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PLANNING OF A THERMOCIRCULATORS MANUFACTURER FICTITIOUS COMPANY¹

PLANEJAMENTO DE UMA EMPRESA FICTÍCIA FABRICANTE DE TERMOCIRCULADORES

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ABSTRACT

This paper proposes the planning of a fictitious company that manufactures thermocirculators, including a business model and a business plan, brand, and conclusions about its viability. Studies indicate that only 37.6% of companies founded in 2014 survived until 2019, and lack of planning is one of the main reasons that lead to the early closure of companies, making it important to make an adequate business planning. Using the Canvas methodology and the manual proposed by Sebrae, the business model and business plan were prepared, respectively. Based on market research, an initial investment of R\$ 23,061.00 and an initial production of 50 thermocirculators with a selling price of R\$ 700.00 per unit were estimated. The SWOT analysis pointed out two threats: competition from consolidated companies and low market demand, in addition to a weakness in product differentiation. Therefore, it is concluded that opening a thermocirculator manufacturing company is unfeasible in this context.

Keywords: business model canvas, business plan, business planning, entrepreneurship, Sous Vide.

RESUMO

Neste trabalho, propõe-se o planejamento de uma empresa fictícia fabricante de termocirculadores, incluindo modelo e plano de negócios, marca e conclusão sobre sua viabilidade. Estudos indicam que apenas 37,6% das empresas

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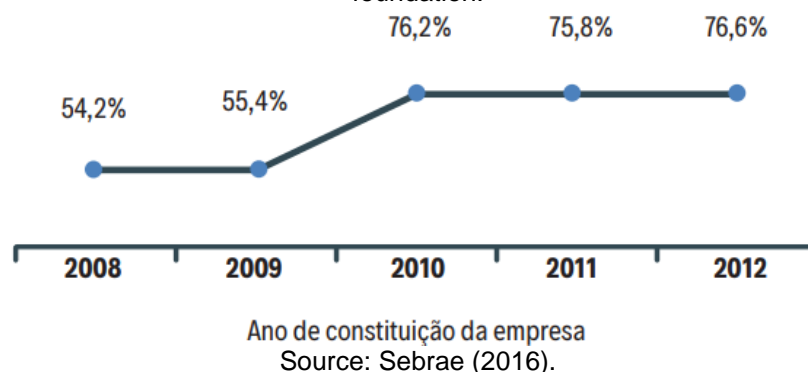
fundadas em 2014 sobreviveram até 2019, sendo que a falta de planejamento é um dos principais motivos que levam ao fechamento precoce de empresas, tornando importante a realização de um planejamento empresarial adequado. Utilizando a metodologia Canvas e o manual proposto pelo Sebrae, foi elaborado o modelo de negócios e o plano de negócios, respectivamente. Com base na pesquisa de mercado, estimou-se um investimento inicial de R\$ 23.061,00 e uma produção inicial de 50 termocirculadores com preço de venda de R\$ 700,00 por unidade. A análise SWOT apontou duas ameaças: a concorrência de empresas consolidadas e a baixa demanda do mercado, além de uma fraqueza na diferenciação do produto. Portanto, conclui-se que a abertura da empresa fabricante de termocirculadores é inviável neste contexto.

Palavras-chave: business model canvas, plano de negócios, planejamento empresarial, empreendedorismo, Sous Vide.

INTRODUCTION

In Brazil, it is estimated that 52.2% of formal jobs are generated by small businesses, which account for 99.1% of the country's formal enterprises and are responsible for 20% of its Gross Domestic Product (GDP) (MESQUITA, 2018). According to research made by Sebrae (translated from Portuguese as Brazilian Micro and Small Business Support Service) (2016), among the companies founded in 2012, only 76.6% of them survived after 2 years of operation. When looking at companies founded between 2008 and 2009, the percentage of surviving businesses drops considerably (Figure 1).

Figure 1. Survival rate of companies in 2 years of operation according to their year of foundation.





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Furthermore, according to Olivan (2021), only 37.6% of companies founded in 2014 survived until 2019. According to this same research, there is a positive correlation between the company's permanence in the market and its size, that is, the larger the company, the higher the survival rate.

According to Viana (2022), one of the main factors that influence the premature closure of companies is the lack of business planning. So, there is a need to plan the opening of the company, increasing its chances of survival over the years.

Thus, the objective of this paper is to develop a fictitious company responsible for the development, manufacture and sale of thermocirculators, including the preparation of all the materials necessary for planning a real company: business model, business plan, brand development and project viability study. The thermocirculators produced must have a lower price than their market competitors, aiming to be more accessible to amateur cooks. Furthermore, this work seeks to serve as an example for new entrepreneurs, encouraging and facilitating business planning, which is crucial for the prosperity of a company.

THEORETICAL BASIS

The business plan seeks to describe the objectives of a company, as well as the steps that must be taken to achieve them. In this way, a business plan reduces the risks and uncertainties that permeate the beginning of a company and allows the identification and correction of errors while still on paper, avoiding making them during operation. Furthermore, a business plan helps to conclude whether the idea of a company is viable, seeking information about the market, the products, the suppliers and the customers, in addition to exposing the strengths and weaknesses of the future business (SEBRAE, 2013).



According to the methodology proposed by Sebrae (2013), a business plan consists of 7 main topics: executive summary, market analysis, marketing plan, operational plan, financial plan and strategic evaluation, with the executive summary being a summary of the business plan, containing its most important points. In addition to the business plan, the planning of a new company can also be added by a business model, such as the Canvas Business Model.

The Canvas Business Model was created during the doctoral thesis of Swiss professor and researcher Alexander Osterwalder, in 2004. It seeks to describe the logic of creation, delivery and capture of value by an organization, and to this, it groups in a framework, topics related to the customer segment, value proposition, channels, sources of revenue, main resources and key activities of a company (OSTERWALDER; PIGNEUR, 2011). It is currently used by companies around the world, such as Google, Spotify and Amazon (MARTINS, 2021).

Currently, the thermocirculator market is made up of world-renowned brands, such as Chefsteps Joule and Anova Precision Cooker.

METHODOLOGY

This study carried out all the business planning necessary to launch a thermocirculator manufacturing company. Thus, the Canvas Business Model, written by Osterwalder and Pigneur (2011), was used to develop the business model. The methodology proposed by Sebrae (2013) was followed to develop the business plan for this fictitious company. The SWOT matrix was also used.

In order to conduct a study on the customer profile attended by the company, market research was conducted using Google Forms. Data was obtained from owners and potential consumers of thermocirculators. The research was conducted by creating a form, followed by its propagation in Facebook groups about Sous Vide and in the comments section of cooking



videos related to this culinary technique on YouTube. The propagation media were predominantly English-speaking communities, so it was necessary to prepare the form in English and deal with monetary values in dollars.

The form collected information for 2 months, from 01/26/2023 to 03/31/2023, receiving a total of 38 responses. Relevant information was obtained regarding the profile of customers interested in the developed product. The following questions were asked:

- How old are you?
- What is your annual income (in dollars)?
- Where are you from?
- What is your favorite food to cook with a thermocirculator?
- What is your main reason for purchasing a thermocirculator?
- What is the maximum amount you would pay for a thermocirculator?
 - What is your favorite brand of thermocirculators?
 - Do you consider wireless connection (Bluetooth or Wi-Fi) an important feature?
 - Do you think it is important to have an exclusive network for sharing recipes and tips between thermocirculator users?
 - Do you use your thermocirculator professionally or as an amateur?

The budget of the product manufactured and sold by the company was developed using Excel spreadsheets. Finally, the logo that makes up the company's brand was developed using the Canva graphic design platform.

The viability analysis of the planned company was based on the four points proposed by the SWOT matrix, which were obtained analyzing the model and the business plan.

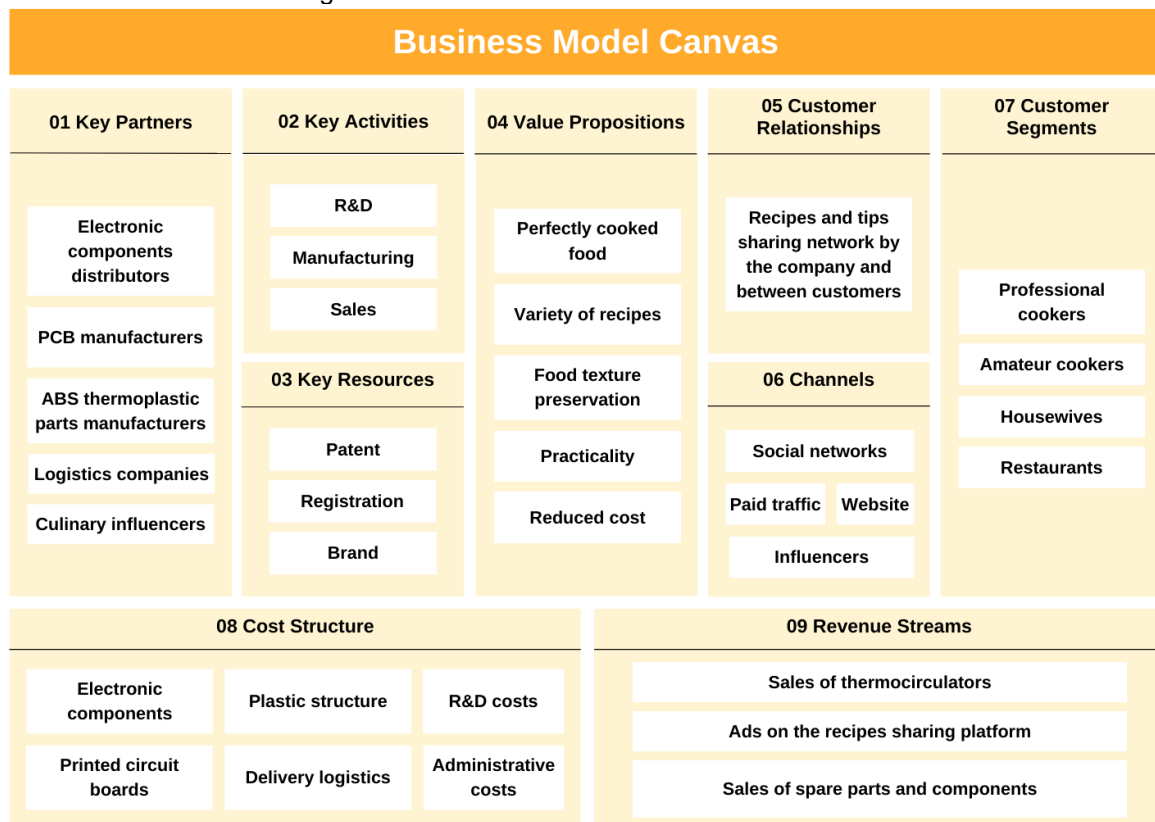


Therefore, this work is qualitative and descriptive research, as it describes and exemplifies the business planning of a thermocirculator manufacturing company.

BUSINESS MODEL

The business model elaborated for the fictitious company developed in this work is shown in Figure 2.

Figure 2. Business Model Canvas elaborated.



Source: Own authorship.



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BUSINESS PLAN

Executive summary

The business concept

This company will develop (R&D), manufacture and sell thermocirculators for its target audience: amateur and professional cooks, housewives and restaurants, with focus on the first group. Its only marketed products will be thermocirculators, however, its source of revenue also includes the sale of spare parts and components and the rental of advertising space on its recipe sharing platform.

Its main objective will be to make the practice of the Sous Vide cooking technique more accessible to amateur cooks and small restaurants that generally do not have enough income to purchase a professional thermocirculator sold at high prices by their current market competitors. The differentials of their thermocirculators will be the cost-benefit, the wireless connection with the user and the ease-of-use equipment.

The product

The first thermocirculator model developed by the company will have the following features: Wi-Fi connection, 3-inch OLED display to show information to the user, ABS plastic structure, 680 W power and domestic operating voltage of 127 V. Its dimensions will be compact (7 x 7 x 18.5 cm), ideal for operating in containers of different sizes, present in an amateur kitchen.

Other models are planned to be developed in the future, which may vary in power and operating voltage, display type and size, product dimensions and type of wireless connection (Bluetooth or Wi-Fi).



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Management team

The management team will initially consist only by its founder, who has expertise in the areas of electrical and electronic engineering, economics and finance. His salary will correspond to 10% of the company's income.

Mission

Development, manufacture and sale of thermocirculators for amateur and professional cooks, housewives and restaurants.

Market analysis

The market for thermocirculators has grown in recent years due to the popularization of the Sous Vide cooking technique through the internet. Thus, an equipment initially created for professional and industrial use has gained space in domestic kitchens.

Although recent, it is a market made up of global companies, such as Anova Culinary and Chefsteps, in addition to the Brazilian company Cetro Máquinas.

Client

Based on the results obtained from the market research, it was possible to build the consumer persona of this equipment, being middle-aged (50% of the responses between 41 and 60 years old), with a high income (36.80% of the participants earn more than one hundred thousand dollars per year) and residents of North America (55.3% of the votes). As for their opinions, it was clear that they prefer to use the thermocirculator to prepare beef cuts (preference of 60.5% of the voters), having purchased it because of the ease of obtaining perfect cooking point (76.3% of the votes), would pay a maximum of 200 dollars for the equipment (93.4% of the votes), have a preference for the Anova Culinary brand



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(63.2% of the votes) and use the equipment as an amateur (94.7%). Surprisingly, 60.5% of the voters did not consider the presence of a wireless connection in the equipment to be important.

Competitors

This market is mostly made up of foreign companies, with the American companies Anova Culinary and Chefsteps standing out. As for the domestic market (Brazil), the company Cetro Máquinas stands out, which has professional and amateur equipment in its catalogue.

Founded in 2012, Chefsteps is headquartered in Seattle (USA) and has the mission of helping people to cook smartly. Its main equipment is the Chefsteps Joule thermocirculator, announced in 2016 (HATCH, 2016). In addition to the quality of its equipment, it adds value to customers and differentiates itself from competitors by providing cooking classes and recipes for various foods (CHEFSTEPS, 2022). Its entry-level product is the Joule White Polycarbonate, priced at US\$199.99 (BREVILLE, 2022b). Its top-of-the-line product is the Joule Stainless Steel, sold for US\$249.99 (BREVILLE, 2022a). Its thermocirculators have a magnetic base for attachment to the container.

The company Anova Culinary was founded in 2013, is headquartered in San Francisco (USA), and sells culinary equipment such as thermocirculators, ovens, and vacuum sealers. Also in 2013, it announced its first and, to this day, main product, the Anova Precision Cooker (ANOVA, 2019). It was acquired by the Swedish multinational Electrolux in 2017 for 250 million dollars (ELECTROLUX, 2017). Its entry-level product is the Precision Cooker Nano, priced at US\$99.99 (ANOVA CULINARY, 2022a). Its top-of-the-line product is the Precision Cooker Pro, sold for US\$399.99 (ANOVA CULINARY, 2022b).

The Brazilian company Cetro Máquinas is located in Bauru-SP (Brazil) and was founded in 2012. It started by selling packaging machines and currently



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has more than 250 employees and more than 600 machines in its catalog, including thermocirculators and water ovens (BONINI, 2021). Its entry-level product is the SV95, costing R\$1,290.00 (CETRO MÁQUINAS, 2022a). Its top-of-the-line thermocirculator is the SV100, sold for R\$3,290.00 (CETRO MÁQUINAS, 2022b).

Suppliers

Among the suppliers required for the company's operations, three stand out whose products are strictly related to the manufacture of thermocirculators: Suppliers of electronic components; Printed circuit board manufacturers; and 3D printing filament manufacturers.

Among electronic component distributors, Digi-Key, Mouser Electronics and ICSuperman stand out, as they have in stock all the components needed for the circuits present in the thermocirculators to be manufactured. As for printed circuit board manufacturers, JLCPCBs stands out, offering a quick and easy PCB manufacturing ordering process. Finally, as for 3D printing filament manufacturers, we have the company 3D Lab, which has filaments made of different materials and of high quality at low prices.

Marketing plan

Currently, the thermocirculators on the market have high commercial value, preventing them from being purchased by low-income amateur cooks and small restaurants. This company's marketing strategy aims to meet this demand by offering the market thermocirculators that are cheaper than their competitors and are simple to operate.

Using the company's own resources, and initially carried out by the company's sole manager, customer prospecting will take place through the company's social networks, combined with paid traffic strategies and partnerships



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with influencers and cooking programs. Sales will be made entirely online, through its own website and advertisements on marketplaces such as Mercado Livre and Amazon, reducing the costs required to open a physical store.

Price

The electronic components will be purchased in large quantity from one of the suppliers mentioned above, in order to reduce costs. The printed circuit boards will be manufactured by the company JLC PCBs. Therefore, based on the values of the components purchased to build the equipment developed in this paper, all the electronics for the thermocirculator will have a manufacturing cost of R\$205.09 per unit, as shown in Table 1.

Table 1. Manufacturing costs of electronic circuits per thermocirculator.

Item	Amount	Unit cost	Total cost
Button	2	R\$ 0.56	R\$ 1.12
Buzzer	1	R\$ 2.71	R\$ 2.71
2-Way Connector Cables	4	R\$ 1.46	R\$ 2.92
3-Way Connector Cables	4	R\$ 1.88	R\$ 3.76
Capacitor	4	R\$ 0.05	R\$ 0.20
Terminal connector	2	R\$ 0.61	R\$ 1.22
AC-DC Converter	1	R\$ 18.24	R\$ 18.24
OLED Display	1	R\$ 33.55	R\$ 33.55
Boiler	1	R\$ 37.90	R\$ 37.90
ESP32-WROOM-32	1	R\$ 45.00	R\$ 45.00
LED	1	R\$ 0.14	R\$ 0.14
Mini button	2	R\$ 0.39	R\$ 0.78
DC Motor	1	R\$ 10.00	R\$ 10.00
Optocoupler	1	R\$ 3.46	R\$ 3.46
Resistor	9	R\$ 0.04	R\$ 0.36
Socket	5	R\$ 0.11	R\$ 0.55
Water level sensor	1	R\$ 3.04	R\$ 3.04
Temperature sensor	1	R\$ 14.90	R\$ 14.90
Thermistor	1	R\$ 0.28	R\$ 0.28
Transistor	2	R\$ 0.08	R\$ 0.16
TRIAC	1	R\$ 3.46	R\$ 3.46
Fan	1	R\$ 13.34	R\$ 13.34
Control and power supply board	1	R\$ 4.00	R\$ 4.00
Main board	1	R\$ 4.00	R\$ 4.00
Manufacturing cost		R\$ 205.09	

Source: Own authorship.



The equipment structure will be manufactured by the company itself, initially on small scale using 3D printing and ABS plastic, at a cost of R\$75.09 per unit and detailed in Table 2.

Table 2. Manufacturing costs of the plastic structure per thermocirculator.

Item	Amount	Unit cost	Total cost
Propeller (6.35 g)	1	R\$ 0.52	R\$ 0.52
Magnets	4	R\$ 10.32	R\$ 41.28
Hex screws	8	R\$ 0.49	R\$ 3.92
Screws	20	R\$ 0.49	R\$ 9.80
Nuts	2	R\$ 0.49	R\$ 0.98
Bottom (99.34 g)	1	R\$ 7.18	R\$ 7.18
Upper part (47.63 g)	1	R\$ 2.96	R\$ 2.96
Bottom cover 1 (13.61 g)	1	R\$ 0.66	R\$ 0.66
Bottom cover 2 (4.54 g)	1	R\$ 0.56	R\$ 0.56
Medial cap (14.06 g)	1	R\$ 1.29	R\$ 1.29
Boiling stand (6.80 g)	1	R\$ 0.49	R\$ 0.49
Temperature sensor holder (0.45g)	2	R\$ 0.03	R\$ 0.06
Energy spent on 3D printing (Anet ET4 - 240W)	26 hours and 55 minutes	R\$ 0.22	R\$ 5.95
Plastic frame manufacturing cost	R\$ 75.09		

Source: Own authorship.

Therefore, the thermocirculators sold by the company will have a manufacturing cost of R\$280.18 per unit. In addition to the production costs of the product, the taxes on its final sales value must also be considered: ICMS (19%) and IPI (6.5%).

Thus, a sales price of R\$ 700.00 per thermocirculator is estimated, which is below the value charged by other companies (higher than R\$ 1,000.00), maintaining its initial purpose of low cost to the customer and presenting a manufacturing cost of R\$ 280.18 and taxes equal to R\$ 178.50, that is, a total cost of R\$ 458.68. Thus, a gross profit equal to R\$ 241.32 per unit sold is estimated, representing a gross profit margin equal to 34.50%.

Thus, the final sales value of the thermocirculators is made up of R\$ 280.18 (40.00%) relating to manufacturing costs, R\$ 70.00 (10%) relating to administrative costs and sales commission, R\$ 178.50 (25.50%) relating to taxes



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levied on the sale of the product and R\$ 241.32 (24.50%) relating to the profit per unit sold.

Operational plan

Initially, anticipating a low initial sales volume, the company's operations will be performed and controlled by its only member, who will act from the design and planning stage of the thermocirculators to the ordering of electronic components and printed circuit boards and assembly of the equipment.

Initially, certain processes will be outsourced until, as the company's operations grow and the team expands, the company begins to execute these processes.

Financial plan

The financial plan addresses the total investment required to start the company, being equal to the sum of the estimated fixed investments, the initial working capital and pre-operational investments.

Estimation of fixed investments

Given the possibility of starting the company's operations with certain outsourced processes, there is a large reduction in the initial fixed investment, which corresponds to the investment in the goods necessary for the company to function properly (SEBRAE, 2013). Thus, it is estimated that a fixed investment of R\$ 8,000.00 is necessary, with R\$ 3,000.00 allocated to the acquisition of a notebook for professional use, R\$ 4,500.00 allocated to the purchase of a high-quality 3D printer and R\$ 500.00 allocated to the acquisition of tools for handling and assembling the thermocirculators.



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Working capital

According to Sebrae (2013), working capital represents the resources necessary for the standard operation of the company, such as raw materials. Thus, the need for an initial investment in working capital equal to R\$ 14,061.00 is projected, considering the stock of components, printed circuit boards and structures to produce 50 initial units of thermocirculators (Table 3).

Table 3. Initial working capital investment.

Item	Value
Acquisition of initial electronic components	R\$ 9,415.00
Initial PCB Fabrication	R\$ 400.00
Manufacturing of initial structures	R\$ 4,247.00
Total initial working capital investment	R\$ 14,061.00

Source: Own authorship.

Pre-operational investments

Since the company will start its operations at its founder's residence, there will be no need for renovations or acquisition of a building. Furthermore, since the company will start with only with its founder on the team, it will be registered as an MEI (Individual Micro Entrepreneur) at no cost according to Brazilian laws. Therefore, the only pre-operational costs are the initial advertising costs defined as R\$ 1,000.00, which is enough to promote the company's products and its sales channels on social media.

Total investment

Summing the three investment sections mentioned above, we have a total initial investment of R\$ 23,061.00, which will be obtained from the founder's own resources (Table 4).

Table 4. Breakdown of total initial investment.

Item	Value
Fixed investment	R\$ 8,000.00
Investment in working capital	R\$ 14,061.00
Pre-operational investments	R\$ 1,000.00
Total investment	R\$ 23,061.00

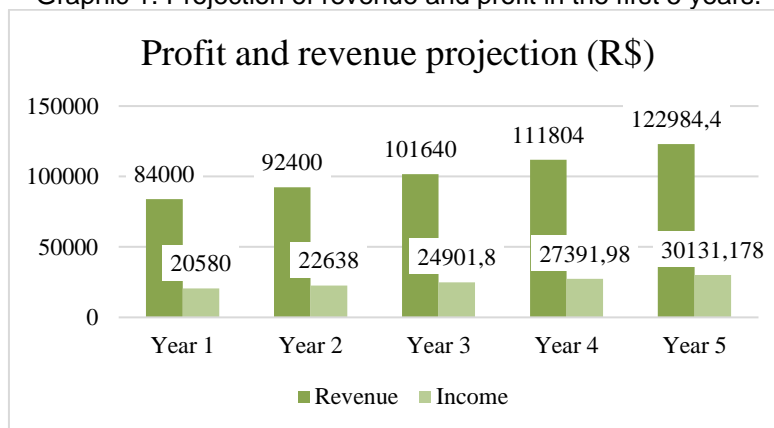
Source: Own authorship.



Projections

As a sales projection, the first 5 years of business operation were considered, with the sale of 120 units in the first year, followed by a growth of 10% per year in the following four periods. Considering the price of R\$ 700.00 per thermocirculator sold, and a net profit margin of 24.50%, the following projection is shown in Graphic 1.

Graphic 1. Projection of revenue and profit in the first 5 years.



Source: Own authorship.

Thus, given a total initial investment cost of R\$23,061.00, and the projected profit shown in the previous graph, a payback period of 13.32 months was calculated.

Swot analysis

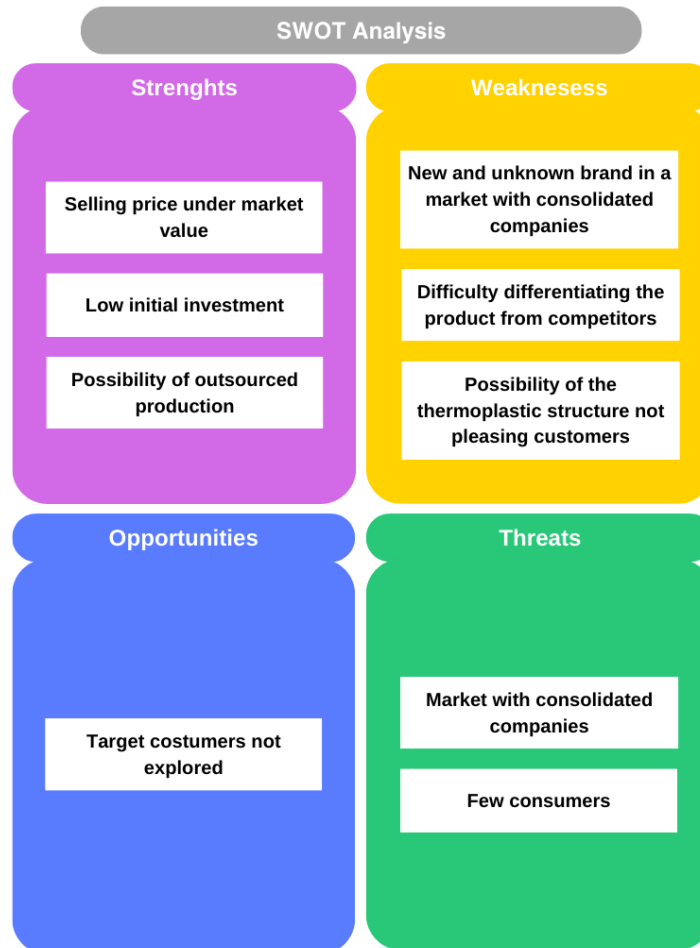
Based on the SWOT matrix (Figure 3), the main critical factors for the company's start-up were determined. Some factors make its final success difficult, such as the market's already consolidated competition, difficulty in differentiation and the existence of few consumers. Some factors favor it, such as the low initial investment cost and the less explored target audience.



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Figure 3. SWOT matrix.



Source: Own authorship.

Brand

The company's brand was created considering aspects that directly link it to its product, thermocirculators. Thus, it was named Termo 3D, in reference to the manufacturing method of the equipment's plastic structure, 3D printing. Furthermore, using burgundy and salmon colors, the following logo was created to display on the company's products and advertisements (Figure 4).



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Figure 4. Logo of the fictitious company.



Source: Own authorship.

Business viability

After developing the entire business planning, including a business model, business plan and brand, a careful analysis of the viability of the business was carried out. The SWOT analysis was considered, focusing on the following threats: market with consolidated companies and few consumers, in addition to the following weakness: difficulty in differentiating the product, which when observed individually, already presents some danger to the business. In the case analyzed, all three occur simultaneously, presenting much greater danger, all at the beginning and during the company's operations, regardless of how many years pass.

Thus, with few customers due to it being a little-known culinary machine applicable to a specific culinary technique, combined with a market already made up of famous and consolidated companies worldwide, it is concluded that starting a company to develop and manufacture thermocirculators is unfeasible.

CONCLUSION

With the development of this paper, the established objective of planning a fictitious company that manufactures thermocirculators was achieved, with the elaboration of all the business planning necessary for its founding: business model, business plan and brand, in addition to market research that resulted in the consumer persona of the equipment. Furthermore, since the final product had



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a lower price than its market competitors, it is concluded that the objective of developing a more accessible equipment for amateur cooks was achieved.

As final result, it was concluded regarding the viability analysis of the planned company, which, due to the existence of few consumers of the product sold, combined with a market formed by consolidated companies, was not the desired one, making the starting of the business unfeasible.

REFERENCES

Anova Company Fact Sheet. San Francisco. 2019. 1 p.

ANOVA CULINARY. **Anova Precision Cooker Nano**. Available at: <https://anovaculinary.com/products/anova-precision-cooker-nano>. Accessed on: November 29, 2022a.

ANOVA CULINARY. **Anova Precision Cooker Pro**. Available at: <https://anovaculinary.com/products/anova-precision-cooker-pro>. Accessed on: November 29, 2022b.

BONINI, Raphael. **Bauruense started testing machines in the garage and now plans to open a unit in the USA**. 2021. Available at: <https://www.socialbauru.com.br/2021/10/04/bauruense-testando-maquinas-garagemhoje-planeja-open-unit-usa/>. Accessed on: November 29, 2022.

BORGES, António MF **Development of an electronic heating system for “sous vide”**. 2019. 105 p. Dissertation (Master's) - Faculty of Science and Technology, Universidade Nova de Lisboa, Lisbon, 2019.

BREVILLE. **Joule Sous Vide - Stainless Steel**. Available at: <https://www.breville.com/us/en/products/sous-vide/cs10001.html?clickid=UYHWmWy0cxyNWZnySHSTZVuEUKA0ehUeZU1Rwk0&irgwc=1&mpname=ChefSteps&cid=8631>. Accessed on: November 29, 2022.

BREVILLE. **Joule Sous Vide - White Polycarbonate**. Available at: <https://www.breville.com/us/en/products/sous-vide/cs20001.html?clickid=UYHWmWy0cxyNWZnySHSTZVuEUKA0ehUeZU1Rwk0&irgwc=1&mpname=ChefSteps&cid=8631>. Accessed on: November 29, 2022.



RELISE

252

CETRO MACHINES. **Sous Vide Thermocirculator SV95**. Available at: https://www.cetro.com.br/termocirculador-sous-vide-sv95/p?idsku=896&gclid=Cj0KCQiAyMKbBhD1ARIsANs7rEGFOVaW92XiSQNPcTFA1xo7X5jMv2UdKTyj8sCQZXco v-8fDur-mqkaAiwVEALw_wcB. Accessed on: November 14, 2022.

CETRO MACHINES. **Sous Vide Thermocirculator SV 100**. Available at: https://www.cetro.com.br/termocirculador-sous-vide-sv-100/p?idsku=895&gclid=Cj0KCQiAyMKbBhD1ARIsANs7rEHwGbu3gzL9LSbZSiOeSfph6G_QalwLZi20sH1OurU4yd2kf4PHBrwaArINEALw_wcB. Accessed on: November 14, 2022b.

CHEFSTEPS. **Welcome to ChefSteps!**: we are here to help you go from curious cook to confident in the kitchen.. We're here to help you go from curious cook to confident in the kitchen. Available at: <https://www.chefsteps.com/>. Accessed on: 14 Nov. 2022.

ELECTROLUX. **Electrolux to acquire fast-growing smart kitchen appliance company Anova**. 2017. Available at: <https://www.electroluxgroup.com/en/electrolux-to-acquire-fast-growing-smart-kitchenappliance-company-anova-23189> . Accessed on: November 29, 2022.

HATCH, Amy. **ChefSteps Announces Joule**. 2016. Available at: <https://www.chefsteps.com/chefsteps-debuts-joule#:~:text=Founded%20in%202012%2C%20ChefSteps%20is,techniques%2C%20tools%2C%20and%20resources..> Accessed on: November 29, 2022.

MARTINS, Wendel. **What is the Business Model Canvas and how to use the technique in practice?** 2021. Available at: <https://senno.ai/business-model-canvas/>. Accessed on: November 14, 2022.

MESQUITA, Laís Gonçalves. And **Preparation Of The Management Plan Of A Fictitious Automation Services Company**. 2018. 57 p. TCC (Graduation) - Control and Automation Engineering Course, Federal University of Rio de Janeiro, Rio de Janeiro, 2018.

OLIVAN, Fernando. **Less than 40% of companies born in Brazil survive after five years, says IBGE**. 2021. Available at: <https://fenacon.org.br/noticias/menos-de-40-das-empresas-nascidos-no-brasil-sobrevivem-apos-cinco-anos-diz-ibge/#:~:text=partir%20de%202020.->



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,Segundo%20o%20IBGE%2C%20apenas%2037%2C6%25%20das%20empresas%20nascidos,e%20o%20tamanho%20das%20empresas. Accessed on: December 18, 2022.

OSTERWALDER, Alexander; PIGNEUR, Yves. **Business Model Generation: innovation in business models: a manual for visionaries, innovators and revolutionaries**. Rio de Janeiro - RJ: Alta Books, 2011. 293 p.

RAMOS, Ana EA **The Sous Vide System. 2004**. 34 p. Monograph (Specialization) - Lato Sensu Specialization Course in Food Quality, Center of Excellence in Tourism, University of Brasília, Brasília, 2004.

SEBRAE - BRAZILIAN SUPPORT SERVICE FOR MICRO AND SMALL ENTERPRISES. **How to prepare a business plan**. Brazil. Brasília: Sebrae, 2013.

SEBRAE - BRAZILIAN SUPPORT SERVICE FOR MICRO AND SMALL ENTERPRISES. **Business survival in Brazil**. Brazil. Brasília: Sebrae, 2016.

VIANA, Flavia. **Lack of planning is one of the villains of business mortality in Brazil**. 2022. Available at: <https://sebraepr.com.br/comunidade/artigo/a-falta-de-planejamento-e-um-dos-viloes-da-mortalidade-das-empresas-no-brasil>. Accessed on: December 20, 2022.