

A Work Project, presented as part of the requirements for the Award of a Master's degree in
Management from the Nova School of Business and Economics.

BUSINESS IN PRACTICE:
EXPLORING BUSINESS DYNAMICS OF JAWDA'S CAR MANUFACTURING
COMPANY THROUGHOUT THE TRANSITION FROM INTERNAL COMBUSTION TO
ELECTRIFICATION AND AUTOMATION

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Abstract

This paper aims to investigate the performance of JAWDA's car manufacturer company during its six years of transition from internal combustion to electrification and automation system.

This essay is organized in two distinct sections. The first one has the objective to analyse two critical incidents that contributed to my personal learning. The Absence of Trust and the Art of Listening; and Managing Conflicts, looking beneath the surface.

The second part concerns JAWDA's firm analysis, in which will be explored the three macro-functions of Strategy, Human Resources and Operations and the interdependence between them.

Keywords: Apply Theory in Practice; Business Simulation, Develop A Business Strategy; Integrate and Coordinate Decisions Across Business Functions; Managing A Business; Reflective Practice; Sustainability and Esg; Team Dynamics; Working In Teams; Team Building; Decision-Making Process; Trust; Analysis; Interdependence Across Business Functions; Green HRM; Innovation Technology; Business Ethics; Value Creation Strategy; JAWDA.

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1. An Introduction to my Reflective Journal

The aim of this section is to reflect and find insightful learnings related on the Business in Practice (BiP) project.

During the simulation, I was covering the position of Human Resource Director in JAWDA's car manufacturer company. At that time, we had to run the business for six years and make the transition from internal combustion to electrification and automation system.

The project was critical to get to know better the role of Human Resource Manager and all the implications arising from it. Managing and dealing with people always involve considerable responsibilities and even if it was just a simulation, I could feel the pressure in taking relevant decisions.

It was also complex interacting with colleagues belonging to different areas of expertise, having different knowledge, experience, and culture.

The simulation also created the right context to comprehend what means being part of a real working team and understand the complex and demanding environment. We were, therefore, exposed to different challenges but, at the end, it was interesting and rewarding.

The following essay will explain two critical incidents that affected me during the wonderful journey and all the teaching I gained from it.

2. Critical Incident 1: Managing a conflict: look beneath the surface

The first critical incident that characterized by path in JAWDA's company was the management of conflicts. In the middle of the simulation, when our added value reached its lowest point (Figure 1 in Appendix), we had to face a weighty decision. On the one hand, the Director of Innovation was suggesting investing in two new car models to quickly renew our portfolio and, on the other hand, one of the Operations Directors was pushing to open a new production plant. The decision was critical, in fact, my colleagues and I felt substantial pressure.

Unfortunately, this tension generated a destructive conflict, in which the parties tried to make

their point of view prevail by using aggressive communication methods that have also progressed from a personal point of view. This behaviour undoubtedly interfered with the efficiency, collaboration, and free expression of the group; and I, as HR Director, felt compelled to make decisions and take responsibilities.

In addition, the peer evaluation I received few days before the critical incident gave me more courage and security to make my moves. In fact, the "expecting quality" section resulted with a low evaluation, with one peer expecting 2 points out of 5 in quality. Since my feeling were not matching with that result, I wanted to prove my high commitment into the cause.

My actions can be summarized in the attempt to do **team building activities**, proceed with a **brainstorming** and speed up the **decision-making process**.

2.1 The Team Building: creating a sustainable work environment through effective communication and collaboration

During my academic career, I learned the importance of building interpersonal relationships and collaboration within the team. These activities aim to create a sustainable work environment and develop team effectiveness. Team Building is, therefore, a way to create value inside an organization, indispensable for the wellbeing of the workers and the high performance of the company.

When JAWDA's communication process was becoming unhealthy and unacceptable, I tried to apply the teachings accumulated over the years. My intent was to build bonds that aimed at collaborative and communicative development.

Hence, I started by talking to my colleagues one by one. I tried to look in depth and as the Prof. Helga Saraiva-Stewart, a sales expert, taught us, I tried to "ask the right questions".

As proposed in a Harvard Law School Negotiation Program, to resolve a conflict it is, sometimes, necessary to "look beneath the surface to identify deeper issues" (Shonk 2022). As recognized by this strategy, conflicts that arise from a financial problem (in this case the

indecision between investing in a new factory or in two new car models) often have deeper causes, such as fear of being underestimated, not respected, neglected, and ignored.

Listening more carefully to my team's concerns made me understand the real intentions and goals they were trying to achieve. It made it possible for me to try to solve them through creative and paradoxically simple solutions.

2.2 The Brainstorming: collecting ideas to find a solution for a given problem

In fact, after having an idea of how each of my colleagues felt within the group, I decided to speak in front of everyone. While, on the one hand, I tried to encourage them to do better and apologize to each other, on the other, I proposed viable solutions to prevent difficult choices from causing destructive conflicts.

To analyse our business performance, I suggested a brainstorming. A creative activity that aims to find a conclusion for a specific problem, collecting a list of ideas spontaneously provided by the team (Osborn 2013).

So, I wrote on the board everything that we jointly felt were wrong decisions. My intent was to make the group accept what was wrong and, at the same time, find a solution in a cohesive way, planning future choices.

2.3 The Decision-Making Process: fluidly analysing possibilities and choosing the best option

I tried to lead them explore alternatives and possibilities in order to make the best choice. My goal was therefore to encourage a constructive conflict in which listening and integrative communication are essential qualities.

Outlining our thoughts and ideas and creating an interchange of knowledge was fundamental. It helped to structure the whole decision-making process and make it more fluid.

In addition, as suggested by Prof. Miguel Pinto Fernandes, strategic consultant, and executive coach, we stated a team charter in which we settled some rules in order to not forget to listen to

everyone's opinion and concerns.

2.4 Accessing my learnings through the Billings – Yun's effective negotiation pillars

This critical context showed me how conflict management is an activity that affects every sphere of life, from professional to personal. What is important to do during a negotiation is to recognize that you are inside and deal with it. Many conflicts, in fact, are disastrous precisely because the parties do not realize they are in it and do not act accordingly.

According to Billings - Yun, there are four pillars to having an effective negotiation:

- **“Build a productive relationship”** (Billings-Yun 2010). It is necessary to understand the interests of the corporate functions in such a way as to connect them and create interdependence. This makes it possible to think of integrative solutions that can be accepted by all roles.
- **“Pursue outcomes not points”** (Billings-Yun 2010). The goal is to get the company off the ground and not achieve personal satisfaction.
- **“Seek solutions, avoid blame”** (Billings-Yun 2010). Wrong choices must be accepted and understood. It is then necessary to go ahead and try not to fall back into the same mistake.
- **“Focus on fairness”** (Billings-Yun 2010). Most of the negotiations fail because one party feels that the other is playing its game. This insecurity can be resolved through practices such as team building which aims to create empathy among team members.

From this experience, I therefore learned that conflict management is essential for the life of a company. It is the mechanism through which “negative results are minimized, and positive results are prioritized” (Andreev 2022).

The importance of creating team building, which helped to generate empathy and establish connections within the team, is an essential element for a team high performance.

In addition, I have understood how a structured decision-making process defined by specific

and needful steps can change the perspective and support a team to identify mistakes to overcome them. Finally, I was feeling proud of my attempt. It was useful for the performance of the team, but above all, for my personal growth.

3. Critical incident 2: The absence of Trust and the Art of Listening

The second critical incident that defined the first three years of the simulation was the lack of trust among the group members which triggered a series of negative dynamics and behaviours. The latter can be identified in the scarcity of collaboration and constructive communication between the various company directors, both indispensable and essential tools for the pursuit of a common goal and the success of a project.

As identified by the American author Patrick Lencioni in his book *The Five Dysfunctions of a Team*, the lack of trust lies at the base of the corporate inefficiency pyramid (Lencioni 2012) (Figure 2 in Appendix). "Without this trust, team members will feel the need to be dangerously overprotective of themselves in group situations" (Joosr. 2015). In fact, in this adverse context, all members of the group had a defensive and, in the long run, destructive approach, not only towards the business but also from a personal and human point of view. These led to a series of bad choices and unproductive behaviours.

Evidence of this failure can be found both from an analytical point of view, observing the trend of Revenue (Figure 3 in Appendix), which suffered a decrease in the first years of the simulation, and from the production point of view, understood as group inefficiency. In fact, the lack of cohesion and the absence of a shared *forma mentis* did not allow us to achieve the objectives set initially.

3.1 My behaviour explained through the Thomas-Kilmann Conflict Model

The following part will analyse my behaviour under the Thomas-Kilmann Conflict Model. During this tremendous scenario, my goal was no longer strictly linked to the well-being of the company and achievement of high performances but to the maximization and optimization of

the functions of my role.

In fact, my attitude was characterized by an active engagement strategy which implied a low level of empathy and a high degree of assertiveness. The pain points of this attitude are many and can be summarized in the lack of collaborative will and in the difficulty of a fluid decision-making process as it become unpleasant and time consuming.

The interdependence between my role and my colleagues was almost non-existent. In fact, the absence of trust and misunderstanding of the weaknesses and vulnerabilities among the team members made me feel judged or somehow emotionally exposed. It seemed that I should not show my frailties and insecurities within the group. The latter was characterized by strong individualism and little support, elements that made me feel uncomfortable and drastically knocked down my motivation.

Due to the tense environment and the numerous and frequent conflicts, I did not feel stimulated to pursue our goal. As a proof of evidence, the authors Martine Haas and Mark Mortensen in their article *The Secrets of Great Teamwork*, demonstrated that "People have to care about achieving a goal, whether because they stand to gain extrinsic rewards, like recognition, pay, and promotions; or intrinsic rewards, such as satisfaction and a sense of meaning "(Haas, Mortensen 2016).

At that time, there were no team, just separate members in a group. "Without team members that can work together as a united force to achieve results, any team will find itself stagnant, disorganized, and eventually redundant." (Joosr 2015).

3.2 The turning point: "admit, accept and move on"

Fortunately, the pivotal moment arrived in the middle of the simulation's fourth year. We were given the opportunity to have a session with the Professor Miguel Pinto Fernandes, thanks to whom we were able to manage the situation, integrating fundamental tools and, mainly, learn the art of listening. It encouraged us to feel and function as a team and struggle together to

achieve our goal. In addition, the section helped to raise the performance of our company that from that, moment onwards, took off.

The Professor assisted me in a path which rules were “admit, accept and move on”, without resentment or indecision. I was able to tell each member of my team how I felt about certain behaviours and they, on the other hand, managed to explain to me the rationale behind their actions. We were actively listening to each other, sharing ideas, and understanding perspectives. If initially my vision was one dimensional, from then on, I started to see the context in the round. It was the moment when I understood the real importance of taking right the time to effectively listen my colleagues and build trust.

3.3 Learnings: taking time to actively listen

The change formula says that "Change happens when the product of Dissatisfaction with the context, and a Vision of a more compelling future, and First Steps towards a different future are greater than the Resistance to Change" ("Beckhard And Harris Change Formula" 2022).

It was very interesting to see the whole team react and go from total incoordination and misunderstanding to cohesion and unity.

In hindsight, I realized that I should have been more incisive and should not have given up on the disinterest of others but, on the contrary, I should have insisted more on finding a solution. I should have been more proactive and able to listen and understand the intentions of others. I believe that I lacked a strong attitude to resilience which would have increased the degree of empathy and improved the interdependence and connection between roles. Furthermore, we could have achieved a greater level of intimacy which would have prompted us to create a more peaceful work environment in which we could feel vulnerable without being judged negatively. But the most critical key takeaway that I will always keep in my mind is the importance of listening. Actively listening.

In one of his interviews, Simon Oliver Sinek, an English writer and essayist, explained the art

of listening. The latter is not about just hearing the words spoken by the interlocutor, not gaining any insight from it, not trying to make an effort to understand those words.

Listening is, therefore, creating an environment in which each component of the team feels heard and understood. It is generating and shaping trust. It is about designing a safe space and engaging in a more meaningful way. (Sinek 2021).

The latter was the main learning I gained from this critical incident. It will be highly precious for my future. I will train to do it as best as I can, within the work environment but also with my family and friends.

4. Conclusion: an insightful reflection activity

The Business in Practice project developed a multitude of skills which can be summarized as follows:

- **Managing a conflict.** Understanding of being inside of a negotiation is the first step to solve it. It is necessary to look more in depth and understand the rationale behind it.
- **Team Building Activities.** An effective team will always need to create connections among the members. It enhances collaborations and a sustainable work environment.
- **Importance of Decision Making.** Individuate the issues, analyse the various possibilities, and choose the best to overcome it.
- **Interdependence of roles.** Interconnection between roles and activities are critical to create a common *forma mentis*. The sharing of information and knowledge among the group enlarge the effectiveness of a team.
- **Reactiveness.** It is central to accept mistakes and act, taking responsibility and move forward. Not stay bogged down into the problems.
- **Build trust.** It is an essential ingredient when in a team. To create trust, time and patience is needed. It is important to take the time to listen and understand others perspective without judging anybody.

- **Learn.** This is the most meaningful takeaways. Never stop learning new things. Be curious and openminded.

In conclusion, it was an insightful reflection activity. It helped me to digest some situations and mature more awareness and knowledge on how to deal with it. I get the importance of define my strengths and weaknesses. I found opportunities to learn about my behaviour during stressful situation and know a little more about how to overcome it. In addition, I am more conscious about my tenacity and courage. I will certainly try to embrace all the learning acquired and share it along my path. I feel it was a critical part of my academical journey.

A fruitful learning for my future career.

5. An introduction to JAWDA's Firm Analysis

From the early 1900s to today, the automotive industry has been in constant evolution, in step with the continuous needs of markets, consumers and climate change. In fact, during the last decades important investments have been made in innovation and research for the construction of advanced technologies and security schemes.

The challenges that the sector has had to face lately are closely related to electrification, connectivity, automation, and diversified mobility. And it is precisely to contribute to the slowdown of climate change that companies are specializing in these sectors, albeit facing various obstacles. These can be summarized in the excessive cost of batteries and retail prices, manufacturing constraints such as difficulties in sourcing sufficient raw materials, insufficient number of battery-producing factories, as well as low productivity within existing facilities, low profits, consumer concerns about battery life and sparse charging stations.

However, electrification is not new, the reason the research and development of this technology has not been deepened was the lack of a market. The new condition of necessity has, therefore, reopened the doors to this hitherto almost unexplored technology. In fact, recent research proposed by McKinsey illustrated that by 2030, the potential revenues of these technologies

could expand by 30%.

Many automotive companies, such as Tesla, Toyota, Volkswagen, and many others, have decided to make this transition. The drivers that have pushed companies to proceed in this direction are different.

First of all, it is important to mention the green dimension that is becoming part of all spheres of the individual's life, in fact it is representing a great incentive for the implementation of the transition.

Subsequently, it is possible to focus on the upcoming restrictions at the European level, but not only, concerning the ban on the sale of gasoline, diesel and LPG cars by 2035. In addition, the purchase of subsidies, the recent outbreak of war between Ukraine and Russia and the slow production cost of batteries due to strong innovation, is marking the beginning of a new era.

In this context, JAWDA, a Lisbon-based company specializing in the automotive sector, also felt the need to make the transition to electrification and automation, embracing all the ensuing challenges.

This essay therefore has the purpose of analysing in depth the choices that the company had to face during the six years of transformation. The functions that will be evaluated subsequently are: Strategy, Human Resources and Operations.

6. JAWDA's Strategy fundamentals: create value through innovation and sustainability

This section analyses JAWDA's strategy over the past six years, discussing its evolution, considering the main drivers of the market and the competition within the automotive industry. JAWDA's goal was to move from internal combustion cars to electrified and automated cars in six years to follow the environmental impact and satisfy customer preferences.

Its mission, in fact, was “To create values through innovation without sacrificing

sustainability". Its vision involved designing high-quality cars capable of delivering better driving performance while generating zero CO2 emissions.

The values that prompted the company to proceed towards electrification that make up the organizational culture of JAWDA are described below:

- **Integrity:** finding the perfect fit between consumer preferences and environmental sustainability.
- **Honesty:** transparent communication with suppliers and customers.
- **Ethics, Equality and Diversity:** avoiding any kind of discrimination, both cultural, gender, sexual orientation, and religion...
- **Quality:** creating unique products through innovative and sustainable processes.

For a better understanding of the firm performances and the decisional process, I found interesting describing the company by starting to analyse the connections between the participants, key activities, and capabilities, and cost and revenue structure.

6.1 JAWDA's strategy explained through the Business Model Canvas

JAWDA's strategic management can be plotted thanks to the Business Model Canvas, a tool provided by Alexander Osterwalder, a business scientist, entrepreneur, author, and strategy consultant. It is a map of elements that describe a company's value proposition, infrastructure, customers, and finances. It is, therefore, essential to comprehend the interaction and alignment between the various activities of the company and potential compromises and opportunities arising from it.

The chart is divided in nine building blocks which point out to the indispensable activities of the business. Hence, this graph is critical to dilute the decisional process and strengthen the company's direction, necessary to establish a solid and effective strategy.

At this propose, the exhaustive framework (Figure 4) will be used to present the key components of the business and define its competitive advantages.

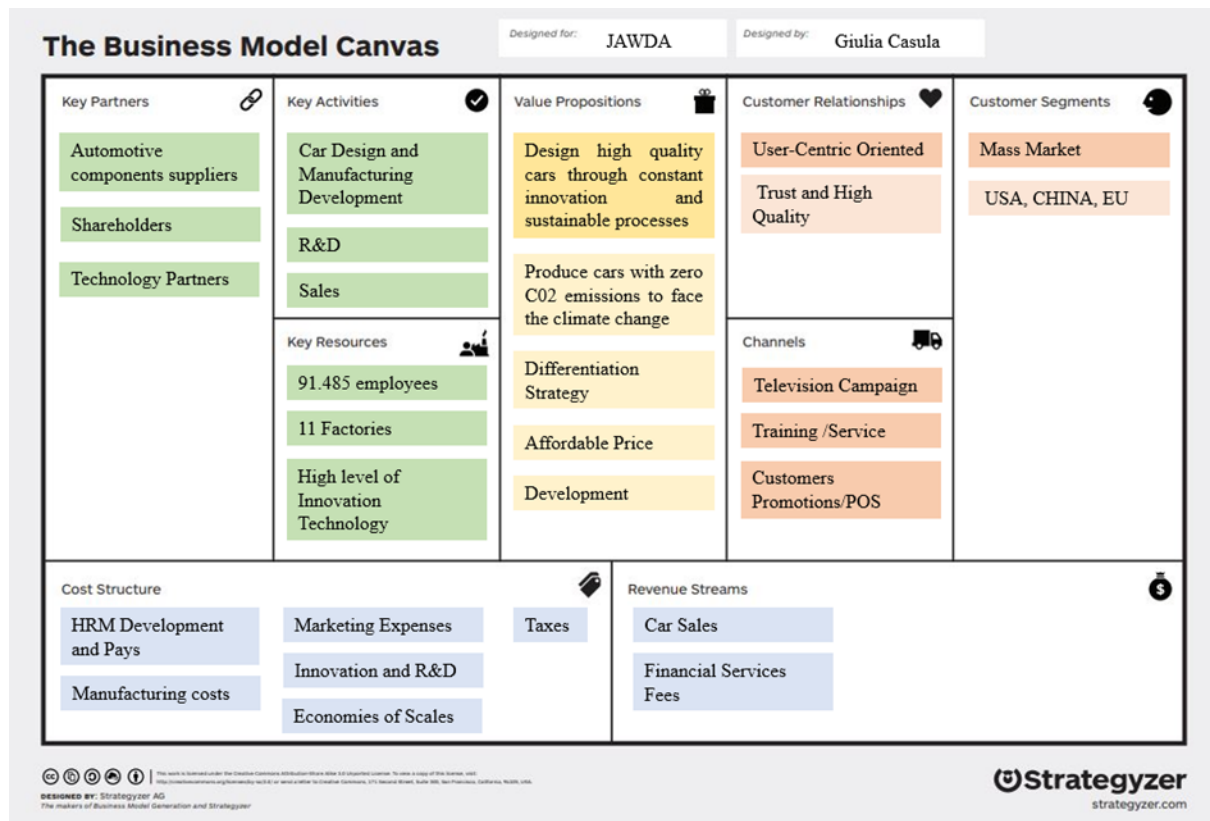


Figure 4 – “JAWDA’s Business Model Canvas”. Strategyzer. Own Elaboration

The **Customer Segment** section defined the customers which JAWDA is creating value for. The company identified three different geographical segments which have unique and homogeneous needs to be satisfied and have a common reaction to the marketing campaign. These areas are USA, Asia, and Europe.

The entire market was covered through a differentiation strategy which considered the preferences of the customers and focused on the development of exclusive products with high innovation level. This approach allowed the firm to differ significantly to the competitors (which did not reach the same level of technology yet) and built a strong competitive advantage. For this reason, for each segment, the firm proposed a unique **Value Proposition** which reflected the design of high-quality cars through the constant innovation and sustainable processes development.

The huge investments made on the first three years of the transition, such as massive amount of money spent in connectivity and electrification, were fundamental to strengthen the business

opportunities.

As a matter of fact, the creation of value was not a rapid process. The transition took, indeed, 23 Quarters to be effective, but the achievement of zero emission by that time let the firm beat all the competitors and gain market shares.

In addition, from the customers point of view, this escalation meant the growth of the corporate sense of responsibility and commitment regarding ecological, environmental, economic use of resources.

The company identified the most effective **Channels** to spread the product's value to the targeted audience. The marketing campaign was made through the Customer Promotion, Point-of-Sale, Training, Service, Print, and Television.

The **Customer Relationships** described the type of bonds the firm wants to establish with its customers. In this case, the differentiation strategy played a fundamental role for the relationships.

The constant research and analysis of the preferences for segment and the consequent alignment of the product guaranteed a User-Centric method, an iterative design method in which designers focused on the users and their needs in each stage of the process ("What Is User Centered Design?" 2022). An example can be given: during the transition, after an accurate evaluation, the firm discovered that the USA market preferred SUV instead of utilitarian cars. This discovery allowed the company to manage its production accordingly.

This episode created a sense of trustworthiness towards the consumer who began to trust the company. JAWDA, on the other hand, started to build its high-quality level of reputation.

The **Revenue Streams** clarified which are the channels through which the firm captures value. For JAWDA capturing value meant selling cars with a high innovation technology without sacrificing sustainability.

The cash flow was generated by the selling of the cars. The price mechanism was affordable

for the clientele and guarantee a huge benefit compared with the cost.

The infrastructure to produce, deliver, and capture value is described by the **Key Resources**. In this section are included all the 91.485 highly qualified employees distributed in the 11 factories around the world. Their practical and intellectual knowledge was essential to make the company effective. They were the core of the intricate mechanism.

Another fundamental asset for JAWDA's business model was, undoubtedly, its high level of innovation, which drove the company through its competitive advantage.

The **Key Activities** represent what the firm needs to perform effectively.

This block included the stages to produce the product, from the car design to the manufacturing. In addition, the R&D activities and the high technology investment were critical to create a unique and valuable position, capable of engaging a set of different activities to deliver a unique mix of values (Porter 1996) to the customer.

Furthermore, the sales activities were the fuel to drive the company.

The **Key Partners** helped the company to achieve its objectives. Among them, it is important to mention the stakeholders and all the suppliers for the automotive components (raw materials as elements for the batteries).

The Business Model Canvas provided an overview of the main activities and the link between all processes. From this strategic investigation it was possible to extrapolate the functions that made JAWDA unique and inimitable and that contributed to the creation of value.

It, therefore, helped JAWDA managers to define their strategy which was the perfect fit between internal and external aspects of the company, without leaving out any piece of the puzzle.

As will become clearer later, this essay aims to document company dynamics by focusing on the interdependence of functions. In fact, this allowed the company to develop its sustainable competitive advantage over the years.

7. The Green HRM: change management explained through the Kurt Lewin Model

The process of finding, selecting, distributing, and managing personnel within an organization is known as human resource management.

As is known, employees were the beating heart of JAWDA's business. They were the essential, unique, and fundamental resource that guaranteed the quality of the product.

In recent years, JAWDA had to witness the transition to electrification and automation. This resulted in a series of dynamics of transformations in all departments of the company, in particular HRM.

JAWDA, therefore, designed a Green System that aligned the company's sustainable goals with its employees. The aim was to manage staff by creating an environment aware of the difficult climate challenges and preparing them to face them.

Its managerial change can be analysed through the model of Kurt Lewin, a psychologist, known as one of the modern pioneers of social, organizational, and applied psychology in the United States, consisting of three phases: **Defrosting, Change, Refreezing**.

In order to make the transition, it was necessary to alter the status quo of the company. This first phase, **defrosting**, was able to motivate employees and convince them of the positivity of the change. It was necessary to eliminate resistance and accompany them towards future challenges, showing the indispensability of the change.

The second phase, **change**, involved the development of unique skills aimed at improving business performance. In this context, specific trainings, personnel development and sharing knowledge activities played a crucial role. Creating a sustainable environment did not only concern the production of zero CO₂ emissions cars, but also considered all company functions. Finally, the **refreezing**, which dissolved the practices possessed in the past to give rise to new processes and skills that were part of the culture of the organization, such as excellence in quality through the use of innovative technological processes, which then characterized the

advantage competitive of JAWDA.

The interconnection between strategy and human resource management created the perfect fit for making the organizational change.

Subsequently, the three operational spheres of human resource management will be analysed, which concern on Workforce Planning, Compensation and Training, all key elements for the construction of a stimulating and healthy work environment.

7.1 Workforce Planning: an action plan to access human resources needs

Strategic workforce planning is a fundamental process that allows the company to understand and predict the need for capital resources in the face of future challenges, in line with company objectives.

To support an adequate human capital plan, JAWDA used a model that involves six steps (Figure 5 in Appendix), which were essential to ensure an effective action plan and consider any challenges that might arise in the future.

The model primarily considered the need for **strategic direction**. A careful analysis of the dynamics of the automotive industry, the external market and the company allowed JAWDA to find the perfect fit between the two, creating opportunities for growth.

Secondly, the **current analysis of human capital** played a central function since it was possible to make projections of the capital needed in the future from it. In fact, human capital expanded and contracted according to the phases of the transition.

Third, **determining the needs of the workforce** was critical. These had to be adapted to the technological advancement of the company and the gradual expansion it had undergone during the six years of transition

JAWDA used a tortoise approach which implied greater resistance to change, which was slow and gradual but at the same time generated stability. This implied that there was greater retention of the worker during periods of depression and general approval within the

organization. Furthermore, the costs of personnel management were undoubtedly lowered, as there was no continuous turnover.

Fourth, it was crucial to **understand the workforce gaps** on the journey to electrification. In fact, the specialization necessary to build cars of a certain level required a very high level of preparation and know-how of the collaborators. In fact, JAWDA created value by investing, on the one hand, in technological innovation and, on the other hand, in trainings for human capital. In this regard, it is interesting to see how Green Capex (Figure 6 in Appendix), the ratio of investments in green projects to total CAPEX, increased over the years reaching a percentage of 45.23%.

Fifthly, the evaluations regarding the **planning actions** were important. These included action plans in case of scarcity and excess of resources, inadequacy, and / or lack of skills on the part of collaborators. At this stage, it was important to search and select personnel by starting a recruitment process aimed at filling the missing roles.

Sixth, **the execution, implementation and monitoring** of resources was fundamental. JAWDA always kept an eye open on alert indicators, such as staff satisfaction, skill level, diversity rate.

7.2 Compensation: adequate compensation interfered positively in employees' performances

Compensation is a systematic approach to remunerate employees for the work done for the company. Remuneration can be of different types, both monetary such as pay and non-monetary such as benefits. This system is critical regarding the proper functioning of a company and also has an intense financial impact.

JAWDA adopted a basic compensation system, which remunerated the worker based on the position they hold, the responsibilities they have, the functions they perform and their degree of specialization.

Adequate pay set in motion a series of fundamental dynamics for the company (Figure 7 in Appendix). First, it affected the motivation of workers. The latter, without adequate remuneration, would decrease their degree of motivation, which in turn would affect the commitment and ultimately the productivity of the worker. An adequately remunerated staff will have higher production capacities than one not adequately remunerated. In addition, the company attempted to have compensation that could increase employee satisfaction and involvement, to retain them in the company and not lose its best resources.

JAWDA's human resources department decided to analyse compensation using an index called the Compa Ratio, a ratio of comparing an individual employee's salary to the midpoint of a given salary range. This indicates whether the worker is receiving competitive compensation compared to rival companies based on the type of function performed and the degree of specialization. The index expresses the value as a percentage.

JAWDA can boast of having managed payrolls in an adequate manner. The Compa Ratio index was indeed positive. At the beginning of the very competitive transition with variations from -1% to 2%, and towards the last years of the transformation between 3% and 6%. In fact, the level of motivation (Figure 8 in Appendix), grew dramatically over the years, reaching 91.7222% in Q24.

7.3 Training: the driver to innovation

Training is also part of this intricate system. It attempts to improve the skills and competences a worker needs to be more effective in the current position, or to reach a more senior position. Essentially, it's about promoting learning and staff growth.

Training was another cornerstone of JAWDA's corporate policy, which affected employee motivation. The latter needed to know that their performance was appreciated. Therefore, the training incentives linked to development goals were often well received by the employees.

Furthermore, according to company policy, a qualified staff corresponded to an equally high

salary, which directly affected motivation and productivity. An example can be given by comparing Figure 8 (in Appendix), Figure 9 (in Appendix), Figure 10 (in Appendix). From these it is possible to notice a correlation between the increase in wages, the degree of specialization and motivation of the staff. In Q20 there is a dizzying surge in all the figures, demonstrating that they are all dynamics that are part of the same complex and fascinating system.

8. Operations: the complex system to deliver the value proposition

Operations is a managerial function that focuses on the management of production systems and the resources involved in the process. This area is responsible for optimizing the functions that accompany the product throughout the production process from Inventory Control to Supply Chain Management, to Manufacturing and Quality Control.

The main objective of this role is, therefore, to pursue production efficiency through the integration and optimization of the mechanisms of the value chain, finding the balance between costs and revenues.

Operations management rests on 4 fundamental pillars:

- **Design.** Creation, improvement, planning of processes, activities, and prices.
- **Efficiency.** Optimization of quality, waiting time, outputs generated for inputs entered, cost minimization.
- **Resources.** Equipment, technologies, personnel, time, money, energy, knowledge (know-how).
- **Creation of Value.** Revenues, Profits, Customer Satisfaction, Market Share, Sustainability, Innovation.

Each company has its own unique and special operational capabilities that it jealously guards from competing companies. An example can be given by Ford and Toyota, both auto companies exhibit inimitable operations management. In the past, Ford focused on standardizing processes

to create fast production at a low level of variability. Toyota, on the other hand, devised an operational process that aimed to reduce waste (inventory, defects). This was possible thanks to the JIT (Just In Time) model which provided the alignment between the demand curve of the product and its production. It also allowed better quality control and, therefore, the consequent growth of it.

These models enabled the two companies to deliver the best possible value proposition and gain significant market share.

As follows will be analysed JAWDA's operational processes and key concepts.

8.1 Operations of JAWDA

To better understand the operational dynamics of JAWDA it is interesting to analyse the main elements of the operational process, the four V (Figure 11 in Appendix).

These Vs refer to:

- **Volume.** Quantity of output produced.
- **Variety.** Level of heterogeneity of outputs.
- **Variation.** Trend of the demand curve.
- **Visibility.** Consumer product experience.

The production **Volume** of the car company was quite high.

In general, JAWDA preferred to produce a high volume of items, because it allowed it to leverage economies of scale, lowering the cost of the unit of product. This was possible thanks to the highly specialized staff that the company had.

The products had different production volumes. (ex. Micro 45k, Lux 15k).

This discrepancy revealed consumer preferences. Analysing the volume was therefore important to understand the dynamics of the market and determine future strategic choices. For example, the City subcompact was for most of the transition period the product with the highest production / sales and contribution margin. This caused JAWDA to learn consumer preferences

and lay the groundwork for producing a new, improved electric version of the model.

The **Variety** of cars produced, and the distinct levels of technology allowed JAWDA to satisfy a large slice of the market and be flexible. Although its portfolio consisted of only six different car models (Figure 12 in Appendix), the element that managed to guarantee the creation of value and the consequent competitive advantage was, without a doubt, the high level of technological innovation. The latter, in fact, together with sustainability, was able to compensate for the medium-low variety.

Variety and volume are negatively correlated; For this reason, high levels of unit production will correspond to a low variety of the portfolio.

The **Variation** in demand over time depended on the external environment, and therefore, it was not always possible to anticipate it and made the appropriate moves to satisfy it.

While there are some natural occurrences that managers cannot control, JAWDA saw fit to do some keen market research to predict demand and be prepared to react with agility whenever possible. An example of the impossibility or limitation of action can be illustrated: the Covid-19 pandemic caused a precipitation in car sales of 71% in China, 47% in the USA and 80% in Europe by April 2020. Hence, it is possible to say that the managers of the various auto companies failed to react promptly to this disastrous phenomenon.

The medium-low variation in demand implied a low cost of the product per unit as production always remained stable. It also connoted an elevated level of utilization capacity of the factory (100% for JAWDA).

Visibility referred merely to the experience that the consumer had in relation to the product / service offered by the company. To gain visibility in the eyes of the consumer, JAWDA had integrated a targeted marketing strategy into its operational processes that allowed the achievement of consumer satisfaction in relation to the proposed car models. The marketing campaign certainly affected the company's financial resources. However, the optimization of

operational processes also included these trade-offs: limiting the performance of a particular area to achieve excellence in others. In fact, the company believes that the interconnection between the various sections and the resulting resources must be integrated to create a unique value. The actual management of the four Vs aimed to integrate all production processes and all functional areas of the company

9. JAWDA's Fit and Sustainability

One of the goals of the firm analysis was to prove JAWDA's interconnected system of functions, the following figure aims to demonstrate the interdependence between activities (Figure 13).

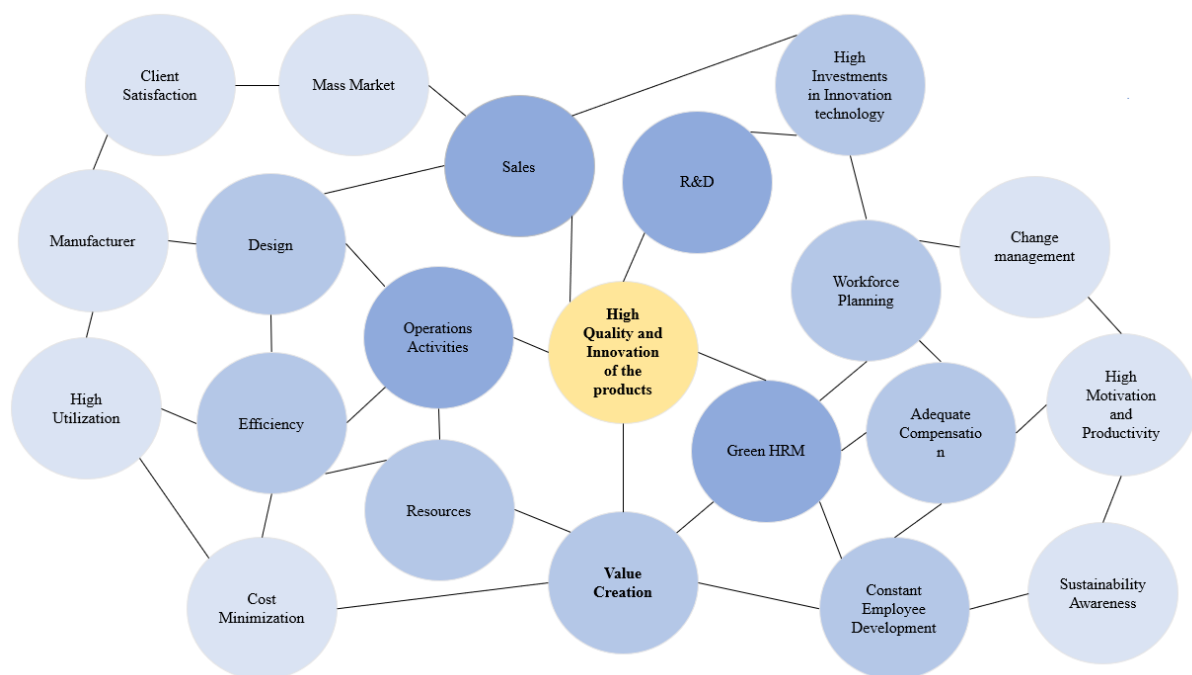


Figure 13 – “JAWDA's Cross-Functional Activities”. Own Elaboration

Indeed, JAWDA's value chain activities were highly complementary, intricate and reinforce each other. It was the creation of this dense network that gave the company its main competitive advantage. As Porter said, however, in his essay "What is Strategy?", the strategic adaptation between different activities of the company is not only fundamental for its competitive

advantage but also for its sustainability (Porter 1996). In fact, competitors failed to imitate JAWDA's activities mechanism because it was unique and could not be applied easily to different businesses. The interconnection between the functions and the maintenance of a fixed position on the market had, in fact, supported the competitive advantage of JAWDA's company.

10. Conclusion

The purpose of this essay was to analyse the company's performance over the six years of transition to electrification and automation. It was insightful to explore and understand all the firm dynamics and elements involved in the entire process.

From this experience it was possible to understand the importance of defining a solid strategy that could match all cross - functional activities. In fact, a common goal that generates cohesion, collaboration, sharing, and support is an indispensable feature within any team.

In addition, it was important to learn how highly qualified personnel as well as sustainability, innovation and efficiency are key values in today's automotive industry.

They are therefore the basic gear of an overly complex mechanism.

But the wisest teaching that JAWDA has been able to devise is that every business function is equally important and that the interdependence between them creates a sustainable competitive advantage that is exceedingly difficult for competitors to imitate.

Only through strong interconnection is it possible to create stable and lasting value.

"Talent wins games, but teamwork and intelligence win championships," my idol Michael Jordan said in an interview. Until now I had not fully understood the meaning of these words.

I am sure that from now on I will treasure it and apply it to every sphere of my life, both professional and personal.

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Appendix

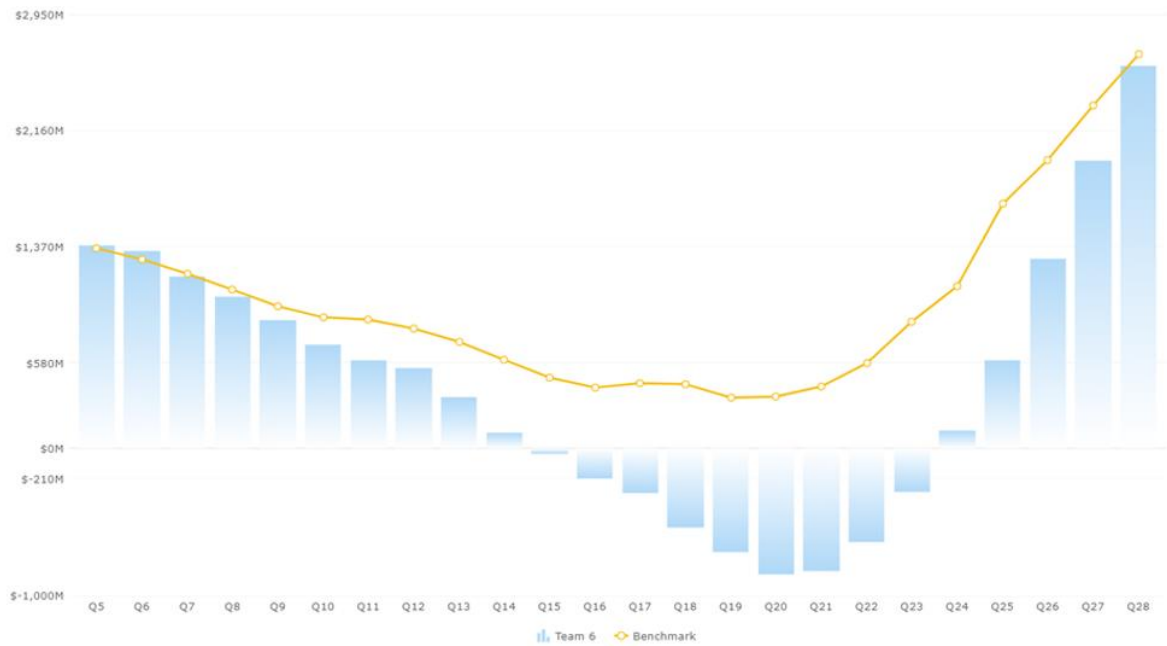


Figure 1 – “JAWDA’s Value added”. Industrymasters.



1) **Figure 2** – “The Five Dysfunctions Of A Team”. Patrick Lencioni. Own Elaboration

KPI - Revenue

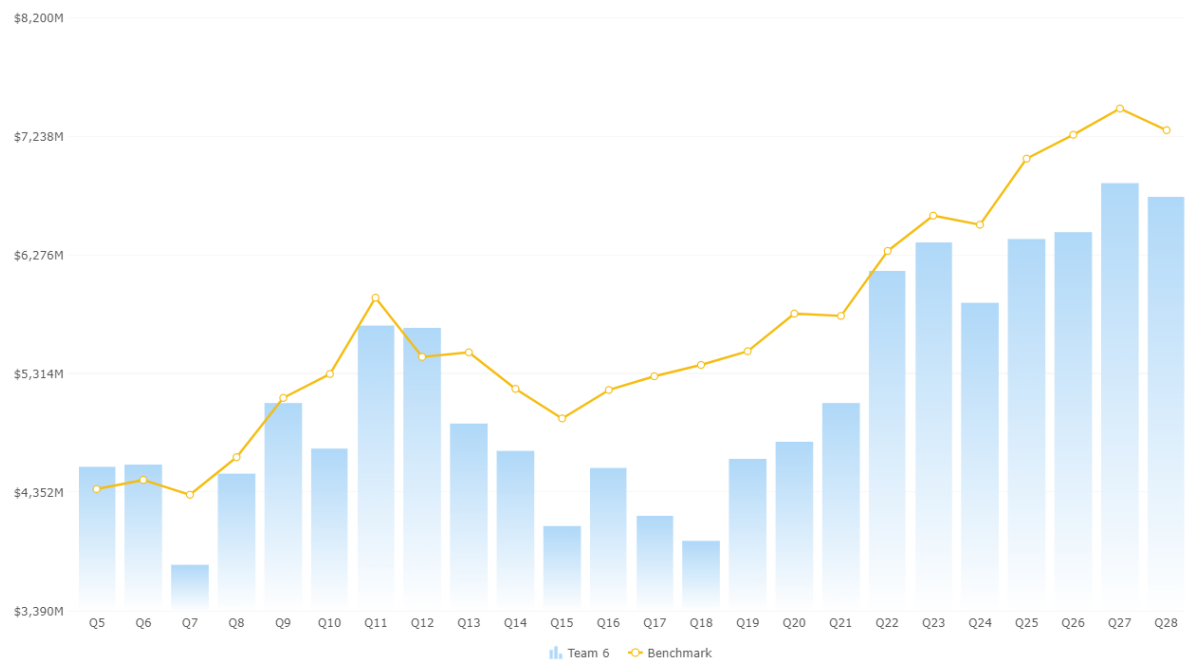


Figure 3 – “JAWDA’s Revenue”. Industruymasters.

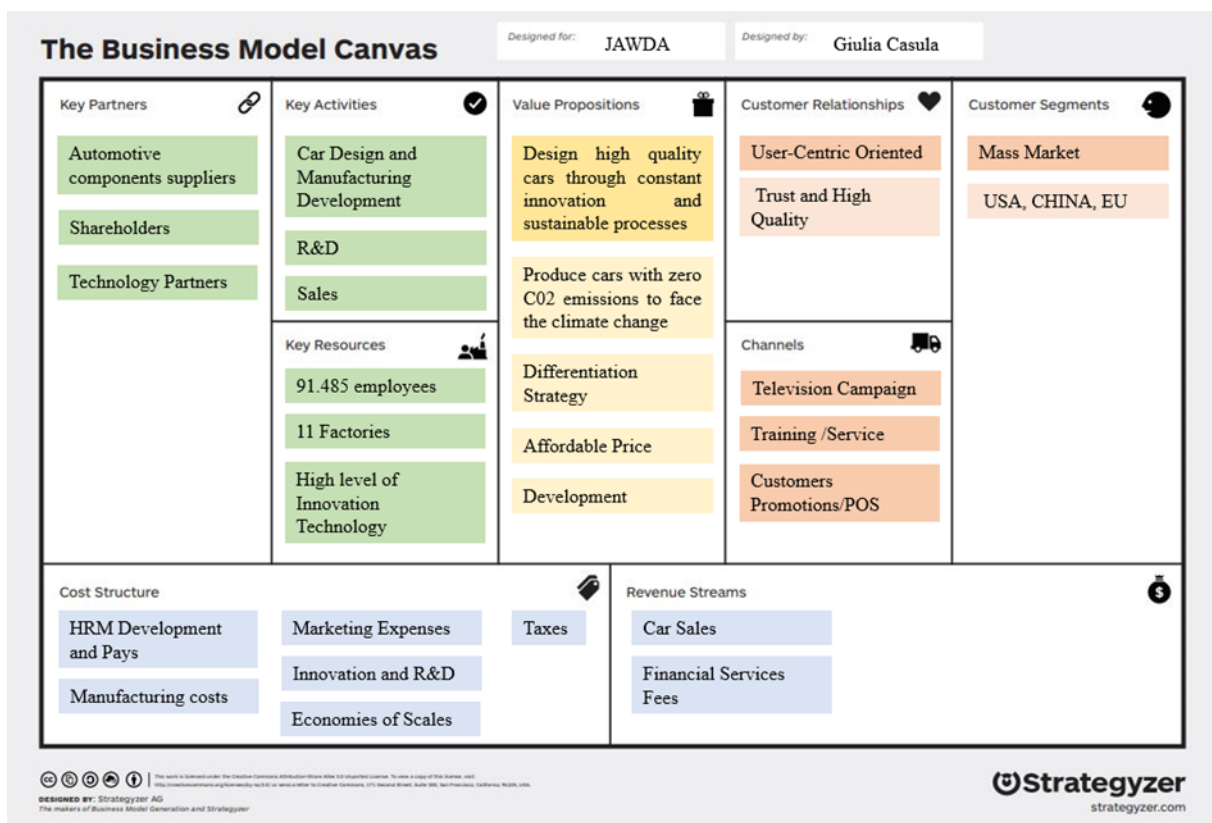


Figure 4 – “JAWDA’s Business Model Canvas”. Strategyzer. Own Elaboration

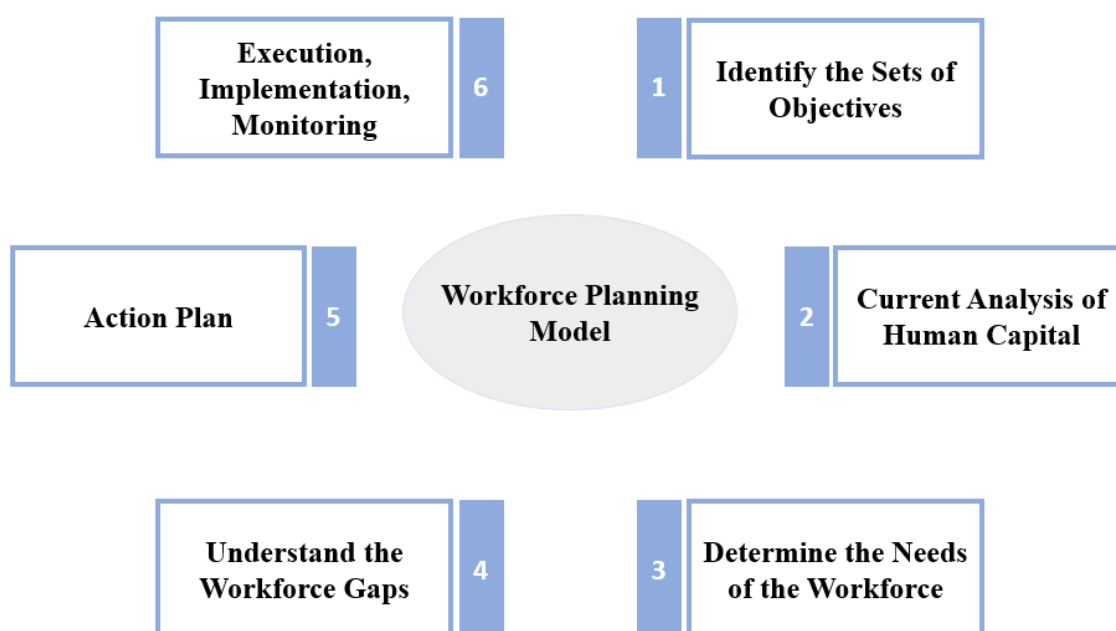


Figure 5 – “Workforce Planning Model”. Own Elaboration

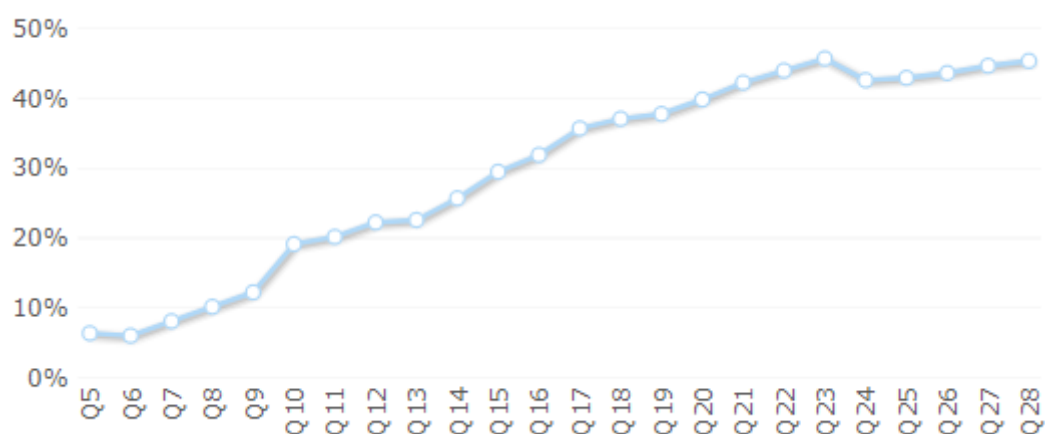


Figure 6 – “JAWDA’s Green Capex Ratio”. Industriymasters.

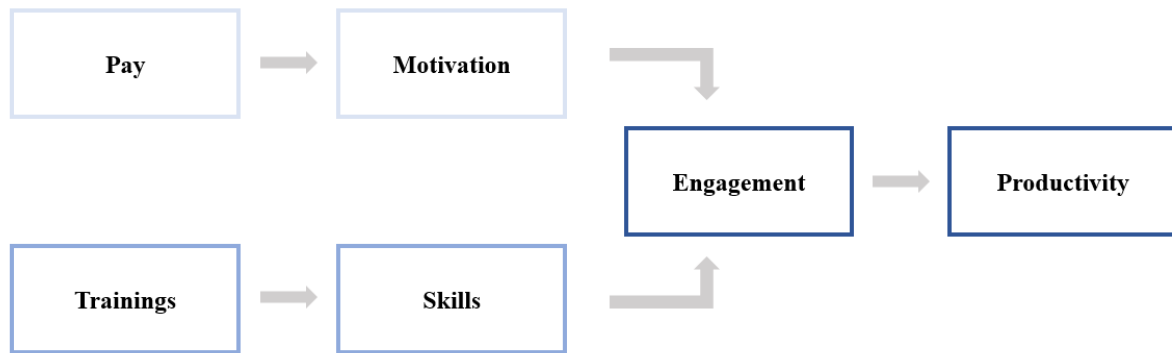


Figure 7 – “Pay Effects”. Own Elaboration

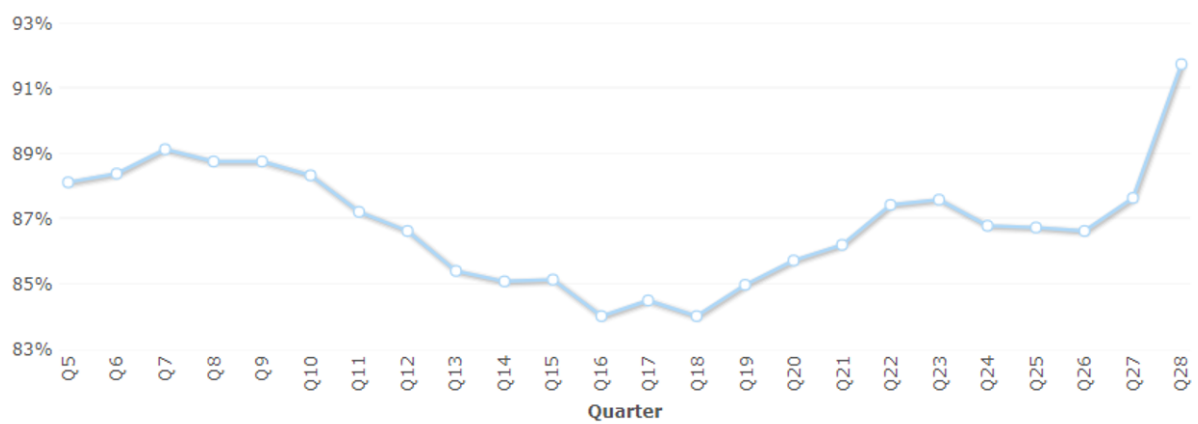


Figure 8 – “JAWDA’s Level of Motivation”. Industrymasters.

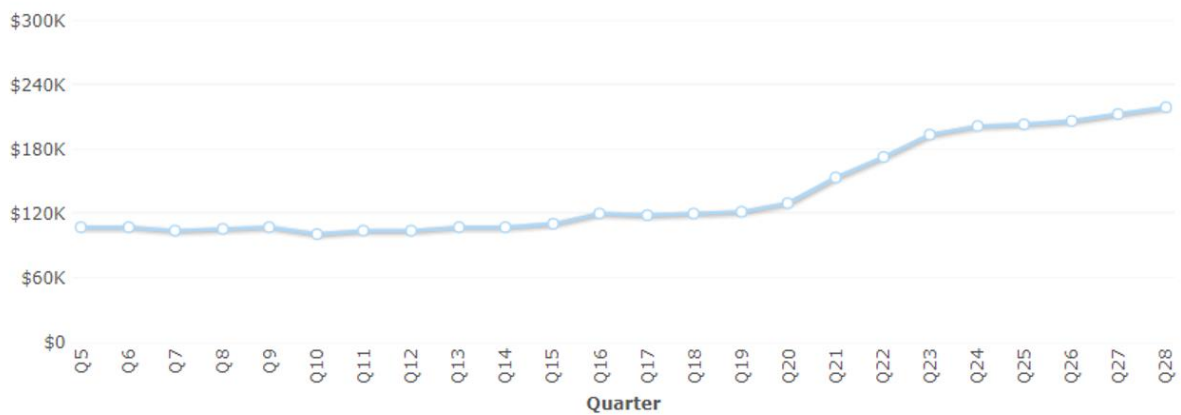


Figure 9 – “JAWDA’s Salary Management”. Industriousmasters.

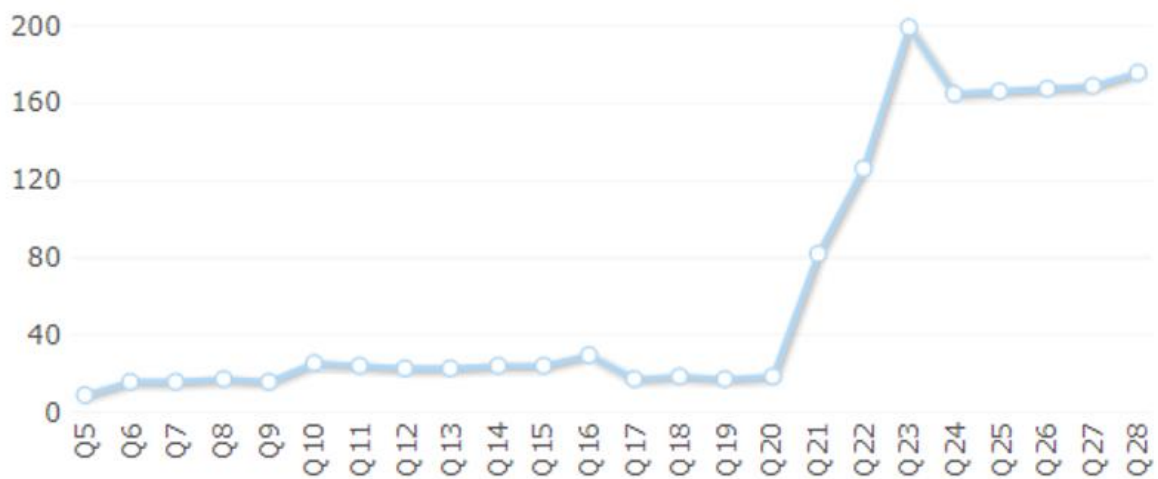


Figure 10 – “JAWDA’s Sustainability Skill Level”. Industriousmasters.

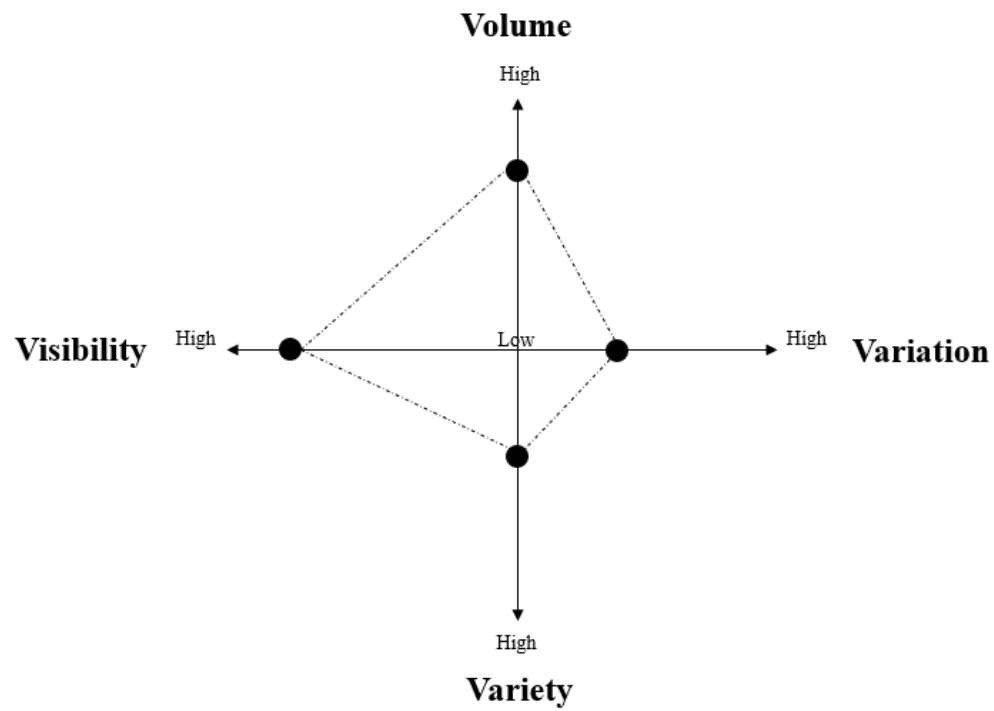


Figure 11 – “JAWDA’s 4Vs”. Own Elaboration



Figure 12 – “JAWDA’s Portfolio” Industrymasters. Own Elaboration.

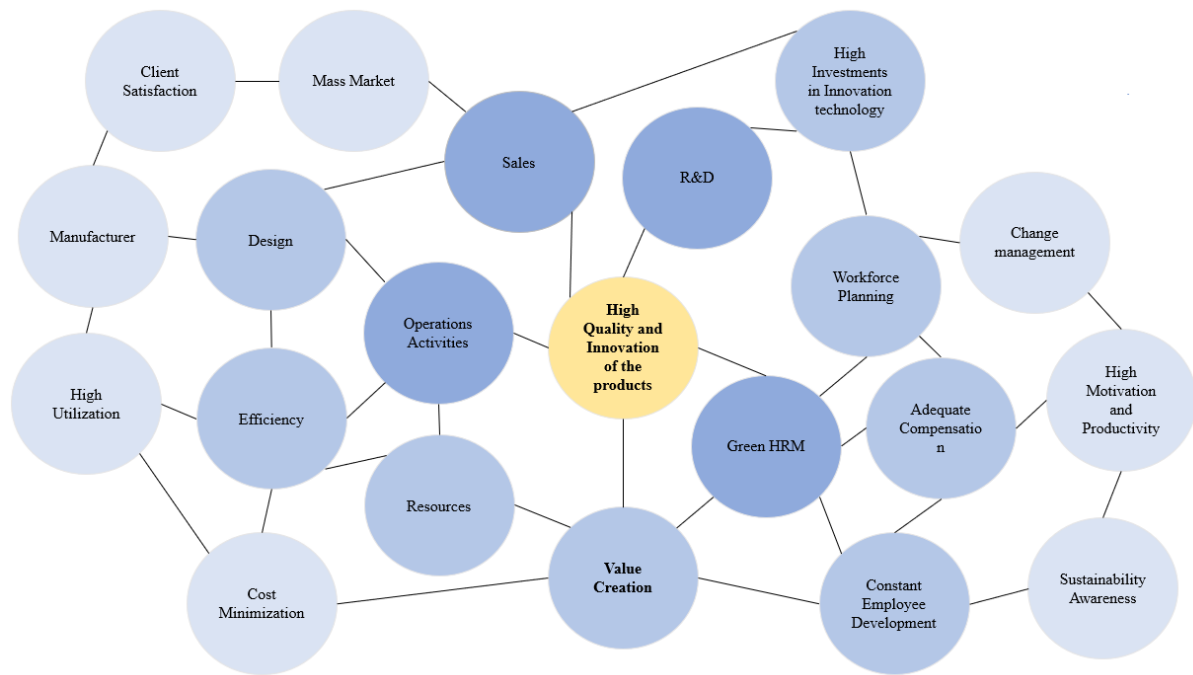


Figure 13 – “JAWDA’s Cross-Functional Activity Map”. Own Elaboration