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Modelling intrapreneurial ideas: from the inside out

Transforming cost pools into profit centers

Marta de Gouveia Limbert, Master Student #2393

A Project carried out under the supervision of:
Professor João Silveira Lobo

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Abstract:

This Work Project studies five intrapreneurial business ideas in Sonae MC's logistics department in order to provide a proposal on which ones to implement, along with an execution plan and suggestions on how to turn the department more profitable. The business ideas were: Truck Wash, Box Wash, Space Rental in Frozen Products Warehouse, Gas Station and Truck Advertising. A list of variables was delivered to the company's directors for them to elect the most important for the appraisal of the potential businesses. The variables were then grouped into three categories, axis of the matrix, according to their scope - attractiveness, probability of success and potential result. The ideas were plugged into a final matrix which highlighted three to pursue: Truck Wash, Gas Station and Space Rental in Frozen Products Warehouse.

Keywords: Innovation, Intrapreneurship, Decision Matrix, Business Modelling

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Introduction and purpose of project

Project's Objective

In this competitive and globalized era, organizations struggle to differentiate themselves to conquer a market positioning that can drive profitability and success in the long run. The average company life span is decreasing over time, with many companies going bankrupt after a while because they could not sustain their position. Therefore, firms should always have an ambidextrous strategy: exploiting and optimizing their current products and services whilst exploring into the future, using innovation as a driver of sustainable growth and profitability.

Innovation is a very powerful weapon through which a company does not settle on its comfort zone but strives for improvement and new paths. In the majority of companies, innovation arises out of specialized, highly qualified people, who work in a specific department. Nonetheless, disruptive innovative ideas can also come from the minds of common employees, who are close to daily operations and organizational agents such as customers, suppliers and partners. Likewise, one can potentiate innovation within a company whilst leveraging existing resources in a process called intrapreneurship.

The food retail industry in Portugal, where the project takes place, is one of the most concentrated industries in Europe. Being highly competitive, margins are tremendously low and retailers have few tools for differentiation, since a lot depends on suppliers. Therefore logistics is one of the organizational competencies where one can develop potential for competitive advantage, through efficient processes and reduction of waste in order to achieve superior performance and cost efficiency. This can then be reflected into a higher value proposition delivered to consumers and higher profits. Logistics is defined as “the process of planning, implementing and controlling the efficient, effective flow and storage of goods or services and related information, from the point of origin to the point of consumption for the

purpose of conforming to customer requirements”¹. Consumers have almost no visibility on the logistics’ radius of action, but it is the “soul” of any retail business.

The logistics department at Sonae MC, the company where this project is inserted, was designing its budget for the following year and decided to challenge some employees to create ideas on how to provide profit to the logistics department that is, by definition, a cost pool. Since the new business ideas came from internal employees, the process is called intrapreneurship. The ideas Sonae MC asked from its employees had to come out of the rationale “make the most of what we already have”. They were not looking for big innovative ideas that would require huge investments or organizational changes, nor even to start exploring a completely new business segment. They were simply asked to look at the current activities logistics performed, and observe where there was an opportunity to implement a small business and generate profits. Employees came up with the following ideas: (1) Truck Wash, which they already do to their rented freight; (2) Box Wash, which they also do it for themselves for the boxes that carry their fish and meat, (3) Rental of Localizations in the Frozen Products Warehouse, that has constantly some available space, (4) implementation of a Gas Station in the Azambuja warehouse, where hundreds of trucks move everyday and (5) the sale of third-party Truck Advertisement in their trucks, optimizing them.

The purpose of this project is then to analyze each one of these ideas that emerged from employees’ brainstorming and determine if they are in fact a business opportunity, or just an internal activity that has no capacity or market to be externalized. The final goal is to give a recommendation on whether or not the company should pursue with the introduction of each idea in the market. This process involves a study of the relevant variables to determine the viability of the new business ideas, a description of the methodology applied and a decision matrix, where the different ideas are ranked. In the end a solution for the firms’ request is

¹ Source: Council of Supply Chain Management Professionals

presented to the company, along with a suggestion for the next steps and a proposal of further opportunities to seize, based on a benchmark of the biggest retail companies in the world.

Organizational Overview

Sonae MC is the current market leader in the food retail industry in Portugal. It was founded in 1985 by the SONAE group, its current owner. Annex 1 lists Sonae MC's present insignias. Currently Sonae MC has around 24% market share whilst Jerónimo Martins, its major competitor, detains approximately 21% of the market in Portugal. However, it is a very competitive and concentrated industry, where nothing can be taken for granted.

In the end of 2015, the company operated 509 own stores and had 237 other stores in a franchising format. Sonae MC's turnover hit €3,490 M in 2015, conquering a growth of 0.8% compared to the previous year. In spite of sales growth expectations², the company's EBITDA has shown a decreasing trend, as a result of Sonae's attempt to improve its value proposition by, among other things, reducing prices. This is one of the reasons why it is so important to optimize logistics activities, in an effort to increase the company's EBITDA.

Sonae MC is now in the process of reinforcing *Continente's* internationalization strategy and in 2015 already exported its own brand products to more than 30 countries, being present in Europe, North America, Asia, Africa and Oceania, according to Luís Moutinho³, current CEO. The organization is mainly divided into commercial, logistic and administrative departments. In the logistics department there are five distinct teams: Transportation; Warehouses; Supply Chain; Projects Development and Manufacturing Centers. In total, the company's logistics department sums more than 2,000 employees. On average, logistic annual costs represent 10%⁴ of retailers' sales, so the annual budget for Sonae MC logistics is estimated to be near €350 M.

² Source: Sonae Financial Report, 2015

³ According to an interview in Portugal Global, AICEP, October 2015

⁴ According to Tompkins, Supply Chain Consortium

Literature Review

Invention is the development of a new device, method or technique, which to be an innovation, must be introduced to the marketplace and become generally accepted. Innovation is then the process of introducing new concepts to the market, by developing ideas into new products or services that are subsequently sold. It can be classified as radical or incremental. Radical innovation is the development of completely disruptive ideas, where new paradigms are built, a completely new way of looking to a problem or need, supported by inventions. Incremental innovation on its turn is built on existing notions and solutions, extending and adding new inputs, re-shaping previous concepts and solutions.

In their growth and development strategies, when looking for innovation, firms can opt for intrapreneurship, an effective solution for managing innovation inside organizations, based upon organic growth. Intrapreneurship is the practice of entrepreneurship inside the organizations, without the risk or accountability component associated with entrepreneurship, thus avoiding personal losses. It can also be called corporate entrepreneurship or corporate venturing (Burgelman 1984; MacMillan et. al. 1986).

Norman Macrae, deputy editor in the journal *The Economist*, was the first person to appeal to this concept, pointing out that big companies in its present form would not survive and that they needed to harness the drive, creativity, vision and ambition of entrepreneurial employees within organizations. The concept became more popular in the late 80s.

A relatively recent research conducted by Antoncic & Hirsich (2003), defined it as “not only to the creation of new business ventures, but also other innovative activities and orientations”, highlighting that intrapreneurship includes all types of innovation initiatives arising from the employees that lead to changing and improving the firm’s position in the market.

Kuratko et al. (1990) justifies the necessity to pursue intrapreneurship, besides the reasons that appeal to innovation, with the turnover of innovative-minded employees who are disenchanted with bureaucratic organizations and want to disrupt the market.

Regarding to the benefits of this relatively new concept, many of them overlap the benefits of innovation - leads to progress, development, social welfare and better company results. It is a very efficient way of innovating, since one uses the current human resources, which are constantly receiving signals from agents (customers, suppliers, other employees) and objects (machinery, computers) inside the company. According to Hank Balmaekers (2016) there is a “surprising side-benefit to intrapreneurship that potentially has an even bigger impact (than new products or services): deep and lasting organizational transformation, making teams, units and organizations ready to play in the new economy”. The “Like” button on Facebook, the Gmail of Google and the Sony’s PlayStation are some of the successful intrapreneurship examples.

When faced with several alternatives and scarce resources, managers need to make decisions. One powerful instrument that helps assessing and arranging all options, taking the subjectivity out of the decision and carefully weighting all the factors and criteria used to make a final conclusion is a decision matrix. It highlights all points that may weight in the final choice and quantitatively concludes the ideal solution for an organization to meet its goals, needs and wants. It is a simple and measurable model to make decisions based on the rating and scoring of different criteria, allowing to compare different options based on the same measures. According to an article in the Business News Daily (Marci Martin, 2016), to create a Decision Matrix one needs to list the different alternatives in rows and the relevant factors affecting the decision, customized for each organization, enumerated in columns. Afterwards one should establish a rating scale for the value of each alternative, to be able to compare them, and a weighted ranking to each factor, to determine how significant that factor is in the final decision.

All factors under each option should be added up being the option that scores the highest the alternative that should be firstly addressed.

In order to make accurate decisions one needs to take into account the incremental cost and benefits added. In the book *Managerial Accounting* the authors make a distinction between relevant costs, as the ones that differ between alternatives, and irrelevant costs which can be ignored and eliminated in the decision making analysis. To be successful in decision making, managers must differentiate the incremental costs and benefits and correctly utilize it to perform an accurate analysis and choose the best option amongst alternatives.

Process Analysis

Variables Chosen

In order to address the firm's request of evaluating the five ideas and determining which ones have higher potential, it was necessary to start by defining the variables that would conclude this potential.

In order to choose these assessment variables, a similar process to the one the framework "Value Creation Wheel (VCW)" proposes was followed. The key decision makers in the company, the "board" as the VCW calls it, were asked to choose the variables they thought were important and valuable for their company's standards and objectives. This way one avoids the imposition of academic and "vulgar" metrics that might lead to a solution that does not completely match the company's goals and expectations. In this process a list of 17 variables was delivered to Pedro Bártolo, the director of the Transport division at Sonae MC. The list, presented on Annex 3, was constructed through research and brainstorming. The "board" was then asked to rank the listed variables by level of importance, from one to five being five the most relevant, and to add new variables that they would also find important but were not listed.

This process allows to create a perfect fit between the results of the project and what the company is looking for, delivering a customized solution.

Afterwards, the variables chosen were grouped into three categories: i) attractiveness, ii) probability of success and iii) potential result, so that the results were interpretable and possible to draw conclusions from. This framework that was chosen is a variant of the “Strategic Intent Matrix”⁵, and is intended to conclude on one hand which ideas to pursue, by observing if they are in an attractive market, if the company is prepared to succeed in that same market, and if it can generate high results. On the other hand, the framework allows the company to understand which ideas are less attractive and define corrective measures to overcome that situation.

The attractiveness comprises all the variables related to the market of the pointed ideas per se, independently of Sonae MC being a player. It intends to conclude about the conditions of the marketplace, if it is currently attractive to get into or not, and includes the following variables: market dimension, market growth rate and market rivalry degree, the last being divided in three sub-variables: barriers to entry, competitors’ concentration and clients’ power.

The probability of success is related with the company itself, with its resources and characteristics, measuring if it is prepared to create and capture the value of the market. In this category are inserted variables such as organizational resources - firms’ competencies, specialized assets needed to perform the activity and relational architecture, understood as the relations with clients, suppliers and partners needed to implement a business - basic resources – CAPEX, investment in people and investment in technology - the presence of economies of scale; time-to-market and the synergies the new businesses can provide.

At last, the potential results measure the fit between the company and the market, disclosing the potential outcomes for Sonae if in fact implements the business idea. The Net Present Value (NPV) 3 years based, the Return On Investment (ROI) and the payback period are the variables

⁵ Source: Professor João Silveira Lobo - Framework based on “Positioning Theory and Resource-Based View of the firm”

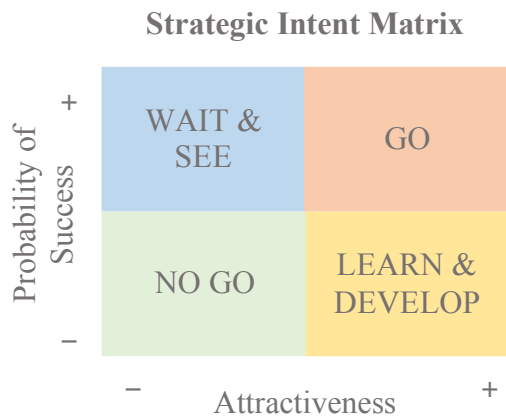


Fig. 1 – Strategic Intent Matrix
Source – Own

that compose this category. The matrix on the left, chosen to answer the company's request, groups the innovative ideas into four different clusters, according to the its attractiveness and probability of success, as explained before. The potential result will later correspond to the size of the bubbles representing each idea. If the

attractiveness and the probability of success are high, the matrix concludes that the firm should pursue and implement the idea (Go). If they are both low, then the company should not go forward with that idea (No Go). When the attractiveness is high, but the probability of success is low, the company should learn and develop the necessary resources and skills to succeed in that new market (Learn & Develop). Finally, if the probability of success is high, but the attractiveness of the market is low, the company should wait and see what ensues, closely monitoring the market and its evolution, and if by any chance that market becomes more attractive in the future, the company might bring the idea into the market (Wait & See).

Methodology

Concerning the materialization of the chosen variables, the internal data needed was obtained through interviews to the employees currently responsible or directly related to the activities associated with each idea. It is important to highlight that none of these activities was closely monitored nor the costs were accurately mapped, so a close analysis and deep study were performed in order to understand everything these activities involved. The cost accounting concept of incremental costs was definitely crucial in this stage, given that for the majority of the ideas, many of the costs would occur anyway, whether one implemented the business or not, because the activities needed to be performed internally either way. That is why some costs composing the activity should not be considered for this specific decision making.

Regarding the information about the relevant markets, internet research was conducted. Conversations with potential clients were also performed, to get to know their needs and wants, and sometimes, when justifiable, phone calls to competitors were made, to understand their pricing, geographic location and pipeline management. *Bloomberg* was also used to obtain some of the financial data required, such as the food retail industry's growth, and some of the other market's growth rates. For specific information about the company, such as Weighted Average Cost of Capital (WACC) at 9.5%, effective tax rate of around 21% and predictions about the company's future, the firms' annual report was consulted.

In order to fill in each variable, market dimension and market's growth rate were taken directly from research. For the variables that measure the rivalry rate such as competitor's concentration, client's power and barriers to entry, it was attributed a value from 0 to 5, being 5 very competitive, and 0 not competitive at all, based on the study of the industry. The organizational resources' variables (competencies, specialized assets and relational architecture) were measured as a percentage of the degree of completion Sonae currently has, in relation to what would need to successfully implement the business. The basic resources such as CAPEX, people and technology correspond to the investment needed in these areas in order to launch the businesses. Economies of scale is a binary variable: whether it is present or not. Time-to-market was an intuitive estimate, taking into account the complexity of introducing the new ideas into the market. The potential results' variables were computed according to a Discounted Cash Flow (DCF) constructed for three years, based on estimated prices (most of the times grounded on the market), quantifiable synergies, incremental costs, tax rate and the company's WACC. When there was more than one alternative to establish a business, the one with the highest NPV was chosen, for being the option that will probably provide more benefits to the company. Once all the data was gathered and computed, it was time to insert it into the matrix. For that purpose, the variables, with diverse sizes, scales and importance, needed to be

compounded to form their respective category - attractiveness, probability of success and potential result - to get them a final number and place the ideas in the strategic intent matrix, as exemplified on the figure below. To do so, within the same variable, the values of each idea were scaled from one to ten, being ten the most desirable one. Since the most desirable value

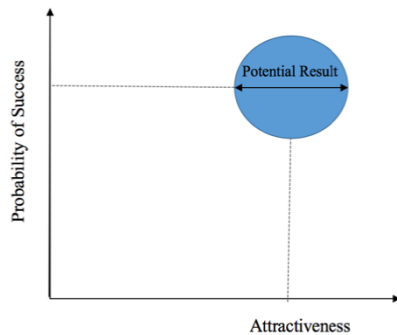


Fig. 2 – Example of a position in the matrix
Source - Own

inside one variable would correspond to a ten, to the other values it was attributed a number from one to ten, using a “three simple rule”: if X is a 10, then Y will be $(Y*10/X)$. When the amplitude of values was too big, it was employed a cascade process, attributing a ten to the most desirable value, nine to the second most desirable one and so on. The

objective is that all the variables are converted to one same scale so they can be summed inside their respective category and idea. The model intends that the idea with the highest potential scores as much “points” as possible. Afterwards, the already scaled values were multiplied by the weights Sonae’s decision makers attributed, so that the final result was fully aligned with their needs and expectations. The board gave values from one to five, being five the most relevant and one the least. The weights of each variable are presented in Annex 3. The final values of the categories were the sum of its composing variables, already scaled and weighted.

Proposed solution to the company

Decision Matrix

After all the research and computation was performed, the ideas were placed into the matrix. In Annex 4 we can find the results - the absolute values each variable has and the correspondent scaled numbers (from 1 to 10) for the five ideas. As observed in the table there is no established market for the Box Wash, but it was assumed the growth rate of the food retail market for its

close relation. Investments in CAPEX are never needed since all the ideas came from optimizing existing assets, or do not involve them at all, and all the businesses need the same investment in people – a manager who can split her time between the four activities that are implementable. The goal was to attend the company’s request of which ideas had the potential to be implementable. Annex 5 presents a table that summarizes the points each idea received for each variable and consequently, category, which are the inputs for the final matrix. On the picture below is represented the comparison decision matrix. For the division of quartiles in

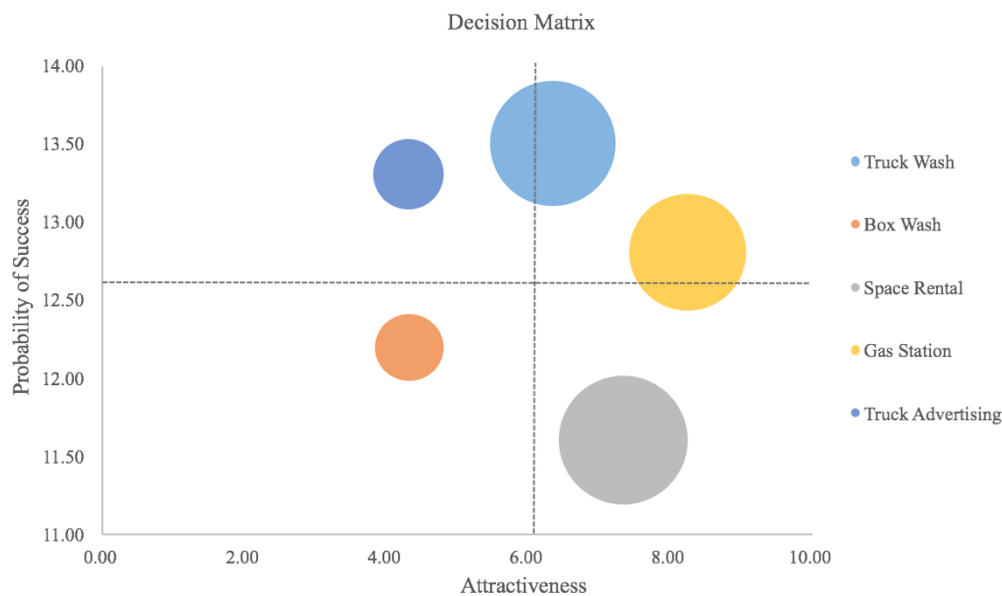


Fig 3 – Decision Matrix
Source - Own

the matrix, the splitter was placed on the average value of the attractiveness and probability of success, to distinguish the ideas that were above (winners) and below (losers) the average. These limits separate the four clusters of the matrix. The light blue and yellow bubble are not totally in the Go quartile but that is just due to their high area (potential result).

Results and interpretation

According to the results of this model, there are two ideas that should clearly be addressed right away, due to their high attractiveness, probability of success and potential result: Truck Wash and Gas Station.

The **Truck Wash** has a high business potential because Sonae already does it internally, to the companies from whom it rents the trucks (to transport the goods from the warehouses to their stores). Having the materials, the infrastructure and the people needed to provide this service, the company can easily implement the business. It is a fragmented, relatively large market, growing with the recovery of the economy, since there are more trucks circulating and consequently, needing frequent washing - this market grew 0.52%⁶ in 2015.

The **Gas Station** is also a good bet for Sonae MC, partnering up with an established Gas company, that can take care of all the investment in infrastructure, people and operations, paying to Sonae just for the space granted inside Sonae's facilities. This idea scored a lot for the probability of success category, since the investment and operations will be part of the partners' responsibilities. The market dimension is also high, growing at approximately 2%⁷ per year. Furthermore, it generates synergies, since currently Sonae's rented trucks need to make deviations to refill their deposits, increasing the probability of delays (bad for service levels) and the value paid at the end of the month to the truck owners (either by more distance travelled or by more time). Nevertheless, this idea has a big time-to-market period due to the acquisition of the license and the construction of the infrastructure and deposits.

Relatively to the **Space Rental in the Frozen Products Warehouse**, the attractiveness and potential results are comparatively high, Sonae will only support a marginal cost for storing third-party property (it already does it for itself). However, the probability of success is low, due to a high technological investment that needs to be done (create a new software) to control and manage these third-party properties, because Sonae's current software only controls its own purchased products. This investment was estimated to be approximately €20,000, based on benchmark. The matrix indicates that the company should "Learn and Develop" this

⁶ "European Car Wash Market 2016", June 2016, Verdit Retail

⁷ According to an ENMC (Entidade Nacional para o Mercado de Combustíveis) study

technological system before launching the business in order to gather the necessary conditions to succeed. Abandoning it should not be considered.

Regarding **Truck Advertising**, the model suggests that the firm has a high probability of success, as the company already does it for itself, and no further investments are needed. Nonetheless, the market is relatively unattractive. Moreover, Sonae used to have a contract with an advertising agency in the past to do this exact same thing but the partner went bankrupt, supporting the theory of an unattractive market. With such innovative ways to advertise, trucks are a relatively outdated method. However, conditions might change and the market might improve, being it the reason why the models suggests to “Wait and See”.

At last, the **Box Wash** is inserted in the “No Go” quartile. First of all, there is not a defined market for this business. The company that has the monopoly of renting the logistic boxes in Portugal (IFCO) also washes them, so it would be very difficult to get in, unless a partnership with this leading company was created. In addition, the machine Sonae owns is calibrated with the specific dimensions of its particular boxes, and it is not productive nor competitive in washing the IFCO ones – the ones the general market uses. Furthermore, the potential result is also low, due to high cost per washed box Sonae has for being unproductive, and the price established by IFCO.

If Sonae MC in fact goes ahead with the **Truck Wash** and **Gas Station**, a joint first year Free Cash Flow (FCF) of approximately €150K was estimated (discounted to the present is about €135K) and if it also decides to implement **the Space Rental in the Frozen Products Warehouse**, that amount increases to roughly €210K (which discounted to today is around €190K), with a total investment of around €55K, in present values. In the scenario of the firm also wanting to pursue with **Truck Advertising**, the joint first year FCF amounts to 220K in present values. The investment is relatively low, given that for most of these ideas, Sonae MC already has the assets, workforce and the know how, for it has been doing these activities

internally for a long time. Therefore, ROI (return on investment) is very high for most of the ideas. All these figures were calculated in a base scenario, decided along with Sonae's employees. Inflation was ignored due its low values, roughly 0.57%⁸, and the growth rates of the businesses throughout the next three years projected were assumed to be the same of the markets were they were inserted, as they are new ventures, one could not get a better estimate.

Implementation Plan

Given the recommendation to advance with the Truck Wash and the Gas Station, as well as the Space Rental in Frozen Products Warehouse, it is necessary to define the next steps. The Truck Advertising might also be considered a good business, as explained later. A deeper study was performed in order to understand the market of these ideas and the milestones Sonae MC would need to follow to launch these new businesses.

Relatively to the **Truck Wash**, there are four issues to address before implementing the business: first, the quality of the washings needs to be increased (by training the employees for example), because it is perceived to be low by the owners of the rented trucks Sonae uses; second, it is necessary to turn the activity homogeneous in the three distinct places (Azambuja, Maia and Santarém), using the same raw materials, prices and timings, which currently does not happen. Third, the firm needs to select a way to manage the pipeline. This is very important because currently this activity is internal and it needs to keep serving Sonae's freight. Given the study performed, Sonae has three major options: i) a pre-scheduling of clients, to be able to plan, manage and serve the wash of their and clients' trucks, but this option is not in accordance with how the general market works; ii) work in a First Come First Served model, but this can hurt and delay the washings of their own trucks; or iii) implement a hybrid system, where Sonae's own trucks are washed until a certain hour, and after that a First Come First Served model applies. The last issue is the collection of revenues. The majority of the wash stations

⁸According to *Banco de Portugal* at 15th November 2016

are inside Sonae's facilities and are not prepared to collect money. The recommendation is to collect the money at the reception of trucks, as they enter the facilities. There, the employees are more qualified to deal with money, and can register all sales. The drivers can then receive a "coupon", stating the the date and the kind of washing they paid for, to then deliver it to the employee that washes the trucks. The last employee must register all the washings performed. At the end of the day, the two different records need to match.

Nowadays Sonae only uses around 33% of its wash stations, measured in hours, with Maia being the less used station and Azambuja the most used one, so it has plenty of available time. The proposal of prices is lower than the general market, allowing to capture new clients and still earn a good margin per wash (nearly 85%) given that all the initial investments are covered. Raising clients will be relatively easy given the low price and the strategic location - hundreds of trucks circulate per day (except in Santarém, where about 20 suppliers' trucks arrive per day) - but still efforts should be allocated to communicating and marketing this new service to potential clients: suppliers' transport providers and Sonae's transport providers (to wash their other trucks that are not allocated to Sonae). Competitors are not a significant problem because everyone is offering a very standard service in a fragmented market.

Regarding the **Gas Station**, there are also some questions to answer. First of all, Sonae must decide the physical location, taking into consideration the requirements of the construction of a gas station. A place close to the national road is suggested so that the affluence of clients is maximized. When faced with this business idea, there are three different business models that could turn it into reality: i) purchase and resale of fuel, but this represents a new business area, and a lot of risk, investment and operational effort, ii) concede the space to an established gas company and charge a variable commission per liter sold, enjoying the upper side of the business and minimizing the risk and investment, iii) charge a high fixed rent to an established gas station company, so that it can operate in such a strategic location with a high number of

potential clients. After meeting with a gas company, it was understood that they are more keen to work in the third model proposed. The rent is defined taking into account the potential traffic of the station. It is important to highlight that this business would bring additional operational gains, because Sonae's own freight also needs to refill. A gas station in the facilities means that trucks would need to travel less and could reduce delays, increasing the transports' service level and reducing the amount paid to transport providers (due to time and distance savings).

The potential partners of this deal are Galp - with whom Sonae MC has a long term commercial relation - or Prio - which has been reinforcing its position as a low cost premium provider of fuel and might be interested in establish relations with Sonae to expand their business. Of course the new business needs to be communicated to its higher potential clients: suppliers and Sonae's transport providers. Vehicles circulating in the national road might also be potential clients.

Moving on to the **Space Rental in Frozen Products Warehouse**, as it was pointed before, the first issue to address is the development of a new technology to monitor and control third party goods in Sonae's warehouse. It is necessary to invest in a software that allows Sonae to correctly charge to its clients and protect itself from potential misunderstandings, monitoring the clients' merchandise. It is also required to have insurance on the same goods, in case anything happens. Another needed guarantee is to have a buffer space for the normal Sonae's operation and to avoid creating entropy in the warehouse with inbound and outbound fluxes of clients' goods. There are on average 1.500 available locations per month, but since this is a seasonal business, with high peaks in the summer and Christmas, it is necessary to look at the minimum available space throughout the year and set up the business from there. The operational capacity is very limited (due to the number of employees and the automatic rackets that can only come one at a time), so the clients' goods must have low rotation - staying on the warehouse for long periods of time. In fact, that is what proves to be profitable, given that all of the warehouse's expenses are already covered anyway by Sonae's own goods. Likewise, marginal costs of this activity

are very low, allowing Sonae to, even charging a low price for the service, have a substantial profit. The prices were based on the prices practiced by a logistics operator, partner of Sonae, and set 10% below, to attract clients. The clients with higher potential are Sonae's Frozen Products suppliers, that go to the warehouse more frequently and can start going fewer times, leaving more merchandise at each time, as long as the cost of renting space is lower than the cost of the trip. It is also important to highlight that Sonae has a lot of bargaining power with its suppliers. Another possibility is to serve as buffer to logistics operators when they are running out of space, but that might not have sufficient volume to justify the business. As for competitors, there are some big operators in the market, with very sounding names, but Sonae does not want to place itself like a big player, at least not for now, it just wants to profit from the empty spots, to which, with the right clients, it will be possible.

Finally, implementing the **Truck Advertising** sale might not be a bad idea after all, despite the matrix's recommendation, because almost no investment needs to be done and only a deep procurement is required. This is a small market with almost no growth but still, Sonae has all the conditions to succeed, in a partnership with the right advertising agency. The goal is then to find an advertising agency with sufficient success to have a solid base of clients and offer consistent revenues to Sonae. The agency does all the work of finding clients, installment and charging whilst Sonae only concedes the trucks and collects a variable commission. The commission used to calculate the potential result was based on a previous agreement held with an advertising agency to do the same job (this firm went bankrupt in a very initial stage).

For all these activities it is necessary to hire someone to manage the work, deal with clients and employees, assuring the good functioning of the businesses. It is estimated that that person can occupy 25% of her time in each venture, so one additional employee could be responsible for all these additional businesses, excluding the Box Wash, that has a No Go recommendation.

Opportunities to seize

The goal of this chapter is to provide some guidelines of what Sonae MC can do to continue optimizing existing assets and turn logistics more profitable, taking into account what the biggest retailers in the world are doing or intending to do.

In the perspective of optimizing existing assets, one of the relevant rationales behind it is sharing economy. In this economic model companies lend or rent assets to other companies who also need it, but would be pointless for both companies to buy it, because the assets not fully utilized in either of the firms and/or because it is very expensive.

In this asset sharing perspective, Carrefour started sharing its trucks. It noticed that all trucks (theirs and from their suppliers) had an objective for departure but always returned empty, which was a clear waste. For this reason, it started developing some new concepts: backhauling, fronthauling and inbound multipack. Backhauling Sonae MC is already doing. Fronthauling works the other way around: using producers' trucks after unloading at Carrefour's warehouse to deliver to Carrefour's point of sales, so that their trucks do not return empty as well. Inbound multipack consists in a single Carrefour's truck making several pick ups at producers' factories to maximize truck utilization. All of these ideas require a deep organization and management of freight, plus a close relation with suppliers, but in the end can lead to large savings or revenues' generation. Carrefour has verified a decrease in costs of around 26%⁹. Inside the transportation theme, Walmart is applying a "drop and hook" model, where drivers take the loaded truck to its destiny, leave it there and hook up with another truck that is already set to go. Most drivers prefer this because there is no waiting, as currently happens sometimes for hours, for a truck to get loaded or unloaded. With this Walmart was able to lower drivers' costs. On the e-commerce area, Walmart is also considering starting something new: a crowdsourcing model to fulfill e-commerce orders - instead of a Walmart's vehicle or an outsourcing service

⁹ Source: Efficient Consumer Response website

distributing an ordered good, a customer is offered a discount to pick up and drop off the merchandise. However, in this model Walmart is entrusting its clients to securely and quickly deliver items to strangers instead of simply stealing them, which presents a high risk. Another system being considered is a locker-based order fulfillment strategy. In this model items ordered online are directed to a local store along with the other merchandise and kept in a specific locker unit. Instead of goods being shipped to a business or habitation, customers will travel to their local Walmart to pick it up. Under this strategy, consumers have to be willing to sacrifice the comfort of personalized provision, so a discount should be offered to incentivize them, furthermore, Accenture estimated that 25% of consumers are using “buy-and-collect” services more than they did a year ago. The objective of these strategies is to better leverage the existing infrastructures as e-commerce becomes a bigger part of the retail business.

Another very specialized and valuable asset that Sonae has are its collaborators. People with the know how, insights, experience and skills to succeed in the retail world. They could provide consultancy services to other companies in the logistics area, making Sonae sharing and renting these “assets”. It is likely that many smaller retailers or even Sonae’s suppliers might value the contribution of a giant like Sonae to help them and are certainly willing to pay a high price for that. The problem is that these “assets” are used at full capacity. Collaborators dedicate all of their time to the company’s activities, remaining no spare time for consultancy.

Thinking in more macro trends, the retail client is changing, and logistics needs to adapt to be able to respond to these new demanding needs. According to a study from Accenture, 89% of customers are interested in ordering out-of-stock items via their mobile when they are shopping in stores. Likewise, 35% shop online before visiting the store to check if the product they want is available, and 92% want retailers to send real-time promotions to them while shopping. Clients are increasingly demanding in quality, speed, comfort, convenience and omni-channeling, desiring all at a low price.

A part of the answer can be in digitalization: consumers want to be able to buy and consult goods and promotions everywhere, with developed, up-to-date and customer-friendly apps and websites. Cloud systems can also be a good solution for this omni-channel demand, allowing retailers to be agile and have all channels synchronized, at speed and at scale.

Another clear path is being outlined - the internet of things (IoT). Regarding the customer experience, IoT allows retailers to cultivate an ecosystem that links physical and digital world, allowing bidirectional, real-time interactions with consumers, being smartphones the hub. For example targeted promotions or smart shelves in store that can detect when inventory is low and automatically re-order it. As for the supply chain, connected devices and products offer the chance to optimize operations in an increasingly complex environment. Radio Frequency Identification technology can improve the precision of inventory tracking. Data visualization eases the tracking of items across the supply chain and can even be extended to customers.

IoT can also provide an entirely integrated pricing structure which would help retailers improve synchronization of prices between shelves, registers and across channels, granting prices' consistency between online and brick and mortar stores. It could even allow a smart pricing strategy, using internet-enabled smart tags to adjust prices: lower them on promotions or low-turnover goods and increase them on superior demand products. Using IoT to automate many of the tasks employees used to do leaves more time for them to interact with customers, further improving the in store experience. Another big opportunity of IoT is the possibility to sell through new channels, like the emerging "connected home". Some firms are even becoming an integrated "platform" with the array of connected products, to allow clients to make all of their domestic devices talk to each other. If food retailers partner up with these platforms, they will obtain a gold mine of customer data related with nearly all aspects of the household. This data could help retailers conduct more targeted proposals or offer new services, such as an automatic replacement of goods based on the client's consumption or scrutinizing perishable dates.

All these suggestions regard to the upcoming of food retail and are intend to prepare Sonae to continue playing in the future and being a clear reference of retailing in Portugal.

Conclusion

After collecting some new business ideas from collaborators, Sonae MC was faced with the challenge of assessing its potential and make a decision on whether to launch these proposed businesses or not. The objective of this project was then to study each idea and give the tools and information the company needed to decide if they should or not implement them. To answer this question a model was constructed with several assessment variables. Since Sonae MC was the end user, the project should be fully aligned with the company's goals and expectations, so the decision criteria were defined along with sector directors, delivering a customized solution. The final matrix pointed out that Truck Wash and Gas Station have the potential to start being implemented right away. The Space Rental in Frozen Products Warehouse has also a high potential result but the company does not possess yet the technology it needs to deal with this business, so the model recommends to "Learn and Develop". With these 3 businesses the company can generate about €210K in the first year. The Truck Advertising is in an unattractive market, nonetheless, Sonae MC has what it takes to succeed, so, by finding the right partner, this business might be a good idea after all, unlike the Box Wash which is a clear No Go. Since the variables are chosen according to Sonae's patterns and the matrix is constructed to deliver a customized solution, this model can be used in the future to manage and assess upcoming innovative ideas inside this department. The downside is that the model only works to compare ideas with each other, not to evaluate independent ones.

Regarding future recommendations, Sonae should always keep looking into its current assets and observe if they are used at full capacity. If not, find new ways of optimize them. There are many opportunities, namely with their freight, stores and people, as big retailers are doing. Logistics has to deeply know its clients and adapt to their changing and demanding needs, in

order to match their expectations and keep them happy. Cloud systems, digitalization, Internet of Things and automation are some of the highlighted paths the future is converging to.

References and Annex

- Accenture LLP.** 2014. “Integrating Digital is the Latest Retail Industry Challenge”
- Antoncic, B. & Hirsich, R.** 2003. “Clarifying the Intrapreneurship Concept”, *Journal of Small Business and Enterprise Development*, Vol. 10 Iss: 1, pp.7 – 24
- Balmaekers, Hank.** 2016. “Intrapreneurship: in the end it’s not about the innovation”. Brussels, Intrapreneurship Conference
- Burgelman, Robert.** 1984. “Designs for Corporate Entrepreneurship”, *California Management Review*, 26, 154-166;
- Carrefour.** 2013. “Collaborative Transportation. Asset Sharing”, ECR Russia Forum
- Garrison, Ray; Noreen, Eric.** 2000. “Managerial Accounting”, Boston, McGraw Hill
- Gregory, J.** 2016. “The Internet of Things: Revolutionizing the Retail Industry”, Accenture
- Krapohl, Don.** 2014. “A Structured Methodology for Group Decision Making”, Augmented Intelligence website
- Kuratko, D. et al.** 1990. “Developing an Intrapreneurial Assessment Instrument for Effective Corporate Entrepreneurial Environment”, *Strategic Management Journal*, 11 (5): 49-58
- Lage, Luís.** 2016. “Value Creation Wheel: Innovation, technology, business, and society”, *Journal of Business Research*
- MacMillan, Ian et. al.** 1986. “Corporate Venturing: Alternatives, Obstacles Encountered, and Experience Effects”, *Journal of Business Venturing*, 1, 2, 177-190
- Martich, M.** 2015. “Retail Supply Chain Reboot: Agilely Facing the Unknown”. Accenture
- Martin, Marci.** 2016. “Decision Matrix: What Is New and How to Use it?”, Business News Daily Website

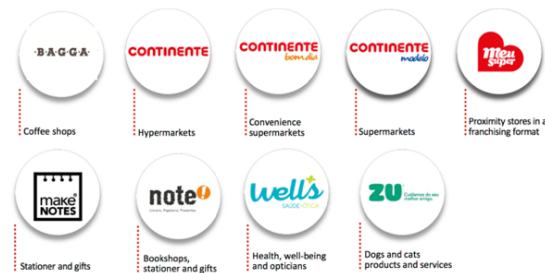
Master, N. 2013. “Walmart considers radically New Supply Chain Optimization Strategies”,
The Mobile Supply Chain Blog

Norman Macrae. 1976. “The Coming Revolution”. The Economist, 41-665

Pinchot, Gifford; Pinchot, Elisabeth. 1978. “Intra-Corporate Entrepreneurship”, Tarrytown
School for Entrepreneurs

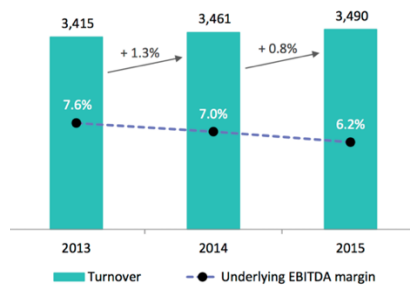
Annex:

Annex 1 – List of Sonae MC’s insignias



Source – Sonae’s Annual Report

Annex 2 – Graph of Sonae MC turnover and underlying EBITDA



Source – Sonae’s Annual Report

Annex 3 – Table of variables and weights

#	Variables	Category	Weight (1-5)
1	Market Dimension	Attractiveness	5
2	Market Growth Rate	Attractiveness	4
3	Barriers To Entry	Attractiveness	2
4	Competitors Concentration	Attractiveness	2
5	Clients Power	Attractiveness	2
6	Competencies	Probability of Success	3
7	Specialized Assets	Probability of Success	2
8	Relational Architecture	Probability of Success	3
9	CAPEX	Probability of Success	3
10	Investment On People	Probability of Success	3
11	Investment On Technology	Probability of Success	3
12	Scale Economies	Probability of Success	3
13	Time-to-market	Probability of Success	4
14	NPV - 3 years	Potential Results	5
15	Return on Investment	Potential Results	5
16	Payback Period	Potential Results	4
17	Synergies	Potential Results	4

Source – Own

Annex 4 – Table of absolute and scaled values

Category	Variable	Metric	Opportunities				
			Truck Wash	Box Wash	Space Rental	Gas Station	Truck Advertising
Attractiveness	Market Dimension	Value M €	28 €	n.a.	7 €	6 361 048 €	1 €
		Scale 1 - 10	9	6	8	10	7
	Market Growth Rate	Value % growth rate	0,523%	1,160%	2,000%	2,080%	0,001%
		Scale 1 - 10	3	6	10	10	0
	Barriers To Entry	Value 1 low - 5 high	4	1	2	3	3
		Scale 1 - 10	10	3	5	8	8
Probability of Success	Competencies	Value % of completion	85%	30%	95%	100%	80%
		Scale 1 - 10	8,5	3	10	10	8
	Specialized Assets	Value % of completion	90%	20%	80%	100%	100%
		Scale 1 - 10	9	2	8	10	10
	Relational Architecture	Value % of completion	95%	50%	80%	100%	100%
		Scale 1 - 10	9,5	5	8	10	10
Potential Results	CAPEX	Value €	- €	- €	- €	- €	- €
		Scale 1 - 10	10	10	10	10	10
	Investment On People	Value €	8 781 €	8 781 €	8 781 €	8 781 €	8 781 €
		Scale 1 - 10	10	10	10	10	10
	Investment On Technology	Value K €	0	0	26 €	0	0
		Scale 1 - 10	10	10	6	10	10
Potential Results	Scale Economies	Value 0 no - 1 yes	0	1	0	0	0
		Scale 1 - 10	0	10	0	0	0
	Time-to-market	Value Years	0,13	0,25	0,50	1,00	0,17
		Scale 1 - 10	10	8	7	6	9
	NPV - 3 years	Value K €	208 €	5 €	155 €	170 €	86 €
		Scale 1 - 10	10	0	7	8	4
Potential Results	Return on Investment	Value %	2366%	60%	441%	1935%	981%
		Scale 1 - 10	10	0	2	8	4
	Payback Period	Value Years	0,29	4,68	0,73	0,14	0,29
		Scale 1 - 10	9	10	2	0	1
	Synergies	Value K €	11 €	0	0	102 €	0
		Scale 1 - 10	1	0	0	10	0

Source – Own

Annex 5 – Table of final Matrix Inputs

Category	Variables	Weight	Opportunities				
			Truck Wash	Box Wash	Space Rental	Gas Station	Truck Advertising
Attractiveness	Market Dimension	40%	3,60	2,40	3,20	4,00	2,80
	Market Growth Rate	30%	0,75	1,67	2,88	3,00	0,00
	Barriers To Entry	10%	1,00	0,25	0,50	0,75	0,75
	Competitors Concentration	10%	1,00	0,00	0,75	0,50	0,75
	Clients Power	10%	1,00	0,50	0,50	1,00	0,50
	SUM			6,35	4,32	7,33	8,25
Probability of Success	Competencies	20%	1,70	0,60	1,90	2,00	1,60
	Specialized Assets	10%	0,90	0,20	0,80	1,00	1,00
	Relational Architecture	20%	1,90	1,00	1,60	2,00	2,00
	CAPEX	20%	2,00	2,00	2,00	2,00	2,00
	Investment On People	20%	2,00	2,00	2,00	2,00	2,00
	Investment On Technology	20%	2,00	2,00	1,20	2,00	2,00
Potential Results	Scale Economies	20%	0,00	2,00	0,00	0,00	0,00
	Time-to-market	30%	3,00	2,40	2,10	1,80	2,70
	SUM		13,50	12,20	11,60	12,80	13,30
	NPV - 3 years	40%	4,00	0,10	2,98	3,27	1,66
	Return on Investment	40%	4,00	0,10	0,75	3,27	1,66
	Payback Period	30%	2,70	3,00	0,47	0,09	0,19
Potential Results	Synergies	30%	0,31	0,00	0,00	3,00	0,00
	SUM		11,01	3,20	4,19	9,64	3,51
	TOTAL SUM		30,87	19,73	23,12	30,69	21,11

Source – Own