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 - INNOVATION MANAGEMENT

Abstract

In group of six, we have been put in charge of managing an automotive firm during its transition to a more ecological and sustainable model. We developed our team and strategies for the different department in order to generate the most value added and renew the whole portfolio. This paper is a summary of the three weeks of simulation we went through and the different strategy and methods we used to make our firm successful.

Keywords

Innovation Management – Strategy – Apply Theory in Practice – Team Dynamics – Business Simulation

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1. Personal Reflection

During the experience of the Business in Practice, I had the chance to be a member of the team 2. Our team, composed of six members was likely one of the most diverse with a large variety of nationalities, philosophies, background, sexual orientation, and personalities. This diversity was confirmed during the leadership sessions where we learnt that we were one of the only team with a member from each colors according to the theory of colors Insight Discovery based on the work of Carl Jung (Insights Discovery 2021). Having such a diverse team is both a chance and a threat. The chance is that from diversity emerges inventiveness, productivity and, innovation but it can also be a great threat as it can complexify the communication due to the misunderstanding of the others' thinking system. Moreover, the repartition of the colors being unequal in our team with three fiery red, one cool blue, one earth green and, me, the yellow sunshine, the threat of the fiery reds taking over the team was present. Luckily, our team developed a great relationship and most of the experience and exchanges were very positive. Still, there is two major incidents to me that challenged me and my conceptions, forcing me to change my position and way of doing, allowing me to learn and evolve. The first incident happened during the first week of the experience, during the very first sales roleplay. This event was important as a consequent reward was offered which we almost missed due to the newness of our team and a lack of communication. The second event happened way later in the experience, during the business game itself, when we faced an important decision towards our strategy as whole between the year 4 and 5. The two critical incidents are interesting to detailed as they occurred at very different time in the experience and highlight the importance of communication, trust, self-confidence and the interaction between the different colors. All along the following pages, I am going to detail and use these incidents in order to show how I had to learn and challenge my system of thinking and, sometimes, my ego to allow to myself and to my team to keep going and achieve the best results.

The business in practice occurred over three weeks, allowing us to have time to explore and understand various topics. The first week and half of the experience has been especially enriching as it was mainly focused on these learnings. We went through all the important subjects related to the life of a firm and had the chance to exchange with professional experimenting these in their daily life. As a team, this week was more focused on discovering each other and understanding the functioning of each of my colleagues while starting to develop a strategy for our company. Everyone was collaborating and understanding it place and the place of each of their colleague, limiting the risk of tension within the team. We took this time to work on the preparation of document to use during the simulation and on a strategy in order to know how to start playing the simulation. Our strategy was based on heavy investment made as soon as possible, implying heavy expenses and so, an important need for liquidities.

1.1. Critical Incident – Sales Role Play

During the second week of the business in practice, we had a sales role play by team and, for the succeeding teams, a reward of 1.9 billion dollars within the simulation. Obtaining this reward was mandatory for the success of our strategy and this role-play became one of the main goals of our team. The latter was decomposed in two parts, a first session of explanations of a sales-person role on Tuesday morning followed, the next morning, by the role-play itself.

Since I am a kid, I always suffered of sleeping problems as insomnia, those being highly related to exterior factors as the stress. The business in practice being an important event as it represents the closing chapter of my studies, it brings with it an important amount of stress and more specifically the sales-role play was an important point of stress as it was the first important event for our team. As a matter of fact, the night before the sales session I have been incapable of sleeping resulting in me missing the entirety of the session. My team understood the reason why I missed that class and

helped get back to what have been said the morning. The end of the day was focused on choosing who were going to be the people representing our team for the role-play on the following day.

Before coming to Nova Business School, I, in the context of my previous business school, made a 6-months internship in a startup in Brussels, Belgium. I was working there as a Sales Development Representatives and, unofficially, as an Account Executive as I was the only one in charge of a specific type of customer for the whole France. I was doing the entirety of the selling process from the cold-calling to the preparation of the contract and a part of the after-sales service. In those 6-months, I signed more than four hundred customers, and, after my internship, I had been hired as student to train new salespeople and manage the two interns that took the following of my role. I had become one of the most important people of the sale team and learnt a lot about selling, especially in the B2B segment.

As a matter of fact, when arrived the moment to choose the representant of our team for the sales roleplay with a scenario based on a B2B customers knowing a bit about our company, I was feeling more than qualified to take the responsibility and go get the money for my team. Selling is a precise art. The processes among the different firms are often similar as they follow the same seven steps (prospecting, pre-approach, approach, presentation, overcoming objections, close, and follow-up) which are used since the beginning of the 20th century and knew very little evolution during the latter. Since the beginning of the century, this sales process evolved from a firm-orientation to a customer-orientation (Moncrief and Marshall 2005) meaning that, more than the selling theory, we are focusing more on the value bring to the customers, its needs and will. Selling became an exchange more than a one-way discussion meaning that what is bringing value to a seller is its experience more than its theoretical knowledge. But, despite my experience and my willingness to do the role-play, my team did not want me to go as I was not present during the morning session.

I am not the type of people who fight, if my team does not want me to do something, then I will comply with the majority, even though I disagree. In this case this is what happened, I accepted

their decision as I was feeling bad for missing the class in the morning, this created a lot of frustration in me as I knew it was something I was used to do. And at the same time, due to anxiety trouble, I am experiencing the impostor phenomenon known as a phenomenon causing people to underestimate their experience and fear to be exposed as a fraud (Sakulku and Alexander 2011). I undervalued my experience in the area and decided to trust my colleagues as they seemed to be sure of themselves. I, of course, offered to help with the preparation of the role-play and assisted them during the discussion around the subject. The impostor feeling added to the guilt of missing the session made me feel bad and I stayed very passive. We worked late that night to prepare everything, two of the three participants were fiery red personalities, showing a great confidence and trust in their work, pushing me to stay even more passive even though I was thinking that they tended to wander by trying to be creative about the fictional value-added they wanted to present to the false customer. I tried to center them at some point but they did not seem to want to listen and so I left it go.

Eventually, on the next morning, the role-play occurred. Since our meeting the previous night, my colleagues prepared a PowerPoint to support their sales speech which I was not aware of and I, immediately, knew it was a bad idea. Ms. Stewart instantaneously expressed that it was a mistake and had no room in this role-play. They, then, started the role-play, without their PowerPoint. After less than thirty seconds of conversation, I understood that it was going to be a failure. The speech was a one-way speech, with no interactions or concern of the customer and its needs. The whole speech was very scholar and disconnected from an actual sales speech, they were desperately lacking experience and missing the point. I felt the urge to intervene, thinking about creating a character to justify my apparition in the middle of the role-play, but once again, I did not feel legitimate to do so and I got scared that it would bring more negative than positive and I, painfully, waited for the end of the role-play. Ms. Stewart expressed how disappointed she was but, by luck, as we were the first group to go, she offered us to try again at the end of the morning. After that, I

decided to stand-up and take the lead onto the training of my colleagues. It was too late for switching the role, but I spent two hours training them in the way they talk, interact, and react. And, when we finally went back for the second row, my colleagues made a great job, and we succeed to get the reward.

As a conclusion, this critical incident is a very interesting example of the impact of the impostor phenomenon and the negative incidence it can have on your professional life. It allowed me to confront myself to the reality of this phenomenon in a real-life like situation. Impostor syndrome has a negative impact onto one's career. Studies suggest that it can have a negative impact on wages as people undervalue their work and will not ask for salaries increase when deserved. For the same reason, it is likely to reduce the pace of progression of your career. It can also have an impact on the firm's operations as someone with this syndrome will keep its ideas and possible innovation for itself which has a negative impact on the perception of its own value but also on the perception others have of your value (Neureiter and Traut-Mattausch 2016).

This acted like a shock, and I decided to learn more about the impostor phenomenon in order to have a better understanding of the mechanism underlying in this phenomenon. I started to trust more my knowledge as this example showed that I was capable and that what made me lose value was my fear of not being valuable enough. It is better to try and fail, than just waiting for something to happen and so, I am willing, in my future professional life, to let more place to my capacities when there is a risk to take.

1.2. Critical Incident – Strategy Disruption

After this incident, the rest of the second week went well. We managed to overcome this challenge and succeeded to reach our objectives as a team. I was feeling more listened since that event as if I proved my value. It had given me confidence which has been highly reinforced by the establishment

of our simulation strategy that was mainly based on the proposition I came with. The first days of the simulation were going well as we were following our initial strategy, everything was under control, and we were achieving great results even if some teams seemed to be doing better. There was almost no tension point within the team as we were focusing much on communication and debate when we had to make a decision. But eventually, our results starting to get worse, and I finally came up to the conclusion that our strategy was not adapted to the simulation. The strategy I had developed was directly inspired by real world example and was focusing on quality and margin more than volume, but along the year 4, it appeared that the operations management was struggling a lot to have a correct level of utilization and stock, which was directly impacting our margin and as a matter of fact, our overall results.

Our strategy was heavily inspired by Peugeot's strategy that turned out to be one of the most successful one in the previous year, changing completely the image of the brand and increasing steadily the firm's results (Genet 2016), but our goal was to position ourselves as more premium, Peugeot aiming more at a generalist-premium positioning. To do so, our strategy at to be based on high-functionalities car with the lowest cost as possible during the building processes in order to justify the higher prices and increase the margin counterbalancing the lower volume of sales. Except that it was not happening in the fact, our margin was constantly decreasing, our sales level was not as good as expected and one of the main reasons for it was the lack of flexibility in the operations process which was structurally due to the simulation itself. Our strategy had a very low compatibility with the simulation, and we had to change not to sink.

I always been a fan of the automotive industry, before I learnt to read, I was asking my mother to read me the name of every car in the street. At the age of 5, I was capable on the highway to tell if the car's rims were the original one or had been changed. At the age of 16, I could tell you the price and options of a car just by observing it in the street and I am still the one that all my friends are going to contact when they want to buy a car. I spend a lot of time reading and watching content

about cars and its industry which provided me the role of "industry specialist" in my team. Moreover, the simulation was following a logic that was really close from reality, making my knowledge transferable in the simulation. As such, I was capable of seeing and planning thing likely to happen before my colleagues, allowing us to earn precious time which, as the innovation director, was very valuable. As a matter of fact, when I understood that our strategy was not going to be successful, I prepare an important adaptation of it to increase our value creation. I came to the conclusion that adding one high volume model with lower margin would allow us to capture a great market share and add an important amount of value. I communicated this to my team explaining my logic and justifying the urgent need for change.

One of my problems as a "yellow sunshine" is that, even if I can be very creative and challenge the classical way of thinking, I tend to struggle a lot organize my though and to communicate them clearly. Most of the time, I end up thinking out loud and letting my colleagues gather the information I am giving and structure them, of course, I am capable of structuring it myself, but it takes more time and is kind of frustrating for me. But, on the other hand, the rest of my colleagues leading on the strategy aspect were all "fiery red" who like to go straight to the point, in a clearly structured and organized way. This has been the source of some tension from the beginning of the experience that we overcome easily. In this situation, the situation of our company was going bad making everyone more stressed and the tension emerged quicker. When I presented the strategy changes, I was thinking about, my colleagues seemed not to hear my offer and did not really consider it. I then tried to reorganize my thoughts to offer a more concise explanations making everyone of us losing a precious time, but the essence of my strategy had been communicated. Still, they refused to change the strategy, creating in me a great frustration and even a lot of anger.

That night when I came back home, I was furious as I was feeling as I was the only one seeing that we were going into a wall. I called my friend to rage about how misunderstood I was feeling, and they helped me calm down and understand why my new strategy had been refused. I am very

unconventional in my thinking process; I always challenge the status-quo and is very progressive in my solution. I do not mind taking risk to reach a better solution which can be very challenging and scary for more conventional personalities as we can meet a lot in business paths. When my strategy had been refused, I was hearing "your idea is wrong" instead of "we are afraid as this is very different from our initial strategy", which is a problem I already encountered as when an idea seems good to me, I tend to think that this is obvious for everyone.

The following day we started discussing about our strategy again as it was now, one simulated year later, obvious that our strategy was not effective. I presented again my idea for the strategy but more calmly, in a structured and organized way while taking care to reassure my colleagues about the important changes it was bringing. After some minutes of discussion, we decided to adopt my strategy with only one slight change. This same strategy led us to success and allowed us to win the simulation at the last minute.

This critical incident is a great example of something that happened multiple times during the simulation creating a lot of frustration. At least three times I offered solutions to a problem we were encountering that my colleagues refused before wasting time to discuss about this problem to come to the solution I was offering by themselves. It was especially frustrating as I was feeling misheard and misunderstood and it happened that they came to the same conclusion as me without realizing that it was the solution I was offering initially. Knowing that the timing was tight, and the pressure was high, it probably represented to me the biggest source of frustration over the entire simulation. Of course, the problem is not only coming from my colleagues, and I used it to learn how to develop my personal skills. But their lack of confidence in my proposition and treatment they gave to it made me have bad review in the peer-evaluation especially on the contribution to the team aspect which was, to me, ironic knowing that I developed almost the entirety of the strategy we followed during the simulation. And overall, I still feel very invisible and unrecognized at the end of this experiment.

From this experience, I understood that having good ideas is useless if you are not able to communicate them clearly to your team. Communicating a complex idea can be very challenging also it is necessary to train to deliver the concept without loosing your public. To do so, it is recommended to be clear, quick and to diversify the different representation of the idea (Ilchenko 2015) which is even more important and challenging as English is not the native language of any of the participants. It is a biased that we tend to have as for us an information is logical does not mean that this is for the people you are talking to. The difference of origin is also an important aspect in the communication of the ideas as the way to present and receive ideas can be very different from one culture to another which is important to emphasize to ease the exchanges (Jones and Draper, n.d.).

As a conclusion, this incident is a good example of the impact of a bad communication and the negative externalities it can have on productivity. I understood the importance of structuring my ideas instead of drowning my colleagues in ideas, as well as the importance of cultural differences in the misunderstanding of each other.

I chose to talk about those two incidents in this first part about my personal reflection as they were, to me, rich in learning and the source of frustration was different from each other as well as their timing in the simulation. They remain marginal to me as, and I really wanted to point it out here, our team had overall a very good connection and we had a very low number of tension point which is a great sign to me. I had been very happy to work, learn and grow within this team.

I really think that the first incident is clearly on me as I was originally in fault causing their mistrust in my capabilities and, because of a lack of confidence I did not know how to stand up for myself. This turned out to be detrimental to me but also to my teammates and it is showing how lacking

confidence does not only impact yourself. Being aware of my competitive advantage is something I have been working on since then.

The second incident is an example of miscommunication and, here again, lack of trust. I think the last one is related to the miscommunication too, as I was unsure of myself how can I expect my colleagues to trust me? This added to a bad structure of my ideas made them unclear and difficult to hear while I also did not emphasize enough their feelings and worries in my explanations. This incident is great as communication is an art and only time and training can make us better.

Finally, the peer assessment remains one of the biggest points of frustration to that day. We did not had time to really discuss about it with my colleagues and I still do not understand the assessment of some of my peers. I ended up with some of the worst assessment in the group while I bring much knowledge about the automotive industry and developed the majority of our strategies. Maybe I have been too discreet, so they did not the realize what I actually bring to the team, or I relied too much on it. Moreover, we had very different conception of work and what was acceptable in this framework leading, maybe to some frustration to them. Anyway, I remain proud of my work during this simulation.

2. Individual Firm Analysis

"The time is right for electric cars - in fact the time is critical." (BrainyQuote.com 2022). This quote, attributed to Carlos Ghosn the former CEO of one of the major alliances of the automotive industry, is a great representation of the disruption the industry has known in the past twenty years. If electric vehicles existed since the invention of cars, they progressively disappeared in the first part of the 20th century, becoming a rare alternative energy source used by some confidential selling vehicles. When, in 1972, the Meadows report highlighted the danger of climate change, the interest for electric powered vehicles grew again. The investment slowly increased, and the first electrified mass sold vehicle appeared known as the Toyota Prius in 1997. Since then, all cars manufacturer invested heavily in electrification programs, pushed by the success of hybrid cars and of electric car, as the Nissan Leaf (2010). In 2012, Tesla announced their first mass-targeted vehicle, the EV Model S, the brand appeared as the first 100% electric car manufacturer, since then the brand became the most valued car brand in the world, inspiring the whole industry.

The simulation we have done during the Business in Practice was heavily based on this disruption in the automotive industry. We were a new board of manager taking over a car company that has just started investing in electrification and needed to review its whole portfolio to comply with the evolution of the demand and of the new environmental policies ruling the industry. We were in charge of every important department of the company, we decided to name this last RelyOn. The latter is based on "rely", to highlight the quality and reliability of our product to which we added the suffix "-on" which can be linked to the idea of digitalization and modernity. We started with a portfolio of five vehicles, including one hybrid, two gasoline and two diesel powered cars. We developed a strategy named "Fast&Strong" based mainly on a high Innovation to offer high quality premium cars to our customers. In the

following pages, we are going to explore our strategy and its impact on RelyOn, through three of the major departments of the company, knowing Strategy, Innovation and then Marketing.

2.1. "Fast&Strong" Strategy

The first function we are going to investigate is the strategy. The latter had been the central element of our work as all the actions and choices took during the simulation were aligned with our overall strategy. In order to determine the path, we had to choose our goal; after some discussion we decided that RelyOn had to transform itself to emphasize and push sustainability as its core value. When we took over the command of the company, it was far from reaching the minimum legal sustainability minima with an inadequate portfolio and a certain lateness regarding the needed innovation necessary to effectively renew the product range.

To establish our strategy, we firstly needed to decide on what product we wanted to offer to our customers. The automotive industry is structured on various positioning, in general this last is the same for the whole brand even if some variation can happen on some specific product. In other terms, a brand can aim a large public by adopting a cost-leadership position with large volume of cheap low-equipped cars, aim at a more general positioning, premium-oriented positioning or even luxury segment (non-official categorization of car brans positioning, appendix 1). Those segments can be associated with the Porter's generic strategies (Porter 1985) as depending on the size of the target, focus on cost and on differentiation, each brand is going to be positioned differently on the market, covering various needs.

The positioning of a car manufacturer does not stop with the market categories, within each of these, the brand aims at differentiating themselves from the competitor. Here the differentiation is mainly based on non-financial advantages. This layer of differentiation is essential for the brand and more specifically in the case of automotive group owning multiple brands that can compete between each other in the same category. The positioning of the brand in this layer depends on brand personalities

and is, in general, highlighted through a perceptual map (See Appendix 1-p30) (G, P, and R 2017). This bi-dimensional positioning is necessary for each car manufacturer and is going to be structuring for the whole brand from the creation of the product to the end of its life.

The positioning of RelyOn was then the basis of our strategy. The luxury market was inaccessible due to the limitation of the simulation and a mainstream positioning was risky as the differentiation element were not numerous enough to eliminate the risk of being stuck in the middle. The choice was then between a cost-leadership positioning or a premium one. The first strategy is relying heavily on the volume of product sold, the latter are with simple design and the essential features only to offer the lowest price to the customers. Those brands need to develop a product that the largest amount of people is going to want while having a very important cost limit. The best example of this strategy is the Romanian brand Dacia that, under the control of the group Renault, went from a forgotten brand about to bankrupt to one of the best-selling brands in Europe. Their product is offering every basic need of the customers, making of it a highly reasonable choice. To guarantee the lowest prices, the brand is using the highest number of pieces already present in the other product of the Renault's group. That is allowing them to realize an important number of economies of scale and scope as the pieces. The model from Dacia is using less pieces than a mainstream car and is focusing on sharing, for instance between the first Sandero and the first Duster, 70% of the pieces were common to the two vehicles (See Appendix 3 - p31). The differences are mainly esthetic allowing the customer to have an original product. In the same way, the distribution network and after-sales services are reunited allowing the group to save important amount of money.

On the contrary, a premium brand is going to be focused on the differentiation through the overall quality of the car, its engine, its design and especially, its features. When an innovation occurs in the industry, they are, in general, first released on the most high-end product of a premium brand before spreading slowly through the different categories and then, brands. As a result, car as the Mercedes S-class, Audi A8 or BMW Series 7 are especially awaited by the specialist to predict how

the products are going to change in the following years. This focus on the features demand for high investment in research and development forcing the brand to make economies on other aspect, especially during the manufacturing. In general, the operations of premium brands are very precise avoiding having sleeping stock. Some of the strategies of Dacia are also used by premium brands, for instance the Audi's are sharing an important number of pieces with other cars from the Volkswagen group. On the other hand, brand like Mercedes is not part of such a group and is developing partnership with other brand to share a platform (as for the A-class and Lexus Q30) or technical pieces, for instance, Renault is building the two smaller engines offered by the premium brand. The focus for those brands is to have the highest margin as possible in order to generate a high-level of profit despite the limited volume of brand they are selling.

To reposition RelyOn, we decided to build our strategy with the example of Peugeot. The brand is a member and leader of the PSA-group, which also owns Citroën, Opel, and DS. After the creation of DS and the buying and rescue of Opel, the group needed to reposition all its brands as Peugeot, Citroën and Opel are all mainstream brands with close positioning. Citroën and Opel remained on the mass segment, the first one taking cheaper positioning based on the originality of the product while the Deutsch brand was positioned as more serious and qualitative. For Peugeot, the main brand of the group, the positioning evolved aiming at reaching a premium position. While DS was supposed to represent the French luxury on the premium market, the lion's brand was supposed to be seen as the sportive premium brand. To do so, Peugeot slowly started to increase the quality of their car while investing a lot in the features offered to the customers. From generation to generation, the product became always more qualitative slowly changing the perception of the public. The price started to increase too and despite the drop in volume, the brand became more profitable than ever challenging well-established premium brand. Finally, because of the jointure between PSA and FCA (Fiat-Chrysler Automobile), the brand stopped its evolution on the market and is now a semi-premium brand with rocket profitability and a great image from the public.

Based on this example, we developed the strategy "Fast&Strong" on the six years of the simulation. The first part of the strategy is based on the Innovation department with to develop quickly the most features and replace our product range by premium positioned products in the first three years of the simulation. The second half of the strategy, the focus is to push the sales through the Marketing department to capture the biggest share of the market as possible in order to generate revenue through our high margin products and make the heavy investment from the first three years profitable. The supporting functions of the firm were participating to the strategy by taking all the necessary decision to support sustainability in the firm and, even if the strategy was not focusing on them, they were essential for the success of it. Human Resources was expecting to manage the teams in order to maximize its costs while guaranteeing their high level of skills, especially in sustainability. Other goals were given to the human resources as the representativeness of our employees, as for the management board the ethical aspect was as important as the ecological one. The Operations department was expected to develop the sustainability aspect of their processes while precisely producing our needs of volume. Finally, the Finance department had to deal with the important needs of investment of the different departments in the most sustainable way.

2.2. The role of Innovation in the "Fast&Strong" Strategy

The first part of our "Fast&Strong" strategy was focusing mainly on the Innovation department. The mission of this department, heavily dependent on the finance department, was to invest in the development of the electric mobility and of attractive features to differentiate from the competitor. While developing this different aspect, it was expected to renew the whole product portfolio. The time objective was to realize the majority of these investments by the end of year 3. Apart from the punctual dilemmas the department encountered, their missions were divided in two sections, first the investment in features organized under three categories e-mobility, connectivity, and autonomous driving. Secondly, they were in charge of designing the new products, decide on the category, engine and features available. In the case of thermic vehicle, the possibilities of differentiation were more numerous through the interior and exterior style. The department is dependent on the finance department that is the only one capable of unlocking the funds needed to invest. It also has an important relationship with the Marketing as they tend to know well the targets and their needs which allows Innovation to design a product that is going to be desirable. Also, the marketing needs to be aware of the new product which are about to be launched in order to prepare their promotion strategy and manage the mix of communication between the different products.

The rhythm of investment from innovation had been important, from the first quarter, a new car has been introduced to the market. At the beginning of the first year (in quarter 4), the innovation department was already doing research to develop a first electric engine with small battery allowing us, after two quarters, to launch a small-range electric vehicle. But RelyOn was already confronted to a problem of emission. The government had set policies limiting the level of emission of the fleet and our brand was way above the limit, implying a high level of penalty. The calculation of this level of emission is, as in the actual European policies, based on the proportion of sales of each vehicle. In our case, the only hybrid car was the luxury which had, first, a high level of CO2 emission despite the electrification and, secondly, a lower volume limiting its impact on the fleet

average. The goal was then to identify a vehicle with a diesel engine as the technology was already predicted to drop fast with the years and a relatively high level of volume. The category answering the majority of our will was the business vehicles that we launched in hybrid named Irminger that was planned to arrive on the market by the end of the first year. Regarding the features investment, the focus had been put on the electric development in order to be able to offer satisfying range for our bigger vehicles, the second focus was on the connectivity aspect, the autonomous driving being researched when we had time and budget left. This choice was motivated by real life example as the classification on an innovation matrix did not allow us to differentiate the options according to its type of innovation (Kristóf 2016). Since the beginning of the 21st century, car manufacturer invested a lot in this technology and it was seen as one of the biggest disruptions in the industry but, with the year, most of the manufacturer gave up because of its cost making it impossible to sell in a classic car. Moreover, the technology is complicated to develop, and many ethical questions raised, question that are too complicated to be under the responsibility of private actors. The investment decreased and some actors stopped. The simulation being very close from reality, we have decided to not prioritize the autonomous driving path of innovation. By the end of the year 1, we have had invested in the two first level of connectivity, launched a hybrid business car, invested in the two first level of electric driving and in the first level of autonomous driving.

The second year knew an increase in the rhythm of investment. Multiple investment had been done at the same time in order to optimize the development time. We started the year with the investment in connectivity, in order to unlock the four levels by the end of the year. We also invested in two levels of autonomous driving meaning that, at the end of the second year, we were able to introduce a car on the market with a connectivity of level 4 out of 4 and the autonomous driving at the level 3 out of 4. The development of these features was matching our overall strategy of premium positioning, allowing us to be technology leaders on the market. During this same year, we launched a new car, the Falkland-EV, a microcar with a small range and a connectivity and autonomous

driving of level 3. We decided this model has it was able to guarantee high volume, significantly reducing our fleet emission average while not needing a high technological level as this is small car, made for the city and they do not rely on technology or autonomy, making it the best category to start the transition to electric cars. The Falkland-EV arrived on the market as the only micro-car during the quarter 10, providing us an important first mover advantage. On the side of these investment, we decided to finish the year with a final investment in a new electric luxury car. This decision was not planned as we were planning to replace each model from the smaller to the bigger as we had to wait to obtain longer range for our electric vehicles which is necessary for the bigger models. Nonetheless, during the third quarter of the second year, we faced a dilemma regarding the type of battery technology we wanted to invest in. We decided, unanimously, to invest in the most expansive and sustainable option despite a risk regarding the reliability. This choice unlocked the extra-long range and, with our technological level being already very high, we knew we could arrive on the market with an offer superior to the competitor, giving us a strong competitive advantage and allowing us to benefit from the high margin the luxury category is providing.

Finally, during the third year, we made our final investment in the third level of autonomous driving. We decided not to make the fourth level as we were having an important technologic advantage and we did not think that investing more would be profitable. We also decided not to invest in the last level of electric driving as we already had the extra-long range. Then, the innovation department only continued to replace the product range as our early heavy investment allowed us to have a technologic competitive advantage towards our competitors. Overall, we invested 2.71 billion during the three first years of the simulation and launched eight vehicles for a total investment of 4.87 billion.

2.3. The central role of marketing

The implementation of our strategy implied that the marketing took a central role to coordinate and guide the actions according to the reality of the market. Actually, it is the department with the most information and insight on the reality of the market asking for a great sense of data treatment and communication. Marketing is important for car manufacturer as they are offering a specific product with a lot of implications to their customers. Most of the time, the car is the second highest expenses for a household which makes it a reasonable choice with multiples factors of choice, as the price, the reliability and functioning costs and the social status. Effectively, cars are a positional good (New York University School of Law 2011) meaning that a part of the choice from the consumer are going to be made based on the perception other people are going to have of their car. This has implication on the marketing strategy, the department is in charge of fixing the price, as we decided to position ourselves as a premium brand, our product aim at being seen as a positional good. To achieve this positioning, our price must be high enough to exclude a part of the population from buying our products allowing us to fix prices above the average of the market (Vatiero 2011). Setting the price is one of the core functions of marketing, this action is a part of the marketing mix which is also often denominate as the 4Ps. This theory is grouping the four major areas of the marketing mix: Pricing, Product, Promote and Place (Kotler and Dubois 1984). The product aspect is the thinking around the product and its features according to the reality of the market and the future needs of the consumers, in other words, the establishment of its value proposition. In the case of the simulation, it implied that marketing could help innovation orientate itself on which investment to do first and, most importantly, their collaboration was necessary when designing a new car. In general, the development of the value proposition is a long process based on market research but also a multiplication of the sources with primary data and secondary data with existing customers. All the more as we know that cars manufacturer, especially premium brands, has a high level of fidelity from their customers oscillating between 45 and 50% for most of the premium brands (J.D. Power 2021). The Place aspect is more related to the operational aspect of RelyOn as we do not really have an impact onto the distribution networks or selling teams, still the marketing has information regarding the favorites categories of each region. The existence of tariffs and their possible evolution in time is pushing us to produce our cars as close as possible to their main point of sales in order to maximize the margin, then, thanks to the marketing information we can decide on the optimum production plant for each model.

The Promotion is probably one of the most important aspects of the marketing in the car industry. Firstly because of the high number of competitors from which you have to differentiate and of the importance of the brand image and, secondly, because apart from the half of customers expressing a high fidelity, the other part is showing a lot of hesitation. According to the positioning of a brand, the message it wants to convey to the consumers is very different, most of the brand position either based on innovation (Toyota, Renault, Fiat, Ford...), on pleasure (Peugeot, BMW, Seat, Porsche...) or on style. As we got inspired by Mercedes strategy, this last aspect was the most interesting to us, its signature "born to seduce" allowed them to develop a high-end image which value its qualitative image to a segment of customers that is especially sensitive to these elements. The communication in the automotive industry is a mix of the tactical communication and the image communication. The first one aim at communicating relevant fact that are going to grow the targeted audience objectives elements of choice. In theory, the consumers are rational being and are going to make their choice based on facts (Scott 2000), the idea is then to give element to nourish this rational thinking. Still, even if we consider the consumers as rational, we have seen already that car is a positional good showing a social consideration in the choice, then a car manufacturer has to develop its image to create an imaginary that people associate to their brand, this is image marketing. The first one is going to influence the rational thinking process of a customer while the second is going to influence its emotional thinking process. As we were aiming at a premium positioning, marketing was then necessary. We decided to invest a lot in it and to be present on every type of platform,

from the beginning, we have been the team investing the most in marketing especially through TV campaign with marketing expenses of 24.5% and Customer promotions with expenses of 14%.

The lifecycle of a car is also important and under the responsibility of the marketing. This last correspond to the evolution of stage for every model, going from the introduction stage to the maturity one (See Appendix 2 – p30). This lifecycle is important and is, in real life, rapidly evolving. In the 80's the lifecycle of a model was estimated to 8.6 years while it reduced to 6.7 years nowadays (Hoey 2020). Once a product reached the maturity stage, the sales and profit associated, are going to decrease slowly over time which is called the declining stage. There is different strategy to counter this phenomenon. A common way of doing is to restyle a product when it is reaching the middle of its lifecycle, this action is a way to redesign the visible part of the car to create a feeling of newness and keep a modern drawing. Restyling a product is often not only visual as it can be used to update the product regarding the last innovation available on the market. We associate this common practice with the possibility to relaunch a car within our simulation. During the second year, we decided to relaunch the convertible model as it was a high revenue generating model that we were not planning on renewing soon allowing the model to maintain interesting scores longer than expected.

Overall, our marketing strategy followed the overall strategy by positioning our brand as a premium car provider. The department had to treat an important amount of information and its collaboration with all the department had been essential in the achievement of our objectives.

2.4. Strategy evolution and coordination between functions

The strategic management is known as a process composed of five main stages (Kukreja 2018). Along the previous pages of this paper, we explored how RelyOn defined its goals and analyzed its internal and external situation in order to define and formulate a strategy. We also seen how this strategy had been implemented throughout different department of the company. The last stage of a strategy plan is to monitor its implementation and change if necessary. This last aspect is especially important and is too often forgotten by companies. The case of RelyOn is especially interesting as, after some years of operations, we had to face the conclusion that our strategy was incompatible with the reality of our firm and its market, forcing us to entirely renew our strategy.

Our strategy was mainly centered around the three first years, the rest being used to sales and profit from the return of the investment we have done before. But we quickly realized that the sales were not as good as expected and, due to a lot of instability, the operations department was not able to guarantee a satisfying level of production. Our demand was fluctuating, and we were experiencing very bad utilization which was directly impacting our product margin that were desperately dropping every quarter as highlighted on the chart below.



Figure 1- Product Margin Evolution

This important decrease of the margin was due to the buying of two supplementary line of production in the operations process which resulted in a capacity of production above our needs.

This decrease was impacting all of our KPIs, and the situation was worsening every quarter. It is important to emphasize that, in the car industry, operation is at the heart of the strategy as over-

producing implies a lot of stocking costs and has an important impact on the profitability, more specifically for premium as RelyOn. Due to the lack of flexibility in the operations department, we decided to rethink our strategy to maximize our factories utilization and guarantee profitability. The first draft of strategy was focusing on innovation, the second focused on operations. We decided to launch a new model with large volumes of sell and great profitability, the choice was made to launch a new micro-car. In effect, the Falkland-EV, the first electric car RelyOn launched had been a success since the beginning, being often out of stock and maintaining a very high and stable level of profitability. The model being one of the oldest we were offering, we decided to launch the Falkland-EV II with our newest innovation to make it as attractive as possible.

Our new strategy was not only based on a new car but on a whole repositioning of the brand, marketing reduced the prices of every model to make our vehicles more attractive. Instead of aiming a premium strategy, we decided to adopt a volume based one, effectively, even if we could not calculate it due to a lack of information, it appeared obvious to our management team that the cost of overage was less important that the cost of underage. In other words, loosing a customer because we are not producing enough is less expensive than producing a car that we can not sell.

This new strategy turned out to be extremely positive for our company, most of our KPIs went from a bad situation to a skyrocket success. The better example of this evolution is the Value Added that started to increase slowly during the year 5, when our new strategy had been implemented, before skyrocketing during year 6 as shown on the chart below.



Figure 2 - Evolution of RelyOn value added over 6 years

Conclusion

This experience of managing RelyOn as a member of the Team 2 had been very insightful and the skills and learning we obtained during those three weeks are going to represent a precious asset for our future professional life. We have developed a strong team spirit based on a pushed communication and understanding of each other. The synergy within our team allowed us to develop this same synergy between our respective department.

We understood the importance of developing a precise strategy and how it can help you work fast and efficiently. But a firm is the addition of all of its department and one can does not work without the others, that is a learning to keep from our strategy; we did not put focus on operations thinking that the other department would be enough to be successful and this could have led us to our end.

Monitoring and control are a basic learning in strategy, but this simulation showed how important and challenging this aspect is. Understanding and accepting that your strategy is not successful imply to question yourself and your assumption and it had been interesting to see how everyone had been reacting in different ways depending on how conventional they can be.

As a conclusion, we can see that building a strong team which work in a positive and open environment while following a well-established strategy that we apply with a critical mind led RelyOn to success, becoming the firm with the highest value added.

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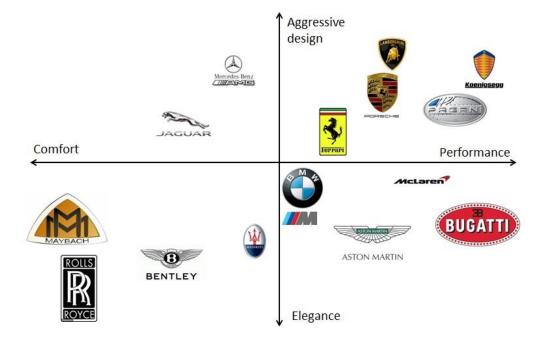
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Appendix 1 - Example of Perceptual Map for the luxury car market

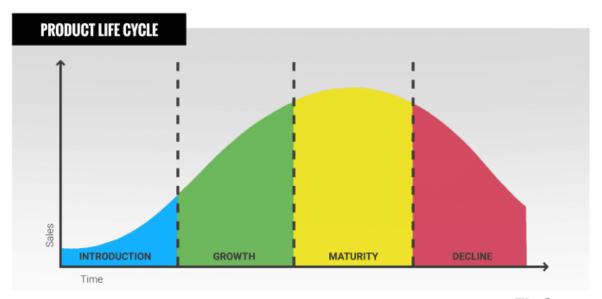
POSITIONING MAP ON THE LUXURY CAR MARKET



Appendix 2- Positioning of Car Brands



Appendix 3- Product Lifecycle



TheStreet.