

MANGA CURTA, SAUDÁVEL NAS HORAS BUSINESS PLAN

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Summary

Building a successful business is about identifying trends and market gaps, providing products or services to fulfil them.

In order to identify those tendencies and corresponding gaps, factors like the impact of tourism, street food development, fruit benefits and consumer behaviour were studied. Moreover, a market analysis was executed, finding and developing data about the ambulant beach selling in Portugal, the market trends, direct and indirect competitors, market valuation and the factors that can influence the business.

It was possible to conclude that the foundations of the contemporary world are relying more and more on health and environmental sustainability. Specifically, the tendencies leading customer's preferences are healthiness, local and organic products, gluten and lactose intolerances, convenience and sustainability.

Fresh-cut fruit selling has proven to be along with these market developments and given the fact that Portuguese beaches are lacking this type of products a business opportunity was created.

Therefore, the main objective of this thesis was to propose marketing and operations plan to sell fresh-cut fruit on Portuguese beaches in the most convenient way possible with huge environmental concerns, aiming to update an underdeveloped market.

Afterwards, a financial analysis was conducted resulting in a positive net present value proving the viability of the project.

JEL Classification System:

L26 (Entrepreneurship) M1 (Business Administration)

Keywords:

Business Plan, Mobile Selling, Healthy Trend, Social and Environmental Responsibility.

Resumo

Criar um negócio de sucesso consiste em identificar tendências e lacunas de mercado e providenciar produtos ou serviços que as satisfaçam.

A fim de identificar essas tendências e as lacunas correspondentes, fatores como o impacto do turismo, o desenvolvimento do “street food”, os benefícios do consumo de fruta e o comportamento do consumidor foram estudados. Foi realizada uma análise de mercado, encontrando e desenvolvendo dados sobre a venda ambulante nas praias portuguesas, as tendências do mercado, os concorrentes diretos e indiretos, a valorização do mercado e os fatores que possam influenciar o negócio.

Foi possível concluir que os fundamentos do mundo moderno estão cada vez mais dependentes da saúde e sustentabilidade ambiental. Especificamente, as tendências que guiam as preferências dos consumidores são os benefícios na saúde, produtos locais e orgânicos, intolerâncias ao glúten e à lactose, conveniência e sustentabilidade.

A venda de fruta cortada está perfeitamente alinhada com os desenvolvimentos do mercado e tendo em conta que é um produto em falta nas praias de Portugal, considera-se uma oportunidade de negócio viável.

Portanto, o principal objetivo da tese foi propor um plano de marketing e operações para vender frutas cortadas nas praias portuguesas da maneira mais conveniente possível, com enormes preocupações ambientais, visando atualizar um mercado subdesenvolvido.

Por fim, foi realizada uma análise financeira, resultando em um valor actualizado líquido positivo comprovando a viabilidade do projeto.

JEL Classification System:

L26 (Entrepreneurship) M1 (Business Administration)

Palavras-Chave:

Plano de Negócios, Venda Ambulante, Tendências Saudáveis, Responsabilidade Social e Ambiental.

Executive Summary

Fruit consumption is known for its superb benefits, preventing some of the most alarming diseases of the century, such as coronary artery disease, hypertension, stroke and cancer.

People are becoming aware of the prosperity that fruit intake provides and its consumption has been rising in the last years.

Nowadays, when choosing products or services people look for sustainability and convenience as differentiation factors. In fresh-cut fruit retail business some examples are; local and in season sourced products since they spend fewer resources on the production and transportation processes and the type materials used in packaging if they are recyclable, compostable or biodegradable. Regarding convenience it can range from availability, easiness of consumption to payment methods.

The present plan demonstrates the viability of a business that sells fresh-cut fruit on Portuguese beaches, in a sustainable and convenient way, during the summer.

The ambulant food selling on the beach market in Portugal was analysed and some conclusions were taken. There is a predominance of sellers of the traditional sweet snack “Bolas de Berlim” with 65% of the licenses over the remaining categories, other food products including American cookies, popcorn fries and others represent 13%, bottled water and refrigerants 11%, natural products including fruit 7% and lastly ice creams with 4% of licensed sellers. Considering the number of licenses, references to the number of units sold and average price of the items, the market value in 2018 was estimated to be between € 20.6 and € 25.1 million. This value likely to grow around 5.7 to 5.8% on the next three years due to the increase in tourism, inflation and the percentage of fruit sellers, since they practice higher prices compared to other products. The amount of buyers will always have a cap since beaches have a limited amount of space, on the long run it can be assumed that the market could no longer grow on number of people, but only on conversion rate and price, considering that consumer tastes keep changing and the prices with them.

Many factors suggest that there is still a gap, some companies are already selling fruit at the beach, but the market is not yet mature, especially regarding sustainability and convenience.

The brand will aim to position itself as environmentally friendly, by using compostable paper cups, wooden forks and recycled napkins, donating every excess to non-profit organizations, source local and in-season products. Health-oriented providing healthy snacks with positive impact on people's diets and lives. Convenient as the fruit is ready to eat, sellers are easy to find with resource of an app and with easiness of payments with electronic contactless options.

This product is designed for the masses, notwithstanding there are some groups that are more willing to buy fresh-cut fruit, namely, women above 25 years old, men above 35, gluten and lactose intolerants, people that are sustainability or health-oriented.

The project will be developed from North to South of Portugal, in beaches where the number of daily visitors is considerable, beginning with a big number of sellers to create brand awareness and to prevent new competition to steal market share on the following years, since sellers have preference in license requesting if they were already active on the previous year.

The preparation of the fruit will be done by partners like local restaurants or catering companies, being supervised and controlled by company workers, keeping the investment to a minimum.

The financial projections indicate that the project is viable with a very high return. If implemented it should not only steal market share from current sellers, but also increase the valuation of the overall market. Sales are expected to reach € 1.26 million in the first year and net income of € 398,723. It is possible to affirm the viability of the project through a positive net present value of € 93 million and an internal rate of return of 488.51%.

The initial investment requirement is €135,044.50, being €105,000 financed through a bank loan, repaid on the end of the first year and the remaining would be share capital.

To increase the confidence of the investors a sensitivity and scenario analysis were executed, confirming that the investment is still worth it if results or variables change negatively. In the sensitivity analysis with 10% fewer sales, the net present value would still be € 48 million and in with 10% more sales it would reach 113 million. Regarding a scenario where only 80% of the licenses were obtained and sales revenue were down 20% the NPV would be € 52 million.

1. Description of the business proposal

This project aims to test the viability of a company that sells ready-to-eat fruit, at the beach, with a huge concern about its environmental impact.

The goal is to be a scalable enterprise, so a well-defined process is a primary need as well as the creation of a strong brand. To achieve that, the main differentiation factors will be the promotion of a healthy and environmentalist lifestyle, motivating people to eat more fruit, in the most convenient way possible with a policy of zero regular plastic usage. Therefore biodegradable and compostable materials will be chosen like wood forks, paper cups and recycled paper napkins. Furthermore, this company will aim at offering a convenient service, which may include encouraging payments through digital platforms like MB WAY or contactless cards. Thus, combining a healthy and environmental approach with a service that takes its products directly to their consumers' in a "door-to-door" system will set this project apart from existing ones.

The majority of the competition sells the traditional sugar in a "Bola de Berlin" shape and the other portion that sells fruit damages the coast and enlarges the great pacific garbage patch with their plastic waste, so it is believed that there is a considerable gap on the market.

Hiring young people and dress them with a nice casual white short-sleeve shirt, beige shorts and a small sombrero will definitely build a brand recognized by its modernity and fresh look. With the creation of this brand, known too for quality fruit and environmental concerns, doors may open to diversifying in other business units, like street vending or supplying major events.

To ensure that the current project is viable, there are critical questions that will be studied through state of the art articles and questioners, such as the operations' area, sourcing decisions, legal permits, consumer preferences, fruit preservation, inventory management and control, environment sustainability, hygiene and negotiation.

2. Literature Review

The aim of this literature review is to deepen the knowledge about the business and the industry to build a business model aligned with market trends and possible gaps.

2.1 Tourism and economic growth

There is a profound connection between the business idea and economic activity in or near the coast, this area is a big source of income to several nations due to the tourism growth (Vaz, Pereira da Silva, Phillips, & Williams, 2009).

There is a causal link between tourism, and economic growth in Portugal, being prevented from domestic and foreign tourists (Bento, 2016).

The number of landed passengers in Portugal has been increasing every year since 2009, reaching over 26.2 million in 2017 (INE & Pordata, 2018). To illustrate the impact of tourism in the Portuguese economy, the search in the Travel & Tourism Competitiveness Index revealed that the tourism sector represented 6.4 % of total Portuguese GDP in 2017 an industry that employed 362,797 people, totalizing 7.9% of total employment (WTTC, 2018).

Portuguese beaches became a reference for the tourists especially after the upgrades made possible by Portuguese Coastal Master Plans (POOC), which started in 1993 (Ferreira et al. 2013).

2.2 Street Food

This business is a type of street food, specifically on the beach that means it is important to master its concept. According to the World Health Organization (WHO, 1996) street foods are defined as “foods and beverages prepared and/or sold by vendors in streets and other public places for immediate consumption or consumption at a later time without further processing or preparation, that includes fresh fruits and vegetables which are sold outside authorized market areas for immediate consumption.”

According to Will Bredderman, the future of street food is corporate. A usual problem street food faces is the credibility of the carts and its hygiene methods, franchising known brands can be a solution for both parties, since street sellers can raise their standards and be backed up by a recognized name, big companies can find a way into new business units, enhancing their profits (Bredderman, 2018).

2.3 Fruit Benefits

The theme that is going to be studied in this section is the impact of fruit consumption on humans, it is known to be a healthy snack and in fact, studies show exactly that.

Nutrition in adolescence is critical for growth, development, health and well-being (Neumark-Sztainer, Story, Hannan, & Croll, 2002; Vereecken, et al., 2015). Establishing good habits throughout childhood is quite important since they will have an impact long term in people's health. Nowadays child obesity is an alarming problem, (Karnik & Kanekar, 2015) so it should be tackled, on an early age, by putting healthy eating into practice.

Research found superb benefits related to fruit consumption.

For example, fruit and vegetable intake is associated with reduced risk of several diseases like coronary artery disease, (Lampe, 1999) hypertension, stroke and cancer (Boeing et al., 2012; He, Nowson, & MacGregor, 2006).

In addition, there is a reduced risk of oral cavity and pharyngeal cancer with increased consume of Citrus Fruit (Cirimi,et al, 2018).

Some examples of specific fruit benefits are that strawberries increase blood fluid and defend the body against oxidative challenges (Tulipani, et al., 2014) and also mango that has antioxidant capacities resulting in a positively preventing hypertriglyceridemia. Interesting to note that fresh-cut processing does not affect the beneficial properties of mango (Robles-Sánchez, et al., 2011).

Given all the aspects mentioned above, the promotion of healthy diets was determined as a global health priority (World Health Organization, 2013).

This topic is reaching a great dimension not only being a global health priority, but also being now a law regulated area. United Kingdom is using legislation, to change eating habits and it is currently having a positive impact on the nutrient composition of households' shelves, especially on fruit and vegetables (Griffith, Hinke, & Smith, 2018).

2.4 Inventory Management and Conservation

Research indicates that there is on average in UK waste of 71kg per year per person, 50% of those being fruit and vegetables (Blanke, 2014). However, there are some techniques to reduce the impact of this problem. A root of specific fruit ripening is the liberation of a gas named ethylene (Blanke, 2014) by having substantial air circulation or using ethylene absorbers or inhibitors such as 1-Methylcyclopropene (Blanke, 2014), the fruit will last longer and less financial effects will be noticed.

According to Blanke, there are many fruits that produce ethylene gas, being some of the biggest producers: apples, avocados, bananas, cantaloupe, guavas, kiwi, mangoes, nectarines, papayas, passionfruit, peaches, pears and plums being important to pay special attention when storing these fruits.

Besides the storage of the fruit before preparing it, after peeling and cutting it will need to be conserved for at least a working day in perfect conditions, recent studies identify techniques to increase the shelf-life of fresh-cut fruit. On one side there is modified atmosphere packaging (MAP) that keeps a certain concentration of gas on the package postponing the fruit spoilage and another technique that is being studied recently is dipping the products to create edible coatings preserving the components inside it using polysaccharides, proteins, and lipid compounds (Yousufa, Qadri, & Srivastavaa, 2018).

Inventory Management affects companies' profitability and its main purpose is to define when, how and how much to order, to maximize efficiency and minimize costs.

Presently, there are already automated forms of managing inventories using Automated Store Ordering systems, however when regarding products with reduced shelf-life, they can be quite complex to implement, so data accuracy is imperative to their good functioning (Raman, 2001). Poor inventory management can lead to overstocking or stock-out situations. Both are result of some inefficiency and usually result in financial losses. When there is no stock

available, people might try to find their solutions elsewhere, when overstocking occurs there are other strategies to follow, those can vary depending on the companies' inventory management policies. The regular examples are FIFO (first in first out) and LIFO (last in first out), but concerning fresh products there are already different techniques like FF (fresh first) that increases client satisfaction but increases waste, OF (old first) that reduces waste but can sometimes reduce profitability, by the use of discounts and lastly, OP (optimized priority) when a model defines which item to sell in specific periods to maximize profit (Coelho & Laporte, 2014). This means that enterprises can choose to dispose of merchandise in order to get more revenue from fresher items.

Overall when overstocking occurs companies can choose to throw away products or use a discount price to release high stocks (Sabir & Farooque, 2017). In case of throwing away, the value of the merchandise represents the loss. When markdowns are used the effect on the profitability depends on their number and the value of each one. The best option for the retailers is to have big control over their ordering size and policies so that they can diminish waste and stock-outs (Sabir & Farooque, 2017).

2.5 Market trends and consumer behaviour

It is important to manage food waste, but even more important is to manage fruit consumption. The World Health Organization recommends a daily 400g consumption of fruits and vegetables (WHO, 2008). Unfortunately, this number is a reference that is not commonly reached (Moore, Thompson, & Demissie, 2017), notwithstanding this sector is growing, and the main cause of his growth is ready-to-eat food (Artés, Gomez, Aguayo, Escalona, & Artés-Hernandez, 2009). Fresh-cut products, being ready and of easy consumption, represent an interesting innovation for the industry. Salads dominated the fresh-cut market with 50% market share while fresh-cut fruit represented only 10% (Rabobank International, 2011). Data from Rabobank 2010 revealed that in Europe just 1% of the fruit sold was fresh-cut, however, in vegetables, the percentage reached 4% of the entire volume. This data has been changing with the growth of popularity of ready-to-eat fruit. These numbers can be explained by some important factors that affect fruit and vegetable selection. They were categorized in a classic study as the following: sensory appeal,

familiarity and habit, social interactions, cost, availability, time constraints, personal ideology, media and advertising and health (Pollard, Kirk, & Cade, 2002).

Sensory appeal is quite important when choosing food because eating does not involve only nutrient fulfilment; in fact, several people eat for pleasure, to get enjoyable experiences and as a comforting activity (Clark, 1998).

Sensory appeal involves taste, texture, quality, smell and appearance, being those prerequisites for the consumption of fruit and vegetables (Pollard, Kirk, & Cade, 2002).

Fruit consumption can be explained too by people's culture, familiarity and habits (Rozin & Vollmecke, 1986). If people were thought and are used to see others eating certain types of food they are more likely to endure that habit over time. However, if individuals suffer neophobia (rejection of new foods), that can be overcome by frequent exposure of that specific food (Koivisto & Sjoden, 1997), suggesting that familiarity takes part in food choices and on the willingness to eat. Another study on this field supported the theory that there is more likeliness to ingest vegetables if they are familiar than those non-familiar. A suggestion given in the article was that free tasting sessions could increase intake (Pollard, Kirk, & Cade, 2002). Food rejection was too an element of study, Fallong and Rozin proposed 4 categories to understand it, being them distaste, danger, disgust and inappropriateness (Fallon & Rozin, 1983).

Social interactions have a big impact on food choices. Several factors impact the pleasure of eating like atmosphere, the table, mood and people (Westenhoefer & Pudel, 1993). For example in atmospheres of more social pressure people are more likely to increase fruit and vegetable intake (Cox, Anderson, Lean, & Mela, 1998).

Studies showed that people that usually eat in front of the TV on the living-room, ingest fewer vegetable and fruit compared to people who eat in other rooms with no TV (Thompson, Margetts, Speller, & McVey, 1999). Nevertheless, there are some situations where people are more likely to eat fresh-cut fruit such as eating outdoors and driving (Jaeger & Rose, 2008).

Caregivers have a big role in influencing fruit and vegetable consumption. Research indicates that the ones who planned meals ahead are bigger fruit and vegetable consumers, also people who are more experimental in food preparation have higher intake levels of F&V.

Eating with company may affect food choices, a factor that is associated with increased fruit and vegetable intake is being married (Billson, Pryer, & Nichols, 1999). Singles sometimes do not want to prepare those kinds of foods since they are eating alone (Brug, Debie, Assema, & Weijts, 1995).

Attending Germov and Williams studies, food choices can be influenced by social interactions in two major ways, differentiating and social inclusion (Germov & Williams, 1999), in which people can eat a vegetarian meal or go to Starbucks to mark one's social status or consolidate group membership.

The cost of food is a critical aspect when choosing food. Fruit and vegetables are going through a shift, from loose to prepared and ready-to-eat products, the latter being more convenient they are also more expensive (Intel, 2001). This poses a threat for fruit consumption for the lower socioeconomic groups, being them already the ones with lower fruit and vegetable consumption (Cassady, Jetter, & Culp, 2007).

Availability is key in these matters, if the products are not available they cannot be consumed. A study showed that there are some obstacles concerning availability in fruit and vegetable consumption, especially at work, when eating out, doing takeaway and at friends' houses (Cox, Anderson, Lean, & Mela, 1998).

Time constraints are becoming an issue considering food choices, convenience is highly appreciated and ready-to-eat products are nowadays a must, this can be illustrated by the increase of prepared salads and fresh-cut products (Intel, 2001). However choosing fresh-cut products can increase the number of visits to shops, due to the perishability of the products leading to more time usage.

Despite the benefits of eating fruit, more than 90% of US children from 14 to 18 years old do not consume the recommended portions of vegetables and fruit per day (Moore, Thompson, & Demissie, 2017). There is evidence that teenage years are critical for changes in fruit and vegetable intake, usually, the consumption decreases substantially (Vereecken, et al., 2015).

According to (Vereecken, et al., 2015) there is a bigger refuge on convenience food, because of the increased independence and busy lifestyle characteristic of this phase.

Personal Ideology is a subject to consider. Organic production, genetically modifications and type of packaging are actually having a big weight in health perception and in consumers'

choices (Frewer LJ, 1998). A study concluded from his sample that people who purchase organic products do it because of its taste (43%), because it is environmentally friendly (28%) and because it is animal-welfare friendly(24%) (The Soil Association, 1999).

In terms of media and advertising, fruit has to compete with other snacks that have far more advertising expenses, becoming difficult to increase its consumption (Pollard, Kirk, & Cade, 2002). A way to promote it is using health as a comparative benefit (Dittus, Hillers, & Beerman, 1995). Whichelow and Prevost found that non-smokers, ex-smokers and self-assessed “excellent or good health” do eat more fruit (Whichelow & Prevost, 1996). However promoting fruit consumption through the healthiness concept may not have results of 100%, because of the optimistic bias effect, this means that people believe they are currently in a less risky situation than others, in this case concerning healthy eating (Weinstein, 2000).

According to (McClelland, Demark-Wahnefried, Mustian, Cowan, & Campbell, 1998) women are bigger fruit consumers than men, and older adults consume more than younger ones. Also, people with higher education, income and social status are known to have higher fruit consumption (McClelland et al, 1998; Cassady et al, 2007).

Developing research highlights that social marketing programs, media and lifestyle interventions should be focusing on the pleasure of eating to promote healthy habits (Jacquier, Bonthoux, Baciú, & Ruffieux, 2012). Currently, many health practitioners are using and favouring the strategy that includes food enjoyment to promote healthy habits, having presented already positive results (Carbonneau et al., 2017). There are already some studies about the healthiness perception of eating fruit and additional pieces of fruit, the outcomes showed that people perceive that the most health beneficial option is to eat a variety of fruit, throughout the day (Burns & Rothman, 2016).

People tend to enjoy more and actually eat bigger quantities of food if there is more variety available (Raynor & Osterholt, 2012). This finding is sustained across meals if there is continued variety over numerous days (Remick, Polivy, & Pliner, 2009).

A study found that if a person ate a piece of fruit in the morning, it is more likely that he or she chooses fruit over candy if the fruit is different from the previously eaten (Burns & Rothman, 2015).

Another determinant factor on the consumption choice is the packaging. In terms of relevance, quality and type of packaging were found to be more important than the brand (Peters-Teixeira & Badrie, 2005) when picking ready-to-eat products. In addition (Koutsimanis, Getter, Behe, Harte, & Almenar, 2012) discovered that there is a big concern amongst consumers about the materials used in packaging.

Besides packaging, research has demonstrated that there are other factors that are critical to creating bonds and trust with the consumer such as food safety, labels, certifications and sustainability (Santeramo, et al., 2018).

Considering that sustainability is crucial to building trust with the consumers, companies are adopting more and more an eco-friendly positioning. There is a major topic involved in this change, and that is plastic. It can be quite beneficial for economics and day-to-day activities, but the characteristics that made him valuable are the same that makes him so harmful to the environment “(high persistence, resistance to corrosion, low electric and thermal conduction)” (Bockhorn, Hornung, Hornung, & Schawaller, 1999).

Good news related to minimizing single-use plastic is the ban of straws in Seattle (Fleishman, 2018). In addition, the European Union has just voted to ban single-use plastic starting in 2021 (Andrews, 2018) which means changes in mentality and in legislation are occurring, building a greener and more sustainable world.

3. Reference table

Tourism and economic growth	Nowadays, tourism is an impulsion of economic activity especially in coastal areas, so the current state is an opportunity for the business to flourish. The challenge is to find the most appropriate area to invest according to tourist's specifications and consumer behaviour.
Street Food	Street food is growing also with increased global mobility and tourism. Creating a reliable brand with high hygiene standards in street food can result in competitive advantage since this is a big issue in this business. The business plan will aim to find ways to structure a strong and known brand.
Fruit Benefits	There are many benefits associated with eating fruit, the research will be mainly focused on highlighting the benefits of each fruit, and to find how to display them.
Inventory Management and Conservation	In order to become efficient studies will aim to find which are the fruits that should be warehoused together to increase shelf-life. It will be verified the need for coatings to increase the conservation of fresh-cut fruit and what type of coats are available. Which are the best Inventory Management systems in the market concerning perishable products.
Market trends and consumer behaviour	Research indicates that fresh-cut products are growing, taking advantage of it and hopefully set a trend, being the 1 st using biodegradable materials, showcasing several fruits in the most pleasant way possible. To combine that with other factors that incentive fruit consumption is the emphasis in this area.

4. Objectives of the Plan

The ultimate goal of a business plan is to find out if the marketing and operation plans proposed are financially viable, and how much money is necessary to invest.

It is intended to deepen the knowledge on how to create a profitable business, finding a market gap and taking advantage of it, while making the world a better place. Build a brand that can be recognized for its good values and maybe open doors to other projects. That can only be possible with a structured control system, where it is possible to play the role of a national business manager, where operations can be escalated throughout Portugal with a safe method.

5. Methodology

The methodology will concise on what methods were used to prove the viability of the project.

The first phase will consist of gathering information. The literature review will act as a guide for the work, based on secondary data, from studies and articles as actualized as possible, studying general information regarding the sector, the products and the business.

Moreover, a market analysis will be executed, looking for quantitative data about the ambulant beach selling in Portugal, the market trends, direct and indirect competitors, what, where and how they are doing business. Also in this analysis primary data will be created, estimating the value of the market with information collected from every Portuguese Captainship by email, mixed with information on beaches' capacity and the average number of visitors found on "Planeamento da Orla Costeira" and on the website of "Agência Portuguesa do Ambiente". To further analyse the market the factors that can influence the business will be studied through a PESTEL analysis as well as the competitive rivalry through a Porter 5 forces framework (Porter, 1979).

Internally strengths and weaknesses will be examined and by adding opportunities and threats found on the market analysis a SWOT framework will be completed, as well as a SWOT systemic analysis.

After profound market research, it is essential to make decisions concerning strategy and marketing. Critical success factors and the strategy will be defined, stating a mission, vision and values.

The next phase will comprise all the other marketing definitions, like the segmentation, targeting and positioning, brand design and its marketing mix, involving the definition of the product and policies such as promotion, price, place, people, process, physical environmental and productivity.

The operations plan will be presented on the section with marketing and, with the decisions taken about the strategy, marketing and operations, research will be conducted on

Captainships', ASAE and other legal documents to discover the requirements for the implementation of the policies previously stated.

Lastly, the financial plan, which will incorporate all the data from the previous plans, from comparable businesses and from budgets asked online or physically. It will consist of sales forecasts, cost of the goods sold, staff expenses, supplies and services contracted, working capital, the investment required and financing. The plan will culminate in three crucial statements, the income statement, balance sheet and cash flow statement.

Considering these projected statements using the CAPM (Sharpe, 1964) and WACC (Miles & Ezzell, 1980) models it is possible to calculate the net present value and the internal rate of return to prove or not the financial viability of the project.

In order to increase the confidence of investors, sensitivity and scenario analysis will be performed, confirming if the investment is still worth it if results or variables change.

6. Market Analysis

6.1 Description of the market

6.1.1 Portuguese fruit consumption

People are becoming more concerned with their diets. A study from INE demonstrated that the average yearly fruit consumption in Portugal accompanied the years of the crisis. There was a clear decline from 2008 to 2012 reaching an average annual consumption of 102kg per capita, and since that year it has been growing, in 2017 fruit intake was 130kg, meaning that there was a smaller intake in crisis years than in prosperity ones (INE, 2018). In the same study, INE concluded that the type of fruit that is most eaten is evidently fresh fruit, but more specifically from 2012 to 2016 the most consumed fruits were apples and oranges (Coutinho, 2018).

According to the tool, google trends, since 2012 the word fruit in Portuguese (Fruta), is becoming more and more searched, indicating that there is a growing interest in this matter (Google Trends a, 2019) and sustaining the theory mentioned above.

In 2014 the National Inquiry for Health, studied the consumption habits of Portuguese people above 15 years old, announcing that 6.3 million eat fruit daily, on average 2.3 portions. The number of portions eaten was studied and it was concluded that 70.8% of the population ate one or more portions of fruit a day, 23% between 1 and 6 portions a week, 5% less than one portion a week and 0.9% claim that never eat fruit (INE, 2016).

The daily consumption of fruit was less frequent in people between 15 and 24 and more frequent from 45 years old onwards. Between 45 and 74 is the age when people eat more quantity of fruit. From a total of 8 884 581 people, the range between 35 and 64 represented 37.1% which sums 3 298 240 individuals that ate at least 1 portion of fruit a day. This phenomenon is confirmed in men and women, nonetheless, there are more women (3 517 487) eating fruit daily than men (2 774 703).

In Lisbon Metropolitan Area the category that has bigger fruit intake is 35 to 44 years old with 309 790 people, 67% of men eat daily being the most significant interval 35-44 with

145 843 persons, on the other side 74% of women consume fruit daily, being its largest category 45-54 with 167 388 females.

INE studied the fruit consumption regarding occupation and the class with more daily eaters is “Employed” with almost 3 million people (72%), on the other hand, “Retired” with 1 751 666 persons has 80% of daily eaters as seen in figures 7 and 8 presented in annexes.

According to education, in Portugal there are more people with basic education eating fruit daily (3 350 027) compared to other levels of education, however with fewer people (1 175 750) the category that tends to eat more frequently in percentage and bigger quantities is “Superior education” with 77% as seen in figures 9 and 10 (INE, 2016).

6.1.2 Healthiness

Portuguese are looking for healthier and well-being related products. In Portugal, 70% of the buyers are concerned with eating in a healthy way. This is reflected in the shop of fruits, vegetables, white meats and fish, avoiding high fat and sugar products, as well as processed foods (Nielsen, 2018). According to Nielsen in 2017 Portuguese wanted for their following year to consume fewer candies (52%), less added sugar products (49%), less saturated fat (43%) and increase the consumption of fruit and vegetables (57%) (Nielsen, 2017). In a study conducted in December 2016 to Portuguese consumers, 77% assured that they have altered food behaviour in the last two years, especially to prevent health issues, half of them have reduced the intake of refrigerants and 48% says that eats fewer candies (Agência Lusa, 2017). However, 36% of the ones that do not feel that they eat healthy, point economic difficulties as the main reason, 33% say that cannot resist eating unhealthy food and 30% mention lack of time.

Superfoods are entering Portuguese diets, 72% of the consumers believe in their efficacy to prevent or cure diseases, and 66% would like to have more information on these products in order to manage its intake (Nielsen, 2017). Currently, they consider some products quite beneficial for one's health like chia seeds, ginger and goji berries.

It is important to know how persons evaluate the healthiness of the goods and a Portuguese study concluded that national shoppers determine if the products are healthy through the label

nutritional information (54%), health professionals (43%), health-related websites (40%) and by the messages on the packaging (45%) (Nielsen, 2017).

Pedro Celeste, a marketer and general manager of PC&A declares that the trend of healthy eating can be explained by the willingness of the modern man and woman to become a better version of themselves, looking for optimization, being more efficient, effective, to live better and having a greater quality of life. That is supported with the growth in attendance of gymnasiums, hotels and spa, nutritionists and social media related to diets and health (Nunes & Pereira, 2016).

6.1.3 Convenience

As fruit is a food product its consumption is rather recurrent. However, usually it sells with low margins, in this case adding the readiness to eat, greater value will be delivered, the price will be higher and so will be the margin. According to (Clemons, 2018) fresh-cut vegetables are paid premium, easily sold 2 to 4 times more the price of uncut ones. When it comes to revenue, there are two important factors to consider, the number of sales and the price, being this a recurrent product and with a higher price, in theory, profits will be higher than regular fruit selling, making this a more attractive market. The question is whether consumers choose this type of food over others. As we saw in the literature review individuals with higher disposable income are more likely to buy ready to eat fruit (Cassady, Jetter, & Culp, 2007). In this point of view, this can be limiting the number of potential buyers, but a hint on what target to focus.

There has been a change in fruit consumption occasions, in the last 20 years, out-of-home got way more attention, in Europe according to 2018 Fruit Logistica Trend Report, the predicted compounding annual growth rate 2015-2030 of fruit consumption out-of-home is 28% (Wyman, 2018) this can be an opportunity to invest in ready-to-eat fruit, since it is easier to consume while out.

In 2007 there were already news that claimed fresh-cut was a fast-growing trend (International Fresh-cut Produce Association, 2007). Eleven years later, in 2018, the CEO of Vicente Peris, a company that specializes in preparing fruit, reasons that fresh-cut products are still growing and with a lot of room to improve, mentioning a study that revealed people

eat around 40% more fruit if it is already peeled and cut. He believes that in 20 years, the market will be dominated only by cut and peeled fruit (Fresh Plaza, 2018). In U.S. consumers seeking convenience and healthy snacks increased the value-added fruit segment. Dollar sales of fresh-cut fruit have grown 11% from 2015 to 2016, and from August 2016 to August 2017 pre-packaged fruits grew 15% (Statista, 2018).

According to Nielsen retailers in Portugal should invest in quality, convenience and innovation. Portuguese buyers are willing to pay more for convenience (54%) and quality (68%), as well as experimenting more new products, since from 2017 to 2018 the willingness to try new brands and goods raised from 13% to 19% (Nielsen, 2018).

In the last 2016 and 2017, there were categories of food that had risen to make the lives of consumers easier, this is the case of ready-to-eat meals (52% growth), refrigerated pasta (41%) and frozen vegetables (22%), meaning that fast-moving consumer goods that make people spend less time are getting more valuable.

Another perspective in convenience is that with the increased internet connectivity, 65% of the buyers that want to be always connected, search product information during shopping, having more access to reviews, specificities and other characteristics of the goods.

There are various forms of convenience whether people are saving time, making their lives easier or getting more information, consumers are more likely to buy and to pay more for these products (Nielsen, 2018).

6.1.4 Ready-to-eat/Value-added fruit

Ready to eat fruit is clearly an expanding market worldwide, in England companies such as Tesco (Tesco, 2019) and Sainsbury's (Sainsbury's) already have a large array of fresh-cut fruits. Big companies are establishing to supply retailers, having large factories with specialized equipment for each fruit, working in cold temperatures between 1 and 6 degrees, sealed enclosures, purified water and developed sanitation measures (Fresh Plaza, 2018). Some examples are Del Monte, Crunch Pak, Ready Pac, Chiquita, Garden Highway (Statista, 2019).

Nowadays, Portuguese supermarkets are incorporating those types of products in their offer, usually following the trends of countries that are on the cutting edge of innovation like England and New Zealand. For example, Pingo Doce (Pingo Doce, n.d.) And Continente (Continente, 2019) already have offer of fresh-cut fruit.

Even in vegetables, this trend is noticeable, in a New Zealand supermarket there are already fresh-cut vegetables to pick (Kentish, 2015) being now the biggest challenge, to manage stocks accurately.

By empirical observation in London, on November 2018, I witnessed a bigger and more segmented offer for fresh-cut fruit in this market. This offer sometimes serves as tests for new products that only reach peripheral markets, if they succeed in more central ones, indicating that this trend can be soon to establish in Portugal.

To sustain that theory, we can already find some ambulant vendors in Lisbon, selling bulk or ready-to-eat. For example near Vasco da Gama, there is a company that not only specializes in ready-to-eat fruit, but also natural juices (Figueira, 2017). And equally, in other places like Avenida Duque D'Ávila and praça do Marquês de Pombal (Marketeer, 2011). Others selling bulk, in Belem and in Chiado claim to sell during the summer and Spring season 30 boxes of 5kg of fruit daily, ranging from Mango and Pineapple to Strawberries and Cherries (Almeida F. , 2010). In Lisbon, there is the possibility to order fruit for your home using supermarket websites and even specialized websites (Olha fruta Fresca, 2018). And in some parts of Portugal, you can already see companies selling fruit at the beach (Lusa, 2015).

Nevertheless, there is no evidence of this type of food being sold in biodegradable packages, making this an opportunity worth to explore, considering that the legislation about single-use plastic is changing.

6.1.5 Buying local

Buying local-source fruits and vegetables is getting more interest from consumers (Stein, 2016), according to the Food Marketing Institute, there are many topics that explain this phenomenon and with different weights in the minds of customers. The studied ones were the following: support local economy 79%, freshness 74%, knowing where it is grown 45%, lesser environmental impact that increased from 23% to 38% from 2015 to 2016, unique

local/regional product 25%, knowing the farm story 23%, better price 20% and better nutritional value 20%.

According to a study from Eurobarometer 90% of the respondents believe that buying local is quite beneficial, and the European Union should incentive their accessibility. Regarding their identifiability, roughly 50% of the people find it hard to recognize local products (Eurobarometer, 2011).

In Portugal, for 72% of the shoppers, the origin of the products is a determinant factor, 31% are willing to pay premium to have Portuguese products and 60% choose these products if they have the same price (Nielsen, 2018).

One example is Compal a Portuguese company that operates in the production of fruit juices already bets on buying locally, utilizing over 60% of the total raw materials produced in Portuguese lands. Defending that one of their goals is to raise the competitiveness of the national fruit market (Silva, 2017).

Focusing exclusively on national production is a new brand from Luís Vicente group that is called Maria, a name that is characteristic from Portugal making its positioning clear. In 2018, the group has made €75 million in sales, releasing this brand in of the most prestigious fairs of the market they hope to reinforce its presence worldwide (Grande Consumo, 2019).

6.1.6 Organic

According to the European Union “organic farming is a system of farm management and food production that combines best environmental practices, a high level of biodiversity, the preservation of natural resources and the application of high animal welfare standards”. Organic products can be considered a new trend, sales in the European Union rose from € 20.8 billion in 2012 to 30.7 billion in 2016, which represents an increase of 47.7%. In the EU, spending’s on organic food per capita have duplicated in the last decade (FiBL, 2018).

European citizens have specific ideas about organic products, 79% think organic is when the production has restricted use of pesticides, fertilizers or antibiotics, 78% says they have better environmental practices, 72% argue that they are of better quality and 70% believe they are safer (EPRS; Eurostat; Eurobarometer; FiBL, 2018).

According to a survey in 2017, Americans buy them to avoid pesticides (60%) and because they associate organic to health prosperity (37%) (Statista, 2018).

On average, the price of organic products is 30% higher than conventional ones (Nunes & Pereira, 2016). Isabel Braga Cruz from PortugalFoods argues that this sector focuses on informed customers and the main factors that drive this development are regulations, dissemination of information through social media and specific needs like many types of intolerances (Nunes & Pereira, 2016). According to Agrobio's president (Portuguese Association of Organic Agriculture) cited in Visão, the biggest consumers of this sector are women from 25 to 50 years old and the big turning point in this target is the arrival of the 1st child.

In a Portuguese study concerning organic food, 65% of the inquired assume that they rather consume only organic and 66% believe these products reduce the risk of cancer. However, only 19% believe that this method uses phytopharmaceuticals known as pesticides, to support its production (Lusa, 2018). This may indicate that people perceive organic as healthier, but do not master the concept.

Mónica Trunninger cited in Visão mentioned in her book "O Campo Vem à Cidade" that the growth of organic food consumption is related to fears concerning food safety, health benefits associated, better taste from food and environmental as well as animal well-being (Nunes & Pereira, 2016).

An example of the success of organic food is Biofrade that in 2016 had previsions to grow 30% and reach € 3 million in sales, its president Henrique Gomes claims that never felt such a demand for vegetables as today.

The largest supermarkets in Portugal have built a brand of their own just for specific products, like organic, without added sugar, without gluten or lactose and other. Showing an incredible growth in 2015, Continente with the brand "Área Viva" presented an increase of 16%, El Corte Inglés created the brand "Special line", claiming to have a double-digit growth in 2015 and Pingo Doce with the brand "Pura Vida" registered an availability of over 100 products (Nunes & Pereira, 2016). Other companies have developed with the base of organic products like Maria Granel, Celeiro and Miosótis showing that the market is getting more mature.

6.1.7 Gluten intolerances

Only in US 1 in 133 people carry celiac disease, however, only 1 in 4700 was officially diagnosed. In UK 1 in 100 people carry this condition (NHS, 2016). In addition, there are people that are non-celiac but have some kind of intolerance, estimates go from 5 to 10% of the people can suffer from any kind of gluten sensitivity.

On average gluten-free products are 242% more expensive than its gluten equivalent (Patrick, 2019). 11% of US households eat gluten-free and 25% argue that there are benefits in having a gluten-free diet (Drown, 2018). It is a worldwide phenomenon, in UK estimates from 2016 were that 8.5 million people already went gluten-free (BBC, 2016)

Findings indicate that people claim to be healthier when not consuming gluten even if they do not have coeliac disease (Harper & Bold, 2018).

6.1.8 Lactose intolerance

The population with lactose intolerance is estimated to be between 65 and 70% of the world's adult population (Bayless, Brown, & Paige, 2017). In a study in Spain, a country in which 56% of the population is considered to be lactose intolerant 41% of them avoid lactose intake. Despite not being totally diagnosed the perception of being intolerance leads to less consumption of dairy products (Casellas, Aparici, Pérez, & Rodríguez, 2016).

6.1.9 Shelf-life increasing plastic packaging

A challenge in the fresh-cut industry is the reduced shelf-life of the products, according to an interview with the CEO of Vicente Peris these products usually take two days to reach retailers' shelves with a life span of seven days, being reduced to five in the first day of becoming available (Fresh Plaza, 2018). The necessity of keeping the cold chain can add some costs and complexity for this market. A group of companies have gathered and invested in research and development to discover a way to prolong shelf-life, and by adding active substances to the plastic packaging it permits the expansion on average of two more days of useful life (ITENE, 2015).

Modified atmosphere packaging is currently in development causing delays of fruit softening, with resource to control of the concentration of gases and other chemical treatments. Note that most of the improvements are connected to the use of plastic, increasing, even more, the scale of its pollution.

6.1.10 Biodegradable Packaging

However, with the growth of the fresh-cut market, another environmental problem has grown, and it is the amount of plastic used to package. The traditional packaging of the fruit used to be its peel, but now the plastic was added. As fresh-cut fruit usually liberates liquid the packaging cannot be done in permeable substances like simple paper, making the fruit market way more pollutant than it was used to be. Consumers noticed it and they are showing their discontentment. On the Facebook pages of the main players in fruit selling at beach, in Portugal, there are aggressive comments disapproving the use of plastic to sell their products.

People worldwide are so discontent with plastic usage that in Australia, an online petition to reduce unnecessary plastic wrapping and packaging reached 391 032 subscribers (Change, 2018).

International companies such as Portuguese Renova, are already making changes in their packaging, switching the usual plastic for paper and following the world megatrend (Marketeer, 2018).

6.2 Competitor Analysis

6.2.1 Direct Competitors

6.2.1.1 "Filhos da Fruta"

It is a company that sells fruits and juices, in Sesimbra and Meco using styrofoam cases, plastic cups and cutlery. It was founded in 2016 and in 2018 they had 6 products available:

Orange Juice (€ 2), Watermelon Juice (€ 2), 5 Fruit mix (€ 2), Melon (€ 1.5), Cantaloupe (€ 1.5) and Watermelon (€ 1.5) (Palmeirim, 2017).

According to a conversation with the founder, they are planning on expanding operations to Algarve in 2019, as they already tested the new market in 2018.

6.2.1.2 “Capitão Fruta”

It was founded by a group of friends in their 20’s that specializes in fruits and juices, in São João da Caparica beach. The idea of the brand is to display the caption as a hero that plans to reach the younger ones.

They use adapted backpacks that carry 5 to 6kg of fruit and contain the temperature, use plastic cups and wooden cutlery. According to the founders in they are already thinking in ways to diminish the environmental impact of the business, namely with policies of returning the used plastic cups, recycling and sourcing season and some biological fruit (Sobral, 2018). The focus is on fruit mixes and bottled lemonade.

6.2.1.3 “Fruta Mar”

This is the greater company in Portugal in terms of volume of sales and the biggest in occupied area. Founded in 2014 they already have licenses to sell in 12 beaches in Algarve and in Ayamonte, claiming to sell on average over 200 bowls every day in beaches like Ilhas de Tavira, Cabanas, Fuseta, Faro and Barril. Initially, it started as a company that sold salads, but quickly they realized that the demand for fruit was higher. The company transports the fruit in Styrofoam cases and sells in plastic bowls. The price practised is € 2 per bowl, with fruit mix, pineapple, kiwi, watermelon, Cantaloupe and grapes (Lusa, 2015).

6.2.1.4 Fruits 4 Life

It operates in 4 beaches, namely, Quinta do Lago, Ancão, Garrão-Poente e Vale do Lobo having 1 mobile seller on every beach. In 2018, they were present from June 15 to early September, from 10h30a.m to 6.30p.m selling fruit mixes, watermelon, pineapple, apple, cherries and grapes in packages of 200 grams for € 3 (TVI, 2018). They use plastic cups and

cutlery that are transported in cooler backpacks. Despite the usage of plastic, they have some concerns with the environmental impact, as they donate their unsold items to refood Almancil and in an interview, the founder Sven showed himself open to give away fruits peels to any organization that wants to use them. To break the seasonality of the business, the owner affirms that the objective is to expand to events and children parties for example (Gordo, 2018).

6.2.1.5 “Fruta da Ilha”

This company was founded in 2014 in Ponta Delgada, by a medicine university student, in order to maximize the profit of the family’s orchard and pay his tuition. They use a mobile cart with 2 coolers, being the easier solution to carry big amounts of fruit. Sold in plastic bowls with plastic cutlery they have 7 different products, fruit mix (€ 2.50), melon (€ 2), watermelon (€ 2), kiwi (€ 2.50), grapes (€ 2.50), figs (€ 2.50) and India's fig (€ 2.50) (Abreu, 2015).

All the information regarding direct competitors can be found in form of a table on the annexes (table 17 to 21).

Direct competitors positioning



Figure 1 - Fruit selling on the beach positioning map

Source: Author

Fresh-cut fruit selling at the beach will always have a higher environmental impact than regular fruit selling since it will be cut, it will need to have a proper packaging, culminating in more waste also as it is fresh-cut if not eaten it can result in higher waste.

So if no policies are designed, companies will be responsible for the production of waste that previously did not exist, reason why “Filhos da Fruta” and “Fruta Mar” are on the low environmental sustainability side.

Nonetheless the impact can be mitigated through a serious number of practices, like promoting campaigns to retrieve or clean plastic packaging, using biodegradable cutlery such as “Capitão Fruta” does, selling local a season fruit as “Fruta da Ilha”, donating excess stocks to charity like Fruits 4 Life and an unexplored aspect is to package the fruit in biodegradable recipients.

6.2.2 Indirect Competitors

6.2.2.1 Coconuts

Since 2016 coconuts are a part of Setúbal and Troia, Green Coconut is a company that sells two types of coconuts, the green one that is original from Brazil and Costa Rica ranges from € 3.50 to € 5 and the white one from Thailand is peeled and sold for € 4.50. (Rosa, 2018) They work in Saúde Beach in Setúbal, from 10 a.m. to 7 p.m. and in the afternoon at 2.p.m. they start at Figueirinha beach, Serra da Arrábida and Troia.

6.2.2.2 “Bolas de Berlim”

The second line of competitors are “Bolas de Berlim” sellers as they are an iconic sweet, known and enjoyed in the entire country.

Some examples exist in Cabanas beach, in Tavira that on average, in 2014, 160 “Bolas de Berlim” were sold daily for € 1.20 each, according to the local seller, far from the 250 average

of past years (Carvalho, 2014). In Falésia beach, in 2014, despite the decreased number of sales according to the seller, the average is still 250 per day (Carvalho, 2014). Through conversation with the regular vendor at Salgados beach, the number of sales could reach 400 a day in 2016.

In the last couple of years, there were innovations in the “Bolas de Berlim” market.

First, in 2017, an app was created so people could call the vendor to their location, meet his location and also check their stock live. With 9300 downloads and 340 sellers registered in the 1st year, this app helped the seller to find actual customers (Eco, 2017). This application can be considered a connection between traditional sales and the digitalization trend of businesses.

In 2018, a new product was launched, a “Bolas de Berlim” made from spirulina, an algae with a high nutritional value (MadreMedia & Lusa, 2018) adding to the collection of other types like carob, beetroot and with chocolate cream. This innovation also coincides with the healthy trend, as companies argue that is the healthiest solution when it comes to “Bolas de Berlim”.

6.2.2.3 Ice Creams

Whether they are sold on the beach or in kiosks ice creams have a big demand during the summer.

In 2014, Olá Academy was created, a business unit designed to attract young workers to sell ice creams, in kiosks, at the beach or near tourist areas, in 2017 almost 300 people were part of this project getting above average pays, ranging from € 811 to € 1,483 depending on the objectives met (Agricultura e Mar, 2017). The brand Olá in Portugal, launched in 2018, five new ice creams that confirm the trends mentioned above, without gluten, with organic fruit and low in calories (Dinheiro Vivo, 2018), Olá even diminished the size of certain products in order to make them less caloric, Magnum, Cornetto and Ben & Jerry's were the most affected by this measure (Diário de Notícias, 2016).

At the beginning of 2018, the base price varied from 60 cents to 2 euros (ISSUU, 2018), with the elimination of Super Maxi from the list (Guerreiro, 2018) which was the cheapest ice cream on the list, the lowest price available is 80 cents. This is only referent to the recommended price, usually differences especially to higher prices should be noticed near the Portuguese coast.

Olá is not the only brand selling these products, Santini a gourmet ice cream seller conducts his activity only in stores, but also in a van being present near beaches in the Lisbon area, occupying a place in events during the day and night (Saleiro, 2012). Santini offers many flavours and lactose-free products following market trends. They have a variety of prices depending on the size, starting at € 1.60 with a mini cone to a big cone or cup for € 5.50 (Santini, N.A.)

6.3 Market value

Selling on the beach is classified in the Portuguese code of economic activities 47810, which is retail commerce in stalls, fairs and mobile unit sales of food, beverages and tobacco. There are 383 listed companies in Portugal that sum almost € 24 million in 2014 (AEP, 2014) important to note that this number can be quite underestimated as it only corresponds to companies and due to the known under-invoicing characteristic in this type of commerce.

An estimation of the market value was made considering the number of licenses issued in 2018, the items average selling price, number of beach visitors and sales conversion rate.

6.3.1 License distribution

In order to know the market of ambulant food selling at beach, contact was established with national captainships, the organisms that regulate and attributes licenses in this field.

To begin the analysis every Portuguese Captainship was asked by email, the number of licenses of 2018 to know how many people were allowed to sell and what type of products were available.

Some replied in different formats and have different methods of attributing licenses, being difficult to harmonize the information. For example in Lisbon sellers had permission to sell more than one product, meaning that the count of licenses is higher than the number of authorized sellers, in other captainships that is not confirmed and Caminha's Captainship could not specify the type of products sold.

Nonetheless, there were 62% of answers in Continental Portugal, which can give an idea of the market structure, being those, the objects of study.

The most looked for food products were "Bolas de Berlim" with a total of 65% of all the licenses, the second with 13% were "Other food products" including items like American cookies, popcorn fries and others, the third with 11% were "Bottled water and refrigerants", in fourth came with 7% "Natural products" like fruit and natural fruit juices and lastly with 4% "Ice Cream", access table 22 in annexes.

There are some differences between regions, in the North and South "Bolas de Berlim" had above average results with 81% and 77% of the licenses in the region respectively.

The South leads the share of natural products while the North has no accounted fruit and natural juices licensed. This can either be an opportunity since there are no players in the fruit market on the north or that there is no need within this area.

However, these conclusions might not be 100% accurate as there is information lacking concerning some Captainships.

6.3.2 Market Valuation

In order to estimate the value of each region, the number of beaches with licenses was estimated, to do so the criterion was "more than 377 people need to visit a beach in a day". The assumption behind this number is that should have at least € 160 of daily sales, with 29.7% of conversion rate. After summing the number of people in the selected beaches, calculate 29.7% times the average selling price of the region and daily sales are reached, multiplying by 90 which are the number of days of the season it is possible to estimate the market value in 2018, and it sums € 22.743.453,92. Performing a sensitivity analysis, varying price and the number of sales both 5% up and down, it can vary between € 20.616.271,17 and € 25.184.973,92, being this numbers presented in annexes (table 26).

6.3.3 Projected Market Growth

To proceed with the calculations of the growth rate, three items were considered; the tourism growth, the consumer price index and the growth of fruit selling and its impact on the average selling price.

According to the Report of the strategy of tourism 2027, there is a targeted growth for tourism in Portugal of 4.2% yearly (INE, 2018). Since this number is an average it is assumed that bathing tourism will be growing at this rate, so by growing the number of people at the beach at a rate of 4.2%, so will the actual buyers. Both the impact on the average selling price caused by the predicted increase in fruit selling licenses and the IPC was already taken into account above on the calculus done on the average selling price.

Considering all the factors previously mentioned the growth is estimated to be 5.69% in the present year, 5.70% in 2020 and 5.84% in 2021 as seen in table 27 in annexes. The amount of buyers will always have a cap since beaches have a limited amount of space that can be occupied, on the long run we can assume that the market could no longer grow on number of people, but only on conversion rate and price, considering that consumer tastes keep changing and the prices with them. For example, the average selling price of the fruit is higher than the sweets and other food products, as this is a growing segment the value of the market should also grow in this manner.

6.4 PESTEL Analysis

6.4.1 Political

Nowadays, there are many political factors that strongly influence fruit consumption throughout the world, this is quite emphasised in the European Union, where countries like France, Norway, Belgium and all the UK, benefit not only from EU policies and funds, but also their own (European Commission, 2019).

To exemplify, in the United Kingdom policies were designed to maximize fruit and vegetable intake, like the “UK Healthy Start Scheme” that uses vouchers to boost consumption (Griffith, Hinke, & Smith, 2018).

Portuguese government wanted to create incentives to promote the intake of healthy foods, in a measure called Integrated Strategy to the Promotion of Healthy Eating (Carricho, Governo quer incentivos fiscais para promover consumo de alimentos mais saudáveis, 2017), this proposal incorporated the reduction of salt, sugar and the promotion of fruit and vegetables through fiscal incentives, like the use of discount vouchers.

However, after negotiations, the government decided to drop that incentive. “Direção Geral de Saúde”(DGS) argues that the trend is to tax unhealthy foods, but maybe if there was an encouragement to consume healthy ones, the results could be improved (Almeida J. , 2017).

Overall the best example of taxing is the sugar added refrigerants, with a specific tax according to the level of sugar plus the VAT of 23% (Tiago, 2018) . On the other hand fruits and vegetables have a reduced VAT with only 6% (Portal das Finanças, 2016).

One objective of DGS is to raise the number of people who consume fruit and vegetables, namely 5% until 2020 (Programa Nacional para a Promoção da Alimentação Saudável, 2017). Projects like “Regime de Fruta Escolar” are one of many to boost fruit and vegetable consumption, this specifically is based on providing fruit to kids and to make them aware of the importance of good eating habits (Programa Nacional para a Promoção da Alimentação Saudável, 2019).

In the last European Parliament elections, the green parties had an amazing result, Portugal PAN was not an exception, being a surprise result, however, it confirms the trend to go green in Europe. These parties pressure the assembly to regulate more in topics like people, animal and nature rights and well-being, having one space dedicated only to healthy eating (PAN, 2019), this change in politic perspective might cause changes in the future legislation and hopefully, improve Portuguese diets in a sustainable way.

6.4.2 Economic

According to INE and PORDATA, the level of superior education has been increasing every single year since 1998 (INE & PORDATA, 2018) and, since 2013, the unemployment rate (16.2%) in Portugal, has been decreasing steadily being now at its lowest point (8.9% in 2017) (INE, Taxa de desemprego: total e por sexo (%), 2018). The family income is also growing since the end of the last financial crisis (INE & PORDATA, 2018). With all this

data from the Portuguese economy and as mentioned in the literature review, people with more education and more disposable income are more prone to eat ready-to-eat products (Cassady, Jetter, & Culp, 2007), this means that the potential market is growing.

According to the study shown in the description of the market, fruit consumption accompanied the years of the crisis and grew steadily ever since (INE, 2018). There can be a relationship between economic prosperity and fruit intake.

6.4.3 Social

Portugal is becoming a tourist attraction and prove of that is the rising number of passengers, for example in 2010 the major airports had 28.817.341 passengers in contrast with 52.713.187 in 2017 (INE & PORDATA, 2018).

The tourist capacity in Portugal has been growing, the number of beds in 2011 did not reach 275 000 and in 2017 there was a total of 402 832 (INE & PORDATA, 2018). In 2018 data from “Associação Hotelaria de Portugal” (AHP) show that the capacity of “Alojamento local” has already surpassed the capacity from hotels (Relvas, 2018).

In some areas of Lisbon particularly in the historic centre, permits for “Alojamento local” have been suspended (Idealista, 2018), so investors may decrease their investment in Portugal due to instability or find new areas to invest namely in other touristic attractions like in the Portuguese coastline. This can either lead to more offer near the beach, consequently smaller prices and possibly more people or in case of divestment the contrary results.

A factor that can influence the business, in the long term, is the crescent number of elderly people in Portugal (INE & PORDATA, 2018), this not only represents a growing social security burden (INE; CGA/MTSSS; PORDATA, 2018), but also can have impact on the business itself because it is difficult to predict the behaviour of this generation, as their health state is not known due to medical advancements or stabilization, their willingness to go to the beach and their disposable income.

Fruit has been searched more and more, for the last years, being December usually the month with the least searches, and the summer, the season with more exploration (Google Trends b,

2019), that can indicate that people are more attentive to fruit consumption during the summer period.

Additionally, the interest in ready-to-eat products has been increasing (Artés, Gomez, Aguayo, Escalona, & Artés-Hernandez, 2009), so people can have more time for their leisure activities.

6.4.4 Technological

Currently, it is quite difficult to separate technology from any part of the business, since it is present in the production process, conservation, storage, transportation, control and pre/post-sale interactions.

In Portugal, there is an IOS and Android app that is storming the market, to make payments and money transfers easier and faster. It is called MBway, and already had surpassed half a million users in 2017 that made up to a million transactions a month (MBWAY, 2017) , many stores are using them, from websites like Ticketline and Imovirtual to big brick and mortar chains like Jumbo and Decathlon.

Other apps like Revolut can be entering and changing the marketing since they are growing so fast, (Tavares, 2019) gaining between 300 and 400 Portuguese users every day.

Stock management systems are growing and becoming more complex, fulfilling the most varied needs of the companies. According to Fishbowl a reference inventory management company the topics that are being more and more considered are data analytics, order management systems, cloud services, IoT and real-time inventory data (Nichols, 2018). These tools can provide management with a better base for faster and more accurate decision making.

6.4.5 Environmental

There are growing environmental concerns that can influence the business, the main impact should be caused by the production process, transportation, packaging and waste (non-sold items).

Considering the environment friendly trend (Franchise Help, 2019) , there are many factors to consider in order to diminish the environmental impact, like buying local products where the transportation is minimal, culminating in less burning of fossil fuels, selling seasonal products, so they do not need to waste more resources than they usually would, avoiding the use of plastic as it is currently a big concern worldwide and managing stocks properly as to reduce waste of food and energy.

As mentioned above the political change, from parties like PAN and PEV, will for sure have a big impact on this field, one example is the prohibition of plastic bags for fruit, vegetables and bread selling starting in 2020 (Almeida S. , 2019)

6.4.6 Legal

Legally there are many legal controls a business requires to operate, in food and restaurant businesses a key entity to look for is ASAE. That organization is accountable for the legislation and supervision of the food safety in Portugal, ranging from the production to the manipulation and distribution. According to the Portuguese regulation 852/2004 all of the phases listed should be in accord with the Hazard Analysis and Critical Control Point (HACCP) which is an internationally recognized management system to ensure reduced risk of safety hazards in food and always taking into consideration the good practices of present in Codex Alimentarius (Alamedas Office, n.d.).

Another topic to consider is the authorization to sell at the beach, and according to the Fruta Mar's owner cited in "Observador" there is a fight for permits (Monteiro, 2016) . There is an example of the contest for the beaches Ilha de Tavira, Terra-Estreta and Cabanas de Tavira did not open, in the past years. So it was not possible to exercise the selling. The captainship of the Tavira's port argued that it can be an unfair practice against the local concessions, given the lower occupational capacity, being needed to ensure safety and comfort on the beach.

In 2016, the communist party showed its discontentment to the government, concerning the lack of permits to sell fresh fruit, on the beach, given its health benefits. (Algarve Primeiro, 2017).

After visiting the captainship of Cascais (the organ that rules a big area near Lisbon) and trying to get a license to exercise fruit selling, the captainship replied that it was not possible since the authorized products were: ice creams, cakes, chips, beach toys, towels, sun hats and sunscreen. This information is present on the “Regulamento da Venda Ambulante do Município de Cascais” Article 31º, number 1, the administrative officer advised to ask APA (Agência Portuguesa do Ambiente), as they can sometimes authorize specific requests, the contact was made and the reply was that they did not have the authority to it. In addition, the administrative mentioned that in future this area will be regulated by the city hall and leave the captainship command. Currently there are no current licenses for selling fruit on the beach from the mouth of the river Sisandro to the tower of S. Julião da Barra, exclusive, which is an area densely populated in Portugal.

Changes in green receipts may incentive people to work in summer, since social security has new and more attractive regime in 2019 (Montepio, n.d.), and also if workers do not overcome an annual income of € 9,150.96, they are free from the income tax (Economia Finanças), so if they only work in the summer, for example students, can have fewer fiscal burden.

6.5 Porter 5 Forces Analysis

Threat of new entrants - Score: 3

The business can be easy to copy on a smaller a scale, because of the low investment needed, and it can be considered of low complexity, without a big logistics process behind or complex software. Local concessionaries can be a threat since they already run a food business and have a logistics process going. However, on a larger scale, throughout the country, for example, it can be harder to replicate due to the management control difficulty and because licensing can be a barrier of entry to new players, as companies that already had a license in the previous year have preference over new entrants.

Threat of substitutes - Score: 3

The product itself is a substitute for the current market, the “Bola de Berlim”, however, products like “Bolas de Berlim” of spirulina and carob are advertised as healthier than normal ones and can be perceived as not so unhealthy, being a possible substitute.

Ice cream sellers are now focusing on gluten and lactose-free products, those can replace the option of fresh fruit since they serve the purpose of refreshing and do not have gluten or lactose.

To the current fruit sellers, it has an extra feature concerning plastic, which may lead to substitute the companies without sustainability concerns.

Bargaining power of customers - Score: 1

The policy will be one price only, occasional gifts can be granted, but no major impact should be noticed.

Bargaining power of suppliers - Score: 2

In the beginning, the supply will be done on supply markets that set the prices. But in the long run, the objective is to be supplied by local producers directly to cut intermediaries and consequently costs. On the second phase, the bargaining power will change, being the power on the company as it can offer different conditions to the producers.

Competitive rivalry

$$(3+3+1+2)/4 = 9/4 = 2.25$$

The overall competitive rivalry scores in half of the table.

The focus should be to have a great image through the license givers, to reduce the risk of entry of new competitors, in the targeted beaches, launch innovative products, or innovative ways of presenting them to reduce the likelihood of customers switching to substitutes and lastly sourcing more and more quantities to increase the bargaining power with suppliers, that can only be done if the company grows to attenuate the impact of the threats of new entrants and substitute products.

6.6 The market need

Many factors indicate that there is still a gap in this segment, some companies are already selling fruit at the beach, but the market is not yet mature.

Data showed that fruit consumption has been increasing since 2012, in 5 years the average yearly fruit intake has grown 28kg per capita (INE, 2018).

In 2014 the National Inquiry for Health concluded that 70.8% of Portuguese people above 15 years old eat fruit daily, on average 2.3 portions totalizing 6.3 million Portuguese daily fruit eaters (INE, 2016).

Summer is the time when there are more Google searches of the word fruit, meaning that there is more interest in this topic coinciding with the schedule of the business (Google Trends b, 2019).

Several chronic diseases are troubling more and more the world population and fruit is known to reduce the risk of those disorders like coronary artery disease, (Lampe, 1999) hypertension, stroke and cancer (Boeing et al., 2012; He, Nowson, & MacGregor, 2006). In December 2016, a Portuguese study showed that 77% of the consumers changed a food habit in the last two years, concretely to prevent health problems (Agência Lusa, 2017).

This concept is answering the call for healthy food, providing youth, reducing the risk of diseases and extending people's lives.

Companies that sell fresh-cut fruit on the beach are not yet concerned with sustainability in their businesses, according to the trends mentioned above people look for environmental initiatives as differentiators. Buying local products is an example, according to Eurobarometer, 90% of the respondents of an international inquiry believe that buying local products is quite beneficial. In Portugal, 72% of the shoppers consider the origin of the products a determinant factor and 31% are willing to pay premium for Portuguese goods (Nielsen, 2018).

It is not new that packaging plays an important role in fast-moving consumer goods, especially in ready-to-eat products (Peters-Teixeira & Badrie, 2005), but in the last years, the type of materials used to package is getting more importance (Koutsimanis, Getter, Behe, Harte, & Almenar, 2012). After searching the Facebook pages of the main players in fruit

selling at beach, in Portugal, there are many aggressive comments disapproving the use of plastic to sell their products. Companies from other sectors, such as Renova, are already changing their packaging from plastic to paper following the world megatrend and respecting the environment (Marketeer, 2018).

In this business concept, the base of the product is fruit, but this specific product brings another important feature, convenience. Since it is fresh-cut, people can consume it rather easily. Fresh-cut is a market that is undoubtedly growing, proved by the number of supermarket chains that sell these products, companies that specialize in this type of transformation are investing heavily on research for conservation improvement and supply chain optimization (Statista, 2019).

In Portugal, economic factors (36%) and lack of time (30%) are the main reasons to have diminished fruit consumption (Agência Lusa, 2017), however Portuguese want to increase fruit intake (57%) (Nielsen, 2017) in order to be healthier, so providing healthy ready-to-eat solutions is fixing a problem of people that want to have better diets with less effort. In 2016 and 2017, ready-to-eat meals had a growth of 52% (Nielsen, 2018) and according to Wyman the predicted compounding annual growth rate 2015-2030 of fruit consumption out-of-home is 28% (Wyman, 2018) indicating that time and convenience are becoming more and more valuable. Moreover, Portuguese look for convenience, quality and innovation, and they are willing to pay more for it (Nielsen, 2018).

The CEO of Vicente Peris mentioned a study that showed that people are way more likely to eat fruit if it is peeled and cut (Fresh Plaza, 2018), meaning that if the need is not present already, it can be created.

Convenience is not only serving fresh-cut fruit, but it is also about making every step of the process easier, introducing an app to track vendors like the one to sell “Bolas de Berlim” and fast mobile payment methods is crucial to satisfy all the needs from the customers.

Concluding there are already some fruit sellers, some claim to sell over 200 portions of fruit a day (Lusa, 2015), but according to the changes in demand, if the business focuses on providing convenience and sustainability, customers will be more fulfilled and so will the market need.

7. Internal and Competitive analysis

7.1 SWOT Framework

Strengths	Weaknesses
1-Social responsibility orientation 2-Easiness to pay 3-Trendy 4-Sharability 5-Healthy convenience	1-No previous license 2-Lack of notoriety 3-Inexperience
Opportunities	Threats
1-Growing number of searches for fruit since 2012 and during summer 2-Increasing fruit consumption since 2012 3-Increased family income since the end of the last financial crisis 4-Growing number of educated people, who are more prone to eat ready-to-eat fruit 5-Unexplored fruit market in the north of Portugal 6-No licenses for fruit selling in Cascais Captainship 7-No exploration of biodegradable packaging 8- Fruit still has a low market share 9-Growing interest in Social responsible 10-Prediction of out-of-home fruit consumption growth 11-Government programs to increase fruit consumption 12- Growing interest in healthy food 13- Growing interest in superfoods 14- The development of PAN (Party of the people, animals and nature) and its environmental legislation changes.	1-Other companies get the licenses before 2-Possible to copy due to low complexity and low investment requirements 3 - Ice cream brands betting on gluten and lactose-free products 4 – “Bolas de Berlim” of Spirulina, perceived as a more healthy option compared to others 5- Local concessioners do not authorize selling because of direct competition 6- Bad weather during the summer season

Figure 2 - SWOT analysis

Source: Author

7.2 SWOT Systemic Analysis

Strengths + Opportunities = Challenges

- S1/S5 x O7/O9/O11/O12 x W1 – Increased possibility of getting licenses through the healthiness of the products and social responsibility
- S1 x O7/O9 – Filling the market gap for socially responsible sellers
- S3/S4/S5 x O1 – Easier online positioning
- S5 x O11/O12 – Meeting customers' needs for healthy products
- S3/S4/S5 x O13- Bet in extras of superfoods like chia seeds and ginger powder
- S1/S5 x O14 - Profit from environmental legislation changes

Strengths + Treats = Alerts

- S1/S2/S3/S4 x T2/T3/T4 - Focus on differentiation by easiness to pay and brand loyalty to create a strong position as a pioneer
- S1 x T5 - Using social sustainability as an argument to get the authorization.
- S1/S2/S3/S4/S5 x T6 – Use the company's strengths to drive people to the beach and consume

Weaknesses + Opportunities = Constraints

- O1 x W2 – Bet heavily on social media to create brand awareness

Weaknesses + Treats = Dangers

W1 x T1 x T5 – Possibility of not having a chance to develop the activity

W2/W3 x T1/T2 – Competition may get market share before or during the 1st year of activity

7.3 SWOT Analysis

Fruit sellers still have a low market share compared to overall products, as fruit and ready-to-eat product consumption is growing this is an opportunity to explore.

Despite the low market share, there are already some players developing this activity, so in order to maximize the strengths and get market share, the focus should be on differentiation, namely social responsibility, being the most convenient possible with a fresh and young style. This, especially environmental concerns should be beneficial in order to compete for a license since companies that already had a license on the previous year have preference over new ones.

The time fruit is most searched is during the summer, so should be used as an advantage since in the beginning, the lack of notoriety can be an issue, basically, an investment in social media can have a positive impact on the business and on the brand itself.

Unexplored markets should be considered, the focus should be to know if the need does not exist or there are legislation issues, such as in Cascais captainship where it is not legal to sell fruit on the beach.

7.4 Critical Success Factors

Through the market analysis, it was possible to determine that this type of business requires the fulfilment of some factors in order to create a competitive advantage, those are the following:

Quality of the products

This can be linked with taste, smell, source and the presentation of the products, as they should not only have quality but be perceived as such.

Seller's Attitude

Many ambulant sellers secure loyalty from year to year, not only because of their products but through their relationships, based on empathy, trust and sometimes entertainment.

Broad number of licenses

The more places of operation the bigger will be the business and so will be the brand awareness. That can be critical to moving people from some beaches to another due to the presence of these products.

Environmental sustainable policies

Can be considered the biggest market gap and as such should be fulfilled to make the statement of a pioneer. The aim should be to minimize the environmental impact of the business considering many factors like CO2 emissions, packaging materials and local economies.

Convenience

Making the consumption of the products the easy as can be should be a focus since this is becoming more and more important for the present-day consumer, ranging from payment methods to accessibility on the beach.

8. Development strategy

When building a business it is rather important to define its long term objective, only this way it is possible to determine what are the steps to reach it, how the organization will work and which set of values that will serve as guidelines for the organizations' behaviour and decision making regarding business strategy. So a mission a vision and values were defined for the company.

Mission

Provide easy, healthy and green refreshment in Portuguese beaches.

Vision

Lead healthiness and sustainability on Portuguese beaches

Values

Sustainability, healthiness, quality, innovation, youth and easiness.

8.1 Strategy

Fruit selling on the beach is a developing market, having still some gaps as seen in the positioning map, namely in social/environmental responsibility, being this the one the company should fulfil.

Environmental Sustainable Positioning

With the growing environmental concerns that can influence the business, the main impact should be caused by the production process, transportation, packaging and waste (non-sold items). In order to build a positioning as the most socially responsible company in the industry, many policies should be established, such as the following.

Ensure that products are in the season, so they do not need to waste more resources than they usually would.

Source from national products, where the transportation is minimal, culminating in less burning of fossil fuels.

Within the packaging, there are two big themes, the materials and the life cycle of the product. Regarding the materials used, a critical aspect is to avoid single-use and non-recyclable plastic, it has many harmful features, as mentioned above. Nowadays, with new legislation to cut single-use plastic, new products are appearing on the market, the most known are bamboo, other types of wood and bioplastics. Bamboo and woods are the most natural options, however after contacting many suppliers they are not available in prices that are supportable for the business, cheaper options do not maintain liquids as needed. The chosen option was bioplastic, as it uses renewable sources to be produced, like corn and starch instead of petroleum-based plastics and when they are incinerated there is no liberation of toxic components as contrary to regular plastics. In terms of the life cycle, it is important to know where the products come from, how far they need to travel, how they were made and where will they end up. Fossil fuel consumption, to bring products from far away countries to Portugal can be huge, so local producers should be preferred, in order to lower CO2 emissions and energy waste, if there are none, sourcing directly from the producer will help to make the journey smaller and consequently have fewer environmental impact.

Sourcing should be done from producers with sustainability concerns, for instance when buying wooden cutlery it is fundamental to look for certifications like FSC or PEFC, which means that the forest that produces the wood is managed sustainably (Forest Stewardship Council, n.d.).

To have full knowledge of the life cycle of the product, it is crucial to know if it is possible to reuse products. If it is, how to create policies in order to make people return them, and how many times that can be done until it needs to be disposed of. Lastly, would be its destiny, if it is biodegradable, if it can be recycled, compostable, incinerated or it will be dumped and not degrade at all.

In matters of diminishing waste and energy, building partnerships to sell or make businesses arrangements is decisive, in order to manage unsold cut fruit.

To build a sustainable and environmentally friendly business it is critical to undermine all of the previous points, otherwise, the company's positioning can be damaged.

Organic products

Organics are way more expensive than regular ones, being difficult to set a price that guarantees comfortable margins, being at the same time accessible to the mass market. And as seen on the presented news, customers do not master clearly the concept. After studying the discussion between organic and non-organic methods of growing crops, on which there is no overall consensus on the society, the decision of the company was to sell non-organic products. In non-organic production, plagues do not spread so easily and the land used to produce a certain amount of fruit is way smaller than organic farming (Ritchie, 2017), a method that still uses phytopharmaceuticals but people tend to assume it does not.

Superfoods

Portuguese eating habits are changing, and are changing for the better, Nielsen states 70% are concerned with eating healthy and a significant amount want to keep improving their diets on the future, mentioning superfoods like chia seeds, ginger and goji berries as an area of big interest (Nielsen, 2017). This is an opportunity that will be explored, namely adding those items for an extra or in some cases sell it individually.

Brand

One identified problem in ambulant and street selling is the credibility related to the quality and hygiene methods and, as Bredderman states in Crain's New York Business Journal, the future of street food is corporate (Bredderman, 2018), this is because big companies have a name and a brand that guarantees reliability and consistency of good delivery. So there could have been two choices, being the first to use a known brand and sell with its name or the second and the one that was chosen is to create a business with operations in multiple places with powerful marketing to build a strong and trustworthy name.

As the company is trying to create a new positioning in the market it is important that it is clearly perceived by the consumers from the beginning of the first year, so it can be seen as the pioneer, a strong 1st come brand so competition does not copy and overthrow with a similar concept.

Partnerships/Sponsors

In order to keep the investment to a minimum, it was decided that the company will outsource the production to local restaurants or catering companies, ensuring they can also have better prices for their fruit too. This process will be monetarized by our workers in terms of entry of stocks, waste and final products.

To start a business with presence in many places with big brand awareness is necessary to have funding, there are many ways to get it, but there is one that can be quite advantageous.

The state is really interested in boosting fruit consumption once it is a healthy food providing a better quality of life for the people, and on the long term with better diet, the fewer will be the costs with medicine and treating diseases associated with poor eating habits. With that clear, there are currently many measures to increase fruit intake, the enterprise should look for or propose programs to be supported not only with state incentives but also through local city halls.

Convenience

It is a topic that is getting more and more attention from buyers, according to Nielsen they are willing to pay more for it. Being not only delivering fresh-cut fruit in this case but also provide fast and easy payment methods and the ability to live track sellers. Regarding payment methods, Mbway and portable paying devices will be used to facilitate and make transactions faster.

9. Definition of implementation policies

9.1 Marketing

Companies' strategy determines their success or the lack of it. In order to develop one, it is essential to know the customers. To find get closer to the consumers' needs and wants a segmentation target and positioning will be performed.

9.1.1 Segmentation

Despite fruit selling market is massified with 6.3 million Portuguese over 15 years old eating fruit every day (INE, 2016) there are some segments that are more prone to consume these products, for that, fruit eaters will be divided into categories considering two criteria, demographic and psychographic.

The selection of these criteria was done according to the market research's most relevant topics and those with the most influence on consumer behaviours. Regarding demography, the subjects in study were age, gender and income as for psychographic aspects the level of health and sustainability concerns were considered. Having in mind that people with health concerns encompasses gluten and lactose intolerants/sensitive or people that are perceived as such.

The image below shows an example of the type of segmentation done, concerning only the age group from 35 to 44 years old, the age where both male and female start to eat relevant amounts of fruit. Being possible to find every age group represented in figure 33 of the annexes.

A Portuguese study by INE found that there are specific groups of people that eat fruit more frequently and bigger quantities, as identified in the description of the market, those categories are employed and retired, high education people, higher income, women from 25 and men 35 years old onwards (INE, 2016).

The consumers should not be only Portuguese or locals, so international customers should be considered, foreign studies support Portuguese findings and consolidate the target market idea, people with higher education, more disposable income and higher social status

(Cassady, Jetter, & Culp, 2007) consume more fruit, also non-smokers, ex-smokers and self-assessed “excellent or good health” do eat more fruit (Whichelow & Prevost, 1996).

As the business concept is around convenience and social responsibility the target might not be exactly people that eat fruit, as it will have extra costs compared to regular fruit selling, those costs will be reflected on the price and so the target will restrict a few potential customers. Nonetheless, there is an opportunity regarding people that felt convenience or sustainability concerns were issues that were not addressed properly in this industry. Currently, there is a bigger refuge on convenience food, because of the increased independence and busy lifestyle (Vereecken, et al., 2015). As studied above there are ways people are more prone to eat fruit and in an interview with the CEO of Vicente Peris, he mentioned a study that revealed people eat around 40% more fruit if it is already peeled and cut fruit (Fresh Plaza, 2018), so this can mean that the potential market can be even greater than expected.

9.1.2 Target

Although the business is designed to the masses, there are some segments that are more prone to these products, being the preferred target customers that go to the beach and usually buy more fruit, related products or identify themselves with the business concept.

As studied in the segmentation the most significant slices were the ones that included people with medium to high purchasing power, as those are more likely to consume ready-to-eat goods, people over 35 years old if they are men and over 25 if they are women as they show bigger fruit consumption, people higher healthy concerns since it is expected for them to choose fruit, over other non-healthy product sold at the beach and lastly people that are concerned with the environment and its sustainability.

Also focusing on the children segment through women from 35 and above so they can buy for them and other relatives since women are on average more likely to eat fruit than men.

9.1.3 Positioning

The goal is to provide easy, healthy and green refreshment to people on the beach.

The target should perceive the company as health, environment and convenience-oriented a firm that exists to help people be better versions of themselves. Having clean operations and friendly sellers that are aimed to build trust, with constant innovations to create curiosity and buzz.

Since fruit sellers already have healthy products, the differentiation factor cannot be the fruit itself.

So the level of sustainability and price were taken into account to position the business.

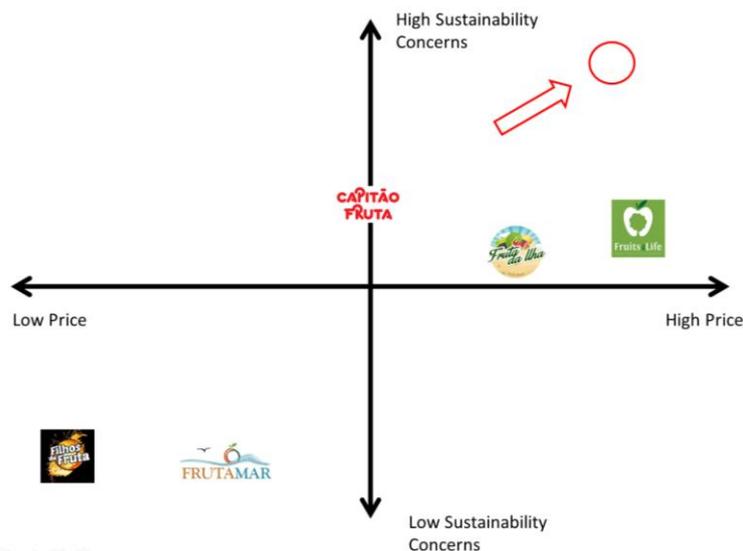


Figure 3 - Brand positioning

Source: Author

It is visible on the graphical representation that the 1st and 4th quadrants are not occupied since the value delivered would be lower on the 4th leaving those companies in disadvantage and on the 1st quadrant the margin would be inferior since spendings would be greater than if they did not practice environmental sustainability.

The company will be positioned on the top right of the graph symbolized by the red circle filling the market gap in the relevant quadrants (2nd and 3rd).

9.1.4 Brand, Name, Slogan and Image

Building a brand is rather important as it may be a stamp of quality, people associate certain brands to a pattern of value that is either high or low, the goal is to build one that can be recognized for its high value-added and that can open doors to many similar businesses.

It will focus on three main values healthiness, environmental sustainability and innovation these will hopefully bring self-marketing by word of mouth and “instagramability”.

The brand will be called “Manga Curta” being a word juggle in Portuguese since it can mean short sleeve which is related to the summer or a short mango fruit.

The slogan is “Saudável nas horas” which means in direct translation healthy on the hours, ”nas horas” is an expression used by young people that can be substituted by the word really or plenty, indicating that the products sold are rather healthy in a more appellative way.



Figure 4 - Brand's Logo
Source: Author

The image with the tree shows the sustainable side of the company, with the wooden fork, a material that will be used since it is biodegradable, leaving no doubts that this is a company with environmental concerns on the food industry.

Nowadays, a brand can be recognized by a hashtag, it is necessary to be cautious when joining words as it can have an undesirable result, but whether it is posted #MangaCurta or the slogan #Saudávelnashoras they are both safe and appellative to join as a hashtag.

9.1.5 Marketing Mix

9.1.5.1 Product elements

People are more likely to enjoy and eat more food if there is a bigger variety of offer (Raynor & Osterholt, 2012) being this finding sustained across meals and days (Remick, Polivy, & Pliner, 2009), so it is necessary to ensure a variety of at least three to four products a day and changing as much as possible during the following days taking into account seasonal and national fruits.

Fruit

The products will be of Portuguese origin since consumers in Portugal consider the origin of the products a crucial factor to choose foodstuff and are willing to pay more to have national products (Nielsen, 2018).

The kinds of fruits available during the bathing season are bananas, cantaloupe, cherries, figs, grapes, melon, nectarine, oranges, peaches, pears, pineapples, plums, strawberries and watermelon (Pingo Doce, n.d.). A smaller list will be served, considering the perishability of the fresh-cut fruit, it will also differ from the beginning to the end of the season according to the availability.

According to “Mercado Abastecedor da Região de Lisboa” (MARL) the average prices for national products during the bathing season of 2018 (from 25/05/2018 until 10/09/2018) were the following:

Fruit	Price per kg (€)	Fruit	Price per kg (€)
Plum	€ 1.29	Melon	€ 0.48
Orange	€ 0.77	Strawberry	€ 2.10
Watermelon	€ 0.30	Peach	€ 1.02
Grape	€ 1.21		

Table 1 - Average prices for national products in supply markets in 2018 bathing season
Source: (Gabinete de Planeamento, Políticas e Administração Geral, 2018)

Toppings

More than two-thirds of consumers believe that superfoods may prevent or cure diseases, and 66% want to have more information on these products (Nielsen, 2017).

As Portuguese are so interested in these products they will be included as options for toppings. The toppings will include chia seeds, linseeds and ginger powder. Their costs will be € 4.77 per kg, € 2.33 per kg and € 16.00 per kg respectively (Ribeiro, n.d.).

Packaging

Packaging is quite relevant for consumers, quality and the type of packaging are found to be determinant (Peters-Teixeira & Badrie, 2005) when choosing ready-to-eat products. The materials used are one of the biggest concerns in packaging (Koutsimanis, Getter, Behe, Harte, & Almenar, 2012). To create bonds and trust with the consumer labels with nutritional information and certifications (Santeramo, et al., 2018) should be included as well as the logo of the brand. Note that in this case, labels are not required by law since it is a product of the day, produced and meant to be sold on the next 24 hours.

The material chosen was paper cups with a certification to get in contact with food according to “Regulamento (CE) n° 1935/2004 do Parlamento Europeu e do Conselho, de 27 de Outubro de 2004”, with written messages of 100% compostable/biodegradable. The ultimate level in terms of environment-friendly packaging is the fruit itself, for example, pineapples and

cantaloupes are ideal to package fruit mixes. By taking all the inside and combine several fruits it can constitute a family pack in the most ecological way.

Lastly, the box that carries all the portions will have messages saying 100% gluten and lactose-free as there is a growing number of gluten and lactose intolerants always looking for what they can and cannot eat.

9.1.5.2 Promotion

The company will reach its customers, through digital marketing and directly on sight, via social media and website or by direct sales. Frequently, this type of business catches the attention of news broadcasters, which can lead to a significant exposure of the enterprise.

Social Media

Data by Nielsen shows that Portuguese want to become more and more healthy (Nielsen, 2018). According to The New York Times (as cited in Shutterstock, 2015) people post/share what they want to become, so our brand can be considered quite sharable in social media, since the consumers can tell the world they are healthy eaters.

Being Instagram and Facebook the most powerful social media (eMarketer, 2018) and as the business can be linked with these platforms as food is recurrently published, the enterprise will focus with great force on these channels to build brand awareness and create the wish for some fresh-cut fruit. It is considered so important that one regular task of the sellers will be to publish at least a picture a week on the beach related with the business.

The strategic bet is to privilege Instagram over other social media because it is the largest growing platform and Facebook users are declining (eMarketer, 2018), however, Instagram has the option to export for many platforms including Facebook. This is important as older generations are not so active in Instagram yet, being possible to maintain a larger coverage.

Instagram ads will be a bet at the beginning of every season to get the people to know the business, hopefully, with the activity of the company, the consumers will spread the news on their feeds and promote it for free due to the reasons explained above. The ads will focus on Portuguese people with interests in health, well-being, physical shape, quality of life, over 25 years old and women, as these are a target with the characteristics that are more likely to buy

the products. A simulation was done on Instagram and a budget of € 900 for the 1st 30 days reaches between 120 000 and 320 000 potential customers, doing this campaign three times per season, plus a campaign on the beginning of the year, starting at January 1st as people search for healthy options in this period.

Since people search healthy diet more in January and between March and May, this is when our posts will be focusing on hashtags with diet on it focusing on hashtags like #Healthydiet #Healthyoption #Healthymeal and related topics, to introduce the idea to the consumers. Fruit searches peak in July so marketing campaigns will focus on the fruit itself with hashtags the word fruit on it like #FruitLover #Fruit #FrutaNacional #Frutanapraia.

These campaigns with different content aim to reach the same objective, take advantage of the fact people search certain topics and be found since in the beginning, the lack of notoriety can be an issue, investing in social media may have a positive impact on brand awareness and consequently on the business itself.

Website

In any business a website it is necessary to have a website at least to build credibility for the brand, but it will serve also to provide valuable information to the users.

It will have a map to inform where the business is present, live location of sellers and will showcase all the products, nutritional information, health professionals' opinions/articles, origin, impact on the local economy and environmental impact being these some of the consumers' most valued aspects (Stein, 2016; Nielsen, 2017).

Direct sales

People with more age probably will have more contact with direct sales as they are the adults that are not so present on social media especially above 54 years old (Statista, 2019). The company will reach these people by the presence on the beach and critics from their friends, being the sellers with brand shirts, transportation bags for fruit with a distinct logo and lastly by emitting funny sounds for their presence to be noticed.

9.1.5.3 Price

It is important so attend two limits in pricing. A low price that will not generate profit, and a high price that will not generate demand. To formulate a price there are factors that should be considered such as costs, competitors' prices and the customers' assessment of uniqueness.

The business idea is to suggest the product as unique and pioneer, to sustain the mission "provide easy, healthy and green refreshment in Portuguese beaches" the price should be perceived as higher since the value is superior, and as Portuguese are willing to pay premium for convenience (54%), quality (68%) and 36% admit to still buy the same quantities of fruit if the price went up (Nielsen, 2018) an above-average price should be charged. Being the average € 2.25 and the maximum € 3 (in beaches that are known for having people with high purchasing power) the price for portions between 200 and 250gr that will range between € 2.50 for melon, watermelon, oranges and € 3 for cherries, strawberries, plums, peaches, and grapes.

9.1.5.4 Place and time

Regarding the places of operation, it is observed that there are many places where fruit is not being sold yet, whether it is due to legislation not allowing or for being an early stage of the industry. The company will focus on beaches where there are plenty of beach daily visitors and also in unexplored markets.

A specific case of under exploration is Cascais Captainship, but as long as the legislation does not change it is not possible to sell fruit there. Efforts and propositions will be made in order to change it, and take advantage as the first or one of the firsts to bet on this zone.

Taking into account that people that already had a license on the previous year have preference over new requests, the business will focus on the most competitive areas first, mainly Algarve, Alentejo and Lisbon, on the second year it will expand to the Center and on the third year to the North.

Beaches with more than 2000 people are the target, having many potential buyers the sellers can be seen by numerous people it will result in more brand awareness. Other criteria used were that beaches that already have fruit sellers will be avoided and ones that are followed by

or near other largely populated beaches will have preference. See figures 11 to 32 in the annexes for the elaboration of the groups of beaches.

Those beaches are the following:

North	Center	Center	Lisbon	Alentejo	Algarve
Olinda	Esmoriz/ Barrinha	Paredes da Vitória	Saúde I	Albarquel	Rocha baixinha
Mindelo	Furadouro	São Martinho do Porto	Saúde II	Figueirinha	Quarteira
Azurara	Torreira	Nazaré	Saúde III	Portinho da Arrábida	Vilamoura
Árvore	Barra	Baleal Norte	Fonte da Telha I	Bico das Lulas	Luz
Angeiras	Costa Nova	Baleal - Campismo	Fonte da Telha II	Tróia- Galé	Meia praia
Leça da Palmeira	Mira	Cova da Alfarroba	Fonte da Telha III	Tróia- Mar	Peneco
Matosinhos	Tocha	Peniche de Cima		Carvalhal	Armação de Pera
	Quiaios	Molhe Leste		Comporta	Barcos
	Buarcos/Figueira da Foz	Santa Rita		Pego	Alvor- Nascente
	Pedrogão	Mirante			Alvor-Poente
	Vieira	Azul			Rocha
	Velha	Foz do Sizandro			

Table 2 - Selected beaches

Source: Author

Fruit selling will occur between the 15th of June and the 15th of September, considering the peak of attendance of the beaches and the availability of the workers (student's summer vacations). Workers will start with a training period prior to the activity, through a series of videos, exploring sales techniques and explanation on how to handle the stock management system.

9.1.5.5 People

The company will have four types of positions, salesman, stock managers, regional managers and a general manager.

The general manager will be responsible for strategy updates, technology implementation, payments and receivables, management control, so it is necessary a person with strategic thinking, innovative and number oriented.

There will be four regional managers one for Algarve, one for Alentejo and Lisbon, one for the center and one for the North, on the first months they will have to hire people for the stock management and selling, when operations start they will transport fruit from local supply markets to the restaurants, ensure smooth operations by supporting stock managers and inspect restaurant partnerships concerning HACCP. These individuals should have clear leadership skills, people and problem-solving oriented. They will be people with availability from April to September, have driver's license and preferably own a van to transport fruit.

Stock managers are responsible for taking the products from the production to the sellers, on the beach. They will support between three and five sellers depending on the distance. Selection of these workers should focus on responsibility, due to the importance of time management and control of the delivered goods, checking always the quantities that flow from the production to the beaches and at the end of the day from each seller.

The sellers will be responsible for communication with clients and posting regular pictures of the fruit and/or beach, so the target for this job will be young adults, college or final high school students as they have availability during the summer, with good communication skills and empathy makers, ideally with health and environmental concerns to strengthen the culture of the company. Advertisements to reach these people will be sent to universities with bachelors and masters with courses like science of communications or communication and marketing. Their income will be based on in % of sales calculated on the financial plan and a monetary reward will be attributed every week to the seller with the most liked and viewed post on Instagram.

On the 1st year, the business will require 29 active sellers, 20 stock managers in rotation, 2 region managers and 1 general manager. This is the number of sellers that will operate in beaches where the number of potential customers is not a condition for selling. The sellers

will only work 15 days a month, so per season the business will need at least twice the sellers presented above, in order to maintain every place always active. Stock managers will also work 15 days a month, supporting 2 to 5 active sellers in their area.

9.1.5.6 Process

The process can be divided into five major parts; order, production, distribution, selling and controlling.

It starts with buying the necessary supplies, including the fruit, cups, forks, napkins and other, being this the job for the management, ensuring everything is functional for the operations to run smoothly. Regional managers are in charge for buying fruit on local supply markets and transport it, stock managers should always receive the supplies on local outsourced restaurants/kitchens, to control the amount received and the state of the merchandise.

The local restaurants are responsible for the cutting and preparing of the fruits and extras according to the request of the manager. After everything is nicely packaged the stock manager will confirm the number of units, pick up and deliver to the sellers of the correspondent area.

The sellers will receive the kit with a full box ready to sell, they will need to walk along the beach publicizing the products and presenting to the buyers, receive cash or electronic payments, deliver the product and register the type of product, quantity and payment method on the provided smartphone.

When the stock or the schedule is over sellers should go to a defined meeting point where the stock manager will soon arrive, as we will be notified by the stock management system. The stock manager will collect the box and confirm the number of unsold items and cash, latter delivering the fruit that was not sold to a local organization.

Everyday information should be processed by the manager so he can plan orders, possible changes on the products and/or process.

9.1.5.7 Physical environment

The activity will be developed on the beach, being a relaxed environment, the goal is to foster open communication and fulfilment of needs in a greenway. People will need to see the employees as open to any approach, focused on the customers' and planet's health, maximizing and improving the lives of both. For that workers need to look inviting to contact, having always a clean uniform, white short-sleeve shirts with the logo of the company and beige shorts, clean boxes of fruit, to build trust relative to hygiene practices and always approach customers with a smile.

9.1.5.8 Productivity

The company's intention is to sell a bigger number of units for that productivity should be studied and encouraged. To boost productivity sellers will have no fixed income, being totally variable, meaning that the more they sell the more they will earn. Marketing is crucial in every mass-market retail business, a monetary premium will be granted to the seller with the best Instagram post on a weekly basis. Stock managers will serve as controllers for the selling so a smaller percentage will be also attributed to them according to the number of sales on their beaches.

9.2 Technology

The most important resource to technology will be a smartphone that every worker will have, it will play internal and external functions.

Internally the main purpose will be to serve as a stock management system. Every time a sale is completed it will be registered in the system, helping to control the entire operation. The objectives of the system are the following: control the number of sales of each product, alert the driver to the time of refill, determine the products that should be reposed according to the most sold good, control received cash and confrontation with the delivery of daily unsold items, manage waste and determine the optimal time and quantity of order.

The smartphone will also function to make the following contacts: sellers to drivers, drivers to management and seller to management.

Externally the same smartphone will live broadcast his GPS signal for customers to know the sellers' exact position, so they can decide to wait or to meet him at his location.

9.3 Organization

9.3.1 Structure

The organizational structure is completely vertical, being the general manager on the top, followed by regional managers and stock managers. Sellers will have a services contract working in green receipts.

9.3.2 Recruitment policies

There will be a heavy recruitment process every year. The general manager is responsible for hiring all the regional managers that after will help to hire stock managers and sellers. This process will focus universities and high school students above 18 years old, so partnerships with faculties are mandatory to promote these jobs. Also platforms like "Net Empregos", "Trovit empregos" and the company's Instagram will be used.

The recruitment will consist of an application by email, followed by an interview. The following aspects will be the most considered.

Function	Requirements	Experience	Competences/Skills
General Manager	Management studies	Preferably with business/ entrepreneurship experience.	-Leadership skills -People and problem-solving orientation
Regional Managers	Driver's license, own transporting van will be preferable. Availability from April to September.	From the second year and on, people that previously worked to the company will be preferred. Management students will be favoured.	-Communication and leadership skills -People and problem-solving orientation -Responsibility and scepticism
Stock Managers	Driver's license and personal vehicle. Availability from 15 th to June to 15 th of September.	From the second year and on, people that previously worked to the company will be preferred. Management students will be favoured.	-Responsibility and scepticism
Sellers	Availability from 15 th to June to 15 th of September.	From the second year and on, people that previously worked in the company will be preferred. Communications, marketing and social science, students will be favoured.	-Communication skills -Empathy creators -People-oriented

Table 3 - Recruitment requirements and preferences

Source: Author

9.3.3 Remuneration policies

The general manager will be a full-time worker, with a gross remuneration of € 2,500 for 14 months. Regional managers will have a 5-month contract with a monthly gross remuneration of € 2,000 and receive 36 cents as cost allowances for every kilometre they travel by car. Stock managers will work from June 15th till September 15th only 15 days a month, by contract for € 1,200 of base, plus 3% of commissions on their sellers' total sales. Every worker of the company will receive food subsidy of € 4.77 for every working day. In addition, as regional managers have to perform many journeys, they will receive cost allowances of 0,36 cents/km. Sellers will be paid solely by commissions getting 10% of their total sales.

9.3.4 Partnerships

Partnerships will be the base of the business, especially with restaurants/catering companies, city halls and universities. Every set of beaches will require a nearby outsourced company to prepare the fruit for selling as well as its storage, the location of those partners is key to assure fast and easy refill to seller, they should always be positioned on one edge of a set of beaches in order to minimize the distance of daily fruit distribution. City halls can be quite important to build brand awareness and marketing, some examples can be; facilitating campaigns of beach cleaning, appeal locally to healthy eating or even supply local events.

10. Implementation requirements

To begin the activity is necessary to start a company which bears a cost of € 360 through the model of “Empresa na hora”. The brand will also need to be secured by being registered in INPI “Instituto Nacional de Propriedade Industrial”. The cost to register the name of the brand and the logo is € 126.17 €. After a proper constitution, the critical part is to get the licenses to sell that will have a cost of € 25.70 per seller per month and will be further explained ahead.

With those steps completed it is necessary to establish agreements with suppliers of food, materials and services and lastly to proceed to the activity is necessary to recruit and select workers.

10.1 Licensing

In order to sell at the beach, a license is mandatory, and the organs that provide it are the Captainships. The process requires some previous actions, first people need to open activity in the finance department, second need a prove of previous communication to the DGAE, only after these two steps is possible to deliver the requirement indicating the beach or group of aggregated beaches, the period and the products that will be sold, with that should be as well delivered a prove that the products come from an establishment where HACCP is applied. When the beach has a concessionary, it is also required for them to authorize the activity in that space.

In every Captainship there are a maximum number of licenses to attribute, so to manage the applications some selection criteria were identified, can vary slightly from captainship to captainship in hierarchical terms. Also, the delivery date of the requirement may change or even be absent.

The selection criteria nationwide are: the longer period of activity, the longer period of activity on the previous year(s), date and hour of the requirement delivery, absence of proof of bad conduct in previous years, requests for a second or third beach will be considered after.

11. Financial evaluation

Main assumptions:

The business is scheduled to start in 2020 with 3 months of selling operations from 15th of June till 15th of September.

RF - “Banco de Portugal”	0.59%
Rm - “S&P 500 - investing.com 21/07/19”	6.23%
Market risk premium = (Rm-Rf)	5.64%
B unlevered Company Sector “Damodaran” - Retail (Grocery and Food)	0.28
Ru= Rf + Bu (Rm-Rf)	2.17%
Cf Growth rate in perpetuity - Predicted Inflation - “Banco de Portugal - 2019”	1.3%
WACC	2.32%
Loan interest rate	2.98%
Income Tax	21%
Social Security (Company)	23.75%
Social Security (Workers)	11%
IRS average rate	15%

11.1 Initial investment/ Capital requirement

The initial investment requirement is € 135,044.50, being € 105,000 financed through a bank loan, repaid on the end of the first year and the remaining by share capital. The bank chosen is “Caixa Geral de Depósitos” in the scope of the program “Capitalizar” which is based policy that grants the bank a guaranty and covers commissions’ expenses, lowering the overall costs of the loan (IAPMEI, n.d.). Detailed information on the loan is presented on annexes.

The investment will serve to buy tangible and intangible assets that will be described on the investments part, materials and fruit for till the end of June and to provide salaries for the managers before sales start to occur. Every year is necessary to prior to sales, nonetheless, the results from previous years will always cover this expense.

Bank loan	2020	2021	2022	2023	2024
Interest expenses	1 475,24 €	2 507,92 €	1 327,72 €	221,28 €	- €
Commissions	262,50 €	- €	- €	- €	- €
Capital reimbursement	- €	42 000,00 €	42 000,00 €	21 000,00 €	- €
Stamp tax	69,51 €	100,32 €	53,11 €	8,85 €	- €
Investment	135 044,50 €	327 238,45 €	466 869,19 €	520 971,94 €	546 587,06 €

Financing Sources	2020	2021	2022	2023	2024
Operational cash flow	401 345,11 €	735 287,39 €	900 098,27 €	959 126,66 €	999 750,70 €
Capital	30 044,50 €				
Other capital instruments					
Partner Loans					
Loans	105 000,00 €				
Subsidies					
Total	536 389,61 €	735 287,39 €	900 098,27 €	959 126,66 €	999 750,70 €

Table 4 - Financing Sources and Costs
Source: Author

11.2 Sales

It was assumed that there is an even distribution on the type of fruit sold and 20% of the customers buy an extra of seeds or ginger powder. The reference to forecast the number of sales was the competition, that claims to sell on average 200 portions a day per seller (Lusa, 2015), since this will be a more expensive product a 10% decrease in the number of sales was considered. By multiplying this number by the average selling price and by the number salesmen and of days it is possible to reach € 1.26 million in sales for the first year (Table 5). The first-year sales will happen in Lisbon, Alentejo and Algarve. On the second year the center region will be added and by the third it is expected to reach Portugal from north to south.

Sales	2020	2021	2022	2023	2024
Fruit Sales	1 262 086,25 €	2 219 531,00 €	2 741 773,58 €	2 872 334,23 €	3 231 422,88 €
Extra's Sales	30 203,77 €	53 116,98 €	65 615,09 €	68 739,62 €	71 864,15 €
Total Sales (without VAT)	1 292 290,03 €	2 272 647,98 €	2 807 388,68 €	2 941 073,85 €	3 303 287,03 €
VAT	77 537,40 €	136 358,88 €	168 443,32 €	176 464,43 €	198 197,22 €
Total Sales (with VAT)	1 369 827,43 €	2 409 006,86 €	2 975 832,00 €	3 117 538,29 €	3 501 484,25 €

Table 5 - Sales forecasts
Source: Author

11.3 COGS

The COGS include fruit and every material involved to deliver the final product, like fruit, seeds and ginger, cups, forks and napkins. It is assumed that 45% of the price of the fruit is wasted not only in peel and seeds but also in ripening. VAT is only considered in fruit and toppings as other materials are imports that are exempt according to article 13º of “Código do Imposto sobre o Valor Acrescentado”.

COGS	2020	2021	2022	2023	2024
COGS (without VAT)	248 718,85 €	437 402,11 €	540 320,25 €	566 049,79 €	591 779,33 €
VAT	9 003,65 €	15 834,01 €	19 559,66 €	20 491,07 €	21 422,48 €
COGS (with VAT)	257 722,50 €	453 236,12 €	559 879,91 €	586 540,86 €	613 201,81 €

Table 6 - COGS forecasts

Source: Author

11.4 Personnel

Stock managers are the most considerable expense in this rubric since there are 20 of them, followed by 2 regional managers and 1 general manager. This table will also showcase the increased number of employees due to the expansion on the first 3 years from Algarve to the Center and then to the North.

Personnel	2020	2021	2022	2023	2024
Stock Managers	127 334,09 €	215 368,10 €	283 140,83 €	295 557,01 €	307 973,19 €
Regional Managers	44 399,28 €	66 598,92 €	88 798,56 €	88 798,56 €	88 798,56 €
General Manager	29 238,21 €	38 984,28 €	38 984,28 €	38 984,28 €	38 984,28 €
Total	200 971,58 €	320 951,30 €	410 923,67 €	423 339,85 €	435 756,03 €

Table 7 - Personnel Expenses

Source: Author

11.5 Supplies and Services

The biggest slices in supplies and services are the restaurant/catering companies and the sellers, as they are the ones that are in charge of preparing and selling the fruit respectively. These two expenses will rise proportionally with the number of sellers. Electronic payments are assumed to be 50% of sales, being calculated 5cents per transaction plus monthly fees.

Supplies and Services	2020	2021	2022	2023	2024
Accounting	1 829,27 €	2 439,02 €	2 439,02 €	2 439,02 €	2 439,02 €
Communication	1 365,85 €	2 317,07 €	2 951,22 €	3 073,17 €	3 195,12 €
Electronic payments	13 533,33 €	23 800,00 €	29 400,00 €	30 800,00 €	32 200,00 €
Marketing and communication	2 195,12 €	2 926,83 €	2 926,83 €	2 926,83 €	2 926,83 €
Restaurant services	162 536,59 €	285 268,29 €	354 341,46 €	359 934,96 €	387 902,44 €
Sellers	129 829,00 €	227 864,80 €	281 338,87 €	294 707,39 €	308 075,90 €
Sellers Social Security	12 982,90 €	22 786,48 €	28 133,89 €	29 470,74 €	30 807,59 €
Stock management system	5 691,06 €	9 756,10 €	9 756,10 €	9 756,10 €	9 756,10 €
Website/mail maintenance	162,60 €	162,60 €	162,60 €	162,60 €	162,60 €
Total Supplies and Services (without VAT)	330 125,72 €	577 321,20 €	711 449,99 €	733 270,81 €	777 465,61 €
VAT	72 942,85 €	127 542,98 €	157 162,70 €	161 874,02 €	171 731,34 €
Total Supplies and Services (with VAT)	403 068,57 €	704 864,18 €	868 612,69 €	895 144,82 €	949 196,95 €

Table 8 - Supplies and Services

Source: Author

11.6 Investments

The investment is divided into tangible and intangible assets. In tangible assets, there is administrative equipment represented by the € 1,951.22 concerning three computers in the first year and basic equipment comprising smartphones, bags and uniforms (€ 7,771.34). In intangible assets the investment will be done on the company's website (€ 2,032.52).

Investment	2 020	2 021	2 022	2 023	2 024
Tangible Assets					
Basic Equipment	7 771,34 €	5 269,70 €	3 042,87 €	386,18 €	386,18 €
Administrative Equipment	1 951,22 €	650,41 €	650,41 €	- €	- €
Total Tangible Assets	9 722,56 €	5 920,11 €	3 693,28 €	386,18 €	386,18 €
Intangible Assets					
Computer Programs	2 032,52 €				
Other Intangible Assets					
Total Intangible Assets	2 032,52 €	- €	- €	- €	- €
Total Investment	11 755,08 €	5 920,11 €	3 693,28 €	386,18 €	386,18 €
VAT	2 703,67 €	1 361,63 €	849,45 €	88,82 €	88,82 €

Table 8 - Investments

Source: Author

11.7 Income Statement

This statement projects the positive result of the operations, being the net income positive since the first year, demonstrating the possibility to finance the following years' operations. It shows clearly the expansion from the first to the second year, from 29 to 51 sellers and from the second to the third with an extra 12 sellers.

Supplies and services is the rubric with most expression, being restaurant services and sellers the largest contributors, being these mostly variable costs they will increase with the number of sellers and sales throughout the years.

	2020	2021	2022	2023	2024
Revenue	1 292 290,03 €	2 272 647,98 €	2 807 388,68 €	2 941 073,85 €	3 074 759,03 €
Cost of goods sold	248 718,85 €	437 402,11 €	540 320,25 €	566 049,79 €	591 779,33 €
Supplies and Services	330 735,48 €	577 321,20 €	711 449,99 €	733 270,81 €	777 465,61 €
Persomnel	200 971,58 €	320 951,30 €	410 923,67 €	423 339,85 €	435 756,03 €
Other expenditures	3 054,08 €	4 032,42 €	4 857,30 €	5 097,45 €	5 319,90 €
EBITDA	508 810,04 €	932 940,96 €	1 139 837,47 €	1 213 315,96 €	1 264 438,17 €
Depreciations and Amortizations	2 622,02 €	3 675,96 €	4 544,70 €	3 944,43 €	4 021,66 €
EBIT	506 188,02 €	929 265,00 €	1 135 292,77 €	1 209 371,53 €	1 260 416,50 €
Interest expenses	1 475,24 €	2 507,92 €	1 327,72 €	221,28 €	- €
EBT	504 712,78 €	926 757,08 €	1 133 965,05 €	1 209 150,25 €	1 260 416,50 €
Taxes (21%)	105 989,68 €	195 145,65 €	238 411,48 €	253 968,02 €	264 687,47 €
Net Income	398 723,09 €	731 611,43 €	895 553,57 €	955 182,23 €	995 729,04 €

Table 9 - Income Statement

Source: Author

11.8 Cash Flow

The business has really high-profit expectations, with a NPV of € 93 million, since the reference to decide or not to invest NPV equal to 0, this is an extraordinary result, also the IRR is higher than the WACC reassuring the viability of the business.

It is important to highlight that the most significant part of the NPV is the residual value. In this calculation, it holds 89 million of the 93 of the net present value, representing the lifetime value of the project.

The payback period is expected to be reached in the second month of sales.

	0	2020	2021	2022	2023	2024
Free Cash Flow	- 135 044,50 €	631 359,35 €	776 523,24 €	897 670,82 €	953 297,02 €	1 010 083,97 €
Discount Rate (WACC)		2,31%	2,31%	2,31%	2,31%	2,31%
Discount Factor		1	1,02	1,05	1,07	1,10
Discounted Cash Flow	- 135 044,50 €	631 359,35 €	758 989,39 €	857 589,77 €	890 167,97 €	921 897,10 €
Accumulated Discounted Cash Flow	- 135 044,50 €	496 314,85 €	1 255 304,24 €	2 112 894,01 €	3 003 061,98 €	3 924 959,09 €

Net Present Value (5 years)	3 924 959,09 €
Residual Value	89 201 933,98 €
Net Present Value	93 126 893,07 €
Internal Rate of Return (IRR)	488,51%

Table 10 - Free Cash Flow (NPV, IRR)

Source: Author

11.9 Balance Sheet

In this statement, it is possible to observe the high liquidity of the company, due to the amount of cash and equivalents on the balance sheet. Moreover, it is not possible to see some effects of operations in terms of payables and receivables, as it operates mainly in the summer, and at the end of the year, most of the accounts are already paid/received.

Assets		Liabilities		Equity	
Non Current Assets		Non Current Liabilities		Share Capital	
Tangible fixed assets	7 778,05 €	Loans	105 000,00 €	Reserves	
Intangible assets	1 355,01 €	Provisions	- €	Retained earnings and other reserves	
Financial Investments	- €	Accounts payable	- €	Other equity variations	
Total Non Current Assets	9 133,06 €	Total Non Current Liabilities	105 000,00 €	Net income	398 723,09 €
Current Assets		Current Liabilities		Total shareholder's equity	
Inventories	- €	Loans		428 767,59 €	
Clients	- €	Suppliers			
State and public agents	508,62 €	Shareholders	- €		
Accounts receivable		State and public agents	107 233,43 €		
Cash and Equivalents	631 359,35 €	Accounts Payable	- €		
Total Current Assets	631 867,96 €	Total Current Liabilities	107 233,43 €		
		Total Liabilities	212 233,43 €		
Total Assets	641 001,03 €				

Table 10 - Balance Sheet

Source: Author

11.10 Negative scenario

It is possible that the predictions are not 100% accurate, and the company might not get all the licenses it applies to so a scenario was simulated where only 80% of the licenses were attributed and a decrease of 20% in selling. Despite those nuances, the result would still be quite positive with a NPV of 52 million euro and an IRR of 361%. Again in this scenario the residual value of the cash flow as a tremendous weight on the NPV, representing € 50.5 million of the total.

	0	2020	2021	2022	2023	2024
Free Cash Flow	- 105 000,00 €	366 729,44 €	407 920,11 €	487 428,00 €	515 874,89 €	571 090,09 €
Discount Rate (WACC)		2,31%	2,31%	2,31%	2,31%	2,31%
Discount Factor		1	1,02	1,05	1,07	1,10
Discounted Cash Flow	- 105 000,00 €	366 729,44 €	398 720,33 €	465 690,09 €	481 752,72 €	521 287,94 €
Accumulated Discounted Cash Flow	- 105 000,00 €	261 729,44 €	660 449,76 €	1 126 139,85 €	1 607 892,57 €	2 129 180,51 €

Net Present Value (5 years)	2 129 180,51 €
Residual Value	50 582 515,94 €
Net Present Value	52 711 696,45 €
Internal Rate of Return (IRR)	361,46%

Table 11 - Free Cash Flow (NPV, IRR) negative scenario

Source: Author

11.11 Business Indicators

11.11.1 Profitability Ratios

It is expected that “Manga Curta” in 2020 earns liquid of cost of goods sold € 1 million, increasing through the years due to the investment in new areas of Portugal. However, the gross margin of 81% will remain the same during the period in study. The EBITDA and EBIT will only vary slightly from each other as the weight of the depreciation is small when compared to the volume of sales and costs. Lastly, a net profit margin above 30% indicates a high profitability and efficiency of the business.

Profitability Ratios	2020	2021	2022	2023	2024
Gross profit	1 043 571,18 €	1 835 245,87 €	2 267 068,42 €	2 375 024,06 €	2 482 979,70 €
Gross Margim	81%	81%	81%	81%	81%
EBITDA Margin	39%	41%	41%	41%	41%
EBIT Margin	39%	41%	40%	41%	41%
Net profit Margin	31%	32%	32%	32%	32%

Table 13 - Profitability Ratios

Source: Author

11.11.2 Efficiency Ratios

To analyse the efficiency of the products and the cost structure some ratios were developed. It was possible to calculate an average contribution margin for fruit products of € 1.43 per unit and € 0.21 for the toppings, and as the variable expenses are predominant with 73% of the total costs, it explains the profitability of the company.

This type of cost structure, with low fixed costs, diminishes the risk of the business, meaning that if there are lower sales the business will not suffer so many losses.

Efficiency Ratios	2020
Contribution Margin (Fruit)	1,43 €
Contribution Margin (Toppings)	0,21 €
Variable Costs (%)	73%
Fixed Costs (%)	27%

Table 12 - Efficiency Ratios

Source: Author

12. Conclusion

Currently, there is a unique opportunity on the market and it should be taken advantage of. The world is witnessing a change in consumers' eating habits and that is creating a market gap that should be fulfilled since 2014 fruit selling companies are appearing on Portuguese beaches, however, they represent a small percentage of the vast territory yet to cover. If fruit selling is added convenience and sustainability there is a big probability of becoming a market leader.

By satisfying a national need it will be possible to improve people's lives, make beaches more sustainable and through sensitising individuals to become healthier and environmentally friendly the world will certainly become a better place.

This business plan presents a company with enormous profitability, with a positive net present value of €93 million, and an IRR of 488% way above the actualization rate which confirms the value-added of the project. However, some aspects should be highlighted, 89 of the 93 million of NPV are represented on the residual value and, as the NPV is characterized by being the surplus of coverage of the risk and the calculation of the WACC was based on the risk of the market, the NPV could be lower since there is a chance that the risk of this particular project can be higher than the market risk.

Even in the most negative scenario, the company is still really profitable, with a NPV of 52 million and an IRR of 361%.

There are critical aspects associated with the business plan and those are the obtainment of licenses and workers. Licenses should be worked to the sharpest detail as they are directly associated with the sales revenue, as well as employing the amount of workers equal to the number of licenses, those topics are considered the key to the operationalization of the project.

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Annexes

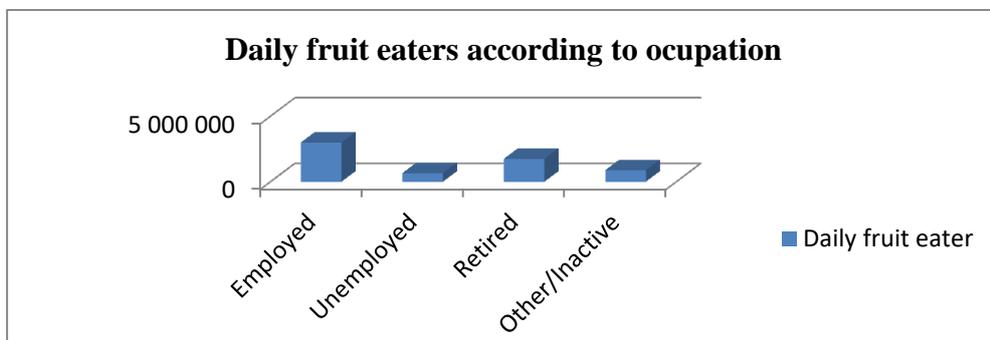


Figure 5 - Daily fruit eaters according to occupation
Source: (INE, 2016)

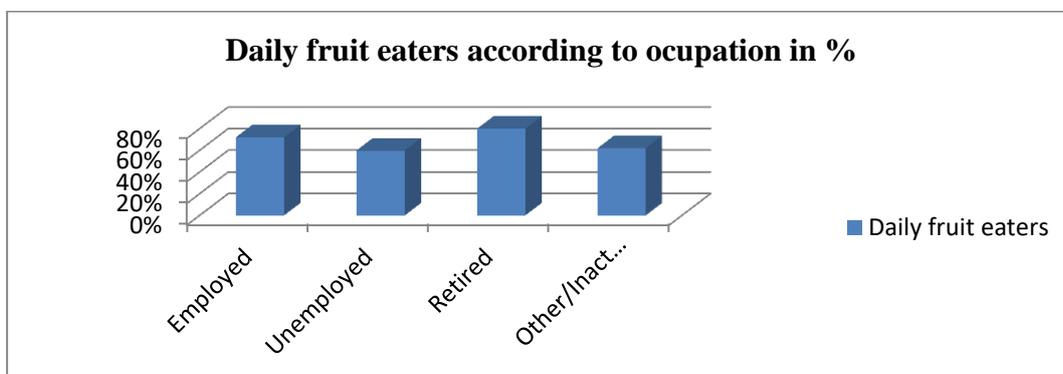


Figure 6 - Daily fruit eaters according to occupation in %
Source: (INE, 2016)

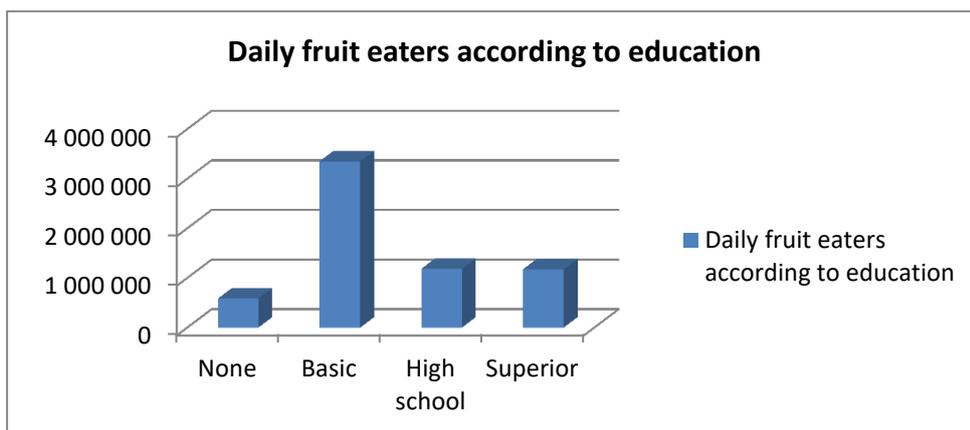


Figure 7 - Daily fruit eaters according to education
Source: (INE, 2016)

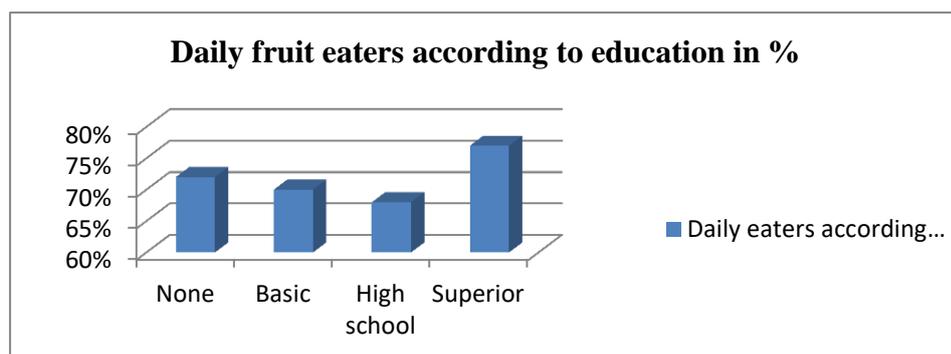


Figure 8 - Daily fruit eaters according to education in %
Source: (INE, 2016)

	Fruta Mar	Fruits 4 life	Capitão Fruta	Filhos da Fruta	Fruta da Ilha
How do they sell?	-Styrofoam box -Plastic bowls	-Cooler backpack -Plastic bowls	-Cooler backpack -Plastic bowls and bottles -Wood cutlery	-Styrofoam box -Plastic bowls	-Mobile cart with cooler bag -Plastic bowls
What?	-Pineapple -Kiwi -Watermelon -Cantaloupe -Grapes	-Watermelon -Pineapple -Apple -Fruit mix -Cherries -Grapes	-Fresh-Cut fruit -Lemonade -Fruit mix	-Orange and Watermelon Juice -5 Fruit mix -Melon -Cantaloupe -Watermelon	-Fruit mix -Melon -Watermelon -Kiwi -Grapes -Figs -India's fig
Price range	€ 2	€ 3	Not found	€ 1,5 – € 2	€ 2- € 2,5
Where?	-Ilhas de Tavira -Cabanas -Fuseta -Faro -Barril -Ayamonte	-Quinta do Lago, -Ancão - Garrão-Poente - Vale do Lobo	-São João da Caparica	- Sesimbra - Meco	-Porto Santo
Sustainability practices	-Unknown	Refood- Donating excess stock for charity -Season fruit	-Returning plastic packaging policies -Beach cleaning campaigns	-Unknown	-Local and season produced fruit

Table 13 - Direct competition information
Source: Author

Beach Data

Data was collected regarding Portuguese beaches, namely the average number of people that frequent the beach daily, the correspondent captainship and county. Information about Algarve and Alentejo was collected on APA's website regarding 2018 bathing season (APA, 2019) being the remaining obtained through the documents of Planeamento da Orla Costeira, from Caminha to Espinho (APA, 2018), from Ovar to Marinha Grande (Universidade de Aveiro, 2015) and from Alcobaça to Cabo Espichel (APA, 2017). In color, red will be the beaches that already had some kind of ambulant fruit selling in the previous years.

Beach	District	County	Captainship	Avg nr of people
Algarve				
Alemães	Faro	Albufeira	Portimão	1 500
Arrifes	Faro	Albufeira	Portimão	200
Aveiros	Faro	Albufeira	Portimão	250
Belharucas	Faro	Albufeira	Portimão	1200
Castelo	Faro	Albufeira	Portimão	150
Coelha	Faro	Albufeira	Portimão	180
Evaristo	Faro	Albufeira	Portimão	120
Falésia Açoteias	Faro	Albufeira	Portimão	400
Falésia Alfamar	Faro	Albufeira	Portimão	250
Galé-Leste	Faro	Albufeira	Portimão	1500
Galé-Oeste	Faro	Albufeira	Portimão	350
Inatel-Albufeira	Faro	Albufeira	Portimão	1800
Manuel Lourenço	Faro	Albufeira	Portimão	200
Maria Luísa	Faro	Albufeira	Portimão	800
Olhos de Água	Faro	Albufeira	Portimão	750
Oura	Faro	Albufeira	Portimão	1400
Oura-Leste	Faro	Albufeira	Portimão	250
Peneco	Faro	Albufeira	Portimão	2900
Pescadores	Faro	Albufeira	Portimão	1000
Rocha baixinha	Faro	Albufeira	Portimão	1500
Rocha baixinha nascente	Faro	Albufeira	Portimão	2800
Rocha baixinha poente	Faro	Albufeira	Portimão	1150
Salgados	Faro	Albufeira	Portimão	200
Santa Eulália	Faro	Albufeira	Portimão	1000
São Rafael	Faro	Albufeira	Portimão	350
Amado	Faro	Aljezur	Lagos	450
Amoreira-Mar	Faro	Aljezur	Lagos	1200
Amoreira-Rio	Faro	Aljezur	Lagos	150
Arrifana	Faro	Aljezur	Lagos	300
Bordeira	Faro	Aljezur	Lagos	800
Monte Clérigo	Faro	Aljezur	Lagos	750
Odeceixe-Mar	Faro	Aljezur	Lagos	600
Vale dos homens	Faro	Aljezur	Lagos	150
Vale Figueiras	Faro	Aljezur	Lagos	150
A lagoa Alta	Faro	Castro Marim	VRSA	6000
Cabeço	Faro	Castro Marim	VRSA	2696
Praia Verde	Faro	Castro Marim	VRSA	2300
Barreta	Faro	Castro Marim	Faro	917
Culatra-Mar	Faro	Faro	Olhão	1067
Faro-Mar	Faro	Faro	Faro	7400
Ilha do Farol- Mar	Faro	Faro	Olhão	917
Benagil	Faro	Lagoa	Portimão	150
Caneiros	Faro	Lagoa	Portimão	300
Carvalho	Faro	Lagoa	Portimão	50
Carvoeiro	Faro	Lagoa	Portimão	450
Cova redonda	Faro	Lagoa	Portimão	50
Ferragudo	Faro	Lagoa	Portimão	500
Marinha Albandeira	Faro	Lagoa	Portimão	320
Pintadinho	Faro	Lagoa	Portimão	100
Senhora da rocha	Faro	Lagoa	Portimão	250
Vale Centeanes	Faro	Lagoa	Portimão	350
Vale do Olival	Faro	Lagoa	Portimão	200
Batata	Faro	Lagos	Lagos	150
Camilo	Faro	Lagos	Lagos	80
D. Ana	Faro	Lagos	Lagos	150

Luz	Faro	Lagos	Lagos	3600
Meia praia	Faro	Lagos	Lagos	16000
Porto de Mós	Faro	Lagos	Lagos	700
Almargem	Faro	Loulé	Faro	1320
Ancão	Faro	Loulé	Faro	2935
Forte Novo	Faro	Loulé	Faro	1147
Garrão-Nascente	Faro	Loulé	Faro	1939
Garrão- Poente	Faro	Loulé	Faro	1413
Loulé Velho	Faro	Loulé	Faro	591
Quarteira	Faro	Loulé	Faro	6600
Quinta do Lago	Faro	Loulé	Faro	1750
Vale do Lobo	Faro	Loulé	Faro	1030
Vilamoura	Faro	Loulé	Faro	5000
Armona-Mar	Faro	Olhão	Olhão	2083
Armona-Ria	Faro	Olhão	Olhão	500
Cavacos	Faro	Olhão	Olhão	100
Fuseta-Mar	Faro	Olhão	Olhão	883
Fuseta-Ria	Faro	Olhão	Olhão	317
Alvor- Nascente	Faro	Portimão	Portimão	8000
Alvor-Poente	Faro	Portimão	Portimão	3800
Barranco das Canas	Faro	Portimão	Portimão	250
Carianos	Faro	Portimão	Portimão	90
Marina de Portimão	Faro	Portimão	Portimão	200
Prainha	Faro	Portimão	Portimão	50
Rocha	Faro	Portimão	Portimão	9500
Três Castelos	Faro	Portimão	Portimão	600
Vau	Faro	Portimão	Portimão	1000
Armação de Pera	Faro	Silves	Portimão	8400
Barcos/Armação de Pera Nasc.	Faro	Silves	Portimão	2400
Praia Grande Nascente	Faro	Silves	Portimão	180
Praia Grande Poente	Faro	Silves	Portimão	750
Barril	Faro	Tavira	Tavira	1950
Cabanas	Faro	Tavira	Tavira	1750
Ilha de Tavira	Faro	Tavira	Tavira	2550
Terra Estreita	Faro	Tavira	Tavira	800
Almádena- Cabanas Velhas	Faro	Vila do Bispo	Lagos	150
Barranco	Faro	Vila do Bispo	Lagos	100
Beliche	Faro	Vila do Bispo	Lagos	300
Boca do rio	Faro	Vila do Bispo	Lagos	120
Burgau	Faro	Vila do Bispo	Lagos	500
Castelejo	Faro	Vila do Bispo	Lagos	500
Cordoama	Faro	Vila do Bispo	Lagos	200
Furnas	Faro	Vila do Bispo	Lagos	60
Ingrina	Faro	Vila do Bispo	Lagos	300
Mareta	Faro	Vila do Bispo	Lagos	1100
Martinhal	Faro	Vila do Bispo	Lagos	450
Salema	Faro	Vila do Bispo	Lagos	1300
Tonel	Faro	Vila do Bispo	Lagos	500
Zavial	Faro	Vila do Bispo	Lagos	130
Fábrica-Mar	Faro	VRSA	VRSA	333
Lota	Faro	VRSA	VRSA	3167
Manta Rota	Faro	VRSA	VRSA	5833
Monte Gordo	Faro	VRSA	VRSA	11800
Santo António	Faro	VRSA	VRSA	1250

Table 14 - Data from Algarve's beaches
Source: (APA, 2019)

Beach	District	County	Captainship	Avg nr of people
Alentejo				
Califórnia	Setúbal	Sesimbra	Setúbal	5100
Ouro	Setúbal	Sesimbra	Setúbal	2500
Albarquel	Setúbal	Setúbal	Setúbal	5100
Figueirinha	Setúbal	Setúbal	Setúbal	2700
Galapinhos	Setúbal	Setúbal	Setúbal	500
Galapos	Setúbal	Setúbal	Setúbal	500
Portinho da Arrabida	Setúbal	Setúbal	Setúbal	2600
Aberta Nova	Setúbal	Grândola	Sines	1000
Atlântica	Setúbal	Grândola	Setúbal	1500
Carvalhal	Setúbal	Grândola	Setúbal	2500
Comporta	Setúbal	Grândola	Setúbal	2500
Galé-Fontainhas	Setúbal	Grândola	Setúbal	1500
Melides	Setúbal	Grândola	Sines	3000
Pego	Setúbal	Grândola	Setúbal	2500
Bico das Lulas	Setúbal	Grândola	Setúbal	4950
Troia- Galé	Setúbal	Grândola	Setúbal	5000
Troia- Mar	Setúbal	Grândola	Setúbal	3000
Costa de Santo André	Setúbal	Santiago do Cacém	Sines	3000
Fonte do Cortiço	Setúbal	Santiago do Cacém	Sines	1500
Grande de Porto Covo	Setúbal	Sines	Sines	600
Ilha do Pessegueiro	Setúbal	Sines	Sines	700
Morgavel	Setúbal	Sines	Sines	700
S. Torpes	Setúbal	Sines	Sines	6000
Vasco da Gama	Setúbal	Sines	Sines	600
Vieirinha- Vale de Figueiros	Setúbal	Sines	Sines	300
Almograve	Beja	Odemira	Sines	600
Alteirinhos	Beja	Odemira	Sines	300
Carvalhal(Odemira)	Beja	Odemira	Sines	600
Malhão	Beja	Odemira	Sines	650
Farol	Beja	Odemira	Sines	500
Franquia	Beja	Odemira	Sines	1200
Furnas	Beja	Odemira	Sines	1400
Zambujeira do Mar	Beja	Odemira	Sines	2000

Table 15 - Data from Alentejo's beaches
Source: (APA, 2019)

Beach	District	Captainship	Avg nr of people
Lisbon Region			
Porto da Calada	Mafra	Cascais	305
São Lourenço	Mafra	Cascais	1000
Coxos #	Mafra	Cascais	120
Ribeira de Ilhas	Mafra	Cascais	250
Empa #	Mafra	Cascais	90
Matadouro	Mafra	Cascais	150
São Sebastião	Mafra	Cascais	0
Algodio/Norte	Mafra	Cascais	750
Pescadores	Mafra	Cascais	150
Baleia/Sul	Mafra	Cascais	870
Foz do Lizandro	Mafra	Cascais	3260
São Julião	Mafra	Cascais	810
Magoito	Sintra	Cascais	730
Azenhas do Mar	Sintra	Cascais	130
Maçãs	Sintra	Cascais	1080
Pequena do Rodízio	Sintra	Cascais	180
Grande do Rodízio	Sintra	Cascais	3135
Adraga	Sintra	Cascais	1100
Abano	Cascais	Cascais	240
Guincho Norte	Cascais	Cascais	780
Guincho Sul	Cascais	Cascais	1335
Crismina	Cascais	Cascais	1370
Água Doce	Cascais	Cascais	180
Santa Marta	Cascais	Cascais	53
Ribeira de Cascais	Cascais	Cascais	550
Rainha	Cascais	Cascais	240
Conceição	Cascais	Cascais	670
Duquesa	Cascais	Cascais	765
Moitas	Cascais	Cascais	700
Tamariz	Cascais	Cascais	1750
Poça	Cascais	Cascais	520
Azarujinha	Cascais	Cascais	130
São Pedro do Estoril	Cascais	Cascais	750
Bafureira	Cascais	Cascais	50
Avencas	Cascais	Cascais	300
Parede	Cascais	Cascais	500
Carcavelos	Cascais	Cascais	7100
Cova do Vapor	Almada	Lisboa	1200

São João da Caparica	Almada	Lisboa	5770
Norte	Almada	Lisboa	360
Santo António da Caparica	Almada	Lisboa	970
CDS	Almada	Lisboa	970
Tarquínio/Paraíso	Almada	Lisboa	1650
Dragão Vermelho	Almada	Lisboa	1490
Praia Nova	Almada	Lisboa	1790
Nova Praia	Almada	Lisboa	1025
Saúde I	Almada	Lisboa	1330
Saúde II	Almada	Lisboa	1500
Saúde III	Almada	Lisboa	1900
Mata	Almada	Lisboa	1535
Riviera	Almada	Lisboa	1845
Rainha	Almada	Lisboa	1570
Castelo	Almada	Lisboa	1205
Cabana do Pescador	Almada	Lisboa	1395
Rei	Almada	Lisboa	1580
Morena	Almada	Lisboa	715
Sereia	Almada	Lisboa	670
Infante	Almada	Lisboa	685
Nova Vaga	Almada	Lisboa	680
Bela Vista #	Almada	Lisboa	860
Fonte da Telha I	Almada	Lisboa	3120
Fonte da Telha II	Almada	Lisboa	1390
Fonte da Telha III	Almada	Lisboa	3825
Lagoa de Albufeira - Mar	Sesimbra	Lisboa	1600
Moinho de Baixo/Meco	Sesimbra	Lisboa	2080
Bicas	Sesimbra	Lisboa	785
# beach capacity with base on the parking			

Table 16 - Data from Lisbon's beaches

Source: (APA, 2019)

Beach	County	Avg. Visitors
Center		
Esmoriz/ Barrinha	Ovar	3034
Cortegaça	Ovar	400
São Pedro da Maceda	Ovar	690
Furadouro	Ovar	4900
Raul dos Santos	Mutosa	660
Torreira	Mutosa	4031
São Jacinto	Aveiro	800
Meia Laranja	Ílhavo	1595
Barra	Ílhavo	5166
Costa Nova	Ílhavo	3360
Costa Nova Sul	Ílhavo	1432
Vagueira Norte	Vagos	640
Vagueira Sul	Vagos	1152
Labrego	Vagos	470
Areão	Vagos/Mira	1140
Poço da cruz	Mira	930
Mira	Mira	4900
Mira Sul	Mira	1250
Palheirão	Mira/Cantanhede	375
Tocha	Cantanhede	3237
Quiaios	Figueira da foz	5188
Murtinheira	Figueira da foz	1450
Buarcos/Figueira da Foz	Figueira da foz	9156
Farol	Figueira da foz	450
Cabedelinho	Figueira da foz	712
Cabadelo	Figueira da foz	1412
Cova-Gala	Figueira da foz	2027
Costa de Lavos	Figueira da foz	1730
Leirosa	Figueira da foz	1229
Osso de Baleia	Pombal	815
Pedrogão	Leiria	5633
Pedrogão Sul	Leiria	300
Vieira Norte	Marinha Grande	500
Vieira	Marinha Grande	4219
Pedras Negras	Marinha Grande	540
Velha	Marinha Grande	2080
São Pedro de Moel	Marinha Grande	1775
Água de Madeiros	Alcobaça	150
Pedra do Ouro	Alcobaça	140
Polvoeira #	Alcobaça	1300
Paredes da Vitória	Alcobaça	3750
Légua	Alcobaça	1300
São Martinho do Porto Norte	Alcobaça	5800
São Martinho do Porto Sul	Alcobaça	980
Norte	Nazaré	1400
Nazaré	Nazaré	8100

Salgado	Nazaré	1970
Salir do Porto	Caldas da Rainha	450
Mar	Caldas da Rainha	3190
Cortiço	Óbidos	360
Vale de Janelas	Óbidos	1700
D'El Rei	Óbidos	1600
Baleal Norte	Peniche	2050
Baleal Sul	Peniche	1970
Baleal - Campismo	Peniche	2340
Cova da Alfarroba	Peniche	2900
Peniche de Cima	Peniche	2900
Gambôa	Peniche	830
Quebrado	Peniche	26
Porto da Areia Sul	Peniche	200
Molhe Leste	Peniche	2100
Medão - Supertubos	Peniche	1600
Consolação Norte	Peniche	1150
Consolação	Peniche	1650
São Bernardino	Peniche	400
Areia Branca	Lourinhã	1000
Areia Branca (Foz)	Lourinhã	170
Areal Sul #	Lourinhã	1220
Peralta #	Lourinhã	485
Porto das Barcas	Lourinhã	415
Porto Dinheiro	Lourinhã	600
Porto Novo	Torres Vedras	635
Santa Rita	Torres Vedras	2635
Mexilhoeira	Torres Vedras	230
Amanhã/Vigia	Torres Vedras	1505
Navio	Torres Vedras	1705
Mirante	Torres Vedras	2300
Pisão	Torres Vedras	1150
Física	Torres Vedras	1100
Santa Cruz (Centro)	Torres Vedras	1650
Santa Helena	Torres Vedras	450
Guincho	Torres Vedras	900
Formosa	Torres Vedras	170
Azul	Torres Vedras	3350
Foz do Sizandro	Torres Vedras	2020

Table 17 - Data from Center's beaches

Source: (APA, 2017) (Universidade de Aveiro, 2015)

Beach	County	Avg. Visitors
North		
Foz do Minho	Caminha	1298
Moledo	Caminha	4373
Vila Praia de Âncora	Caminha	2230
Forte do Cão (Gelfa)	Caminha	352
Ínsua	Viana do Castelo	464
Afife	Viana do Castelo	837
Arda / Bico	Viana do Castelo	1337
Paçô / Carreço	Viana do Castelo	742
Carreço; Camarido; Lumiar	Viana do Castelo	344
		344
		344
Castelo do Velho; Norte	Viana do Castelo	2713
		2713
Cabedelo - Aquário	Viana do Castelo	202
Cabedelo; Cabedelo - Luzia; Parques de Campismo	Viana do Castelo	310
		310
		310
Rodanho	Viana do Castelo	256
Amorosa	Viana do Castelo	787
Pedra Alta	Viana do Castelo	212
Foz do Neiva	Esposende	181
Carruagem	Esposende	233
São Bartolomeu do Mar	Esposende	164
Rio de Moinhos	Esposende	76
Cepães	Esposende	1137
Suave Mar	Esposende	2949
Ofir	Esposende	565
Pedrinhas e Cedovém	Esposende	935
Apúlia	Esposende	3207
Ramalha	Esposende	821
Parque de Campismo	Póvoa do Varzim	415
Estela	Póvoa do Varzim	604
Aguçadoura Norte /Barranha	Póvoa do Varzim	652
Codicheira	Póvoa do Varzim	892
Paimó / Aguçadoura	Póvoa do Varzim	651
Pedras Negras; Santo André	Póvoa do Varzim	1354
		1354
Quião; Coim; Esteiro	Póvoa do Varzim	980
		980
		980
Fragosa; Fragosinho; Pontes; Lagos; Hotel; Lada; Beijinhos	Póvoa do Varzim	1284
		1284
		1284
		1284
		1284
		1284
		1284
Verde; Azul; Salgueira; Carvalhido; Redonda; Loulé; Leixão;	Póvoa do Varzim	1422
		1422
		1422
		1422
		1422
		1422

Prainha; Senhor dos Navegantes; Barcos; Mar e Sol; Luzimar; Pôr do Sol; Atlântica; Mestre	Vila do Conde	565
		565
		565
		565
		565
		565
Olinda	Vila do Conde	5637
Azurara	Vila do Conde	1461
Árvore	Vila do Conde	1459
Mindelo	Vila do Conde	2330
Pinhal dos Elétricos; Laderça; Terra Nova; Congreira	Vila do Conde	375
		375
		375
		375
Vila Chã; Pucinho; Moreiró	Vila do Conde	460
		460
		460
Labruge	Vila do Conde	1206
Angeiras Norte	Matosinhos	2420
Barreiro; Angeiras Sul; Central	Matosinhos	447
		447
		447
Funtão	Matosinhos	585
Pedras Brancas	Matosinhos	806
Pedras do Corgo	Matosinhos	1405
Pedras da Agudela; Agudela	Matosinhos	953
		953
Quebrada; Marreco	Matosinhos	1364
Memória; Facho; Paraíso	Matosinhos	836
		836
Cabo do Mundo	Matosinhos	1013
Aterro	Matosinhos	1188
Azul; Boa Nova	Matosinhos	44

Fuzelhas; Beijinhos	Matosinhos	1032
Leça da Palmeira	Matosinhos	3796
Matosinhos	Matosinhos	7094
Internacional	Porto	508
Castelo do Queijo	Porto	256
Aquário; Homem do Leme	Porto	664
		664
Molhe; Gondarém	Porto	100
		100
Luz; Ingleses; Ourigo; Carneiro; Pastoras	Porto	258
		258
		258
		258
Lavadores; Pedras Amarelas; Estrela do Mar; Salgueiros	Vila Nova de Gaia	812
		812
		812
		812
Sereia da Costa Verde; Canide	Vila Nova de Gaia	2965
		2965
Marbelo; Madalena	Vila Nova de Gaia	1392
		1392
Valadares; Sindicato; Atlântico; Dunas-Mar; Francelos	Vila Nova de Gaia	919
		919
		919
		919
Francemar; Miramar; Sãozinha; Senhor da Pedra	Vila Nova de Gaia	1669
		1669
		1669
		1669
Mar e Sol; Areia Branca; Aguda	Vila Nova de Gaia	1676
		1676
		1676
		1676
Sétima Arte; Granja	Vila Nova de Gaia	608
		608
Boca Mar	Vila Nova de Gaia	556
São Félix da Marinha	Vila Nova de Gaia	769
Baía; Sereias	Espinho	1711
		1711
Rua 37	Espinho	4320
Silvalde	Espinho	1616
Paramos Norte	Espinho	575
Paramos	Espinho	509

Verde; Azul; Salgueira; Carvalhido; Redonda; Loulé; Leixão;	Póvoa do Varzim	1422
		1422
		1422
		1422
		1422
		1422
Prainha; Senhor dos Navegantes; Barcos; Mar e Sol; Luzimar; Pôr do Sol; Atlântica; Mestre	Vila do Conde	565
		565
		565
		565
		565
		565
Olinda	Vila do Conde	5637
Azurara	Vila do Conde	1461
Árvore	Vila do Conde	1459
Mindelo	Vila do Conde	2330
Pinhal dos Elétricos; Laderça; Terra Nova; Congreira	Vila do Conde	375
		375
		375
		375
Vila Chã; Pucinho; Moreiró	Vila do Conde	460
		460
		460
Labruge	Vila do Conde	1206
Angeiras Norte	Matosinhos	2420
Barreiro; Angeiras Sul; Central	Matosinhos	447
		447
		447
Funtão	Matosinhos	585
Pedras Brancas	Matosinhos	806
Pedras do Corgo	Matosinhos	1405
Pedras da Agudela; Agudela	Matosinhos	953
		953
Quebrada; Marreco	Matosinhos	1364
Memória; Facho; Paraíso	Matosinhos	836
		836
Cabo do Mundo	Matosinhos	1013
Aterro	Matosinhos	1188
Azul; Boa Nova	Matosinhos	44
Fuzelhas; Beijinhos	Matosinhos	1032
Leça da Palmeira	Matosinhos	3796
Matosinhos	Matosinhos	7094
Internacional	Porto	508
Castelo do Queijo	Porto	256
Aquário; Homem do Leme	Porto	664
		664

Table 18 - Data from North's beaches

Source: (APA, 2018)

Beach selection

Caption:

Beach name, Number of sellers, average visitors, itinerary distance, time go through all the beaches

North

Leça da Palmeira (1) 3796, Matosinhos (2) (7094), 5.8km, 13 min

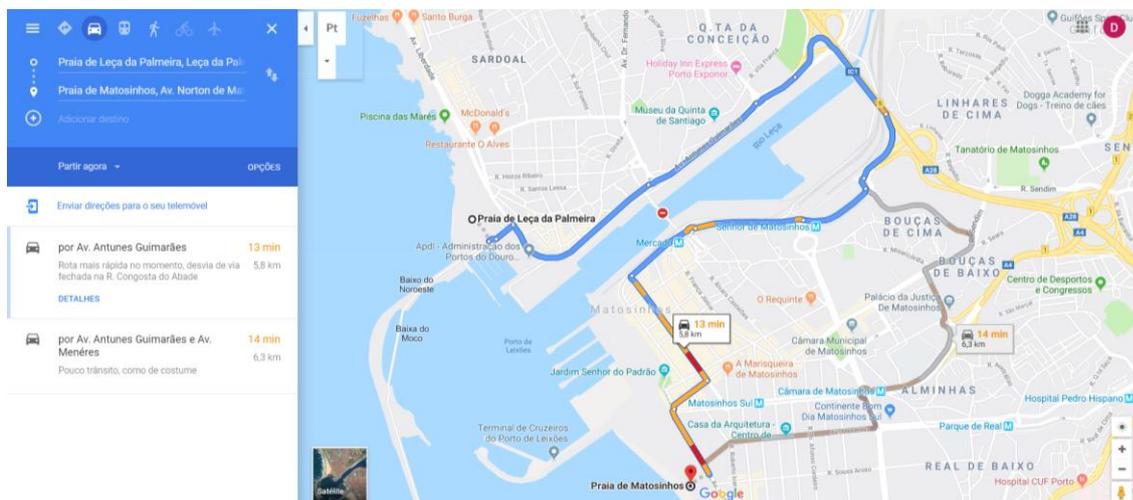


Figure 9 - North's itinerary number 1
Source: Google maps

Olinda (1) (5637), Azurara (1) (1461), Mindelo (2330), Árvore (1459), Angeiras (1) (2420),

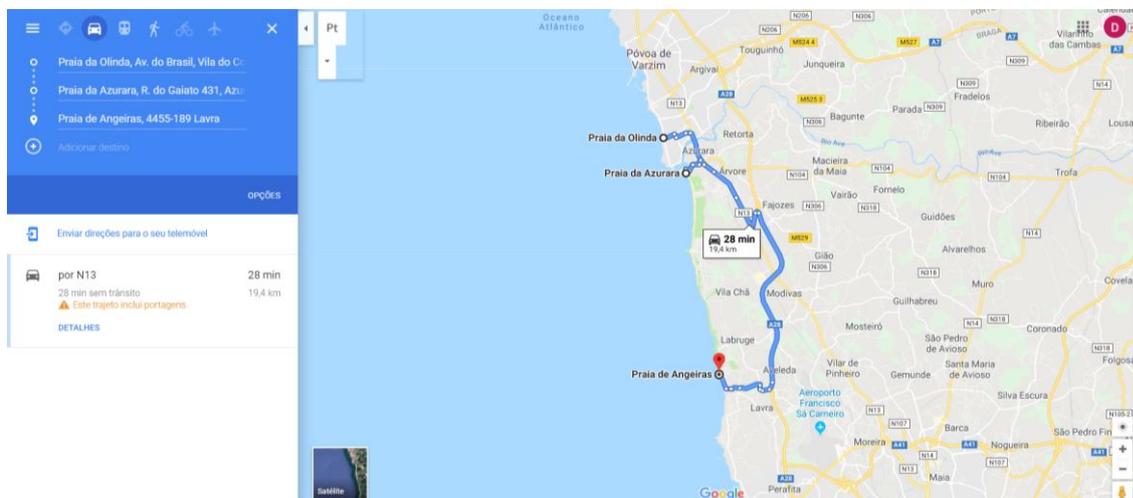


Figure 10 - North's itinerary number 2
Source: Google maps

Moledo (1) (4373), Vila Praia de Âncora (1) (2230), 4.8km, 9min

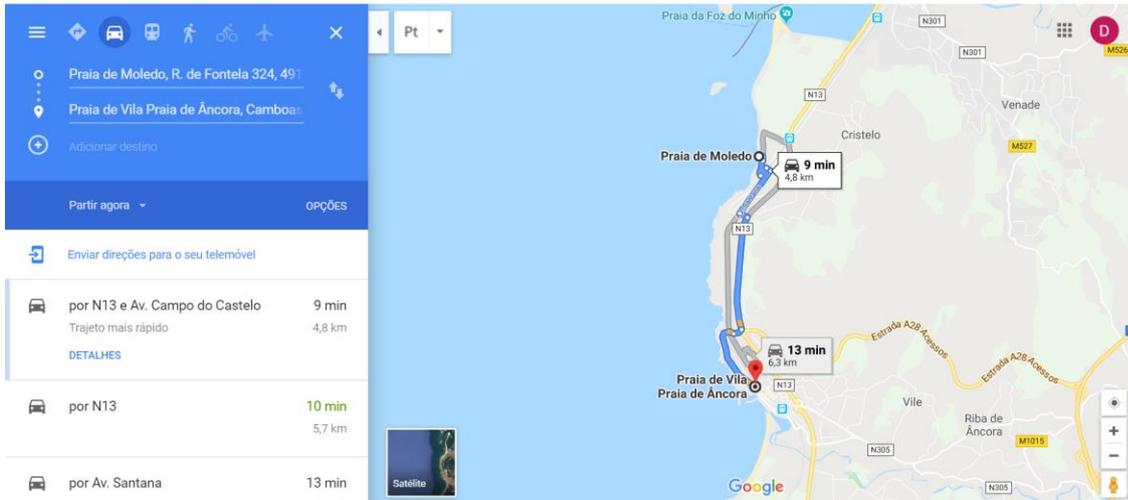


Figure 11 - North's itinerary number 3
Source: Google maps

Suave Mar (1) (2949), Apúlia (1) (3207), 13.9km, 16min

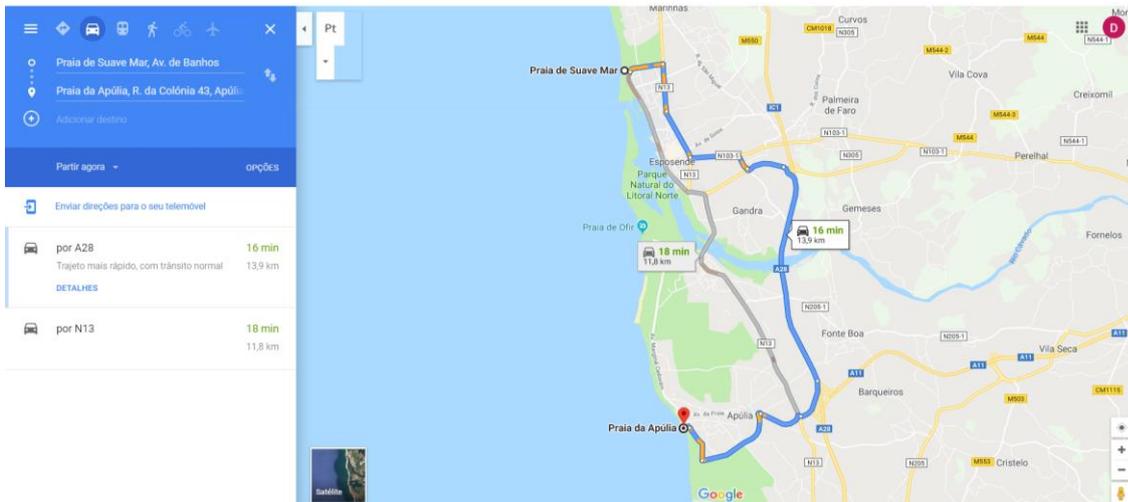


Figure 12 - North's itinerary number 4
Source: Google maps

Sereia da Costa Verde (1) (2965), Canide (1) (2965), 600m, 1 min

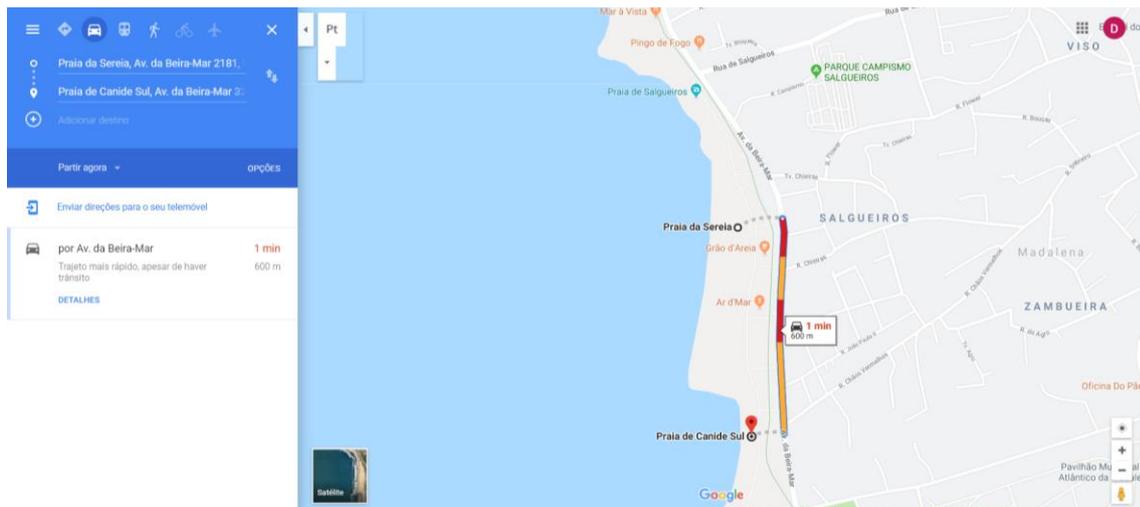


Figure 13 - North's itinerary number 5
Source: Google maps

Center

Esmoriz/ Barrinha (1) (3034), Furadouro (1) (4900), Torreira (1) (4031), 30.1km, 40min

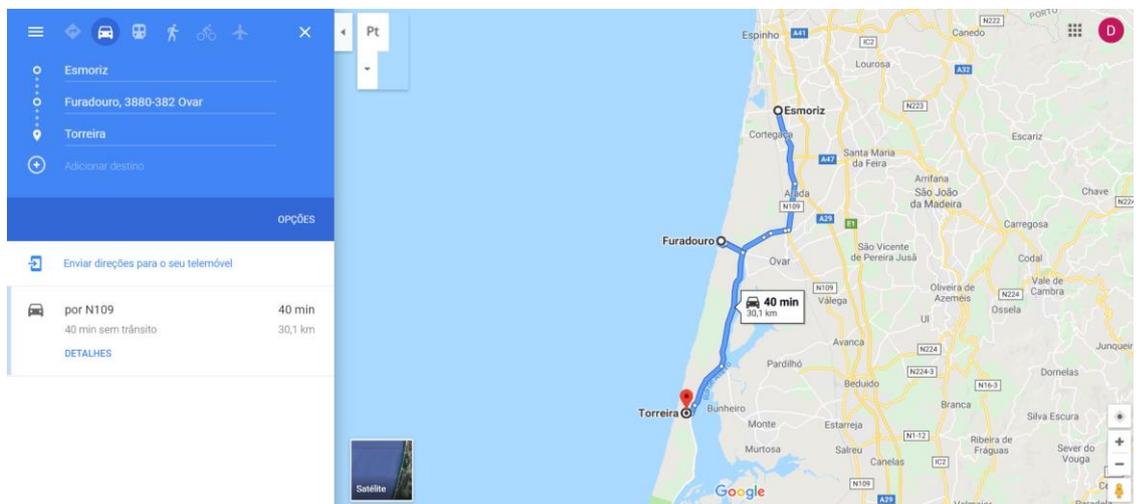


Figure 14 - Center's itinerary number 1
Source: Google maps

Barra (1) (5166), Costa Nova(1) (3360), Mira (1) (4900), 22.3km, 33 min

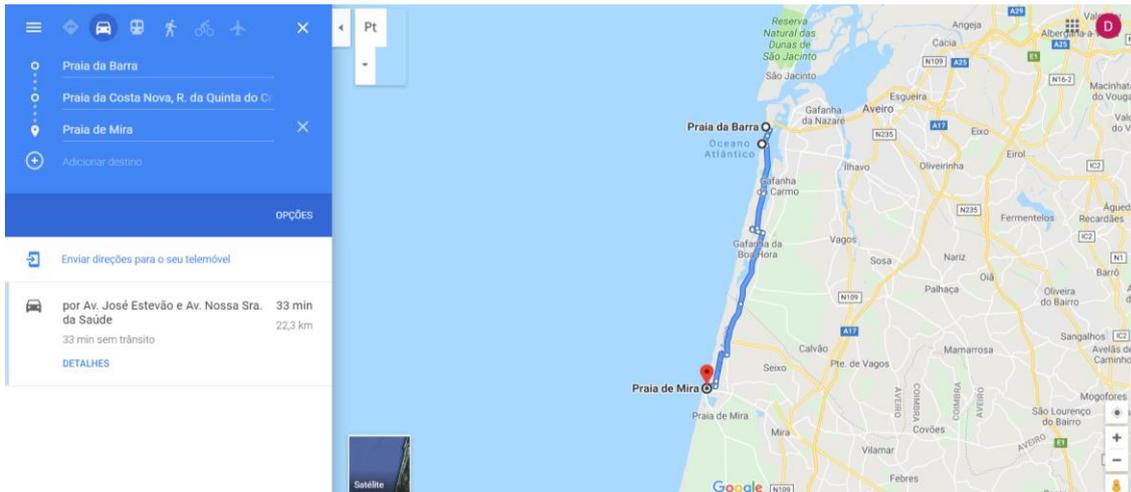


Figure 15 - Center's itinerary number 2
Source: Google maps

Pedrogão (1) (5633), Vieira (1) (4219), Velha (1) (2080), Paredes da Vitória (1) (3750), 29.2km, 31min

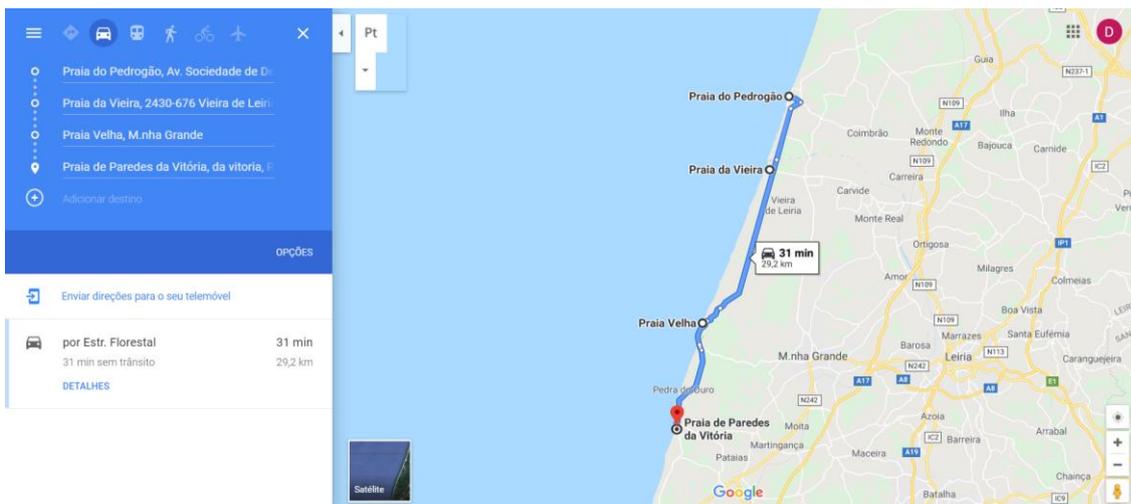


Figure 16 - Center's itinerary number 3
Source: Google maps

Tocha (1) (3237), Quiaios (1) (5188), Buarcos/Figueira da Foz (2) (9156), 30.6km, 41min

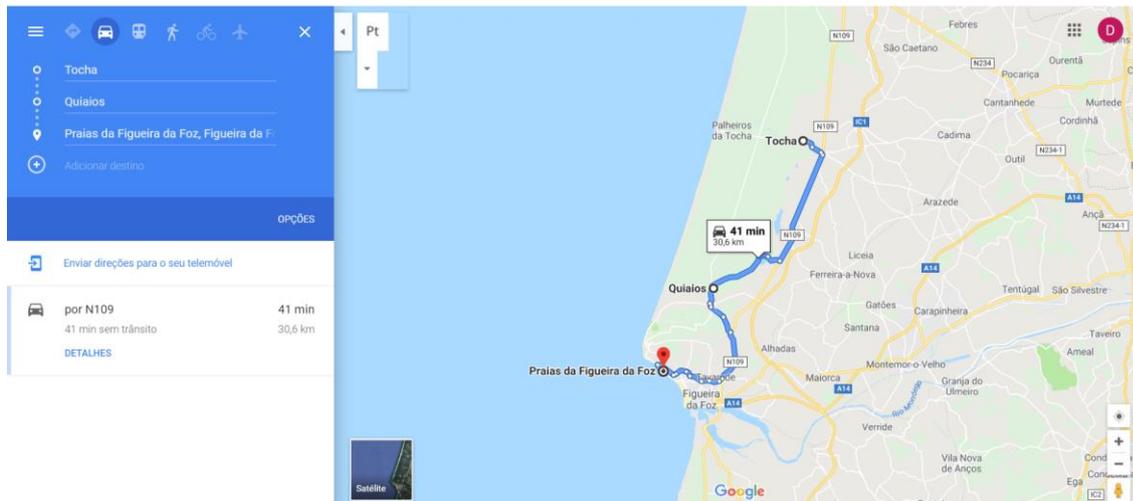


Figure 17 - Center's itinerary number 4
Source: Google maps

São Martinho do Porto (1) (5800), Nazaré (2) (8100), 14.2km, 19 min

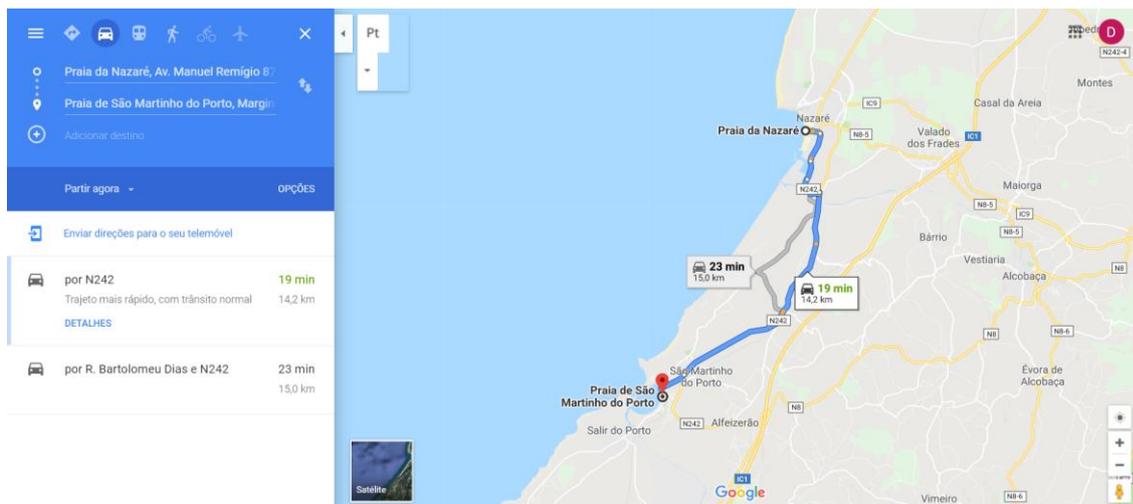


Figure 18 - Center's itinerary number 5
Source: Google maps

Baleal Norte (1) (2050), Baleal - Campismo (1) (2340), Cova da Alfarroba (1) (2900), Peniche de Cima (1) (2900), Molhe Leste (1) (2100), 11.5km, 20 min

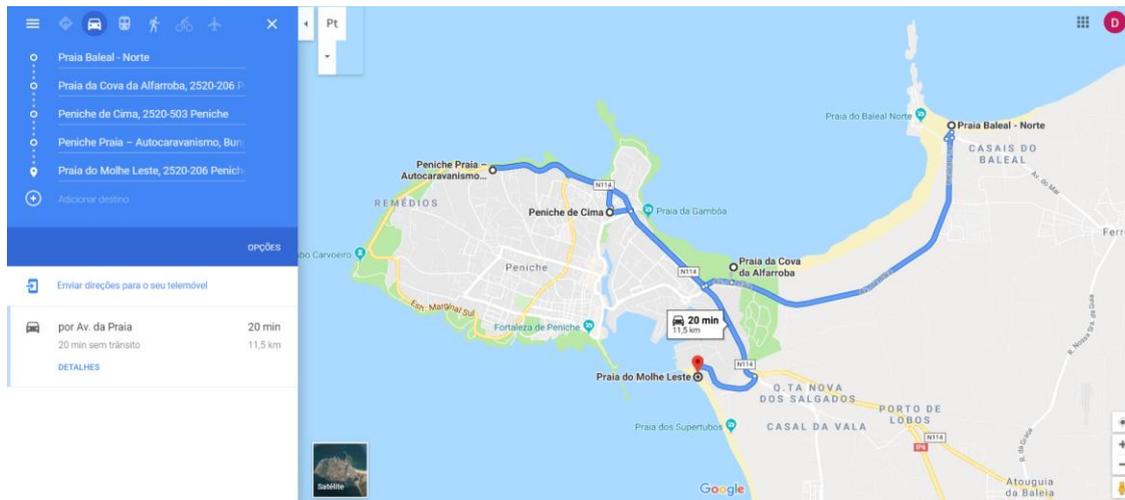


Figure 19 - Center's itinerary number 6

Source: Google maps

Santa Rita (1) (2635), Mirante (1) (2300), Azul (1) (3350), Foz do Sizandro (2020), 11.7km, 20 min

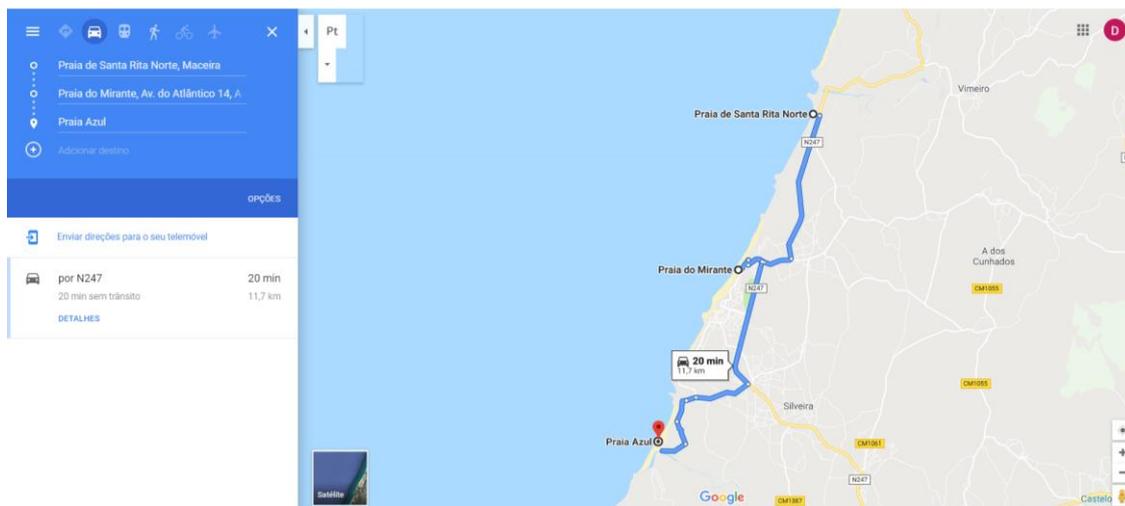


Figure 20 - Center's itinerary number 7

Source: Google maps

Lisbon Metropolitan Area

Saúde (1) (4730), Fonte da Telha (2) (8335), 9.1km, 13 min

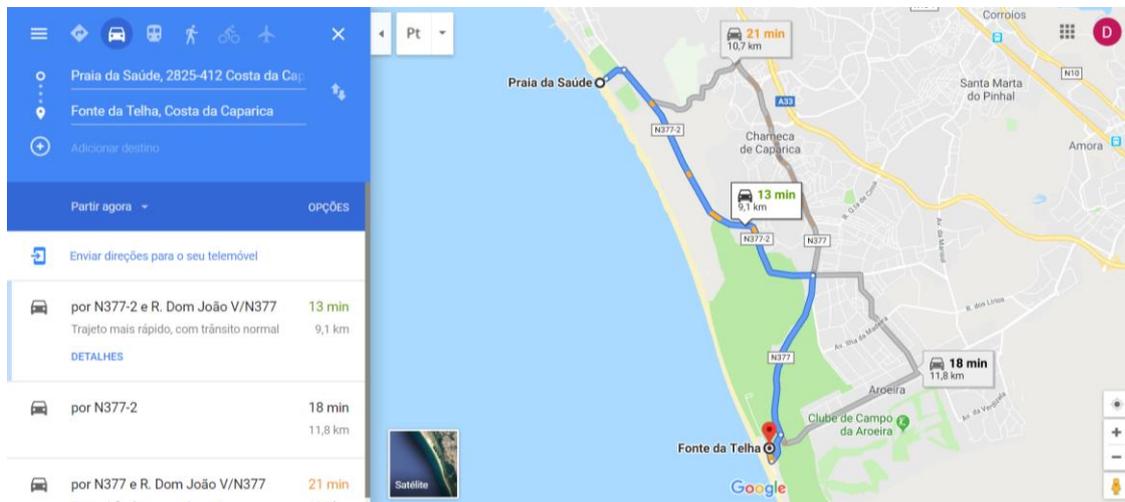


Figure 21 - Lisbon's itinerary number 1
Source: Google maps

Albarquel (1) (5100), Figueirinha (1) (2700), Portinho da Arrábida (1) (2600), 9.1km, 17 mins

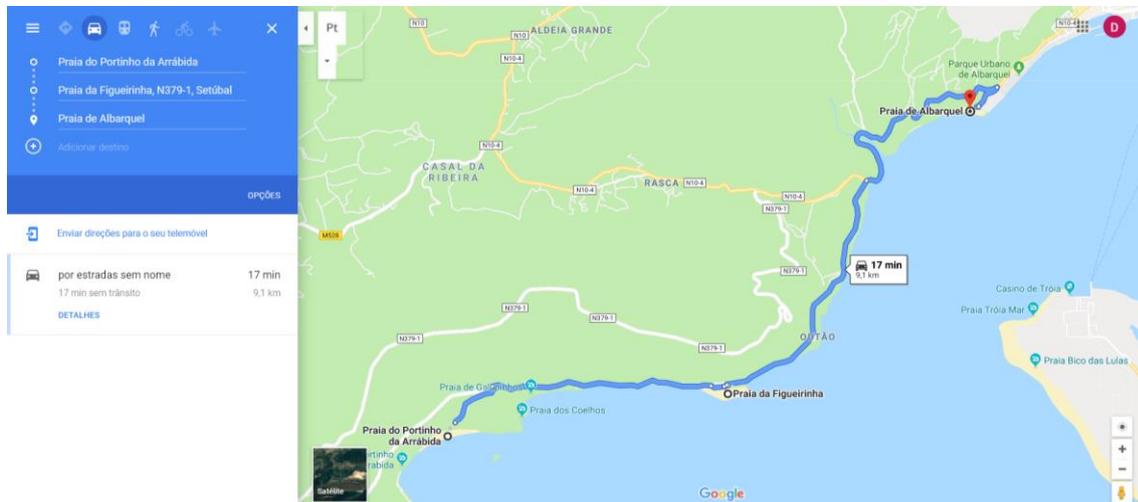


Figure 22 - Lisbon's itinerary number 2
Source: Google maps

Alentejo

Tróia – Galé (1) (5000), Bico das Lulas (1) (4950), Tróia Mar (1) (3000), 2km, 6 min

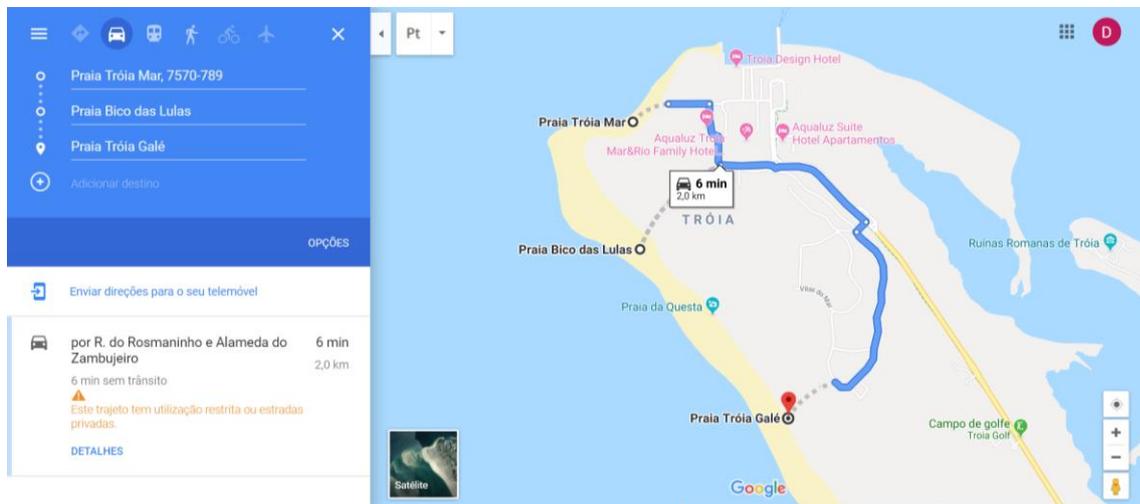


Figure 23 - Alentejo's itinerary number 1

Source: Google maps

Comporta (1) (2500),Carvalho (1) (2500), Pego (1) (2500),18.7km, 24min

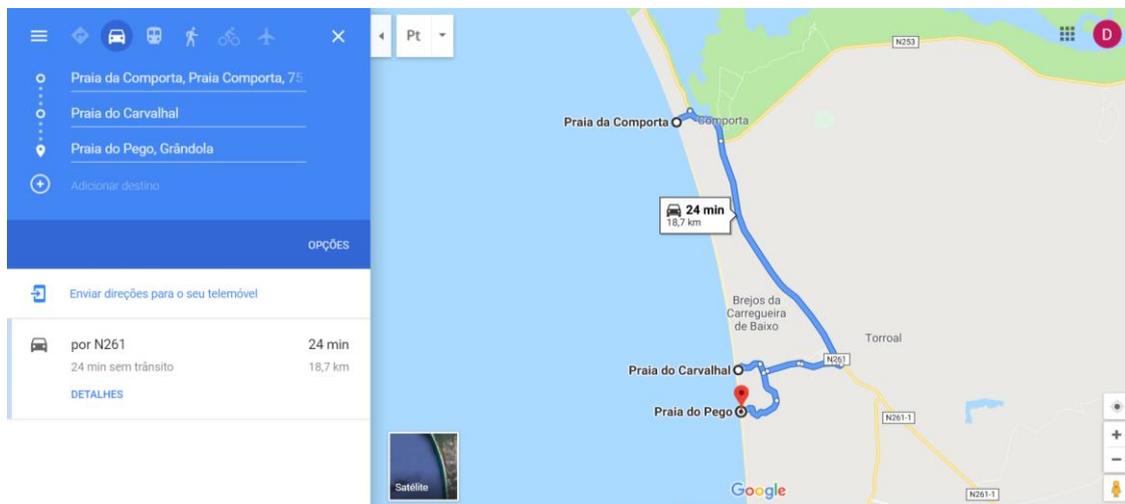


Figure 24 - Alentejo's itinerary number 2

Source: Google maps

Costa de Santo André (3000), Melides (3000), 2.3km, 10 min

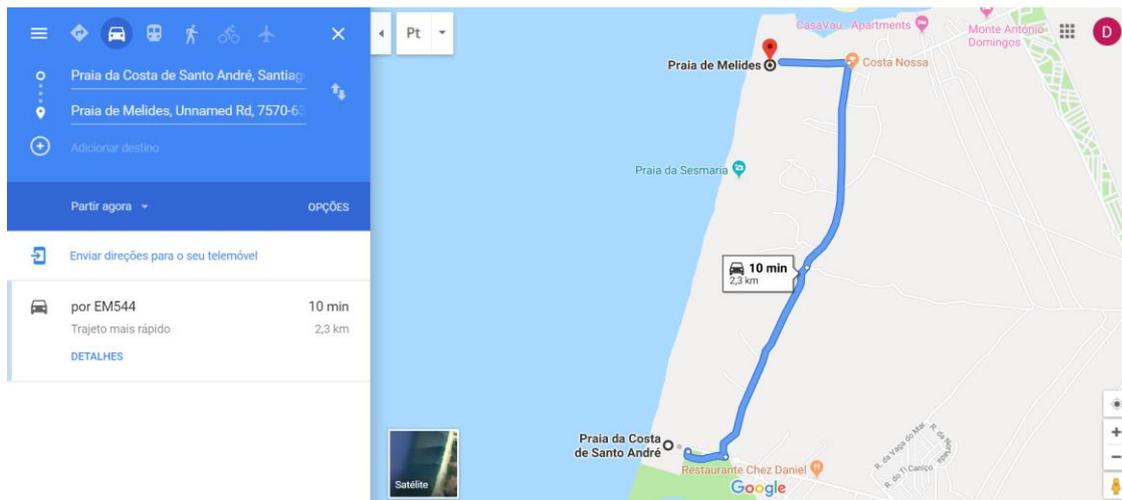


Figure 25 - Alentejo's itinerary number 3
Source: Google maps

Algarve

Rocha baixinha (1500), rocha baixinha nascente (1) (2800), rocha baixinha poente (1) (1150),
4km, 13min

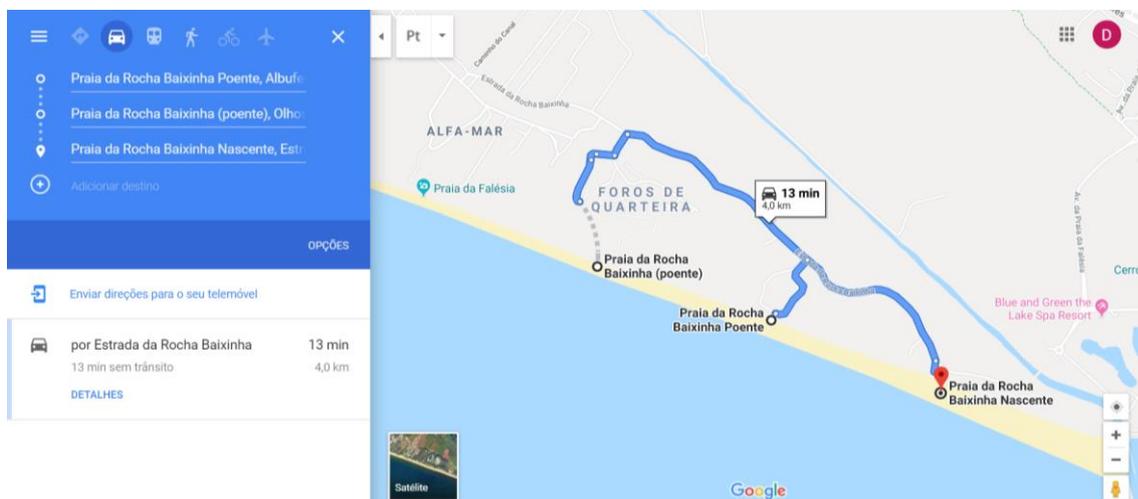


Figure 26 - Algarve's itinerary number 1
Source: Google maps

Peneco (1) (2900), Armação de Pera/Barcos (2) (10800), 13.4km, 19 min

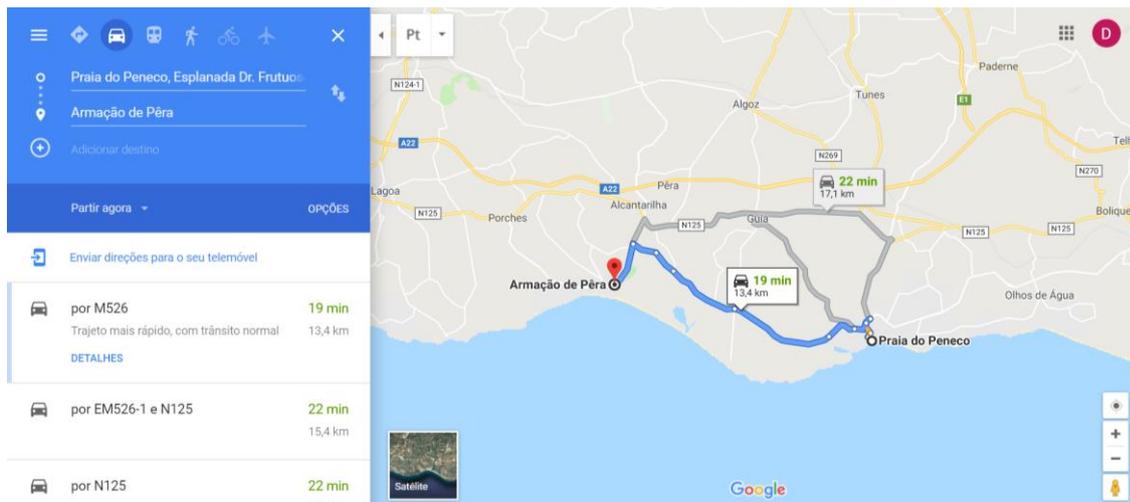


Figure 27 - Algarve's itinerary number 2
Source: Google maps

Quarteira (2) (6600), Vilamoura (1) (5000), 4.1km, 14min

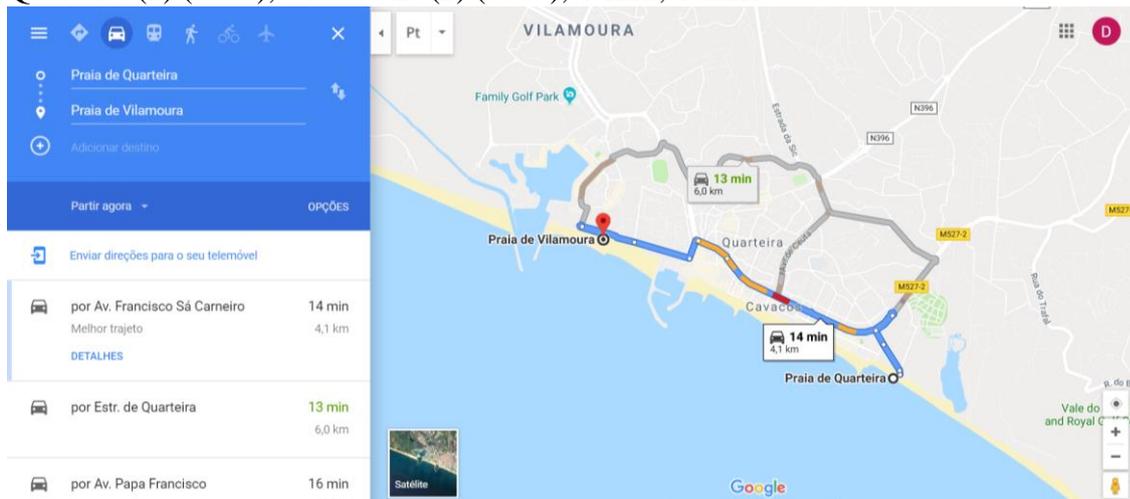


Figure 28 - Algarve's itinerary number 3
Source: Google maps

Alvor-Nascente (2) (8000), Alvor-Poente (1) (3800), Rocha (2) (9500), 7.5km, 17min

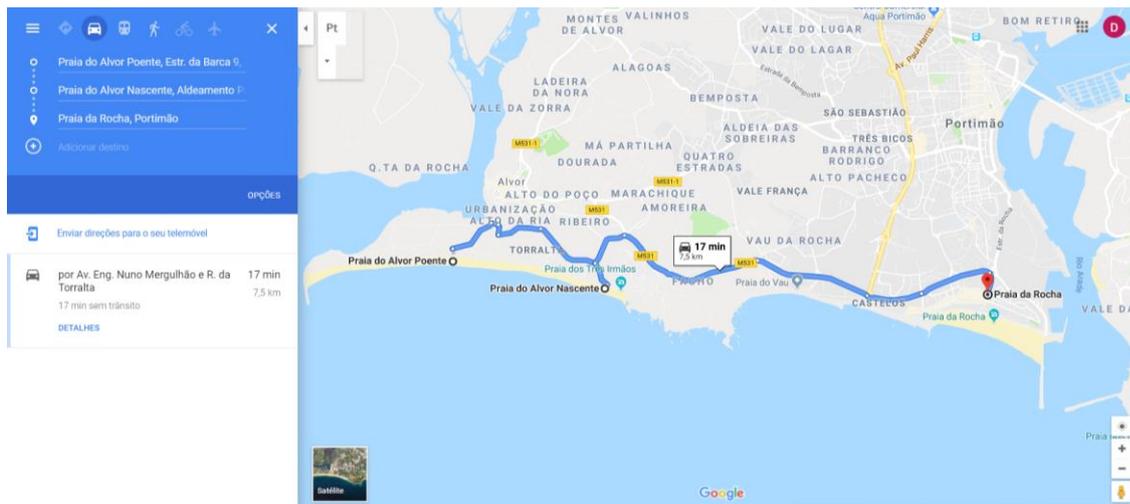


Figure 29 - Algarve's itinerary number 4
Source: Google maps

Luz (1) (3600), Meia praia (2) (16000), 9.3km, 15 min

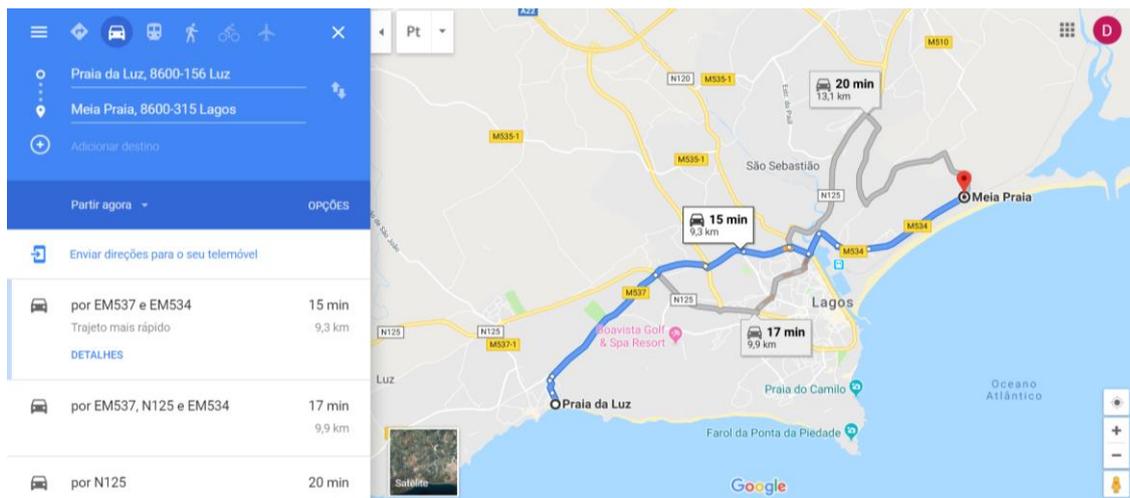


Figure 30 - Algarve's itinerary number 5
Source: Google maps

Market Valuation

Captainship / Products	Bolas de Berlim	Other foods (Popcorn, American Cookies, Fries)	Natural products (Fruit and others)	Bottled water and refrigerants	Ice Cream	Total number of licenses
North						
Aveiro						
Caminha						3
Douro	35	2				37
Figueira da Foz						0
Leixões	8	10	0	4	1	23
Póvoa do Varzim						0
Viana do Castelo						0
Vila do Conde	36	1				37
North's Total	79	13	0	4	1	100
% of licenses per type	81%	13%	0%	4%	1%	
Center						
Cascais						
Lisboa*	46	16	6	39	4	111
Nazaré	8	4	2	2		16
Peniche					12	12
Setúbal						40
Sines						48
Center's Total	54	20	8	41	16	227
% of licenses per type	39%	14%	6%	29%	12%	
% of licenses per type in Lisbon region	41%	14%	5%	35%	4%	
South						
Faro	35	3	5	2		45
Lagos	40	17	7			64
Olhão	9					9
Portimão	58		5			63
Tavira	11	4	4			19
V R S A						0
South's Total	153	24	21	2	0	200
% of licenses per type	77%	12%	11%	1%	0%	
Islands						
Porto Santo**	2	2	2	2	2	10
Total	288	59	31	49	19	446
% of licenses per type	65%	13%	7%	11%	4%	100%
	58%		8%			
<p>*In this Captainship sellers can sell more than 1 type of food, so for ratio purposes, for every product they can sell 1 license will be counted</p> <p>Assumption 1: The % of licenses per type do not include non-food items</p> <p>Assumption 2: The total nr of licenses in Setúbal and Sines is based on other captainships' relation between nr of beaches and licenses in the South</p> <p>Assumption 3: The % of licenses per type do not include captainships with no specific data in terms of products</p>						

Table 19 - License distribution
Source: Author

Average selling price

The average selling price is assumed to be the average price of all types of products, weighted by the number of licenses attributed in the area. This assumption is based on the fact that more licenses are attributed to those products with higher demand.

To calculate the price of every product a geometrical average was made between the minimum and the higher price recorded, with the exception of fruit price that was an average of all known fruit sellers presented on the market analysis above.

The attribution of the average selling price was made for every region that had available data with the percentage of license per type of product times the price previously mentioned, resulting in a ponderation that is summed concluding on the average selling price.

The prices range from € 1.35 in the North, mainly due to the cut of “Bolas de Berlim” and other food products to € 1.46 in the Center where there is a more diversified array of goods.

To calculate the price from 2019 onwards, two variables were included, the growth in licenses for fruit selling and the consumer price index (CPI) predictions from Banco de Portugal (Banco de Portugal, 2019) which culminates in a 5% price growth from 2018 to 2021. Assuming that fruit selling is growing 10% yearly, as fruit consumption is rising since 2012 consecutively at similar rates, this market should follow the trend. The second assumption is that other types of licenses decrease evenly in percentage (2.5%).

Average Selling Price	Minimum	Maximum	Average Price	% of licenses in Algarve	Ponderation		
Bolas de berlim	1,20	1,50	1,35	77%	1,03		
Other food products	1,00	1,50	1,25	12%	0,15		
Natural products (Fruit and others)		-	2,25 €	11%	0,24		
Bottled water and refrigerants	1,00	2,00	1,50	1%	0,02		
Ice Creams	1,00	2,20	1,60	0%	-		
Avg. Selling price			1,59	100%	1,43		
Company	Filhos da Fruta	Fruits 4 Life	Fruta Mar	Fruta da Ilha	Average		
Fruit prices	1,75	3	2	2,25	2,25 €		
Average selling price prediction							
2018 Nr of licenses	2019 Nr of licenses %		Price	Ponderation	2019 Nr of licenses		
288	281	64%	1,36	0,87	274		
59	58	13%	1,26	0,17	56		
31	34	8%	2,27	0,18	38		
49	48	11%	1,51	0,16	47		
19	19	4%	1,61	0,07	18		
446	439	100%		1,45 €	432		
	2019	2020	2021				
Predicted CPI growth for Portugal	0,80%	1,20%	1,30%				
<i>Assumption 1: The average selling price is assumed to be the average price of all types of products, weighted by the number of licenses attributed in the area.</i>							
This assumption is based on the fact that more licenses are attributed to those products with higher demand and the other way around.							
<i>Assumption 2: Fruit selling growth is equal to 10%</i>							
<i>Assumption 3: Decrease of other licenses is evenly distributed 2,50%</i>							
% of licenses in Lisbon Region	Ponderation	% of licenses in the Center	Ponderation	% of licenses in the North	Ponderation	Overall % of sellers	Ponderation
41%	0,56	39%	0,52	81%	1,10	65%	0,87
14%	0,18	14%	0,18	13%	0,17	13%	0,17
5%	0,12	6%	0,13	0%	-	7%	0,16
35%	0,53	29%	0,44	4%	0,06	11%	0,16
4%	0,06	12%	0,18	1%	0,02	4%	0,07
100,0%	1,45	100,0%	1,46	100,0%	1,35	100,00%	1,43 €
	2020		2021				
%	Price	Ponderation	Nr of licenses	%	Price	Ponderation	
63%	1,38	0,87	267	63%	1,40	0,87	
13%	1,28	0,17	55	13%	1,29	0,17	
9%	2,30	0,20	41	10%	2,33	0,23	
11%	1,53	0,16	45	11%	1,55	0,17	
4%	1,63	0,07	18	4%	1,65	0,07	
100%		1,47 €	426	100%		1,50 €	
Price growth 2018-2021	5%						

Table 20 - Beach ambulant selling average selling price calculation
Source: Author

Sales conversion

The conversion of sales can diverge throughout the country. Yet to know the market size it is critical to understand how many people are on the beach and what is the ratio between people and the number of sales of food products.

To estimate this rate, information was gathered and in one specific beach was possible to find data concerning two types of licenses, “Bolas de Berlim” and fruit, that will serve as a base to extrapolate nationwide.

Regarding fruit, Fruta Mar owner claims to sell on average 200 boxes (Lusa, 2015), dividing those by the number of daily visitors (1750) of the beach, it represents 11.43% of the total.

Concerning “Bolas de Berlim”, data from Visão indicated that the daily sales of a worker were 160 units (Carvalho, 2014), summing 9.14% of the population.

Since on average there are 3 licensed sellers in Algarve's beaches, using Cabanas beach as the example, the rate of sales conversion should be $11.43\% + 9.14\% + 9.14\% = 29.7\%$, being this the average the ratio between the number of sales and people at the beach that will be used to calculate the market size.

Beach name	Nr of people	Average fruit sales	Ratio- People on the beach/ Nr of fruit sales			Beach name	Nr of people	Average Bolas de Berlim sales	Ratio- People on the beach/ Nr of Bolas de Berlim sales
Fuseta	883	200	22,65%			Cabanas	1750	160	9,14%
Faro	7400	200	2,70%						
Barril	1950	200	10,26%						
Cabanas	1750	200	11,43%						
Tavira	2550	200	7,84%						
Total	2907	200	6,88%			Conversion rate in Cabanas' beach			29,7%
<i>Assumption 1: Since there are on average 3 Licensed sellers in Algarve's beaches, using Cabanas beach as the example, the rate of sales conversion should be $11,43\% + 9,14\% + 9,14\% = 29,7\%$. On average 29,7% of the people at the beach would buy products.</i>									

Table 21 - Sales conversion calculation

Source: Author

License Attributions

To reach the market size it is required to see how many sellers exist, there is data from 62% of the captainships, for example in Alentejo and Vila Real de Santo António there is no data, meaning that the number of sellers should be estimated.

Firstly the valuation was done by crossing the number of licenses with the number of beaches in Tavira, Portimão, Lagos, Faro and Olhão, than the number of beaches from the areas with missing information were multiplied by the average calculated above. That culminated in an average number of licenses per beach in Algarve and Alentejo of 2,66, however, some beaches might not have a minimum of visitors to sustain a licensed seller, so the average number of licenses per beach should be equal or higher than 2,66.

To sustain a seller in one beach is assumed that he should sell at least €160 of products, since he would need to pay the manufacturer, sometimes the company it represents and himself for the selling, according to the news in “Observador”, sellers get around 40% in commission (Carvalho, 2014), though this percentage seems to be higher than the usual, so the calculus was made with a 30% rate. Assuming that €48 day is the minimum to sell during 8 hours on the beach (€ 6 an hour) and the average price of products sold on the beach is €1.43, he would need to sell at least 112 units. Assuming that on average 29.7% is the conversion rate, a beach should have at least 377 persons during the selling hours to sustain a seller.

By counting the beaches in Algarve with over 377 people and dividing by the number of licenses, the average license per beach is 3,35 which confirms the calculus above, meaning that there are some beaches that are too small to be profitable. In Alentejo, the average is 2,83 as most of the beaches are quite long and have enough people there should be at least one seller on every beach.

Average number of licenses per beach in Algarve and Alentejo according to the number of licenses per captainship and number of beaches									
	Tavira	Portimão	Lagos	Faro	Olhão	VRSA*	Setúbal*	Sines*	Average
Number of beaches per captainship	4	49	29	12	7	8	15	18	
Number of licenses per captainship	19	63	64	45	9	21	40	48	
Nr of licenses per beach	5	1	2	4	1	3	3	3	2,66
<i>Assumption 1: In VRSA, Setúbal and Sines the number of licenses is predicted based on the average number of licenses for each beach in Algarve.</i>									
Minimum of visitors to sustain a seller (X)									
Minimum Sales (€)									
Nr of people at the beach									
Conversion Rate									
Avg price (€)									
160	=	X	*	30%	*				1,43 €
X	=	377		Minimum nr of sales					112
<i>Assumption 2: To sustain a seller in one beach, he should sell at least 160 euros.</i>									
					Number	Total			
Licenses per beach in Algarve according to the criteria "more than 377 people in the beach"					66	3,35			
Licenses per beach in Alentejo according to the criteria "more than 377 people in the beach"					31	2,83			

Table 22 - License attributions

Source: Author

Market Valuation

	Algarve	Alentejo	Lisbon Region	Center	North	Total
Nr of people in licensed beaches	161 138,00	66 500,00	74 660,00	153 253,00	143 269,00	598 820,00
Nr of buyers	47 881,01	19 760,00	22 184,69	45 538,03	42 571,36	177 935,09
Selling Price	1,43	1,43	1,45	1,46	1,35	1,43 €
Daily sales in euros	68 661,36	28 186,80	32 077,86	66 505,19	57 273,84	252 705,04 €
Season sales	6 179 522,60 €	2 536 811,84 €	2 887 007,07 €	5 985 466,81 €	5 154 645,60 €	22 743 453,92 €
<i>Assumption 1: Current sellers receive 30% in comission of what they sell</i>						
<i>Assumption 2: 48 euros is the least sellers can receive a day, which corresponds to 6 euros an hour</i>						
<i>Assumption 3: The ratio between the number of sales and people on the beach is 30%</i>						
<i>Assumption 4: The bathing season lasts on average 30 days</i>						
<i>Assumption 5: The Average selling price of Alentejo is calculated with the Overall portuguese average, since there is no specific data from that region</i>						
<i>Assumption 6: Lisbon Region includes Lisbon and Cascais Captainship</i>						
Nr Buyers / Selling Price	-5,00%	0%	5,00%			
-5,00%	20 616 271,17 €	21 701 338,07 €	22 786 404,98 €			
0%	21 701 338,07 €	22 743 453,92 €	23 985 689,45 €			
5,00%	22 786 404,98 €	23 985 689,45 €	25 184 973,92 €			

Table 23 - Market Valuation

Source: Author

Projected Growth

	People at the beach (Daily)	Nr of buyers	Avg selling price	Daily Sales	Season Sales	Growth rate
2019	623 970	185 408	1,45 €	267 952,37 €	24 115 713,12 €	5,69%
2020	650 177	193 196	1,47 €	284 144,05 €	25 572 964,19 €	5,70%
2021	677 485	201 310	1,50 €	301 778,02 €	27 160 021,39 €	5,84%
2018-2021						16,26%
Predicted tourism growth rate						
4,20%						

Table 24 - Projected Growth

Source: Author

Age (years)	Disposable Income	Gender	Healthy Concerns	Sustainability Concerns
25-35	Medium/ High	Male	Medium/High	Medium/High Low
			Low	Medium/High Low
		Female	Medium/High	Medium/High Low
			Low	Medium/High Low
	Low	Male	Medium/High	Medium/High Low
			Low	Medium/High Low
		Female	Medium/High	Medium/High Low
			Low	Medium/High Low

Age (years)	Disposable Income	Gender	Healthy Concerns	Sustainability Concerns
35-44	Medium/ High	Male	Medium/High	Medium/High Low
			Low	Medium/High Low
		Female	Medium/High	Medium/High Low
			Low	Medium/High Low
	Low	Male	Medium/High	Medium/High Low
			Low	Medium/High Low
		Female	Medium/High	Medium/High Low
			Low	Medium/High Low

Age (years)	Disposable Income	Gender	Healthy Concerns	Sustainability Concerns
45-64	Medium/ High	Male	Medium/High	Medium/High Low
			Low	Medium/High Low
		Female	Medium/High	Medium/High Low
			Low	Medium/High Low
	Low	Male	Medium/High	Medium/High Low
			Low	Medium/High Low
		Female	Medium/High	Medium/High Low
			Low	Medium/High Low

Age (years)	Disposable Income	Gender	Healthy Concerns	Sustainability Concerns
>65	Medium/ High	Male	Medium/High	Medium/High Low
			Low	Medium/High Low
		Female	Medium/High	Medium/High Low
			Low	Medium/High Low
	Low	Male	Medium/High	Medium/High Low
			Low	Medium/High Low
		Female	Medium/High	Medium/High Low
			Low	Medium/High Low

Figure 31 - Definition of target segments

Source: Author

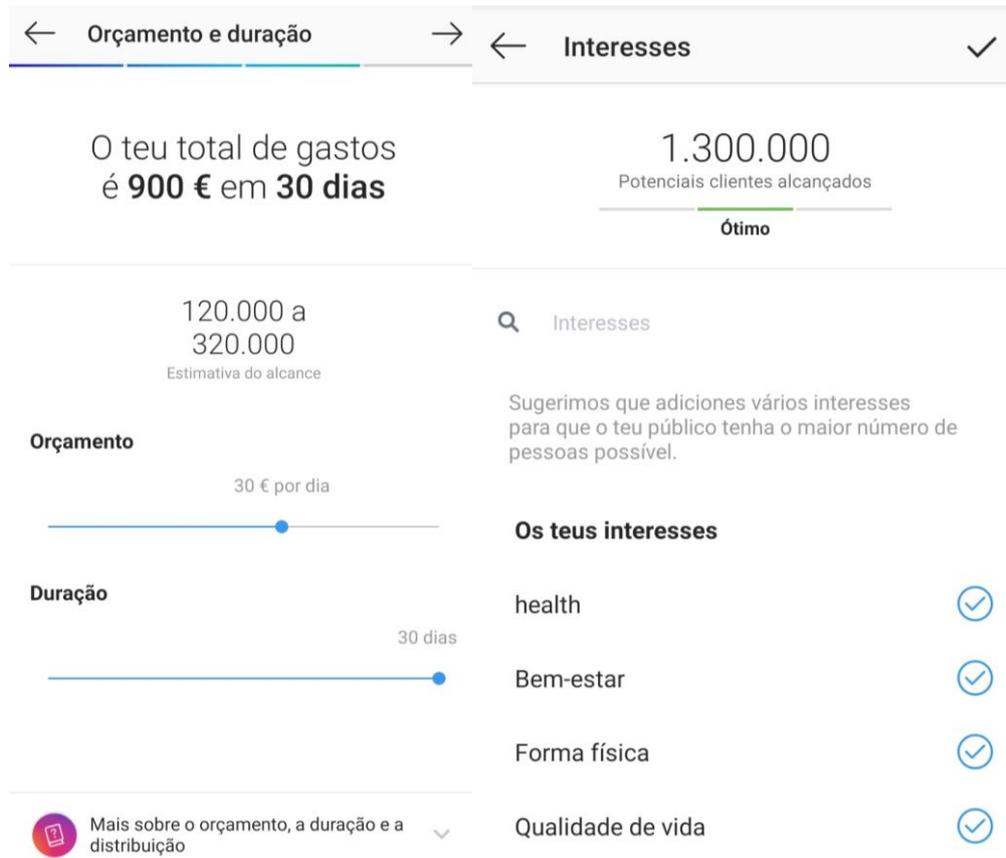


Figure 32 - Marketing costs
Source: Instagram

2020												
	January	February	March	April	May	June	July	August	September	October	November	December
Accountant												
Communications												
Electronic payments												
Marketing												
Restaurant services												
Stock management system												
Web site maintenance												
2020												
	January	February	March	April	May	June	July	August	September	October	November	December
General manager												
Regional managers												
Stock managers												
From 2020 onwards												
	January	February	March	April	May	June	July	August	September	October	November	December
Accountant												
Communications												
Electronic payments												
Marketing												
Restaurant services												
Stock management system												
Web site maintenance												
From 2020 onwards												
	January	February	March	April	May	June	July	August	September	October	November	December
General manager												
Regional managers												
Stock managers												

Table 25 - Map of the period of activity of personnel and services

Source: Author

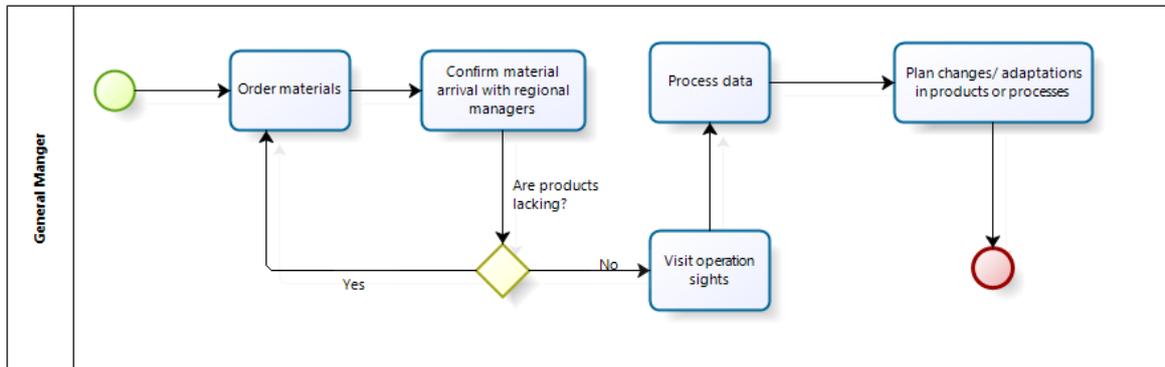


Figure 33 - General Manager process

Source: Author

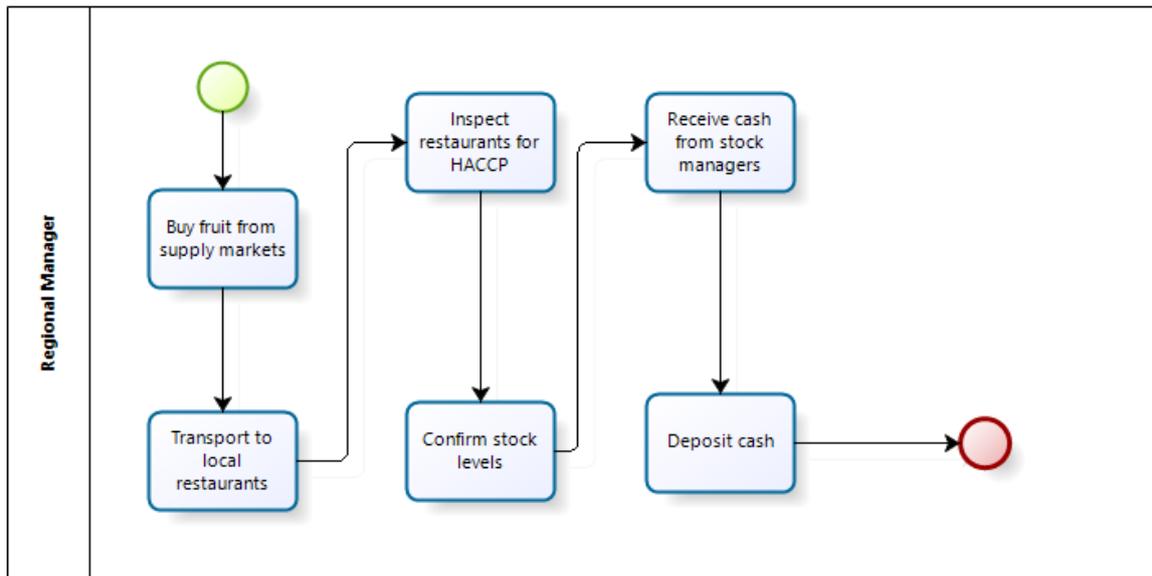


Figure 34 - Regional Managers' process
Source: Author

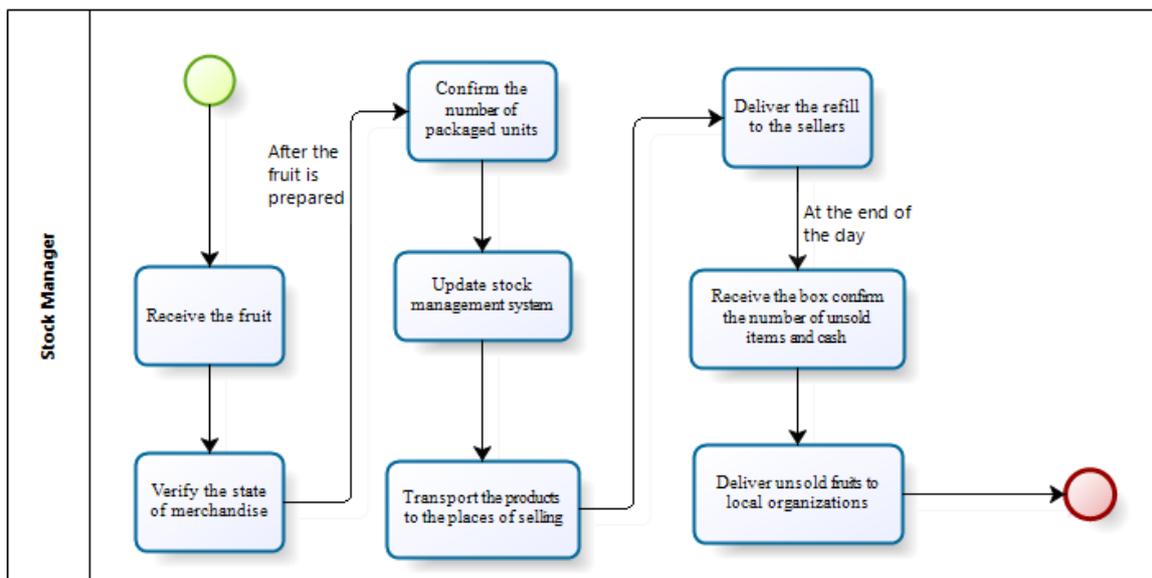


Figure 35 - Stock Managers' process
Source: Author

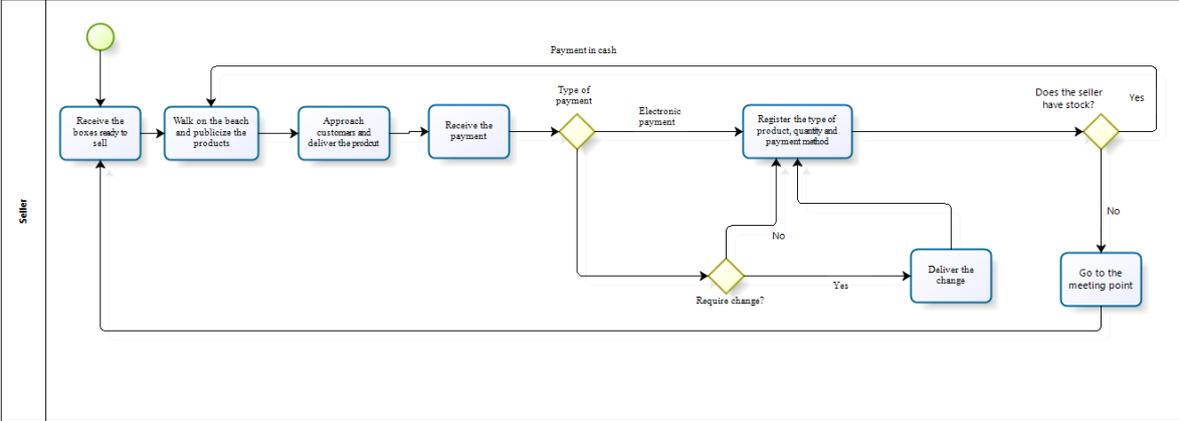


Figure 36 - Seller's process
Source: Author

Monetary Unit	Euros
1st year of activity	2020
Average receiving days	0
Services paying days (Marketing, Stock Management system)	0
Services paying days (Accounting, Restaurants, Eletronic Payments, Communications)	30
Average paying months - State	1
Average fruit stocking days	2,33
Average material stocking days	30
VAT - Sales	6,00%
VAT - COGS (Fruit and Toppings)	6,00%
VAT - COGS	23,00%
VAT - Supplies and Services	23,00%
Tangible Assets	
Depreciation - Basic Equipment	20,00%
Depreciation - Administrative Equipment	25,00%
Depreciation - Other Tangible Assets	25,00%
Intangible Assets	
Depreciation - Computer Programs	33,33%
Depreciation - Other Intangible Assets	33,33%
Income Tax	21%
Social Security (Company)	23,75%
Retentions of social security (Workers)	11%
Workers' IRS Retentions	15%
Social security for indepent workers	10%
Workers compensation fund	1%
Accidents Insurance	1%
Food subsidy	4,77 €
Cost allowance per km	0,36 €

RF (Risk Free)- Treasury bonds- national market (04/07/2019)	0,59%
Rm	6%
Market risk premium = (Rm-Rf)	5,64%
B unlevered Company Sector(damodaran)	0,28
$R_u = R_f + B_u(R_m - R_f)$	2,17%
Cf Growth rate in perpetuity (g)	1,30%
Loan interest rate	2,98%
WACC	2,32%

Sellers' working days	15
Stock managers' working days	15
Regional managers' working days	22
General manager's working days	22
Bathing season (months)	3

June active days	15
July active days	31
August active days	31
September active days	15

Table 26 - Assumptions of the Financial Plan

Source: Author

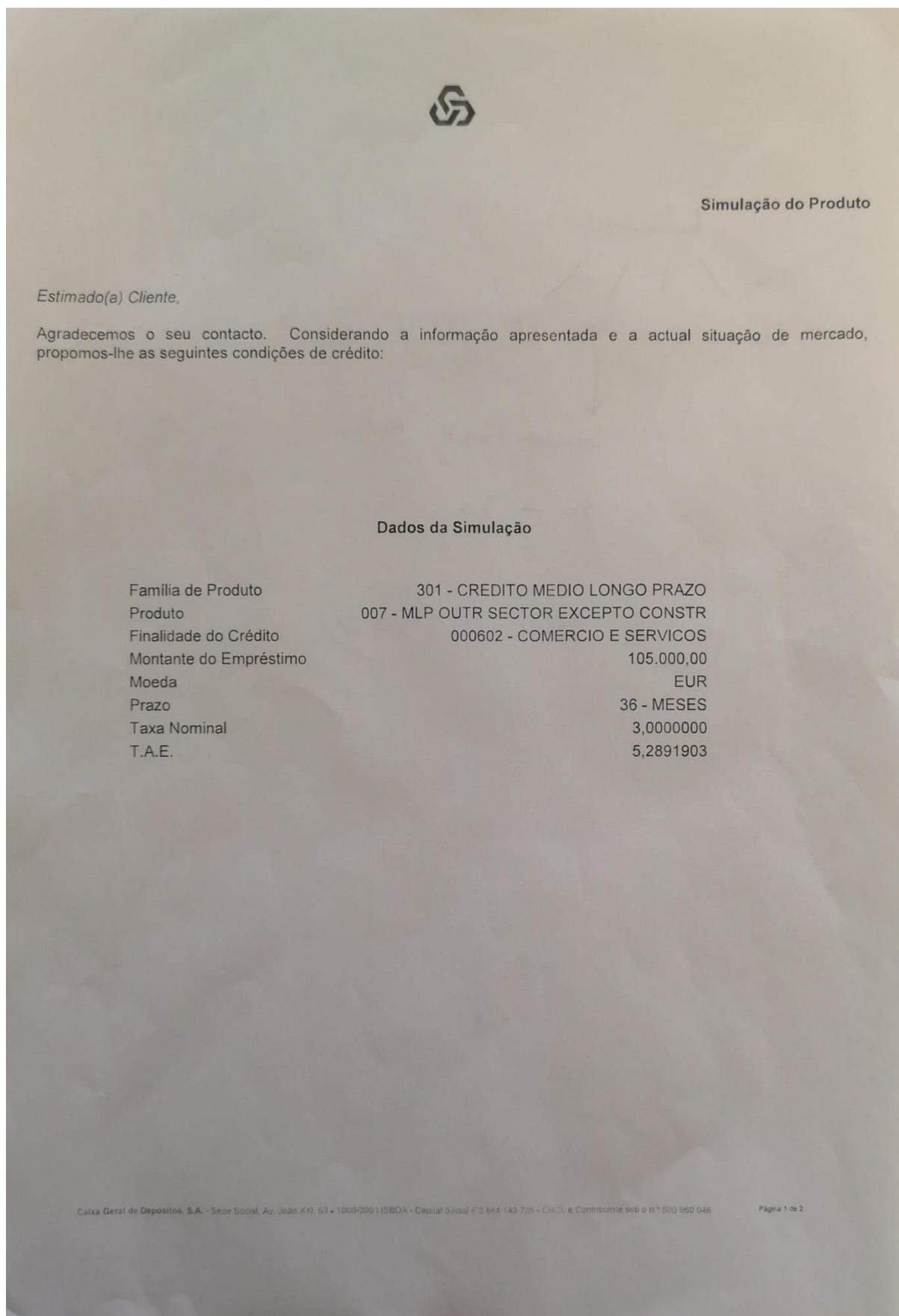


Figure 37 - Bank loan conditions
Source: Caixa Geral de Depósitos

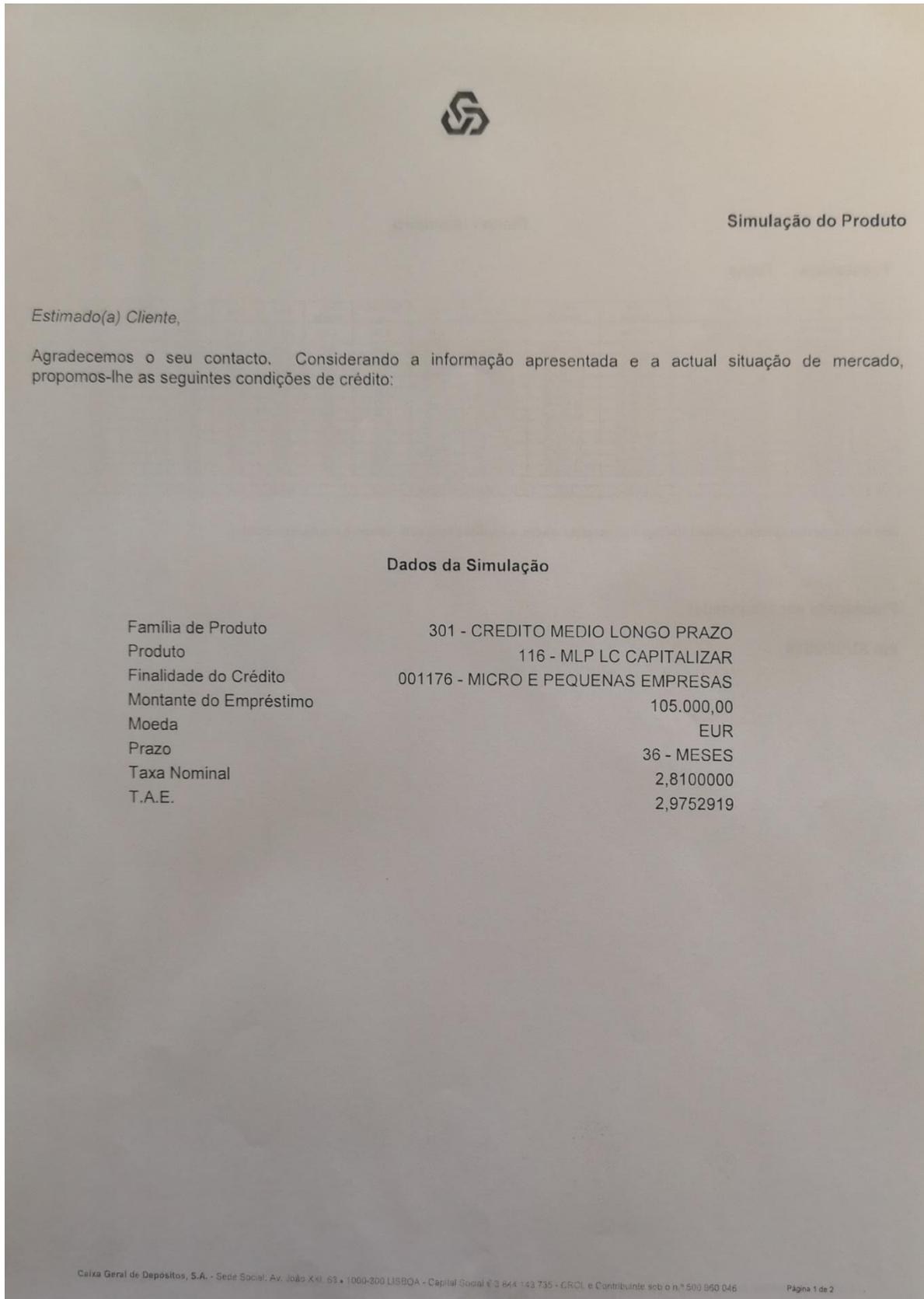


Figure 39 - Bank loan conditions (Program "Capitalizar")

Source: Caixa Geral de Depósitos



Plano Financeiro

Prestações: Todas

Ano / Prest	Data	Evento	Valor Líquido	Capital Vincendo	Capital	Juros	Bonificações	Cad. Encargo	Comi.	Desp.	Imp.	Cod. Seguro	Seguro
1/0	2019-07-31	COMISSÃO DE CONTRATO	273,00	0,00	0,00	0,00	0,00	C79	262,50	0,00	10,50		0,00
1/1	2019-10-31	VENC DE PRESTACAO	767,12	105.000,00	0,00	737,62	0,00	103	0,00	0,00	29,50		0,00
1/2	2020-01-31	VENC DE PRESTACAO	767,12	105.000,00	0,00	737,62	0,00	103	0,00	0,00	29,50		0,00
1/3	2020-04-30	VENC DE PRESTACAO	11.267,12	105.000,00	10.500,00	737,62	0,00	103	0,00	0,00	29,50		0,00
1/4	2020-07-31	VENC DE PRESTACAO	11.190,41	94.500,00	10.500,00	663,86	0,00	103	0,00	0,00	26,55		0,00
2/5	2020-10-31	VENC DE PRESTACAO	11.113,70	84.000,00	10.500,00	590,10	0,00	103	0,00	0,00	23,60		0,00
2/6	2021-01-31	VENC DE PRESTACAO	11.036,99	73.500,00	10.500,00	516,34	0,00	103	0,00	0,00	20,65		0,00
2/7	2021-04-30	VENC DE PRESTACAO	10.960,27	63.000,00	10.500,00	442,57	0,00	103	0,00	0,00	17,70		0,00
2/8	2021-07-31	VENC DE PRESTACAO	10.883,56	52.500,00	10.500,00	368,81	0,00	103	0,00	0,00	14,75		0,00
3/9	2021-10-31	VENC DE PRESTACAO	10.806,85	42.000,00	10.500,00	295,05	0,00	103	0,00	0,00	11,80		0,00
3/10	2022-01-31	VENC DE PRESTACAO	10.730,14	31.500,00	10.500,00	221,29	0,00	103	0,00	0,00	8,85		0,00
3/11	2022-04-30	VENC DE PRESTACAO	10.653,42	21.000,00	10.500,00	147,52	0,00	103	0,00	0,00	5,90		0,00
3/12	2022-07-31	VENC DE PRESTACAO	10.576,71	10.500,00	10.500,00	73,76	0,00	103	0,00	0,00	2,95		0,00
Total			111.026,41	0,00	105.000,00	5.532,16	0,00		262,50	0,00	231,75		0,00

Esta simulação não constitui qualquer obrigação de conceder crédito, e é válida para a data, valores e condições indicadas.

Processado por computador

em 31/07/2019

Figure 40 - Bank loan simulation (Program "Capitalizar")

Source: Caixa Geral de Depósitos



Simulação do Produto

Estimado(a) Cliente,

Agradecemos o seu contacto. Considerando a informação apresentada e a actual situação de mercado, propomos-lhe as seguintes condições de crédito:

Dados da Simulação

Família de Produto	301 - CREDITO MEDIO LONGO PRAZO
Produto	007 - MLP OUTR SECTOR EXCEPTO CONSTR
Finalidade do Crédito	000602 - COMERCIO E SERVICOS
Montante do Empréstimo	80.000,00
Moeda	EUR
Prazo	36 - MESES
Taxa Nominal	3,0000000
T.A.E.	5,3166756

Caixa Geral de Depósitos, S.A. - Sede Social: Av. João X.4. 69 • 1000-800 LISBOA - Capital Social € 3.844.143.735 - CRC: e Contribuinte sob o n.º 500 990 046

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Figure 41 - Bank loan conditions for the negative scenario
Source: Caixa Geral de Depósitos

Fruit - Average daily sales per seller			
Type	Quantity	Unitary price	Volume of sales
Orange	26	2,50 €	64,29
Plum	26	3,00 €	77,14
Watermelon	26	2,50 €	64,29
Melon	26	2,50 €	64,29
Strawberry	26	3,00 €	77,14
Peach	26	3,00 €	77,14
Grape	26	3,00 €	77,14
Total	180		501,43 €
Average		2,79 €	

Toppings - Average daily sales			
Type	Quantity	Unitary price	Volume of sales
Chia seeds	13	0,40 €	5,20
Linseeds	13	0,30 €	3,90
Ginger powder	14	0,30 €	4,20
Total	36		13,30 €
Average		0,33 €	

Fruit - Average COGS per seller				
Type	Per kg (with peel)	COGS per kg (peeled)	200gr portion	Cost per day
Orange	0,77 €	1,12 €	0,22 €	5,74 €
Plum	1,29 €	1,87 €	0,37 €	9,62 €
Watermelon	0,30 €	0,44 €	0,09 €	2,24 €
Melon	0,48 €	0,70 €	0,14 €	3,58 €
Strawberry	2,10 €	3,05 €	0,61 €	15,66 €
Peach	1,02 €	1,48 €	0,30 €	7,61 €
Grape	1,21 €	1,75 €	0,35 €	9,02 €
Total				53,47 €
Average	1,02 €	1,49 €	0,30 €	

Toppings - COGS					
Type	COGS per kg	COGS per gr	gr used per portion	Cost per portion	Cost per day
Chia seeds	4,77 €	0,05 €	2	0,10 €	1,24 €
Linseeds	2,33 €	0,02 €	3	0,07 €	0,91 €
Ginger powder	16,00 €	0,16 €	0,5	0,08 €	1,12 €
Average	7,70 €		1,83 €	0,08 €	
Total					3,27 €

	2020	2021	2022	2023	2024
Nr of sellers	29	51	63	66	69

Price of the fruit	2,63 €	of fruit sales
Price of the toppings	0,31 €	
Average quantity of fruit sold (daily)	180	
Average quantity of toppings sold	20%	
Cost of the fruit	0,30 €	
Cost of toppings	0,08 €	
Cost of Cups	0,15 €	
Cost of Sporks	0,04 €	
Cost of Napkins	0,02 €	

Table 29 - Auxiliary calculations for sales and cogs
Source: Author

		2020	2021	2022	2023	2024
Nr of employees	Stock managers	20	34	46	48	50
	Regional managers	2	3	4	4	4
	General manager	1	1	1	1	1
Months of work	Stock managers	3	3	3	3	3
	Regional managers	6	6	6	6	6
	General manager	9	12	12	12	12

Base remuneration	Stock managers	1 200,00 €
	Regional managers	2 000,00 €
	General manager	2 500,00 €
Commissions	Stock managers	2%
Avg. paid km per month	Regional managers	6000

Table 33 - Staff number and remuneration

Source: Author

Services	Unit cost	nr of months				
		2020	2021	2022	2023	2024
Accounting	203,25 €	9	12	12	12	12
Communications	8,13 €					
Electronic payments	16,26 €	3	3	3	3	3
Marketing and communication	731,71 €	3	4	4	4	4
Restaurant services	325,20 €	3	3	3	3	3
Sellers	10% of sales	3	3	3	3	3
Stock management system	813,01 €	7	12	12	12	12
Website/mail maintenance	162,60 €	1	1	1	1	1

Sellers	Sellers payment rate	0,10 €
	Weekly photo premium	50

Electronic Paym	% of Electronic payments	50%
	Price per transaction	0,04 €
Restaurant	Daily cost per seller	58,54 €

Table 35 - Supplies and Services data

Source: Author

	jan/20	jan/21	jan/22	jan/23	jan/24
Other expenditures	3 054,08 €	4 032,42 €	4 857,30 €	5 097,45 €	5 319,90 €

Licensing	jan/20	jan/21	jan/22	jan/23	jan/24
Cost per license	25,7	25,7	25,7	25,7	25,7
Nr of sellers	29	51	63	66	69
Nr of months	3	3	3	3	3
Total	2 235,90 €	3 932,10 €	4 857,30 €	5 088,60 €	5 319,90 €

	2020	2021	2022	2023	2024
Bank loan Expenses	332,01 €	100,32 €	4 910,41 €	8,85 €	- €

	jan/20	apr/20
Company opening	360,00 €	
Brand registration	126,17 €	

Table 36 - Other expenditures forecasting

Source: Author

Investment	2 020	2 021	2 022	2 023	2 024
Tangible Assets					
Basic Equipment	7 771,34 €	5 269,70 €	3 042,87 €	386,18 €	386,18 €
Administrative Equipment	1 951,22 €	650,41 €	650,41 €	- €	- €
Total Tangible Assets	9 722,56 €	5 920,11 €	3 693,28 €	386,18 €	386,18 €
Intangible Assets					
Computer Programs	2 032,52 €				
Other intangible Assets					
Total intangible Assets	2 032,52 €	- €	- €	- €	- €
Total Investment	11 755,08 €	5 920,11 €	3 693,28 €	386,18 €	386,18 €
VAT	2 703,67 €	1 361,63 €	849,45 €	88,82 €	88,82 €

Depreciations	2 020	2 021	2 022	2 023	2 024
Basic Equipment	1 554,27 €	1 554,27 €	1 554,27 €	1 554,27 €	1 554,27 €
		1 053,94 €	1 053,94 €	1 053,94 €	1 053,94 €
			608,57 €	608,57 €	608,57 €
				77,24 €	77,24 €
					77,24 €
Administrative Equipment	390,24 €	390,24 €	390,24 €	390,24 €	390,24 €
		130,08 €	130,08 €	130,08 €	130,08 €
			130,08 €	130,08 €	130,08 €
Total Tangible Assets	1 944,51 €	2 998,45 €	3 867,19 €	3 944,43 €	4 021,66 €
Computer Programs	677,51 €	677,51 €	677,51 €		
Total Intangible Assets	677,51 €	677,51 €	677,51 €	- €	- €
Total	2 622,02 €	3 675,96 €	4 544,70 €	3 944,43 €	4 021,66 €

Acumulated depreciations	2 020	2 021	2 022	2 023	2 024
Tangible Assets	1 944,51 €	4 942,96 €	8 810,15 €	12 754,58 €	16 776,24 €
Intangible Assets	677,51 €	1 355,01 €	2 032,52 €	2 032,52 €	2 032,52 €
Total	2 622,02 €	6 297,98 €	10 842,68 €	14 787,10 €	18 808,76 €

Balance sheet values	2 020	2 021	2 022	2 023	2 024
Total Tangible Assets	7 778,05 €	10 699,71 €	10 525,80 €	6 967,55 €	3 332,07 €
Total Intangible Assets	1 355,01 €	677,51 €	- €		
Total Assets	9 133,06 €	11 377,21 €	10 525,80 €	6 967,55 €	3 332,07 €

Table 37 - Investments and Depreciations Source: Author

Year	Investment	Quantity	Unit price	Total	Source/Supplier
2020	Bags	125	10,74 €	1 343,10 €	Alibaba
2020	Short sleeve shirts	100	8,42 €	841,99 €	360 Imprimir
2021		100	8,42 €	841,99 €	360 Imprimir
2022		50	8,64 €	431,99 €	360 Imprimir
2020	Shorts	100	11,70 €	1 169,99 €	360 Imprimir
2021		100	11,70 €	1 169,99 €	360 Imprimir
2022		50	13,60 €	679,99 €	360 Imprimir
2020	Sombreros	100	4,00 €	400,00 €	Alibaba
2021	Sombreros	100	4,00 €	400,00 €	Alibaba
2020	Smartphones	52	77,24 €	4 016,26 €	Worten
2021		37	77,24 €	2 857,72 €	Worten
2022		25	77,24 €	1 930,89 €	Worten
2023		5	77,24 €	386,18 €	Worten
2024		5	77,24 €	386,18 €	Worten
2020	Computers	3	650,41 €	1 951,22 €	Worten
2021		1	650,41 €	650,41 €	Worten
2022		1	650,41 €	650,41 €	Worten
2020	Website	1	2 032,52 €	2 032,52 €	Websitsetup
Total without VAT				22 140,83 €	
Total with VAT				27 233,22 €	

Table 38 - Investment details per year

Source: Author

Bank loan	2020	2021	2022	2023	2024
Interest expenses	1 475,24 €	2 507,92 €	1 327,72 €	221,28 €	- €
Commissions	262,50 €	- €	- €	- €	- €
Capital reimbursement	- €	42 000,00 €	42 000,00 €	21 000,00 €	- €
Stamp tax	69,51 €	100,32 €	53,11 €	8,85 €	- €
	2020	2021	2022	2023	2024
Investment	135 044,50 €	327 238,45 €	466 869,19 €	520 971,94 €	546 587,06 €
Financing Sources	2020	2021	2022	2023	2024
Operational cash flow	401 345,11 €	735 287,39 €	900 098,27 €	959 126,66 €	999 750,70 €
Capital	30 044,50 €				
Other capital instruments					
Partner Loans					
Loans	105 000,00 €				
Subsidies					
Total	536 389,61 €	735 287,39 €	900 098,27 €	959 126,66 €	999 750,70 €

*Investments comprise every costs until the end of June of every year (the 1st month of sales)

Table 40 - Financing sources

Source: Author

	2020	2021	2022	2023	2024
Current Assets					
Clients	- €	- €	- €	- €	- €
Inventories	- €	- €	- €	- €	- €
VAT to receive	508,62 €	508,62 €	508,62 €	508,62 €	508,62 €
Total	508,62 €	508,62 €	508,62 €	508,62 €	508,62 €

Current Liabilities					
Suppliers	- €	- €	- €	- €	- €
VAT to deliver	- €	- €	- €	- €	- €
State and other public agents	107 233,43 €	196 389,40 €	239 655,23 €	255 211,77 €	265 931,22 €
Total	107 233,43 €	196 389,40 €	239 655,23 €	255 211,77 €	265 931,22 €

Working Capital	-106 724,82 €	-195 880,78 €	-239 146,61 €	-254 703,15 €	-265 422,60 €
Investment in Working Capital	-106 724,82 €	- 89 155,97 €	- 43 265,83 €	- 15 556,54 €	- 10 719,44 €

Table 41 - Investment in Working Capital

Source: Author

Manga Curta Business Plan

	2020	2021	2022	2023	2024
Assets					
Non Current Assets					
Tangible fixed assets	7 778,05 €	10 699,71 €	10 525,80 €	6 967,55 €	3 332,07 €
Intangible assets	1 355,01 €	677,51 €	- €	- €	- €
Financial Investments	- €	- €	- €	- €	- €
Total Non Current Assets	9 133,06 €	11 377,21 €	10 525,80 €	6 967,55 €	3 332,07 €
Current Assets					
Inventories	- €	- €	- €	- €	- €
Clients	- €	- €	- €	- €	- €
State and public agents	508,62 €	508,62 €	508,62 €	508,62 €	508,62 €
Deferrals	- €	- €	- €	- €	- €
Shareholders	- €	- €	- €	- €	- €
Accounts receivable	- €	- €	- €	- €	- €
Cash and Equivalents	631 359,35 €	1 407 882,59 €	2 305 553,41 €	3 258 850,43 €	4 268 934,39 €
Total Current Assets	631 867,96 €	1 408 391,21 €	2 306 062,03 €	3 259 359,04 €	4 269 443,01 €
Total Assets	641 001,03 €	1 419 768,42 €	2 316 587,82 €	3 266 326,59 €	4 272 775,08 €
Liabilities					
Non Current Liabilities					
Loans	105 000,00 €	63 000,00 €	21 000,00 €	- €	- €
Provisions	- €	- €	- €	- €	- €
Accounts payable	- €	- €	- €	- €	- €
Total Non Current Liabilities	105 000,00 €	63 000,00 €	21 000,00 €	- €	- €
Current Liabilities					
Loans	- €	- €	- €	- €	- €
Suppliers	- €	- €	- €	- €	- €
Shareholders	- €	- €	- €	- €	- €
State and public agents	107 233,43 €	196 389,40 €	239 655,23 €	255 211,77 €	265 931,22 €
Accounts Payable	- €	- €	- €	- €	- €
Total Current Liabilities	107 233,43 €	196 389,40 €	239 655,23 €	255 211,77 €	265 931,22 €
Total Liabilities	212 233,43 €	259 389,40 €	260 655,23 €	255 211,77 €	265 931,22 €
Equity					
Share Capital	30 044,50 €	30 044,50 €	30 044,50 €	30 044,50 €	30 044,50 €
Reserves	- €	- €	- €	- €	- €
Retained earnings and other reserves	- €	398 723,09 €	1 130 334,52 €	2 025 888,09 €	2 981 070,32 €
Other equity variations	- €	- €	- €	- €	- €
Net income	398 723,09 €	731 611,43 €	895 553,57 €	955 182,23 €	995 729,04 €
Total shareholder's equity	428 767,59 €	1 160 379,02 €	2 055 932,59 €	3 011 114,82 €	4 006 843,86 €

Table 42 - Balance Sheet Source: Author

Profitability Ratios	2020	2021	2022	2023	2024
Gross profit	1 043 571,18 €	1 835 245,87 €	2 267 068,42 €	2 375 024,06 €	2 482 979,70 €
Gross Margin	81%	81%	81%	81%	81%
EBITDA Margin	39%	41%	41%	41%	41%
EBIT Margin	39%	41%	40%	41%	41%
Net profit Margin	31%	32%	32%	32%	32%

Interest Coverage Ratios	2020	2021	2022	2023	2024
Interest Coverage Ratio (EBIT)	343,12	370,53	855,07	5465,34	0,00
Interest Coverage Ratio (EBITDA)	344,90	372,00	858,49	5483,17	0,00

Leverage Ratios	2020	2021	2022	2023	2024
Debt-Equity Ratio	49%	22%	13%	8%	7%
Debt-to-Capital Ratio	33%	18%	11%	8%	6%
Net Debt	- 419 125,91 €	-1 148 493,19 €	- 2 044 898,18 €	-3 003 638,65 €	-4 003 003,18 €

Liquidity Ratios	2020	2021	2022	2023	2024
Current Ratio	5,892	7,171	9,622	12,771	16,055
Quick Ratio	5,892	7,171	9,622	12,771	16,055
Cash Ratio	5,888	7,169	9,620	12,769	16,053

Asset Efficiency	2020	2021	2022	2023	2024
Asset Turnover	2,02	1,60	1,21	0,90	0,72
Fixed Asset Turnover	141,50	199,75	266,72	422,11	922,78

Investment Returns	2020	2021	2022	2023	2024
Return on Equity	93%	63%	44%	32%	25%
Return on Assets	62%	52%	39%	29%	23%
Return on Invested Capital	4147%	6176%	8128%	12779%	25926%

Efficiency Ratios	2020
Contribution Margin (Fruit)	1,43 €
Contribution Margin (Toppings)	0,21 €
Variable Costs (%)	73%
Fixed Costs (%)	27%
Operational Break-Even Point (Fruit Quantity)	148489
Break-Even Point (Q)	149518

Leverage Ratios	2020
Degree of Operating Leverage (DOL)	1,45
Degree of Financial Leverage (DFL)	1,45
Degree of Total Leverage (DTL)	2,10

Table 45 - Business Indicators/Ratios Source: Author

Manga Curta Business Plan

	2024											
Cash Flow Statement	January	February	March	April	May	June	July	August	September	October	November	December
Cash flow from operating activities - Direct method												
Receivments from clients	- €	- €	- €	- €	- €	319 681,94 €	660 676,01 €	660 676,01 €	319 681,94 €	- €	- €	- €
Payments to suppliers of services	1 756,10 €	1 024,39 €	1 024,39 €	1 056,91 €	1 056,91 €	41 266,88 €	166 006,56 €	166 006,56 €	125 079,89 €	1 024,39 €	1 024,39 €	1 186,99 €
Payments to raw material suppliers	- €	- €	- €	- €	- €	87 017,50 €	126 613,76 €	126 613,76 €	37 121,50 €	- €	- €	- €
Payments to staff	2 004,94 €	2 004,94 €	2 004,94 €	8 504,70 €	8 504,70 €	36 496,27 €	64 811,78 €	64 811,78 €	36 496,27 €	2 004,94 €	2 004,94 €	2 004,94 €
Cash generated through operations	- 3 761,04 €	- 3 029,33 €	- 3 029,33 €	- 9 561,61 €	- 9 561,61 €	154 901,29 €	303 243,91 €	303 243,91 €	120 984,28 €	- 3 029,33 €	- 3 029,33 €	- 3 191,93 €
Retentions	1 243,75 €	1 243,75 €	1 243,75 €	1 243,75 €	5 223,75 €	5 223,75 €	20 344,59 €	35 677,48 €	35 677,48 €	20 344,59 €	1 243,75 €	1 243,75 €
Other payments	4 240,50 €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
Payment/Receivment of income tax	- €	- €	- €	- €	138 586,23 €	- €	- €	- €	- €	- €	- €	- €
VAT receivments	- €	- €	- €	- €	- €	19 180,92 €	39 640,56 €	39 640,56 €	19 180,92 €	- €	- €	- €
VAT payments	403,90 €	235,61 €	235,61 €	314,15 €	243,09 €	10 981,10 €	41 260,42 €	41 260,42 €	30 258,10 €	235,61 €	235,61 €	273,01 €
VAT received/delivered	- €	912,52 €	- €	- €	785,37 €	- €	- €	6 336,86 €	- €	- €	12 932,65 €	- €
Operating cash flow (1)	- 9 649,19 €	- 3 596,17 €	- 4 508,69 €	- 11 119,51 €	- 152 829,32 €	157 877,35 €	281 279,47 €	259 609,72 €	74 229,63 €	- 23 609,53 €	8 423,96 €	- 4 708,69 €
Cash flow from investments												
Tangible Assets	- €	- €	- €	308,94 €	- €	- €	- €	- €	- €	- €	- €	- €
Intangible Assets	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
Cash flow from investments (2)	- €	- €	- €	308,94 €	- €	- €	- €	- €	- €	- €	- €	- €
Financing Cash flow												
Receivments from:												
Financing obtained												
Realized capital												
Payments referent to:												
Financing obtained	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
Interest expenses	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
Financing Cash flow(3)	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €	- €
Variation of cash and equivalents (4) = (1) + (2) + (3)	- 9 649,19 €	- 3 596,17 €	- 4 508,69 €	- 11 428,45 €	- 152 829,32 €	157 877,35 €	281 279,47 €	259 609,72 €	74 229,63 €	- 23 609,53 €	8 423,96 €	- 4 708,69 €
Cash and equivalents (beginning of the period)	1 777 952,43 €	1 768 303,24 €	1 764 707,07 €	1 760 198,38 €	1 748 769,93 €	1 595 940,62 €	1 753 817,97 €	2 035 097,44 €	2 294 707,16 €	2 368 936,78 €	2 345 327,26 €	2 353 751,22 €
Cash and equivalents (end of the period)	1 768 303,24 €	1 764 707,07 €	1 760 198,38 €	1 748 769,93 €	1 595 940,62 €	1 753 817,97 €	2 035 097,44 €	2 294 707,16 €	2 368 936,78 €	2 345 327,26 €	2 353 751,22 €	2 349 042,53 €

Table 46 - Cash Flow Statement (Negative Scenario) Source: Author

Optimistic	0	2020	2021	2022	2023	2024
Sales revenues		1 550 748	2 727 178	3 368 866	3 529 289	3 689 711
Variable costs		573 055	1 007 786	1 244 912	1 304 193	1 363 475
Fixed costs		213 047	213 047	213 047	213 047	213 047
Depreciation		2 622	3 676	4 545	3 944	4 022
EBIT		762 024	1 502 669	1 906 363	2 008 104	2 109 167
Taxes		160 025	315 560	400 336	421 702	442 925
Unlevered Net Income		601 999	1 187 108	1 506 026	1 586 402	1 666 242
Depreciation	0	2 622	3 676	4 545		
Capital Expend	135 044	5 920	3 693	386	386	0
Increase in NWC	0	-106 725	-89 156	-43 266	15 556,54 €	- 10 719,44 €
Free Cash Flow	-135 044	705 426	1 276 247	1 553 451	1 601 572	1 676 961

Pessimistic	0	2020	2021	2022	2023	2024
Sales revenues		1 033 832	1 818 118	2 245 911	2 352 859	2 459 807
Variable costs		567 324	997 708	1 232 463	1 291 151	1 349 840
Fixed costs		213 047	213 047	213 047	213 047	213 047
Depreciation		2 622	3 676	4 545	3 944	4 022
EBIT		250 839	603 687	795 856	844 716	892 898
Taxes		52 676	126 774	167 130	177 390	187 509
Unlevered Net Income		198 162	476 913	628 726	667 326	705 390
Depreciation	0	2 622	3 676	4 545		
Capital Expend	135 044	5 920	3 693	386	386	0
Increase in NWC	0	-96 052	-80 240	-38 939	14 000,89 €	- 9 647,50 €
Free Cash Flow	-135 044	290 917	557 136	671 824	680 940	715 037

	Optimistic	Pessimistic
NPV	113 223 630	48 209 569
IRR	588,18%	273,78%

Table 47 - Sensitivity Analysis Source: Author