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Business in Practice: A performance review of Proxima's electrification

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Abstract:

This dissertation comprises of an analysis of the performance of Proxima, a fictitious automotive manufacturing company, during the Business in Practice business simulation. Relying on relevant frameworks, academic literature and simulation data, the analysis focuses on the functions of Strategy, Operations and Finance and how interdependent they are on one another. Furthermore, a personal reflection will be made on two critical incidents, where the topics of communication and time management will be explored, detailing their effect on team dynamics.

Keywords:

Manufacturing, Corporate Finance, Sustainability, Strategy, Operations, Team Dynamics, Time Management, Business Simulation, Communication

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Introduction

Business in Practice was a field lab conducted between the 11th and 28th of June 2024, where teams of 7 students were tasked with managing an automotive company for 6 simulated years. Each member would be a director of a certain function of the company: Finance, Operations, HR, Marketing or Innovation. I was tasked with being **director of Finance**.

My teams' company, **Proxima**, was an established automotive manufacturing firm, with a years' worth of operation already simulated. Our team was tasked with **maximizing value for our shareholders**, where not only did we face direct competition from **3 other simulated automotive companies**, but we also had to address **industry wide issues**, such as electrification, automation, changing consumer demands, increasing trade tariffs between markets and ever stricter regulations on vehicle emissions and sustainability.

Being organized in random teams of 7 individuals meant that, for the company to perform optimally, not only did we need to apply appropriate academic concepts on business management and corporate finance, but we also had to learn and put into practice several teamworking and communication skills.

The following work will be divided into **2 main parts**. The first one will detail the **performance of the company** during those 6 simulated years. A particular focus will be put on 3 functions: Strategy, Operations and Finance. In each section, relevant frameworks will be used to explain how decisions were taken and how the firm performed and where main issues arose, relating to appropriate academic literature. Afterwards, an integrated view of the 3 functions and how they interacted and influenced each other will be laid out. Lastly, I will present the key ideas and learnings taken from analyzing the firm. For the second part, I will focus on a **personal reflection** on how I acted as a member of a team, relating 2 critical incidents to relevant concepts on team dynamics and business skills.

Strategy

As part of the analysis of the firm's performance, it is quite useful to first see how strategic planning and management was done at Proxima, as it was the basis for which many of the decisions in every department were done.

We first began by defining a mission statement of the firm, a step that can bring many benefits. If embraced by all managers, employees and other constituents of the firm, it can be a source of unity and commitment to strive for the goals set forth within this type of statement (David 2011). It has also been shown that a firm can have improved financial performance when employees feel a commitment to its mission statement (Bart Michael G and Taggar 1996), as it can harness more effectively the motivation of employees. Therefore, after reaching a consensus among all the heads of each department, the following mission statement was composed for Proxima:

“Be a company that creates great EVs, to the highest degree of quality and modern battery technology. As a sustainable company, we are committed to creating modern cars that our customers love to drive. Our customers feature happiness and unique driving experience is of the utmost importance. While we offer a diversified portfolio, we remain as cost efficient as possible and sensitive to their demands and preferences”.

As it can be seen with this mission statement, Proxima committed itself to be a sustainable company, which would strive for electrifying their fleet. It would focus on quality, with an emphasis on having feature rich and enjoyable to drive vehicles. It also defined that Proxima would focus on a more premium consumer base, which valued more these product characteristics. Taking this into account, in terms of positioning, using the **Porter's Generic Strategies framework**, Proxima planned to pursue a **broad differentiation strategy**, similar to brands like Mercedes or BMW, which offer a wide range of vehicles but with a focus on quality and premium features, which distinguishes them from more budget brands such as

Toyota, which focuses on price leadership and high-volume sales. This strategy was decided due to several factors. First, a differentiating strategy would mean that Proxima would not compete in price with other firms, but rather in producing vehicles with better or unique characteristics. This meant that investment in increasing production capacity, by building extra factories, would not need to be pursued as intensely, focusing instead on research and development. Expanding factories would take a large amount of initial investment and time to complete, as each line expansion needed 800 million USD and 4 quarters to be finished, so reducing such investments would free up a considerable amount of cashflows for other projects. Secondly, although a cost leadership strategy can provide competitiveness and profitability to the firm in the short term, there is the increased risk that it can be emulated by competitors in the long term, while a differentiation strategy can lead to more sustainable competitive advantage, since it can be harder for competitors to imitate specific qualities or features, while for a cost leadership strategy, they only need to improve their operational efficiency and under-price other firms (Banker, Mashruwala, and Tripathy 2014).

This initial strategic plan was also based on a **SWOT analysis**, where our initial situation and market conditions were analysed (see Table 1). Major strengths included the **diverse fleet** of vehicles Proxima already had in production at the start of the simulation, which was composed of 6 different models: 3 EV's, 1 hybrid and 2 combustion vehicles, which was more than competitors A and C, and the same as B. We also had a **dominant market position**, leading in overall market share in Asia, America, and Europe, and a **healthy financial position**, with a debt ratio of 47% and a credit rating of A+. Weaknesses included the fact that half of our fleet still emitted **CO2**, which was subjected to financial penalties in the simulation (although at the time, the cumulative CO2 emissions still allowed for an overall bonus to be received). None of our vehicles led in their corresponding **segment market share**, a problem which was exacerbated with **misplaced production lines**,

resulting in increased tariffs for certain vehicles when sold in particular regions (for example, EV's exported from America to Asia were subject to a 25% tariff). Although diverse, our fleet also included vehicles with **high maturities**, reducing the potential of future sales and requiring investment in new vehicles. For opportunities, the **Asian market** showed potential to grow our sales, as it had a supply level of only 85.1%, with a market potential of 5,504 million USD. All markets possessed an increasing **demand for EV's** and **autonomous driving** and given the high maturity vehicles in our fleet were mostly electric, meant that with the right investments in new technologies, such demand could be captured. Lastly, for the major threats, potential **increases in penalties** for CO2 emissions could have posed a significant negative effect on our bottom line if our fleet was not electrified at a sufficient pace. **Increases in tariffs** could also reduce sales if production locations for vehicles were not strategically chosen with this risk in mind. Changes in consumer demands, although difficult to predict, were also a major threat to the performance of the firm, if investments were not carefully made to give Proxima the ability to satisfy them.

Although a useful framework to identify the major key elements of a market and the general situation of the firm, SWOT analysis can have significant issues if used incorrectly. They can contain **statements that are too generic**, with no real analysis or practical applications behind them, which can severely affect their usefulness as a tool to guide strategic planning for a firm (Hill and Westbrook 1997). Indeed, our own SWOT analysis did suffer from these issues somewhat, but some key long-term goals did originate from this framework. For example, it was clear that **electrifying our fleet** would be beneficial in the long-term as penalties from CO2 emissions already gave a direct financial incentive to do so and investing in technologies regarding EV's (such as sodium-ion batteries) already aligned with consumer demand. Moreover, when looking at real world examples, consumers increasingly demand more sustainable vehicles, with predictions indicating that 30% of the worldwide passenger

vehicle fleet will be fully electric by 2032 (Rietmann, Hügler, and Lieven 2020). Therefore, a gradual but consistent shift to EV's was deemed one of the main goals for Proxima.

With a long-term strategy planned out, for the first 3 years of the simulation, decisions from every department were done following the long-term goals set out in it. Investments in new technologies were pursued and new electric vehicles were developed, such as a new sport, luxury, 4x4 and city car. However severe problems started to appear regarding **low factory utilization**. While following our strategy of broad differentiation, we ended up developing cars that had **too many features**, and therefore were too expensive to sell at sufficient levels to fully utilize our factory capacity. Therefore, a **shift in our strategy** had to occur, and it was decided that to fully utilize our production capacity and improve our overall operational efficiency, we would pursue a still broad target strategy but with a lesser focus on differentiation, instead producing vehicles that were **more affordable** and that could reliably be sold at the volumes the firm required. This shift towards a more price leadership strategy showed positive results in the later stages of the simulation, with overall factory utilization levels, margins and Economic Value Added all improving significantly, showing that flexibility in strategic planning is crucial to be able to face unexpected issues. It is this dynamic capability inside of firm's to be able to adapt and effectively utilize resources in a changing environment that can potentially explain much of the financial performance of said firm (Teece and Pisano 1994). Similar parallels can be made to the real-world case of Porsche, which in the early 2000's released its first ever SUV, the "Cayenne". Faced with low sales, Porsche decided to radically change its strategy, pursuing for the first time ever a completely new segment of luxury SUV, a rather big shift from a brand that only produced high-performance sports cars. However, this shift saved the brand from potential financial distress and the Cayenne became one of the manufacturers' most successful models, showing that strategic flexibility is key for the success of a company (Porsche 2022).

Operations

The Operations department played a major role in how Proxima performed. It was responsible for **transforming the inputs** of the firm (materials, manpower, funds, etc.) into **useful outputs**, in this case, vehicles, in the most efficient manner possible. In other words, their main role was managing and coordinating effectively a **complex supply chain**, which can be thought of having eight key processes: customer relationship management, customer service management, demand management, order fulfillment, manufacturing flow management, procurement, product development and commercialization, and returns management (Croxtton et al. 2001). In the simulation, the operations managers had access to decisions regarding more directly to **production processes**, deciding on how many lines and in which factory a vehicle would be produced, when a factory needed to be expanded, and investing in sustainable projects related with scopes 1, 2 and 3 emissions.

To guide decisions, 3 main KPI's were evaluated: **Days of Inventory (DOI)**, **Factory Utilization** and **Sustainability Investments**. The **4 V's framework** also helped in determining the state of operations at any given point, and as we will see, the main issues that arose revolved mainly around **Volume**, **Variation in Demand** and **Variety**.

To guarantee an efficient use of assets, maximizing factory utilization was a major goal throughout the simulation. This would ensure the lowest cost per unit of vehicles produced, therefore improving our overall margins. This required a strategic use of production lines that ensured that no vehicle was over or underproduced. If any single production line reached over 120 days of inventory, production would automatically dial down, and potentially shut off. Unfortunately, between the first 4 years of the simulation, factory utilization suffered a downward trend, reaching a minimum of **50%** in quarter 12 (see Graph 1), also accompanied by **inventory build ups**, with 2 major peaks of **86** and **112** average days of inventory in quarters 11 and 17 (see Graph 2). Such high stocks of inventory do carry various costs,

ranging from direct storage and logistic related costs to more indirect costs, such as risk of deterioration and damage. A **balance** therefore must be reached to determine a healthy level of inventory that considers the **trade-off** of potential lost sales if stock levels are too low and the costs that arise if they are too high (Gunasekaran, Patel, and Tirtiroglu 2001).

There were two main reasons that explained this poor performance in these key KPI's. Firstly, there was a fundamental **mismatch** between production **capacity** and the sales **volume** potential of our portfolio of vehicles. At the start of the simulation, Proxima already had several aging vehicles, such as the Sports E, City E and 4x4 E, which all had already reached the maturity stage in their product life cycle. Therefore, successfully replacing these vehicles with new ones that could fully utilize their respective production capacity was crucial. However, as mentioned in the analysis of Proxima's strategic planning, the design of their replacement vehicles, such as the PMsport, PMcity, PMLux and PM4x4, resulted in vehicles that had too many features and that could not sell in sufficiently high volumes due to their high final price. To keep factory utilization as high as possible, several vehicle models had to be shuffled in and out of production lines. As their days of inventory reached closer to the maximum of 120 days, they would be replaced by models that were not assigned at the time to any production line. This would then give time for the first model to sell off their excess inventories in the next quarter. Of course, **shuffling production** in this manner did come with efficiency losses (which in the simulation were represented by a utilization of 83% in the first quarter a vehicle model was switched into a production line), which meant that in the long-term, this could not be a sustainable solution to fix factory utilization issues. A study conducted on GM's Delaware plant corroborated these types of losses, where an increase in product **variety** led to adverse impacts in labor hours and production costs (Fisher and Ittner 1999).

A second negative effect that was inadvertently caused by this instability in production was

the **cannibalization effect** that older vehicle lines had on newer models. The need to keep older models in storage to be able to shift back in production when the newer ones started to accumulate inventories meant that, in a counter intuitive way, this potential short-term solution did in some way exacerbate the original problem, siphoning potential sales of newly developed models (for example, while keeping the old City E, potential sales of the newer PMcity model were likely affected). The more similar two product lines are in features and in brand name, the greater the cannibalization effect (Sezen, Pauwels, and Ataman 2023).

Ultimately, after **introducing more budget models**, like the PMmicro, production capacity and the sales volume potential of our product line-up were more aligned, which also enabled the discontinuation of older models. Starting from quarter 16, factory utilization began an upwards trend and average days of inventory would stabilize in the last 2 years to around 75 days.

As mentioned earlier, the other responsibility for the Operations department was on investing in **sustainability projects** that would improve the **efficiency of production** and **reduce emissions** caused by the direct production of vehicles (**scope 1**), reduce energy consumption which would also reduce the indirect emissions caused in the generation of electricity (**scope 2**) and reduce the emissions emitted either up-stream in the value chain or downstream (**scope 3**). Proxima chose to focus on investments related to scope 1 and scope 2 emissions, such as reducing water consumption and waste in production and investing in the installation of solar panels and in improving energy efficiency, as these projects appeared to have a greater return on investment and a greater effectiveness than those focused on scope 3 emissions. Links between increased sustainability and operational performance have been shown (El-Khalil and Mezher 2020) and improving the efficiency of the operation processes of Proxima was not only pursued for their obvious positive financial effects but also to fulfill one of the major values of the company to become a sustainable car manufacturer.

Finance

The Finance department is key in helping with the decision making of any firm. During this simulation, it was tasked with budgeting, providing financing for investments of other departments, ensuring solvency and liquidity, deciding how to manage the capital structure of the company, how much to invest in working capital and giving an overall view of the financial health of the firm to the other heads of departments as information regarding much of the financial statements and useful KPI's were only viewable by the Finance directors.

With so much information and responsibilities, decision making in the Finance department was guided by a common framework, the **Economic Value-Added** (EVA) methodology, where value created in the firm is calculated as a function of **returns in excess to the cost of capital invested**. This is also the method that was used to calculate the overall score in the simulation, where $Economic\ Value\ Added = NOPAT - WACC * TC$, with NOPAT being Net Operating Profit after Tax, WACC the weighted average cost of capital and TC the total invested capital, which can be calculated by subtracting from total assets, cash and cash equivalents and non-interest-bearing current liabilities. Therefore, we were presented with an optimization problem, where to maximize overall value added, you needed to get as high of **profits** with the smallest **capital invested** and with the lowest **cost of capital** possible. These **three main pillars** would guide decision making for the rest of the simulation. We also observe this in real companies that tie compensation to EVA, which results in an increase on asset turn-over, dispositions, divestments and share repurchases, as managers try to improve asset efficiency (Biddle, Bowen, and Wallace 1998).

Keeping this in mind, in the first 2 to 3 years, our overall strategy required significant **early investments**, either in new technologies to enable a successful transition into EV's or in sustainability projects to improve operational efficiency and environmental performance of the firm or in developing new vehicles. These early and significant investments (see Graph

3), by their very nature, take time to give a return, which explains the increase in Invested Capital but with Net Operating Profit staying about the same, the Return on Invested Capital decreased significantly, going from 15% at the beginning of quarter 5 to 8% in quarter 8. After a second round of major investment from quarter 15 to 19, which occurred during a shift in strategy where an expansion in our fleet of vehicles was decided on, **profitability** of the company finally **started to rise** (see Graph 4), combined with a stabilization of total invested capital, ROIC began to improve significantly, going from 8% in quarter 19 to a peak of 26.2% in quarter 27. Gross Profit, EBIT and Net Income increased as a result of an overall increase in Revenues (see Graph 5) and due to an increase in profitability margins (see Graph 6), with Net Profit Margin, for example, going from 6.6% in quarter 19 to 21.5% in quarter 28, highlighting the increase in sales figures and operational efficiency.

Although improving profitability is one of the main ways to improve EVA, **decreasing WACC** is the other tool that the Finance Department has more direct control over. Deciding how to finance investments, either through equity, debt or internal funds, in other words, deciding on the optimal capital structure of the firm is essential when maximizing EVA. As described by Myers (1984), there are two main theories that try to explain how firms decide on capital structure. The **Trade Off Theory** claims that firms decide on an optimal debt-to-equity ratio, where the benefits of the tax shield on interest payments and the potential costs of financial distress are considered. The **Pecking Order Theory** states that firms prefer to use internal funds first to finance projects, but if required, will resort to debt financing, issuing first the safer securities, and as a last resort issue equity. In this case, asymmetrical information and other costs make equity issuance the most expensive way to finance, while using internal funds is seen as the cheapest. Neither theory can perfectly explain decisions of firms in the real world and the topic of capital structure management is still widely discussed to this day. In our case, we decided to follow more in line with the Trade Off Theory,

targeting a **debt-to-equity ratio** of around **50%**, as we felt that with the information given to us in the simulation, this approach was more practical and appropriate. Following this benchmark, we resorted to **debt financing** significantly in the first few years, with total debt levels rising from around 11.08 billion USD in quarter 5 to 18.95 billion USD in quarter 12 (see Graph 7). Our debt ratio reached a peak of 55% in quarter 12 (see Graph 8), and it was at that time that the firm did its first and only **share issuance** worth 1.2 billion USD. This was done to reduce the debt-to-equity ratio, which had reached the maximum acceptable level, as was the credit rating of BBB. Had it been left like this, the over-levered capital structure of the company would have resulted in more expensive future borrowing and decreased financial flexibility for potential investments.

During the simulation, we also had available the choice to issue **green bonds**, which had significantly lower interest rates (3% fixed rate) than regular loans (which, at a credit rating of A, was 4.75%). However, there was a limit to the amount of these bonds the firm could issue, which was tied to the amount of “green investments” it had done. Investing more in these eligible sustainable projects would then increase the maximum amount of green bonds that could be issued. Having no apparent downside in the simulation, green bonds issuance increased steadily over time, and at the end of the simulation, the **green capital ratio** reached a peak of almost **91%** (see Graph 9). These green bonds had a crucial role in financing of the firm, helping to reduce WACC as more of the capital structure could be made up of cheaper debt, while the low interest rates of these bonds meant that overall interest payments would not be as high, helping with reducing financial distress costs and with financial flexibility. Academic literature as shown that investors are not as willing to pay this **premium** in yields for “greener” bonds, however, they can give the market a **signaling effect** of the firms’ commitment to sustainability, which in many cases then materializes in improved environmental performance (Flammer 2021).

Lastly, as part of the capital structure management of the company, two **buy-back of shares** were done in quarters 25 and 26 respectively. With no more investments planned at that time and with rapidly **increasing free cash flows** since quarter 21 (see Graph 10), these buy backs were done to distribute the returns of the firm back to shareholders, as keeping excessively large cash reserves in the company would be inefficient and potentially erode value. However, this also resulted in an increase in WACC from 7.56% in quarter 25 to 7.83% in quarter 27. There are 3 main economic motivations for stock repurchases: **Mispricing of stocks**, where when management believes that the stock of the firm is undervalued, they can repurchase shares to gain value from this mispricing; **Disgorging free cash flow**, which follows the reasoning we employed; and **to increase leverage**, when firms which to modify their capital structure. According to (Chan, Ikenberry, and Lee 2004), evidence was found to support the mispricing hypothesis, with stock repurchases sending a signal to the market of this mispricing which results in a positive response in pricing afterwards and limited evidence to the free cash flow hypothesis.

Lastly, **working capital management** was also a key function of the Finance department. Inventory build-ups were one of the main issues for Proxima, which meant that payment terms for customers and suppliers needed to be decided carefully to manage working capital levels, as this was the only tool that the Finance department could employ directly in the simulation to affect NWC. Although **minimizing the cash conversion cycle**, by minimizing inventories and accounts receivable and maximizing accounts payable, can be beneficial to cashflows, one must consider potential losses in sales or discounts from suppliers when too aggressive in this management. Evidence has shown an **inverted U-shaped** relationship between working capital levels and firm's profitability (Anton and Afloarei Nucu 2021). Taking this into account, most of the time, we kept payment terms unchanged at the regular 30 days and only modified them in quarters 16 and 24 (see Graph 11).

Integrated view across functions

Although each of these 3 functions could be analyzed separately, their individual performance and decision making was deeply dependent on how **interconnected** they were together.

Many of the KPI's and goals of each function was directly influenced by the actions of the other 2 functions. For example, for Finance to maximize shareholder value, following the EVA framework, maximizing return on invested capital (ROIC) was key. However, although decisions on investments was up to the discretion of the Finance department, much of how net operating profit behaved (which in turn will determine ROIC) was influenced by operating efficiency, a KPI that resulted much more from the actions of the Operations department, where controlling for factory utilization was one of the main tools to ensure the low unit cost and high profit margins of products.

Similarly, many of the Operations decisions were directly affected by how the Finance department operated. Expanding factories to increase production capacity or investing in sustainability investments to improve production efficiency required that the Finance department allocated the required funds in the investment budget of the firm, be it by issuing loans, debt or prioritizing the use of internal funds for these projects instead of others.

Strategy, in turn, gives a long-term vision and goals for each department to consider in their decisions. In this particular case, strategic planning influenced significantly several investment decisions. The number and type of models produced, and the scale of production was first decided on in the general strategic vision of the company before more practical actions were taken by the corresponding departments. The values of Proxima in what relates to sustainability, for example, also influenced how much capital was allocated to sustainable projects, and in turn, how much green capital would be raised.

Conclusions

After reviewing the performance of Proxima, I identified some important learnings.

Firstly, having a sound **long-term strategic plan** and vision of the company is important to provide guidance and goals for each department. However, it is necessary to first thoroughly study the market conditions and industry dynamics. Failing to do so can originate inefficient or unfeasible plans. If that is the case, **flexibility** in adapting business strategies is needed.

Secondly, to create value for shareholders, the firm needs, on the one hand, to maximize its returns. This is done by effective and timely **investment decisions** and by ensuring **asset productivity** by maintaining good operational processes. On the other hand, it needs to minimize the **cost of capital** by having an appropriate capital structure, where the trade-offs of issuing debt, equity or using up internal reserves are considered. All while ensuring good working capital and cashflow management to guarantee **liquidity** in the company. Following these principles, although stagnant at first, Economic Value Added of Proxima managed to grow significantly in the later years of the simulation (see Graph 12).

Analysis of Critical Incidents

This next section will be focused on detailing and analyzing how I performed in a team environment as a director in the company. For this purpose, **2 critical incidents** will be described and reflected on, where several key topics and ideas relating to business and teamwork skills will be explored. First, each incident will be **described**, then a **reflection** on how I personally acted during that incident will be made, where I will also compare my behavior and actions to relevant academic literature and ideas on teamwork dynamics and business environments. Lastly, I will propose some **points of improvement** and how I can address some of the deficiencies I showed in each incident.

The first critical incident analysis will focus on **effective communication** in a team environment. The incident itself describes a meeting where several members of the team had the opportunity to voice their concerns regarding the ineffective communication the team was showing up to that point. I was able to hear from others how I contributed to the issues that were presented and, in this analysis, I reflect on how they can be addressed.

The second critical incident analysis will revolve around **time management** and how time pressure can affect productivity, teamwork and communication. The incident described is a moment where the team faced a deadline and was not able to deliver a complete ESG report by the end of it. I analyze my behavior when under this type of time pressure and how I could implement time management measures in the future to address it.

First Critical Incident: Communication

The Incident

On the 21st of June, after the 3rd year of the simulation, a meeting was held to address some key issues identified at that point related to how our team was functioning. The major dysfunction that all the team members could agree on was regarding **communication**. From the beginning, imbalances in communication started to arise. I and 2 other members tended to take charge of discussions, having lengthy back and forth conversations, debating ideas and providing counterpoints. However, this was accompanied by the fact that other members of the team talked very little during discussions and decision making. I felt that this **imbalance** in communication was not beneficial to the overall performance of the team, and I was afraid that I was not giving enough space and opportunities for others to speak and contribute with novel ideas that myself and the members of the team that usually spoke more did not think about. After giving my point of view during the meeting, I then heard from the less outspoken members. One talked about how she felt that it was **hard to interject** during

the lengthy discussions that me and others had, and even felt that it would be rude to interrupt. Another member also shared this sentiment and agreed that **it was difficult to be heard** when such back and forth discussions between 2 or 3 members were happening, and pointed out times where he tried to speak but was left unheard.

Reflection

After having time to analyze this incident, I could find many parallels between what was described in the meeting and the team dysfunctions and team dynamics that we learned about during academic sessions. Firstly, following Lencioni (2002), there are 5 main dysfunctions in teams. Included in these are an **absence of trust** and **fear of conflict**, which, in my view, are the ones that were present and pointed out in the meeting.

After hearing from the other team members, I was able to detect that there was a lack of trust between the team, where some members did not feel comfortable to share their ideas and points of view, fearing judgement or because the team environment did not feel inviting to such contributions. A lack of trust could lead to less open communication, which would stifle the sharing of ideas. One of the key roles of any leader in an organization is to build and sustain a corporate **culture of trustworthiness**, since if members of an organization feel a lack of trust towards it, their engagement with its mission and overall team productivity will be negatively affected (Newman and Ford 2021).

A **fear of conflict** was also present in our overall team dynamics. There were never any moments of animosity or major disagreements between members at that point, and, after the meeting, it was clear that the reason why was not because the team was always in agreement with each other but instead because several members did **not feel comfortable in showing opposing views** to what was being said and agreed upon during discussions. As part of creating a productive and healthy working environment, it is essential that a team fosters inclusion by ensuring **psychological safety**. There needs to be processes in place to ensure

that everyone is asked on pros and cons of ideas and time must be allocated so that everyone can **comfortably share their views** (Feitosa and Salas 2021).

So far, the importance of setting up an environment where others can feel safe and comfortable to communicate has been explored. However, the other major issue that I felt that I had failed to identify was the fact that **I did not actively listen** to my colleagues. As I pointed out in the meeting, so many times I would, without actively noticing, start a one-on-one style of debate with a colleague, where after they shared their ideas, I would immediately respond and provide counter points or rebuttals. Unknowingly, as I was fostering these types of **closed discussions**, which were in many ways inefficient in reaching a conclusion, the other members were left with very few opportunities to interject.

Having what can be called **high-quality listening** can be beneficial to team dynamics and performance in numerous ways. By listening to others' ideas and feedback in an empathetic, non-judgmental and attentive manner can help with keeping both parties in a conversation engaged and connected, reducing defensiveness behavior and promoting psychological safety (London et al. 2023).

At the end of the meeting, after identifying these several communication deficiencies, an amended team charter was written where some processes and values were added or edited to tackle them.

Team Charter – PROXiMA

Culture & Values

- Respect and Integrity** – Respect each other and the different cultures, their related values, different personalities and communication styles
- Active commitment** – Interest and active mindset
- Analytical** – Constant feedback and questioning
- Trust** – Based on reliability and commitment to the company core values and a culture of small decencies
- Agility** – New challenges require new solutions

Ground Rules

- **Time management**
 - Attend meetings on time (5 minutes tolerance)
 - Always deliver 15 minutes before the deadlines
 - Take 10 minutes before each year decisions to reflect on team dynamics
 - Follow pre-defined structure and agenda of meetings to improve efficiency
- **Communication**
 - Respect the culture and values of our Team
 - Give individual and group feedback with respect
 - Ensure transparency for all
 - Communicate with respect and be aware of cultural differences in negative feedback
 - Raise hand when not feeling heard
- **Action**
 - Prepare decisions for the first quarter in advance
 - Reasoned decision making
 - Flexibility and agility to increase efficiency
 - Be aware of the resource intensive and risk averse mindset
 - Stimulate creative solutions
 - Divide decisions by four categories:
 1. CONVENIENCE - total delegation
 2. COLLAB – make decisions but open to veto's
 3. COLLECTIVE - put decisions up for a vote
 4. CONSENSUS – group discussion leading to concensus
- **Feedback agreement**
 - Name the specific action, event or behaviour you'd like someone to change.
 - Address the impact of that behaviour.
 - Suggest what the person could do differently next time.
- **Conflict resolution steps and finding their source**
 - Improve communication
 - Take perspective – empathise
 - Eliminate unnecessary escalation
 - Uncover issues sooner rather than later
 - Hit the pause button.

Analytic			Efficient Decisions
Harmony			Creativity

Table 2 – Team Charter of Proxima

As seen above, some of the key changes made to the team charter to improve communication were including a pre-determined process of raising a hand when not feeling heard, emphasizing **empathetic and culturally aware communication** and providing insightful but **respectful feedback** on each other’s conduct.

Points of Improvement

Since the Business in Practice field lab ended, I have had time to reflect on the deficiencies in communication that I displayed. Several points of improvement and how to address them were then thought of.

Firstly, to make sure I contribute to a more open communication environment, I should pay attention to how much time I take up in a discussion. If I see that there is an imbalance forming, I should make a conscious effort to **invite** the other members to the discussion. Asking **leading questions** like “What do you think of that?” or “What is your opinion on this matter?” can be good ways to make sure the other person feels comfortable in sharing their opinions and it also shows that I am interested in their point of view.

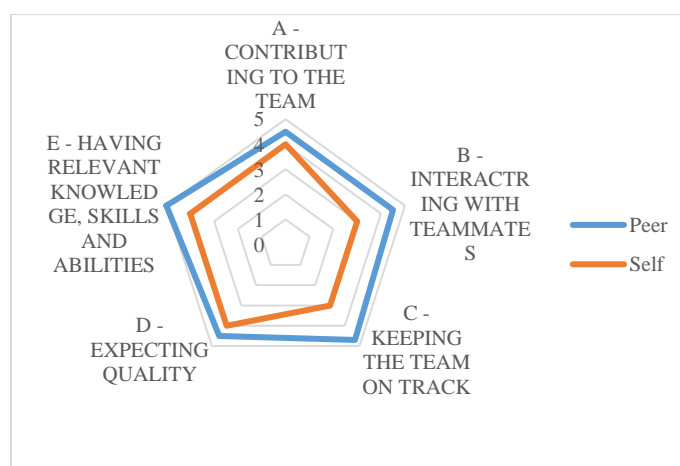
Secondly, I should ask more often for direct **feedback** on how a conversation went. This

can give me a clearer understanding of how the other person feels when communicating with me and where I can improve. Showing interest in how effectively I am communicating with another person helps building trust and can help catch potential issues early on.

Lastly, to employ more active listening, I should ask **follow-up questions** and **paraphrase** what is being said to me. This not only shows others that I am interested in their opinions, but it also prevents me from being overly argumentative in a conversation and ensures I understand the arguments and ideas that are being conveyed.

I tried employing some of these techniques in the final stages of the simulation, and I could see an overall improvement in communication team wide, as several members also were working on their communication skills after the joint meeting.

A **peer assessment** was done at the later stage of the field lab which evaluated 5 key components on a scale of 0-5: Relevant skills and knowledge, contribution to the team, interacting with teammates, keeping the team on track and expecting quality. It was interesting to note that even though I self-evaluated my interaction with teammates at a 3, due to my short-comings in communication at the early and mid-stages of the simulation, the average score given by my teammates was 4.5 (see below).



Graph 13 – Peer Assessment

This was due in part to a harsher self-evaluation compared to how my teammates evaluated me and other members, but it also shows that if I apply these techniques and improve my

communication, future teammates and colleagues will notice and value it.

Second Critical Incident: Time management

The Incident

On the morning of the 26th of June, the team was tasked with creating an ESG report as part of several role-playing tasks in Business in Practice. We had the morning to create a PowerPoint presentation and deliver it by email by 13:00 pm. We first divided up the presentation between ourselves such that each slide would be done by 1 or 2 people. It was agreed that every slide would be done at about 15 minutes before 13:00 pm such that there would be enough time to compile and deliver them by the deadline. I and the other director of Finance were tasked with one of the slides, and we rather quietly worked by ourselves, only sometimes discussing some details and delegating some tasks. The other members also worked in a similar manner, with a quiet environment being present for most of the time. However, as the deadline was approaching and most of the slides were being finalized, problems started arising when we tried to compile them in a shared document. These technical problems were not being easily solved, and as the 13:00 pm deadline was fast approaching, I could feel that I was not the only one beginning to feel **stressed**. Communication started to **break down**, with sometimes several people talking over each other as confusion settled in. I remember standing behind the colleague that was tasked with compiling the final document and nervously watching, sometimes asking about the progress and other times nervously walking around the room. In the end, we ended up submitting a report that was missing one of the slides right at the deadline, which ended up meaning that the professor who received the report, only actually got it in his email inbox 1 minute after the deadline. Afterwards, the report ended up with a failing grade, which would be reflected in the simulation with some penalties in demand.

Reflection

This incident manifested the second major problem me and the rest of the team were having: **time management**. Besides good communication, having established time management practices is essential for good team dynamics and performance. Time management deficiency was not something that we were unaware of in our team. In fact, it was one of the major points brought up during the meeting mentioned in the first critical incident.

Up until the issue culminated into this direct failure on the ESG report, I already felt that I was not applying good time management practices. Frequently, discussions I had with other members ran for too long, and when time would start to run out, I felt that decisions would then be made in a rush, with a consensus that I felt originated not from an agreed perspective but from a practical need to speed up decision making. This **mismatch of timing for the sharing of ideas** can be counter-productive to a team's performance. As Ford and Sullivan (2004) point out, "novel contributions are beneficial to project teams early in their development", however "when a team's attention shifts toward executing the novel proposal (...) attempts to introduce novel ideas will likely disrupt performance and induce frustration". On the other hand, when time pressure rose, I also frequently **focused solely on my work** when I was not actively participating in a discussion. Even though one can say I was still working and contributing to the team's tasks, by shutting myself down from discussions, I was not only missing out on potentially relevant information, but I also could not contribute to the active discourse with a unique perspective or idea that otherwise could be missed. As noted by van der Kleij et al. (2009), "increasing levels of time pressure **narrows team members' focus** (...) and the group attempts to reach consensus and complete the task as quickly as possible, but at the **sacrifice of quality**".

Time pressure, therefore, can be **detrimental** to both the **team's communication** and **performance**, inducing stress and limiting effective collaboration and communication. In

response, adequate time management measures are essential to be able to avoid these negative consequences.

One of the ways we as a team tried to address these concerns was to **delegate tasks** more effectively. As shown in the team charter displayed in the first incident analysis, decisions were divided into different categories depending on their level of complexity and importance. As was made clear up to that point, trying to discuss every decision of every department as a group was unrealistic and time-consuming. Given our time constraints, delegating some tasks and giving more **autonomy** for members to implement decisions would make teamwork more effective and productive. Certain low level routine decisions would be totally **delegated** to the corresponding department. Other more important and complex problems would be discussed as a group and a decision would be reached through a **collaborative** effort, but with the final say still with the corresponding department. However, if a consensus could not be reached regarding major issues, the final decision would be put up to a **vote** where a majority rule would be applied. These are 3 types of delegation of tasks: **convenience**, **collaborative** and **consensus** respectively (Forbes 2012). If applied correctly, they can make better use of everyone's skills and reach decisions in a more efficient manner while still making sure that the necessary level of discussion is made between members. This effective dynamic delegation of tasks, where **more trust** is placed in the independent conclusions of members and a more **shared leadership** structure is present as shown to be beneficial to performance of teams (Klein et al. 2006). It is also relevant to note that delegating tasks not only shows a level of trust that leadership has on employees but also correlates with an increase in employee's trust of management (Meagher and Wait 2020), highlighting the **two-way trust** relationship of leadership and employees that can be improved by delegation.

After the ESG report incident, the team also placed more importance on following pre-determined schedules during the simulation. I was tasked with being a "timekeeper" whose

responsibility was to warn members of when deadlines were approaching and if any discussion was being too lengthy. However, I had **difficulties** in performing these duties and in **enforcing tighter deadlines** and scheduling. This may have stemmed from a level of introversion and lack of confidence that I have always had. At the beginning of Business in Practice, every member did a questionnaire to find out their personality “color” using the “Insights Discovery” Methodology. I had a blue personality, which is characterized by slow and meticulous decision making which stems from an **increased importance given to details** and is associated with higher levels of **introversion** (Insights 2024). This could explain in part my difficulties with time management but also with not having the confidence in imposing time management measures on other people. Introversion has been shown to be correlated with an avoiding conflict management style (Antonioni 1998), and although I was comfortable with discussing decisions and ideas with colleagues, I always had difficulties with warning members about deadlines. It was hard for me to interrupt a discussion and warn people about time management, especially since I also had contributed to the problem several times.

Points of improvement

Summarizing, after analyzing my performance and conduct, I identified 3 main points of improvement. Firstly, I should be conscious of when I start to **focus** only on my work and **individual tasks** and begin ignoring relevant discussions. When this starts to happen, practical steps, such as simply closing my notebook or laptop or beginning to take notes on group discussions can help with maintaining focus on what is being debated as a team. Secondly, being more careful and aware of deadlines and imposing on myself strict limits and **time management** practices will lead to not only **reduced stress** levels but also improvements in the **quality** of my performance. Setting up timers or planning my tasks ahead of time can help with maintaining a stable and predictable work schedule. Lastly,

although probably the hardest step of the 3, is improving my confidence and being more comfortable with potential **conflicts** that can arise when pointing out or enforcing time management practices on colleagues. If this is a responsibility granted to me by others, I need to reinforce the idea to myself that it is not rude or inappropriate to make sure that these rules are being followed. Even though in my peer assessment I received a good grade of approximately 4.7 in the category “keeping the team on track”, I feel that there is much room for improvement and further steps can be taken to further my abilities in this area.

Conclusions

Both these incidents showed how important effective communication and time management skills are in guaranteeing a productive and healthy working environment.

Being able to discuss ideas and opinions in a manner that invites others not only to listen but also to actively participate in the conversation leads to more innovative solutions and more efficient teamwork.

Having effective time management skills helps with stress management, improves quality of work and being able to better deal with time pressure and deadlines can reduce their potential negative effects on team dynamics and productive communication.

Understanding how I behaved in a team setting and what were the key areas where I showed the most inadequacy is not only useful for studying how business and inter-personal skills can affect team dynamics and performance, but it can also serve as guidance for myself in the future on how to act when working in similar settings and environments.

References

- Anton, Sorin Gabriel, and Anca Elena Afloarei Nucu. 2021. "The Impact of Working Capital Management on Firm Profitability: Empirical Evidence from the Polish Listed Firms." *Journal of Risk and Financial Management* 14 (1). <https://doi.org/10.3390/jrfm14010009>.
- Antonioni, D. 1998. "Relationship between the Big Five Personality Factors and Conflict Management Styles." *International Journal of Conflict Management* 9 (4): 336–55. <https://doi.org/10.1108/eb022814>.
- Banker, Rajiv D., Raj Mashruwala, and Arindam Tripathy. 2014. "Does a Differentiation Strategy Lead to More Sustainable Financial Performance than a Cost Leadership Strategy?" *Management Decision* 52 (5): 872–96. <https://doi.org/10.1108/MD-05-2013-0282>.
- Bart Michael G, Christopher K, and Simon Taggar. 1996. "A Model of the Impact of Mission Statements on Firm Performance." <http://www.emerald-library.com/ft>.
- Biddle, G.C., R.M. Bowen, and J.S. Wallace. 1998. "Economic Value Added: Some Empirical Evidence." *Managerial Finance* 24 (11): 60–71. <https://doi.org/10.1108/03074359810765714>.
- Chan, Konan, David Ikenberry, and Inmoo Lee. 2004. "Economic Sources of Gain in Stock Repurchases." *Journal of Financial and Quantitative Analysis* 39 (3): 461–79. <https://doi.org/10.1017/S0022109000003987>.
- Croxtan, K.L., S.J. García-Dastugue, D.M. Lambert, and D.S. Rogers. 2001. "The Supply Chain Management Processes." *The International Journal of Logistics Management* 12 (2): 13–36. <https://doi.org/10.1108/09574090110806271>.
- David, Fred R. 2011. *Strategic Management: Concepts and Cases*. 13th Edition.
- El-Khalil, Raed, and Mohamad Ali Mezher. 2020. "The Mediating Impact of Sustainability on the Relationship between Agility and Operational Performance." *Operations Research Perspectives* 7 (January):100171. <https://doi.org/10.1016/J.ORP.2020.100171>.
- Feitosa, Jennifer, and Eduardo Salas. 2021. "Today's Virtual Teams: Adapting Lessons Learned to the Pandemic Context." *Organizational Dynamics* 50 (1): 100777. <https://doi.org/10.1016/J.ORGDYN.2020.100777>.
- Fisher, Marshall L., and Christopher D. Ittner. 1999. "Impact of Product Variety on Automobile Assembly Operations: Empirical Evidence and Simulation Analysis." *Management Science* 45 (6): 771–86. <https://doi.org/10.1287/MNSC.45.6.771>.
- Flammer, Caroline. 2021. "Corporate Green Bonds." *Journal of Financial Economics* 142 (2): 499–516. <https://doi.org/10.1016/j.jfineco.2021.01.010>.
- Forbes. 2012. "4 Ways For Leaders to Make a Decision." <https://www.forbes.com/sites/Brentgleeson/2012/11/07/4-Ways-for-Leaders-to-Make-a-Decision/>. November 7, 2012.
- Ford, C., and D.M. Sullivan. 2004. "A Time for Everything: How the Timing of Novel Contributions Influences Project Team Outcomes." *Journal of Organizational Behavior* 25 (2): 279–92. <https://doi.org/10.1002/job.241>.
- Gunasekaran, A., C. Patel, and E. Tirtiroglu. 2001. "Performance Measures and Metrics in a Supply Chain Environment." *International Journal of Operations and Production Management* 21 (1–2): 71–87. <https://doi.org/10.1108/01443570110358468>.
- Hill, Terry, and Roy Westbrook. 1997. "SWOT Analysis: It's Time for a Product Recall." *Long Range Planning* 30 (1): 46–52. [https://doi.org/10.1016/S0024-6301\(96\)00095-7](https://doi.org/10.1016/S0024-6301(96)00095-7).
- Insights. 2024. "The Essential Guide to Insights Discovery Color Energies and How to Use Them at Work." <https://blog.insights.com/en-us/blog/the-essential-guide-to-insights-discovery-colour-energies-and-how-to-use-them-at-work>. August 16, 2024.
- Kleij, Rick van der, Jameela T.E. Lijkwan, Peter C. Rasker, and Carsten K.W. De Dreu. 2009. "Effects of Time Pressure and Communication Environment on Team Processes and Outcomes in Dyadic Planning." *International Journal of Human Computer Studies* 67 (5): 411–23. <https://doi.org/10.1016/j.ijhcs.2008.11.005>.

- Klein, K.J., J.C. Ziegert, A.P. Knight, and Y. Xiao. 2006. "Dynamic Delegation: Shared, Hierarchical, and Deindividualized Leadership in Extreme Action Teams." *Administrative Science Quarterly* 51 (4): 590–621. <https://doi.org/10.2189/asqu.51.4.590>.
- Lencioni, Patrick. 2002. *The Five Dysfunctions of a Team*. 1st ed. HB Printing.
- London, Manuel, Judith Volmer, Jetmir Zyberaj, and Avraham N. Kluger. 2023. "Attachment Style and Quality Listening: Keys to Meaningful Feedback and Stronger Leader-Member Connections." *Organizational Dynamics* 52 (2): 100977. <https://doi.org/10.1016/J.ORGADYN.2023.100977>.
- Meagher, Kieron J, and Andrew Wait. 2020. "Worker Trust in Management and Delegation in Organizations." *The Journal of Law, Economics, and Organization* 36 (3): 495–536. <https://doi.org/10.1093/jleo/ewaa008>.
- MYERS, STEWART C. 1984. "The Capital Structure Puzzle." *The Journal of Finance* 39 (3): 574–92. <https://doi.org/10.1111/j.1540-6261.1984.tb03646.x>.
- Newman, Sean A., and Robert C. Ford. 2021. "Five Steps to Leading Your Team in the Virtual COVID-19 Workplace." *Organizational Dynamics* 50 (1): 100802. <https://doi.org/10.1016/J.ORGADYN.2020.100802>.
- Porsche. 2022. "20 Years of the Cayenne: The 'Third Porsche' – an Extraordinary Success Story." <https://Newsroom.Porsche.Com/En/2022/Products/Porsche-Cayenne-Anniversary-20-Years-Success-Story-28443.Html>. June 10, 2022.
- Rietmann, N., B. Hügler, and T. Lieven. 2020. "Forecasting the Trajectory of Electric Vehicle Sales and the Consequences for Worldwide CO₂ Emissions." *Journal of Cleaner Production* 261. <https://doi.org/10.1016/j.jclepro.2020.121038>.
- Sezen, Burcu, Koen Pauwels, and Berk Ataman. 2023. "How Do Line Extensions Impact Brand Sales? The Role of Feature Similarity and Brand Architecture." *Journal of Marketing Analytics*. <https://doi.org/10.1057/s41270-023-00265-z>.
- Teece, D., and G. Pisano. 1994. "The Dynamic Capabilities of Firms: An Introduction." *Industrial and Corporate Change* 3 (3): 537–56. <https://doi.org/10.1093/icc/3.3.537-a>.

Appendix

Strengths

- Diverse portfolio compared to competitors – have more product lines than A and C approx. the same as B
- Countries market share: competitive market share
- Asia Market share leaders in sales in Asia 33.51% by half a percent
- Europe: Market share leaders in sales in Europe by 33.22% by 4.5%
- America we are market leaders as well and have 32.07% Competitor A: 28.45%; B: 27.8%
- Highest revenue in America
- Only company to sell the pickup truck PU – 60% maturity
- Debt ratio at 47% and A+ and ability to issue green bonds
- 6.1% of WACC
- Operational staffing is good

Weaknesses

- Many combustion engines and potential changes in regulation of CO2 emission fines
- Broad range of cars however each individual car is not dominating their segment – they are not market leaders in sales due to the production location
- Misplaced factories lead to higher tariffs
- Low cash for investments at the moment in Q4
- Slight decreases in EBIT margin and FCF due to losing efficiency or increasing costs
- Negative net income due to investment
- Models with high maturity stage that will lose some of their profitability: Sport E 100%; 4x4 90%; City E 80% after 120% maturity it will decline
- Cars with the highest maturity are the only EVs we have
- More than half the employees have a negative compa ratio
- Digital investments are costly compared to sustainability and have less increases in demand

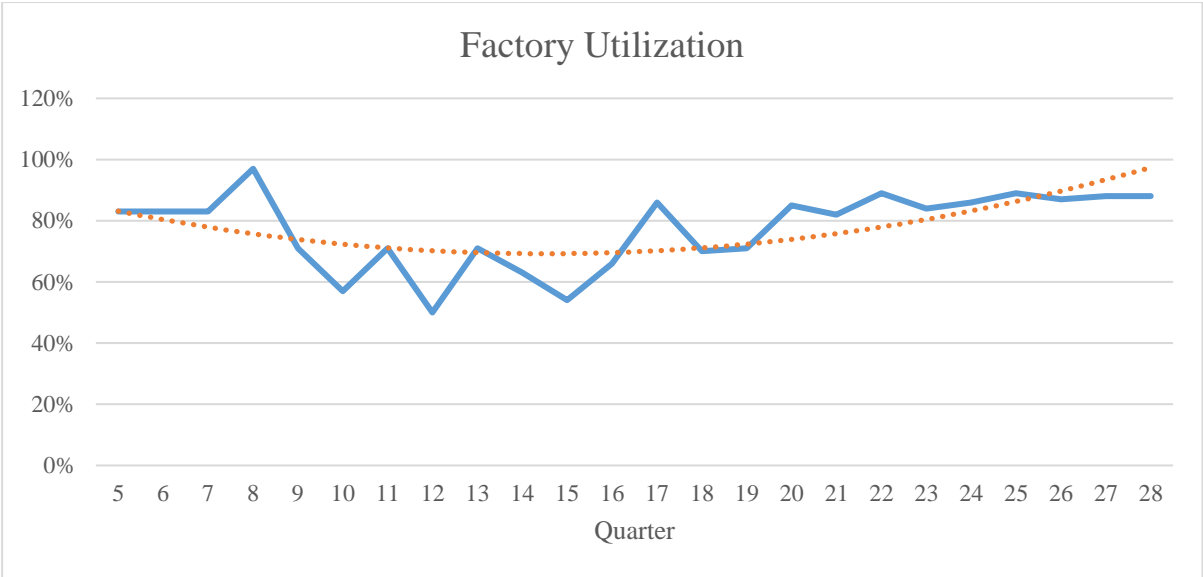
Opportunities

- Asia supply level at 85.1% market potential of \$5.504M
- Shift SUV 4x4 to America since higher demand there
- Increased demand for EVs and autonomous driving
- Cars with the highest maturity are the only EVs we have ability to use operations for new electric cars and develop them based on customer preferences
- Investing in autonomous driving and sustainability
- Increase salaries for workers that have only 0% compa ratio
- Develop skills and increase salaries to keep compa ratios above 0%
- Increase investments into sustainability and marketing and use green bonds
- For digital decide on what to invest into automated driving or AI implementation invest into innovation investments due to market
- Average maturity for EVs have lower maturity thus can relaunch the cars

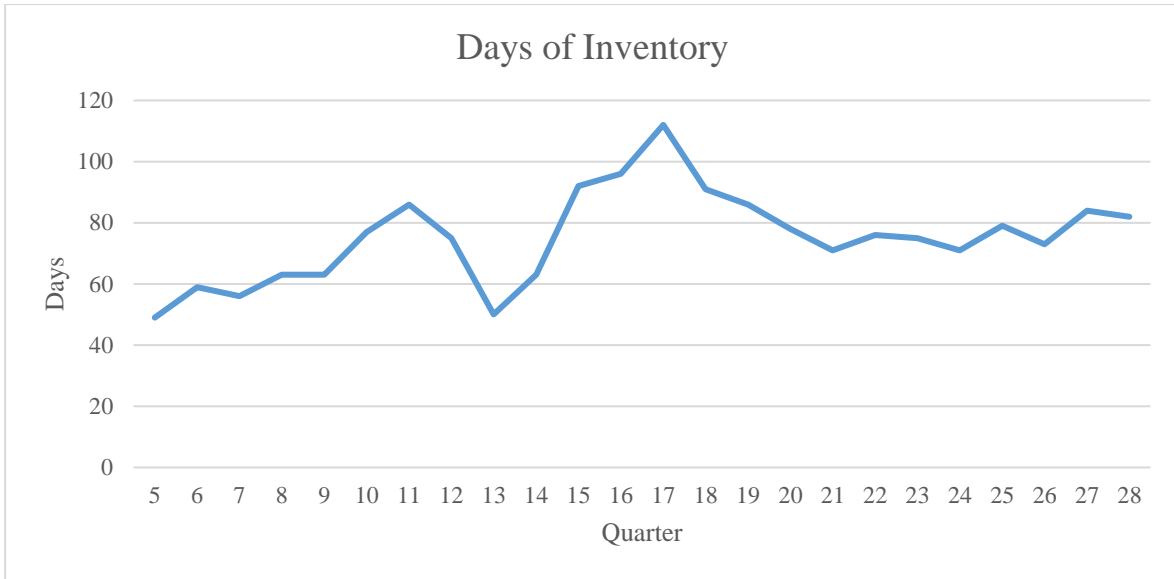
Threats

- CO2 emissions fines because we have many combustion engines and changes in regulation
- Sport E maturity is at 90% after three quarters we likely have an open line in America – charging higher price but still selling more
- Changing customer preferences also in terms of digitalization autonomous driving and sustainability
- Increasing tariffs
- Governmental changes in legislation

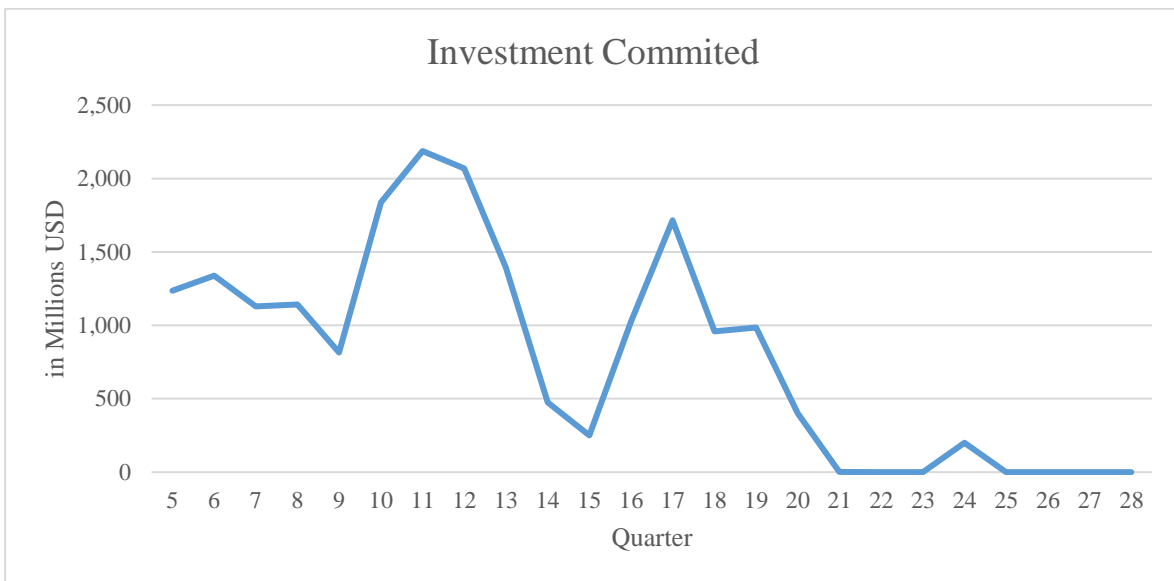
Table 1 – SWOT Analysis



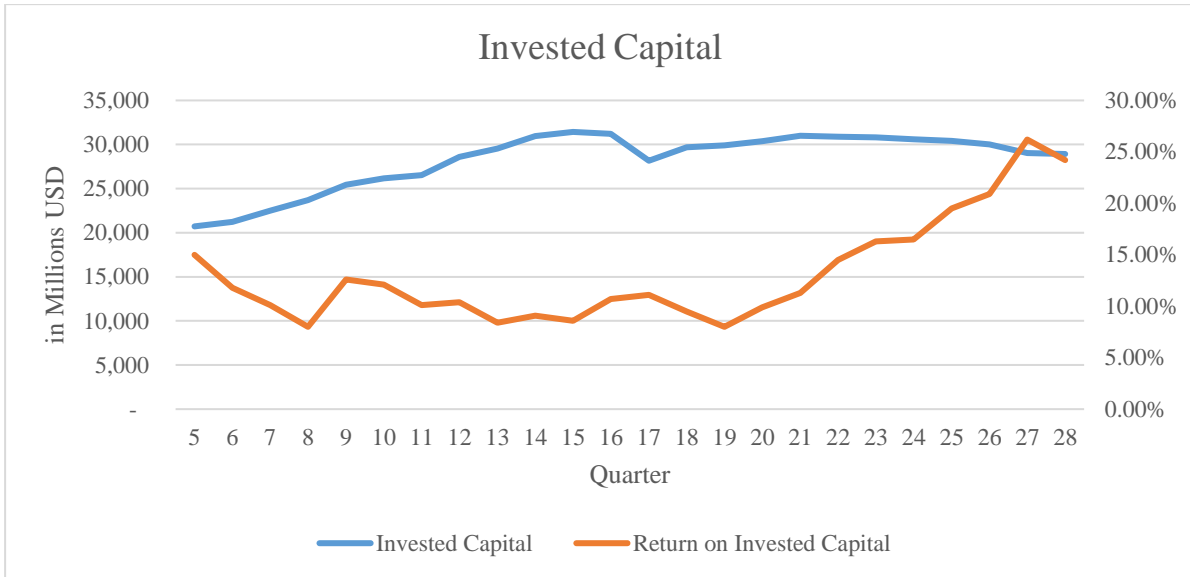
Graph 1 – Factory Utilization levels by quarter



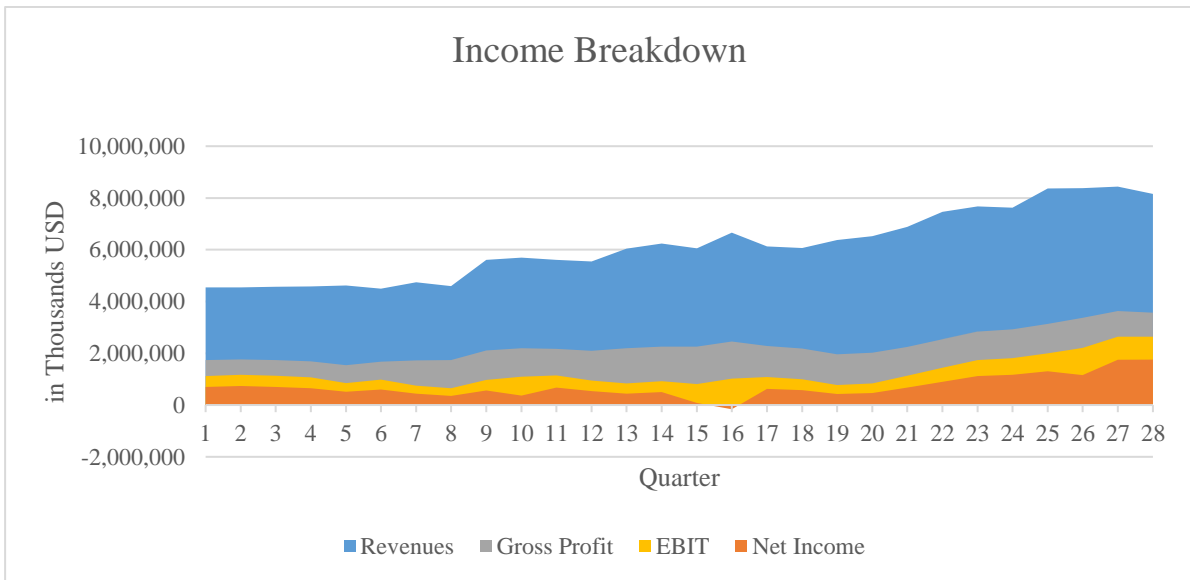
Graph 2 – Days of Inventory by quarter



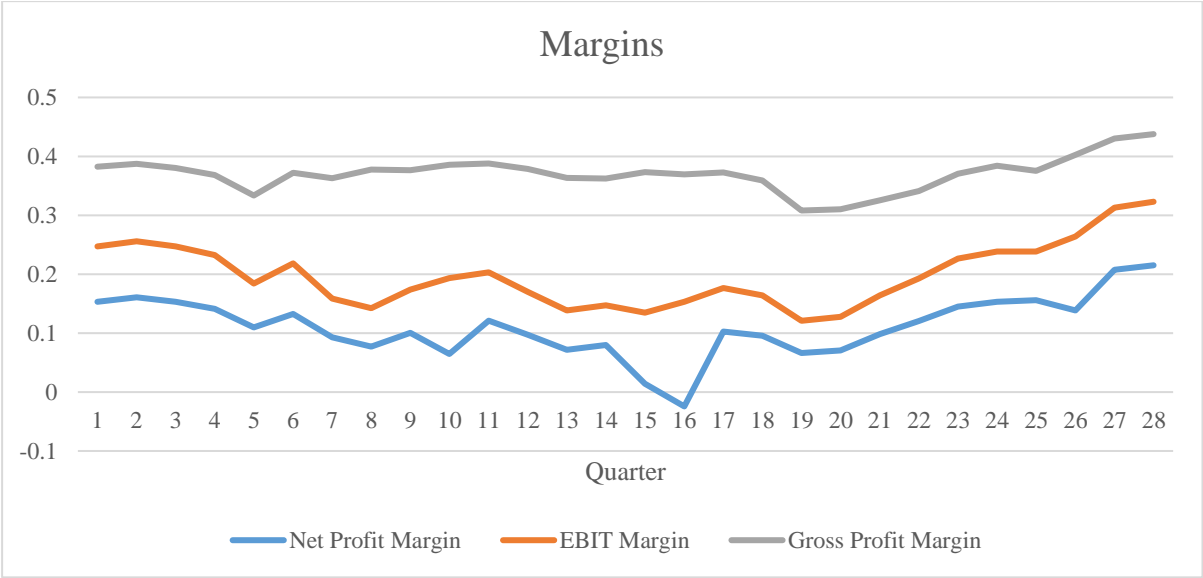
Graph 3 – Investment committed each quarter



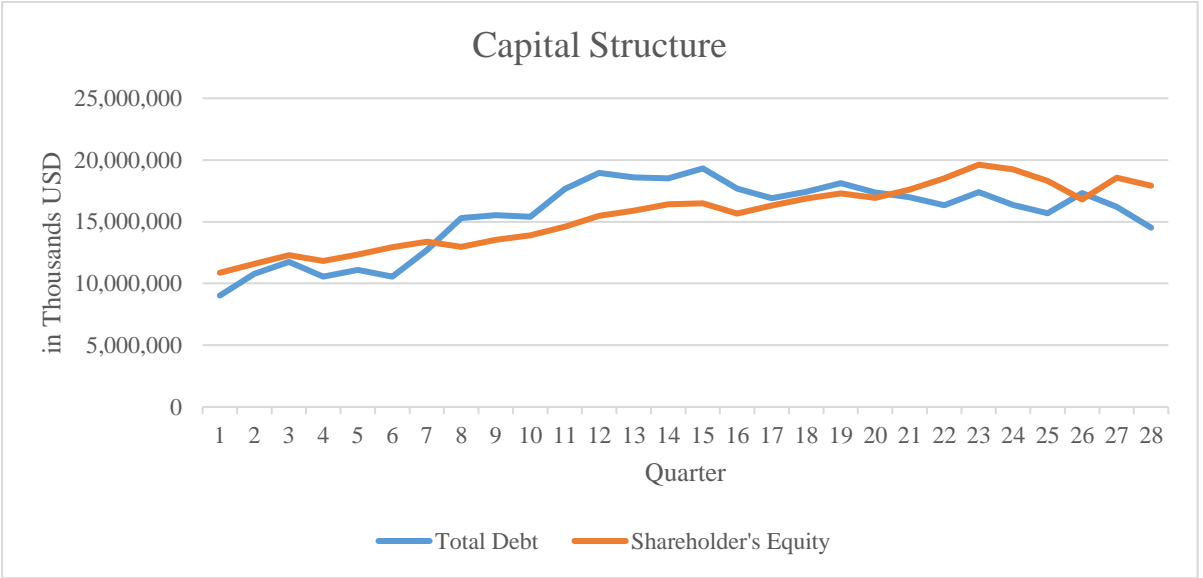
Graph 4 – Total Invested Capital and Return on Invested Capital (ROIC) per quarter



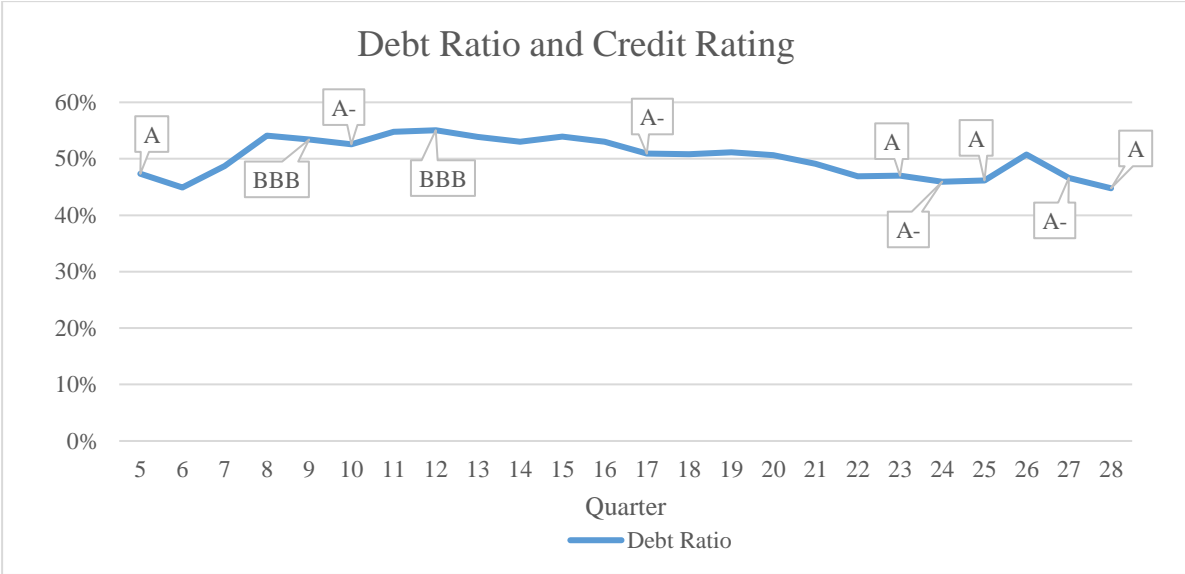
Graph 5 – Total values of Revenues, Gross Profit, EBIT and Net Income per quarter



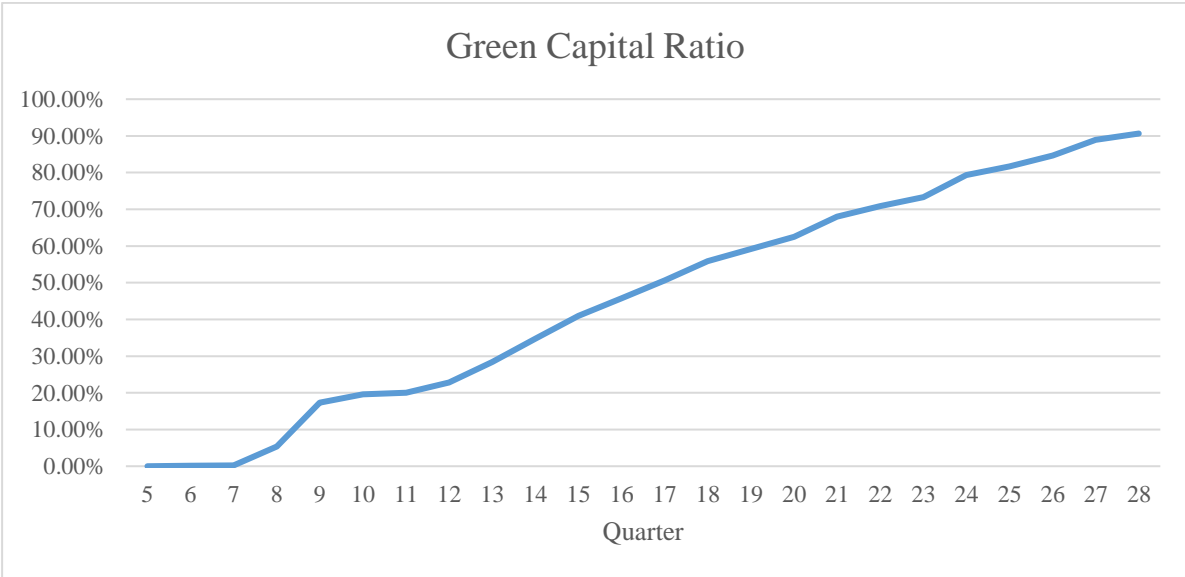
Graph 6 – Net Profit, EBIT and Gross Profit Margins per quarter



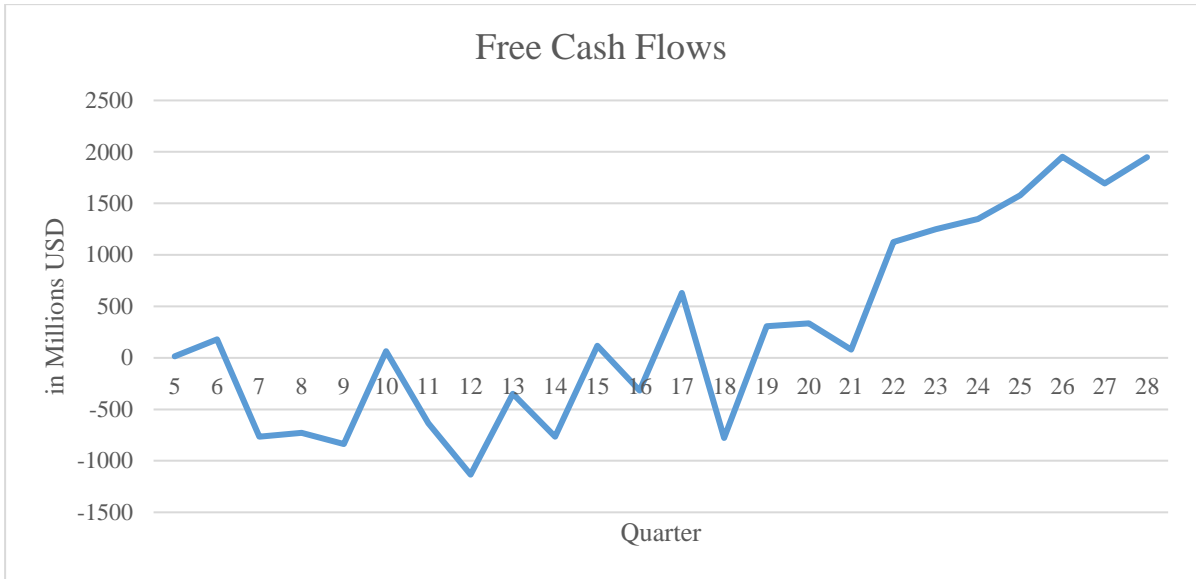
Graph 7 – Capital structure per quarter (total debt and equity outstanding)



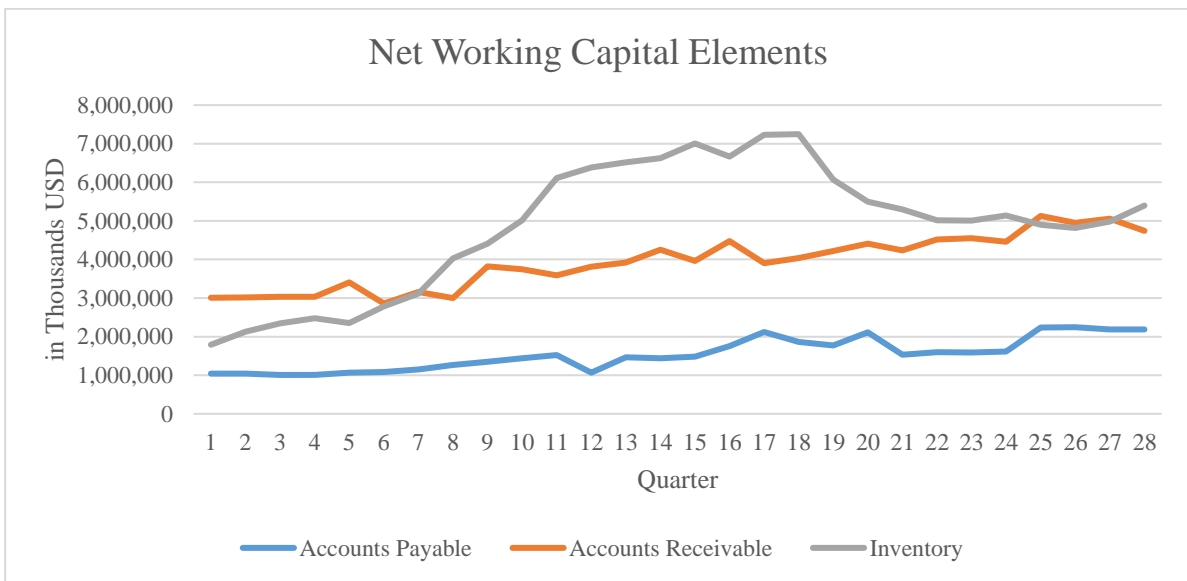
Graph 8 – Debt Ratio per quarter and credit rating changes



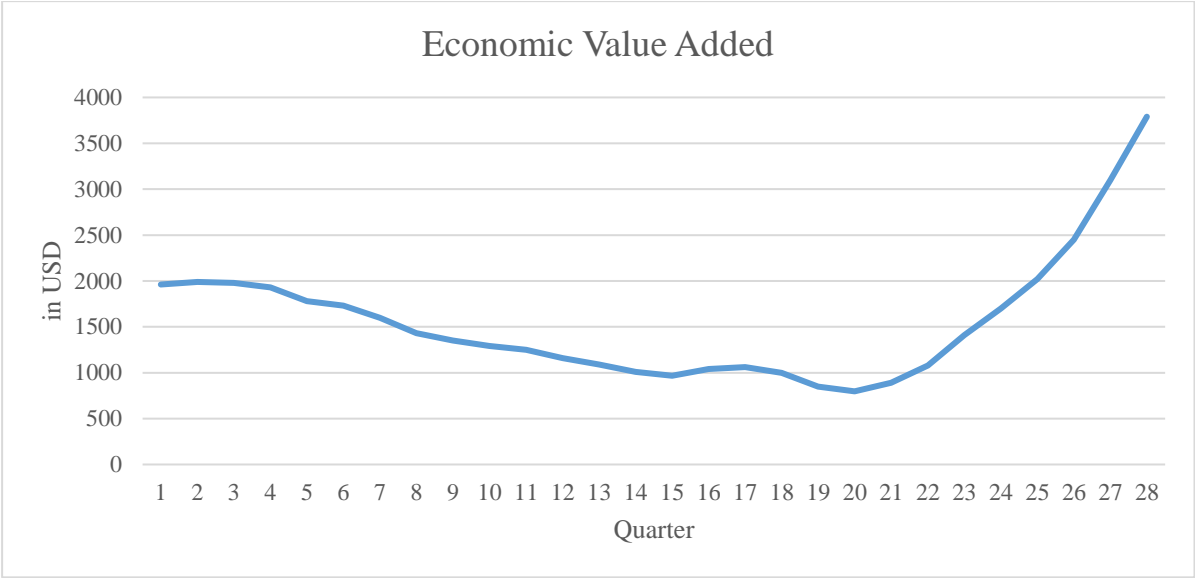
Graph 9 – Green Capital Ratio per quarter (% of total debt that is from green bonds)



Graph 10 – Free Cash Flows per quarter



Graph 11 – NWC elements per quarter: Accounts Payable, Accounts Receivable and Inventory



Graph 12 – Economic Value Added by quarter