

**INNOVATIVE BUSINESS PLAN: A NEW HAMBURGER
CONCEPT**

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Resumo

O objetivo desta tese de mestrado é a elaboração de um Plano de Negócios. Em particular, este plano de negócios avalia a criação de uma empresa que atuaria na indústria da restauração em Portugal. A proposta de inovação consiste no lançamento de um novo conceito de hambúrguer *gourmet*, baseado na customização do hamburger. O cliente poderia escolher o tipo de proteína a ser utilizada como base do hambúrguer bem como os ingredientes a serem misturados antes da sua confeção. A refeição poderia ser completada com várias possíveis escolhas de acompanhamentos e bebidas.

Com o lançamento desta empresa, o desejo de customização estaria disponível duma maneira rápida e conveniente. Este restaurante iria fornecer produtos e serviços de elevada qualidade a um preço acessível, colocando as escolhas nutricionais nas mãos dos clientes, que poderiam usufruir de uma refeição mais saborosa e saudável conforme as suas preferências.

Este plano poderá servir como guia para a implementação da empresa. Mais precisamente, os objetivos específicos deste projeto são:

1. Concluir e avaliar a aceitação do novo conceito de negócio pelo seu público-alvo;
2. Desenvolver uma estratégia de implementação baseada na análise do meio envolvente, na análise de mercado e na posição competitiva;
3. Estudar a viabilidade económico-financeira da estratégia definida através das projeções de vendas e custos.

Palavras-chave: Plano de negócios; Restauração; Customização; Hambúrguer.

Classificação JEL: L26 (empreendedorismo), G3 (Finanças da empresa e Governação)

Abstract

The major objective of this master thesis is the elaboration of a Business Plan. In particular, this business plan studies the creation of a company competing in the restaurant industry in Portugal. The innovative proposal is the launch of a new concept of gourmet hamburger, based on the customization of the hamburger. The client can choose the type of protein to be used as basis of the hamburger, and the ingredients to be mixed before cooking the hamburger. The meal would be complemented with several possible choices of garnish and drink.

With the launch of this venture the desire of customization would be available in a convenient and fast way. The company would provide high quality products and services at an affordable price, placing the nutritional choices in the hands of consumers, who could have a tastier and healthier meal depending on their preferences.

This plan should serve as a guide to the implementation of the venture. More precisely, the specific objectives of this project are:

4. To perceive and evaluate the acceptance of the new business concept by the target;
5. To develop an Implementation Strategy based on the full analysis of environment, market and competitive position.
6. To study the economic-financial viability of the defined strategy throughout sales and cost projections.

Key words: Business plan, restaurant, customization, hamburger

JEL classification: L26 (entrepreneurship), G3 Corporate Finance and Governance.

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List of Abbreviations

ASAE → Autoridade de Segurança Alimentar e Económica

β_u → Unlevered Beta

CAPEX → Capital Expenditure

EBIT → Earnings Before Interest and Taxes

EBITDA → Earnings Before Interest and Taxes, Depreciations and Amortizations

EBT → Earnings Before Interest

FCFF → Free Cash Flow to the Firm

HACCP → Hazard Analysis and Critical Control Point

IRR → Internal Rate of Return

NPV → Net Present Value

PP → Payback Period

PV → Present Value

R_f → Risk-free Rate

$R_m - R_f$ → Market Risk Premium

ROE → Return on Equity

ROI → Return on Investment

ROS → Return on Sales

VAT → Value-Added Tax

WACC → Weighted Average Cost of Capital

1. Executive Summary

After acquiring a reputation of unhealthy food, the fast food market is trying to adjust to the greater importance of nutrition and healthy food. Hamburgers are affordable and customizable, having the flexibility that allows the adaptation of the hamburger concept to the current economic and cultural settings. The innovative concept presented in this Business Plan is based on a customizable gourmet hamburger, where the client can choose the type of protein to be used as basis of the hamburger, and the ingredients to be mixed before confection. The meal would be complemented with several possible choices of garnish and drink.

Entrepreneurship is “the process of changing ideas into commercial opportunities and creating value” (Leach and Melicher, 2009 : 7). This project pretends to support that process by serving as a guideline to the creation of a company competing in the restaurant and beverage industry in Portugal. To do so, it is necessary to perceive and evaluate the acceptance of the new business concept by the defined target; to develop an Implementation Strategy based on the full analysis of environment, market and competitive position and to study the economic-financial viability of the defined strategy throughout sales and cost projections.

Information was gathered throughout three methods: developed by the author according to Literature Review; achieved through a questionnaire (sample of 324 individuals) and achieved throughout the realization of an unrecorded interview to a food engineer.

The attractiveness of the industry is medium. Main dangers consist in the existence of substitute products, several competitors and the high rivalry amongst firms, that can endanger acquisition of brand notoriety and market share. However, the intended quality of products and services as well as affordable and competitive prices can minimize these dangers. Also the variety of options and the customization of products will enable the construction of several healthy meals complying with current social trend and the preferences of the customer.

A differentiation strategy was chosen, based on the possibility of customization and quality of the products and service. This is possible to achieve maintaining a similar price to competitors. To do so, concentration on cost efficiency and sustainability of

production, sales and brand is required. Investment in technology, promotion and communication of the brand and training of human resources is essential, as well as the development of LEAN production techniques. As a restaurant business, this venture is required to establish, implement and maintain permanent procedures based on the principles of HACCP.

The core product is a menu with a customized hamburger (base of 125 gr plus three ingredients of 25gr each), accompanied by two portions of garnish of 150gr each and one drink of 33ml or a beer of 20ml, sold for a price of 7,50€. The best location for this venture is a store in a shopping centre in the area of “Parque das Nações”, due to its lower price and better accessibilities, increased evaluation regarding presence of the target consumer nearby and similar perceived visibility of the store/brand.

The production process of the restaurant shall have 6 stages (Reception of the client; Hamburger choice; hamburger conception; Garnish choice; Drink choice and delivery; Plate delivery) with a predicted total duration of 5 minutes. There will be the necessity of hiring eight employees: four in full time and other four in part time, with rotating shifts. To avoid employee turnover, attract and retain quality workers, it is intended to pay a salary above the average. The main components of the physical evidence shall be plates, cups and cutlery (personalized with brand logo), uniforms and facilities as well as the promotional brochure referred above.

For this venture, main technologies needed are an industrial kitchen, cleaning and administrative technologies. Concerning organization, a top-down approach is intended. Regarding layout, the restaurant shall have a total of 35m². A 3D plant of the restaurant was developed (video presentation can be found on the CD with the digital work).

Usually the financial assumptions needed to develop forecasting are inaccurate, leading to the overestimation of income and underestimation of expenses. As so, it is of vital importance that all assumptions made are carefully and conservatively designed. For this project, all assumptions were done in the most conservatively way possible. For example: when calculating cost of goods sold, a unitary cost was considered for each component of the menu. For these unitary costs no average cost was done, it was considered the price of the most expensive option. When in doubt highest tax rates were considered. For CAPEX investment a safety margin was added to every article. In sales projection all assumptions were undervalued conservatively.

This project is supposed to be funded only by equity and have no debt. A WACC of approximately 8% was considered for the development of the methodologies. The firm's perspective and the continuity value was considered. This project as a NPV of 715.000€, an IRR of 90% and a Payback Period of two years, approximately. The break-even point is at 34.039 menus or 255.296€. The only scenario where the project is not viable is in the pessimistic scenario, with all the variables having a 10% downright variation. It is believed that this conjugation of downright variations in all three variables is very unlikely, having in mind that all assumptions were made very conservatively. All other scenarios or tendencies of the risk analysis produce results that are still quite interesting regarding viability of the project.

2. Description of the business proposal

This project proposes the launch of a new concept of gourmet hamburger. This concept is based on the customization of the hamburger by the customer. The client can choose the type of protein to be used as basis of the hamburger, and the ingredients to be mixed before cooking the hamburger.

This habit has been observed when families buy hamburgers at the butcher, and the customer asks to chop and mix some ingredients (ex.: chorizo, cheese, etc.) along with the desired type of meat.

With the launch of this venture this desire would be available in a convenient and fast way, not requiring cooking a meal at home to be fulfilled. The meal could be complemented with several choices of garnish and drink.

The company would provide high quality product and service at an affordable price, placing the nutritional choices in the hands of consumers, who could have a tastier and healthier meal depending on their preferences.

3. Literature Review

3.1 Literature Review on Theoretical Issues

3.1.1 Entrepreneurship and Business Planning

In the last century, economists predicted that big companies would be dominant: size was necessary, for instance, to develop economies of scale or to explore foreigner markets. Since the sixties and seventies this trend has been reversed. All over the world, small and medium enterprises assume an increasingly important role in the economic growth and development. This happened mainly due to new challenges faced by society. Among these is globalization, which led to higher competitive pressure and to the relocation of production facilities to countries with lower costs, associated with the unemployment and the ageing of the population. But it is also important to consider the new opportunities generated by the boom of technology that created and revolutionised markets and industries. Nowadays it becomes necessary to face this new reality and opportunities with the perspective of creating your own job, innovate, produce value and generate wealth. However, the entrepreneurial spirit shall not be considered just as a mean of creating a new business, but as a general attitude that can be usefully applied by everyone in daily life and in any area of activity (Duarte and Esperança, 2012).

In this line of thought, the European Commission (2003) defined entrepreneurship as “first and foremost a mindset. It covers an individual’s motivation and capacity, independently or within an organisation, to identify an opportunity and to pursue it in order to produce new value or economic success. It takes creativity or innovation to enter and compete in an existing market, to change or even to create a new market. To turn a business idea into success requires the ability to blend creativity or innovation with sound management and to adapt a business to optimise its development during all phases of its life cycle. This goes beyond daily management: it concerns a business’ ambitions and strategy” (European Comission, 2003 : 5) . A simpler definition is the one provided by Leach and Melicher (2009) that states entrepreneurship as “the process of changing ideas into commercial opportunities and creating value” (Leach and Melicher, 2009 : 7).

It is also essential to consider that the process of entrepreneurship involves risks. Those risks can be assessed and properly framed in economic really throughout the elaboration

of a Business Plan (Duarte and Esperança, 2012). “The development of a new business usually begins with an idea of a product or service that would meet consumer needs. Once entrepreneurs know what they think consumers need, they should research their market to be sure that consumers really need and want the product or service. If there is genuine need, the planning process can go forward” (Anderson and Dunkelberg, 1993 : 62).

A business plan is a “written document that describes in detail a proposed venture, and its purpose is to illustrate the current status, expected needs, and projected results of a new or expanding business” (Hodgetts and Kuratko, 1992 : 84). The typical reason for the development of a business plan is to secure support and funding for a project or venture (Bessant and Tidd, 2011). However, the business plan is of much importance not only to providers of capital but also to the entrepreneur and to the development of the business in itself as it helps analysing all aspects of the venture and to prepare an effective strategy to deal with the uncertainties that may arise, fomenting the construction of a critical and objective view of the venture (Hodgetts and Kuratko, 1992).

No standard business plan exists, but there is an agreement on their major characteristics. They shall be concise, in order, complete, accurate and be easy to read and understand (Hodgetts and Kuratko, 1992 ; Bessant and Tidd, 2011 ; Anderson and Dunkelberg, 1993).

Some guidelines suggest the kind of information and information segments that must be included in the business plan (Hodgetts and Kuratko, 1992 ; Bessant and Tidd, 2011) :

- Executive Summary – It is a critical part of the plan because it determines if the rest of the plan will be read or not, depending on the interest created by this section. The executive summary should generally be no more than two pages and emphasise the most important aspects of the plan.
- Description of the Business – Contains a comprehensive description of the venture, company (when applicable) and industry. When entrepreneurs have not yet started the company, this is the section of the plan where the concept of company, of the product and of the industry shall be described. Products’ or services’ unique qualities and their value to costumer should be explained alongside with the mission statement of the company.
- Market Analyses and Marketing Plan – Research and analysis of the market and market competition, including the definition and measurement of the target

market. Market analysis is needed in order to understand the market and its players throughout the study of the competition. Also, it is of vital importance to identify the characteristics of the target consumer. After this identification, becomes relevant to quantify those potential clients in order to measure the market. Finally, the plan should also contain the features of the product or service that differentiate it from the others already available in the market, hence how the business will attract and keep costumers, in order to indicate why the costumer would prefer our product and how the new business would take customers from its competitors. All this steps will culminate in the development of the marketing plan including marketing strategy regarding product, price, placement and promotion.

- Product, Production Process and Manufacturing – Description of the product and how it will be manufactured/produced and its costs. The production process should be explained in easy-to-understand terms outlining and briefly explaining its basic steps. This includes the raw materials and the skills needed by employees convert into end product. Identification of optimal location is of prime importance, including the determination of requirements, equipment and costs of production facilities.
- Key Human Resources – Identification of key human resources needed, qualifications or skills they have to possess and their methods of compensation. Key functional areas within the business shall be identified and the amount and characteristics of the human resources in each area should be presented.
- Financial Plans and Forecasting – As one of the most important sections of the plan, shall be as realistic and accurate as possible. The financial assumptions needed to develop forecasting are usually inaccurate, leading to the overestimation of income and underestimation of expenses. Regarding this fact, is of vital importance that all assumptions made are carefully and conservatively designed. Must include a pro forma income statement, pro forma balance sheet and cash-flow projections. Should show in detail how much money is necessary, how it will be used and when it will be repaid. These projected statements should represent the actual financial achievements expected from the business plan and are essential to obtain financing.

- Critical risks – Risks must be analysed to uncover potential problems before they materialise. The concept is that risk can be anticipated and controlled. Usual methods of assessing risks include a sensitive and scenario analysis.
- Milestone Schedule – This section of the plan shall identify the objectives and the timing of their accomplishment fomenting the establishment of guidelines that shall be monitorized while the venture is in progress.
- Appendices – Includes other valuable information that is not contained in the other sections of the plan.

In summary, the business plan is the major tool used to guide the venture and to manage it, compiling strategic development of the project into a comprehensive document (Hodgetts and Kuratko, 1992).

3.1.2. Key strategic aspects

“Corporate Strategy is the pattern of decisions in a company that determines and reveals its objectives, purposes or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of economic and human organization it is or intends to be and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers and communities (...)” (Mintzberg, Quinn and Ghoshal, 1998)

Porter (1980) identifies three generic strategies:

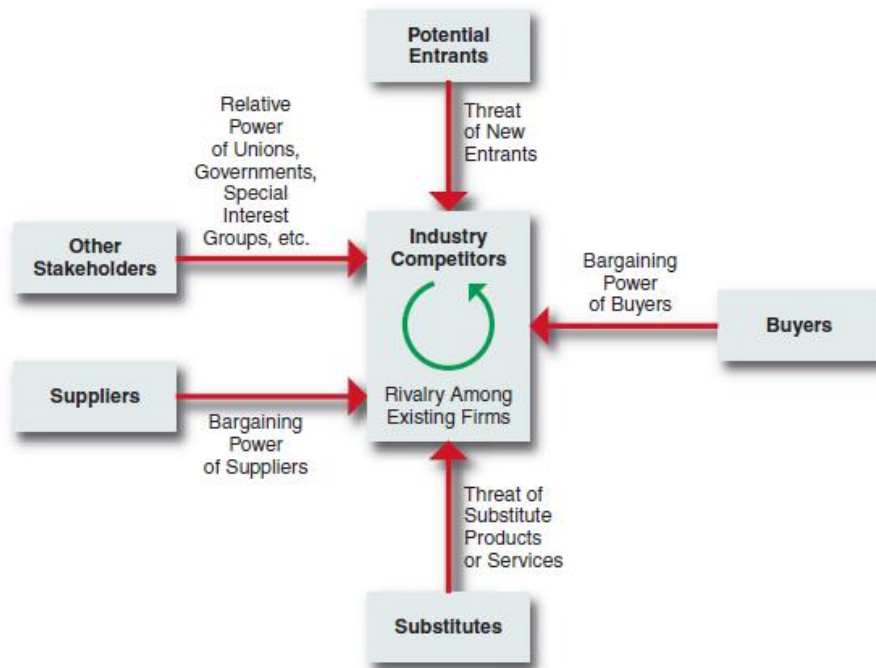
- Cost – Aims to achieve overall cost leadership in the industry.
- Differentiation – Aims to differentiate the product or service of the company, creating something that is perceived as being unique.
- Focus – Aims to focus and serve a particular segment of the market.

To define the right strategy the company should adopt is necessary to develop a complete external environment analysis as well as an internal analysis of the business.

The external environment analysis is achieved throughout the monitoring of “key macro environment forces and significant microenvironment factors that affect its ability to earn profits” (Kotler and Keller, 2012 : 48). Usually this is made by the development of the well-known PEST analysis that considers political-legal forces, economic forces,

sociocultural forces and technological forces (Wheelen and Hunger, 2011). Also, Porter (1980) defends that the company should be concerned with assessing the intensity of competition within its industry by 5 basic forces. Overtime another force was considered to be relevant. These forces are schematized in Figure 1.

Figure 1. Porter 5+1 Forces



Source: (Wheelen and Hunger, 2011)

The internal analysis enables the identification of specific characteristics of the company in order to differentiate it from the other existing companies in the market, throughout the definition of the mission, vision, values and strategic objectives. The mission of a company is, basically, its reason for existing. It is a short and precise statement passed along all the levels of the company internally and externally defining its general objectives. The vision of the company helps defining the destiny of the organization by stating what the company is projecting to be the expected activity in the future, meaning, what it wants to be and do in the future. Throughout the strategic vision, organizations allow the understanding of how they contribute and create value to the overall society. The values are the set of principles that guide and regulate the activity of the company and all its members. They are timeless and should be followed and respected every day, everywhere, and by everyone in the organization. The strategic objectives of the company are originated by the mission, vision and values, indicating the long term objectives of the company (3 to 5 years). They shall be measurable and have a time frame in order to

be comparable and evaluated, being more precise than the mission. These strategic objectives are also baseline to the definition of tactical and operational objectives (Duarte and Esperança, 2012).

According to Kotler and Keller (2012) the major purpose of the external environment analysis is to discern opportunities within the market. An opportunity is an “area of buyer need and interest that a company has a high probability of profitably satisfying” (Kotler and Keller, 2012 : 48). However, some findings of the external analysis become threats. A threat is a “challenge posed by an unfavourable trend or development that, in the absence of defensive marketing action, would lead to lower sales or profit” (Kotler and Keller, 2012 : 48). Throughout the internal analysis it is possible to identify the strengths and weaknesses of the business. The overall evaluation of these strengths (S), weaknesses (W), opportunities (O), and threats (T) of a company is called SWOT analysis, which is no more than the monitoring of the external and internal analysis (Kotler and Keller, 2012).

3.1.3. Key marketing aspects

The marketing process consists in the knowledge of the public of an organization in order to adapt and act effectively in that public. But this public is never completely homogeneous. That’s why it is so important to do segmentation, targeting and positioning (STP). To segment a market is to divide it into a certain number of groups, as homogeneous as possible, to allow the company to adapt its marketing policy to one or more of those groups (Brochand, et al., 2000). The process of evaluating the segments and choosing how many and which group(s) to focus on its called targeting. The last step is positioning that consists in the “act of designing a company’s offering and image to occupy a distinctive place in the minds of the target market” (Kotler and Keller, 2012 : 276)

The marketing mix should translate the orientations defined in STP and general company strategy, throughout the set of fundamental decisions of marketing with respect to the action variables that the organization has. There are four major variables, commonly known as the four P’s of marketing: Product, Price, Placement and Promotion (Brochand, et al., 2000). The main components of each of these four P’s are schematized in Figure 2.

Figure 2. The Four P Components of the Marketing Mix



Source: (Kotler and Keller, 2012)

Kotler and Keller (2012) defend that the service component can be a minor or a major part of the total offering of an organization and distinguish five categories of offerings:

1. Pure tangible good (ex. soap);
2. Tangible good with accompanying services (ex. car);
3. Hybrid (equal parts of goods and services, ex. restaurant);
4. Major service with accompanying minor goods and services (ex. air travel with snacks and drinks);
5. Pure service (ex. babysitting).

However, given the breadth, complexity and richness of marketing generated by its evolution through time, nowadays these four Ps are not enough (Kotler and Keller, 2012). When discussing strategy and the elements of marketing mix, “the distinctive nature of service performances, especially such aspects as costumer involvement in production and the importance of the time factor, requires that other strategic elements are included” (Lovelock and Wright, 2002 : 13). These remaining four Ps are explained in Table 1.

Table 1. Description of the remaining 4 P’s of Services

Process	Productivity and Quality	People	Physical Evidence
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<p>Describes a particular method of operations or sequence of actions, typically involving steps that need to occur in a defined sequence, in which operating systems work.</p>	<p>Should be seen as two sides of the same coin. Improved productivity is essential to keep cost under control but the awareness of the dangerous of making inappropriate cuts is important to service quality, which is vital for product differentiation and building customer loyalty.</p>	<p>The nature of the interaction between the customer and the employee strongly influence the perceptions of service quality.</p>	<p>Visual or other tangible clues provide evidence of a firm's service style and quality and can have profound impact on costumers' perception.</p>
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Source: Adapted from Lovelock and Wright (2002).

3.1.4. Key financial aspects of project evaluation

The reason for the need of accurate financial records is to provide a complete and precise picture of the financial health of firms, assisting the decision of taking actions that many firms will eventually face (Anderson and Dunkelberg, 1993).

According to Mota, Nunes and Ferreira (2004) an investment, either in financial or in real assets, is a resource application where the ultimate objective is to recover the applied resources and still obtain a financial surplus. The economic evaluation of an investment in real assets (investment project) consists in the identification of the financial flows generated by the project (cash flows) applying afterwards assessment methodologies to determine if the project is economically viable or not (Mota, Nunes and Ferreira, 2004). Having in mind that the investment project releases cash flows throughout different periods of time, it is necessary to proceed to the respective correction or discount of future values to the present time (Marques, 1998).

Alternatively or simultaneously used, the most frequent methodologies of assessing the merit of a project can be described as follows (Bom, Dias and Oliveira, 1992 ; Marques 1998 ; Mota, Nunes and Ferreira, 2004) :

1. Net Present Value (NPV) – Difference between the present value of the cash flows and the present value of the investment. If NPV is higher than 0, investment in the

project shall be made, since it recoups the investment, pays for the invested capital and still generates a surplus.

2. Internal Rate of Return (IRR) – Discount rate that makes NPV become equal to 0. It is the highest rate at which the investor can recoup the invested capital. If IRR is higher than the expected rate of return the project is considered economically viable and shall be engaged.
3. Discounted Payback Period (PP) – Time needed to make NPV equal to 0 and recoup the investment, considering the discount of the financial flows. If PP is lower than the number of years of the project, then the project shall be executed.
4. Profitability Index (PI) – Derivation of NPV, it is the proportion between the present value of estimated cash flows and initial investment. Reflects the profitability per unit of invested capital. If PI is higher than 1 the project is economically viable and should be completed.

Following this summarized explanation it is essential to underline that all the methodologies have relevant limitations. That is why they are frequently used simultaneously, so that together it is possible to overshadow those limitations. Also, it is important to refer that to enable this evaluations a series of assumptions are needed and there is uncertainty about the true value of those variables in the future. Usual methods to account and assess those risks include a sensitivity and scenario analyses.

3.2. Conceptual Framework

“Eating out has existed since man first collected fruits and berries and cooked meat on an open fire, and on a commercial basis from the earliest urban communities”(Burnett, 2004 : xiii). Historically, eating out and fast food can be found in the earliest ancient societies, where people did not have the economic means to live with a cooking facility, so they needed to buy food to street vendors. Also, workers whose home was too distant from work had to make provision for food during the day and eating out was literally to eat in the open air. Nowadays, the term ‘eating out’ implies a “non-domestic setting in a public place where a commercial transaction is involved” (Burnett, 2004 : xiii). Eating out has increased and changed dramatically in recent times. While many traditional forms of eating out have survived or revived, a continually expanding range of new catering facilities now confront the consumer with choices unimaginable even a generation ago:

the constant search for novelty, new foods, combinations and flavours, new ways of presentation and new environments (Burnett, 2004).

With the urbanization of the society, the rhythm of life has increased leading people to have continuously less available time. This change in the cultural status of populations originates the need to save time in the eating process and in the household chores such as cooking in order to have more time to work or leisure (Rebelato, 1997), leading consumers to choose fast options to have their meals. However, the economic crisis felt globally originated changes in the consumer behaviour, leading the consumer to make smarter economic choices regarding price-quality relation, which had impact on the overall levels of consumption (Vilčeková, 2014 ; Voinea and Filip, 2011 ; Mansoor and Jalal, 2011). But there are other determinants of consumption that have changed in recent years, mainly connected to people's cultural values. Among these is the recent and increasing consumer demand for healthy and/or environmentally friendly food, with the general public in Europe becoming increasingly more concerned with food quality and safety, food choices impact on health, and sustainability regarding production and consumption (Jang, Kim and Bonn, 2011 ; Vermeir and Verbeke, 2006). Because of these aspects, it is even more important to understand the actual needs of consumers and their reactions, suiting the offer of products and services to their consumption patterns.

Regarding fast food in specific, it should be said that its evolution was booming in the second half of the last century. As Pilcher (2012) defends "fast food grew extensively, intensively, virally and, above all, rapidly. Within a half century, the form spread widely though unevenly across the globe" (Pilcher, 2012 : 283). Following this growing boom, the market stabilized and is now changing trends. After gaining a severe reputation of unhealthy food, the fast food market is now trying to adapt to the continuously higher importance of nutrition and healthy food to the overall society (Richard K. Miller & Associates , 2014).

Regardless of all obstacles (fight against obesity, e-coli bacterial concerns, the mad cow disease outbreak, and the recent go-green attitude) the hamburger industry is predicted to continue to grow as the hamburger consumption has been continuously rising in the past few years. Hamburgers are affordable, portable, and customizable, having the kind of flexibility that allows the easy adaptation of the hamburger concept to the current economic and cultural settings. Now is the time to try to take advantage of the

hamburger’s versatility and marketing it towards people’s preference for customization and choice (Franchise Help Holdings, 2015). Cecala (2013), when citing Burger Consumer Trend Report made by Technomic Inc., goes further on these ideas highlighting that there are several reasons for the success of the hamburger. According to this source, the “Build-your-own” concept is a big tendency now, with nearly two-thirds of consumers saying that build-your-own hamburger concepts are appealing and 64% saying that the ability to customize burger toppings and condiments is also important (Cecala, 2013).

Ultimately, what this venture proposes is to create a business model considering the new trends and needs on this market, enabling the consumption of fast but with quality meals granting people’s preference for customization and choice.

The main concepts presented in this Literature Review are synthesized in Table 2.

Table 2. Main concepts of Literature Review

Topic	Main Concepts
Entrepreneurship and Business Planning	<ul style="list-style-type: none"> • Entrepreneurship is the “process of changing ideas into commercial opportunities and creating value” (Leach and Melicher, 2009 : 7). • Entrepreneurship has risks. Business Plans are needed to assess those risks. • No standard business plan exists. However, information about the following topics shall be included: description of the business, market analyses and marketing plan, product, production process and manufacturing, human resources, financial plans and forecasting, critical risks and milestones.
Strategic Aspects	<ul style="list-style-type: none"> • Generic strategies: Cost, <i>Differentiation</i> ad Focus. • To define the right strategy an external analysis (PEST and Porter 5+1 forces), an internal analysis (mission, vision and values) and a competitive analysis (SWOT) are needed.
Marketing Aspects	<ul style="list-style-type: none"> • The marketing process consists in the knowledge of the public of an organization. To develop it, segmentation, target and positioning is necessary. • Marketing-Mix should translate the orientations defined in STP, through 4 main components: Product, Price, Place and Promotion.

	<ul style="list-style-type: none"> •A restaurant is a hybrid (equal parts of goods and services) and developing another 4 P's is necessary: Process, Productivity and quality, People and Physical evidence.
Financial Aspects	<ul style="list-style-type: none"> •An investment is a resource application with the objective of recovering the applied resources and obtain a financial surplus. •The most frequent methodologies of assessing a project of investment are: NPV, IRR and Payback Period. •All methodologies have relevant limitations, reason why they are usually used simultaneously. •To enable this evaluations a series of assumptions are necessary. Methods to account for differences between these assumptions and their true value include sensitivity and scenario analyses.
Conceptual Framework	<ul style="list-style-type: none"> •Eating out has increased and changed in recent times. Fast food in specific is now trying to adapt to the continuously higher importance of nutrition and healthy food. •Hamburger consumption has been consistently rising in the past few years, since they have the kind of flexibility that allows the easy adaptation of the hamburger concept to the current economic and cultural settings.

Source: Author.

4. Objectives of the Plan

The major objective of the elaboration of this Business Plan is to create a company competing in the restaurant and beverage industry in Portugal, accordingly to the needs of the Portuguese costumer and consumer.

This plan should serve as a guide to the implementation practice as the guiding line for decision making, the settlement of the goals of the organization and the needs of planning. However, as the environmental settings assumed in this plan may change, it must be enhanced and adjusted so that it can cope with its actual environment within the implementation phase.

More precisely, the specific objectives of this project are:

1. To perceive and evaluate the acceptance of the new business concept by the previously defined target;
2. To develop an Implementation Strategy based on the full analysis of environment, market and competitive position.
3. To study the economic-financial viability of the defined strategy throughout sales and cost projections.

5. Methodology

In this project secondary data was obtained. Information is from external sources has it is not supported by any company or organization. Part of the information was developed by the author accordingly to the directions obtained in the Literature Review, as the analyses referred in this section were conducted.

Other relevant information was achieved through a questionnaire, using multi-item measures, being the core propose to assess the acceptance of the product by the defined target. The application of the questionnaire was made in Portuguese (the translation of the questionnaire can be found in Appendix 1, digitally throughout the internet. The questionnaire was administered by convenience sample method at the individual level, however fitting critical variables (target consumer profile features). The sample achieved by the questionnaire was of 324 individuals. The majority of the questions asked were in the form of attitude scales, with a Likert scale being used, or were pre-formatted questions as suggested by Brochand et al. (2000), having in mind the advantages and drawbacks of each type of question. The main methodologies used to analyse the results of the questionnaire are descriptive statistics and qualitative methods. Excel 2007-2010 program was used (main results of the questionnaire can be found in Appendix 2).

Last but not least, other relevant information was achieved throughout the realization of an unrecorded interview to a food engineer, being the core propose to clarify operational details in launching a successful restaurant.

6. Market Analysis

6.1 External Analysis

6.1.1 PEST Analysis

6.1.1.1. Political and Legal factors

Throughout the years of 2011 to 2014, the intervention of the *Troika* (European Commission, European Central Bank and the International Monetary Fund) in Portugal conditioned the political flexibility and autonomy of the country. Portugal was obligated to perform structural reforms, in order to reduce expenses and increase public revenue. These reforms included the increase in taxes which affected the sustainability of the sector.

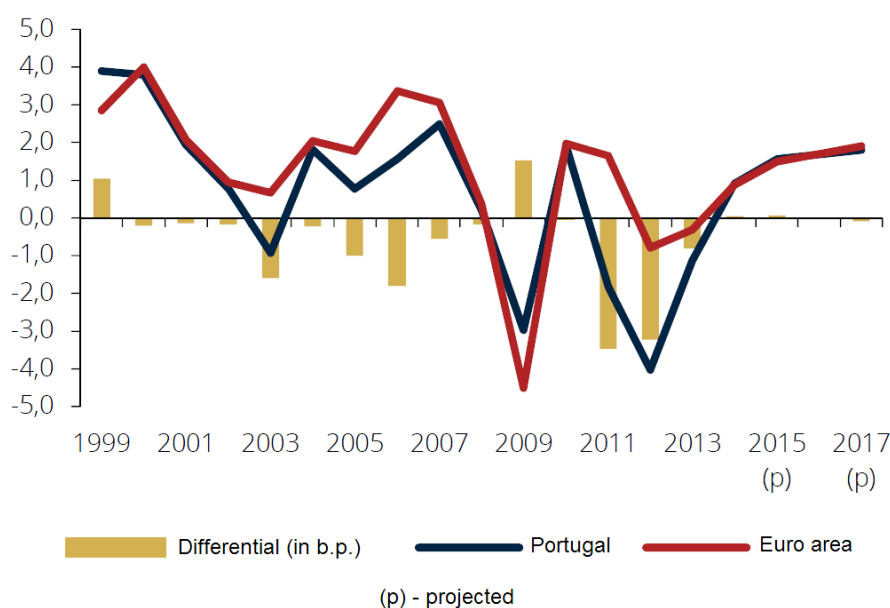
More recently, we have been able to witness some political instability, particularly during the last elections, where a political party of right won the elections but there was a majority of votes on the political left, which enabled the creation of an alliance of the left parties to legislate. Nowadays, there is a tendency for reduction of the tax burden of companies, especially in the sector of restauration where VAT is to be reduced from 23% to 13% and the IRS surcharge is to be eliminated (AHRESP, 2016). On the other hand, in 2013, there was implemented a structural reform in the regimen of billing, introducing the mandatory emission of invoice for all transactions (PECFEFA, 2015), expanding the level of burocracy within companies.

In order to regulate issues related to public health in the sector of restauration ASAE (Autoridade de Segurança Alimentar e Económica) is responsible for the legislation, inspection and supervision of the sector, so that the production process, manipulation of food, transportation and distribution are appropriated and accordingly with the methodology of Hazard Analysis and Critical Control Point (HACCP). For the creation of a business in the food industry there are requirements and conditions that must be properly fulfilled, as this is an activity that interferes directly with the health of the population. The main requirements for the implementation of a venture in this market are exposed in section 8 – Implementation requirements.

6.1.1.2. Economic factors

The last decade was strongly affected by the international financial crisis felt all over the world. This crisis also affected the Portuguese economy, causing its collapse and the intervention of *Troika* as mentioned above. However, since the end of 2013 the country began to reverse this tendency and started to slowly recuperate. The projections for the Portuguese Economy indicate that this gradual recuperation will continue throughout the years of 2015-2017 (INE, 2016; Banco de Portugal, 2015). This developments should translate into an average annual growth GDP of 1.6% in 2015, followed by growth of 1.7% and 1.8%, in 2016 and 2017, respectively. These values are quite close to the projections of the European Central Bank for the euro area (Banco de Portugal, 2015).

Figure 3. GDP Growth in Portugal and in the Euro area (Growth rate, as a percentage)



Source: (Banco de Portugal, 2015)

Until 2013, inflation in Portugal registered low values, in a context of reduced domestic and international inflationary pressures. In 2014 and 2015 inflation registered a positive increase, trend that is expected to continue. The rise in prices should reflect the evolution of the component non-energy (primarily unprocessed food products and services), as energy prices should register a drop (INE, 2016; Banco de Portugal, 2015).

6.1.1.3. Social factors

With the evolution of society the rhythm of life has increased, leading people to have continuously less available time. This change in the cultural status of populations originates the need to save time in the eating process and in the household chores such as cooking, in order to have more time to work or leisure (Rebelato, 1997), leading consumers to choose fast options to have their meals. Not only the accelerated rhythm of life but also the emancipation of women were factors that highly contributed to the unavailability of cooking time-consuming meals every day.

The economic crisis felt in Portugal originated changes in the consumer behaviour, leading the consumer to make smarter economic choices regarding price-quality relation (Vilčeková, 2014 ; Voina and Filip, 2011 ; Mansoor and Jalal, 2011)

Also there is a recent and increasing awareness for the importance of healthy and/or environmentally friendly food. The public is becoming increasingly more concerned with food quality and safety and food choices that impact on health of the individual and sustainability of the planet (Jang, Kim and Bonn, 2011 ; Vermeir and Verbeke, 2006).

This societal factors led to the increasing demand for fast, affordable and healthy food.

6.1.1.2. Technological factors

The technological evolution of recent decades had impact in this sector, not only at the administrative level but also at the level of production, conservation, storage and transportation of food. Establishments had to adapt as many of these new technologies became mandatory to ensure product quality and eliminate hazards relating to food hygiene and safety. Technology is of high importance and it is expected that its evolution is essential to the development of the sector. It can be seen as a critical success factor: a way to ensure product quality and eliminate consumers' concerns about food conservation status.

Technology is also an important tool for the management of a business in this sector, particularly in the marketing area of expertise. The use of smartphones allows access to the Internet and the use of social networks everywhere. This became an important communication tool between the company and consumers, and also between consumers among each other, enhancing the potential of strategies of digital marketing. This factor

is potentiating and facilitating word of mouth. Nowadays, consumer choices are highly influenced by the more sophisticated “word of mouth”, done through social media, blogs, apps, etc.

6.1.2. Description of the market

6.1.2.1 European Fast Food Market Overview

According to Marketline, fast food can be defined as “the sale of food and drinks for immediate consumption either on the premises or in designated eating areas shared with other foodservice operators, or for consumption elsewhere” (MarketLine, 2012 : 7). In the cited report, “Fast Food in Europe”, it can be observed that the European fast food market has experienced consistent and moderate growth in the past few years and it is expected to continue that tendency of growth until the end of the year of 2016. It generated total revenue of 27.054 million Euros in 2011 with an annual growth rate of 2,4% between 2007 and 2011. Also, market volumes reached 13,4 billion transactions in 2011 and are expected to rise to 14,1 billion by the end of 2016. Quick service restaurants, defined as “locations where the primary function is to provide full meals but where table service is not offered” (MarketLine, 2012 : 7), were the market’s most lucrative in 2011, with total revenues of 15.772 million Euros, equivalent to 58,3% of the market's overall value. As underlined above, the performance of the fast food market is forecast to accelerate, driving the market value up to 31.794 million Euros by the end of the year of 2016 and achieve an annual growth rate of 3,3% between 2011 and 2016 (MarketLine, 2012). All this information is schematized in Table 3.

Table 3. Europe Fast Food Market Value & Volume and Forecasts, 2007-2016

Year	€ million	% Growth	Million Transactions	% Growth
2007	24.652		13.217	
2008	25.363	2,9%	13.250	0,3%
2009	25.849	1,9%	13.370	0,9%
2010	26.490	2,5%	13.386	0,1%
2011	27.054	2,1%	13.373	(0,1%)
2012	28.156	4,1%	13.610	1,8%
2013	29.015	3,0%	13.733	0,9%

2014	29.891	3,0%	13.862	0,9%
2015	30.814	3,1%	14.002	1,0%
2016	31.794	3,2%	14.146	1,0%

Source: Adapted from MarketLine (2012)

6.2.1.2. Portuguese Market

6.2.1.2.1. Evolution of immediate consumption in Portuguese Retail

The Horeca channel is one of the less confident sectors regarding business volume evolution and the most resistant to internationalization. This can be linked with lower use of the management tools, reducing solutions for managers to grow their business based in precise information. In this sector, 77% of the companies use management software tools to help guide their businesses: the lowest percentage among all sectors (IDC & Primavera, 2012).

According to Anuário Nielsen Report (2013) this market is following a downwards tendency with an impact on Portuguese restaurants both in volume of sales and number of stores. Moreover, the relative decrease in volume of sales is higher than the relative decrease in number of stores (see Appendix 3). This fact can suggest that not only the market is shrinking, but the existing stores are selling less every year, possibly due to the severe reputation of unhealthy food that fast-food has gained. However, it must be emphasised that the geographic Nielsen areas in which the volume of sales decreased less were the ones that comprised the district of Lisbon (Area I and III S of Appendix 3) (The Nielsen Company, 2014), possibly due to the higher variety in the range of available options of fast-food restaurants in this urban centre.

6.2.1.2.2. Evolution of the Portuguese Fast Food Market

From 2010 to 2014, Fast Food market has been constantly decreasing in value as observable in Appendix 2. However, the number of Fast Food establishments has been increasing since 2011 (Appendix 2). This facts combined with a decrease of the average revenue value of Fast Food establishments (Appendix 2), might reflect a price deflation in this market (Barnes, 2013).

The main possible causes for this event can be the increasing of the Portuguese population health concerns which led them to seek other healthy emerging products and brands in

the market. “Healthy” Fast Food Chains can be seen as a good substitute for the traditional fast food, as this one is perceived as unhealthy.

6.1.3. Porter’s 5+1 forces

In order to assess the intensity of competition within the industry Porter’s 5+1 forces are analysed below.

Buyers – Generally the bargaining power of the clients in this industry is low. Each client does not obtain a significant volume of sales that express a significant proportion of the business and the number of clients is high.

Potential Entrants – The threat of potentials new entrants is medium because there are a lot of competitors in the industry. Any new entrant has easy access to the beginning of the business however its impact in the industry is generally low.

Suppliers – The power of the suppliers in this industry is very low. The market of wholesalers that make the provision of food products in Portugal has a considerable degree of atomization, with approximately 90% of the total 9,709 wholesalers having a micro enterprise with less than 10 employees (Informa D&B, 2014). Because of the high number of small companies supplying it is very unlikely for one supplier to obtain a significant proportion of the supplies needed to the business.

Substitutes - The threat of substitute products or services is very high because there are a lot of products and services available to customers to satisfy the same need, including other fast food chains, traditional restaurants, coffee and snacks shops, supermarkets and companies that make and deliver meals.

Other Stakeholders – The relative power of unions, Government and special interest groups is medium, considering the regulations and legislations that affect the business, not only by the Government but also the regulators of the market as ASAE for example. Also the special interest groups can have an important impact in the costumers’ perception of the company, such as zomato for example, a commonly known company which reviews food companies.

Rivalry Among Firms – The rivalry among existing firms in the industry is high with players competing to fulfil the same need and pressured by the decrease in sales over the past few years.

Throughout the analysis of these forces made on Table 5, we can conclude that the attractiveness of the industry is medium.

Table 4. Consolidation of Industry Analysis

Competitive Force	Attractivity of the Industry				
	Very Low	Low	Medium	High	Very High
Buyers				X	
Potential Entrants			X		
Suppliers					X
Substitutes	X				
Other Stakeholders			X		
Rivalry among firms		X			
Global Evaluation			X		

Source: Author

6.2. Internal Analysis

Mission – Provide to the customer a gourmet hamburger that meets their personal taste, through a service and products of high quality at an affordable price, placing the nutritional choices in the hands of consumers and encouraging creativity and innovation in the process of creating the hamburger.

Vision – To become the clients preferred and leading hamburger restaurant in Portugal.

Values:

- Professionalism and customer orientation;
- Trust and product/service quality;
- Respect for multiculturalism and multiplural tastes ;
- Innovation and creativity;
- Ethics and social responsibility.

Strategic Objectives:

In the first five years of activity, the main strategic objectives of this venture shall be:

- To disseminate the concept of the brand;
- Have a customer satisfaction level of at least 75%.
- Achieve a market share of 5%.
- Achieve 1.000.000 € in sales.
- Grow 2% on quantity sold per annum.

6.3. Analysis of Competitors

The direct competitors are “H3”, “Hamburgueria do Bairro” and “Honorato”. Due to its volume, “H3” is considered the principal competitor of this venture. Extended competitors are Mc Donalds, Burguer King and Burguer Ranch due to their volume despite of their core product concept not related to healthy consumerism. The details related to business of our direct and extended competitors are presented in Appendix 5.

As indirect competitors there are a lot of other types of restaurants such as fast food restaurants with core product different than hamburgers (ex. pizzeria), or other types of restaurants such as traditional restaurants.

Despite the fact that there are a lot of competitors in this market it is necessary to have in mind that none of those actually provide a service close to ours: the possibility of customization of the hamburger is an innovation yet to be introduced in the market.

6.4. Competitive Analysis

In order to achieve a complete and accurate competitive analysis, the first step is to list the main topics that constitute opportunities or threats and strengths or weaknesses.

Table 5. SWOT Analysis

Opportunities:

1. Increasing of families' budget

Threats:

<ol style="list-style-type: none"> 2. More practical society with less time for cooking activities 3. Increasing relevance of the healthy-minded consumer 4. Low bargaining power of suppliers 5. Payment from clients is immediately available 	<ol style="list-style-type: none"> 1. General population has the habit of taking homemade meals to work 2. Substitute products with high notoriety 3. High number of indirect competitors 4. Rivalry amongst firms 5. Legislation and regulation constrains.
<p>Strengths:</p> <ol style="list-style-type: none"> 1. Affordable and competitive prices 2. Customization of product to clients needs' 3. Variety of options 4. Product and service quality 	<p>Weaknesses:</p> <ol style="list-style-type: none"> 1. High investment needed 2. Difficulty to gain notoriety and market share 3. Low initial know-how 4. Perishability of the raw material 5. Variety of options can difficult logistics and stock management

Source: Author

6.4.1. Swot Systemic Analysis

Strengths + Opportunities = Challenges

- S1 + O1 – Potentiates sales volume
- S2 and S3 + O3 – The variety of options and the customization of products will enable the construction of several healthy meal options, accordingly to clients' preferences.
- S4 +O4 and O5 – Availability of cash flow to invest in product and service quality
- S1 and S3 + O2 - Potentiates shift from homemade meals to eating out for affordable price and good quality.

Strengths + Treats = Alerts

- S1 + T2, T3 and T4 - Affordable and competitive prices will contribute to compete with substitute products and competitors.
- S1, S3 and S4 + T1 – Homemade food is usually limited in terms of options, as it must be something you heat in the microwave and still tastes good, or something you can eat cold. If an affordable product with quality and variety is available then the company is less likely suffer of the treat T1.
- S4 + T2 – The quality of the product and service can minimize the treat of substitute products.
- S3 + T3 – The variety of options can overlap options provided by indirect competitors.

Weaknesses + Opportunities = Constraints

- W2 + O4 – The low notoriety and market share will constrain the bargaining power of the company with suppliers.
- W5 + O4 – The variety of options will require the purchase of small quantities of several products instead of big quantities of few products, limiting the bargaining power of the company with suppliers.

Weaknesses + Treats = Dangers

- W3 + T5 – As there is little know-how, there is the need to reassure that all legal/normative regulations are followed.
- W2 + T2, T3 and T4 – The existence off substitute products, several indirect competitors, and high rivalry amongst firms can originate difficulty to gain brand notoriety and market share.
- W1 + T5 – Legislation and normative regulations are accountable for part of the high initial investment needed.
- W4 and W5 + T5 - Legislation and normative regulations are needed because of the perishability of raw material, in order to ensure product quality and eliminate hazards relating to food hygiene and safety. This also difficult logistics and stock management.

6.4.2. Critical Success Factors

According to the data obtained throughout the questionnaire, the critical success factors of this business are (calculated using weighted average results of Question 21 of the Questionnaire, selected factors with average above 8 in a scale of 1 to 10):

- Food Hygiene and Safety
- Quality (of service, meat and other ingredients)
- Food Origin and Temperature
- Price
- Location.

7. Development Strategy

7.2.1. Identification and enterprise constitution

The proposition is to create a limited partnership, “Sociedade por Quotas. This type of Society has a fundamental characteristic: Only the company’s equity is legally responsible for the debt of the company. The initial capital of the company will be of 80.000.

This venture fits in the classification of Microenterprise (PME), as it will initially have less than 10 employees, and an annual volume of sales or total balance sheet volume less than or equal to 2 million Euros (IAPMEI, 2007).

The main code of Business will be 56103 – Restaurant without table service (INE, 2008).

7.2. Strategy

Based on the market analysis, it is possible to understand that this venture has potential, but also a lot of challenges to be successful, as it competes in a very aggressive market. As so, the author opted by a differentiation strategy. The main differentiation is based on the possibility of customization and quality of the products and service. However, this is possible to achieve maintaining a similar price to the nowadays seen on this market. To do so it is required concentration on efficiency of costs and sustainability production, sales and brand.

Key factors:

- Invest in the latest technologies.
Will permit the reduction of production costs and expedite the production time.
Despite not being one of the most important critical success factors, quickness of service had a 7,88 average score of importance in a scale of 1 to 10 (Question 21 of the questionnaire), indicating that a fast service will probably induce sales.
- Develop techniques of LEAN production.
Lean production is a philosophy of achieving high levels of productivity, quality and complexity, and reducing waste, by focusing on what adds value, reducing everything else. As introduced by John Krafcik in 1988, “Other (...) truly were lean operations. Inventory levels were kept at an absolute minimum so that costs

could be saved and quality problems quickly detected and solved; bufferless assembly lines assured continuous-flow production; utility workers were conspicuous only in their absence from the payroll. If a worker was absent without notice, the team would fill in; repair areas were tiny as a result of the belief that quality should be achieved within the process, not within a rectification area. (...) The lean production management policy presents higher risks – any hiccup will stop production totally. But the potential gains are great” (Krafcik, 1988 : 45).

To develop techniques such as these, will minimize waste and improve quality, reducing service time and cost of production, as well as empowering sales.

- Invest in promotion and communication of the brand

One way to sustain and increment sales is throughout the construction of a positive brand image. It is vital to introduce our brand to our consumers, explaining the business concept and making it remarkable.

- Invest in training of human capital

One way to maintain a positive and valuable brand image is to serve our clients in the best way possible. To serve them, we use our human capital. As so, there is a vigorous necessity of training those employees on how to provide that excellent service, to teach them the techniques and skills of communication with the costumer.

7.3. Brand

“The brand is and has been defined in many different ways over the years, depending on the perspective from which the brand is perceived” (Heding, Knudtzen and Bjerre, 2009 : 9).Recently, the American Marketing Association (1960) cited by (Heding, Knudtzen and Bjerre, 2009) defined brand as:

“A name, term, sign, symbol, or design, or a combination of them which is intended to identify the goods or services of one seller or a group of sellers and to differentiate them from those of competitors.”

(Heding, Knudtzen and Bjerre, 2009 : 9)

In more recent definitions of brand and branding, it also includes internal and organizational processes, constituting an extremely broad definition, aiming at the

coverage of all the facets of the brand and how it developed over time. The value of a strong brand to a business is incontestable: they attract loyal buyers at regular intervals of time, securing income and generating high quality earnings that can directly affect the overall performance of the business (Clifton and Simmons, 2003 ; Heding, Knudtzen and Bjerre, 2009).

7.3.1. Name, Slogan and Image

In the case of this venture, the main facets of the brand used to identify the goods and services of our company and differentiate them from those of competitors are the name, the slogan and the image, as follows:

Figure 4. Name, Slogan and Image

PodeSer
...um hambúrguer para todos os gostos!

Source: Author

The name of the Brand will be “PodeSer”, or in translation “CanBe”. This suggestive name is not usual, not directly indicating the purpose of the brand, arousing curiosity in the customer and thereby fomenting "word-of-mouth". The name also indicates flexibility and multiple options. This name can be called a Borrowed Interest Name as it uses “existing words that do not directly reflect the brand’s offerings or promise but that can be linked to a brand’s essence and promise through marketing efforts rather than through direct translation” (Chiaravalle and Schenck, 2007 : 110), such as Apple, YAHOO!, Nike and Starbucks.

The slogan will be “...um hamburger para todos os gostos!” or, in translation, “...a hamburger for all tastes”. It is intended that this slogan will serve as an identifier of the core-product, hamburgers, also giving a significant focus to the option of diversity driven from the capacity to customize the hamburgers. This is considered to be a descriptive slogan, as it describes the features of the business. Descriptive slogans are chiefly advantageous for micro/small businesses and for businesses with non-descriptive names,

both of which are the case of this venture. On the other hand, this slogan also has a persuasive edge as it includes the evidence of the benefit from consuming our products and services rather than the ones of competitors: the possibility of customization.

On the subject of the image of the brand, it is possible to underline three major aspects: the Lettering, the colors and the picture. The Lettering is simple and round, in order to be elegant and agreeable to the eyes. Regarding colors, white, black and green were chosen, because of their association with the following feelings (respectively):

- Purity, integrity, immaculacy, limpidity, luminosity, honesty and freshness.
- Mystery, curiosity, power, nobility, distinctiveness, sophistication and elegance;
- Freedom, independency, nature, freshness, vitality, health, energy and youth.

It is also important to highlight the lack of a picture in the image, in order to keep a simple and clean logo, and convey the idea of honesty and transparency of the brand. This type of image is a “Wordmark”, sometimes called a logotype or typographic symbol. This logotype “turns your brand name into your logo by presenting it in a unique typestyle, often with some artistic element that adds flair and memorability” (Chiaravalle and Schenck, 2007 : 126), such as Disney, Sony and Facebook.

The ultimate objective of this brand strategy is to make the brand gain visibility and recognition, being identified and remembered by the consumer for its intrinsic value, differentiating itself from the competition by its main competitive advantage: the possibility of customization of the hamburgers.

7.3.2. Protection

As mentioned above, a brand is a valuable yet intangible asset, which needs to be protected so it cannot be available to be used by others, forbidding them of benefiting inappropriately from that value. It is intended to register the brand "PodeSer", in order to prevent third parties to use, without consent, the trade mark to similar goods or services. The Nice class into which the brand is to be registered is the Class 43 – Restaurant Services (INPI, 2016).

8. Implementation Requirements

8.1. Licensing

With the current licensing regime, called “Licenciamento Zero” introduced by Legislative Decree N° 48/2011 of April 1st, the opening of businesses in the restaurant sector needs only of communication and a compliance commitment declaration of all legislation related. The main legislation is:

- Law-decree n° 48/2011: Simplifies access to and exercise of various economic activities in the context of “Licenciamento Zero”;
- Regulatory decree n° 20/2008: establishes specific requirements regarding facilities, operation and classification system of restaurant establishments;
- Law-decree n° 234/2007: establishes the legal regime that must be applied to the installation and modification of restaurant establishments, and the arrangements for its operation and functioning.

8.2. Hygiene and Safety

As a restaurant business that is engaged in the production, processing, storage and distribution of food, this venture is required to develop a methodology of Hazard Analysis and Critical Control Point (HACCP). This is a preventive methodology in order to avoid potential hazards that could cause damage to consumers, by eliminating or reducing hazards, ensuring that there is no unsafe food available for the consumer (ASAE, 2007). In 1993, by Directive 93/43/EEC, HACCP became part of European legislation, by applying the basic principles in the *Codex Alimentarius*. In Portugal, this Directive was transposed into national law by the Law-Decree n° 67/98. In 2006, European Commission Regulation n° 852/2004 of the European Parliament and of the Council replaced Directive 93/43/EEC, stipulated in Article 5 that all food business operators shall establish, implement and maintain a permanent procedure(s) based on the seven principles of HACCP (ASAE, 2007).

In order to implement and maintain the HACCP Plan, there is the need to ensure the following pre-requisites:

1. Structures and Equipment – All construction, structures, equipment and technology must be suitable from restauration purposes, and fit for food contact. All surfaces must be easily cleanable and non-porous.
2. Hygiene Plan – The existence of a hygiene plan must be guaranteed. The plan shall include aspects as diverse as the cleaning of the facilities or hand washing of all employees every 30 minutes.
3. Pest Control – There must be a certified enterprise responsible for the plague control.
4. Water Supply – The water supply has to be made throughout the water network, making available drinkable tap water.
5. Waste Collection – As the venture is located in an urban zone, garbage collection is in charge of the town hall. Despite this, a waste separation system is going to be implemented.
6. Materials in contact with food – All materials used must be suitable to be in contact with food.
7. Personal Hygiene – There will be a Personal Hygiene Plan that all staff must comply with, including simple, clean and short nails, no personal accessories at all (including wedding ring), etc.
8. Training –An individual training plan, adapted to the activity of each employee, has to be developed and implemented.

At the time of initiation of the venture, the HACCC Plan will be developed and implemented. Also, there is the need to hire a certified company that makes internal audit every six months and does microbiologic analysis with a previously defined periodicity. Last but not least, with regard to consumer information about allergens and nutrition, the European Union Regulation N° 1169/2011 will be used as guidance. These matters will highly benefit from the supervision of a food engineer specialist.

10. Implementation Policy

10.1. Marketing Plan

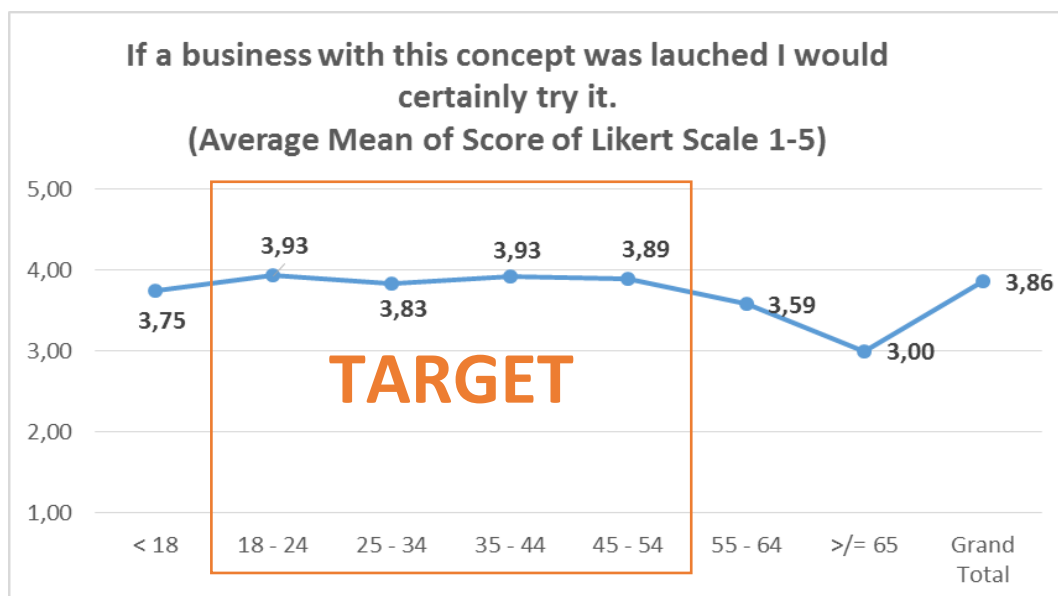
10.1.1. Segmentation, Target and Positioning

As seen in Literature Review, segmentation, targeting and positioning is a major part of the marketing strategy. The reason for segmenting, targeting and position is to focus limited resources for maximum effectiveness. The following criteria for segmentation were used:

- Geographic: Country and city
- Demographic: Age, occupation, financial capacity
- Psychographic: Life style

For targeting, results from question 16 of the questionnaire were used. Selection criteria were age groups that had an average mean response above the total mean. Group from 25 to 34 was included as it figured in the middle of our target age groups (see Figure 5).

Figure 5. Target Age

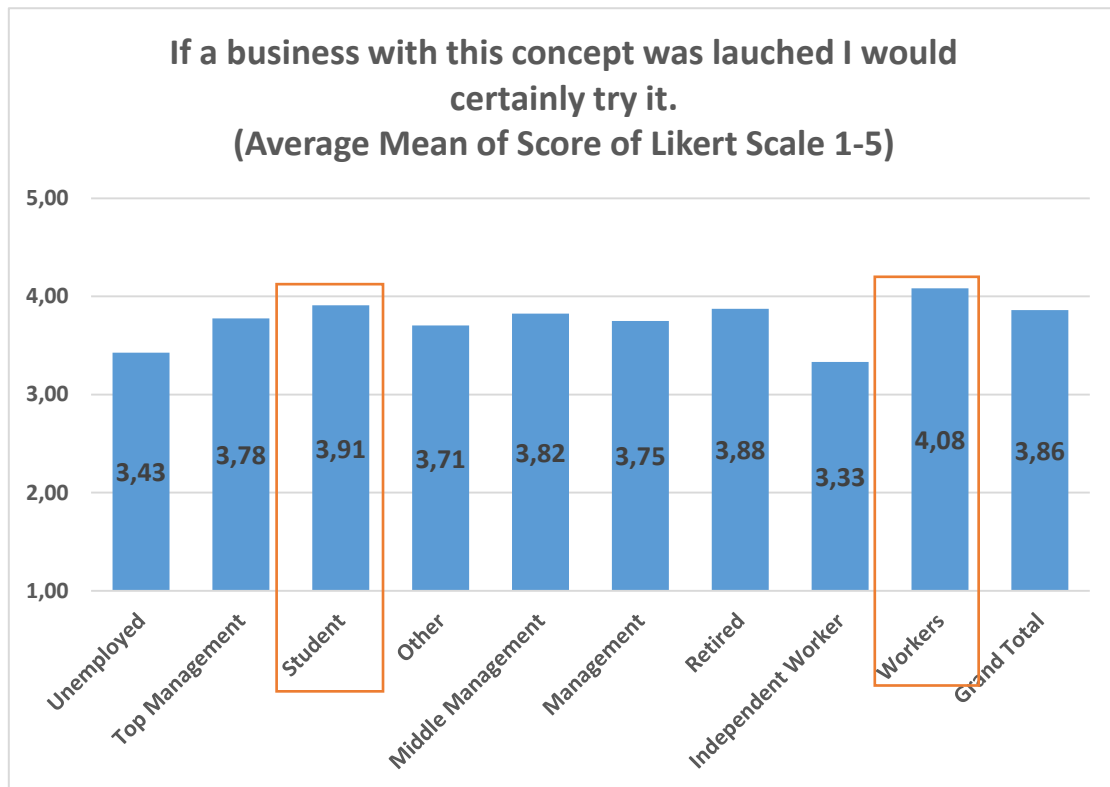


Source: Author

Similarly and as displayed on Figure 6, for occupation the selection criteria were groups that had an average mean response above the total mean. The group of retired people was excluded as there were only 8 individuals in this category (results were considered non

reliable). Therefore, the target is the local consumer that resides or develops activity in the city of the restaurant, the city of Lisbon, mainly workers or students with age between 18 and 54 years old.

Figure 6. Target Occupation



Source: Author

According to INE (2014), there is a total of 477.239 individuals living in the city of Lisbon, of which 199.662 have between 20 and 54 years old and are employed or studying (see Appendix 6). According to Câmara Municipal de Lisboa (2015), the users of the city of Lisbon daily grow a total of 378.226 individuals (425.747 entering the city minus 47.521 leaving the city, everyday), as a result of travelling for work or study purposes (home-work and/or home-school travelling) (Câmara Municipal de Lisboa, 2015). Of these 378.226 individuals not all are between the target ages. As there were no information about the age of the travelling population, a proportion was applied based on the number of workers or students with age between 20 and 54 years old of the resident population vs. total number of workers or students of all ages of the resident population, according to the information presented in Appendix 6. As so, the number of potential clients is 487.114.

Positioning that evidences the price-quality ratio is intended, with focus on the quickness of service and the possibility of customization of the hamburger as a differentiating factor. In order to position the company and send messages to the target the strategies presented in Table 6 were developed.

Table 6. Segmentation, Target and Positioning Strategies

Segmentation Criteria		Target	Strategy
Geographic	Region	City of Lisbon	Do not invest out of this area in the first phase of investment
Demographic	Age	From 18 to 54 years old	Do not invest in individuals in different age groups.
	Occupation	Students or workers	Invest throughout flyers (distribute near to workplace, universities and around shopping centre), social media and word-of-mouth.
	Financial Capacity	>7,5€ a meal	Do not invest in individuals without the availability to spend 7,5€ to lunch or dine.
Psychographic	Life style	Restrited time to lunch	Invest throughout social media and word-of-mouth, to show ease and quickness of service.

Source: Author

Further developments in the communication strategy are presented in the next chapter.

10.1.2. Marketing Mix

Due to the fact of having equal parts of goods and services, the offering of this venture is considered a hybrid, reason why it is necessary to develop 8 P's in the marketing-mix: Product, Price, Place, Promotion, Process, Production and Quality, People and Physical Evidence.

10.1.2.1. Product

“The product of restaurants is experiential; the complete package of food, beverages, service, atmosphere, and convenience goes into satisfying the guests’ needs and wants and making for a memorable experience, one that guests will want to repeat. The main ingredient is excellent food.”

(Walker, 2011 : 432)

In order to ease the business plan evaluation, a major core product was considered. In the first phase of investment, only this core product and no extras shall be available, as this core product is customizable to the client needs or wants. In a second phase of investment it shall be necessary to diversify the offer of the restaurant. The core product is a customized hamburger, sold in as a menu that will be composed of:

- One grilled hamburger (base of 125 gr+ three ingredients of 25gr each);
- Two portions of garnish each of 150gr;
- One drink of 33ml or a beer of 20ml.

For the the hamburger three options shall be available: beef, chicken or tuna. These options were chose throughout the results of question 17 of the questionnaire (see Appendix 7). The three most frequent basis were considered, with one prerequisite: being of different types of protein in order to guarantee variety (bovine, white meat and fish/vegetarian).

Regarding ingredients to complete the hamburger, the costumer will be able to choose three ingredients to be incorporated in the hamburger from the following list:

- | | | |
|-------------|--------------|----------------|
| • Fresh | • Mozzarella | • Chorizo |
| • Mushrooms | • Cheese | • “Farinheira” |
| • Bacon | • Olives | • Parmesan |
| • Onion | • Spinach | • Cheese |
| • Tomato | • Ham | • Goat Cheese |

Again, these ingredients were chosen throughout the results of question 18 of the questionnaire (see Appendix 7). In this case the criteria for incorporation was having at least 15% of the sample choosing that option (maximum of a dozen options).

In the case of garnish the most common were chosen: rice, fried potatoes and salad. Each client can choose two portions of any garnish in order to have the possibility to mix them. Regarding drinks also most common were chosen: bottled water, sodas, beer and natural orange juice made by order.

In a second phase of investment it is intended to diversify the offer, both by introducing new combinations (bases, ingredients, garnish and drinks) and by introducing extras, for

example the availability of different sauces, soups and deserts. Due to practicality of the business plan these diversification products were not included in the financial study.

10.1.2.2. Price

The strategy regarding price is to differentiate by the innovative concept [the possibility of customization] rather than compete by price. As so, price is determined based on competition: the price of the venture's direct competitor, H3.

Average reference price: Between 7€ and 8€ for complete meal (Appendix 5).

Therefore, the price chosen for our complete meal menu (hamburger + two portions of garnish + drink) is 7,5€.

This pricing strategy is adapted to product positioning and the brand image, but allows having a competitive price that should stimulate consumers and potentiate product experimentation and adoption and thus promoting brand awareness and loyalty.

10.1.2.3. Place

The distribution of the product shall be made directly to the consumer in the restaurant facility (direct distribution channel) as illustrated:

Producer → Consumers

“The place or location of a restaurant is one of the most crucial factors in a restaurant's success.”

(Walker, 2011 : 430).

The location is of the utmost importance to the success of the business, due to its relevance in acquiring and maintaining costumers and high investment needed to secure an ideal location. As so, the author considered essential to perform a complete study of all the matters that could influence the location of the venture.

According to Walker (2011), the criteria to define location for a restaurant is not always the same, depending on “restaurant personality, style of service, menu price, and management call for particular criteria in site selection. What is good for one restaurant may not be good for another. The focus is on the potential market” (Walker, 2011 : 94)

In this case, the following criteria were considered when choosing the best location for this venture:

- Presence of the target consumers nearby;
- Price;
- Visibility of store and brand;
- Accessibility (ease of transportation of products and merchandise).

Retail market in Portugal experienced great growth with the opening of hypermarkets and major commercial centres. This led to the approach of the Portuguese consumer to the European consumer: in Portugal, consumers spend about 38% of their disposable income in shopping centres, compared to 40% in the rest of Europe (ACAI, 2008).

The main reasons that led to construction of large shopping centres were the lack of commercial areas capable to satisfy a selective demand, the poor supply of stores in terms of quality, innovation and price, and the lack of parking facilities. Initially restricted to the largest metropolis in the country, shopping centres have spread throughout Portugal. Sonae Group, the MDC and Mundicenter are largest companies to promote shopping centre business in Portugal, representing over 70% of total area. The leader, Sonae Group, owns about 50% of the market, is the main operator and the largest real estate mediator in the retail area (ACAI, 2008).

Accordingly to Cushman & Wakefield (2016), Shopping centres are the most successful retail format (71% of operations), with particular concentration in urban centres, primarily, in Lisbon and, secondly, Oporto. The demand in shopping centres has evolved very positively over the last year, with restauration being most active in the sector representing almost 30% of demand. As a result of the sustained recovery of the retail market, there was a general increase in rents charged, which in shopping centres rose to 75€/m²/month (Cushman & Wakefield, 2016).

According to the same source, the street trade (local trade) is the second type of retail that gathers more operations (23 %), and this type of trade has strong potential for growth due to legislative changes, both at the lease level and at the urban regeneration level. However, in 2015 the largest relative increase in rents was seen in the street trade with costs of 97.5€/m²/month in Lisbon (3% more than in 2014), susceptible to continue increasing (Cushman & Wakefield, 2016).

Regarding offices (where the target of this business plan is during the day), the Central Business District (CBD) is slightly dominant (20%). Conversely, this area had a significant drop in the volume last year. The areas of “Corredor do Oeste” (area near A5 Lisboa-Cascais) and “Parque das Nações” were the following areas with the highest volume of offices. Regarding occupancy of those offices, the area of “Corredor do Oeste” had the highest vacancy rate (of almost 18%), the area of CBD of approximately 10% and the area of “Parque das Nações” was the area with the lowest vacancy rate (only 5,6% of offices are vacant). The area of “Parque das Nações” also had the highest reduction (450 basis points) of this rate from 2014 to 2015 (Cushman & Wakefield, 2016). This very positive development in this location is a clear sign of its attractiveness when it comes the proximity with the target.

10.1.2.3.1. Macro location:

Accordingly to Cushman & Wakefield (2016), there is a particular concentration of shopping centres in urban centres, primarily, in Lisbon and, secondly, Oporto. Another reason for choosing a large urban centre focuses on the fact that those are areas with more population and concentration of target.

10.1.2.3.2. Micro location:

According to the information above it is now possible to construct a multi criteria matrix that will evidence the ideal location for this venture, considering the two best options:

1. A store in a shopping centre in the area of “Parque das Nações”
2. A store in a shopping centre in the Central Business District.

Table 7. Multi Criteria Matrix Location

Critical Factor	Importance	Option 1	Option 2
Presence of the target consumers nearby	5	5	4
Price	4	2	1
Visibility of store and brand	3	4	4
Accessibility (ease of transportation of products and merchandise)	3	4	2
TOTAL	-----	57	42

5–Very Attractive; 4–Attractive; 3–In-between; 2–Unattractive; 1–Very unattractive.

Source: Author

It can be concluded that the best location to this venture is a store in a shopping centre in the area of “Parque das Nações”, namely in “Centro Comercial Vasco da Gama”, property of Sonae Group, due to its lower price and better accessibilities, increased evaluation regarding presence of the target consumer nearby and similar perceived visibility of the store/brand.

10.1.2.4. Promotion

An Integrated Marketing Communication strategy shall be used, as both above-the-line and below-the-line communication strategies are mixed with the objective of reaching the target population. The ultimate target of communication strategy are the students or workers between the age of 18 and 54 years old that live, work, study or develop any other activities near the area of Lisbon, specifically “Parque das Nações”.

The strategic objective of this communication strategy is to provide information about the product and the business concept, raising product awareness and creating a strong brand with solid positioning. Also, it is very relevant to promote product experimentation, evidencing the product and service quality, transmitting confidence in a safe, quick and always adapted to present wishes meal.

10.1.2.4.1. Indirect (or mass) communication

- Internet - Mainly done all year long through social media in a regular basis (Facebook, Twitter, Instagram, Snapchat, etc).

10.1.2.4.2. Direct communication

- Promotional brochure - A launching promotion of 2 meals for 10€ will be assembled in the first three months of activity, publicized through the distribution of flyers by promoters with interaction with the target, in order to gain awareness and potentiate word-of-mouth. Distributed in the immediate area of the facility, a brief mini brochure with essential information about the concept of the business and the promotion available to test product quality and service.
- Launching Event – Opening and product launching event shall be prepared, including brand and production line presentation, cooking, tasting and opinion listening. Presence of opinion leaders and society influencers, news reporters and food critics shall be guaranteed throughout VIP invitations, in order to positively impact on

opinion articles and journalistic reports or documentaries, solidifying brand notoriety.

In a second phase of investment other communication strategies shall be implemented: a website shall be developed as well as an online app. The personalization of trays, paper towels for trays and napkins is intended. Also, the distribution merchandising is proposed in order to keep the brand alive in consumers’ minds. Last but not least, it is intended to develop radio commercials in order to revive the brand to customers and present the business concept to new clientele.

10.1.2.4.3. Communication Budget and implementation chronogram

The budget for the promotion strategy is 11.000€, distributed as follows:

- Internet – Free.
- Promotional Brochure – 1.000€, for the printing of flyers and hiring part-time temporary worker for distribution flyers.
- Launching Event – A specialized PR company with a budget of 10.000€ will be responsible for the organization and execution of the Launching event.

These communication actions shall occur in accordance with the following implementation chronogram:

Table 8. Implementation chronogram of communication actions

<u>Actions</u>	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
Mass Communication												
Internet												
Direct Communication												
Promotional Brochure												
Launching Event	★											

Source: Author

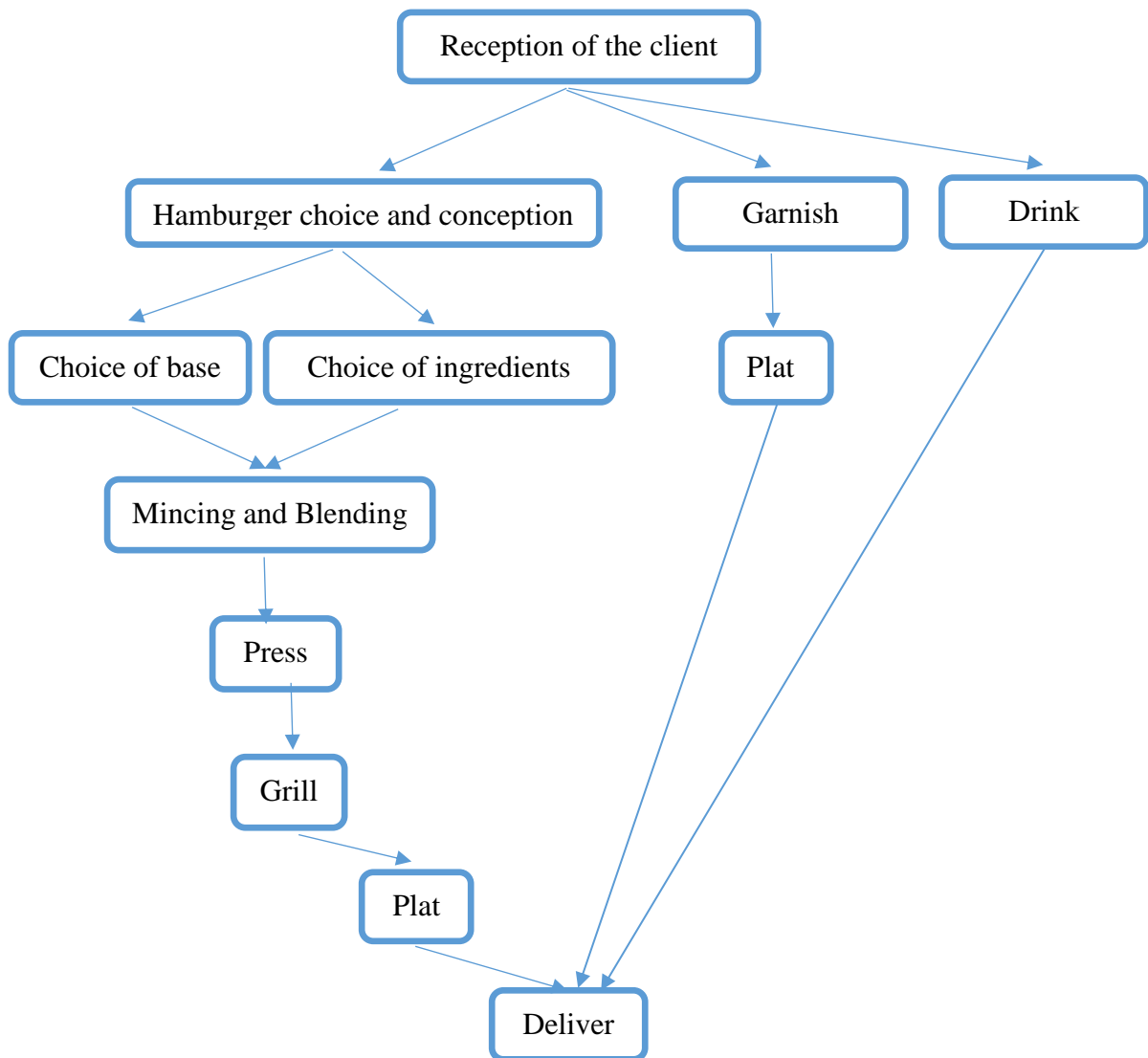
10.1.2.5. Process

The only way to achieve a quick service is guaranteeing quick processes (Walker, 2011). But in order to have quick processes is necessary to define the stages of the production process and what is done in each stage. The production process shall be developed in 6 stages, with the following predicted durations:

1. Reception of the client: includes staff welcoming, payment for the menu and retrieving tray with paper towel and cutlery. Duration: 40 seconds.
2. Hamburger choice: Client choosing base and ingredients for the hamburger. Workers puts them directly into the client's pot. Duration: 60 seconds.
3. Hamburger conception: Involves mincing and blending the base and the ingredients (30 seconds), pressing the mix so that it has the form of a hamburger (10 seconds), grilling the hamburger (maximum duration, grilling beef: 140 seconds (Unrecorded food engineer interview, 2016)) and plating (10 seconds). Total duration: 190 seconds.
4. Drink choice and delivery: Choice by the costumer and delivery of drink. Maximum duration, natural orange juice made to order: 45 seconds.
5. Garnish choice: Choice by the costumer and plating. Duration 45 seconds.
6. Plate delivery: Delivering of plate with the hamburger and the garnish to the client. Duration: 10 seconds.

As stages 4 and 5 of the production process can be developed while stage 3 takes place, our service has a predicted duration of 300 seconds (\equiv five minutes). An error margin of 1 minute is given, to account for any delay at the several stages of the process. It is considered that this predicted duration is acceptable to our customers given the service that the restaurant is to provide. The production process is diagrammed in Figure 7.

Figure 7. Production Process



Source: Author

10.1.2.6. Productivity and Quality

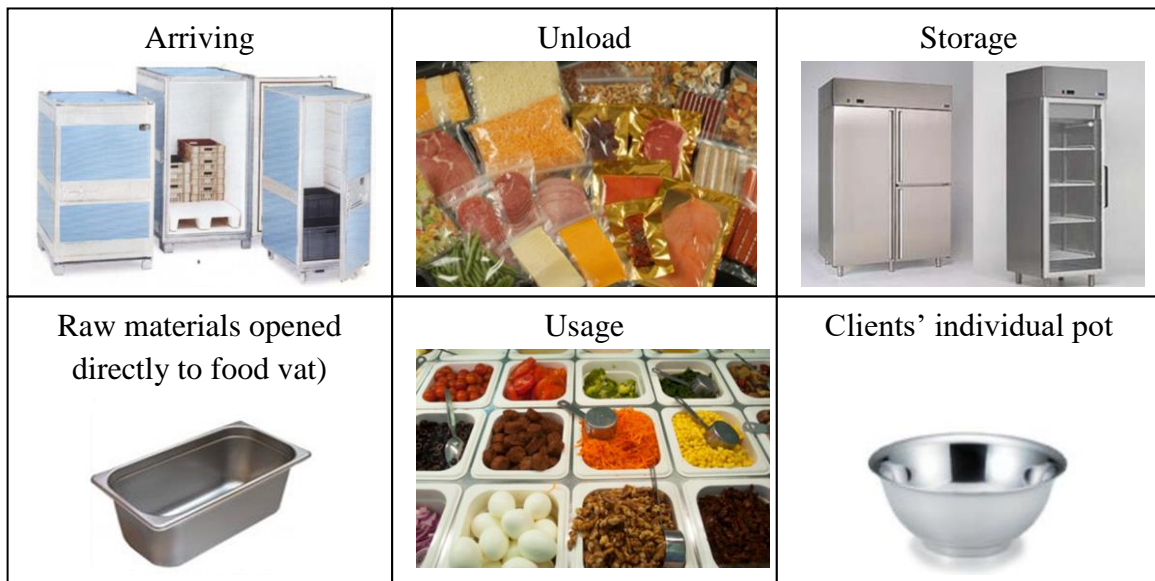
10.1.2.6.1. Quality

In order to guarantee freshness and quality of product as well as quality and quickness of service, it shall be contracted supply deliveries 4 times a week (Monday, Wednesday, Friday and Saturday), out of rush hours. By making this investment, it will be possible to maintain minimum stocks and guarantee stocks at the weekend (peak of production). Daily deliveries were considered, but in the unrecorded interview the food engineer alerted to the frequent flaws of suppliers when engaged in this type of contract. With 2-

day deliveries suppliers tend to fail less and the restaurant tends to assure some minimum stock in the case that supplier fails to deliver when supposed to.

The food engineer also recommended buying pre-cooked chicken in order to reduce the microbial bioburden, allowing the chicken to be cooked in the same grill as the remaining protein bases. The last recommendation of the food engineer regarding supplies was to buy all the products in certain dosages, like unidosages for the food vats, in order to handle food as little as possible. As so, all raw material will be received and stored in individual packages. When needed, the packages will be open directly to the food vat. After the client chooses the base protein and 3 ingredients to construct the hamburger, the raw materials shall be taken from the food vats into the client’s individual pot throughout appropriate tool, so that the rest of the production process can take place as described in the previous chapter.

Figure 8. Illustrative image sequence of raw materials reception, storage and usage.



Source: Illustrative images retrieved from the internet
 (http://vialgo.com/transporte_comidas.htm; <http://www.enfincasada.com.br/tag/congelando-comida/>; <http://www.fcc.pt/REFRIGERACAO/index.htm>;
http://www.menaje.cl/utensilios_recipientes.php; <http://www.10best.com/destinations/portugal/lisbon/baixa-chiado/restaurants/vitaminas/>;
http://www.mercamania.es/a/listado_productos/idx/10020587/mot/Recipiente_inoxidable/listado_productos.htm)

This option will avoid the usage of gloves, which can contribute to food contamination. However it does not exclude the necessary handwashing every 30 minutes (HACCP hygiene plan). At the end of each day, the remains in each food vat shall be placed in a disposable food package and donated to a social charitable institution as part of the social responsibility policy of the business.

Cleaning and maintenance of eating areas and bathrooms, are responsibility of the shopping centre management, as part of the facilities renting fee, as well as locker rooms and bathrooms for the employees. Collection of trays, plates, cups and cutlery of the eating areas and placement of those items on the restaurant is responsibility of the shopping centre management. Cleaning of those items is responsibility of the restaurant. This activity shall be developed during the hours of work that are not meal serving hours.

10.1.2.6.2. Productivity

The restaurant will be open from 9h until 24h everyday (except January 1st, May 1st and December 25th) as this is the shopping centre working hours. However it is necessary to take into account that most meals will be served during lunch or dinner time. As so, although the restaurant shall provide meals in all working hours, only four meal serving hours (12h30 to 14h30 and 20h to 22h) were considered for production capacity calculations, as the production that can be made in the remaining hours is considered residual. Also, it is relevant to take into account that this calculations are made based on the assumption that production is constant throughout the four hours, which is not entirely true due to the concentration of demand in some hours even among those four hours, reason why this projection of maximum production capacity has to be analyzed with caution.

It is considered that the main bottleneck of this production line is the conception of the hamburger. As so, only this production stage was considered for the calculation of the maximum production capacity. As Table 9 reports, the maximum production capacity with the initial investment is believed to be 136.421 meals per year.

Table 9. Maximum Production Capacity

Seconds per minute		60
Minutes per hour	×	60
Hours per day	×	4
Days by month	×	30
Months by year	×	12
Seconds per year	=	5.184.000
Conception of the hamburger (stage total duration + 20% margin)	× (190*1,2)	228
Number of grilling sequences	=	22.737
Grill capacity	×	6

Maximum production capacity
(meals per year) = 136.421

Source: Author

10.1.2.7. People

In order to ensure the hourly work of the schedule described in the previous chapter it will be necessary to account with the collaboration of workers according to Table 10.

Table 10. Total hours of work per week, with number of workers needed and assigned duties

	N° workers	Duties
9 to 10	2	Cleaning the facilities, dishwashing, preparation of trays and cutlery
10 to 11	2	
11 to 12	3	Preparation of meal serving
12 to 13	3	
13 to 14	4	
14 to 15	3	Meal serving hours
15 to 16	2	
16 to 17	2	
17 to 18	2	
18 to 19	2	Cleaning the facilities, dishwashing, preparation of trays and cutlery
19 to 20	2	
20 to 21	3	Preparation of meal serving
21 to 22	4	
22 to 23	3	Meal serving hours
23 to 24	2	
Total	273	Cleaning the facilities, dishwashing, preparation of trays and cutlery

Source: Author

During meal serving hours, each team shall be composed of at least three elements: one worker responsible for stage 1 and 2 of the production process, another worker responsible for the conception of the hamburger (stage 3 of the production process) and another one responsible for stages 4, 5 and 6 of the production process. During peak hours, (from 13h to 14h and from 21 to 22h) one more worker shall help all stages of the production process and support the proper functioning of the pantry. Depending on the fluctuations of the concentration of demand this distribution of workers may need to be adjusted.

As seen, there is a necessity of 273 hours of operational work per week, which shall be fulfilled by the hiring of eight employees: four in full time (40 hours per week) and other four in part time (30 hours per week), with rotating shifts, totalizing 280 hours of work per week. The seven hours of work were given as a margin, in order to account for necessary adjustments to work schedule as well as vacations. Another nonoperational worker shall be accounted, as the manager of the restaurant. This manager will be responsible for the functioning and managing of the business in all matters (General management, reporting and finance, human resources, marketing etc.).

Training shall be developed according to the individual training plan for each employee, according to the activities carried out by each employee. Some examples of training activities will be client interaction seminars, grilling formation, etc. All workers must contribute to the daily cleaning of the restaurant, and comply with the HACCP plan, including hygiene plan, internal audit and individual training plan.

10.1.2.8. Physical Evidence

Design, decoration, facilities, equipment, etc., are physical evidence in which the client bases their first opinion of the restaurant and creates expectations of the service. As so, it is of particular importance to invest in this aspects of the restaurant. The main components of the physical evidence shall be:

- Plates, cups and cutlery – Personalized with brand logo, allows the recalling of the brand while the customer is appreciating the meal. It is also necessary to ensure proper collection and delivery of the items (plates and cutlery) from the eating areas to the restaurant by the Shopping centre management services.
- Uniforms – Clean and simple uniforms, with clear colours, to evoke purity, immaculacy and limpidity.
- Promotional brochure (flyer) - brochure with clean and simple design and essential information about the concept of the business and the promotion available, in order to transmit easily the message and give the idea of transparency.

- Facilities - shall be clean and adapted to the needs of the restaurant, with all the necessary and recent equipment. Decoration shall be simple and with the colours of our brand: White, black and green.

10.2. Technology

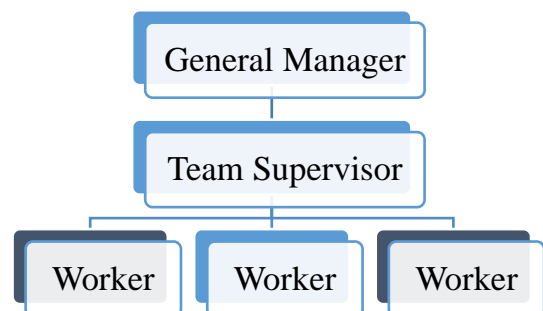
In order for this venture to be established, the following technologies shall be installed:

- Industrial kitchen – With refrigerated counters for the conservation stock (beverages and raw materials). Cold (for raw) and hot (for cooked) showcase structures, for presentation of hamburger raw ingredients and cooked garnish, respectively. A meat slicer/blender to chop and mix the hamburger ingredients. A press to shape the hamburger. A divided grill to cook both meat and fish hamburgers. An industrial fryer to fry potatoes, and a rice water steam cooker. Last but not least a juice machine will be needed to make natural orange juice made to order. In order to extract the smoke from the grilling process a fume cupboard shall be installed.
- Cleaning – A pantry and two industrial dishwashers (one for cups and cutlery, other for plates).
- Administrative – A cashier with appropriated software for the restaurant, and a portable computer for the general manager (official and office headquarters shall at the home of one of the promoters of the project).

10.3. Organization

Regarding organizational hierarchy, a top-down approach is intended. As presented in Table 10 – Total hours of work per week, with number of workers needed and assigned duties, two to four workers shall be at the restaurant every hour. One of the full time workers shall be assigned as team supervisor for every shift, as displayed in Figure 9.

Figure 9. Organization hierarchy

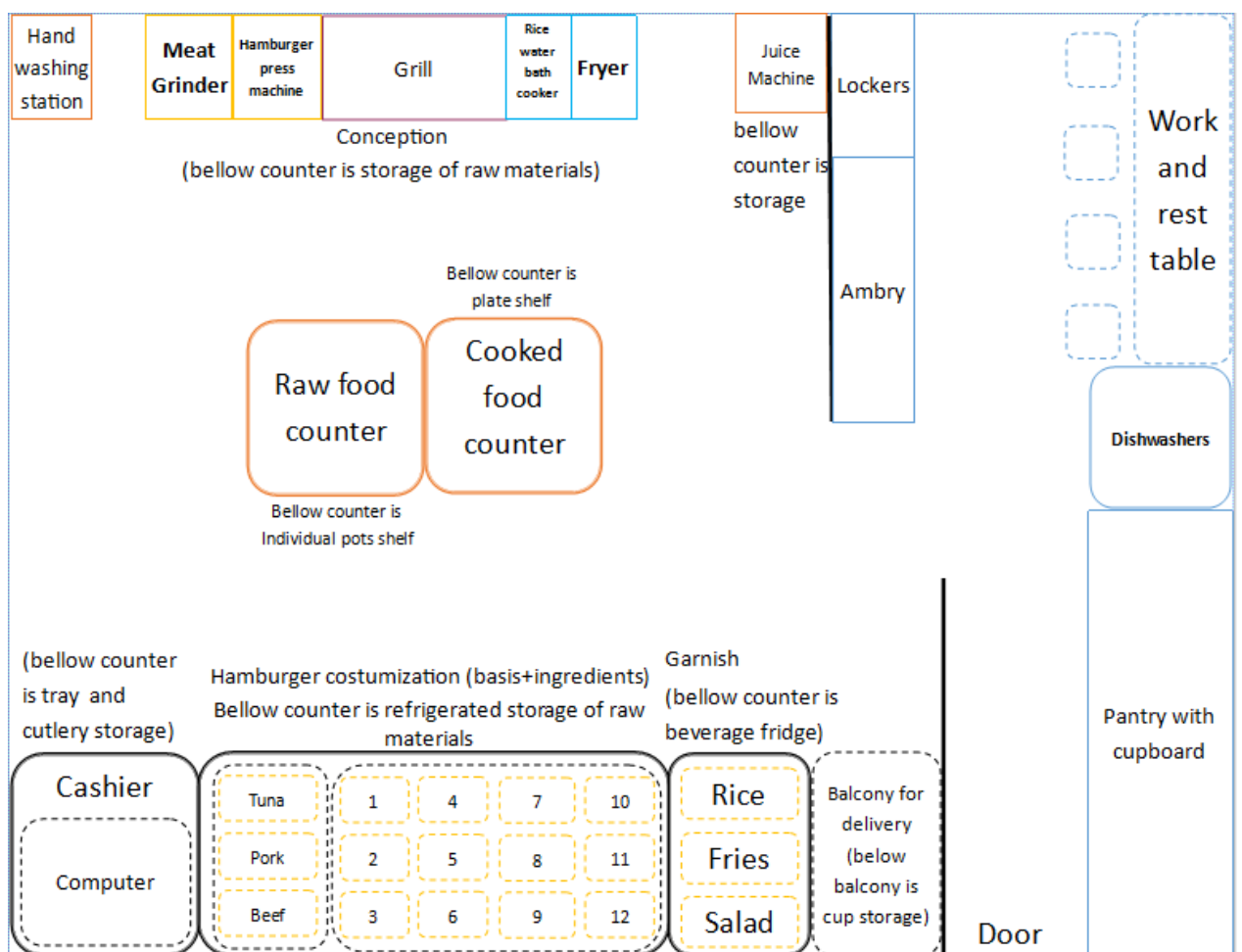


Source: Author

In this sector, the turnover of human resources may compromise the normal operation of a restaurant and the quality of the services provided. As it is intended to have a high quality service, there is a need to recruit skilled workers with experience in the area. Thus, to avoid employee turnover and attract and retain quality workers, it is intended to pay a salary above the average.

Regarding layout, the restaurant shall have a total of 35m² (7X5), with disposition as presented in Figure 10.

Figure 10. Disposition of the restaurant



Source: Author

A 3D plant of the restaurant was developed, and 2D graphics of that plant can be found in Appendix 8 (video presentation of 3D plant can be found on the CD with the digital work).

10.4 Financial Assumptions

As Financial Evaluation is one of most important sections of the plan, it shall be as realistic and accurate as possible. As underlined in the Literature Review, usually the financial assumptions needed to develop forecasting are inaccurate, leading to the overestimation of income and underestimation of expenses. As so, it is of vital importance that all assumptions made are carefully and conservatively designed.

For this project, all assumptions were done in the most conservatively way possible. For example: when calculating cost of goods sold, a unitary cost was considered for each component of the menu. For these unitary costs no average cost was done, it was considered the price of the most expensive option. When in doubt highest tax rates were considered. For CAPEX investment a safety margin was added to every article. In sales projection all assumptions were undervalued conservatively.

The financial evaluation of this proposition was made with the currency Euros, as it is the official currency in Portugal (country of implementation). The first year of activity considered was 2017. Only the last three months will have commercial activity, as the first nine months shall be used in studying and developing other activities necessary to the opening of the restaurant (developing the HACCP plan, developing supplier's contracts, developing location renting contract, etc). See a resumed Milestone Plan in Appendix 9.

The following tax rates were considered:

- VAT: 13% for restaurant sales and services provided and maximum rate (23%) for other transactions (PricewaterhouseCoopers, 2016a; Autoridade Tributária e Aduaneira, 2015a).
- Personal Income Tax: Having in mind that the average wage of the venture's workforce is 744€, a tax rate of 8,5% was considered as this is the highest personal income tax for individuals with a monthly gross salary between 730€ and 805€ (Autoridade Tributária e Aduaneira, 2015b; Autoridade Tributária e Aduaneira, 2016a).
- Income Tax Rate: 17% for the earnings until 15.000€; 21% for the remaining earnings - applicable for PME's. (PricewaterhouseCoopers, 2016b; Autoridade Tributária e Aduaneira, 2016b).

10.4.1. Sales

The Sales projection was developed as shown in Table 11.

Table 11. Sales Projection

Description	Assumption	Total	Rationale
Potential clients	487114	487114	Target
% communication coverage	×0,15	73067	Assumed communication coverage with 11.000€ the communication strategy.
Experimentation rate	×0,8	58454	Sum of the percentage of individuals that answered "Agree" or "Totally agree" to question 16 of the questionnaire.
Retention of clients	×0,45	26304	Despite answering that they would try the concept, only about 55% of target usually attend hamburger restaurants (Question 13 of the questionnaire).
Times a year attending hamburger restaurants	×30	789125	Results of those usually attending hamburger restaurants (question 13 of the questionnaire)
Intended market share	×0,05	39456	Strategic objective
Total Meals Annually	=	39456	
Volume of Sales	×7,5	295920€	

Source: Author

10.4.2. Costs

On the subject of costs it is important to underline that costs of goods sold was considered a variable cost, staff costs were considered fixed costs and external supplies and services were considered a hybrid.

10.4.2. Cost of Goods Sold

The cost of goods sold was calculated adding the costs of the most expensive raw material in each material needed. The indicative unit costs were collected in several suppliers (lowest ones were chosen) and an increase of 10% to the price was added to account for the cost of distribution, as follows:

- Basis of the hamburger – Most expensive: Tuna, unit cost of 125gr is 0, 72€.
- Ingredients – Most Expensive: “Farinheira”, unit cost of 75gr is 0, 28€.
- Garnish – Most Expensive: Rice, unit cost for 300gr is 0, 2€.
- Drink – Most Expensive: Beer, unit cost for 20ml is 0, 25€.

Source: Author’s research.

10.4.2.2. Human Resources

As mentioned above, to avoid employee turnover and attract and retain quality workers, it is intended to pay a salary above the average: 750€ for full time workers; part time workers receive a little less proportionally (550€) because full time workers have the responsibility of being team supervisors. For the manager the wage shall be of 1.500€. There is no food allowance since the restaurant can and shall provide lunch/dinner for the working staff.

10.4.2.3. External Supplies and Services

Concerning External Supplies and Services, the expenses represented in Table 12 were assumed.

Table 12. External Supplies and Services Assumptions

	% Fixed	% Variable	Monthly Value
Electricity	40%	60%	500
Water	30%	70%	300
Fluids	50%	50%	50
Tools	60%	40%	100
Stacionary	30%	70%	20
Rent	100%		2.625
Comunication	40%	60%	100
Insurances	100%		250
Fees	70%	30%	100
Litigations and notary	70%	30%	20
Maintenance	50%	50%	400
Advertising	100%		100
Specialized work (Accounting, Food Engineer, Pest Control, Laboratory)	100%		1.000
Others	50%	50%	500

Source: Author

10.4.4. Working Capital

Regarding working capital assumptions is imperative to emphasize that the average inventory period considered was 2 days (due to 2-day supply delivery). The average collection period is of 0 days due to cash payments from clients, which also makes provisions for doubtful debts unnecessary. Average payment period to suppliers is 30

days. An amount of 500€ was assumed as cash balance required, whilst there was a minimum necessity of 274€ (see Equation 1).

Equation 1. Cash balance required

Cash Balance Required

$$\begin{aligned}
 (1) & \equiv \frac{\text{number of meals in a year} \times (\text{next higher bill} - \text{meal unit price})}{\text{number of days in a year}} \\
 & \equiv \frac{39456 \times (10 - 7,5)}{360} \equiv 274\text{€}
 \end{aligned}$$

10.4.5. CAPEX

In Table 13 are presented CAPEX expenses.

Table 13. Detailed CAPEX Investment

CAPEX Investment	2017
<u>Tangible Fixed Assets</u>	
Land and Natural Resources	0
Building and other constructions	0
Equipments	21.500
Basic equipment	1.500€
Trays	300
Plates	600
Cups	350
Cutlery	250
Industrial Kitchen equipments	12.500
Refrigerated Counters	2.500
Beverage Refrigerated Counter	600
Meat slicer/blender	400
Hamburger Press	300
Showcase refrigerated struture	2.700
Showcase heated struture	1.200
Grill	1.300
Fryer	400
Rice Water Steam Cooker	500
Fume cupboard	1.000
Juice machine	1.600
Furniture and other equipments	7.500
Transportation Equipment	0
Tools	1.000
Administrative Equipment	2.500
Returnable Containers	0
Other tangible fixed assets	2.000
Total Tangible Fixed Assets	27.000

10.4.6. Weighted Average Cost of Capital (WACC)

For the determination of WACC, the following assumptions were made based on data retrieved from Damodaran (2016a) and Damodaran (2016b) presented in Appendix 10.

- Risk free Rate (R_f) = 2,77%
- Market Risk Premium ($R_m - R_f$) = 8,06%
- Unlevered Beta (β_u) = 64%

As there is no debt, the WACC of this venture is 7,93% (see Equation 2).

Equation 2. Calculation of WACC

$$\begin{aligned} (2) \quad WACC &= R_f + (R_m - R_f) \times \beta_u \\ &= 2,77\% + 8,06\% \times 0,64 = 2,77\% + 5,16\% = 7,93\% \end{aligned}$$

11. Financial Evaluation

11.1. NPV, IRR and Payback Period

The cash flows generated by the project are explicit in Table 14.

Table 14. Cash Flows of the Project

Cash Flow Statement	Currency Euros					
	2017	2018	2019	2020	2021	2022
Free Cash-Flow for the Firm	-76 305	53 637	43 906	47 535	49 966	54 419
Cumulated Cash Flow	-76 305	-22 668	21 238	68 773	118 739	173 158

Source: Author

The cash flow of the first year is negative, due not only to the investment in CAPEX needed to implement the venture (see financial assumptions above), but also to the negative operational cash flow generated in these first three months of activity (see detailed cash flow statement in Appendix 11). These cash flows were used for the development of the financial evaluation methodologies (NPV, IRR and Payback Period).

This project is supposed to be funded only by equity and have no debt. A WACC of 7,93% was considered for the development of the methodologies (see financial assumptions above and detailed WACC calculation in Appendix 11).

The firm’s perspective and the continuity value were considered. There is a small investment in the beginning of the venture and no investment in the following years. As so, the terminal value of the company will always be reductive: there are not a lot of assets to liquidate because there was only a small investment in them.

This project as a NPV of approximately 715.000€, an IRR close to 90% and a Payback Period of about two years, as it is possible to conclude from Table 15.

Table 15. Calculation of NPV, IRR and Payback Period

Considering Continuing Value						Currency	Euros
Firm Perspective	2017	2018	2019	2020	2021	2022	2023
Continuing Value							936 292
Free Cash Flow to Firm	-76 305	53 637	43 906	47 535	49 966	54 419	936 292
WACC	7,93%	7,93%	7,93%	7,93%	7,93%	7,93%	7,93%
Present Value Factor	1	1,079	1,165	1,257	1,357	1,464	1,581
PV of FCFF	-76 305	49 697	37 692	37 810	36 824	37 160	592 375
Cumulated PV of FCFF	-76 305	-26 608	11 084	48 894	85 718	122 878	715 253

Net Present Value	715 253
Internal Rate of Return	87,45%
Pay Back period	2 Years

Source: Author

The values presented are quite attractive since there are considerable cash flows for a small investment (80.000 of equity). Usually in a restaurant, the highest investment is in buying the location. In the case of this venture, the high investment on buying the location is not done, since the location is only rented (rent of 2.625€ per month). If a location with that value would have to be bought, it would cost 525.000€ (2625/0,005). A simulation with the same characteristics was done (considering continuity value, in the firms perspective and with a WACC of 7,93%), and if that investment would have to be done, the NPV of this project would be approximately 280.000€ and the IRR close to 17%.

11.2. Economic and Financial Indicators

The main economic and financial indicators of this project are presented in Table 16.

Table 16. Main Economic and Financial Indicators

	2017	2018	2019	2020	2021	2022
EBITDA	-16 866	44 787	50 000	55 410	61 023	66 845
EBIT	-20 997	28 262	33 475	42 010	57 216	63 795
EBT	-20 921	29 544	35 783	45 364	61 711	69 503
Net Income	-20 921	28 078	28 869	36 438	49 352	55 507
Return on Sales (ROS)	-43%	10%	10%	12%	15%	17%
Staff Cost / Revenues	68%	40%	39%	39%	38%	37%
Return On Investment (ROI)	-32%	26%	20%	20%	21%	19%
Return on Equity (ROE)	-35%	32%	25%	24%	24%	22%
Equity/Assets	91%	80%	81%	84%	86%	88%
Equity/Liabilities	1048%	403%	422%	508%	596%	715%
Total Debt/Assets	9%	20%	19%	16%	14%	12%
Long Term Debt/Assets	0%	0%	0%	0%	0%	0%

Source: Author

Regarding earnings, it is possible to conclude from every indicator (EBITDA, EBIT, EBT and Net Income) that they are negative in the first year and positive from the second year forward. This happens mostly because of the initial investment made in the beginning of the venture and because there are no further investments, with sales remaining more or less stable (growing per year 2% in quantity sold, 1% in price and costing 1% more in cost of goods sold).

ROS is negative in the first year since the venture is not achieving break-even point. This happens not only because this year has only three months with commercial activity but also because in these three months there will be a launching promotion of 2 meals for 10€, in order to allow for the testing of product and service quality, gaining awareness and potentiating word-of-mouth.

Staff costs are above the national average of the sector (close to 24%), mainly due to the option of paying an above average salary to the company's workers. Also its intrinsic characteristic of customization makes the production process harder. To maintain it fast and efficient an above average work force is needed. These staff costs have a descending tendency.

Since this project has no long term debt, ROI and ROE are quite similar and follow the same tendency. In the first year, they are both are negative, since the company is still not making profit. Only from the second year forward these ratios are positive indicating that the venture is making profit.

The Equity/Assets ratio is between eighty and ninety percent which is well above 35% (reference point). This means that at least 80% of Assets are financed with Equity, since there is no long term debt (only 20% of short term debt at most). Having a good financial autonomy can be very important to the management of the business.

The Equity/Liabilities ratio is also very high because there is little debt (only short term debt). In every year of its predicted activity, the value of the company's equity will be more than enough to cover all the company's debts.

As underlined above, there will be no long term debt, only a few current liabilities such as accounts payable to suppliers and public entities. As so, the total Liabilities/Assets ratio is quite small and the Long Term Debt/Assets ratio is 0.

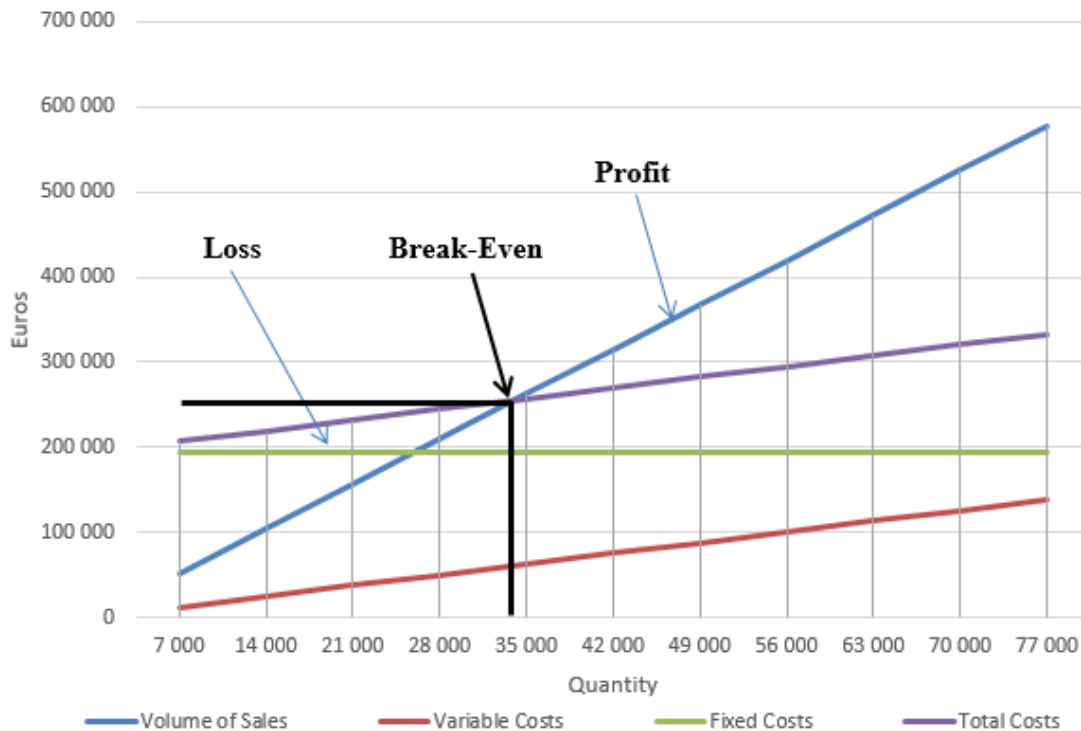
The remaining data supporting all the economic and financial calculations presented in this chapter can be found in Appendix 12 (External Supplies and Services, Volume of Sales, Cost of Goods Sold, Staff Expenses, Working Capital, Investment, Financing, Profit and Loss Account, Balance Sheet).

11.3. Critical Risks

11.3.1. Break-even analysis

For this project, the break-even point is at 34.039 menus or 255.296€, as shown in Figure 11.

Figure 11. Break-even point



Source: Author

Having in mind the volume of sales presented in Appendix 12, the derived safety margin is of 15% in 2018 (one year and three months after launching) and of about 30% in 2022. This safety margin is not great, but it is necessary to have in mind that all projection assumptions were made very conservatively.

11.3.1. Sensitivity and Scenario analyses

For this section, sensitivity and scenario analyses were developed, with three main variables: units sold, price and cost of goods sold. Sensitivity analysis was done throughout the sum and subtraction of 10% of variation in each variable. After that, 3 scenarios were considered:

- Base Scenario (in which the financial evaluation was developed);
- Pessimistic Scenario (in which all downright variations were conjugated, e.g. decreasing of units sold and price, increasing of cost of goods sold);
- Optimistic Scenario (in which all upright variations were conjugated, e.g. increasing of units sold and price, decreasing of cost of goods sold);

Resumed results of these analyses can be found in Table 17 (for detailed analyses see Appendix 13).

Table 17. Resumed Scenario Analyses

Pode Ser		Continuing Value		
		NPV to Firm	IRR	Pay-Back
BASE SCENARIO		715 253	87%	2
1. Units Sold				
1.1 - Decreasing of Units Sold	-10%	402 327	60%	4
1.2 - Increasing of Units Sold	10%	1 027 751	115%	2
2. Price				
2.1 - Decreasing of Price	-10%	331 847	55%	4
2.2 - Increasing of Price	10%	1 097 640	116%	2
3. Cost of Goods Sold				
3.1 - Increasing of Cost of Goods Sold	10%	640 477	81%	2
3.2 - Decreasing of Costs of Goods Sold	-10%	790 028	94%	2
4 - PESSIMISTIC CASE (1.1+2.1+3.1)		-27 490	1%	6
5 - OPTIMISTIC CASE (1.2+2.2+3.2)		1 530 630	156%	1

Units: Euros; IRR in %.

Source: Author

As it is possible to conclude, the only scenario where the project is not viable is in the pessimistic scenario, with all the variables having a downright 10% variation. It is believed that this conjugation of downright variations in all three variables is very unlikely, having in mind that all assumptions were made very conservatively. All other scenarios or tendencies of these risk analysis produce results that are still quite interesting regarding viability of the project.

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Appendices

Appendix 1. Questionnaire

Part I

Welcome. My name is Ana Antunes and I am a student of the MSc. in Finance of ISCTE-IUL. I would like to obtain your participation in this questionnaire, which is going to help me realize my master thesis. There are no right or wrong answers, only the ones that reflect your opinion. This survey has a predicted duration of 6 minutes, is confidential and is destined only for academic studies. I thank you in advance for your collaboration.

1) Gender*

Female

Male

2) Age*

< 18

45 - 54

18 - 24

55 - 64

25 - 34

>= 65

35 - 44

3) Occupation*

Unemployed

Management

Student

Top Management

Retired

Independent Workers

Workers

Other

Middle management

4) City of work/study*

Part II

Indicate your level of accordance with the following statements

5) When buying an unknown brand, I feel insecure regarding the level of quality*

- Totally Disagree Disagree Indifferent Agree Totally Agree

6) I prefer to buy known brands because I like to reconfirm their quality*

- Totally Disagree Disagree Indifferent Agree Totally Agree

7) I prefer to buy known brands because the risk of my necessities not being satisfied is less when compared to an unknown brand*

- Totally Disagree Disagree Indifferent Agree Totally Agree

8) Generally, I always buy the latest or newest products to arrive on the market*

- Totally Disagree Disagree Indifferent Agree Totally Agree

9) Generally, it is exciting to experiment the newest products before anyone else*

- Totally Disagree Disagree Indifferent Agree Totally Agree

10) I appreciate and usually consume meals out of the house, in commercial environments. (By meals please understand main courses, such as lunch or dinner)*

BurgerRanch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hamburgueria do Bairro	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Honorato	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part IV

PodeSer

...um hambúrguer para todos os gostos!

This project proposes the launch of a new concept of gourmet hamburger. This concept is based on the customization of the hamburger consumed by the customer, which may choose the type of meat to be used, and the ingredients to be mixed with the meat before cooking the hamburger. This habit has been observed when families buy hamburgers at the butcher, and the customer asks the butcher to chop some ingredients (ex.: chorizo, cheese, etc.) along with the desired type of meat. With the launch of this venture this desire would be available in a convenient and fast way not requiring cooking a meal at home to be fulfilled. The company would provide high quality product and services at an affordable price, placing the nutritional choices in the hands of consumers, who could have a tastier and healthier meal depending on their preferences.

14) I appreciate the business concept presented above and I think it would be successful. *

Totally Disagree Disagree Indifferent Agree Totally Agree

15) In my opinion, the proposed brand image fits the concept of the business. *

Totally Disagree Disagree Indifferent Agree Totally Agree

16) If a business with this concept was launched I would certainly try it. *

Totally Disagree Disagree Indifferent Agree Totally Agree

17) Which of the following types of hamburger do you prefer? *

Pork

Vegetarian/Soy

Beef

Other. Which?:

Chicken

Tuna

18) Imagine that you are going to create your hamburger right now. What are the 5 ingredients you would choose to integrate your hamburger?*

Bacon

Smoked ham

Ham

"Linguiça"

Chorizo

Sausage

Pepperoni

Shrimp

"Alheira"

Sea delicacies

"Farinheira"

Fresh Mushrooms

"Morcela"

Olives

- Onion
- Pepper
- Tomato
- Spinach
- Chillies
- Corn
- Goat Cheese

- Swiss Cheese
- Mozzarella Cheese
- Parmesan Cheese
- Serra Cheese
- Azores Cheese
- Other. Which?:

19) And what sauce would to choose to accompany you hamburger? *

- Bechamel
- Mushrooms
- Four Cheese
- Garlic Mayonnaise
- Pepper
- Spicy Hot

- Lemmon
- Tomato
- Parsley
- Beer
- Oporto Wine
- Other. Which?:

20) For a meal of this type I would be willing to pay:*

- Less than 5€
- Between 6€ and 10€

- Between 11 and 15€
- More than 15€

21) On a scale from 1 to 10 please rate the importance of each of the following factors for the success of the referred business, where 1 - Not at all important and 10 - Extremely Important.

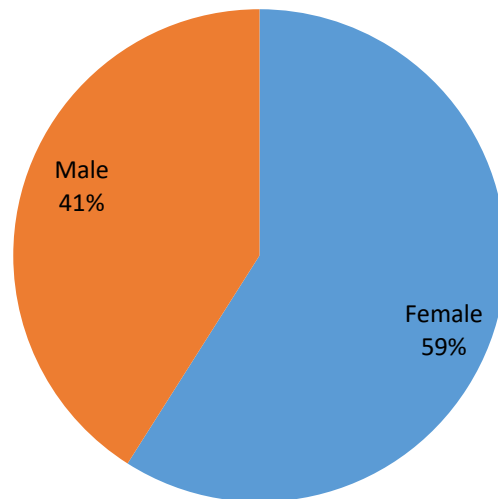
	1	2	3	4	5	6	7	8	9	10
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speed of Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Menu Variety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meat Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of remaining ingredients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Food Temperature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hygiene and safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Origin of meat and remaining ingredients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nutricional values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank You!

Source: Author

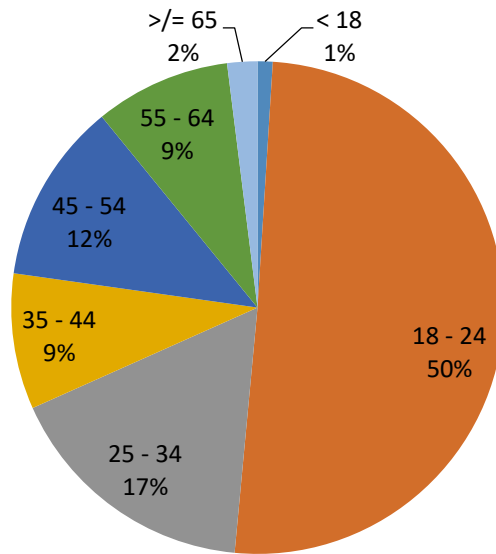
Appendix 2. Main results of the questionnaire

1. Gender



Value	Percent	Count
Female	59.3%	192
Male	40.7%	132
Total		324

2. Age Group

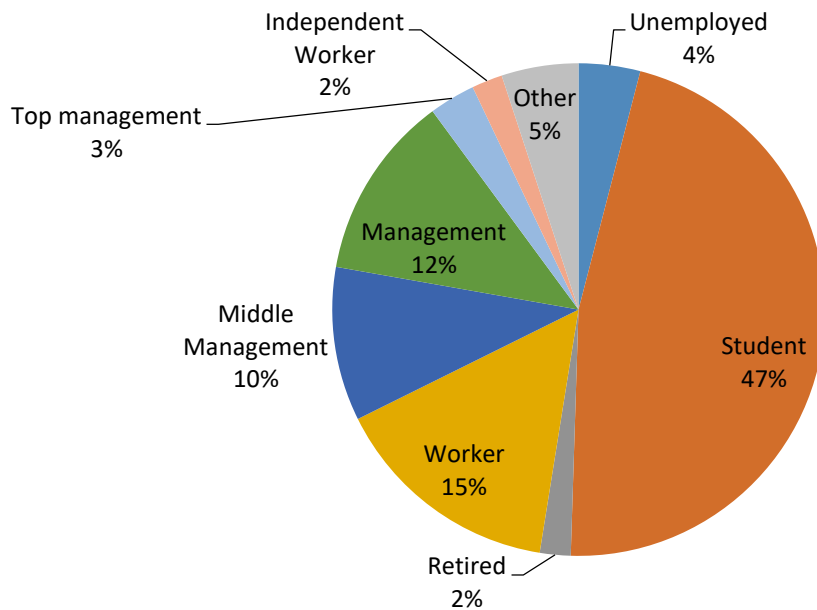


Value	Percent	Count
< 18	1.2%	4
18 - 24	50.9%	165
25 - 34	16.7%	54
35 - 44	8.6%	28
45 - 54	11.7%	38
55 - 64	9.0%	29
>= 65	1.9%	6
Total		324

Statistics

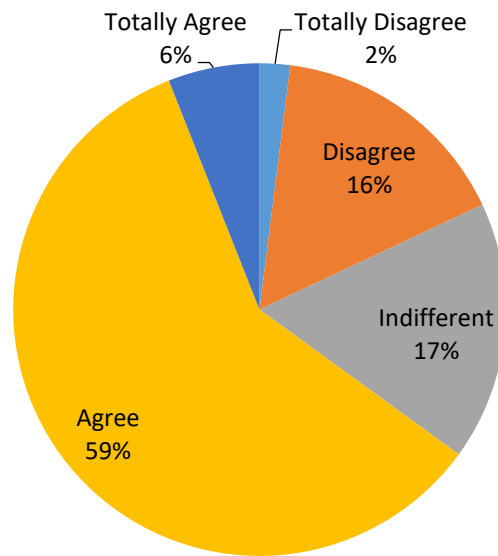
Sum	8,605.0
Average	27.4
StdDev	12.7
Max	55.0

3. Occupation



Value	Percent	Count
Unemployed	4.3%	14
Student	45.7%	148
Retired	2.5%	8
Worker	14.8%	48
Middle Management	10.5%	34
Management	12.4%	40
Top Management	2.8%	9
Independent Worker	1.9%	6
Other	5.3%	17
Total		324

5. When buying an unknown brand, I feel insecure regarding the level of quality

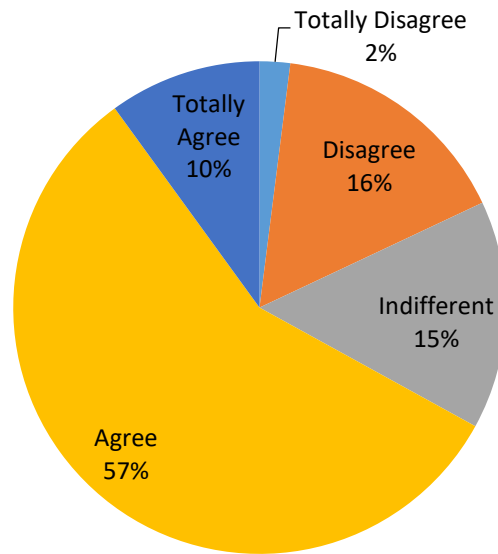


Value	Percent	Count
Totally Disagree	1.9%	6
Disagree	15.7%	51
Indifferent	17.0%	55
Agree	59.0%	191
Totally Agree	6.5%	21
Total		324

Statistics

Sum	1,142.0
Average	3.5
StdDev	0.9
Max	5.0

6. I prefer to buy known brands because I like to reconfirm their quality.

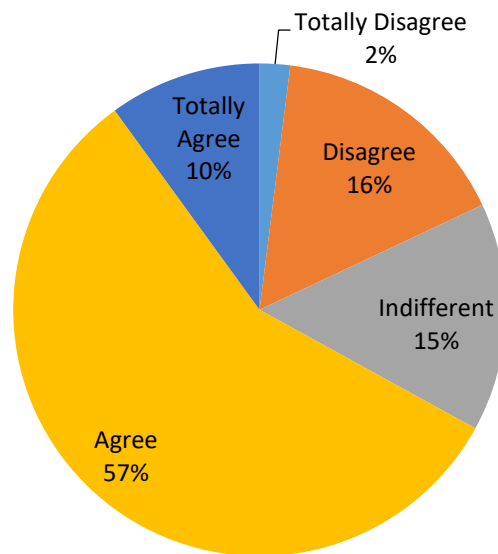


Value	Percent	Count
Totally Disagree	1.5%	5
Disagree	16.4%	53
Indifferent	15.1%	49
Agree	57.4%	186
Totally Agree	9.6%	31
Total		324

Statistics

Sum	1,157.0
Average	3.6
StdDev	0.9
Max	5.0

7. I prefer to buy known brands because the risk of my necessities not being satisfied is less when compared to an unknown brand.

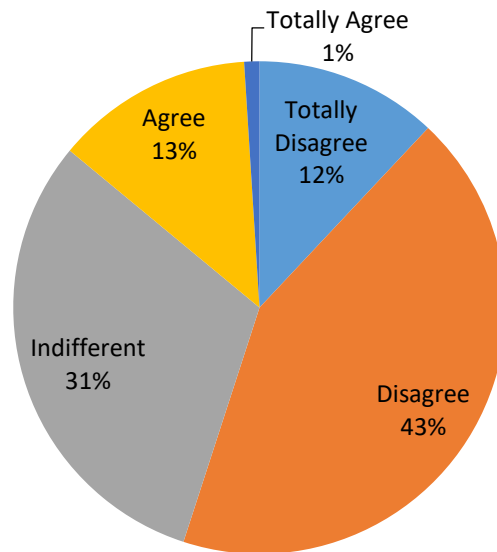


Value	Percent	Count
Totally Disagree	2.2%	7
Disagree	15.7%	51
Indifferent	15.1%	49
Agree	56.8%	184
Totally Agree	10.2%	33
Total		324

Statistics

Sum	1,157.0
Average	3.6
StdDev	0.9
Max	5.0

8. Generally, I always buy the latest or newest products to arrive on the market.

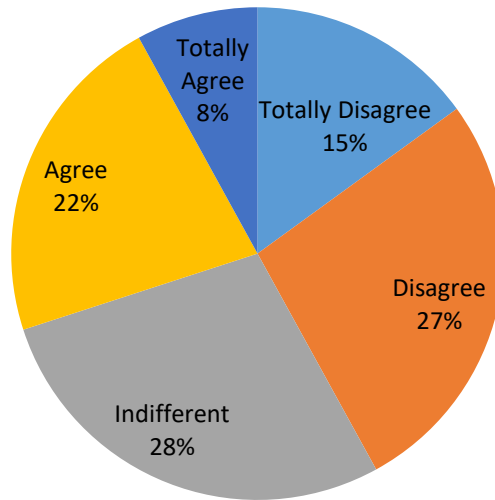


Value	Percent	Count
Totally Disagree	12.4%	40
Disagree	43.2%	140
Indifferent	30.6%	99
Agree	12.7%	41
Totally Agree	1.2%	4
Total		324

Statistics

Sum	801.0
Average	2.5
StdDev	0.9
Max	5.0

9. Generally, it is exciting to experiment the newest products before anyone else

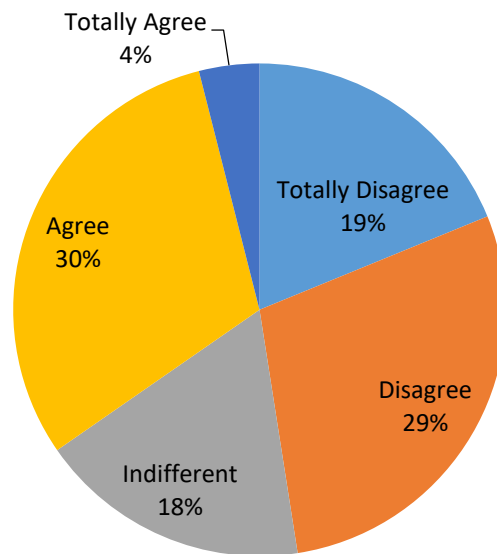


Value	Percent	Count
Totally Disagree	15.1%	49
Disagree	27.5%	89
Indifferent	28.1%	91
Agree	21.6%	70
Totally Agree	7.7%	25
Total		324

Statistics

Sum	905.0
Average	2.8
StdDev	1.2
Max	5.0

10. I appreciate and usually consume meals out of the house, in commercial environments. (By meals please understand main courses, such as lunch or dinner)*

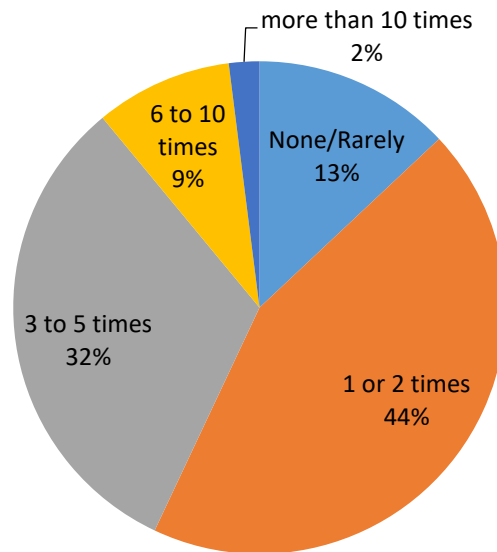


Value	Percent	Count
Totally Disagree	18.8%	61
Disagree	29.0%	94
Indifferent	17.6%	57
Agree	30.6%	99
Totally Agree	4.0%	13
Total		324

Statistics

Sum	881.0
Average	2.7
StdDev	1.2
Max	5.0

11. In average, how many times a week do you consume meals out of your house?

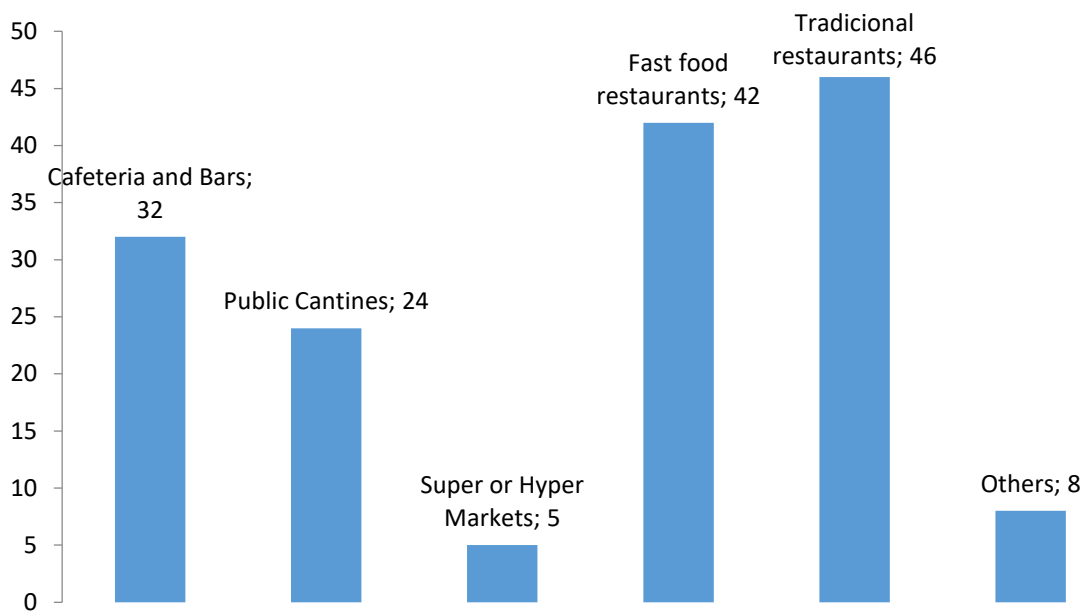


Value	Percent	Count
None/Rarely	13.0%	42
1 or 2 times	43.8%	142
3 to 5 times	32.4%	105
6 to 10 times	9.3%	30
More than 10 times	1.5%	5
Total		324

Statistics

Sum	637.0
Average	2.3
StdDev	1.6
Max	6.0

12. When you consume meals out of your house, which kind of establishments do you tend to prefer?

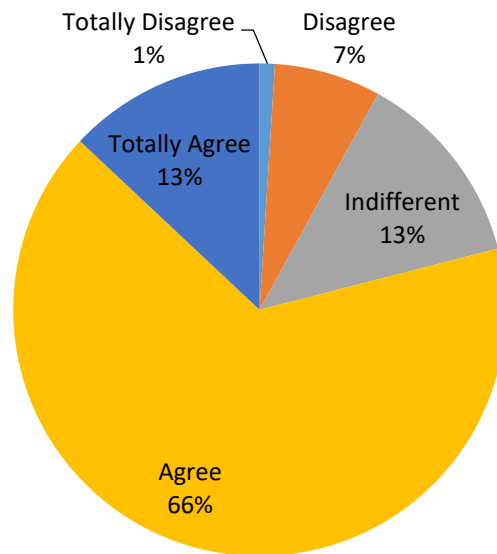


Value	Percent	Count
Cafeteria and Bars	31.8%	103
Public Cantines	24.4%	79
Supero r Hyper Markets	5.3%	17
Fast food restaurants	41.7%	135
Tradicional Restaurants	45.7%	148
Others	7.7%	25
Total		324

13. If you usually attend to hamburger restaurants please indicate which ones and the respective monthly frequency. If you do not attend to this kind of establishments please go on to the next question.

	Never	1 or 2 times	3 to 5 times	6 to 10 times	More than 10 times	Responses
McDonald's	16.4 % 41	71.2 % 178	10.0 % 25	1.2 % 3	1.2 % 3	250
BurgerKing	78.8 % 175	19.4 % 43	0.9 % 2	0.5 % 1	0.5 % 1	222
BurgerRanch	94.1 % 206	4.1 % 9	1.8 % 4	0.0 % 0	0.0 % 0	219
H3	45.5 % 107	47.7 % 112	6.8 % 16	0.0 % 0	0.0 % 0	235
Hamburgueria do Bairro	59.9 % 136	36.6 % 83	3.1 % 7	0.0 % 0	0.4 % 1	227
Honorato	74.5 % 164	23.6 % 52	1.8 % 4	0.0 % 0	0.0 % 0	220
Other	70.2 % 144	24.9 % 51	2.9 % 6	1.5 % 3	0.5 % 1	205

14. I appreciate the business concept presented above and I think it would be successful.

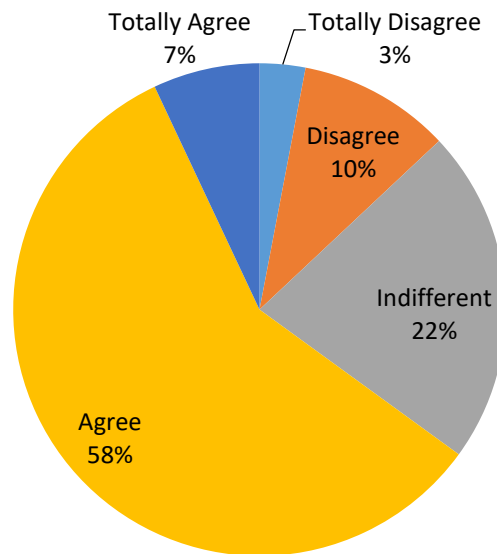


Value	Percent	Count
Totally Disagree	1.2%	4
Disagree	7.1%	23
Indifferent	13.0%	42
Agree	65.5%	211
Totally Agree	13.0%	42
Total		322

Statistics

Sum	1,230.0
Average	3.8
StdDev	0.8
Max	5.0

15. In my opinion, the proposed brand image fits the concept of the business.

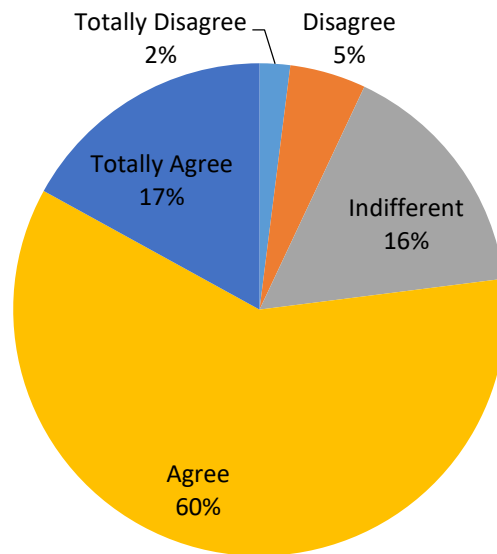


Value	Percent	Count
Totally Disagree	2.8%	9
Disagree	9.6%	31
Indifferent	22.4%	72
Agree	58.4%	188
Totally Agree	6.8%	22
Total		322

Statistics

Sum	1,149.0
Average	3.6
StdDev	0.9
Max	5.0

16. If a business with this concept was launched I would certainly try it.

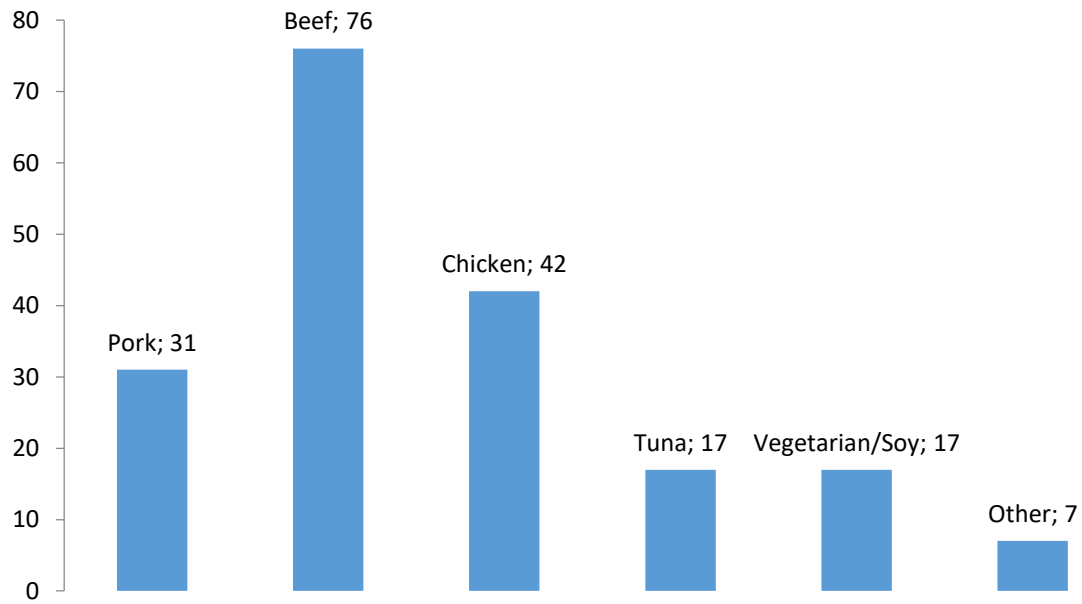


Value	Percent	Count
Totally Disagree	1.9%	6
Disagree	4.7%	15
Indifferent	16.2%	52
Agree	60.3%	194
Totally Agree	17.1%	55
Total		322

Statistics

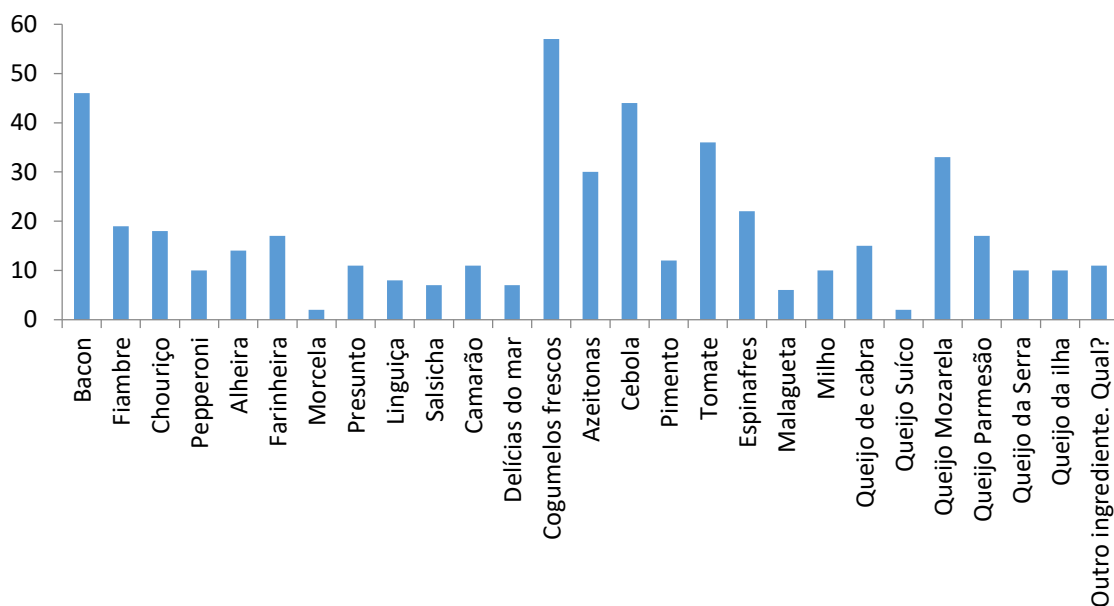
Sum	1,243.0
Average	3.9
StdDev	0.8
Max	5.0

17. Which of the following types of hamburger do you prefer?



Value	Percent	Count
Pork	31.1%	100
Beef	76.4%	246
Chicken	41.9%	135
Tuna	16.8%	54
Vegetarian/Soy	16.8%	54
Other	7.5%	24
Total		322

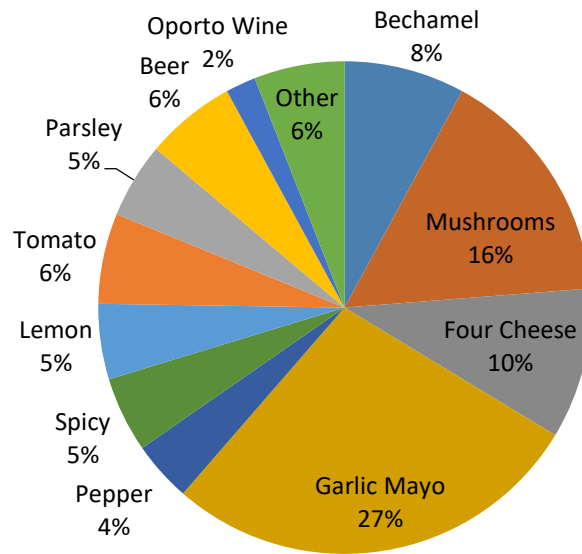
18. Imagine that you are going to create your hamburger right now. What are the 5 ingredients you would choose to integrate your hamburger?



Value	Percent	Count
Bacon	46.0%	148
Ham	18.9%	61
Chorizo	18.3%	59
Pepperoni	9.6%	31
“Alheira”	14.0%	45
“Farinheira”	17.1%	55
“Morcela”	2.2%	7
Smoked Ham	11.2%	36
“Linguiça”	7.8%	25
Sausage	7.1%	23
Shrimp	10.6%	34
Sea Delicacies	6.5%	21
Fresh Mushrooms	56.5%	182

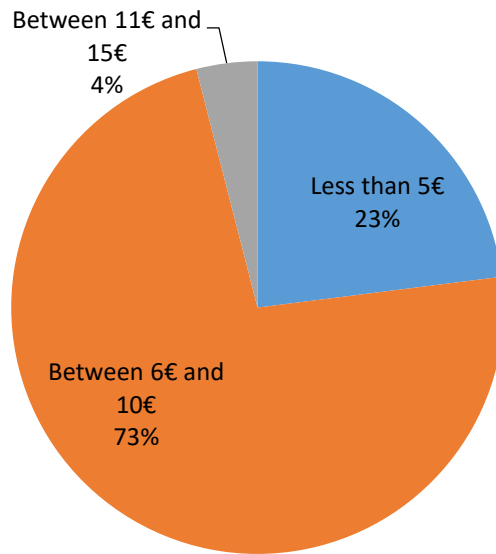
Olives	30.4%	98
Onion	44.4%	143
Pepper	12.4%	40
Tomato	36.3%	117
Spinach	22.1%	71
Chillies	5.6%	18
Corn	9.9%	32
Goat Cheese	14.6%	47
Swiss Cheese	2.2%	7
Mozzarella Cheese	32.9%	106
Parmesan Cheese	16.8%	54
“Serra” Cheese	9.6%	31
Azores Cheese	9.6%	31
Other	10.6%	34
Total		322

19. And what sauce would to choose to accompany you hamburger?



Value	Percent	Count
Bechamel	7.8%	25
Mushrooms	16.5%	53
Four Cheese	9.6%	31
Garlic Mayo	28.0%	90
Pepper	3.7%	12
Spicy	4.7%	15
Lemon	5.3%	17
Tomato	5.9%	19
Parsley	5.3%	17
Beer	5.9%	19
Oporto Wine	1.6%	5
Other	5.9%	19
Total		322

20. For a meal of this type I would be willing to pay:



Value	Percent	Count
Less than 5€	22.7%	73
Between 6€ and 10€	73.3%	236
Between 11 and 15€	4.0%	13
More than 15€	0.0%	0
Total		322

21. On a scale from 1 to 10 please rate the importance of each of the following factors for the success of the referred business (where 1 - Not important at all and 10 - Extremely Important).

	1	2	3	4	5	6	7	8	9	10	N
Price	0.0% 0	0.3% 1	2.5% 8	1.9% 6	8.5% 27	2.5% 8	11.3% 36	24.2% 77	18.2% 58	30.5% 97	318
Speed of Service	0.6% 2	0.3% 1	1.3% 4	2.2% 7	6.3% 20	6.3% 20	14.7% 47	31.6% 101	18.8% 60	18.1% 58	320
Quality of servisse	0.6% 2	0.0% 0	0.6% 2	0.3% 1	1.3% 4	2.2% 7	4.4% 14	14.1% 45	27.5% 88	49.1% 157	320
Menu variety	0.6% 2	0.9% 3	2.2% 7	2.5% 8	9.7% 31	9.4% 30	15.4% 49	24.2% 77	18.2% 58	16.7% 53	318
Meat Quality	1.9% 6	0.3% 1	0.0% 0	0.9% 3	1.6% 5	1.9% 6	3.8% 12	11.7% 37	24.1% 76	53.8% 170	316
Quality of remaining ingredients	0.0% 0	0.3% 1	0.9% 3	0.9% 3	1.6% 5	2.8% 9	6.6% 21	12.9% 41	27.9% 89	46.1% 147	319
Food Temperature	0.6% 2	0.6% 2	0.3% 1	1.6% 5	4.4% 14	5.3% 17	12.5% 40	29.4% 94	21.3% 68	24.1% 77	320
Hygiene and Safety	0.3% 1	0.6% 2	0.0% 0	0.6% 2	1.3% 4	2.8% 9	3.1% 10	10.3% 33	13.2% 42	67.7% 216	319
Origin of meat and remaining ingredients	1.3% 4	2.2% 7	2.2% 7	2.5% 8	3.4% 11	6.3% 20	10.9% 35	14.1% 45	14.7% 47	42.5% 136	320
Nutricional values	1.9% 6	2.5% 8	2.5% 8	5.3% 17	9.1% 29	13.4% 43	12.5% 40	15.0% 48	15.0% 48	22.8% 73	320
Brand	10.1% 32	3.5% 11	6.0% 19	7.9% 25	15.5% 49	13.9% 44	15.8% 50	14.9% 47	5.4% 17	7.0% 22	316

Source: Author

Appendix 3. Anuário Niesen Report Tables

Portuguese Restaurants Volume of sales & Number of Stores Evolution

	Volume of Sales (Million Euros)				Number of Stores			
	Restaurants	Snacks	Cafés	Total	Restaurants	Snacks	Cafés	Total
2003	1.220	4.722	4.322	10.264	4.876	31.432	44.125	80.433
2004	1.275	4.663	4.352	10.289	4.055	31.044	43.386	79.485
2005	1.293	4.645	4.288	10.226	5.179	30.555	43.606	79.340
2006	1.343	4.358	4.394	10.096	5.299	28.677	44.649	78.625
2007	1.398	4.193	4.469	10.060	5.432	27.956	46.036	79.424
2008	1.188	3.740	4.242	9.170	5.257	26.869	45.115	77.241
2009	1.145	3.645	3.893	8.683	5.393	26.129	44.485	76.007
2010	1.062	3.663	3.476	8.201	5.239	26.787	42.779	74.805
2011	890	3.152	2.869	6.911	4.616	24.769	38.646	68.031
2012	805	2.866	2.632	6.303	4.386	24.302	37.702	66.390
% Variation of last 5 years (2007-2012)	-42,42%	-31,65%	-41,11%	-37,35%	-19,26%	-13,07%	-18,10%	-16,41%

Source: Adapted from(The Nielsen Company, 2014)

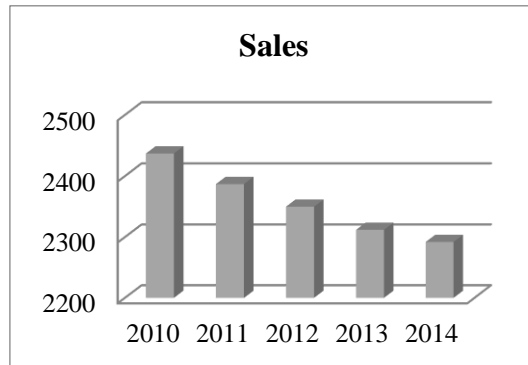
Volume of sales (Millions of Euros) per Nielsen Areas

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% Variation of last 5 years (2007-2012)
I	2.350	2.305	2.418	2.401	2.441	2.272	2.186	2.123	1.884	1.701	-30,32%
II	954	967	925	920	877	803	781	744	611	564	-35,69%
III N	2.651	2.674	2.560	2.572	2.548	2.300	2.133	1.948	1.654	1.523	-40,23%
III S	1.160	1.151	1.175	1.185	1.200	1.100	1.127	1.055	911	849	-29,25%
IV	934	926	985	928	980	941	861	816	638	589	-39,90%
V+Algarve	2.215	2.267	2.162	2.090	2.014	1.754	1.595	1.515	1.213	1.077	-46,52%
Total	10.264	10.289	10.226	10.096	10.060	9.170	8.683	8.201	6.911	6.303	-37,35%

Source: Adapted from(The Nielsen Company, 2014)

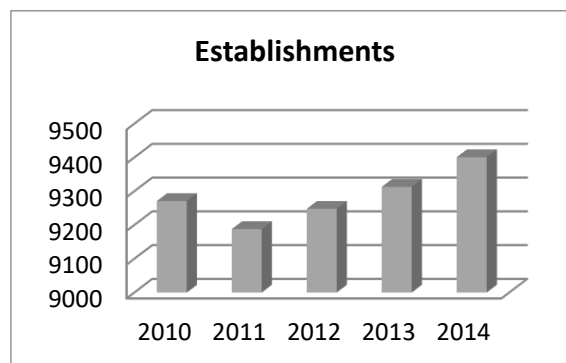
Appendix 4. Worldwide Fast Food Restaurants Charts

Volume of sales of Portuguese Fast Food Restaurants (Million Euros)



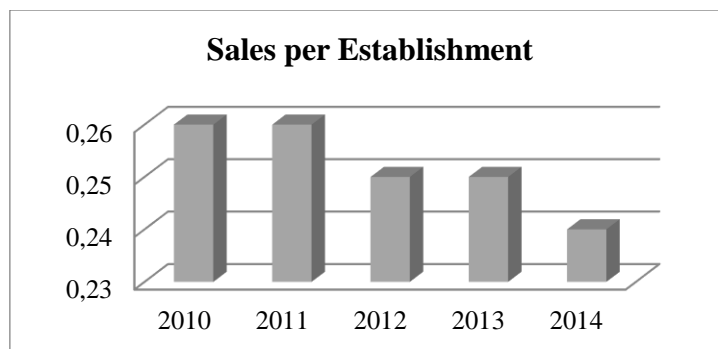
Source: Adapted from (Barnes, 2013)

Number of Establishments of Portuguese Fast Food Restaurants



Source: Adapted from (Barnes, 2013)

Chart 3: Volume of Sales per Establishment of Portuguese Fast Food Restaurants (Million Euros)



Source: Adapted from (Barnes, 2013)

Appendix 5. Details of competitors

	PC	DC		EC		
	H3	Hamburgueria do Bairro	Honorato	McDonalds	Burger King	Burger Ranch
Area covered	All country	Lisbon	Lisbon	All country	All country	All country
Price	7€ / 8€	7€ / 9€	8€ / 11€	5€ / 6€	5€ / 7€	5€ / 7€
Type of meal	Hamburguer Gourmet	Handmade gourmet hamburguer	Handmade gourmet hamburguer	Hamburguer	Hamburguer	Hamburguer
Frequency (*)	High	Medium	Medium	High	Low	Low
Website	www.h3.com	www.hamburgueriadobairro.com	www.honorato.pt	www.mcdonalds.pt	www.burgerking.pt	www.burgerranch.com

(*) Derived through questionnaire question 13 results.

Source: Author

Note:

- PC – Principal Competitor
- DC – Direct Competitors
- EC – Extended Competitors

Appendix 6. Resident population (n) in the city of Lisbon by age group and employment status

	Total			20 - 24 years old			25 - 29 years old			30 - 34 years old		
	Total	Employed	Students	Total	Employed	Students	Total	Employed	Students	Total	Employed	Students
Lisboa	477.239	229.566	32.874	29.050	11.497	10.328	37.422	27.968	1.910	40.960	33.151	479

	35 - 39 years old			40 - 44 years old			45 - 49 years old			50 - 54 years old		
	Total	Employed	Students	Total	Employed	Students	Total	Employed	Students	Total	Employed	Students
Lisboa	40.433	32.678	224	35.184	28.078	96	35.410	27.672	76	33.991	25.441	64

Source: (INE, 2014)

Calculations:

Total workers or students with age between 20 and 54 years old =

$$11.497+10.328+27.968+1.910+33.151+479+32.678+224+28.078+96+27.672+76+25.441+64 = \boxed{199.662}$$

Proportion of workers or students with age between 20 and 54 years old

$$=(11.497+10.328+27.968+1.910+33.151+479+32.678+224+28.078+96+27.672+76+25.441+64)/(229.566+32.874) = \boxed{76,08\%}$$

$$\text{Number of potential clients} = 199.662 + 378.226 \times 0,76 = \boxed{487.114}$$

Appendix 7. Results of Questions 17 and 18 of the Questionnaire

Question 17

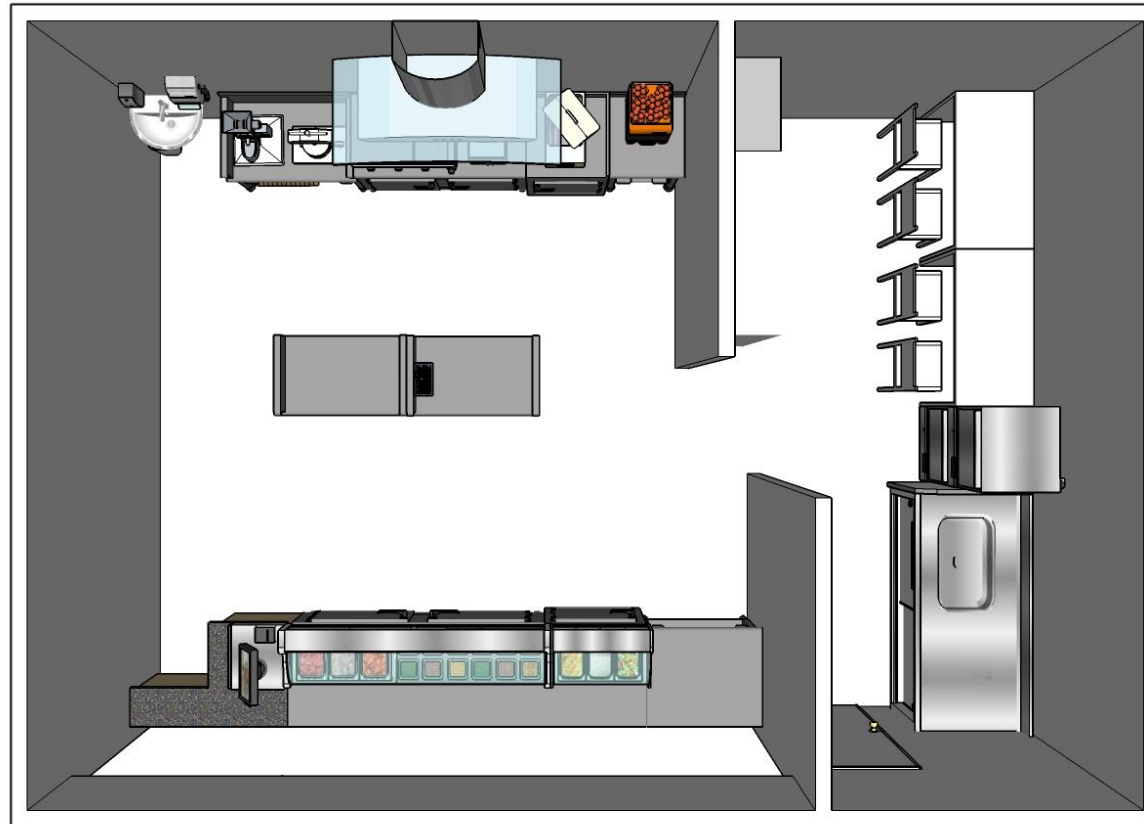
Value	Count	Percent
Beef	246	76,4%
Chicken	135	41,9%
Pork	100	31,1%
Tuna	54	16,8%
Vegetarian/Soy	54	16,8%
Other. Which?	24	7,5%

Question 18

Value	Count	Percent
Fresh Mushrooms	182	57%
Bacon	148	46%
Onion	143	44%
Tomato	117	36%
Mozzarella Cheese	106	33%
Olives	98	30%
Spinach	71	22%
Ham	61	19%
Chorizo	59	18%
“Farinheira”	55	17%
Parmesan Cheese	54	17%
Goat Cheese	47	15%
“Alheira”	45	14%
Peppers	40	12%
Smoked Ham	36	11%
Shrimp	34	11%
Other. Which?	34	11%
Corn	32	10%
Pepperoni	31	10%
Serra Cheese	31	10%
Azores Cheese	31	10%
“Linguiça”	25	8%
Sasage	23	7%
Sea delicacies	21	7%
Chillies	18	6%
“Morcela”	7	2%
Swiss Cheese	7	2%

Appendix 8. 2D graphics of the restaurant plant.

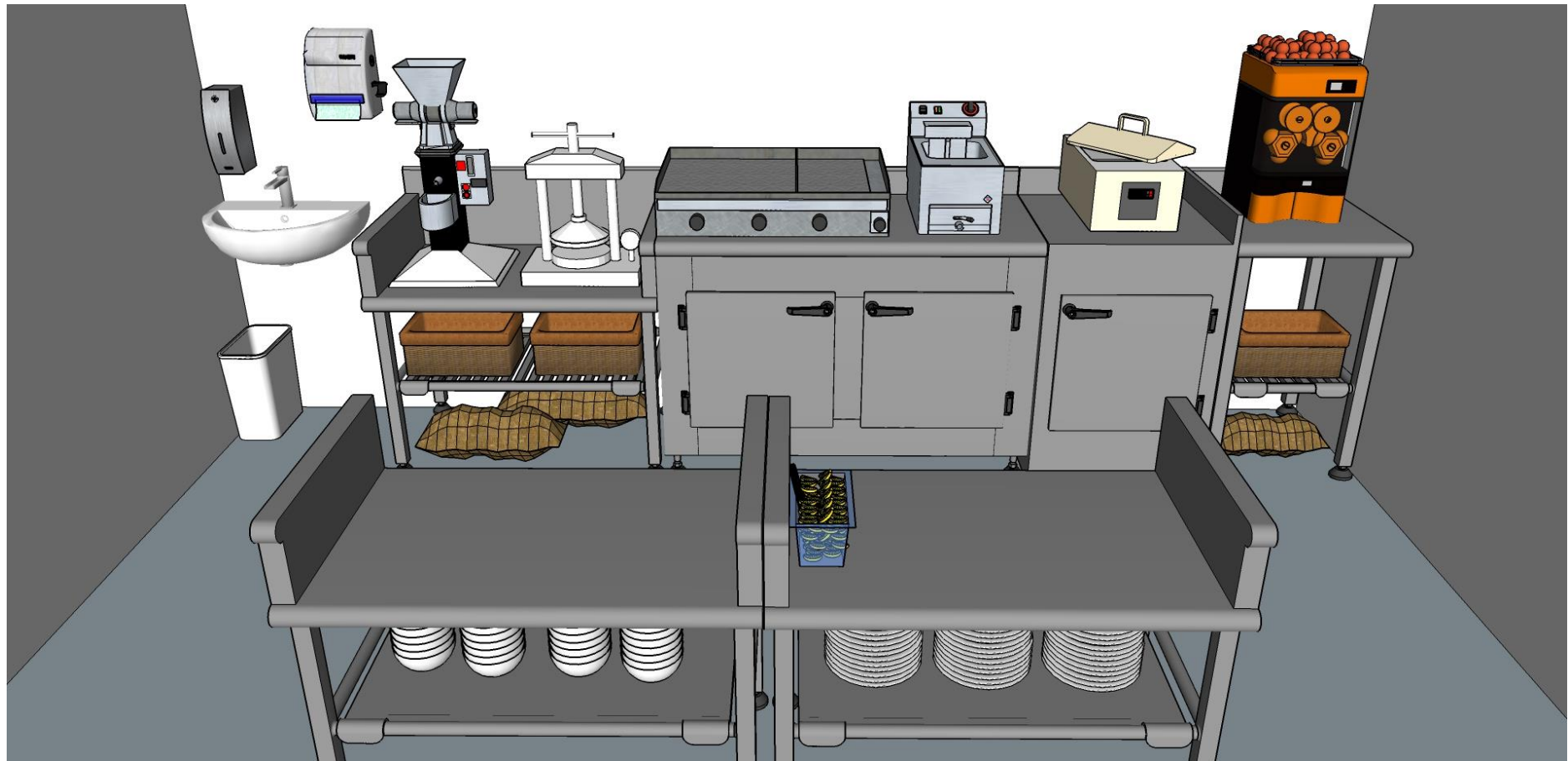


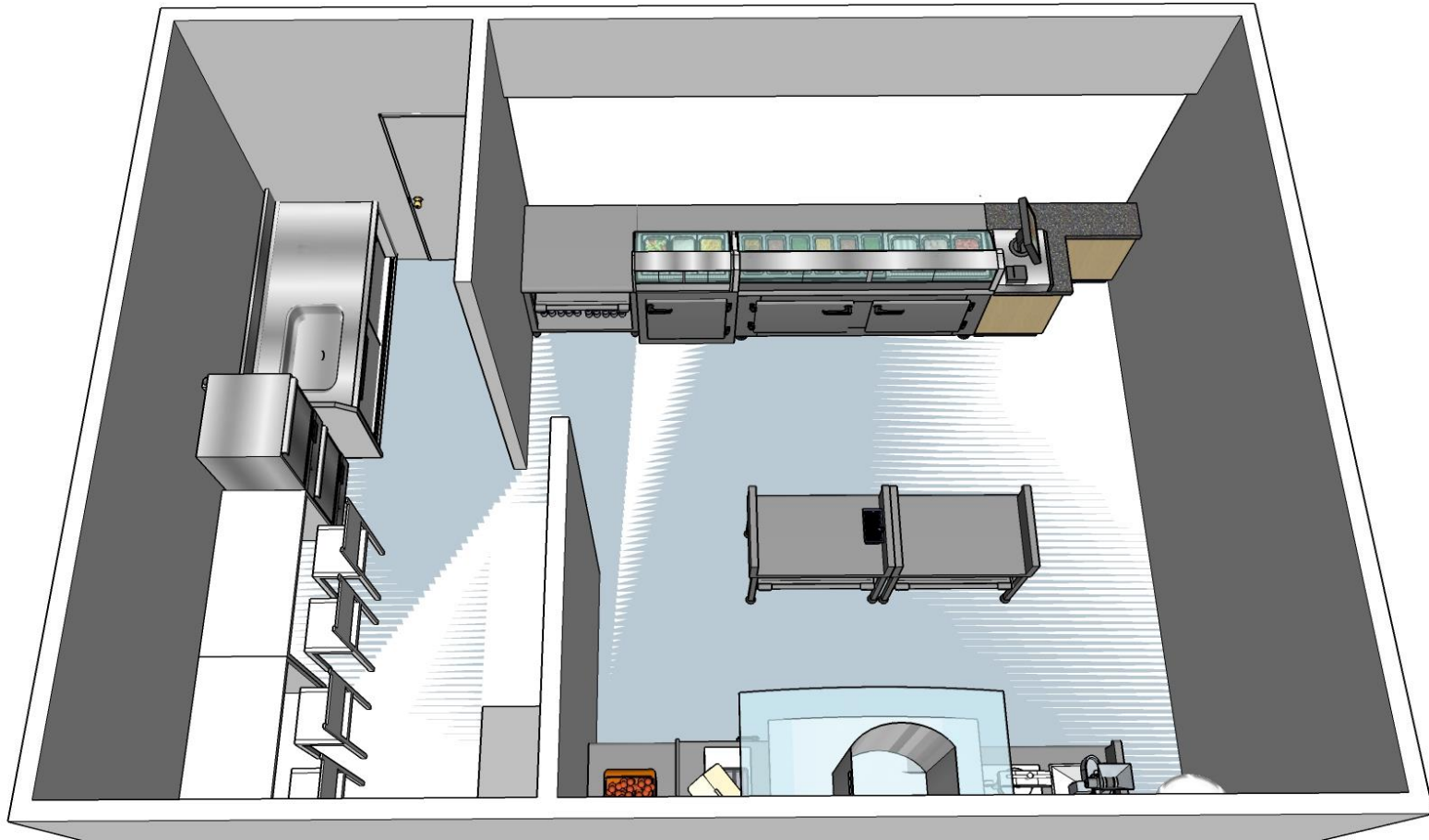




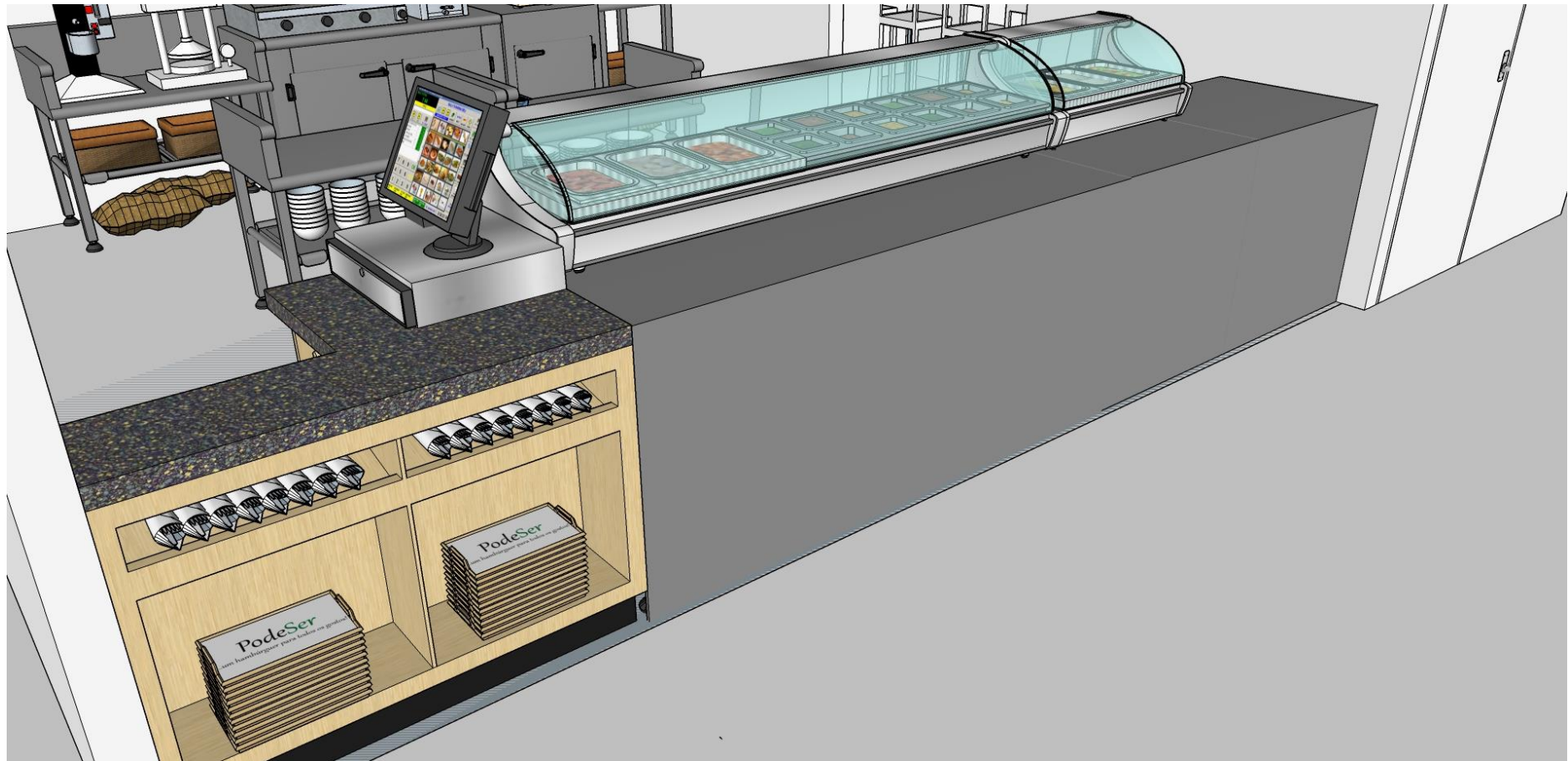


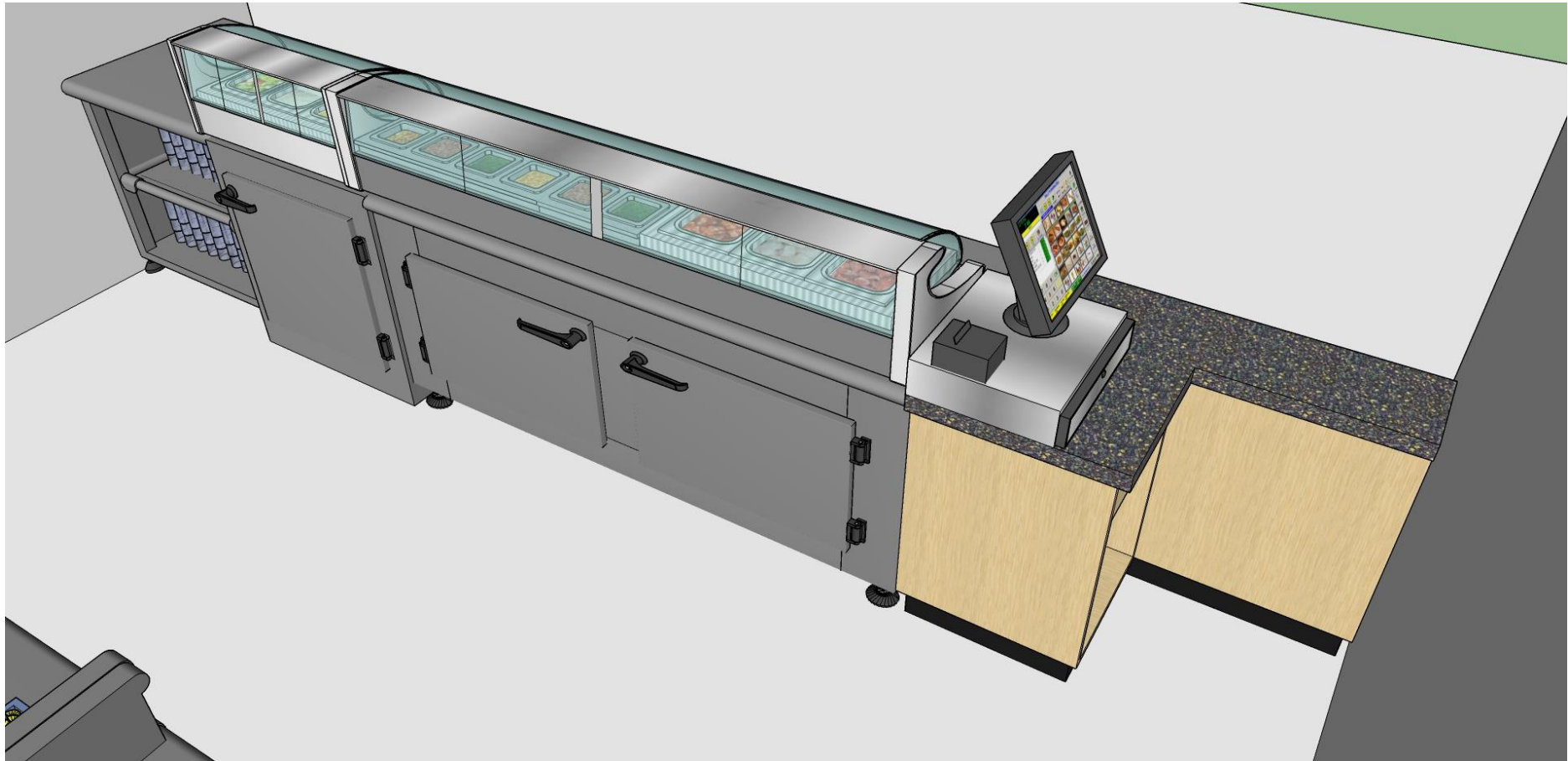


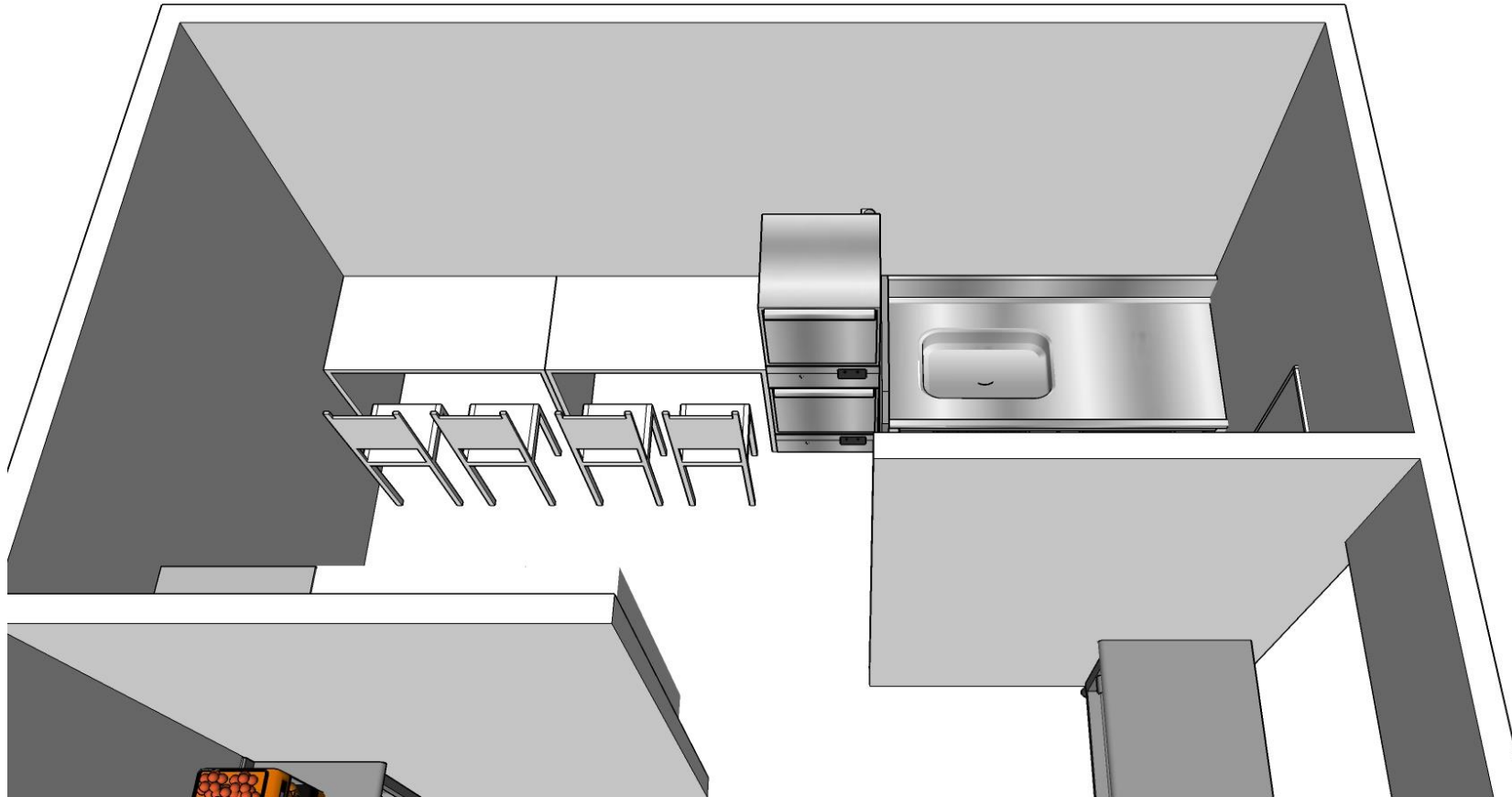


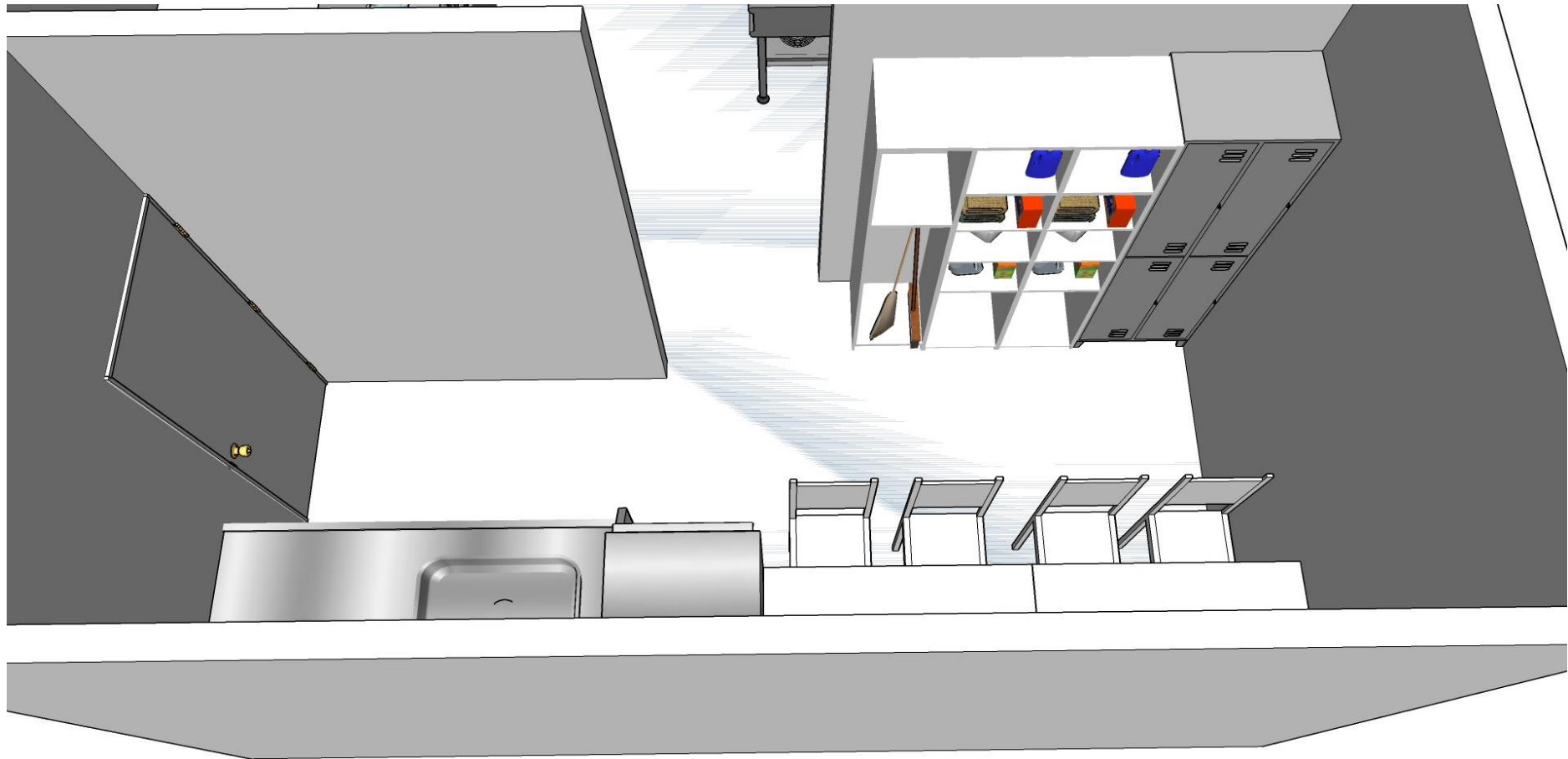


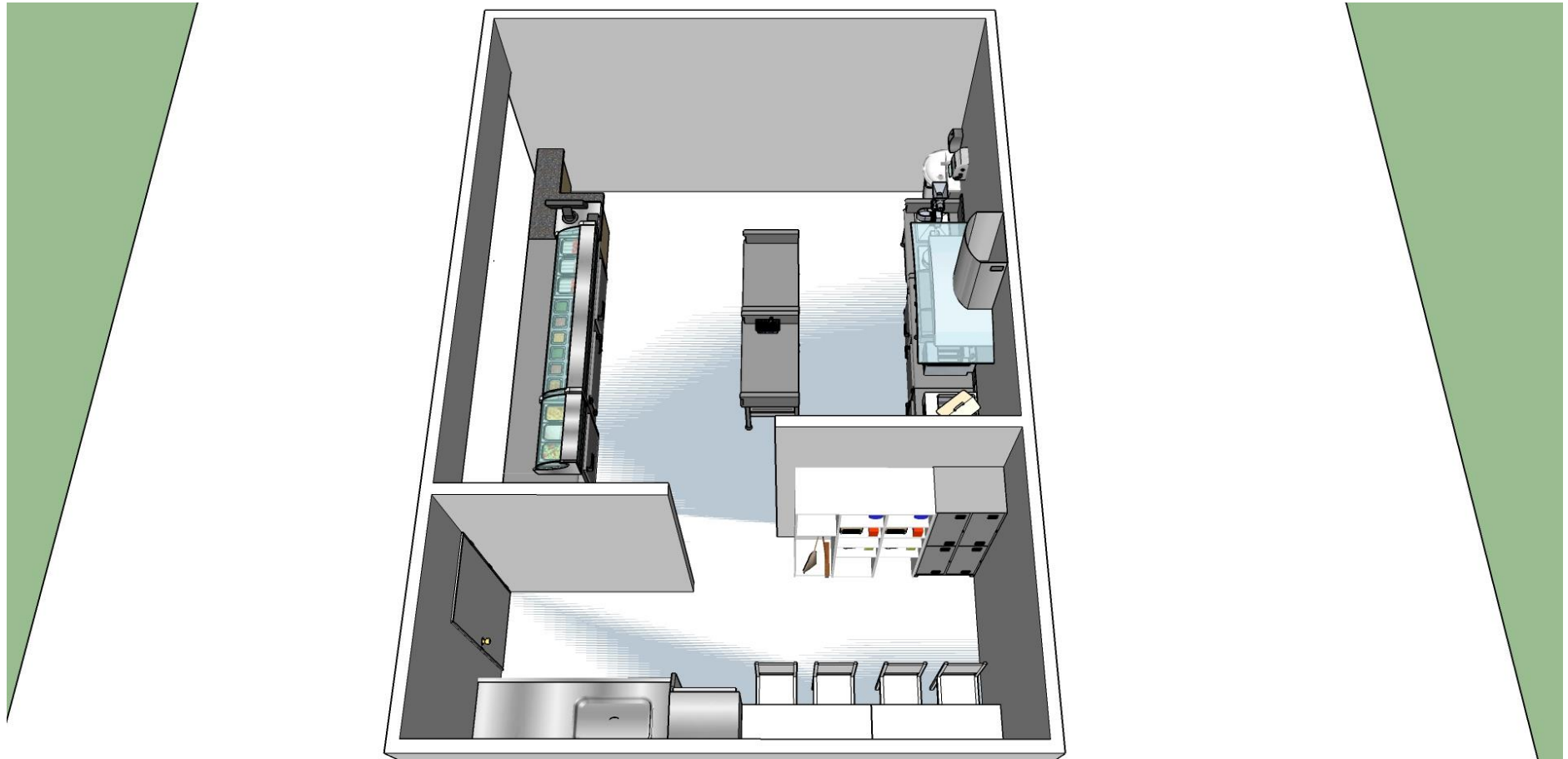


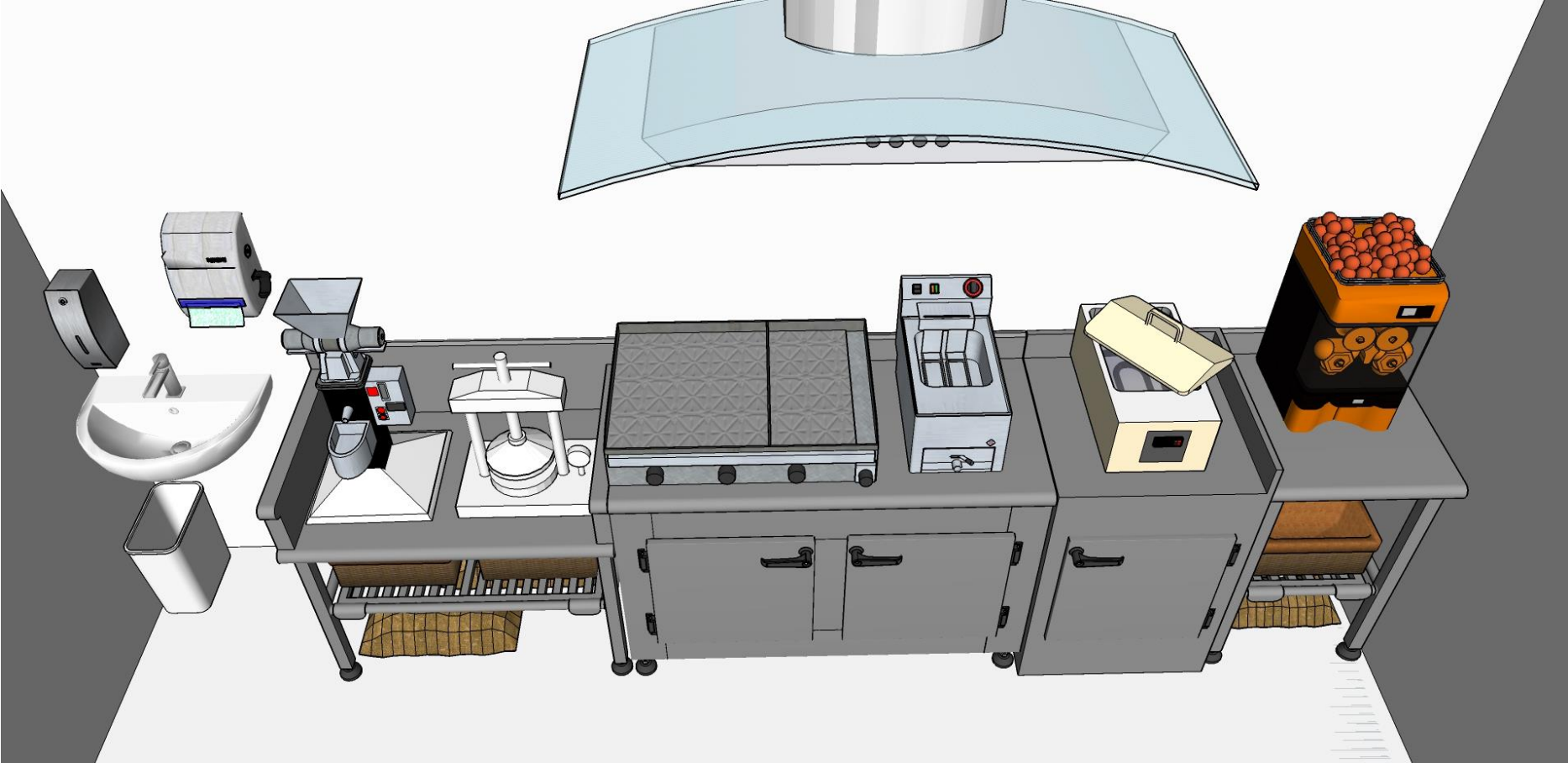


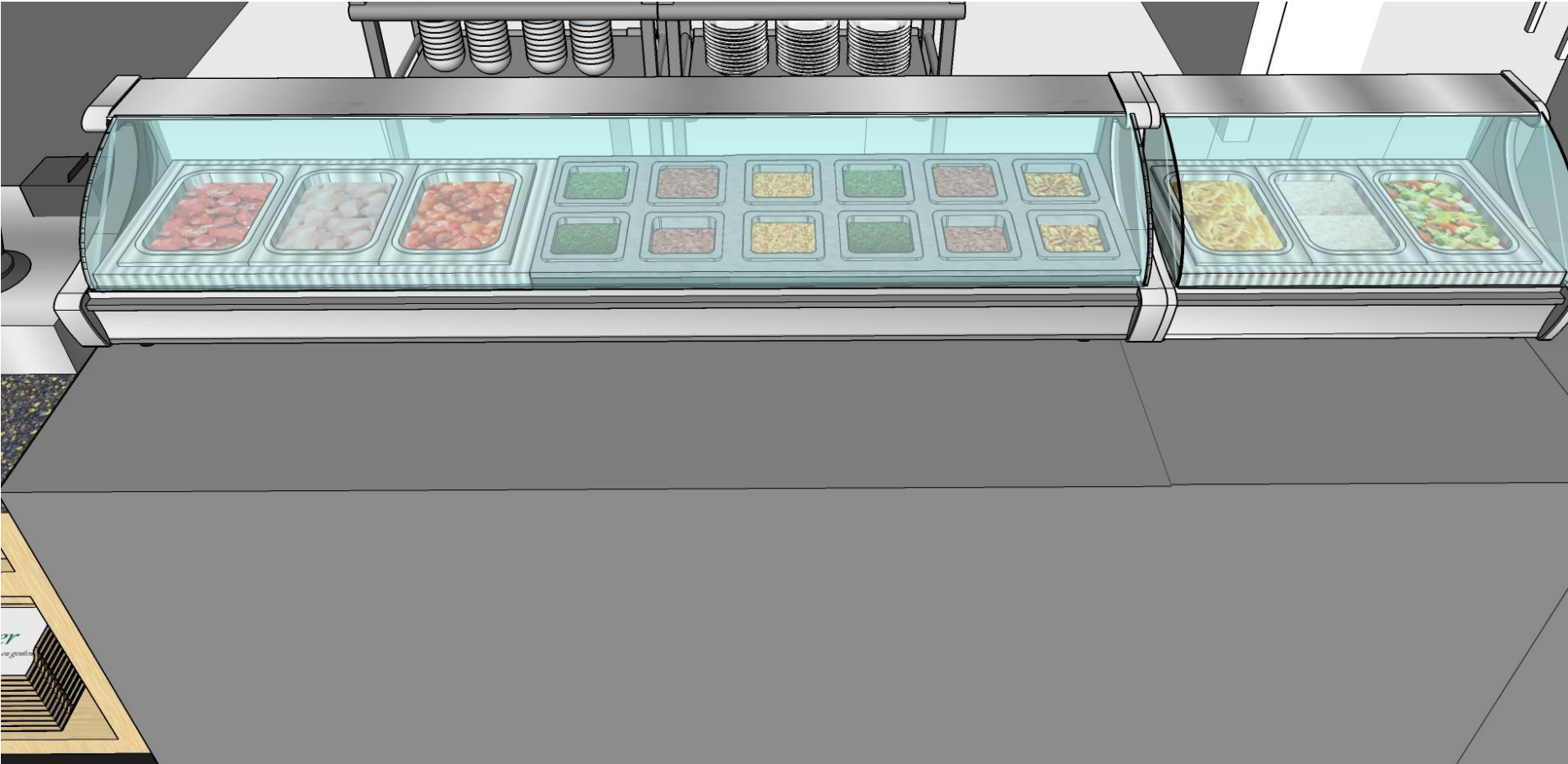


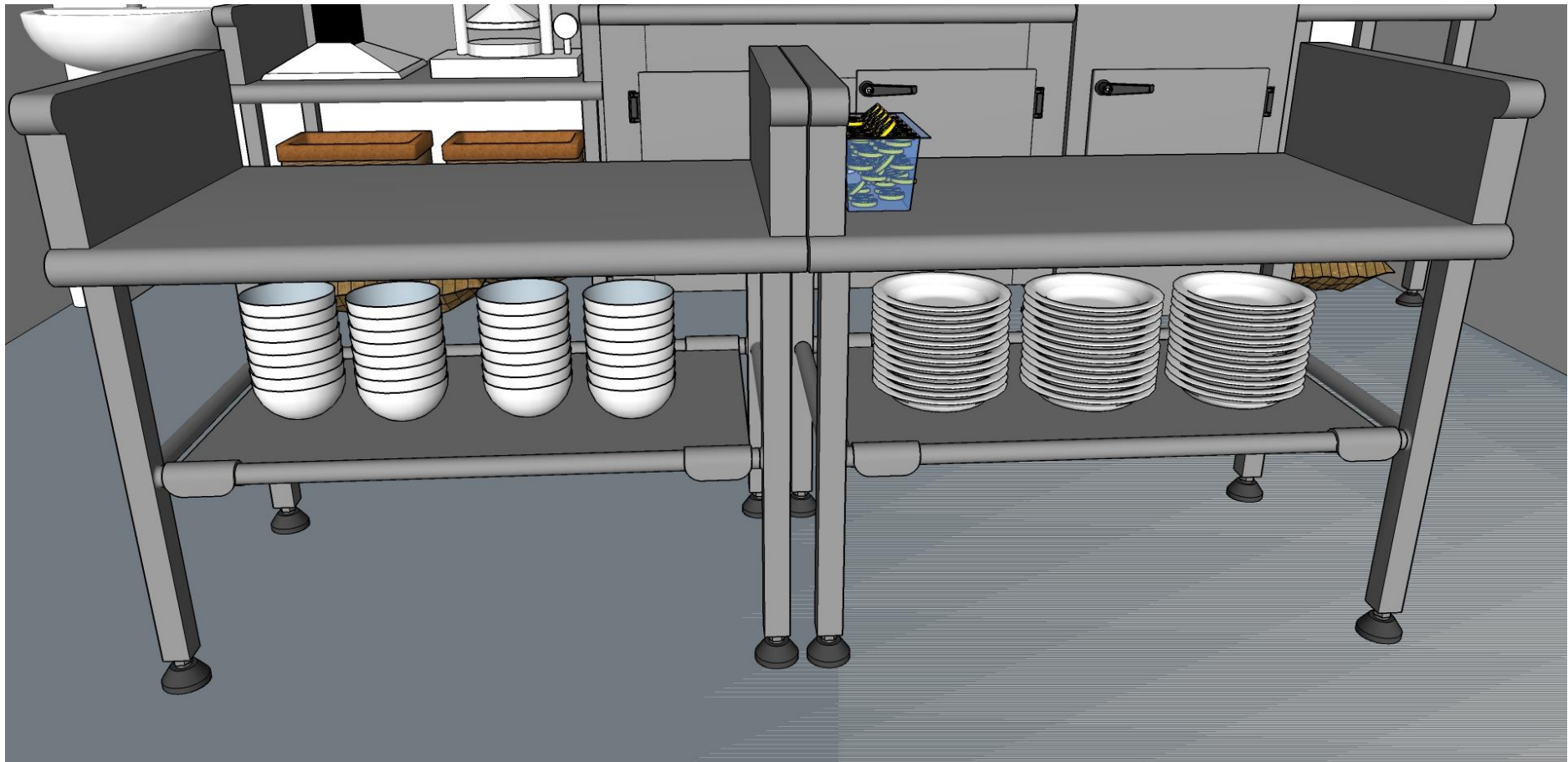


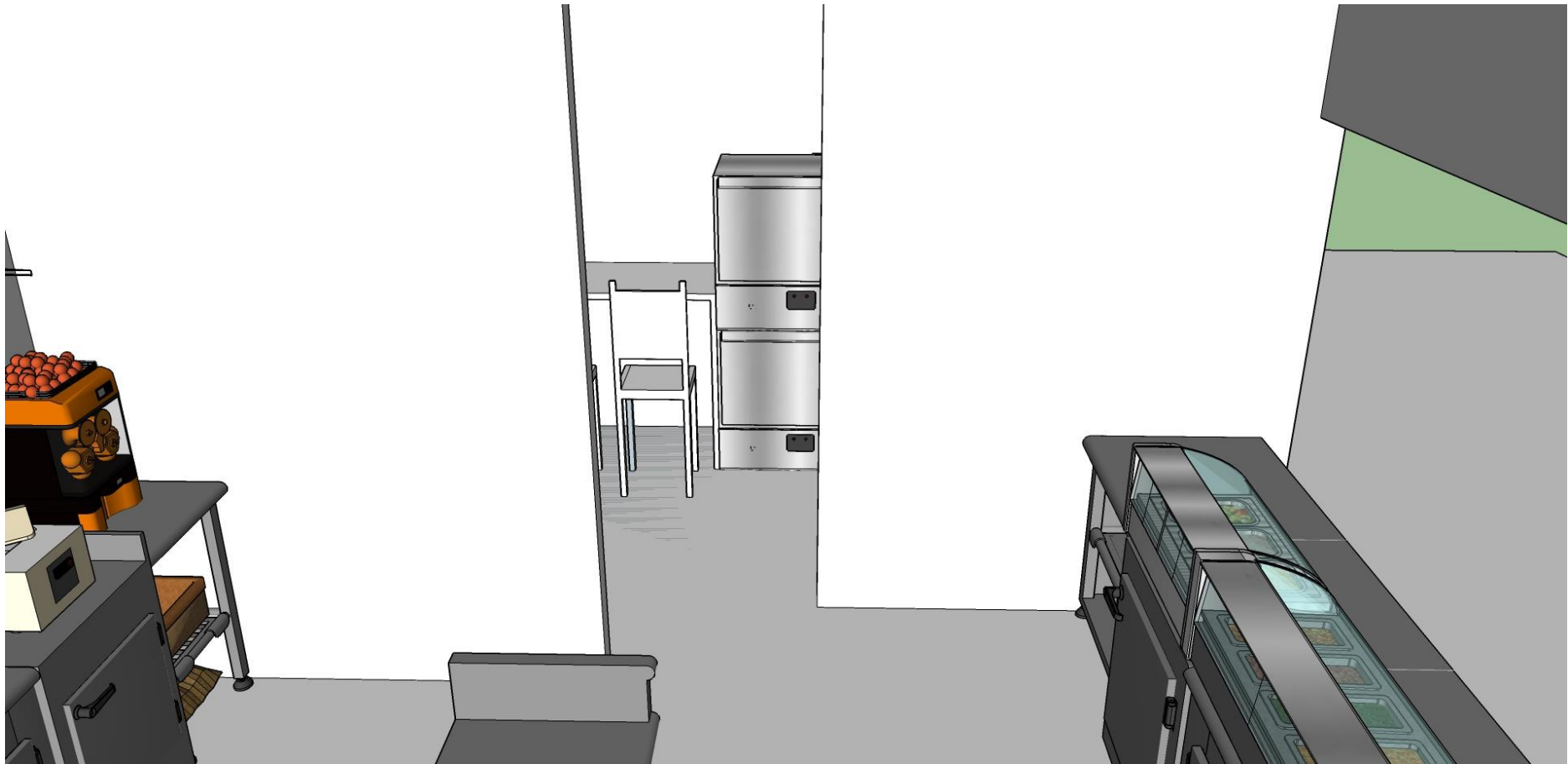


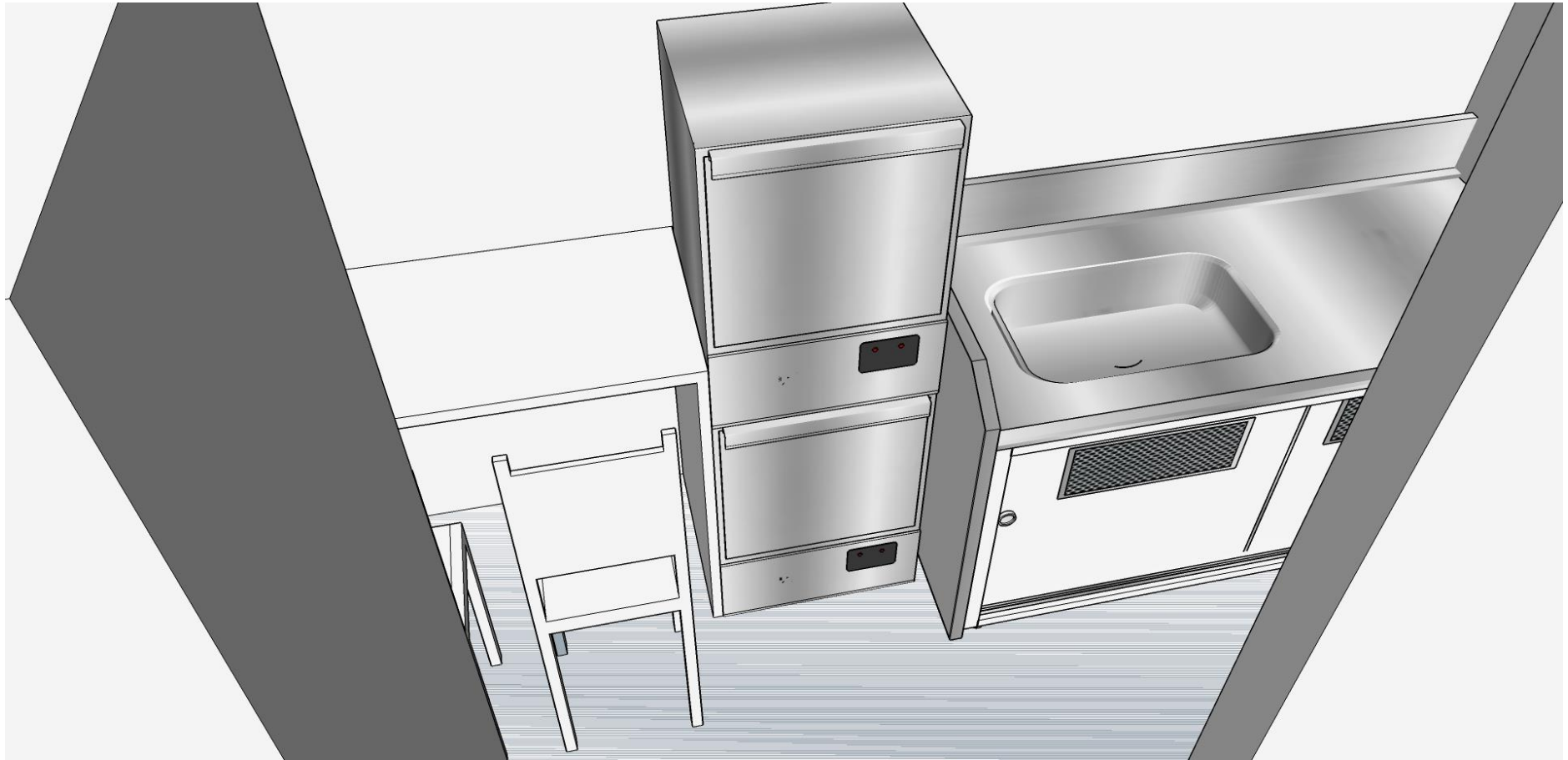














Appendix 9. Milestone Plan

<u>Actions</u>	2017 (months of the year)												2018
	1	2	3	4	5	6	7	8	9	10	11	12	
Creation of the enterprise	■												
Hiring Food Engineer	■												
Development of HACCP Plan	■	■	■	■	■	■	■	■	■				
Lincencing		■											
Contracting Location		■	■										
Contracting suppliers		■	■	■									
Contracting Pest Control		■	■	■									
Contracting Laboratory		■	■	■									
Adaptations of location				■	■	■							
Installation of machines							■						
Recruitment of Staff							■	■					
Training of Staff							■	■					
Developing Communication Strategy							■	■					
Launching Event									★				
Promotion 2 meals for 10€										■	■	■	
Normal Sales													■

Source: Author

Appendix 10. Data for the calculation of WACC

Market premiums

Current risk premium for a mature equity market 6,25%
 Multiplier to use on the default spread 1,39

Country	Location	Moody's rating	Rating-based Default Spread	Total Equity Risk Premium	Country Risk Premium	CDS Default Spread (net of US)	Total Equity Risk Premium	Country Risk Premium
Portugal	Western Europe	Ba1	2,77%	10,11%	3,86%	2,05%	9,11%	2,86%

Source: (Damodaran, 2016a)

Calculations:

Risk free Rate (R_f) = 2,77%

Market risk premium ($R_m - R_f$) = 8,06%

Since $3,86\% - 2,05\% = 1,81\%$ and $6,25\% + 1,81\% = 8,06\%$.

Industry Betas

Industry Name	Number of firms	Beta	D/E Ratio	Tax rate	Unlevered beta	Cash/Firm value	Unlevered beta corrected for cash	HiLo Risk	Standard deviation of equity
Restaurant/Dining	83	0.76	25.85%	18.54%	0.63	2.12%	0.64	0.4150	40.67%

Source: (Damodaran, 2016b)

Unlevered Beta (β_u) = 0,64

Appendix 11. Financial Evaluation Tables

Detailed Cash Flow Statement

Cash Flow Statement	2017	2018	2019	2020	2021	2022
Operating Cash flow						
(EBIT) x (1-t)	-20 997	22 827	26 945	33 688	45 701	50 898
Depreciations	4 131	16 525	16 525	13 400	3 806	3 050
Provisions						
Total	-16 866	39 352	43 470	47 088	49 507	53 948
Working Capital						
Working Capital Funds	5 060	14 285	436	447	459	471
Cash Flow from Operations	-11 805	53 637	43 906	47 535	49 966	54 419
Capex/Divestures						
Capex	-64 500					
Free Cash-Flow for the Firm	-76 305	53 637	43 906	47 535	49 966	54 419
CASH FLOW cumulated	-76 305	-22 668	21 238	68 773	118 739	173 158
1st boundary Income Tax (<15000)		12 500	12 500	12 500	12 500	12 500
2nd boundary Income Tax (>15000)		15 762	20 975	29 510	44 716	51 295
EBIT		28 262	33 475	42 010	57 216	63 795

Source: Author

Calculation of WACC

Weighted Average Cost of Capital					Currency	Euros
	2017	2018	2019	2020	2021	2022
Debt	0	0	0	0	0	0
Equity	59 079	87 157	116 026	152 464	201 816	257 323
TOTAL	59 078,66	87 157,04	116 025,77	152 463,65	201 815,59	257 322,81
% Debt	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
% Equity	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
<u>Expenses</u>						
Financing Expenses	10,00%	10,00%	10,00%	10,00%	10,00%	10,00%
Financing Expenses with tax effect	8,30%	8,30%	8,30%	8,30%	8,30%	8,30%
Cost of Equity	7,93%	7,93%	7,93%	7,93%	7,93%	7,93%
Weighted Average Cost of Capital	7,93%	7,93%	7,93%	7,93%	7,93%	7,93%

Source: Author

Appendix 12. Remaining data supporting all the economic and financial calculations

External Supplies and Services

Currency Euros

External Supplies and Services	2017	2018	2019	2020	2021	2022
Number of Months	3	12	12	12	12	12
Inflation Rate		1,00%	1,00%	1,00%	1,00%	1,00%

	VAT Tax	% Fixed	% Variable	Monthly Value	2017	2018	2019	2020	2021	2022
Subcontracts	23%	30%	70%							
Electricity	23%	40%	60%	500	1 500	6 060	6 121	6 182	6 244	6 306
Fuelling	23%	40%	60%							
Water	6%	30%	70%	300	900	3 636	3 672	3 709	3 746	3 784
Fluids	23%	50%	50%	50	150	606	612	618	624	631
Tools	23%	60%	40%	100	300	1 212	1 224	1 236	1 249	1 261
Books	23%	80%	20%							
Stacionary	23%	30%	70%	20	60	242	245	247	250	252
Offerings	23%		100%							
Rent	23%	100%		2 625	7 875	31 815	32 133	32 454	32 779	33 107
Representation Expenses	23%	30%	70%							
Comunication	23%	40%	60%	100	300	1 212	1 224	1 236	1 249	1 261
Insurances		100%		250	750	3 030	3 060	3 091	3 122	3 153
Royalties	23%		100%							
Transportation of goods	23%	30%	70%							

Travel and Accommodation	23%	30%	70%								
Comissions	23%		100%								
Fees	23%	70%	30%	100	300	1 212	1 224	1 236	1 249	1 261	
Litigations and notary	23%	70%	30%	20	60	242	245	247	250	252	
Maintenance	23%	50%	50%	400	1 200	4 848	4 896	4 945	4 995	5 045	
Advertising	23%	100%		100	300	1 212	1 224	1 236	1 249	1 261	
Cleaning Services	23%	50%	50%								
Surveillance and Safety	23%	100%									
Specialized work (Accounting, Food Engineer, Pest Control, Laboratory)	23%	100%		1 000	3 000	12 120	12 241	12 364	12 487	12 612	
Others	23%	50%	50%	500	1 500	6 060	6 121	6 182	6 244	6 306	
TOTAL						18 195	73 508	74 243	74 985	75 735	76 493

	2017	2018	2019	2020	2021	2022
Total Fixed External Supplies and Services	14 790	59 752	60 349	60 953	61 562	62 178
Total Variable External Supplies and Services	3 405	13 756	13 894	14 033	14 173	14 315
Total External Supplies and Services	18 195	73 508	74 243	74 985	75 735	76 493
VAT	2 034	8 219	8 301	8 384	8 468	8 552
Total External Supplies and Services + VAT	20 229	81 726	82 544	83 369	84 203	85 045

Source: Author

Volume of Sales

Sales - National Market	2017	2018	2019	2020	2021	2022
Product A - Menu						
Quantity	9 750	39 000	39 780	40 576	41 387	42 215
Growth Rate	0%	300,00%	2,00%	2,00%	2,00%	2,00%
Price	5,00	7,50	7,58	7,65	7,73	7,80
TOTAL	48 750	292 500	301 334	310 434	319 809	329 467

	2017	2018	2019	2020	2021	2022
Sales - National Market	48 750	292 500	301 334	310 434	319 809	329 467
Sales - International Market	0	0	0	0	0	0
TOTAL SALES	48 750	292 500	301 334	310 434	319 809	329 467
VAT of Sales	6 338	38 025	39 173	40 356	41 575	42 831
Total Volume of Sales	48 750	292 500	301 334	310 434	319 809	329 467
VAT	6 338	38 025	39 173	40 356	41 575	42 831
TOTAL Volume of Sales + VAT	55 088	330 525	340 507	350 790	361 384	372 298

Source: Author

Cost of Goods Sold

Cost of Goods Sold	Gross Margin	Currency Euros					
		2017	2018	2019	2020	2021	2022
National Market		14 138	56 550	58 258	60 017	61 830	63 697
Product A - Menu	80,67%	14 138	56 550	58 258	60 017	61 830	63 697
TOTAL		14 138	56 550	58 258	60 017	61 830	63 697
VAT	23%	3 252	13 007	13 399	13 804	14 221	14 650
TOTAL + VAT		17 389	69 557	71 657	73 821	76 051	78 347

Source: Author

Work Force

Number of workers (Wage)	2017	2018	2019	2020	2021	2022
Administration / Management	1 (1 500)	1 (1 515)	1 (1 530)	1 (1 545)	1 (1 561)	1 (1 577)
Operational Management						
Marketing Management						
Human Resources Management						
Operational Production (Full Time)	4 (750)	4 (758)	4 (765)	4 (773)	4 (780)	4 (788)
Operational Production (Part Time)	4 (550)	4 (556)	4 (561)	4 (567)	4 (572)	4 (578)
Maintenance						
Provision and storage						
R&D						
Others						
Summary of Staff Expenses	2017	2018	2019	2020	2021	2022
Wages						
Management/Administration	6 000	21 210	21 422	21 636	21 853	22 071
Others	20 800	73 528	74 264	75 006	75 757	76 514
Social Security	6 215	21 970	22 190	22 412	22 636	22 862
Staff Insurance	268	947	957	966	976	986
Food Allowance						
Comissions						
Training and Transportation						
Other						
TOTAL STAFF EXPENSES	33 283	117 655	118 833	120 021	121 221	122 433

Source: Author

Working Capital

	Currency					Euros
Working Capital	2017	2018	2019	2020	2021	2022
Working Capital Needs						
Needed cash balance	500	500	500	500	500	500
Clients						
Inventory	79	314	324	333	343	354
Public Entities						
TOTAL	579	814	824	833	843	854
Working Capital Resources						
Suppliers	3 135	12 607	12 850	13 099	13 354	13 616
Public Entities	2 504	7 553	7 755	7 962	8 176	8 396
TOTAL	5 639	20 160	20 605	21 061	21 530	22 012
Working Capital Requirements	-5 060	-19 345	-19 781	-20 228	-20 687	-21 158
Working Capital Investment	-5 060	-14 285	-436	-447	-459	-471

Source: Author

Investment

	Currency Euros					
Investment	2017	2018	2019	2020	2021	2022
Intangible Fixed Assets						
Start Up Costs	17500					
R&D	6000					
Patents	1500					
Software	1500					
Other	11000					
Total Intangible Fixed Assets	37 500					
Tangible Fixed Assets						
Land						
Plant						
Equipment	21 500					
Transportation Equipment						
Tools	1 000					
Administrative Equipment	2 500					
Returnable Containers						
Other	2 000					
Total Tangible Fixed Assets	27 000					
Total Investment	64 500					
VAT	23%	6 210				

Source: Author

Financing

Financing						Currency	Euros
	2017	2018	2019	2020	2021	2022	
Total Investment: Fixed Assets + Working Capital	59 440	-14 285	-436	-447	-459	-471	
Safety Margin	2%	2%	2%	2%	2%	2%	
Financing Needs	60 628	-14 571	-444	-456	-468	-480	

Sources of Funds						
	2017	2018	2019	2020	2021	2022
Internally Generated Funds	-16 866	39 352	43 470	47 088	49 507	53 948
Equity Capital	80 000					
Other Equity						
Shareholders Loans						
Debt Loans						
TOTAL	63 135	39 352	43 470	47 088	49 507	53 948

Source: Author

Profit and Loss Account

	Currency Euros					
Previsional Profit and Loss Account	2017	2018	2019	2020	2021	2022
Sales	48 750	292 500	301 334	310 434	319 809	329 467
Services Rendered						
Total Revenues	48 750	292 500	301 334	310 434	319 809	329 467
Change in Final Product Inventories						
Cost of Goods Sold	14 138	56 550	58 258	60 017	61 830	63 697
Other Variable Charges (External supplies and services)	3 405	13 756	13 894	14 033	14 173	14 315
Gross Profit	31 208	222 194	229 182	236 384	243 806	251 455
% of Total Revenues	64%	76%	76%	76%	76%	76%
External Supplies and Services - Fixed charges	14 790	59 752	60 349	60 953	61 562	62 178
Gross Value Added	16 418	162 442	168 833	175 431	182 244	189 278
Taxes						
Staff Costs	33 283	117 655	118 833	120 021	121 221	122 433
% of Total Revenues	68%	40%	39%	39%	38%	37%
Other Operating Costs						
Other Operating Revenues						
EBITDA	-16 866	44 787	50 000	55 410	61 023	66 845
Depreciations	4 131	16 525	16 525	13 400	3 806	3 050
Provisions						
EBIT	-20 997	28 262	33 475	42 010	57 216	63 795
Interest expenses				-0		-0
Interest Income	75	1 282	2 308	3 354	4 495	5 708
Financial Result	75	1 282	2 308	3 354	4 495	5 708
Other Charges						
Other Revenues						
EBT	-20 921	29 544	35 783	45 364	61 711	69 503
Income Taxes		1 466	6 914	8 927	12 359	13 996
Net Income	-20 921	28 078	28 869	36 438	49 352	55 507

Source: Author

Balance Sheet

	Currency Euros					
Balance Sheet	2017	2018	2019	2020	2021	2022
Assets						
Non-Current Assets						
Intangible Assets	37 500	37 500	37 500	37 500	37 500	37 500
Tangible Fixed Assets	27 000	27 000	27 000	27 000	27 000	27 000
Cumulated Depreciations	4 131	20 656	37 181	50 581	54 388	57 438
Inventories						
Raw materials						
Finished Goods						
Other	79	314	324	333	343	354
Accounts Receivable						
Clients						
Doubtfull Debts						
Public Entities						
Other						
Cash and Equivalent	4 270	64 625	115 902	168 199	225 249	285 914
Defferrals						
TOTAL ASSETS	64 718	108 782	143 545	182 452	235 705	293 330
EQUITY						
Capital	80 000	80 000	80 000	80 000	80 000	80 000
Other						
Revaluation surplus						
Reserves and Retained Earnings		-20 921	7 157	36 026	72 464	121 816
Current Year Net Income	-20 921	28 078	28 869	36 438	49 352	55 507
Total Equity	59 079	87 157	116 026	152 464	201 816	257 323
LIABILITIES						
Income Taxes						
Non Current Liabilities						
Borrowings						
Capex Suppliers						
Shareholders Loans						
Other						
Current Liabilities						
Borrowings						0
Accounts Payable	3 135	12 607	12 850	13 099	13 354	13 616
Public Entities	2 504	9 019	14 669	16 889	20 535	22 391
Other						
Defferrals						
Total Liabilities	5 639	21 625	27 519	29 988	33 890	36 007
TOTAL EQUITY + TOTAL LIABILITIES	64 718	108 782	143 545	182 452	235 705	293 330

Source: Author

Appendix 13. Critical Risks Analysis

		Continuing Value				Terminal Value				E/A	E/A
Pode Ser		NPV to Firm	IRR	Pay-Back	NPV to Equity	NPV to Firm	IRR	Pay-Back	NPV to Equity	2018	2019
BASE SCENARIO		715 253	87%	2	762 219	113 253	57%	2	113 253	80%	81%
1. Units Sold											
1.1 - Decreasing of Units Sold	-10%	402 327	60%	4	431 068	30 219	22%	4	30 131	75%	78%
1.2 - Increasing of Units Sold	10%	1 027 751	115%	2	1 092 871	195 876	91%	2	195 876	79%	82%
2. Price											
2.1 - Decreasing of Price	-10%	331 847	55%	4	356 322	14 246	15%	4	14 246	75%	76%
2.2 - Increasing of Price	10%	1 097 640	116%	2	1 167 096	211 240	93%	2	211 240	80%	82%
3. Cost of Goods Sold											
3.1 - Increasing of Cost of Goods Sold	10%	640 477	81%	2	683 107	93 002	49%	2	93 002	80%	80%
3.2 - Decreasing of Costs of Goods Sold	-10%	790 028	94%	2	841 330	133 503	66%	2	133 503	80%	82%
4 - PESSIMISTIC CASE (1.1+2.1+3.1)		-27 490	1%	6	-60 638	-90 328	-	6	-92 243	58%	12%
5 - OPTIMISTIC CASE (1.2+2.2+3.2)		1 530 630	156%	1	1 625 259	325 939	141%	1	325 939	79%	84%

Units: Euros; IRR in %; - All cash flows are negative, there is no IRR.

Source: Author