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BUSINESS IN PRACTICE

STRATEGIC TRANSITION TO ELECTRIFICATION IN THE AUTOMOTIVE
INDUSTRY: A SIMULATION-BASED ANALYSIS OF BUSINESS DECISIONS AND
PERSONAL REFLECTIONS ON TEAM DYNAMICS AND SELF-DEVELOPMENT

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Abstract

The automotive industry is going through a major shift from traditional internal combustion engines to electric vehicles. Mudança, a fictional automotive company, faced this pivotal change during an intensive three-week management program that involved a business simulation focused on strategic decision-making to meet evolving sustainability demands. This dissertation analyzes Mudança's response to this industry shift, with a focus on strategy, innovation, and financial performance. It also reflects on team dynamics, leadership challenges, and personal growth experienced throughout the program, offering insights into the complexities of guiding a company through such a significant industry-wide transformation.

Keywords: Automotive Industry; Electrification; Business Simulation; Cross-Functional Collaboration; Financial Analysis; Innovation; Leadership Development; Reflective Analysis; Decision-Making; Strategic Planning; Sustainability; Team Dynamics

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1. Firm Analysis

Mudança operates in the dynamic automotive industry, where rapid technological advancements and evolving consumer preferences continually reshape the market landscape. As part of its strategic efforts to strengthen its market position, Mudança has undergone a significant transition, shifting from traditional combustion engine vehicles to a fully EV lineup over the course of six years, from 2024 to 2030. This transition has been central to the company's strategy, reflecting its commitment to sustainability and innovation in response to both regulatory pressures and growing consumer demand for eco-friendly vehicles.

This analysis is structured to evaluate Mudança's performance across three critical business functions: strategy, innovation, and finance. Each section will assess how the company has managed these areas, drawing on insights from the BiP simulation. Following these evaluations, a separate section will compare Mudança's performance with that of real-world automotive companies, providing a benchmark and identifying areas for improvement.

The analysis concludes with an integrated view of how Mudança's strategies across these functions interconnect to drive overall success. The final summary will synthesize key findings and offer recommendations for how Mudança can continue to grow and thrive in the competitive and rapidly evolving automotive landscape.

1.1 Strategy Review

The automotive industry, undergoing rapid changes due to technological advancements and shifting consumer preferences. As the company seeks to strengthen its market position, it faces various external challenges and opportunities that shape its strategic decisions. This analysis uses PESTEL (Aguilar, 1967) ([*Fig.1*](#)) and Porter's Five Forces (Porter, 1979) frameworks to evaluate Mudança's external environment and employs SWOT (Humphrey n.d.) and VRIO

(Barney 1991) analyses to understand its internal capabilities. By aligning these insights with its vision and strategic positioning, Mudança has been a player in the industry and was able to achieve sustainable growth.

1.1.1 External Analysis – PESTEL and Porter’s Five Forces

Political and economic factors significantly influence Mudança's operations. Government regulations promoting EVs, such as subsidies and tax incentives, offer opportunities to expand market reach. However, tariffs, particularly the 100% tariffs on imports between the Americas and Asia (*Fig.2*), impact cost structures, necessitating careful planning and strategic adjustments to mitigate financial impacts and optimize market penetration (McKinsey 2016). Economic conditions, including fluctuations in purchasing power and fuel prices, drive Mudança to focus on affordable, efficient vehicles for diverse markets, capturing a broader customer base.

Social trends show a growing demand for environmentally conscious and technologically advanced vehicles, influencing Mudança's product development strategies. This social awareness is integral to Mudança's efforts to align with consumer values and strengthen brand loyalty. Mudança's CSR ratings (*Fig.3*) improved significantly from 50% in Q4 to 100% by Q18, reflecting strong engagement in sustainability initiatives and enhancing brand reputation.

Technological advancements, such as batteries and autonomous driving, are reshaping the automotive landscape. Mudança strategically invests in these technologies to remain competitive and align with consumer demands for innovation without overextending resources. By continuously improving its technological capabilities, Mudança ensures it stays ahead in an industry driven by innovation. Thus, Mudança should continue investing in Industry 4.0 technologies, which enable smart manufacturing through the integration of cyber-physical

systems, IoT, and big data analytics. These advancements create more flexible, efficient, and interconnected production processes. Industry 4.0 not only optimizes supply chains and reduces costs through automation but also allows for real-time communication between machines and operators, enabling quicker decision-making and adaptability to market shifts (Verma et al. 2021).

Environmental concerns are critical, with global efforts to reduce carbon footprints. Mudança has made substantial progress in reducing CO2 fleet emissions ([Fig.4](#)), decreasing from 71.421 g/mile in Q1 to zero emissions by Q14. Additionally, its sustainability ratings ([Fig.5](#)) rose significantly from 14.60% in Q1 to 85.13% by Q28, demonstrating Mudança's alignment with SDG 13 ([Fig.6](#) and [Fig.7](#)): Climate Action and reinforcing its commitment to environmental sustainability. Given the automotive industry's role as a pillar of the global economy and its influence on macroeconomic growth, these achievements highlight Mudança's strategic focus on sustainability in line with global priorities (Lenort et al. 2023).

Legal factors, including compliance with safety standards and emissions regulations, have a significant impact on operations. Mudança faced substantial CO2 penalties ([Fig.8](#)), such as \$45.08 million in Q1 and \$54.99 million in Q5. However, through focused efforts to improve emissions performance, Mudança earned a \$98.86 million bonus in Q7 and eliminated penalties by Q13. This financial turnaround demonstrates the effectiveness of Mudança's environmental strategies and their positive influence on the company's performance. By aligning with legal requirements and acknowledging the risks of focusing solely on profit, Mudança ensures its growth does not come at the expense of environmental sustainability (Bandhari et al. 2021).

Porter's Five Forces model ([Fig.9](#)) provides further insights into the competitive dynamics impacting Mudança. The threat of new entrants is moderate due to high capital requirements, though electric vehicle startups pose potential disruption. Mudança leverages strategic

partnerships and technological investments to maintain a strong market position. The bargaining power of suppliers, especially for critical components, prompts Mudança to diversify its supplier network. Buyers demand higher value and innovation, driving Mudança to differentiate its offerings through quality and advanced features. The threat of substitutes, such as ride-sharing services, is growing, but personal vehicles remain primary, with Mudança enhancing convenience and user experience. Industry rivalry is intense, with Mudança investing in branding, customer engagement, and technology to secure consumer loyalty (Porter 1979).

1.1.2 Internal Analysis – SWOT and VRIO

Mudança benefits from strong brand equity and an extensive distribution network, providing a competitive advantage. Initially, transitioning from combustion engines to a fully EV lineup posed significant challenges, requiring substantial investment and operational shifts. However, with this transition complete by Q15, Mudança has since focused on innovation and market expansion.

According to VRIO framework ([Fig.10](#)), Mudança's sustained competitive advantages are rooted in three key areas. First, the company's deep understanding of customers and market experience enables it to target the right segments and deliver high-quality products, which results in above-average returns. Second, Mudança's strong brand perception and customer loyalty, supported by diverse marketing channels, ensure that its brand remains respected globally, further reinforcing its competitive position. Third, Mudança's ability to raise capital through various internal and external sources provides the financial flexibility needed to invest in new business opportunities, such as geographical expansion and diversification of the vehicle portfolio.

Opportunities arise from the growing demand for electric and autonomous vehicles. Strategic alliances with technology firms enhance Mudança's AI and machine learning capabilities, positioning it to capitalize on emerging trends. These partnerships drive innovation and a competitive edge. However, Mudança faces threats from intense competition, regulatory pressures, and evolving consumer expectations, making continuous innovation essential for maintaining market relevance ([Fig.11](#)) (Porter 1996).

1.1.3 Vision and Mission

Mudança's mission is “Forging paths to tomorrow, Mudança leads with innovations in electric vehicles - crafting a future where mobility meets sustainability at every turn.” Its vision is “At the forefront of a new technological horizon, we blend responsibility with cutting-edge advancements, envisioning a world where progress moves in harmony with the planet.” The Business Model Canvas (Osterwalder et al. 2010) ([Fig.12](#)) highlights Mudança’s commitment to delivering value through customer-centric design and strategic partnerships. This vision and mission guide Mudança’s strategic decisions and reinforce its dedication to sustainability and excellence.

1.1.4 Strategic Positioning

Mudança’s strategic positioning ([Fig.13](#)) centers on offering affordable and sustainable vehicle solutions that align with consumer expectations for connectivity and environmental responsibility. The company differentiates itself through strong brand recognition and technological integration. By focusing on quality and consumer satisfaction, Mudança aims to capture market share in both established and emerging markets. The Blue Ocean Strategy, as outlined by Kim and Mauborgne (2005), informs Mudança’s approach to creating uncontested market spaces, where the company can pioneer innovative solutions that meet evolving

consumer needs. Mudança's emphasis on adaptability and innovation, leveraging its extensive distribution network and strategic alliances, enhances its competitive advantage, thus generating a total qualitative value for its products (Meléndez Araya et al. 2022). Commitment to sustainability and technological advancement allows Mudança to be part of the rapidly changing automotive landscape, meet evolving consumer needs, and drive long-term growth (McKinsey 2016).

1.2 Innovation Review

Innovation has been central to Mudança's strategic approach, guiding the development of a diversified product portfolio and positioning the company as a significant player in the automotive industry. In an era defined by rapid technological change, tight regulatory demands, and evolving market dynamics, effective innovation is crucial for maintaining competitiveness and driving long-term success.

1.2.1 Innovation Framework

Mudança's innovation was supported by a framework that prioritizes the identification of relevant technological trends, the integration of these trends into the company's offerings, and the establishment of an innovation roadmap that is both strategic and responsive to industry developments. This approach aligns with the **Coupling Model** (or Chain-Linked Model) (Al Hawi et al. 2018), which emphasizes the iterative interaction between R&D and market demands, ensuring that innovation is both market-responsive and technologically robust.

The operationalization of the Coupling Model at Mudança was evident in the continuous feedback loop between the company's R&D activities and its market analysis. For instance, the decision to invest \$250M in sodium-ion battery development in Q4 was informed by a strategic assessment of market demands for sustainable energy solutions and the regulatory pressures for

lower emissions. This ensured that Mudança's innovations were not only technologically viable but also aligned with broader industry trends and customer expectations (Masoomzadeh et al. 2019).

Similarly, Mudança's investment in AI technology in Q6 and next generation E-Drive modules in Q7 across its vehicle lineup, amounting to \$500M and \$300M, respectively, was guided by the Coupling Model's emphasis on aligning R&D outputs with market needs. The integration of these features was not driven solely by technological advancements but was closely tied to the growing market demand for enhanced vehicle safety and autonomous driving features. By connecting these R&D efforts with market feedback, Mudança was able to develop innovations that were both cutting-edge and well-suited to the evolving automotive landscape while positively influencing customer satisfaction (Saraswati and Sudarmiati 2024).

1.2.2 Infrastructure Challenges and Innovation Ecosystem

While Mudança successfully implemented several key innovations, the simulation also highlighted significant challenges, particularly in the area of supporting infrastructure. A critical gap identified was the decision not to invest in a proprietary charging network. Although this decision may have been economically prudent in the short term, it ultimately limited Mudança's ability to fully control a crucial aspect of the EV ecosystem.

The reliance on existing charging infrastructure created range anxiety among consumers, a known barrier to the widespread adoption of EVs. A robust and accessible infrastructure is a critical enabler for the mass adoption of EVs, as it directly impacts the user experience and overall market acceptance. The absence of a dedicated charging network likely constrained Mudança's ability to deliver a seamless and integrated experience, which is essential for establishing long-term market presence and customer loyalty.

Moreover, Mudança's innovation could have potentially been enhanced through a more extensive application of Open Innovation (Chesbrough 2003) principles. While the company primarily focused on internal innovation efforts, engaging with external partners to co-develop a proprietary or shared charging network might have mitigated some of the risks associated with relying solely on existing infrastructure. Open Innovation encourages collaboration across organizational boundaries, allowing companies to leverage external expertise and resources to complement their own capabilities. In this context, strategic alliances between corporations and start-ups, where both parties maintain autonomy but are mutually dependent, can accelerate innovation processes by making them more agile and productive (Corvello et al. 2023).

1.2.3 Strategic Implications and Future Directions

The strategic decisions made during the simulation have significantly influenced Mudança's performance. While the company's diversified product lineup allowed it to capture substantial market share, the limitations imposed by external charging infrastructure underscore the need for a more integrated approach to innovation. This approach should consider not only the development of advanced technologies but also the supporting infrastructure necessary to maximize the impact and adoption of these innovations (Saraswati and Sudarmiati 2024).

Looking forward, Mudança has the opportunity to expand its innovation strategy by exploring mobility services and developing a comprehensive ecosystem that integrates vehicles with the infrastructure and services that support them. This could include the development of shared mobility solutions, enhanced connectivity with smart city infrastructures, and the integration of advanced V2X communication technologies, building on to the V2V communication investment of \$200M in Q11. By adopting a complete view of innovation—one that balances technological advancement with ecosystem development—Mudança can maintain its

competitive edge and drive sustainable growth in an increasingly interconnected market (Dieguez et al. 2020; Masoomzadeh et al. 2019).

Furthermore, strengthening Mudança's scientific and technological innovation capabilities will be critical in this next phase. To ensure that its innovation strategy remains resilient and forward-looking, Mudança has to focus on building robust R&D processes and investing in key technologies such as solid-state batteries, which offer superior energy density and safety compared to current battery technologies. Additionally, advancements in AI-driven predictive maintenance systems could greatly enhance vehicle reliability and reduce operational costs. Another area of focus should be the integration of 5G technology, enabling real-time data exchange and supporting the deployment of autonomous driving systems and V2X communication. By targeting these specific technologies and features, Mudança will not only meet evolving market needs but also position itself at the forefront of the next generation of automotive innovation (Zhao et al. 2020).

1.3 Finance Review

Mudança's financial strategy during the simulation was centered on supporting its transition to a fully EV lineup while maintaining financial stability and enhancing shareholder value. This analysis evaluates key financial metrics, including revenue growth, profitability, capital structure, cash flow management, and sustainability investments, with a particular emphasis on shareholder returns, such as ROE, share price evolution, and share repurchases.

1.3.1 Revenue, Profitability, and Capital Structure

Mudança's revenue ([Fig.14](#)) grew from \$18.2 billion in 2024 to \$29.6 billion in 2030, driven by the company's expansion into the EV market. This consistent growth reflects Mudança's effective market positioning and the growing global demand for EVs.

Mudança's profitability, as reflected in its EBIT margins ([Fig.15](#)), initially fluctuated due to significant upfront investments, decreasing to 16.4% in 2027 but recovering to 24.8% by 2030 as these investments began yielding operational efficiencies. Net income ([Fig.14](#)) followed a similar trend, showing substantial improvements in the later years, which underscored Mudança's operational and strategic maturity.

RONA ([Fig.16](#)) further highlights Mudança's efficiency in utilizing its assets to generate returns. RONA started at 17% in Q1, declined to 9.8% in Q14 during a period of intense capital investment, but recovered to 21.5% by Q28, indicating improved asset utilization and operational efficiency as the company adjusted its strategies.

To strengthen its capital structure, Mudança focused on reducing its debt ratio ([Fig.17](#)) from 47.12% in 2024 to 32.57% in 2030. This deliberate strategy, including the issuance of green bonds at a favorable 3% interest rate compared to 4.5% for normal loans, contributed to a decline in WACC ([Fig.17](#)) from 6.12% to 5.42%. The reduction in WACC enhanced financial stability and positioned the company for sustained growth. Mudança's credit rating never dropped below A-, which was crucial in securing these favorable terms.

1.3.2 Shareholder Value and Cash Flow Management

Mudança's Return on Equity (ROE) ([Fig.18](#)) provides insight into how effectively the company utilized shareholders' equity to generate profit. ROE began at 24.50% in Q1 but dipped to 9.20% in Q7 due to heavy capital expenditures. However, it rebounded to 27.46% by Q28, reflecting the successful deployment of investments and the company's ability to enhance shareholder value.

The share price of Mudança ([Fig.19](#)) also experienced significant growth, rising from \$397 in Q4 to \$771 by Q28. This increase was driven by the company's consistent revenue growth,

improving profitability, and strategic sustainability initiatives, allowing it to reach \$49,130M in market capitalisation by Q28 ([Fig.20](#)). Share repurchases played a crucial role in this upward trajectory. Mudança conducted repurchases in Q23 and Q25, strategically capitalizing on periods of strong cash flow to optimize the capital structure and enhance shareholder returns. These repurchases, totaling \$4.7 billion across these quarters, not only supported share price growth but also demonstrated the company's commitment to returning value to shareholders.

Cash flow management was a key factor in Mudança's financial strategy. Operating cash flow ([Fig.21](#)) grew steadily from \$3.4 billion in 2024 to \$8.3 billion by 2030, with the most significant increase occurring between 2029 and 2030. This sharp rise was primarily driven by a substantial increase in net income and effective working capital management. In 2029, accounts receivable increased by \$682.6 million, which reduced cash flow as more sales were made on credit, tying up cash that could have otherwise been used for operations. However, in 2030, Mudança improved its cash flow by effectively managing working capital, including a smaller increase in accounts receivable of \$115.9 million and a significant reduction in inventory by \$1.02 billion, which freed up substantial cash.

CapEx ([Fig.21](#)) were substantial throughout the period, particularly in the years leading up to 2029. CapEx peaked at \$4.2 billion in 2027, followed by \$3.1 billion in 2028, and then decreased to \$1.3 billion in 2030 as the company neared completion of its major investment projects. Despite these significant outflows, Mudança managed to maintain positive free cash flow ([Fig.21](#)) from 2026 onwards, allowing continued investment in growth and consistent returns to shareholders through dividends and share repurchases.

1.3.3 Sustainability and Investor Relations

Sustainability was integral to Mudança's financial strategy, influencing both capital structure and investor relations. The Green Capital Ratio ([Fig.22](#)), reflecting the company's funds driven from green bonds, significantly increased from 0% in Q5 to 100% by Q26, demonstrating Mudança's deepening commitment to environmental sustainability and its strategic alignment with investor expectations. The Green CapEx ratio ([Fig.23](#)) also increased from 15.14% in Q6 to 62.44% by Q28, underscoring the company's focus on sustainable investments.

Mudança's strategy reflects the broader trend where companies that actively engage in green financing and ECSR not only attract favorable investment conditions but also enhance their competitive edge in increasingly eco-conscious markets (Zhang et al. 2023). This alignment with green finance principles has allowed Mudança to secure funding at lower interest rates and improve its market reputation, directly contributing to its financial stability and growth.

The sustainability report ([Fig.24](#)) highlighted specific milestones, such as achieving zero CO2 penalties by Q13 and earning sustainability bonuses, which significantly contributed to Mudança's financial performance and market reputation. The alignment of these sustainability goals with Mudança's broader financial strategy underscores the company's commitment to integrating ESG principles into its core operations. This focus on sustainability was crucial in maintaining the \$1 billion investment from Black Pebble, a major sustainability-focused investor, further reinforcing the company's financial and environmental standing.

1.3.4 Future Projections

Building on Mudança's historical performance, the company is projected to reach approximately \$41.25 billion in revenue by 2035, reflecting a steady annual growth rate of around 5-8%. EBIT margins are anticipated to stabilize around 22-23% by 2035, driven by ongoing operational efficiencies and strategic investments. These projections ([Table 2](#)) align

with Mudança's strategy to optimize profitability while expanding its market presence in the EV sector. As the company continues to refine its operations and invest in sustainable technologies, it is well-positioned to achieve these financial targets, ensuring sustained growth and shareholder value creation.

1.4 Comparative analysis with real companies

Mudança's strategic transition from ICE vehicles to a fully electric lineup closely mirrors Volkswagen's approach. Both companies gradually phased out ICE vehicles while increasing their EV offerings. Volkswagen maintained financial stability by continuing to generate revenue from ICE models while committing substantial resources to electrification. The company invested significantly in developing EVs and supporting infrastructure, reflecting their commitment to a fully electric future (Volkswagen AG 2023). Mudança similarly focused on meticulous cost management and completed its transition to a fully electric lineup more rapidly, allowing it to focus exclusively on EVs earlier than Volkswagen. However, this may have resulted in lost revenue opportunities from ICE vehicles during the transition.

Financially, Mudança's revenue reached \$29.6 billion by 2030, placing it close to Mazda, which reported \$28.6 billion in revenue in 2023 (Mazda 2023). This positions Mudança as a solid mid-tier player in the global automotive industry. In terms of net assets, Mudança recorded \$18 billion in 2029, aligning closely with BYD, which had \$21.5 billion in net assets in 2023 (BYD 2023). Mudança's operating margin of 24.8% by 2030 significantly outperforms BMW's Automotive BU 9.6% and Tesla's 10.3% in 2023, highlighting Mudança's superior efficiency in converting revenue into profit (BMW Group 2023; Tesla 2023) .

Mudança's net income of \$4.9 billion by 2030 compares favorably with Ford's \$4.4 billion in 2023, reflecting its strong financial health (Ford Motor Company 2023). With total debt at \$8.7

billion by 2030, Mudança maintains a conservative approach to leverage, similar to Tesla, which held \$12.51 billion in total debt in 2023. This approach ensures financial flexibility while supporting continued investments in innovation and expansion.

Innovation is a cornerstone of Mudança's strategy, much like BYD, which focused heavily on developing proprietary technologies such as the "Blade Battery" by 2023. Mudança's investments in battery technology and AI-driven vehicle features have given it a competitive edge. However, to ensure long-term adaptability in the rapidly evolving EV landscape, Mudança might consider broadening its innovation pipeline, similar to BYD's diversified approach.

Tesla's aggressive investment in its proprietary Supercharger network, with over 45,000 chargers globally by 2023, has strengthened its brand loyalty. Strategic partnerships, similar to the Ford-Tesla agreement allowing Ford vehicles to access Tesla's Supercharger network (Ford Motor Company 2023), could enhance Mudança's infrastructure presence without requiring the same capital-intensive investment.

1.5 Integrated view across functions

Mudança's success in the automotive industry was rooted in a deeply integrated approach across strategy, innovation, and finance. The strategic emphasis on sustainability and electrification was not merely reactive to market demands but a proactive alignment with future regulatory trends and shifting consumer values. This foresight drove innovation beyond simple technological upgrades, leading to the development of advanced energy storage solutions and AI-driven features that positioned Mudança as a market leader.

Financially, the company's strategy involved more than just securing funds for these innovations. By issuing green bonds and managing capital with a focus on ESG principles,

Mudana aligned its financial strategies with broader societal expectations, enhancing both investor confidence and long-term financial stability. This alignment ensured that the company’s innovations were not only groundbreaking but also sustainable, reinforcing its competitive edge.

The integration across these three functions was critical, but it was also supported by essential contributions from marketing, operations, and HR. Marketing effectively communicated Mudana’s innovative advancements, driving consumer adoption and brand loyalty. Operations optimized production processes to ensure that these innovations were scalable and efficiently brought to market. HR played a pivotal role in developing the skills and culture necessary to sustain long-term innovation, ensuring that the workforce was aligned with the company’s strategic goals.

In a cross-functional team like this, individuals often take pride in their functional roles, as their sense of identity and self-esteem is tied to the success of their department (Randel and Jaussi 2003). This strong social identification motivated team members to contribute cooperatively, each enhancing their department's contribution to the overall success of the company.

In conclusion, it was the seamless collaboration between strategy, innovation, and finance, supported by strong marketing, operations, and HR functions, that enabled Mudana to navigate industry challenges and establish itself as a leader in the electric vehicle market. This integrated approach illustrates the power of cross-functional collaboration, fueled by a sense of functional pride, in driving sustainable success.

1.6 Strategic Reflections and Lessons Learned

Mudana’s journey through the simulation highlights the crucial balance between risk management and growth in a rapidly evolving industry. The conservative approach taken—

characterized by limited investments in production capacity and a cautious launch of new models—ensured financial stability but ultimately constrained the company’s ability to achieve higher added value.

While this strategy mitigated risks and maintained a strong financial position, it also limited Mudança's capacity to scale quickly and fully capitalize on the growing demand for EVs. In a fast-moving market driven by technological change, being overly conservative can result in missed opportunities for substantial market gains and leadership.

The key lesson here is the importance of balancing financial prudence with strategic boldness. While cautious strategies can safeguard against immediate risks, they must be complemented by proactive investments when market conditions are favorable. As industries undergo rapid digital transformation, companies must be prepared to adapt by expanding their digital capabilities. This is especially important in industries where innovation often occurs beyond the firm’s current expertise, requiring swift technology development to stay competitive (Lopez-Vega and Moodysson 2023).

Moving forward, Mudança should adopt a more dynamic approach, increasing investments in production capacity, accelerating model launches, and considering infrastructure development to enhance its competitive position. By integrating digital technologies and fostering a culture of agility and responsiveness, Mudança can better address future market shifts and drive sustainable long-term growth. This approach will allow the company to stay at the forefront of industry digitalization, transforming its operations and maximizing its potential in an evolving marketplace.

In conclusion, Mudança’s conservative strategy provided a solid foundation but also limited its potential for higher added value. The lesson learned is that in rapidly changing industries,

especially those undergoing digital transformation, a balanced approach that combines caution with bold, proactive investment is essential for achieving substantial growth and market leadership.

2. Personal Reflection

This reflective analysis explores two critical incidents from the BiP program, which provided valuable insights into my personal and professional development. These incidents highlight critical aspects of decision-making, leadership, and client management in complex business environments.

Throughout the simulation, a daily journal was kept to capture experiences and reflections, which helped identify key learning opportunities and areas for improvement. The first incident involved a strategic investment decision that tested my risk aversion and emphasized the need to balance caution with innovation. The second incident centered around a client retention role play, which underscored the importance of confidence and emotional intelligence in managing client interactions.

Both experiences highlighted the significance of aligning self-perception with external feedback to accurately assess my strengths and growth areas. By analyzing these incidents, I aim to enhance my skills and effectiveness as a leader and team member. This essay will provide a structured examination of these experiences, integrating theoretical insights with practical applications to offer a comprehensive view of my learning journey during the simulation.

2.1 Critical Incident 1: Strategic Expansion Decision – Building a Factory in Year 3

2.1.1 Introduction and Overview of the Incident

During the BiP simulation, our team faced a pivotal decision at the end of Year 3: whether to invest in building a new factory. This decision represented a departure from our prior conservative strategy and required careful evaluation of the potential risks and rewards. The stakes were high, as this choice could significantly influence our competitive position and team dynamics for the remainder of the program. This incident highlights the challenges of balancing risk with innovation in strategic decision-making and underscores the importance of effective communication and trust within a team to achieve successful outcomes.

The decision to potentially invest in a new factory forced the team to consider both immediate financial implications and long-term strategic benefits. Our previous risk-averse strategies were challenged by the need to innovate and grow, emphasizing the importance of integrating diverse perspectives to ensure a balanced evaluation of both risks and opportunities.

2.1.2 Personal Role

As a finance team member, my primary responsibility was to assess the financial implications of building the new factory. I approached this task with caution, focusing on maintaining financial stability. My concerns centered around the potential increase in debt and uncertain market conditions that could affect Mudança's profitability. Reflecting on this, I recognized that my cautious approach was related with Prospect Theory (Kahneman and Tversky 1979), which suggests that people tend to prioritize avoiding losses over pursuing equivalent gains.

While this approach helped us carefully assess the financial risks, it also held us back from exploring new growth opportunities. Cognitive adaptability is critical in complex business situations, where being able to adjust your thinking to new information is key. My hesitation to fully support the factory investment highlighted the need for a more balanced view—one that mixes financial caution with a willingness to take smart risks for growth. Boosting cognitive

adaptability allows teams to think more broadly, challenge routines, and find creative solutions to problems that once seemed unsolvable (Wang et al. 2019). Furthermore, strategic flexibility in avoiding rigid thinking patterns that can hinder decision-making in dynamic situations.

2.1.3 Emotional Impact and Reflection

As discussions progressed, I felt an internal conflict between the financial risks I identified and the potential long-term benefits of the factory. Recognizing the importance of addressing my biases, I relied on Emotional Intelligence (Goleman 1995) to manage this internal conflict and remain open to different perspectives. Baba and Siddiqi (2017) emphasize that emotional intelligence is critical for effective decision-making, as it enables leaders to address their own emotions and maintain clarity under pressure. This was particularly relevant as I faced the complexities of deciding whether to invest in the factory. At the same time, I became aware of the stress that prolonged decision-making can create. Accumulating stress can affect an individual's ability to perform well, highlighting the need for emotional support during such critical moments (Blacklock 2012). This experience underscored the importance of self-awareness in leadership. Understanding my emotional responses to risk allowed me to manage them more effectively, ensuring they did not unduly influence the decision-making process. Moving forward, I plan to continue developing my emotional intelligence, particularly in areas of self-regulation and empathy, to enhance my ability to lead in high-stakes situations.

2.1.4 Contributions to team decision-making dynamics

The decision-making process around the factory investment was significantly shaped by our team's reliance on democratic decision-making and open communication. Our team charter ([Fig.25](#) and [Fig.26](#)), which emphasized values such as open-mindedness, collaboration, and

participation, created an environment where all team members felt empowered to voice their opinions. Throughout these discussions, I actively contributed my financial perspective, engaging in constructive debates with my teammates. This involvement was crucial in ensuring that our decision was informed by a thorough understanding of the financial implications.

Psychological Safety (Edmondson 1999) played a crucial role in fostering an environment where team members felt comfortable sharing differing views. This atmosphere allowed us to consider a wide range of perspectives, ultimately leading to more informed decisions. In such an environment, disagreements are viewed as valuable contributions rather than personal criticism, encouraging openness to diverse ideas (Deng et al. 2021). However, reflecting on the process, I realize my initial hesitation to support the factory investment may have been influenced by confirmation bias. Confirmation bias occurs when individuals tend to stick to their initial preference and seek out information that supports it, rather than objectively considering alternatives (Mueller-Saegebrecht 2024). This may have unintentionally limited the team's ability to fully explore more innovative solutions.

Moving forward, it will be crucial for me to not only provide thorough financial analysis but also to ensure that my concerns are voiced more assertively, particularly when I believe that certain risks are being underestimated. This approach will allow me to more effectively influence the team's decisions, contributing to more balanced and well-rounded outcomes. Additionally, I plan to be more proactive in encouraging the team to consider a broader range of solutions, including those that involve higher risks, to ensure that we do not overlook potential growth opportunities.

Building on Self-Efficacy Theory (Bandura 1997), which suggests that confidence in one's abilities enhances adaptability, I've come to understand that developing greater self-confidence will help me balance my cautious nature with a readiness to embrace new ideas. In this context,

a proactive personality fosters problem-solving and goal-setting behavior, enabling individuals to take initiative in their careers (Darmayanti and Salim 2020). This has encouraged me to adopt a more adaptive mindset, where calculated risks are seen not as threats to stability, but as opportunities for growth and innovation.

2.1.5 Peer Feedback and Personal Development

The peer feedback ([Fig.27](#) and [Table 3](#)) received provided critical insights into both my strengths and areas for improvement, particularly in the context of our decision to invest in the new factory. My peers consistently recognized my ability to clearly and effectively communicate financial information, which was essential for ensuring that the team understood the financial implications of our decisions. This clarity was particularly valuable during the factory investment discussions.

However, the feedback also highlighted my tendency to hold back when expressing concerns, especially in high-stakes situations. Although I participated actively and provided thorough analyses, there were moments when I hesitated to assert my views strongly. This hesitation, likely came from a desire to maintain team harmony, sometimes resulted in my concerns not being fully addressed.

This feedback aligns with my reflections on the need to balance caution with decisiveness. Moving forward, I will focus on being more assertive in team discussions, particularly when my analysis indicates significant financial risks. This approach will help ensure that the team's decisions are well-rounded and consider all critical factors, ultimately leading to better outcomes.

I plan to develop my assertiveness in team settings by refining my communication skills to ensure that my insights are both shared and strongly advocated. Additionally, I will continue to

enhance my emotional intelligence, particularly in balancing team harmony with the need to address critical concerns. By strengthening these aspects of my professional behavior, I will be better equipped to contribute to the team's success, particularly in complex decision-making scenarios.

2.2 Critical Incident 2: Client Retention Role Play

2.2.1 Introduction and Overview of the Incident

During BiP, our team participated in a client retention role play designed to evaluate our ability to manage client relationships and address their concerns effectively. This exercise challenged our skills in communication, negotiation, and problem-solving under pressure, highlighting the complexities of maintaining strong client relationships. Unlike other scenarios we had encountered, this role play required us to engage with a client whose concerns and expectations were initially unclear, forcing us to adapt quickly and think on our feet.

The role play was a critical exercise in assessing not just our technical skills, but also our emotional intelligence and ability to respond to client needs in real time. As Goleman (1995) notes, Emotional Intelligence is key in managing interpersonal dynamics, especially in high-stakes client interactions where both empathy and strategic thinking are crucial for success. The simulation's emphasis on real-time responses made it clear that successful client management relies as much on understanding and adapting to client emotions as it does on presenting solutions.

2.2.2 Personal Role

In this role play, my role was not that of the lead communicator, but I contributed significantly by helping the team uncover and address the client's underlying concerns. Initially, addressing the ambiguity of the client's expectations was challenging. The issues raised were unexpected,

which tested my ability to stay composed and actively engaged. This experience highlighted the importance of being adaptable in client interactions, emphasizing the need for resilience and flexibility in such scenarios (Skoglund et al. 2023).

My contribution was focused on listening carefully and asking questions that helped clarify the client's main concerns. Bodie (2011) emphasizes that Active Listening is essential in understanding complex client needs, which leads to better problem-solving. By asking the right questions, I was able to uncover issues that weren't immediately obvious, which helped our team adjust our approach to better meet the client's needs. This part of the role play underscored the value of patience and attentiveness in building a comprehensive understanding of what the client truly needed, which is often forgotten by initial discussions.

However, a turning point came when the client challenged our pricing strategy and questioned my authority to make decisions. Faced with this challenge, I hesitated and decided to defer the decision to higher management, explaining that final pricing required their input. The client's dissatisfaction with this response was evident, marking a critical moment where I struggled to maintain the client's confidence in our ability to deliver solutions. This hesitation was not just a response to the immediate challenge, but also a reflection of my internal conflict about taking ownership of decisions that could have long-term implications.

Reflecting on this, I realized that my hesitation came from a deeper uncertainty about my authority within the team. While I understood the financial implications, I was reluctant to commit to a decision that I wasn't entirely sure I could justify or enforce. This internal conflict highlights a broader issue that I need to address—how to be cautious while managing client expectations in real-time interactions.

2.2.3 Emotional Impact and Reflection

The client's response to my hesitation had a significant emotional impact on me, prompting deep reflection on how I handle client interactions. My initial reaction was defensive—I was concerned about overstepping my authority and making promises I might not be able to keep. This defensiveness was rooted in a fear of making mistakes that could damage the client relationship, showing a tension between being cautious and taking decisive action.

As I reflected on the situation, I realized that my hesitation wasn't only about protecting the client relationship; it also revealed my discomfort with uncertainty and vulnerability in high-pressure situations. I was holding back due to a fear of making the wrong decision, but ironically, this hesitation risked damaging the relationship more than a mistake might have. Effectively managing emotions is essential for building strong client relationships, as clients often reflect the emotional tone set by their advisor (M. Prati and R. Prati 2009). In this case, better control over my own emotions could have helped create a more trusting and confident dynamic with the client.

This realization highlighted the importance of emotional regulation during difficult conversations. Staying calm and composed is essential for making sound decisions and communicating clearly under pressure. As Cherniss and Goleman (2001) note, effectively managing emotions in stressful moments not only helps maintain focus but also allows for better problem-solving. My initial defensiveness showed me that I need to work on balancing my emotions, especially when things go off course. By managing my reactions better, I can remain focused on finding solutions, even in challenging situations. The ability to regulate emotions, particularly in the heat of a difficult interaction, is something I now see as vital to my development as a professional.

Another aspect of this incident was how it made me confront my deep-rooted fear of failure. This fear showed up as hesitation, which not only affected my performance but also made it

difficult to re-engage with the client after the setback. Dweck (2006) emphasizes the importance of a growth mindset, where challenges are seen as opportunities to learn rather than threats to one's competence. Reflecting on this, I realized that my fear of failure had prevented me from taking the necessary risks in managing the client relationship. Encouraging a growth mindset, which shifts the focus from inherent ability to effort and learning, could have helped me approach the situation with less fear and more openness to growth. By seeing failure as a chance to improve rather than as a source of shame, I could have used the experience to grow and develop further (Tambun and Irawanto 2023).

2.2.4 Personal Learning, Peer Feedback, and Future Applications

The peer feedback received ([Fig.27](#) and [Table 3](#)) following this role play provided a complete perspective on my performance. My peers recognized my strength in establishing rapport with the client and creating an environment where the client felt comfortable expressing their concerns. One colleague mentioned, “You made the client feel heard, which helped us to quickly understand their issues.” This feedback emphasizes the importance of building trust in client interactions, which is essential for effective client management.

Another piece of feedback pointed out a key challenge I faced during the simulation. After the client questioned our pricing strategy, I became noticeably quiet, contributing less to the discussion for the rest of the session. A peer noted, “After the client asked about pricing, you seemed to lose confidence and remained silent for the rest of the simulation, which might have left the client feeling unsure about our capabilities.” This feedback was important because it highlighted how my initial hesitation had a lasting effect on my ability to stay engaged and reassert myself in the conversation.

This feedback made me realize that the issue wasn't just about making a tough decision—it was also about how I handled myself after that moment. My silence after the pricing discussion showed that I need to work on bouncing back more quickly when I'm challenged. Instead of letting an initial setback affect the rest of the interaction, I need to focus on staying engaged and finding ways to regain the client's trust.

The feedback also suggested that while I am strong in the initial phases of client interaction, I need to develop the resilience to maintain my involvement throughout, even when the discussion becomes challenging. This is crucial because client interactions rarely go exactly as planned, and the ability to adapt and continue to lead the conversation is key to maintaining client confidence.

Moving forward, I plan to work on several areas to improve my performance in similar situations. First, I'll practice handling difficult client questions and objections, focusing on how to recover and stay involved in the conversation even if I stumble. This will help me build the resilience I need to maintain consistent engagement with clients.

I also plan to focus on improving my ability to integrate technical knowledge with my relational skills. While I was able to build rapport and understanding client concerns, I need to work on translating that understanding into clear, confident recommendations, particularly when the client challenges our approach. This will involve not only deepening my technical expertise but also practicing how to communicate complex ideas in a way that reinforces my authority and builds client trust.

I will continue to develop my emotional regulation skills, particularly in managing stress and staying composed under pressure. This will be critical in ensuring that I can lead client interactions with the confidence and clarity needed to address challenging situations.

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Appendice

Table 1: Abbreviations

EV	Electric Vehicle
BiP	Business in Practice
PESTEL	Political, Economic, Social, Technological, Environmental and Legal
SWOT	Strenghts, Weaknesses, Opportunitites, Threats
VRIO	Value, Rarity, Imitability, Organization
CSR	Corporate Social Responsibility
IoT	Internet of things
SDG	Sustainable Development Goals
AI	Artificial Intelligence
R&D	Research and Development
V2X	Vehicle to Everything
V2V	Vehicle to Vehicle
ROE	Return on Equity
EBIT	Earnings before Interests and Taxes
RONA	Return on Net Assets
WACC	Weighted Average Cost of Capital
CapEx	Capital Expenditures
ECSR	Environmental Corporate Social Responsibility
ESG	Environmental, Social and Governance
ICE	Internal Combustion Engines
BU	Business Unit
HR	Human Resources

Figure 1: PESTEL Analysis of the Automotive Industry

POLITICAL	ECONOMIC	SOCIAL	TECHNOLOGICAL	ENVIRONMENTAL	LEGAL
Government Policies: - Governments worldwide are promoting electric vehicles (EVs) through subsidies, tax incentives, and investment in charging infrastructure to reduce reliance on fossil fuels. - Trade policies and tariffs can significantly impact automotive companies' supply chains and international market access, affecting production costs and pricing strategies. - Regulations regarding emissions standards are becoming stricter, especially in regions like the EU, pushing manufacturers to innovate and comply with environmental regulations. Global Trade Dynamics: - The automotive industry faces uncertainties due to changing trade agreements and geopolitical tensions, affecting global supply chains and market strategies.	Market Growth and Competition: - The automotive market is highly competitive, with new entrants and established players investing in electric and autonomous vehicle technology. - Economic downturns or recessions can reduce consumer spending, leading to decreased demand for new vehicles. Currency Fluctuations: - Exchange rates affect the profitability of automotive companies operating in international markets, influencing pricing strategies and profit margins. Raw Material Costs: - Fluctuations in the costs of raw materials such as steel, aluminium, and rare-earth metals used in batteries can impact production costs.	Changing Consumer Preferences: - There is a growing consumer preference for environmentally friendly vehicles, leading to increased demand for EVs and hybrid models. - Urbanization trends and changing lifestyles are influencing vehicle ownership models, with more consumers opting for ride-sharing and Mobility-as-a-Service (Maas). Demographic Shifts: - Younger generations prioritize sustainability and technology, driving demand for connected and eco-friendly vehicles. Safety and Health Concerns: - Safety regulations and consumer awareness regarding vehicle safety standards influence buying decisions and manufacturers' focus on safety features.	Innovation in Electric Vehicles: - Advancements in battery technology are improving EV range, reducing charging times, and lowering costs, making EVs more accessible to consumers. - The development of autonomous driving technology is reshaping the industry, with companies investing heavily in AI and machine learning to enhance vehicle autonomy and safety. Connectivity and IoT: - Integration of Internet of Things (IoT) technology in vehicles is leading to increased connectivity, offering consumers features such as real-time navigation, vehicle diagnostics, and entertainment options. R&D and Innovation: - Significant investments in research and development are necessary to stay competitive, focusing on innovation in propulsion technologies, materials, and manufacturing processes.	Climate Change and Sustainability: - The automotive industry is under pressure to reduce its carbon footprint by transitioning to sustainable manufacturing practices and developing eco-friendly vehicles. - Companies are adopting circular economy practices to minimize waste and improve resource efficiency. Regulatory Compliance: - Compliance with environmental regulations, such as emission standards and waste management protocols, is becoming a priority for manufacturers to avoid fines and enhance brand reputation. Resource Scarcity: - Scarcity of natural resources, particularly those used in battery production, poses challenges for the industry, driving research into alternative materials and recycling methods.	Regulatory Frameworks: - Stringent safety and emissions regulations require automotive companies to innovate continuously to comply with legal standards, impacting design and manufacturing processes. - Data protection laws affect how companies handle consumer data collected through connected vehicles, emphasizing the importance of cybersecurity. Intellectual Property: - Protecting innovations through patents and managing intellectual property rights is crucial in the competitive automotive market. Product Liability: - Legal issues related to product liability and recalls can have significant financial implications for automotive manufacturers, affecting brand trust and consumer confidence.

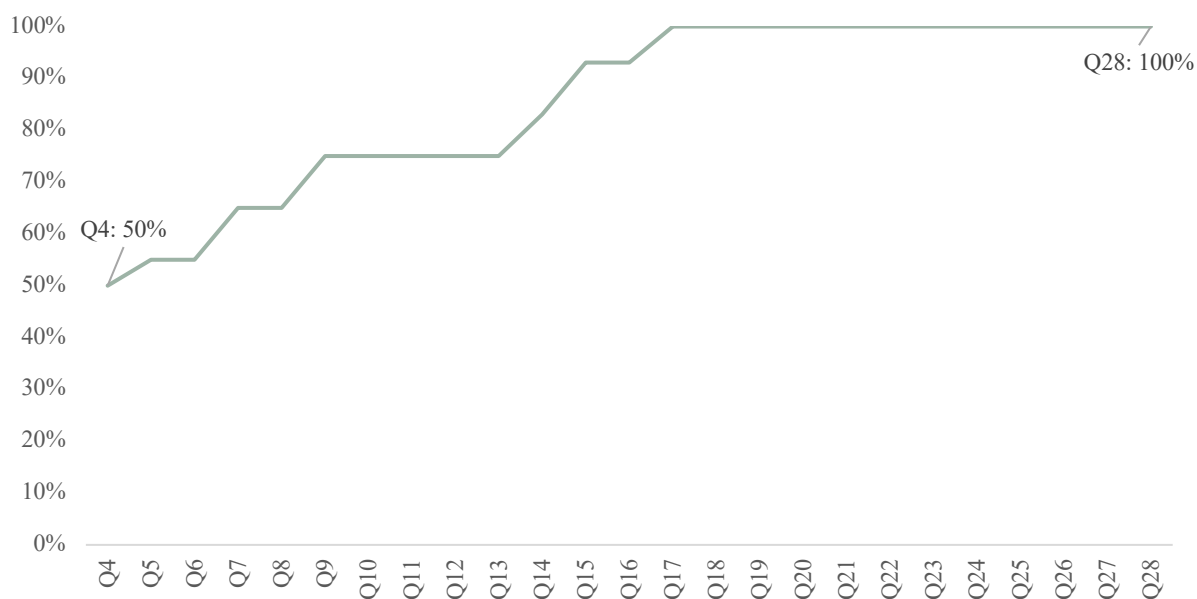
Source: Own Illustration. Data from Deloitte 2024 Global Automotive Consumer Study ; PWC - Five trends transforming the automotive industry

Figure 2: Tariffs for Q28

Import To	Export to	Type	Tariff
Americas	Asia	Electric Car	100.0%
Americas	Europe	Electric Car	3.0%
Asia	Americas	Electric Car	40.0%
Asia	Europe	Electric Car	15.0%
Europe	Americas	Electric Car	10.0%
Europe	Asia	Electric Car	10.0%

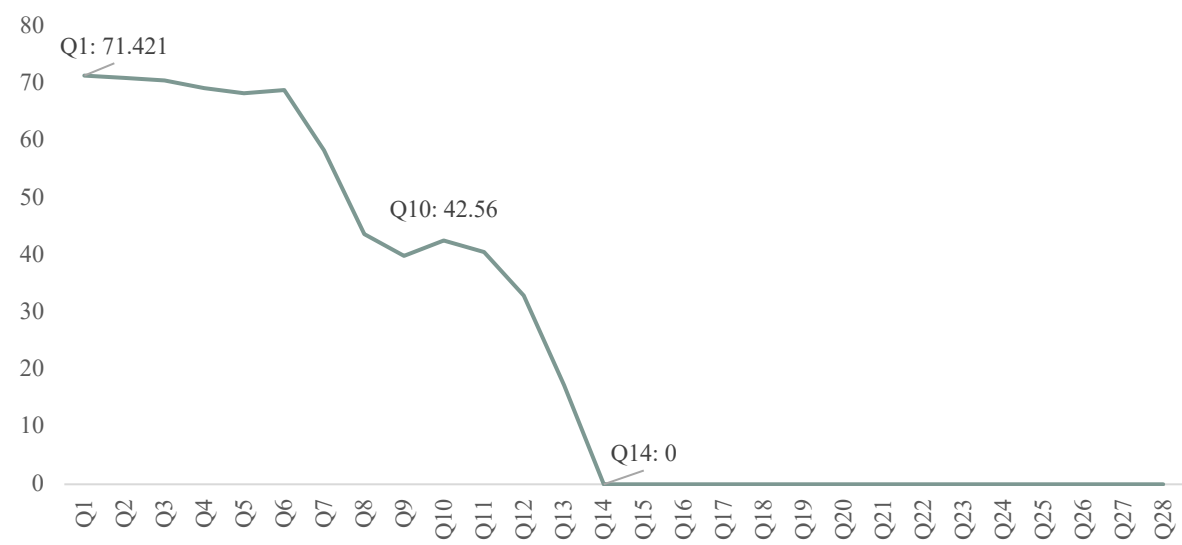
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 3: Mudança CSR Ratings in %



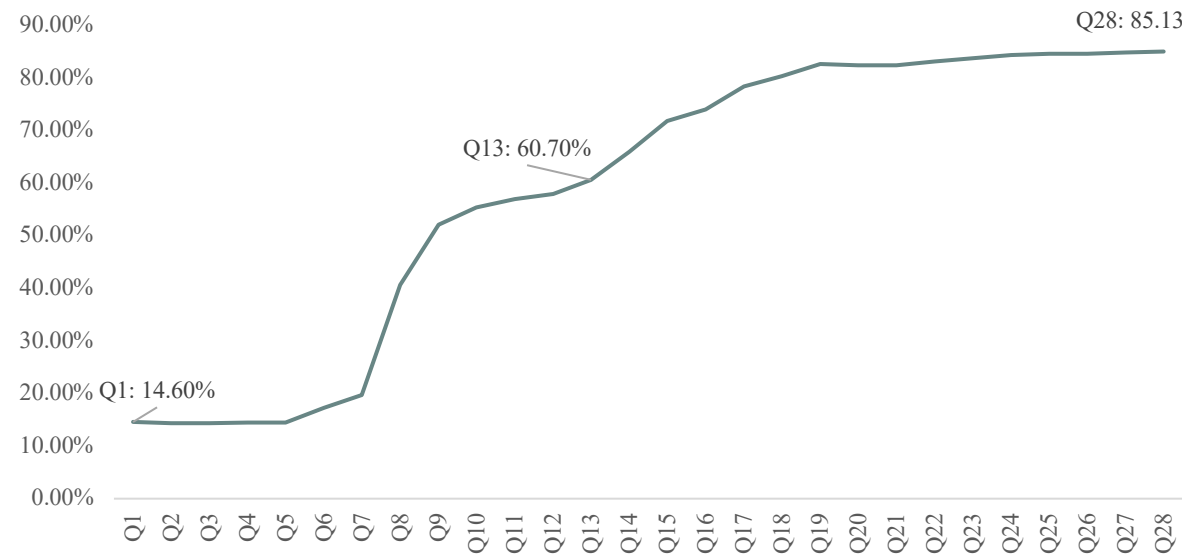
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 4: Mudança CO2 Fleet Emissions in g/mile



Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 5: Mudança Sustainability Ratings in %



Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 6: Sustainable Development Goals



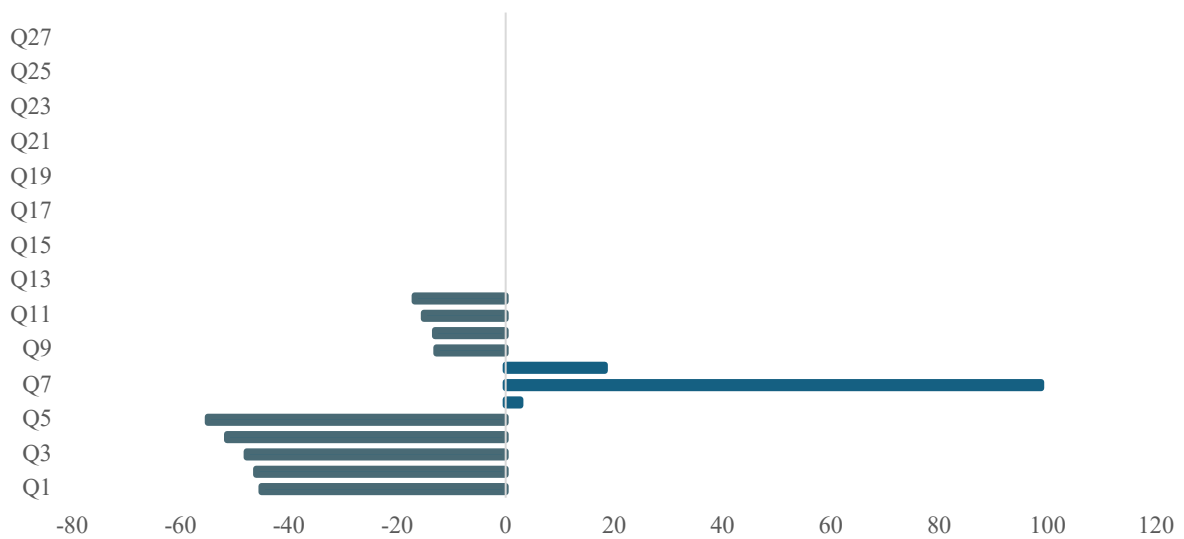
Source: United Nations Department of Economics and Social Affairs

Figure 7: Sustainable Development Goal 13: Climate Action



Source: United Nations Department of Economics and Social Affairs

Figure 8: *Mudança CO2 Penalties/Bonus*



Source: *Own Illustration. Data from @IndustryMasters BiP Simulation 2024*

Figure 9: Porter's 5 Forces Analysis for the Automotive Industry



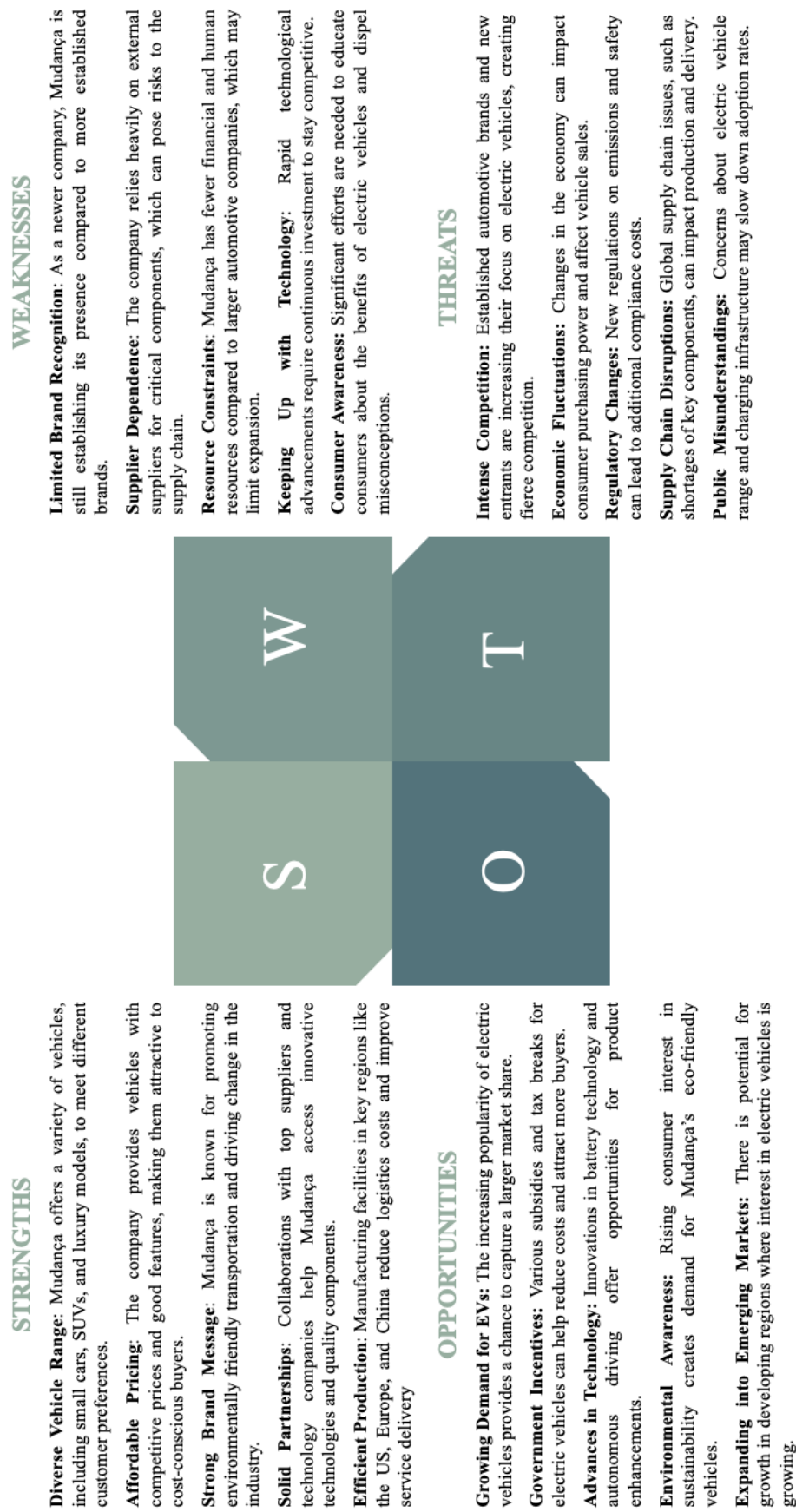
Source: Own Illustration. Porter, M. E. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: Free Press, 1980. (Republished with a new introduction, 1998.)

Figure 10: Mudança VRIO Framework

Resources and Capabilities	VRIO	Performance implications	Competitive Consequences
Design and engineering capabilities to improve safety, innovate (to EVs for e.g.) and increase quality to meet customer's needs	✓	Average returns	Parity
Efficient and flexible production line by adopting lean practices, mindsets and creativity in their highly integrated activities. Able to minimize waste and continuously search for improvement. This is enforced by problem-solving skills and high teamwork leading to a smooth production.	✓	Average returns	Parity
Deep understanding and knowledge of customers and experience on the market, having the ability to target the right segment and deliver the right quality	✓	Above average returns	Sustained competitive advantage
Positive perception and social awareness by customers and strong loyalty. Mudança has a variety of marketing channels ensuring its brand image keeps being respected and recognized across the world.	✓	Above average returns	Sustained competitive advantage
Efficient global supply chain management due to strong, new and reliable Network of relations with suppliers and dealers, working together to find and avoid problems. With helpful partnerships, good logistic and distribution systems engaged by technological resources. All this gives the company further international opportunities.	✓	Average returns	Parity
Use of resources and products for social and environmental impact while generating profits and value for shareholders. Mudança's leadership have a long history of inclusiveness	✓	Average returns	Parity
Ability to develop new technologies and invest in R&D and research labs to innovate, develop products and its safety and performance, increase quality, improving the manufacturing process	✓	Average returns	Parity
Mudança has a culture of hard work, continuous search for improving and of challenging the company's status quo. Employees' development is a priority while defending inclusiveness and being able to retain and adapt talents, keeping a productive work environment within diversity.	✓	Average returns	Parity
Mudanças's ability to raise capital through internal and external sources, creates low financial restrictions on investment in new business opportunities such as geographical expansions, diversification, make acquisitions to take advantage and stand out from competition	✓	Above average returns	Sustained competitive advantage

Source: Own Illustration

Figure 11: SWOT Analysis applied to Mudança



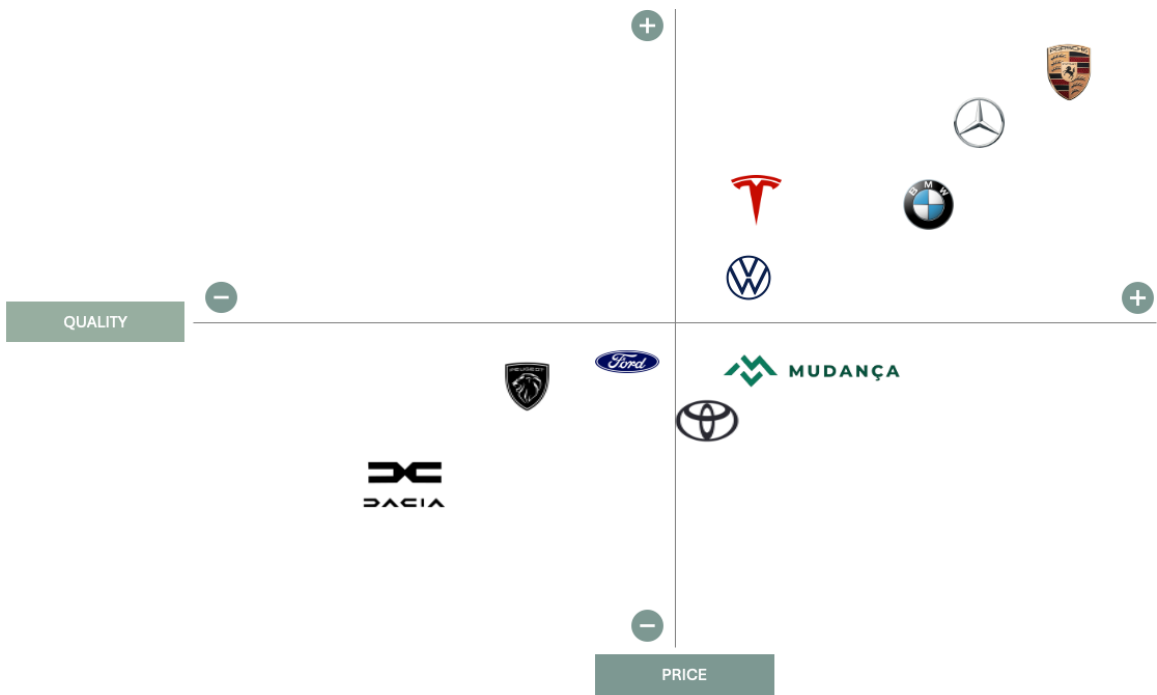
Source: Own Illustration

Figure 12: Mudança Business Model Canvas

PARTNERS	KEY ACTIVITIES	VALUE PROPOSITION	COSTUMER RELATIONSHIP	COSTUMER
Local Dealerships: Collaborate with high-volume dealerships for efficient market reach and distribution. Suppliers: Work with cost-effective suppliers to source reliable batteries and components. Technology Providers: Partner with technology firms to integrate essential EV technologies at competitive prices. Government and NGOs: Engage with governmental bodies and non-governmental organizations to leverage support for EV infrastructure and incentives. Logistics and Distribution: Establish partnerships with logistics providers to streamline supply chain processes and reduce operational costs	Efficient Production: Implement cost-effective manufacturing processes to maintain affordability and quality. Market Research: Conduct continuous analysis of market trends and competitor offerings. Strategic Marketing: Develop campaigns that highlight Mudança's value proposition and benefits of EVs. Product Development: Enhance vehicle features that add value for consumers without significant cost increases.	A Vehicle for Every Need: Mudança offers a comprehensive range of electric vehicles, from compact cars to SUVs and luxury models, ensuring there is an option for every consumer. Driving Change: Position Mudança's vehicles as instruments of change, enabling consumers to transition from traditional combustion engines to eco-friendly alternatives, thereby contributing to environmental sustainability. Quality at Competitive Prices: Provide vehicles with enhanced features, such as improved range and safety, at prices that are accessible to a broad market. Sustainability Commitment: Highlight Mudança's commitment to reducing carbon footprints and promoting a sustainable future. Customer-Centric Innovation: Continuously improve technology and design to meet the evolving needs of consumers, ensuring practical and reliable solutions	Broad Market Appeal: Develop strategies to engage a wide range of consumers, from cost-conscious buyers to those seeking luxury experiences. Community Engagement: Build a brand community through events and digital platforms. Personalized Support: Offer tailored customer service and robust after-sales support. Feedback Channels: Use customer feedback to drive product and service improvements.	Broad Market: Target a broad range of consumers, including families, young professionals, and environmentally conscious buyers. Corporate Fleets: Engage businesses and organizations interested in sustainable fleet management solutions. Global Reach: Focus on diverse demographics across the US, Europe, and China, ensuring offerings meet varied consumer preferences and needs.
COST		REVENUE		
Manufacturing Efficiency: Minimize production costs while maintaining quality standards. Research and Development: Invest in R&D for cost-effective innovations. Marketing and Distribution: Allocate budgets strategically for maximum reach. Partnership Management: Manage expenses related to key partnerships.		Vehicle Sales: Income from selling competitively priced electric vehicles. Service Packages: Revenue from maintenance and extended service plans. Licensing and Partnerships: Income from strategic alliances and technology licensing. Government Incentives: Financial benefits from subsidies promoting EV adoption.		

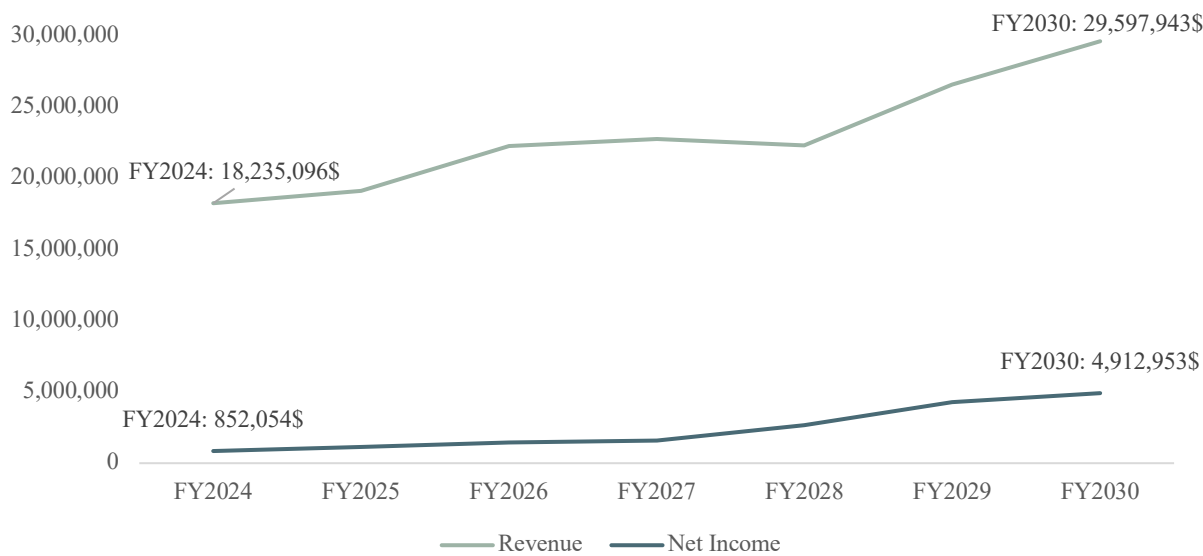
Source: Own Illustration

Figure 13: Mudança Strategic Positioning



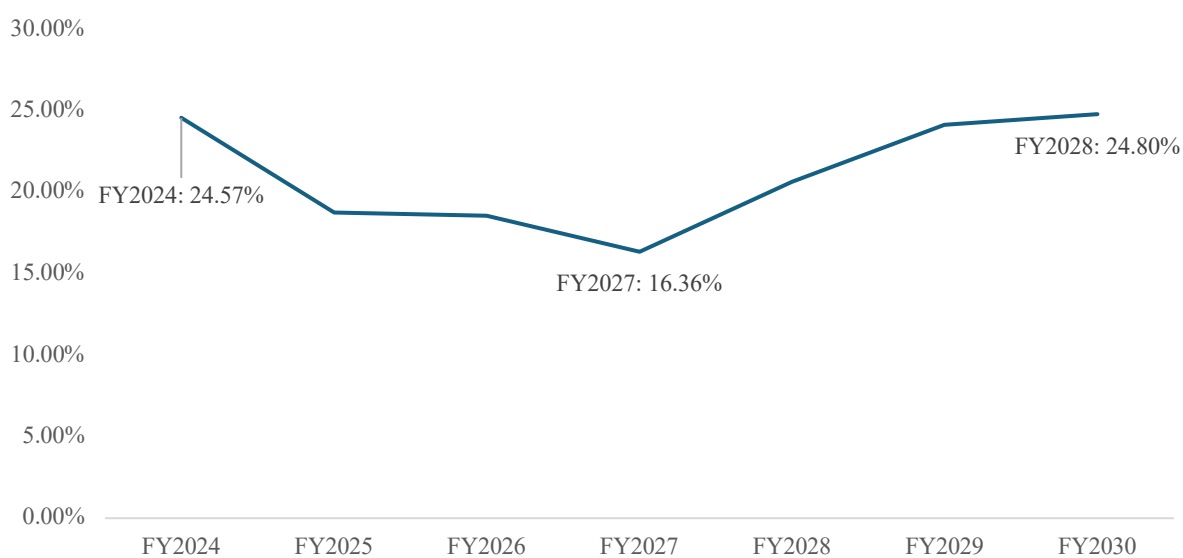
Source: Own Illustration

Figure 14: Mudança Revenue and Net Income (\$ in thousands)



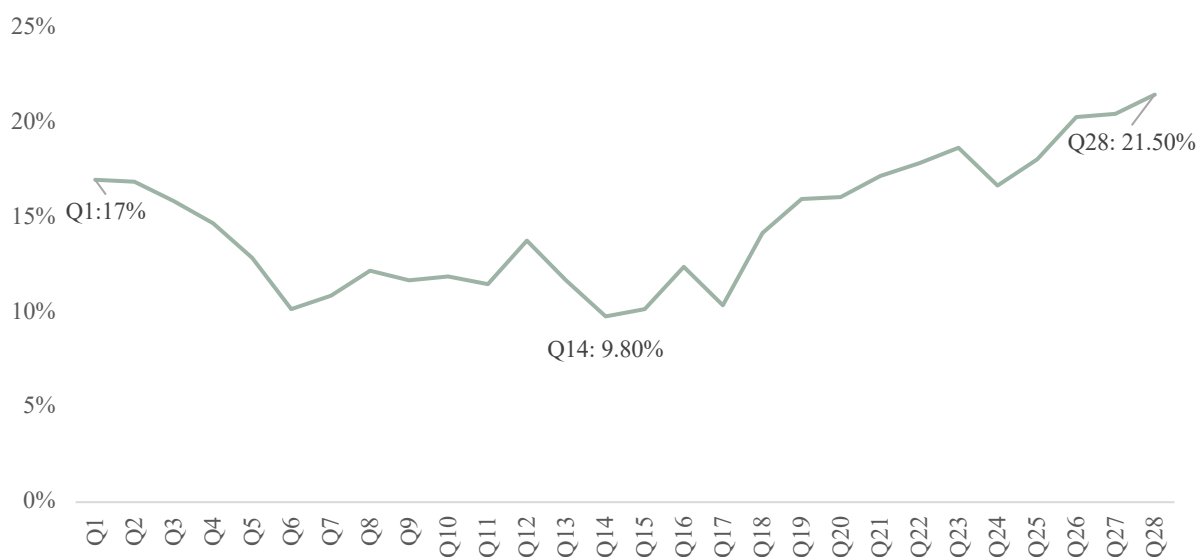
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 15: Mudança EBIT Margin



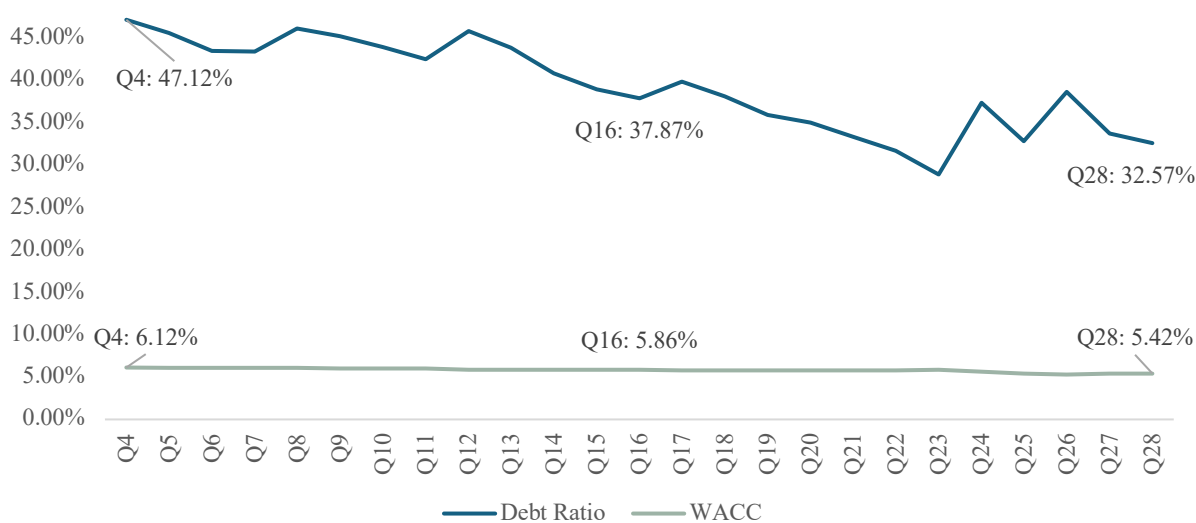
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 16: Mudança Return On Net Assets



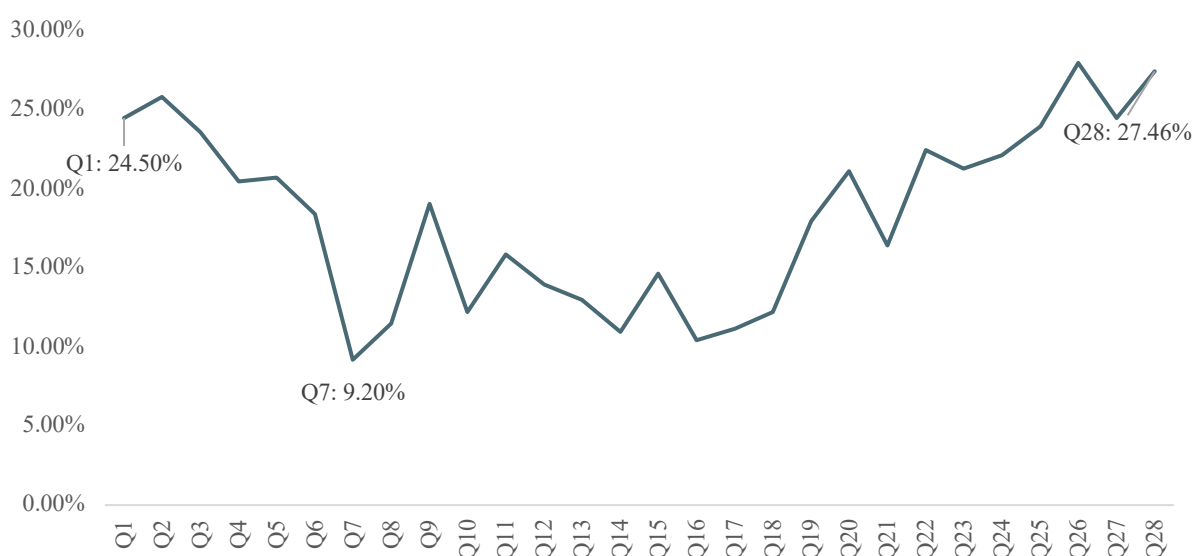
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 17: Mudança Debt Ratio and WACC



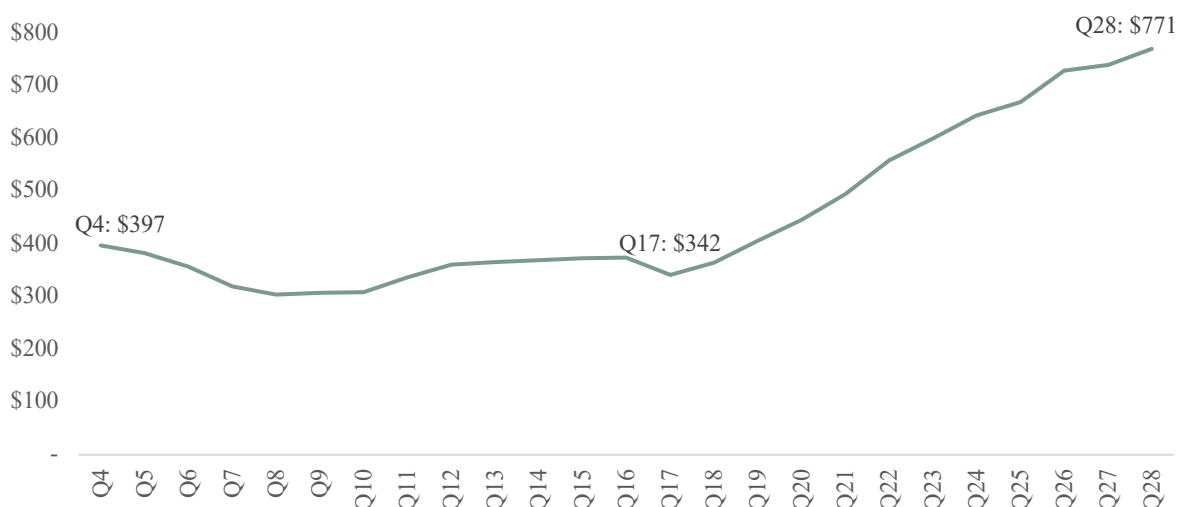
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 18: Mudança Return on Equity



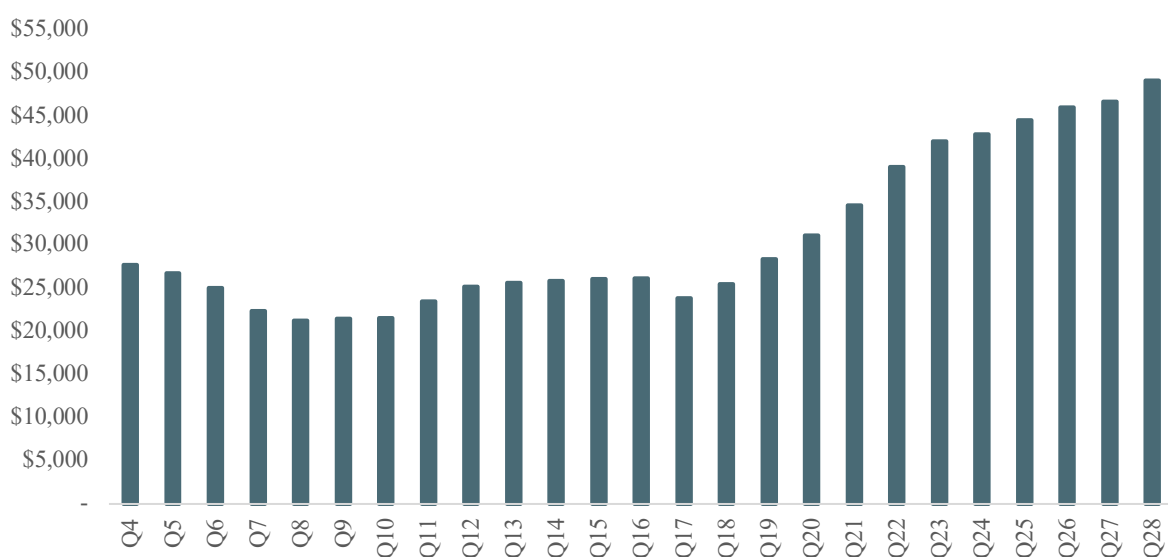
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 19: *Mudança Share Price*



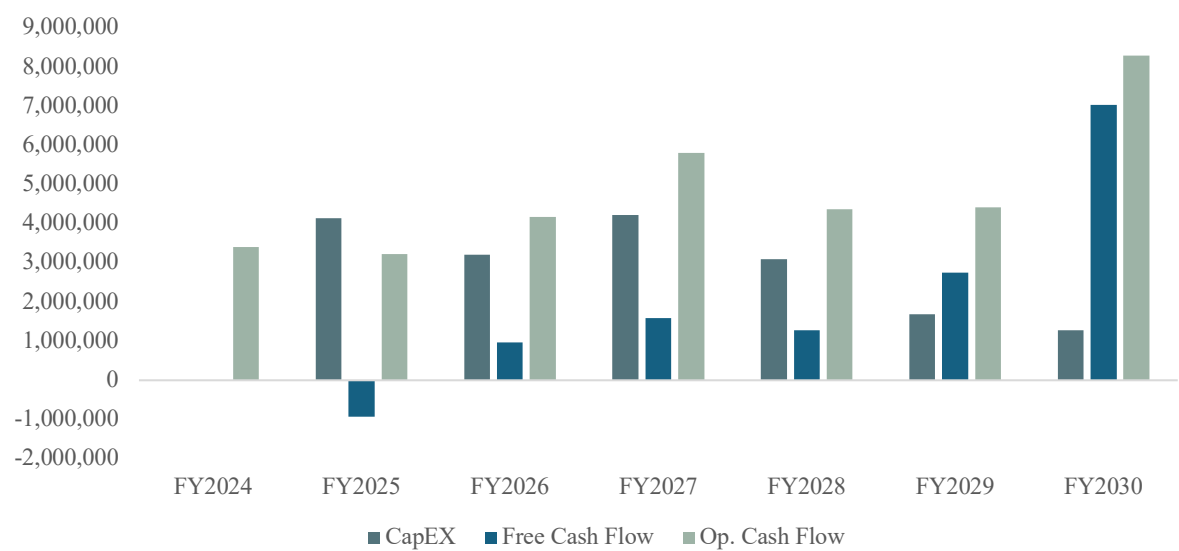
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 20: *Mudança Market Capitalisation (\$ in Millions)*



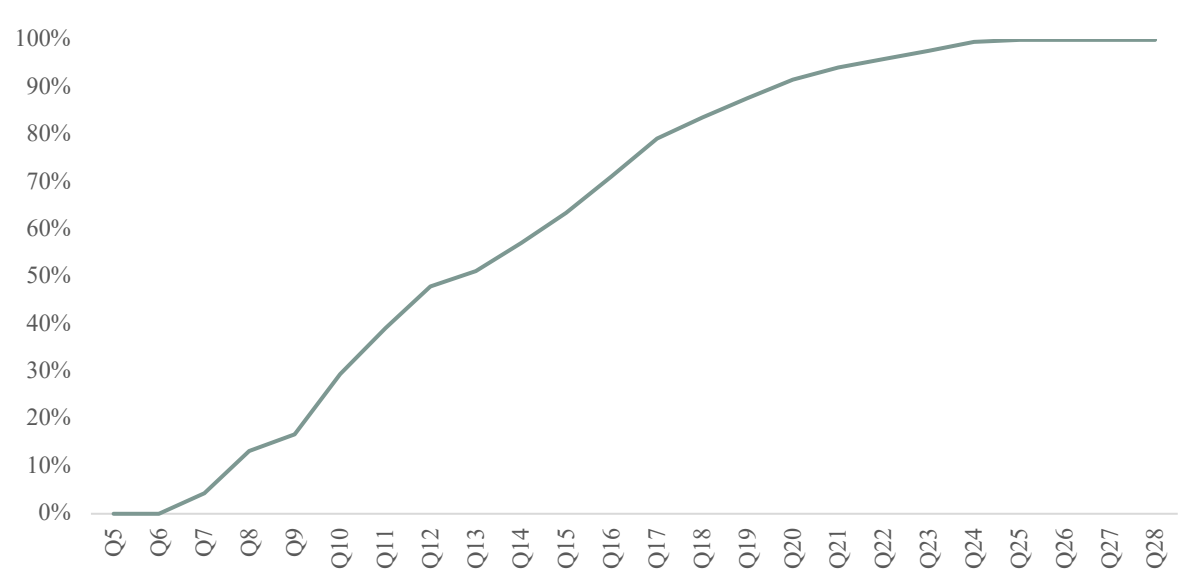
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 21: *Mudança Capital Expenses, Free Cash Flow and Operating Cash Flow*



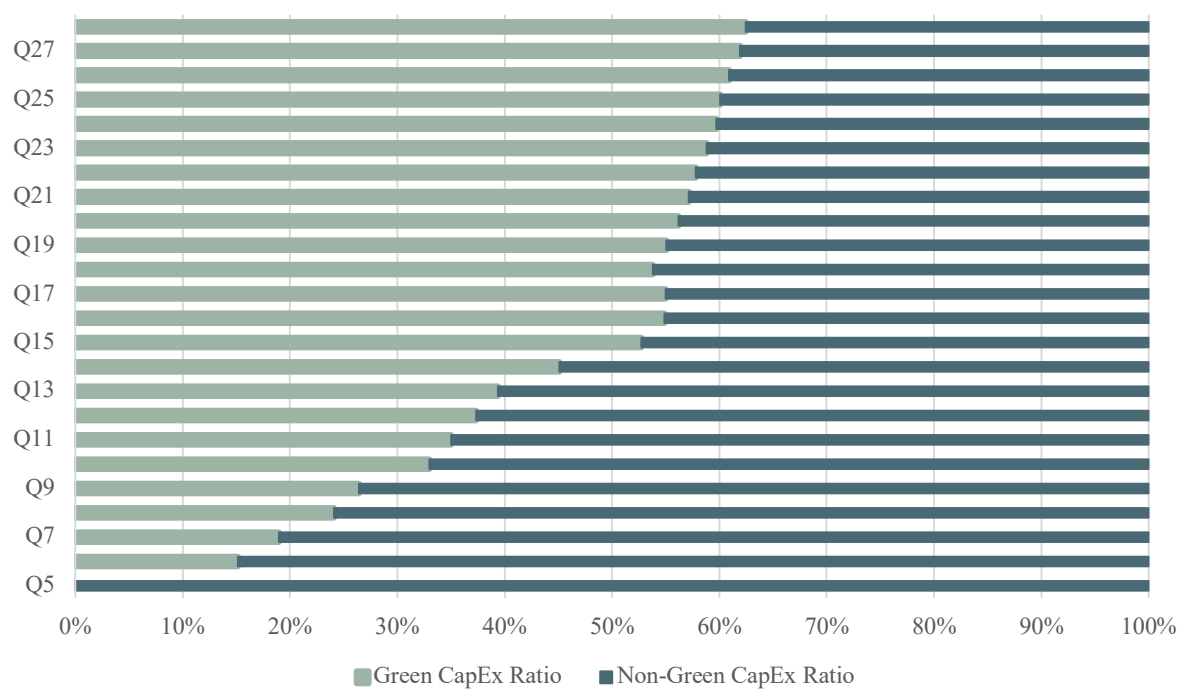
Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 22: *Mudança Green Capital Ratio*



Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 23: Mudança Green Capital Expenditures Ratio



Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

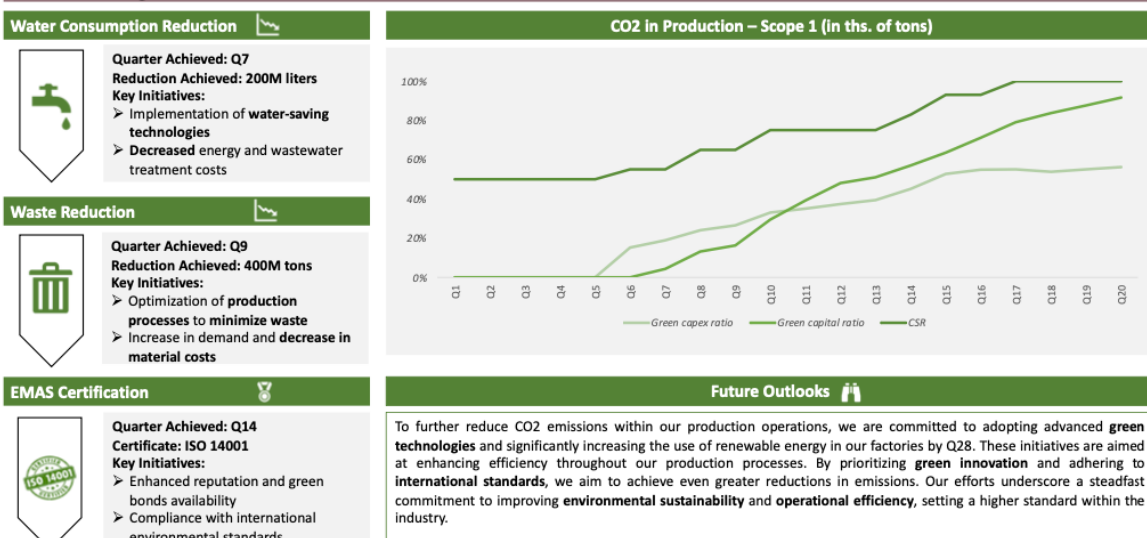
Figure 24: Mudança Environmental, Social & Corporate Governance Report



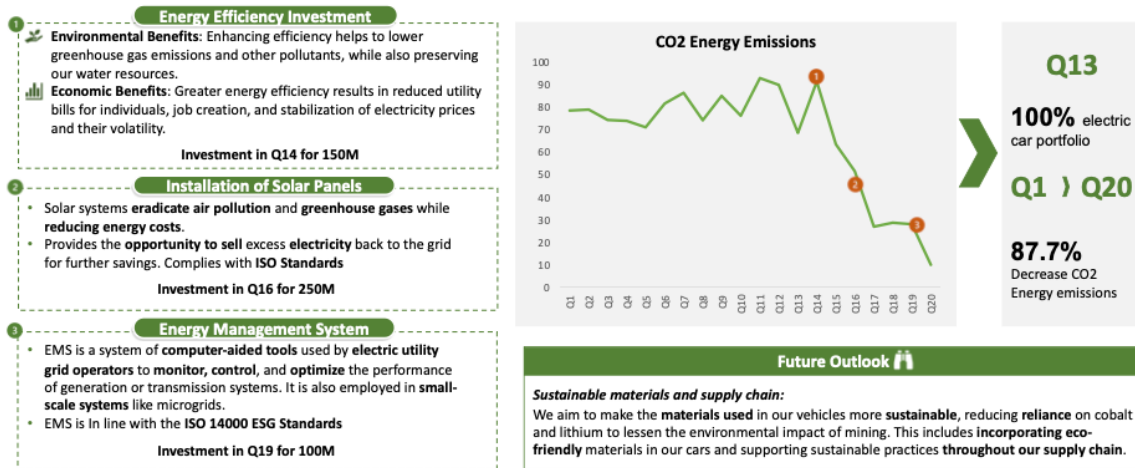
Strategic Sustainability Initiatives: Driving Long-Term CO2 Emission Reduction Goals through Green Investments



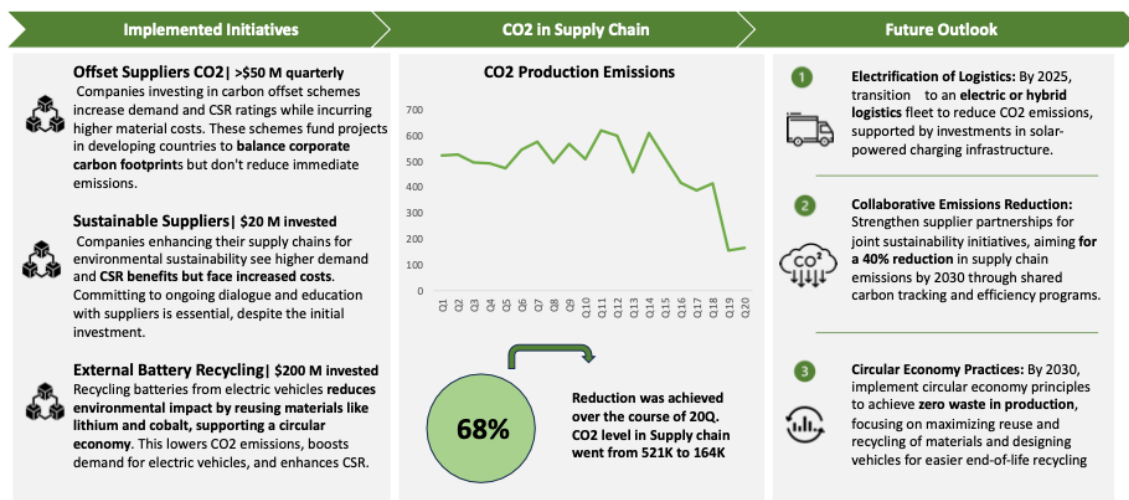
Scope 1: Strategic Allocation and Investment in Sustainable Innovations and Green Projects to Attain Long-Term Goals for CO2 Emission Reductions



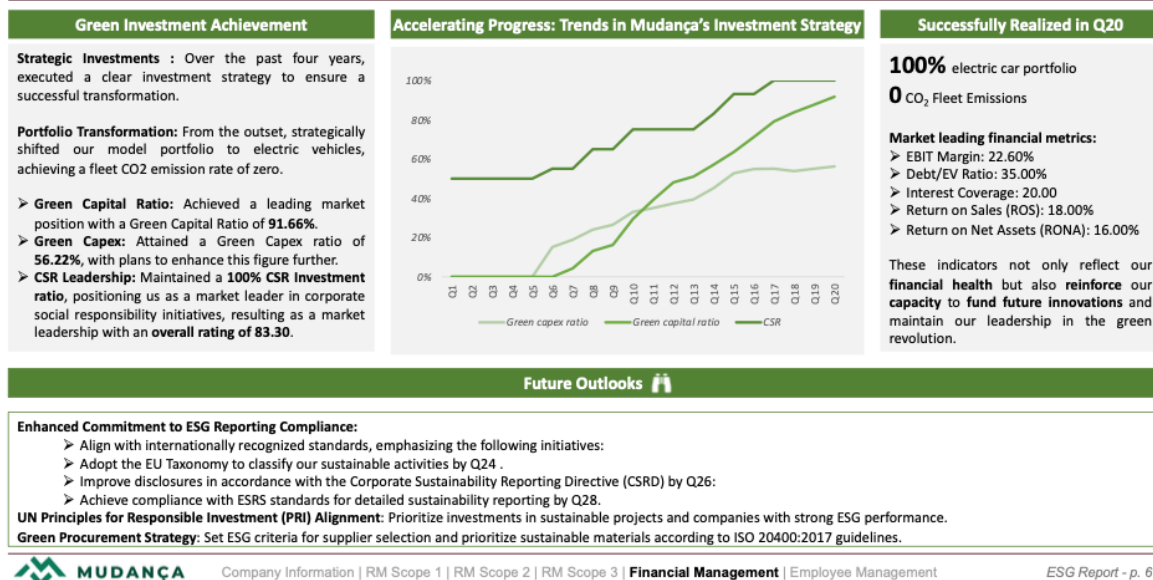
Scope 2: Achieving substantial reduction in energy CO2 emissions through strategic investments towards green energy and sustainability initiatives



Scope 3: Mudança has already invested more than \$300 Million to reduce upstream and downstream emission, aiming at zero waste in production



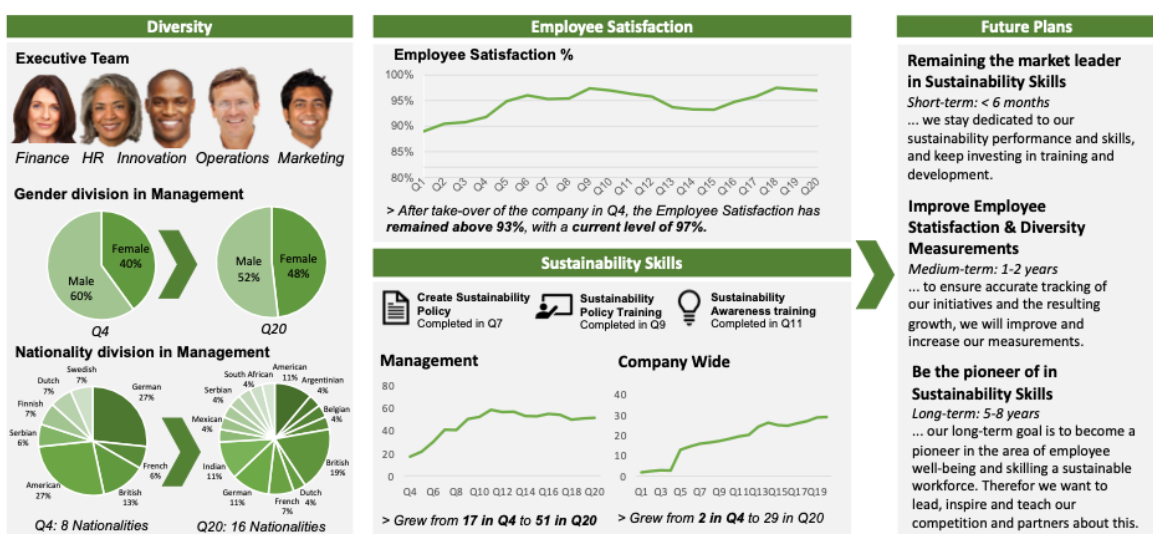
Financing a greener future by enhancing sustainability and growth through strategic financial management and investment decisions.



Company Information | RM Scope 1 | RM Scope 2 | RM Scope 3 | Financial Management | Employee Management

ESG Report - p. 6

Driving Diversity, Boosting Employee Satisfaction, and Cultivating Sustainability Skills for Long-term Success



Company Information | RM Scope 1 | RM Scope 2 | RM Scope 3 | Financial Management | Employee Management

ESG Report - p. 7

Source: BiP Team 4 - Mudança Illustration. Data from @IndustryMasters BiP Simulation 2024

Table 2: Mudança Revenue and EBIT projections (2031-2035)

Model	Historicals							Projections				
USD millions	2024A	2025A	2026A	2027A	2028A	2029A	2030A	2031E	2032E	2033E	2034E	2035E
Revenues	\$ 18,235,096	\$ 19,091,795	\$ 22,225,263	\$ 22,748,370	\$ 22,306,813	\$ 26,543,789	\$ 29,597,943	\$ 32,164,258	\$ 34,631,445	\$ 36,941,566	\$ 39,036,369	\$ 41,249,960
% growth		4.7%	16.4%	2.4%	(1.9%)	19.0%	11.5%	8.7%	7.7%	6.7%	5.7%	5.7%
EBIT	\$ 4,481,046	\$ 3,583,496	\$ 4,124,561	\$ 3,720,595	\$ 4,604,536	\$ 6,413,754	\$ 7,341,252	\$ 6,609,286	\$ 7,218,923	\$ 7,841,277	\$ 8,602,816	\$ 9,186,629
% margin	24.6%	18.8%	18.6%	16.4%	20.6%	24.2%	24.8%	20.5%	20.8%	21.2%	22.0%	22.3%

Source: Own Illustration. Data from @IndustryMasters BiP Simulation 2024

Figure 25: Mudança Original Team Charter

TeamValues		How to handle Hurdles / Challenges	
 Punctuality	 Collaboration	Cultural differences (Different communication styles/Interpretations) • Solution: Address communication accordingly, acknowledging different styles with open communication & feedback Controlling / dominance • Solution: Open communication, team decisions (democracy) Working in silos • Solution: Stimulate communication Handling mistakes • Solution: Analyze the mistake without blaming and improve together Different working paces in stressful times • Solution: Time management & Reminder of deadlines (Hester)	
 Kindness	 Participation		
 Open-mindedness	 Attention to detail		
 Democracy	 Fun		
Guardian Angels		Roles	
Alex for Michal Arina for Hester Hester for Olga João for Alex Leevi for João Michal for Leevi Olga for Arina		Alex: Motivation Manager Arina: Creativity curator Hester: Project Manager João: Quality Manager Leevi: Democracy Manager Michal: Chief Fun Officer (CFO) Olga: Happiness Manager	

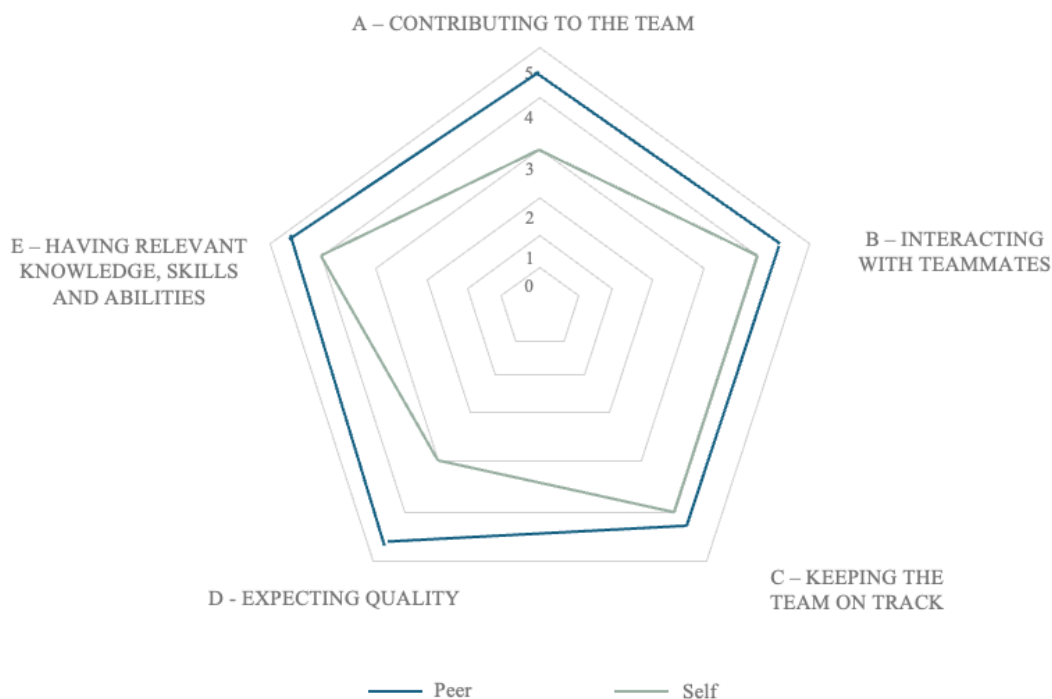
Source: BiP Team 4 - Mudança Illustration.

Figure 26: Mudança Revised Team Charter

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

Source: BiP Team 4 - Mudança Illustration.

Figure 27: Peer & Self Evaluation



Source: Own Illustration. Data from BiP Team & Self Assesment – Mudança conducted by Professor Miguel Pinto Fernandes

Table 3: Peer Review

Section 1: Work Performance	Peer review
1. How would you rate the quality of this individual's work?	Excellent
2. How consistently does this individual meet deadlines?	Always
3. To what extent does this individual contribute to the team?	To a very great extent
Section 2: Teamwork and Collaboration	Peer review
1. Rate this individual's ability to work effectively within the team:	Excellent
2. How well does this individual communicate with other team members?	Very Well ; Adequately
3. How supportive is this individual of their colleagues' work and ideas?	Extremelly Supportive
Section 3: Skills and Development	Peer review
1. How would you rate this individual's technical skills related to their role?	Excellent
2. To what extent does this individual take initiative?	To a very great extent
Section 4: Open-Ended Feedback	Peer review
1. What are this individual's greatest strengths?	Smart and fun to work with ; Always involved in the decisions that are being made, very good at explaining the financial situation to other team members, positive attitude ; Ability to communicate financial ideas to other roles in digestible way
2. What areas do you believe this individual could improve upon?	Communication and speaking up for yourself. I think you value harmony quite high in a team, but even though we are making a wrong decision, you keep to yourself ;
3. Provide specific examples of this individual's positive contributions to the team:	Smart inputs in finance, or in value added discussions; could suggest efficient ideas in terms of financing and tracked our "spending"
4. Provide specific examples of this individual's negative contributions to the team:	When DOI was super high and "we" only made small adjustments to price/marketing, which did not change, you had great input/ideas but did not speak up loud enough ; Very careful about all the financial decisions that were being made, always kept us on track and tried very hard
5. Any additional comments or suggestions for this individual's development?	In the client retention role play you made the client feel heard, which helped us to quickly understand their issues. However, after the client asked about pricing, you seemed to lose confidence and remained silent for the rest of the simulation, which might have left the client feeling unsure about our capabilities

Source: Own Illustration.