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Business in Practice – Personal Reflection & Analysis of JAWDA's Performance

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Abstract

There is so much to learn when working in a team with the pressure to deliver results. Through a deeply personal reflection, I understood that clear and objective communication, and openness to the diversity of skills and knowledge team members can offer are critical factors for the team's success. An unknown world, can prove to be quite challenging for a company to show itself viable and promising in the market, let JAWDA say so. Despite all the difficulties, through good learning from its mistakes and better communication and cooperation between departments (namely, Finance, Innovation, and Marketing), JAWDA overcame any barrier.

Keywords

Marketing, Finance, Innovation, Marketing Strategy, Communication, WACC, Business Simulation, Managing a Business, Reflective Practice, Working in teams, Diversity, Revenues, Quality

I would like to express my deep gratitude to my supervisor, who has always shown great willingness to help me evolve and for offering us an unforgettable and enriching experience. Finally, I'm extremely grateful to my family and friends, who have always encouraged me to do what I loved most and provided me with opportunities to do more and better.

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Personal Reflection

Introduction

During the weeks spent in Business in Practice (BiP), we were exposed to different moments and experiences that allowed us to learn much more than the complexity of defining and following strategies in a business, given the variety of its environment. I believe this experience was crucial for my professional and personal life, as both go hand in hand. From these weeks, I took severe lessons on how to work as a real team: the importance of clear and straightforward communication; the relevance of the union and the cohesion of a group that works with a common objective; the relevance of the flexibility to adjust to changes in the environment; and I managed to deepen many teachings regarding the management of a financial department of a company; between others.

This introspective passage is a reflection on the weeks spent in BiP. Through the analysis of two critical events, I will describe my behavior and the outcomes of it. Deciding which incidents to report was a more complicated task than I thought, as this experience taught me more than just what running an intensive-capital business entails. We have always been used to doing group works for college, however, everything changes when we must combine different goals from different departments for a common purpose. All of this, done with limited resources. At the end of these three weeks spent in this experience, I carry much more with me than the lessons I learned managing the finance department.

Critical Incident I

The Event

JAWDA (team 6) underwent several complicated phases during the simulation. Undoubtedly, one of the most difficult ones we went through was during years 3 and 4. We had reached the middle of the simulation, and the investments made were not profitable, in fact it happened quite the opposite. Revenues were in decline as well as Gross Profit, and EBIT also showed huge drops, not to mention the negative Net Income.

We were facing a business that could not have organic growth, so the money it generated would not be enough to cover operating expenses and some possible investments. Despite this, we thought our main problem was in the portfolio management and the wrong choice of the cars we invested in. After some time of brainstorming and analysis, we realized that we needed to invest in two more cars. After the Head of Innovation and the Head of Marketing carefully analyzed market preferences, and which cars (and features) were selling the most, we agreed as a team that we would have to invest in the cars with a one-quarter difference.

The moment had come for the final decision: "Can we make these investments?". As Head of Finance, it was up to me to accept and make the necessary decisions so that JAWDA had the budget to invest in the cars and to support the operational costs of each quarter. I was perfectly aware that the investments that were made would only be recovered at the beginning/middle of the following year, implying a worsening of our situation for that year. Bearing this in mind, and that we would have to resort to external financing, I did not demonstrate a lot of self-confidence about the investment, albeit a positive answer to the previous question. Our investments were yielding a lower return than required by the company's Weighted Average Cost of Capital (in other words, our investments were not creating value for JAWDA).

My confirmation to go ahead with the investments was not very well accepted by the rest of the team, as I showed all my fears about their return and the company's need to have cash. I demonstrated this uncertainty through my shaky and rather lengthy speech. “Negative feelings can be a sensitive issue to broach” (Toegel & Barsoux, 2016). During my speech, I mentioned several times the risks we were facing, and I rarely showed a willingness to commit the team to what we decided to do.

According to Patrick Lencioni (The Five Dysfunctions of a Team, 2002), the main reason to have a dysfunctional team is the lack of trust, and the fear of being vulnerable to the rest of the team members only inhibits the development of trust within the group. This vulnerability generated more conflict and discussion about the decisions to be made since I did not believe 100% in my teammates, who had more information than I did about the quality of the investment. We ended up having an argument that made us lose precious time since we invested in what we initially had discussed.

My Response

"Today's teams are different from the teams of the past: They're far more diverse, dispersed, digital, and dynamic (with frequent changes in membership)" (Haas & Mortensen, 2016). I consider the referred episode to be a critical incident because never in a group work have I felt such vulnerability and lack of trust in team members and myself. Even though I know that sometimes we must make sacrifices to achieve great results, the lack of these made me feel very worried and thought we had reached the point of no return. "Perhaps the biggest source of conflict on teams stems from the way in which members think about the work they're doing." (Toegel & Barsoux, 2016). I was afraid that the investments would not be profitable and that they would leave us in an even more delicate situation, putting us, financially, without major strategic options.

"Self-confidence is an essential part of leadership. A leader with self-confidence thinks positively about the future and is willing to take the risks necessary to achieve their personal and professional goals." (Daskal, 2019). Since I focused more on conveying the negative aspects of those investments instead of the positive ones, it brought instability and a feeling of insecurity to the team, everything a leader should not do.

In the middle of the simulation, we were asked to evaluate ourselves and the other group members in different aspects. In this way, we could compare our colleague's feedback about us, as well as our own self-assessment, to reflect on some behaviors, which, contrary to what we thought, are not so well regarded.

Thus, we had the opportunity to change and evolve. The ratings given by my colleagues (as shown in the figure below) revealed a moderate opinion for *"Interacting with teammates"* and a low rating for *"Having relevant knowledge, skills and abilities"* and *"Expecting Quality"*. Looking back at this episode, I can see why. The lack of trust I showed in my colleagues highlights aspects I need to improve when interacting within a team. I also believe that the lack of confidence in myself may have led my colleagues to think that my decisions were not being made safely and in a knowledgeable manner. This led them to not expect great results from me.

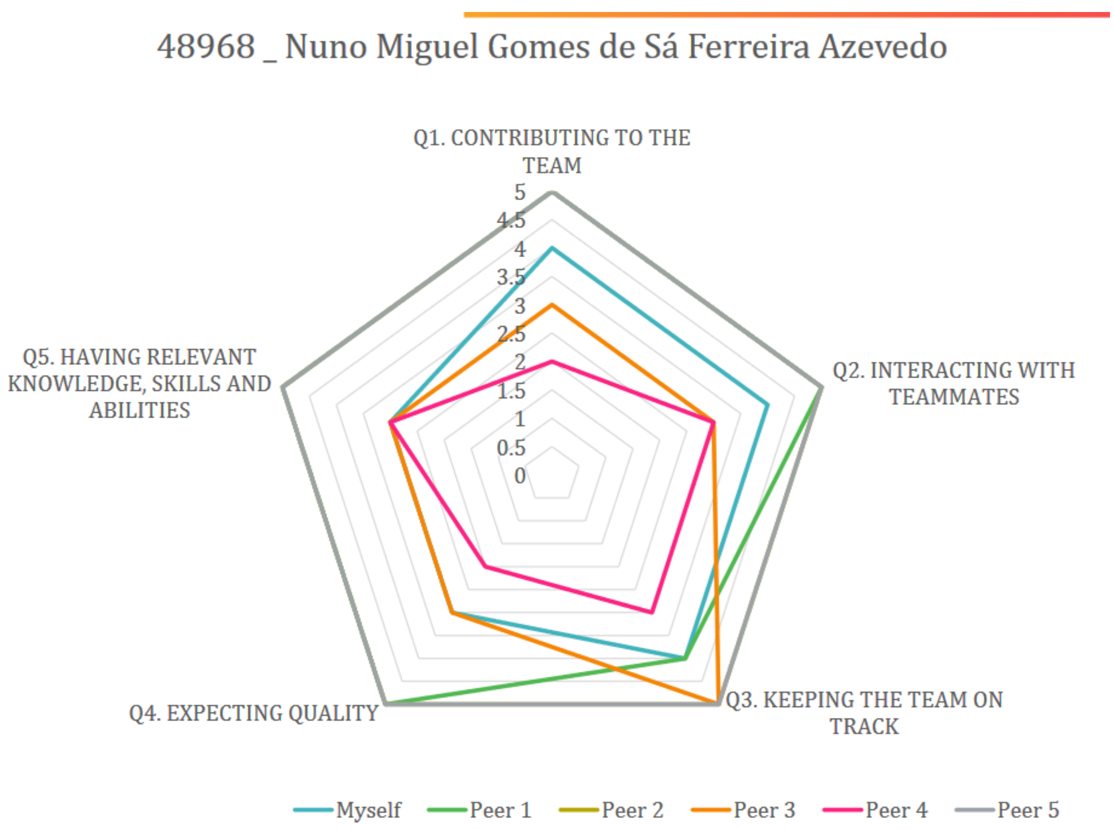

Figure I: Peer & Self-Assessment

Reflections & Learnings

When it came to investing in the second car, I realized the importance of the trust in ourselves since the Head of Innovation also showed doubts about the car's launch. If he, who had the crucial information to make the decision, felt insecure, how could the rest of the team feel comfortable? Even though it was a repetition of my mistake, it was very important for me to understand how I let my team feel. Seeing it from the outside, made it easier for me to understand some methods I could have adopted to avoid this failure.

To begin with, I decided that when it comes to making decisions as a team, and after these have been well discussed and thought through, I would not doubt my colleagues again, especially those who have more information than me on specific subjects. This brings me to the second lesson, despite the difficult time I may go through, panicking does not solve anything. On the contrary, it only generates more conflict and unnecessary instability. In order to remain calm during the rest of the simulation and throughout my life, I realized that it is essential to be aware of and put into practice emotional intelligence. Salovey and Mayer (1990), defined emotional intelligence as the set of theoretical skills that help someone to better assess and express their own (and others) emotions and feelings, more effective regulation of their own (and others) emotions, and the ability to use their emotions to be motivated and reach different goals in life. Knowing myself well is fundamental for a well-rounded emotional management so that I do not give into pressure once more and lose my direction.

For many years I practiced sailing, a sport that like all other team sports, is based on trust and teamwork. Looking back and reflecting on my behavior, I can confirm the importance of this fundamental principle in a team. I cannot say that I am glad that I gave into the pressure of not delivering results. However, I am proud I was able to realize that I had failed and had the flexibility to change my behavior.

The results were visible, as I became less anxious, less vulnerable, and started trusting more in my colleagues. Even my thought process in moments of crisis and the way I expressed myself changed for the rest of the simulation, and for my life. This allowed us to become a more cohesive, united, and complete team. In this way, we were able to make better decisions.

Critical Incident II

The Event

Dalai Lama once said: “When you talk, you are only repeating what you already know. But if you listen, you may learn something new”, and nothing better describes the great lesson I learned from this critical incident. I had the opportunity to experience this during the simulation at the end of year 4. We had come from a year full of significant investments, from which we were recovering and getting good results. Our situation was starting to improve, sales were increasing more than our spending, and we were starting to generate money. With this, and without major investments to make, I had few strategies left. I had access to Green Bonds that could be used to pay off loans (at a more expensive rate), I could use part of the money to make a deposit, and thus lower interest costs, but I could also choose to buy or issue shares to change the cost of capital.

As was usual during our meetings, each element had the floor to talk a little about questions/ideas they had for that quarter. When it was my turn, I reported on all the opportunities we had to alter the capital structure as well as the pros and cons of each strategy. Every idea made sense at that moment, and as I was very involved in this decision, I was excited about the exchange of thoughts. I wanted to choose the option that the team more agreed with, so I wanted to hear the opinion of each colleague and discuss the different choices as a group. The problem was that, given my extreme commitment to this discussion, I could not understand that I was interrupting people in the middle of their speeches, which generated natural displeasure in my colleagues towards me.

My Response

Our group was made up of extremely different people, but for the good of all, we always maintained sincerity, which made me rethink my attitude and change it. Everyone knew that I was not interrupting them out of spite and that my behavior was largely involuntary.

However, for the good of the team, one of my colleagues came forward and told me that to understand their points of view, I had to let each one talk and listen to them, something that I wasn't doing. I considered this opinion as a constructive criticism, as it was pertinent and entirely true.

"A vital ingredient in every successful workplace is high-quality communication, and three quarters of high-quality communication involves listening. Listening skills are important for career success, organization effectiveness, and worker satisfaction." (Duwadi, 2014). Even during the debate, I allowed others to express themselves freely, so we could reach a conclusion as a team. In the end, I apologized to my colleagues, explaining that my attitude had nothing to do with their opinions but simply because I had been impulsive and was very committed to making a good decision.

From then on, I started to rethink what I would say before speaking, whether to have a more coherent speech or speak at the right time, since "In different degrees and in many different ways, listening ability is affected by our emotions." (Nichols & Stevens, 1957). In order to improve my listening skills, I have to better understand what affects my listening ability (Nichols & Stevens, 1957), and I am conscious that this comes with experience and humility.

Reflections & Learnings

In line with Patrick Lencioni (The Five Dysfunctions of a Team, 2002), if a team works in an individual way and ignores to cooperate and communicate, in other words, does not work as a real team, that group is practically destined to fail. And how true this is!

During this incident, I was reminded that my miscommunication may have been one of the major drivers for the relatively low rating given to me by two colleagues in the peer evaluation regarding *"Interacting with teammates"*. If I already know where I am failing and have a tolerant and honest team willing to help me change, why not make an effort to improve? That is exactly what I thought. Moreover, I even asked my team to let me know when I was interrupting them.

I have tried to be less impulsive and give in less to the involuntary temptation to speak over other people. I know that these changes require time and experience, but I also know that having lived through this, I will be able to improve my ability to interact with others.

It is often said that "two heads think better than one", and during the simulation, I was able to experience this. One of the examples was this event. The fact that Nova SBE allows us to interact with people of different nationalities and from several backgrounds is both challenging (given the barriers we must overcome, for example, linguistics, and customs) and enriching since we must overcome these obstacles. However, I also realize that we have much to learn from one another just by listening carefully. A team can potentially carry out a more complete work than a single individual. It is necessary to take advantage of the different experiences, backgrounds, and knowledge that each element can add when delivering a project. When this is done as a team, combining different points of view, ends up in a higher quality project. As Stephen Covey once said: "Strength lies in differences, not in similarities.". This is another great lesson I take away from this critical incident. Realizing that I will not always be able to be the best at everything is, contrary to what it may seem, a great advantage for the rest of my life. I have more to gain from paying attention to what others with different perspectives have to say to me. Listening to other points of view and adding them to my knowledge base can only enrich me. Even more, when these people show a high diversity, good knowledge of what they speak, and honesty.

All in all, knowing how to listen to others and keeping in mind that a team is capable of doing a better job than if I did it all by myself are, in my opinion, two lessons for life.

Conclusion

We only spent three weeks running a business, but it was three weeks that had a lot to teach me. The intensity of this project led to discussions, disagreements, and challenges that, for the good of the group, had to be overcome. Undoubtedly, as Head of Finance, I learned a lot about what a capital-intensive business requires and that I cannot limit myself just to my department. To be able to take my department and the company to another level, I had to communicate with the other directors to understand to what extent my role was linked to theirs and how I would have to adapt my strategies. Furthermore, I also had to pay attention to my department's managers' to advise me regarding my decisions.

Despite these learnings related to more technical knowledge, my biggest lessons from this experience at BiP were related to soft skills.

I can conclude that for a team to be functional and, in this way, do a good job, all its members must be aligned and committed to cooperation. However, it is also crucial that each Director shows confidence in his decisions and strategies to bring peace of mind to the group.

Finally, a good team member and a good leader must know how to listen to others and be aware that this is the only way they will be able to combine the knowledge and experiences of each one to carry out a work of excellence.

JAWDA’s Performance Analysis

Introduction to the firm analysis

Continuously leading Innovation in Sustainable Practices and creating a world filled with high-quality electric cars and zero carbon emissions are the purpose of being and the way JAWDA sees the future.

In the following part, I will analyze the company's evolution, always remembering its mission and vision of the future. I will use an analysis of three JAWDA departments: Finance, Innovation, and Marketing.

To comprehend the company's current health and financial stability, the reader will begin with an analysis of the Finance department. Knowing its history is essential because we can only understand whether JAWDA is charting a path with a promising future if we have in our mind all the stages that the company had to go through.

By doing an analysis of the Innovation department, I want to assess whether or not JAWDA's vision for the future of mobility is viable and whether this company is contributing to a more environmentally friendly future. Notwithstanding this, I also want to understand whether the quality of the cars significantly impacts their attractiveness, and therefore increases the performance of the company.

Ending the analysis with the Marketing department, I want to recognize the importance that this area has both for the performance of a car, as well as for the general performance of the company. I will also assess Customer Satisfaction to see if the JAWDA team understood how to satisfy the needs of its customers and better communicate with them.

Finance Analysis

As "the real signal for operating activities for a company is EBIT" (Adiloglu & Vuran , 2017), analyzing the evolution of its margin will let us better understand the true profitability of the company. Not all periods were easy for JAWDA, which can be seen in Appendix I. As of Q18, the trend was for JAWDA's EBIT Margin to decline, reaching a low of 1.70%. This decrease was due to erratic sales (Appendix II), and an increase in their costs.

Mismanagement of the portfolio and investments made at the wrong time led this company to drop its Gross Profit Margin abruptly, from 41.92% to 25.94% at the end of Q18. In addition, the company's operating costs increased in relation to its sales, as shown in Appendix III. At the beginning of year 1, JAWDA allocated 16.75% of revenues to costs with marketing campaigns, General &Administrative expenses, and depreciation. Until Q18, there was an evident lack of efficiency on the company's part, since about 29% of the sales were destined to support these costs. After all, from Q18 to the end of Q28, the automaker saw its revenues increase by an impressive 62%.

By keeping calm and good management of its operating costs, it was able to progress, improving this ratio from quarter to quarter. Considering the EBIT Margin of 31.3% at the end of the last quarter, we can see that JAWDA has improved its efficiency by 1741.17%, compared to Q18, and about a 50.63% increase since the beginning of year 1.

Most of the time, JAWDA was below expectations, as it showed a lack of efficiency in its management. Until Q23, there was a clear trend: JAWDA was uneconomical compared to its market. But if, on the one hand, I point out the company's flaws, on the other, I must reinforce the incredible agility and sense of overcoming that was above any company in the market, proving straightforward that JAWDA’s team knows how to manage the costs well concerning the company’s performance. In Q24, this company was able to reverse the trend and show that anything is possible. Not only became a company with an EBIT Margin above the market benchmark but also ended year 6 as the company with the best profitability ratio. The result of this indicator becomes even more impressive if we consider that Tesla closed the last quarter of 2021 with an EBIT Margin of 14.74% (*Tesla*).

"Never take your eyes off the cash flow because it's the lifeblood of business", as said once by Richard Branson. The fact that JAWDA is in a capital-intensive industry, the usual high levels of debt did not make the company ignore the importance of Operating Cash Flow (OCF). This special attention did not only come with the concern to improve its performance but also with the awareness that selling does not mean receiving. According to Wayman (2021), the OCF statement can find these variations since the differences between the accrual accounting and the cash flows of a firm are shown by the cash cycle, in other words, all the process that transforms sales into cash. Accounts receivable represented an astronomical figure of around 48% of JAWDA's sales. In this way, the company decided to adopt a strategy that would remain constant throughout its activity, more specifically, to reduce the average receivement period of customers to 15 days and increase the average period of payment to suppliers to 40 days. Once again, Wayman (2021) defended that an efficient Working Capital Management (Accounts Receivables, Accounts Payables, Inventories) is needed to improve either the liquidity or the profitability of a company. This proved to be crucial in a company that had to make so many and high investments. So, this strategy was the best to try to improve its' OCF. By following this strategy and improving its performance, JAWDA increased its OCF by 35.6% from Q5 to Q28.

It is also essential to understand how this company organized itself in terms of its investments and, naturally, the credits it had to resort to. From Appendix IV, we can see that the company chose the first quarters to make significant investments (investing in factories, new cars, etc). It appears that the JAWDA team thought that given the large scale of the projects they would need to have the time on their side. However, given the poor sales performance, I should also note that some of the investments were not the most suitable or were not carried out at the correct times. For example, one of the first investments this company made was to open a factory in the US with the expectation of supporting greater demand and expanding some productions to benefit from economies of scale. However, the exact opposite happened, and in the second year, more specifically in Q10, JAWDA achieved a worrying average Days of Inventory (DOI) of 178.24 days. Of course, in the next quarter, it was forced to reduce its Factory Utilization rate to a minimum of 48%.

When JAWDA invested more, we can also see that the company resorted to greater external financing (combining the Green Bonds with the bank's debt and even issued shares). However, if the reader pays attention, the first big credit JAWDA drew on only happened in Q8. This may reveal some easiness on the part of the company's managers, believing that the company would be able to support not only the operating costs but also its investments only with the money generated by its activity. It seems that the company ignored the possibility of making investments that are not very profitable. The last few years have been marked by a negative Financing Cash Flow, which means that the company, not having large investments to make and having cash in its possession, preferred to buy back shares and, in some quarters, resorted to Green Bonds to buy back debt at a lower cost.

Finally, it will be analyzed an indicator that reveals the company's opportunity cost, the Weighted Average Cost of Capital (WACC), that "…can be used as a hurdle rate against which to assess ROIC performance" (Mcclure, 2021). In this analysis, I will replace Return on Invested Capital (ROIC) with Return on Sales (ROS) for precision reasons. Once again, the company had its most difficult phase during year 4, where it even saw its WACC reach the highest value ever and vastly outperform the benchmark, as Appendix V. Looking at Appendix VI it is shown that from year 3 to year 4, JAWDA was losing value in its investments since the company's ROS was lower than the WACC. In this period, the company was mostly financed from debt, its credit rating worsened quarter by quarter, implying an increase in the cost of debt, the returns on its investments were not even close to those expected (reaching a minimum of

0%), and the lack of liquidity was evident. Everything led to the believe that JAWDA did not have a great solution. However, almost unexpectedly and because of a clear improvement in the investments made and, in the strategies, adopted, the last two years were marked by periods of pure overcoming. The last projects it had invested in were well chosen; the portfolio management had improved a lot (as we can see from Appendix VII), the DOIs dropped dramatically, and sales were constantly improving. As a result, ROS has improved by 214.29% over the past two years. This evolution was such that the car manufacturer in its last year was always above the benchmark and ended year 6 as the company with the highest ROS. Despite not having the lowest WACC among its competitors, JAWDA significantly reduced its cost of capital in the last two years, which, combined with a much higher ROS, made the company more attractive to its investors and able to create value.

JAWDA's mismanagement of the WACC is best seen when, according to *NYU Stern* (2022), the US Auto & Trucks industry's WACC is 5.85% (capital structure detailed in Appendix VIII), a startling difference. If we pay attention to real companies dedicated to the sale of electric vehicles (EV), BMW, according to *Value Investing* (s.d.), has a WACC between 4.7% and 6.1%, which gives us a lower risk associated with the giant German manufacturer compared to JAWDA. Despite this difference decreasing for Tesla (according to *Value Investing* (2021), it presents a WACC between 5.6% and 8.1%), there is still clear evidence that JAWDA should pay more attention to its capital structure and seek to achieve a great WACC.

Innovation Analysis

According to Steve Blank, innovation is “satisfying users current or future wants/needs by turning an idea into a product or service with speed and urgency, using minimal resources and costs”. During the six years under review, the company has always been committed to delivering the highest quality and most innovative cars on the market, trying as much as possible to contribute with the least possible CO_2 emissions. When looking at the Appendix IX, there is a clear trend toward a decrease in these emissions. The commitment to the total sustainability of its fleet arrived at the beginning of year 4 when JAWDA's fleet started to contribute with 0 g/mile of CO_2. This happens because all the cars that this company had in its portfolio had an electric engine, which is, for now, the most environment friendly engine.

If CO_2 emissions are below/above permitted, the company must receive/pay a bonus/penalty. This incentive, for companies to be more sustainable is related to the analysis previously carried out (Appendix X). The bonus came to help the company at a critical time in its history. As mentioned above, the turning point is also in the middle of year 4 since it is when JAWDA fleet stops emitting CO_2. Until then, the company had to pay a penalty for the CO_2 emissions that its cars released. From then on, everything changed for the better, which leads us to infer that even consumers preferred the most environment friendly vehicles possible.

In terms of *Electrification*, *Connectivity*, and *Autonomous Driving*, JAWDA is already as up-to-date as possible. It has invested in all available technologies to offer its consumers the highest quality cars. However, if we compare JAWDA's performance in the E-Mobility Project ratio with the market (Appendix XI), we can see that, in general, it lagged behind the other companies. Despite overtaking the market and becoming a more advanced company than the market's average, the manufacturer took a long time to update its technologies. As they say, "time is money", and this delay costed the company some attractiveness and, therefore, sales. When the company's sales are compared with those of the market, by the Appendix II, we see that there were periods when JAWDA's sales decreased while the market ones increased.

If further evidence is needed on how the market reacts positively to the car upgrade, note that the same quarter that JAWDA achieved the top E-Mobility score also exposed sales to one of the most significant increases in six years (from Q21 to Q22) under analysis.

As reported by Blink Charging (s.d.), some of the most common reasons drivers avoid electric vehicles are fear of running out of battery before reaching their destination, too few charging stations, and long charging times. JAWDA followed the same footsteps as Tesla, that also focused on improving and increasing charging stations after developing their electric engines. As we can see in the image below, according to *Statista* (2020), the number of superchargers of the American company has been increasing gradually since 2013, which clearly shows the importance that Tesla sees in charging stations when it comes to its consumers deciding between an EV and a diesel one.

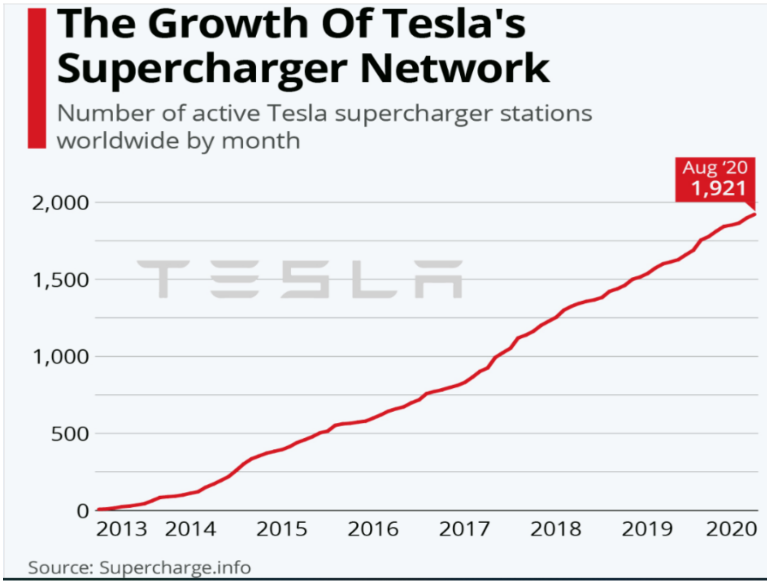

Figure II: The growth of Tesla´s Supercharger Network

Source: Statista

Prioritizing *Electrification* led the company in Q9 to have already invested in all technologies so that its consumers had access to chargers at home and faster-charging stations. Once again, the strategy of the Head of Innovation of JAWDA seemed to align with some of Tesla's measures. The company under analysis invested in chargers in the homes of its consumers so that they would feel more comfortable when purchasing a vehicle from the manufacturer. Of course, if consumers did not opt for this charging station at home, they would still be able to charge their car; however, they would need the help of an electrician. This station is similar to the one launched by Tesla in 2019, the Wall Connector (Burns, 2019).

“The automotive industry is trapped by cost and innovation pressure and it is about to experience a revolutionary discontinuity in generating innovations.” (Ili, Albers, & Miller, 2010). Trying to always stay ahead of the competition regarding connectivity technologies has proved to be one of JAWDA's strengths. “Furthermore, McKinsey (2018) found that 40% of respondents to their global survey would be willing to change car brands for better connectivity services,” (Heiden, 2019) revealing that the market places a high value on the quality and distinction of cars. Thus, by investing in *Connectivity Technology*, JAWDA became a company with a competitive advantage that matched its positioning. Only in Q16, the company invested in the most advanced technology that made the connection between the different models and the manufacturer possible. In this way, more than the quality, the safety and intelligence of the JAWDA cars prevailed. So that the company could grow and diversify its source of income, it could have Tesla as a reference. The American automotive company offers a premium connectivity software for a monthly subscription of $10, which gives some distinction about drivers who have the standard software. “Premium Connectivity provides the ability to access all connectivity features over cellular, in addition to Wi-Fi, for the most intuitive and engaging ownership experience” (Tesla). Thus, JAWDA would not only be able to distinguish itself from the market, as they would be pioneers in differentiating consumers, while boosting its source of income.

A competitive environment also heightens the pressure that the manufacturers feel to innovate since they know they need to build and keep their brands and products exciting with some features that can attract consumers on an emotional level (Ili, Albers, & Miller, 2010). Despite this pressure, one of the roles of the Head of Innovation is to understand when the appropriate timing will be to invest in certain features, since the market is not always prepared to adapt to specific technologies. Concerning investments in *Autonomous Driving*, JAWDA did well and knew how to wait. These were higher-value investments that, due to the company's financial instability, were not carried out sooner. JAWDA was able to invest in the *Secure Infrastructure* midway through year 4 (Q18), having this software available at the beginning of year 5. This aligns with when JAWDA achieved its highest ranking for the E-Mobility Project and with more lavish growth in its sales. From Q20 to Q21 the sales increased by around 6.63%, and from Q21 (when this system was already available and well established on the market) to Q22, revenues grew by an impressive 21.1%.

Marketing Analysis

Segmentation

With the following board, the reader can have a more detailed idea about JAWDA segmentation:

Demographic	**Age**	40 - 60
	Type of customer	For all types of people, but mostly for families
	Income	Medium-high
	Region	USA, Europe, Asia
	Looking for	EV with quality (best technologies)
	Price range	High prices
Behavioral	**Loyalty**	High, as JAWDA chooses to relaunch the most wanted cars
	Involvement	Good knowledge of the car
	Usage Rate	Every day
Psycographic	**Values**	Eco-friendly & Reliability
	Activities	Spending time with family and, of course, completing the daily tasks that families require
	Wishes	Adrenaline; cars that are easy to drive and park; exclusivity
	Interests	Have fun driving while doing it in a sustainable way

Figure III - JAWDA's Segmentation

Targeting

Adults from 40 to 60 years old, married and with good income, looking for a family and city car equipped with the latest technologies and environment friendly with zero carbon emissions.

Positioning

For family members, JAWDA is an electric car manufacturer that offers cars with the best value for money because only JAWDA gives you the experience of being able to drive an EV with the most up-to-date technologies contributing to zero carbon emissions.

Today's consumers place greater value on higher quality products that are more satisfying, delivering them more significant value (Themba, Razak, & Sjahruddin, 2019, p. 6). From the Appendix XII, we can see that JAWDA went looking for it. The company occupies a prominent place concerning its competition. If the customer wants an EV that offers him the most advanced technologies (*Autonomous Drive*, for example), JAWDA is the right company. The highest prices place that this manufacturer dominates is not necessarily due to the higher production costs, but to the value that consumers give to JAWDA cars. Analyzing the reality and considering that JAWDA has not only focused on innovating its cars but also its facilities, and on emitting the least possible emissions (starting with its production and distribution), JAWDA also occupies a prominent place (as shown by the Appendix XIII). It proved to be a very innovative company capable of maintaining sustainability ((Rivervale Leasing) (USA Today Money) (Forbes) (The Zebra) (CARPIXX's Oldimer Blog) (FPT Software) (howstuffworks)).

Marketing Mix Strategy

"Effective marketing mix management enables marketers to create a combination of elements that will enable wisely manage the company's budget in order to achieve the desired objectives." (Isoraite, 2016)

Product

JAWDA, as the Appendix XIV shows, has a very diverse product mix breath. When well-managed, this variety is an advantage for a company's attractiveness, as it covers various market needs. "However, too wide product range can lead to mass confusion by the customers, thus weakening sales (e.g. Jiao et al., 2007, Wan et al., 2012)." (Tolonen, Kropsu-Vehkapera,

& Haapasalo, 2014). That's exactly what happened. In various periods, JAWDA offered cars of different models and, even so, the sales of both were decreasing. For example, from Q7 to Q12, sales of the *City 75G*, and the *Air 135G* ended suffering sales decline. Despite everything, the company could understand how to manage its portfolio without this cannibalization. In the last two years, all the cars that this company sold increased their sales, given the improvement of the strategy and portfolio management.

Price

JAWDA's pricing strategy was not always the best. Until the middle of year 4/beginning of year 5, the prices of its cars differed little from those of the market. This may have led to some lack of consumer's trust in the true quality of the manufacturer's cars, explaining some lack of performance. JAWDA has always stood out for vehicles with advanced technologies concerning the competition. Thus, in Q18/Q20, the price strategy became more consistent in relation to this company's target and in terms of the price-to-value philosophy instead of price-to-cost, JAWDA started to offer much higher prices. In other words, as Mercedes, JAWDA decided to practice prices for the segment "who value quality more than the price and so the price is always on the higher end" (MBA Skool Team, 2021).

Promotion

JAWDA's focus has completely changed in the last two years. Until the 4th year, the company invested more effort in the campaigns for each car. However, these investments proved to be useless, since sales declined, and marketing costs only increased with no improvement in sight. However, JAWDA, like Mercedes, whose "marketing mix promotional strategy of Mercedes Benz uses all media channels like TV, print, online, billboards etc." (MBA Skool Team, 2021) has also invested in *TV Campaigns*. Not to mention that both companies are very focused on their most valuable asset: consumers. This can be seen as "Mercedes has built its brand awareness through various customer centric activities" (MBA Skool Team, 2021), and

JAWDA has intensified its investments in *Customer Promotions*. By doing this, it saw its attractiveness increase and, consequently, demand began to grow exponentially, as the needs and desires of its consumers started to be better communicated.

Placement

Regarding the distribution channels, there was no information to analyse and study.

People & Processes

"Since consumer cooperatives are firms in which employees face with consumers directly, such organizations try to achieve a special situation in the market through training their employees on sale knowledge and how to treat with customers. (English, J., 2000)." (Jain, 2013). Alongside the promotion of its cars, JAWDA's service has also started to improve in recent years, because of a change in its marketing strategy, through more significant investment in the training and service of its employees (*Training/Service*).

Physical Evidence

The Head of Marketing did not have decisions to make about the physical elements of its stores and offices.

Marketing Results

"A good marketing strategy has a significant effect on increasing customer satisfaction in a high direction," (Themba, Razak, & Sjahruddin, 2019) which was proven by the flexibility shown by the automaker in adjusting its strategy. As has been often mentioned, year 4 was, without a doubt, the worst period this company faced. The satisfaction of its consumers decreased by 18 percentual points in Q16, and until the end of Q18, there was no evolution, as presented in the Appendix XV. In that case, we can see that the investments made by the company in the quality of its service and promotion as the analysis of its consumers' preferences had a considerable influence on the satisfaction of JAWDA customers.

The greater focus given by JAWDA on marketing strategies (*Customer Promotions, Print Campaigns,* etc.) was one of the best decisions this company had. Demand increased substantially, and marketing costs about revenues decreased. This evolution is also linked to the periods described above. Year 4 was marked by higher marketing costs concerning revenues. However, following the improvement trend (revealed in the Appendix XVI) and since JAWDA reduced the marketing cost of each car by focusing on marketing strategies, it allowed the company to decrease its marketing costs by revenues by about 6% in two years. By paying attention to what was necessary, the company managed to have the lowest marketing costs by revenues in the market.

Finally, it makes sense for JAWDA to look at its portfolio's Fleet Age (indicated in the Appendix XVII). Although it is getting good results, the truth is that the average age of its portfolio has been increasing, and a range of cars that are too old becomes less interesting for consumers. Knowing the optimal average age of its fleet will let the company know when the right moment is to renew it without consumers losing interest.

Conclusion

JAWDA's history has been marked by all kinds of moments, namely when the company's bankruptcy seemed imminent. Bearing in mind the analysis, it seems clear that JAWDA's strategy (or lack of) regarding the cars to be launched was not the best. Market preference analysis were not effective. In this way, the cars were not equipped with the proper features. With a not very detailed analysis of the market, the cars launched by the company would hardly meet the preferences/needs of the market. Thus, the manufacturer's portfolio became less and less attractive. Consequently, sales began to decrease and combined with rising costs started an unprecedented period for JAWDA.

While the company could not improve its profitability and the investments made were ineffective, the Debt ratio continued to increase. As JAWDA proved incapable of creating value, the associated risk increased more and more, and the return that investors “demanded” also followed suit. As few want to invest in a company as risky as JAWDA and on top of that, the company was destroying value, its market value was continually falling, as was the value of its shares.

All the different analyses had something in common – this company's most challenging period lasted from year 3 until the middle of year 4, with Q18 being the turning point. As Elon Musk said, "when something is important enough, you do it even if the odds are not in your favour". By combining a great desire for change with more meticulous management, the car manufacturer finally faced moments whose results justified all the barriers.

Sales started to increase, and in proportion costs increased less than sales. In other words, JAWDA was becoming more and more profitable. JAWDA's Head of Finance also appeared to have defined a better strategy to manage the company's cash flow as its OCF increased quarterly.

In addition to each Director's learning, their communication improved among the JAWDA boards, namely between the Heads Marketing and Innovation. The Head of Innovation began to equip the cars to meet what the market was looking for, and this was only possible through the more detailed and precise information that the Head of Marketing shared with him. At the same time, the Heads Innovation and Finance have begun to understand each other about the investments to be made and the resources to be used for the projects. Also, the Head Marketing started to give more importance to the Marketing Mix of the company, investing more in the promotion of its cars and the quality of the service provided. Prioritizing the Marketing Strategy was possible because the Head of Finance, when analysed the results of each car in more detail, realized that the money spent on advertising for each car was inefficient. Marketing costs for each car increased in proportion to sales, but these increases did not imply any increase in sales.

After all of this, JAWDA team was able to take the company to another level. JAWDA managed to end year 6 with a valuation of \$52,957M, an increase of 131.71% compared to the market value of \$22,855.47M recorded at the beginning of year 1. The automaker's growth is more impressive when we consider its market valuation in the middle of the year 4 of \$12,075.08, meaning an evolution of 338.56% in just two and a half years.

Once the Value Added (Appendix XVIII), Net Operating Profit (Appendix XIX), and JAWDA's Share Price (Appendix XX) followed the same path and shared one of the most significant increases in the market, while considering that the number of Cumulative E-Cars Sales (Appendix XXI) has shown an endless growth, and that the company stands out for being the most advanced firm in terms of technology, quality, as well as the most environment friendly, one can only assume that this is a company with a promising future. Despite the bad times, it has gone through, it seems clear that JAWDA's long-term strategy is already well defined and that it is a very attractive and interesting company for investors who want to contribute to the automotive world and a more sustainable mobility.

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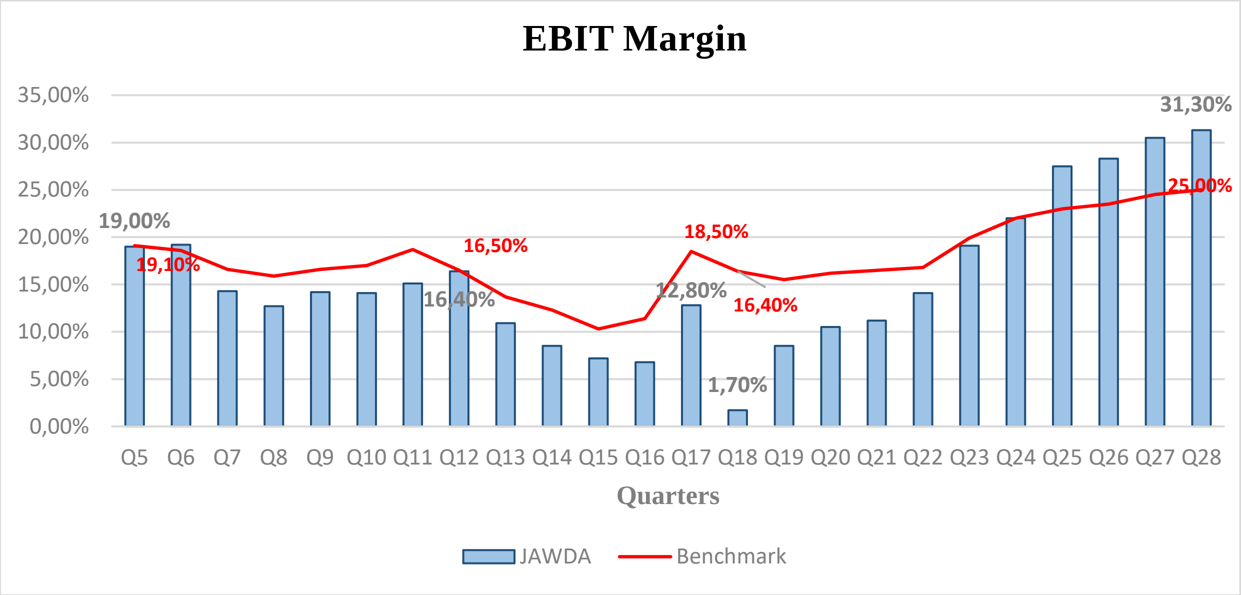
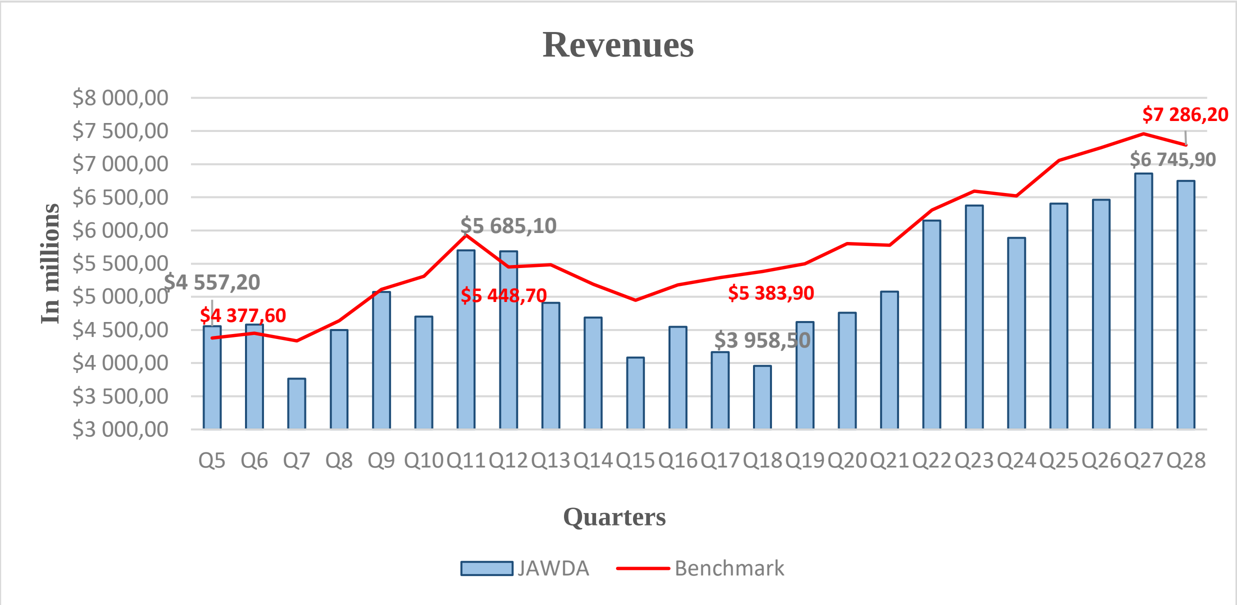
Appendix



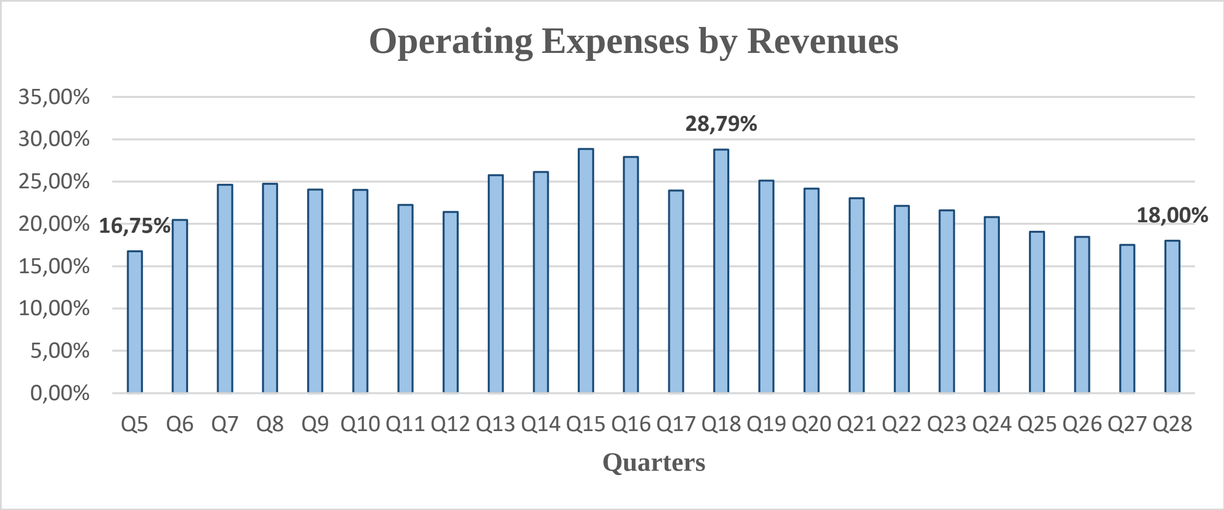
Appendix I: EBIT Margin

Source: Industry Masters



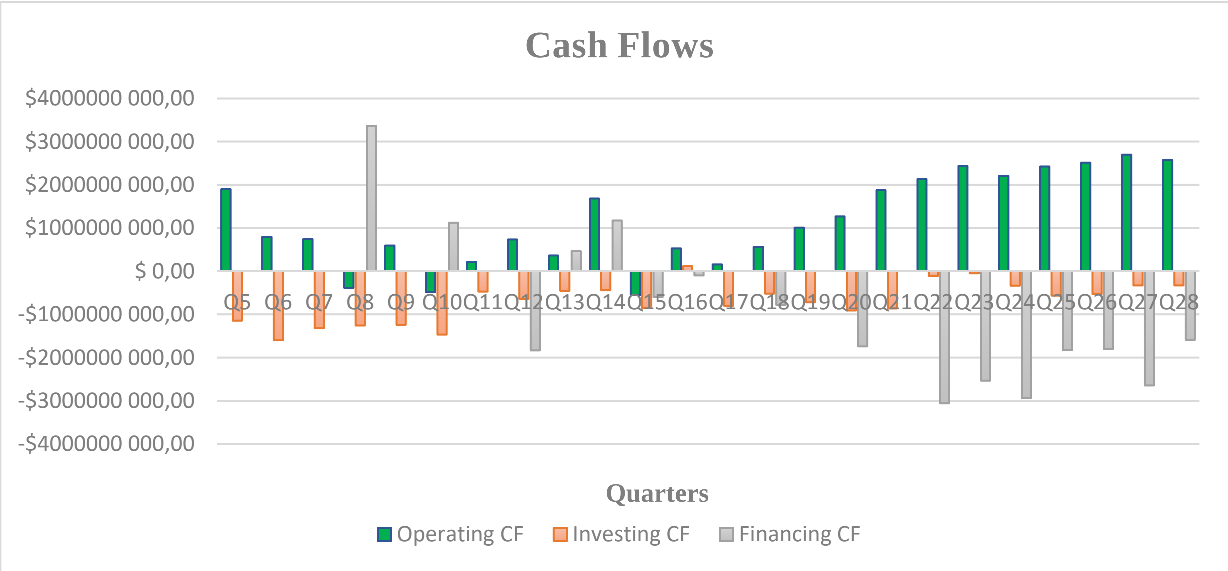
Appendix II: Revenues

Source: Industry Masters



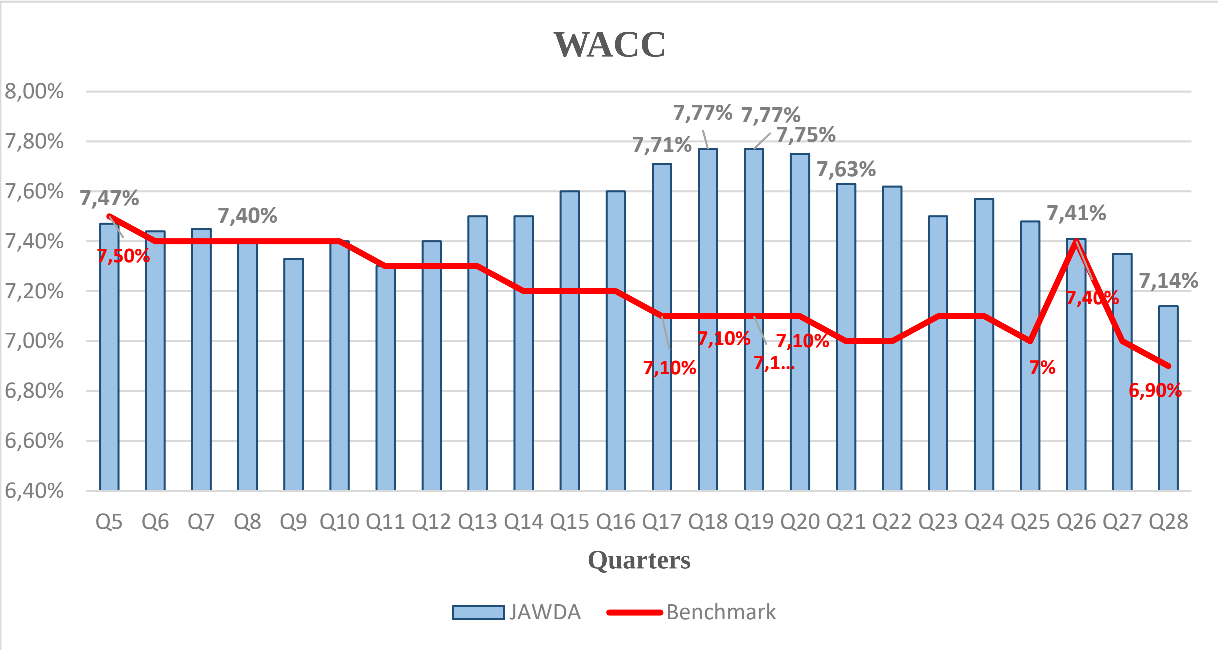
Appendix III: Operating Expenses by Revenues evolution

Source: Industry Masters



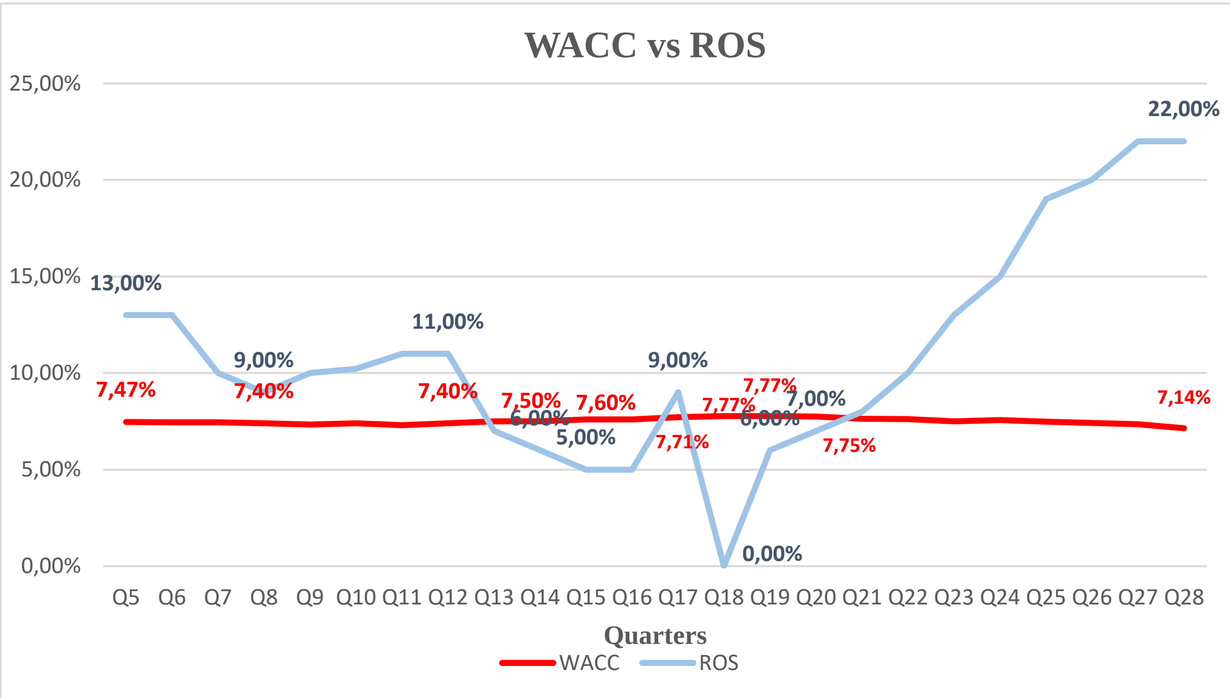
Appendix IV: Cash Flows evolution

Source: Industry Masters



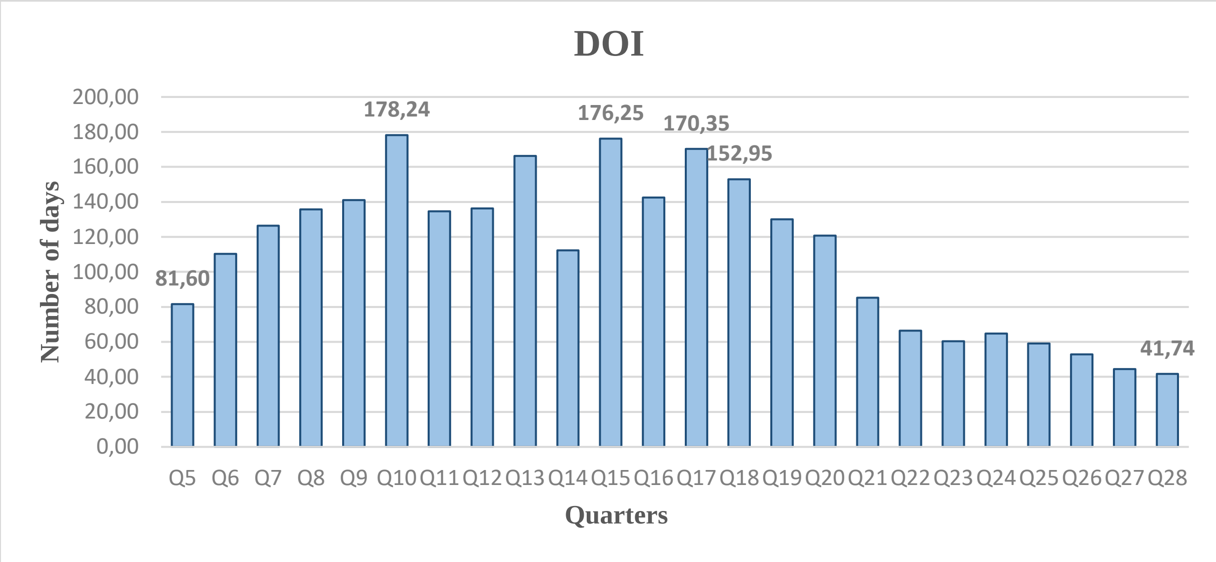
Appendix V: WACC

Source: Industry Masters



Appendix VI: WACC vs ROS

Source: Industry Masters



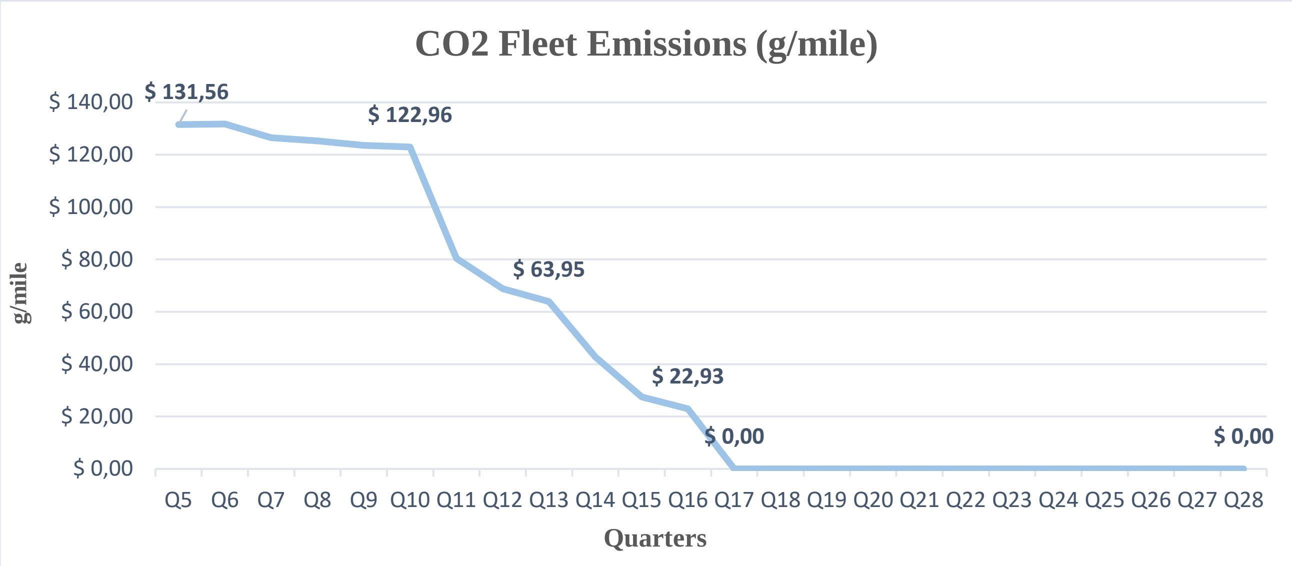
Appendix VII: Days of Inventory evolution

Source: Industry Masters

Cost of Debt	3,58%
Weight of Debt	16,57%
Cost of Equity	6,30%
Weight of Equity	83,43%
WACC	**5,85%**

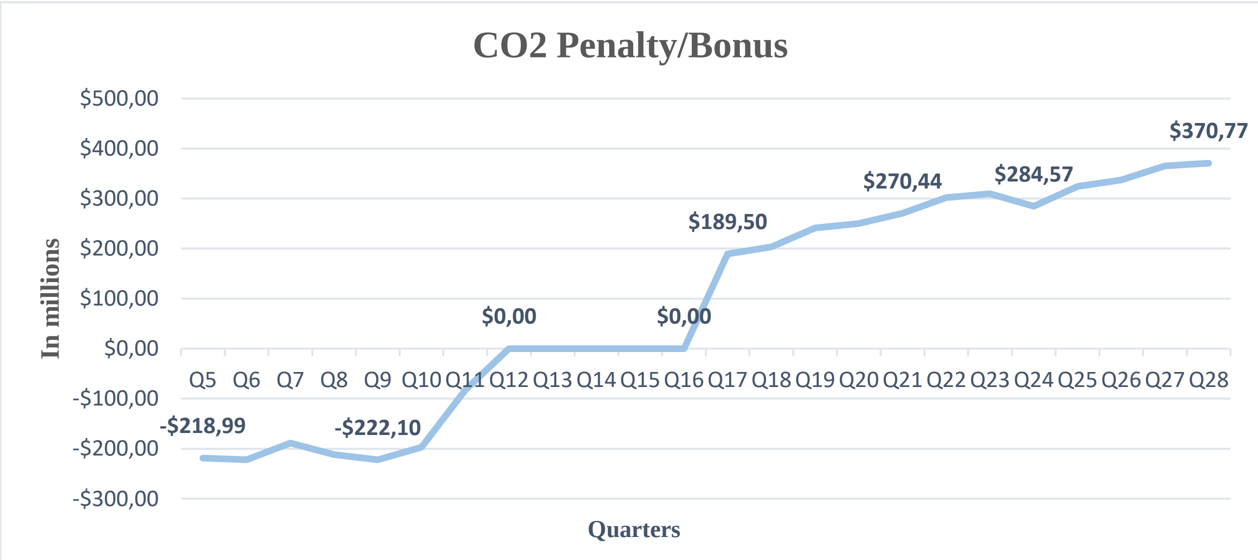
Appendix VIII: US Auto & Trucks Industry WACC decomposition

Source: NYU Stern



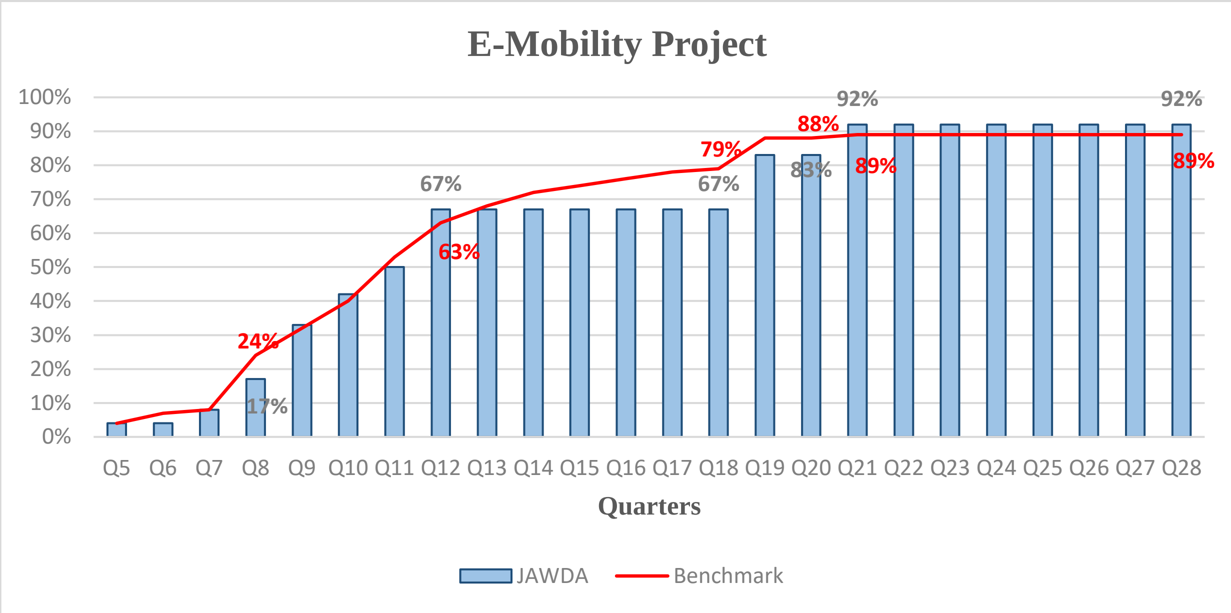
Appendix IX: CO2 Fleet Emissions (g/mile) evolution

Source: Industry Masters



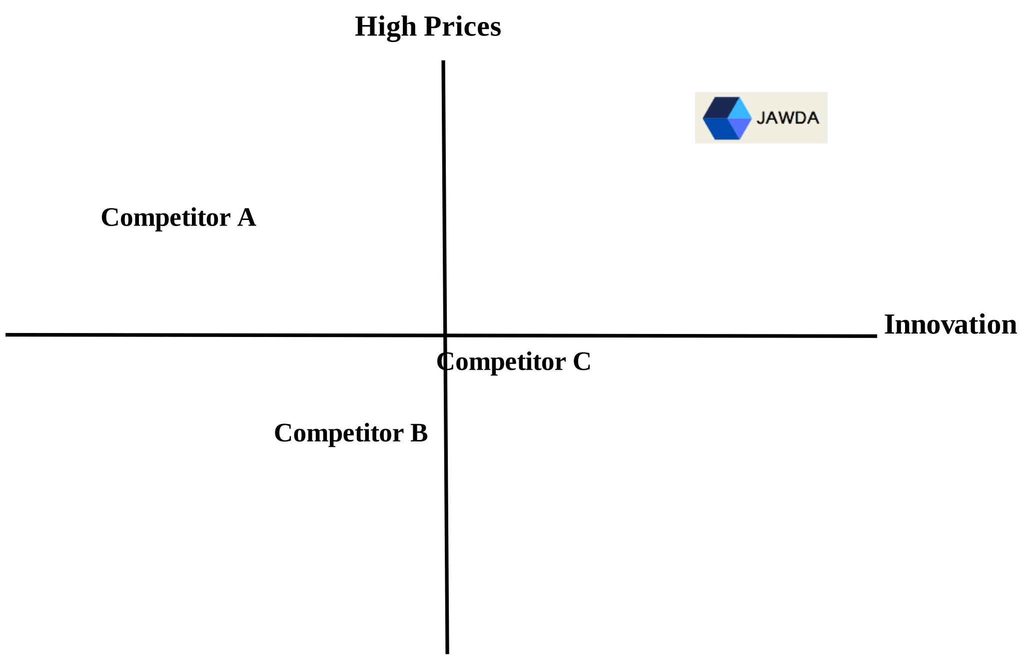
Appendix X: CO2 Penalty/Bonus evolution

Source: Industry Masters



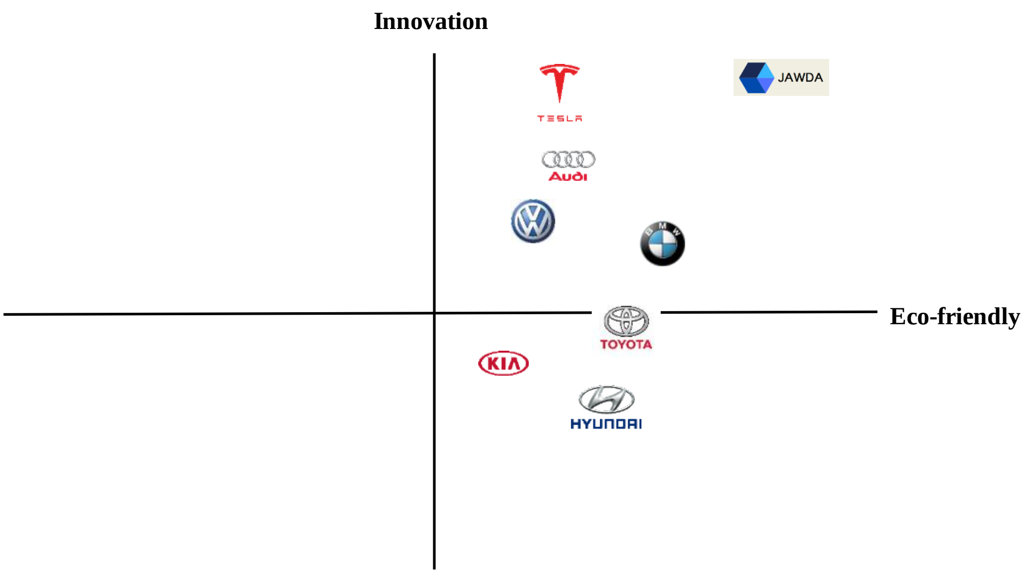
Appendix XI: E-Mobility Project

Source: Industry Masters



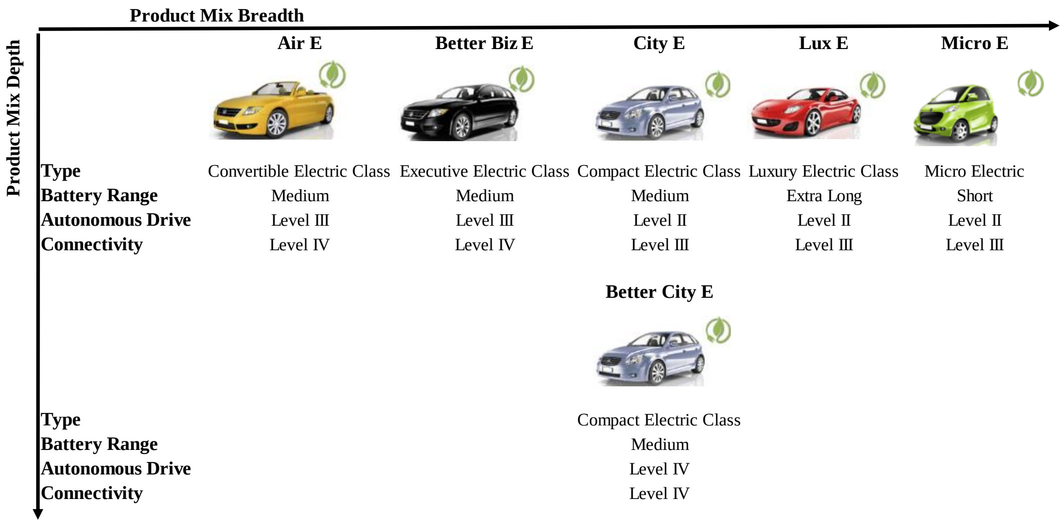
Appendix XII: Positional Map regarding the simulation

Source: Industry Masters



Appendix XIII: Positional Map regarding real companies

Sources: howstuffworks, FPT Software, CARPIXX's Oldtimer Blog, The Zebra, USA Today Money, Forbes, and Rivervale Leasing

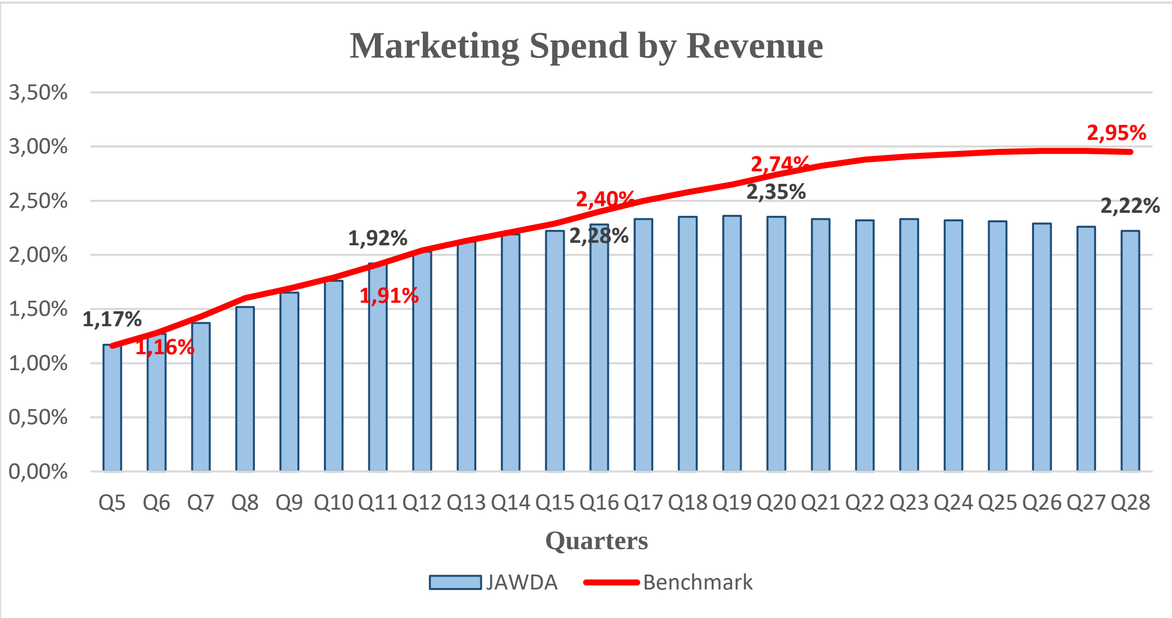


Appendix XIV: Product Portfolio description

Source: Industry Masters

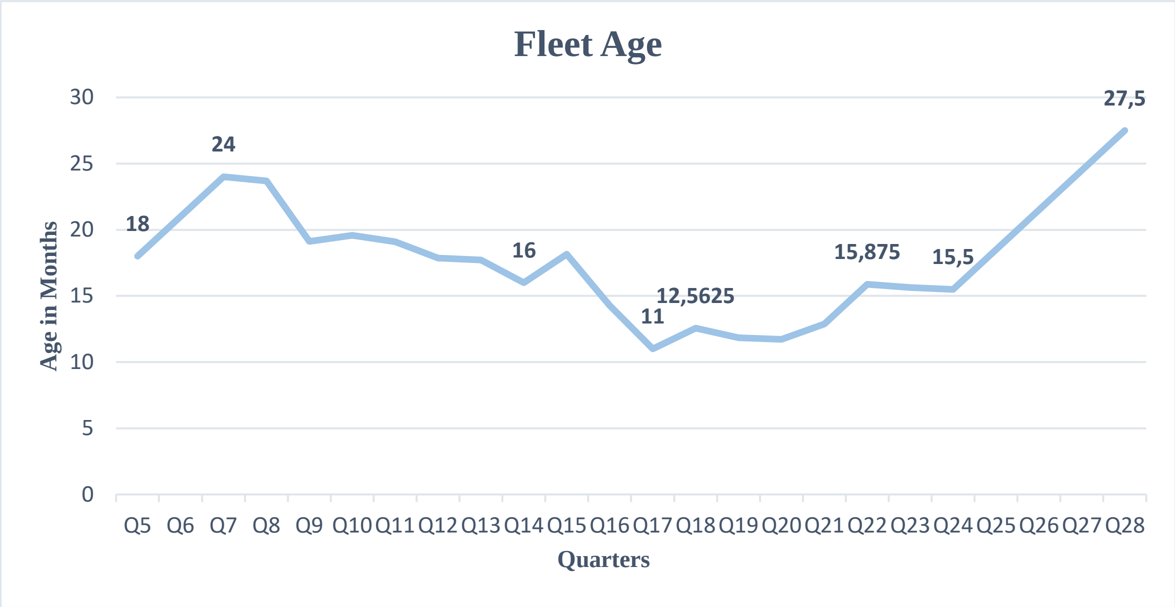
Appendix XV: Customer Satisfaction evolution

Source: Industry Masters



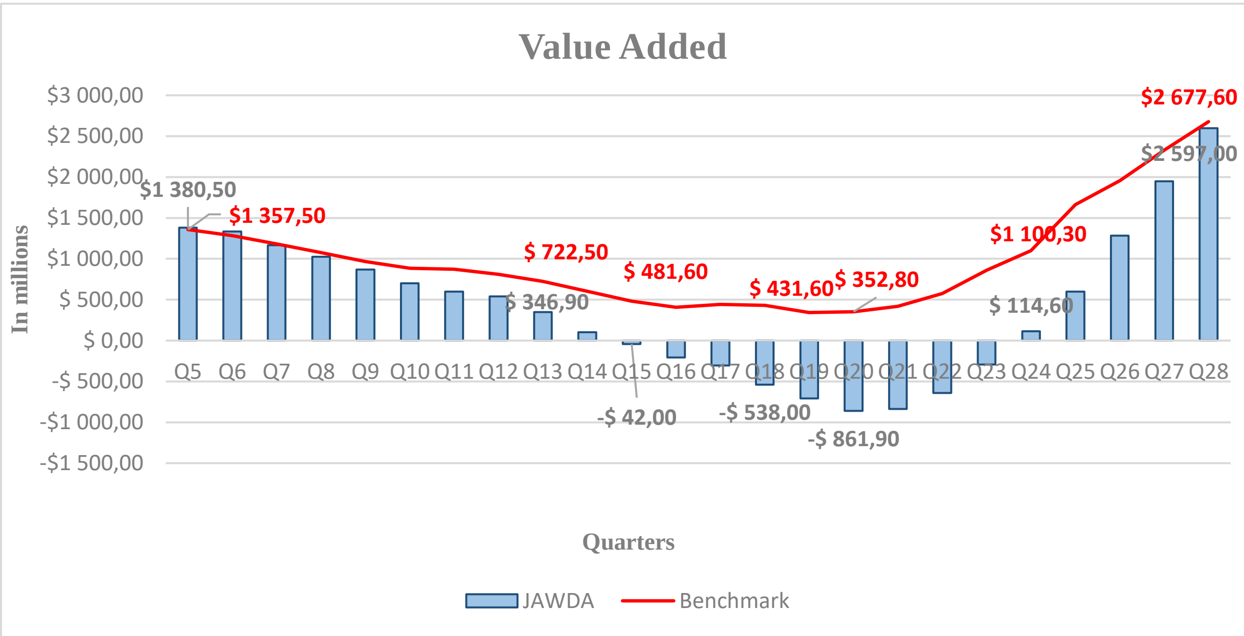
Appendix XVI: Marketing Spend by Revenue

Source: Industry Masters



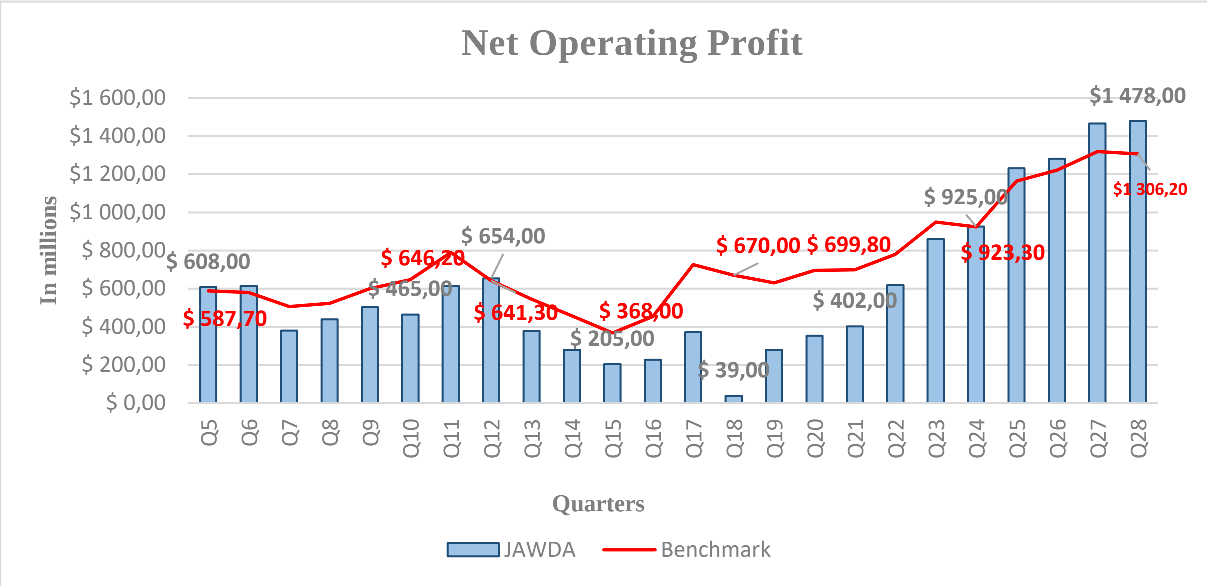
Appendix XVII: Fleet Age evolution

Source: Industry Masters



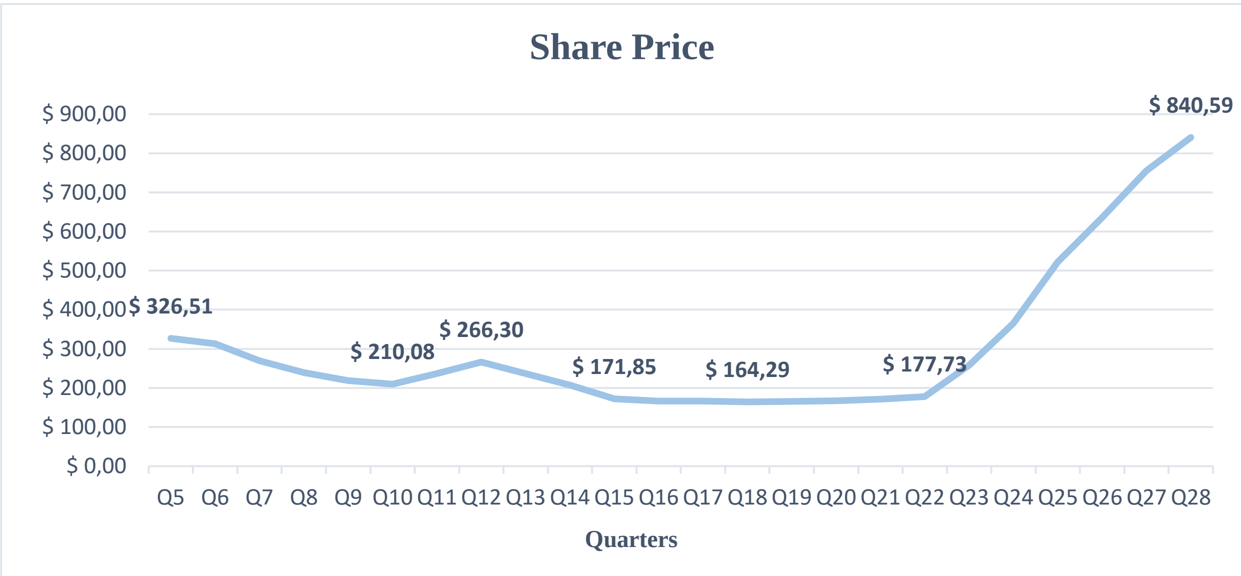
Appendix XVIII: Value Added

Source: Industry Masters



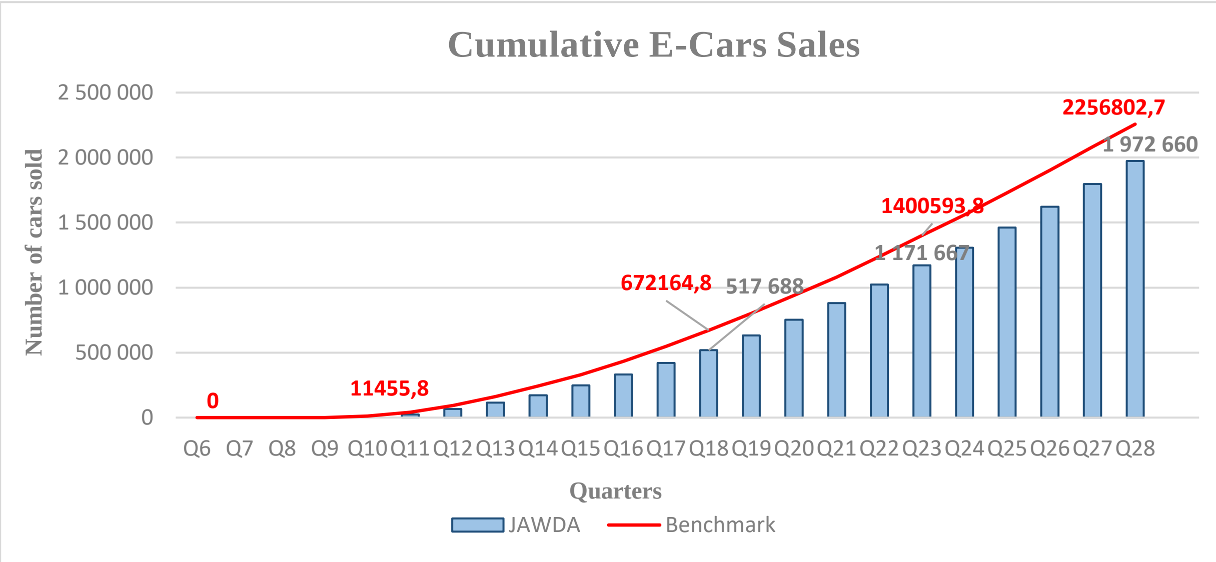
Appendix XIX: Net Operating Profit

Source: Industry Masters



Appendix XX: Share Price evolution

Source: Industry Masters



Appendix XXI: Number of Cumulative E-Cars sold

Source: Industry Masters