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**DEVELOPMENT OF A BUSINESS PLAN FOR AN
INTELLIGENT SUPERMARKET**

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1. INTRODUCTION

1.1. Summary

Through this TFG, which is based on the modality of "creating a business plan", we are going to proceed to the development of a complete business idea from scratch, dealing with all the key elements that this encompasses, in a clear and detailed way, with the aim of carrying out the development of a company while reducing risks.

First of all, we must be clear that a business plan is a document that describes in detail how a business will be developed and operated. According to Hitt, Ireland and Hoskisson (2016), a business plan should include the following elements: executive summary, business description, market analysis, strategy and implementation, management team and organisational structure, financial plan and appendices.

Secondly, The US Small Business Administration (2021) advocates that, the main purpose of the business plan is to provide a clear guide for the development and management of the business by identifying potential obstacles and opportunities while developing strategies to overcome or take advantage of them.

Hence, by applying all of the above elements to the development of our business plan, we will make a significant contribution to the long-term success of our business.

1.2. Objectives and motivations of the TFG

The main objective is the development of a business plan, through which most of the concepts studied throughout the Bachelor's Degree in Business Administration and Management will be applied, which has allowed me to observe the real usefulness of everything learned during the course of the training course by implementing it to a practical case.

We must bear in mind that most of the subjects taken during the degree have had a greater or lesser influence on the different sections developed in this work, as we are

dealing with a degree that aims to offer a general vision of the business environment as a whole.

Below we will develop a table with the aim of reflecting the relationship between some of the subjects taken in the degree and the different sections developed in our academic work.

Table 1. Relationship between the subjects taken and the sections of the project.

Subjects studied	Project sections
AE1001- Introducción a la Contabilidad AE1012- Contabilidad Financiera AE1013 Dirección Financiera AE1023- Contabilidad de Costes	4. Business model (Canvas) 12. Economic-financial plan
AE1002- Introducción a la Administración de Empresas AE1024- Análisis y Formulación de Estrategias Empresariales AE1031- Técnicas de Ventas AE1047- Gestión de Sistemas de Información en Organizaciones	2. Executive summary 3. Description of the business idea 4. Business model (Canvas) 5. Location of the company 6. Analysis of the environment 7. SWOT analysis 9. Corporate social responsibility
AE1009- Introducción al Derecho AE1026- Derecho Mercantil y Tributario de Sociedades	6. Analysis of the environment 11. Legal structure
AE1018- Fundamentos de Marketing AE1025- Marketing Operativo	6. Analysis of the environment 7. SWOT analysis 8. Marketing Plan 9. Corporate Social Responsibility
AE1022- Inglés para la Empresa	Specific business terminology to develop the project in its entirety.
AE1028- Dirección de Recursos Humanos AE1042- Dinamización de Recursos Humanos	10. Human resources plan

AE1030-Implantación de Estrategias Empresariales AE1032- Diseño y Cambio Organizativo	3. Description of the business idea 5. Location of the company
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Source: own elaboration.

1.3. Working methodology

In the following section we will proceed to explain in detail how we have carried out the development of this academic work, taking into account the procedures and tools used to create it.

First of all, when starting to prepare the Final Degree Project, I contacted the tutor of the subject in order to inform her of the type of work I was going to carry out, which was a business plan.

After this, we proceeded to hold a first meeting through the Google Meet application, with the aim of establishing a first more direct contact, detailing the first working guidelines and establishing the working method we were going to follow.

During the following week, I proceeded to develop two business ideas and, after sharing them with the tutor, both were to her liking, so I was able to decide which of them she considered more interesting to be developed in depth.

We then decided to clarify that we were going to hold an online meeting every month, in which we would review all the sections developed during this period of time and establish the tasks to be carried out during the following month.

It should be acknowledge that from the first moment I decided to create a Google Drive folder where the academic work was located and to which the tutor had continuous access thanks to the "Share document" option. Thus she was able to review the work during the meetings in a much simple way, giving me feedback through the in order to be able to review the work during the meetings in a much simpler way, being able to receive feedback from her in a much clearer way through the "Suggestions" option when sharing the document.

Furthermore, we need to take into account that in order to obtain some information we have mainly relied on articles obtained through the search tool "Google Scholar", although we have also used information obtained from some laws and decrees found in the Official State Gazette, as well as information extracted from some prestigious national newspapers, governmental websites and websites of high distinguished companies.

Finally, it should be considered that all external information has been cited in the different paragraphs in which it has been used, and all these sources can be found together in the section corresponding to the bibliography of our academic work, which can be found at the end of this document.

2. PROJECT SUMMARY

We will now proceed to summarise the project in its entirety, highlighting the most relevant aspects of each of the developed sections .

In the first section (introduction), we proceeded to make a brief summary of the subject to be dealt with, indicating and subsequently developing the main objectives to be taken into account when developing the academic work. At the same time, we proceeded to explain the work methodology used to achieve optimal development and execution, detailing all the guidelines and processes carried out.

Next, we proceeded to develop the description of the business idea. This section details the main characteristics of our business, as well as its functionality and method of use by customers. Finally, a brief description of the target audience (group of people who are interested in and can consume our product or service) is given.

Thirdly, we created our business model using the Canvas model, which allows us to visually represent key components of a business and how they relate to each other to create value for the customer and generate revenue for the company. We proceeded to identify the key elements for the development of our business model in each of the following sections: key partners, key activities, value propositions, customer segments, key resources, channels, cost structure and revenue streams.

Next, to detail the location of our business, we had to take into account numerous factors such as population density, customer flow and ease of access. After carrying out an exhaustive investigation and having considered different options, we decided that the ideal location for the correct development of our business was the Ruzafa neighbourhood in the city of Valencia.

We then developed the analysis of the company's environment, explaining in detail the analysis of the general environment using the PEST analysis and the analysis of the specific environment using Porter's 5 forces, analysing the existing competition, the bargaining power of suppliers, the bargaining power of customers, the possibility of new competitors entering the market and existing substitute products. We then proceeded to develop a detailed SWOT analysis, which consists of identifying the Strengths, Weaknesses, Opportunities and Threats of our company in order to determine the strategic position of the company.

The next point to be dealt with was the development of the company's marketing plan, a section in which the corporate image (company name, logo and the reason for them), the determination of the company's mission, vision and values and the analysis of the target public were clarified. Finally, the last element to be dealt with in this section was the marketing mix, which encompasses all the relevant characteristics with respect to its four basic components: product, price, distribution and communication.

To define and detail corporate social responsibility, we proceeded to develop the set of measures that we will carry out in our company with the aim of consolidating a company based on social innovation that is in tune with some of the Sustainable Development Goals that we consider most relevant. To this end, we focus mainly on relating our business activity to three of them, which are as follows: Goal 2: End hunger, Goal 9: Build resilient infrastructure, promote sustainable industrialisation and foster innovation and finally Goal 12: Ensure sustainable consumption and production patterns.

We then proceeded to develop the company's human resources plan.

The organisational structure was explained by means of an organisational chart, in order to understand the different positions and departments in a much more visual and intuitive way.

In this section we came to the conclusion that there are five employees that we should have in our company for an optimal development of each of the areas, which are the operations manager, the sales manager, the marketing manager, the human resources manager and the technology manager. The job descriptions were then drawn up, detailing the responsibilities and functions to be carried out by each of these employees within the corresponding department.

The next section to be developed was the determination of the legal structure to be adopted by the company and after analysing the different advantages and disadvantages of each of the possibilities, we concluded that the most appropriate legal structure for the development of the automated supermarket is a Sociedad Limitada Unipersonal (S.L.U). In this section we also proceeded to determine the characteristics of this type of company and set out the requirements necessary to carry out this process.

Finally, we proceeded to the development of the economic-financial plan.

In this section we proceeded to calculate and evaluate different aspects such as the initial investment necessary for the development of the company and the initial financing required, obtaining a total value of €492,000 in both cases.

After obtaining these results, we drew up the estimated profit and loss account for the first three years of the company. In this section we were able to estimate profits in all periods in the following amounts: €127,235.02 in the first year, €48,568.89 in the second year and €70,896.43 in the third year.

In conclusion, it should be noted that this section reflects a brief synthesis of the different sections that make up our project, allowing us to make a brief explanation of how they have been carried out and which are the most relevant elements of each of the parts that compose it.

We must bear in mind that this is a totally innovative plan, given that it is based on pioneering elements for the development of each of the processes that make it up, both in the technological, ecological and social fields, influencing the logistics process, the relationship with clients and the development of the different strategies, among other factors.

3. DESCRIPTION OF THE BUSINESS IDEA

Implementation of an automated supermarket in the centre of Valencia that offers 24h service and contributes to sustainable development.

This is an interesting business as it allows customers to access it by simply downloading our app on their mobile phone and linking it to a credit card with funds, offering a service 24 hours a day 365 days a year and at the same time contributing to the environment.

When the app is opened from the customer's mobile device, a QR code is displayed on the screen and by scanning it, the door to the establishment opens.

Once inside, the customer has the option to pick up one or more bags (made from 100% recyclable materials) or choose the "no bag" option, in case they bring their own (if they choose this option, the customer will receive some kind of compensation through a points system that we will develop later).

Subsequently, the customer will make the selection of the different items that will be introduced directly into the bag.

By means of the aforementioned points system, we encourage the customer to include in their shopping basket those items that have lower levels of pollution in their production, packaging and distribution, thus saving money for families and at the same time contributing to the development of the SDGs (health and wellbeing, responsible production and consumption, climate action, life of terrestrial ecosystems...).

At the end of the purchase, the customer simply scans the barcode that will appear on the mobile device (purchase receipt) and after receiving the charge in their bank account (immediate process), the doors of the establishment will open automatically, allowing the buyer to leave.

Regarding our target audience, we are going to focus on all those people who have a smart mobile device and have a bank account. In general, it will be all those people who have reached the age of majority, although depending on the results of the market study that we will carry out, we could include minors who somehow manage to get them to use a prepaid method that we will develop in depth later on.

This is a system that already exists in a similar form in some of the most developed cities in Europe, but has not been implemented in the Valencian Community. We must bear in mind that we have incorporated several elements that differentiate us from the systems that we can currently find, since conventional supermarkets do not offer a 24h service and at the same time depend on the staff in charge of collecting the products and attending to the customers.

On the other hand, the supermarkets that are developing this more innovative model (not implemented in our community), do not have a bonus points system and do not encourage sustainable consumption.

4. BUSINESS MODEL (CANVAS)

The Canvas model is a visual way of representing the key components of a business and how they relate to each other to create value for the customer and generate revenue for the company.

This tool was developed by Alexander Osterwalder and Yves Pigneur in their book "Business Model Generation". Its approach is holistic and focuses on nine key components of a business model that interact with each other: key partners, key activities, value propositions, customer segments, key resources, channels, cost structure and revenue streams.

Table 2. Canvas Model.

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
-Local producers.	-Procurement and sale of high quality and sustainable products.	-Sustainable development.	-Unique shopping experience	-Young people and urbanites.
-Delivery service providers.	-Inventory and logistics management.	-Availability (open 24h).	-Automated service.	-Young families and couples.
-Organisations linked to sustainability.	-Mobile app development.	-High quality while maintaining prices.	-Free WIFI access.	-People who value sustainability.
	-Customer relationship management.	- Innovation.	-Mobile payment.	-People who value technology and innovation.
		-Ease in the purchasing process.	-Incentives for people involved in sustainable development and	
		-Social		

		commitment.	disadvantaged.	
	Key Resources		Channels	
	-Automated systems.		-Supermarket.	
	-Advanced technology throughout the logistics process.		-Mobile application.	
	-Absence of personnel.		-Website.	
			-Social media	
Cost Structure		Revenue Streams		
<ul style="list-style-type: none"> - Procurement of products. - Advertising. - Salaries. - Energy costs. - Infrastructure (the premises and all the technology it requires). - Maintenance (taking into account automated systems). - Taxes. 		<ul style="list-style-type: none"> - Sale of products. - Automated and direct payment via the app when leaving the premises. 		

Source: own elaboration.

5. LOCATION OF THE COMPANY

After an exhaustive investigation and after having evaluated different options about the location, I have come to the conclusion that the Ruzafa neighbourhood located in the centre of the city of Valencia may be the ideal location for the development of my business.

First of all, we must take into account that it is a neighbourhood located in the centre of the city, with a high population density, where a large number of young people with a medium-high purchasing power live.

At the same time, it is an area with a wide variety of shops, bars and restaurants, which means a continuous high flow of customers.

The ease of access to the area has been another of the determining factors in our decision, given that it is a location that can be accessed by foot if you live in the vicinity, by public transport given the high availability that can be found, by car and by urban transport, given that there is a cycle lane that crosses the area. This can make for a quick, easy and convenient shopping experience for customers.

In summary, I believe that the Ruzafa neighbourhood of Valencia offers a set of factors that make it ideal for the installation of a supermarket, including its high population density which is booming, the variety of shops in the area which means a constant flow of customers and the easy access to different means of transport.

6. ANALYSIS OF THE ENVIRONMENT

6.1. Analysis of the general environment (PEST)

To carry out the analysis of the general environment of the company, we will use the PEST analysis, a tool that, as stated by Lerma (2014), seeks to describe the context or environment in which a company operates. In turn, this analysis allows us to identify opportunities and threats, taking into account the different external elements that influence the development of our business plan, which, according to Kotler (2010), are political-legal, economic, ecological-social and technological factors.

After the development of such an analysis, the conclusions obtained will provide a better vision for the development of market research, the creation of different marketing strategies and decision making, thus improving the competitive position of the company.

Next, I will carry out an analysis of the environment of the city of Valencia by means of a complete and detailed PEST analysis.

Political-legal:

Valencia is the capital city of the Valencian Community, located in the east of Spain. It is a city with its own regional government, the body in charge of local administration. This means that Valencia City Council has a certain level of autonomy in local decision-making.

In turn, Valencia is subject to Spanish laws and to regional and local laws. It is also subject to the laws and regulations of the European Union.

Some of the main political-legal factors that we must take into account, as they can significantly affect the development of our business activity, are government rules and regulations, political and trade union relations, political and governmental changes, rules and regulations on food safety, rules and regulations on food labelling and nutritional information, and rules and regulations on the advertising and promotion of food and beverages.

**See Annex I for more details.*

Economic:

It is a city with a diversified economy, with a strong tourism sector and an important manufacturing industry. It is also worth highlighting the agricultural and fishing sector in the region, as it has an important port and both maritime and land transport hub.

As reflected in the article *La crisis causa un gran deterioro del índice valenciano de pobreza económica* (El país, 2014), the economic crisis of 2008 affected Valencia, but the city has seen a solid economic recovery in recent years.

Today it is one of Spain's leading industrial cities and we should not forget that it has an important centre for research and technological development.

The level of income and expenditure of the population of Valencia can affect the demand for products in supermarkets.

We can see from statistics and studies that these levels can vary depending on various economic factors, including the unemployment rate, GDP, the level of inflation and interest rates (factors that can affect supermarket costs and the demand for products).

With regard to inflation, the element on which we will focus our economic analysis, we must bear in mind that Spain has recently reached historic highs in terms of the annual average variation of the consumer price index (CPI). This directly affects consumers and supermarkets because an increase in the cost of living means a loss of purchasing power for families, which means a decrease in the amount of goods they will be able to buy.

Faced with this situation, people are likely to opt for lower priced products and cheaper brands, which will increase competition from supermarkets.

In short, if the income level of the population is low, they are likely to be less able to spend on supermarket products, which may affect sales. This in turn affects the type and quantity of goods and services consumed. At the same time, the level of income and expenditure of the population determines competition in the market, as a decrease in the level of income or an increase in expenditure of the population is likely to increase competition between supermarkets and increase demand for products in those supermarkets that are considered to be cheaper.

Ecological-Social:

Valencia is a multicultural and cosmopolitan city, with a population of approximately 800,000 inhabitants. The city is known for its rich history and culture, with a wide variety of buildings, monuments, cultural events and festivals throughout the year, making it a popular destination for tourists.

It is located on the coast and has an extensive network of parks and green spaces, contributing to a healthy and sustainable urban environment. The city is also known for its warm and dry Mediterranean climate, with hot summers and mild winters, which attracts tourists all year round.

It is a city that has an active environmental policy and strives to reduce its carbon footprint, making it one of the Spanish cities with the highest percentage of renewable energy used.

Some of the key elements of the analysis of ecological-social factors are:

- Trends and changes in the consumption patterns of the population of Valencia.

Supermarkets need to be aware of trends and changes in the consumption patterns of the population of Valencia in order to adapt their product offer. For example, if there is an increase in demand for healthy or organic products, supermarkets can increase the supply of such products.

- The behaviours and attitudes of the population of Valencia towards consumption and the environment.

According to the study *Tendencias del consumidor- Resumen de Resultados* (Inmark, 2018), supported by the Ministry of Industry, Trade and Tourism, which analyses Spanish consumer trends, the following elements stand out among the criteria for choosing a shop.

The price/quality ratio, as consumers' decision will be conditioned 71% by price and 63% by quality.

On the other hand, location is considered the third most important element, referring to the proximity between the establishment's location and the consumer's home.

Next we find the treatment and friendliness of the staff, an element that we will not be able to apply in our supermarket as the customer is not in direct contact with the company's staff. In this case, we will try to manage any complaints or queries that may arise by developing a consumer assistance system to resolve them as quickly and easily as possible.

Finally, the three elements that also condition consumers' decisions, but not to such a great extent, are the breadth of the range, confidence and the appearance of the establishment.

- The set of different environmental rules and regulations.

There are a number of environmental rules and regulations that can affect the development of a supermarket in the city of Valencia, including energy regulations, which primarily aim to reduce greenhouse gas emissions, government regulations on waste management, such as recycling targets and landfill regulations, and government pollution regulations, such as air and water quality regulations.

It should be noted that these measures together can affect the energy use of supermarkets and, by increasing the costs that supermarkets face, can directly affect the profits of supermarkets.

- Climate change and its impact on food availability.

According to the report on what climate change is (Ministry for Ecological Transition and the Demographic Challenge, n.d.), "Climate change is the global variation of the Earth's climate. This variation is due to natural and human-induced causes and occurs on all climatic parameters: temperature, precipitation, cloud cover, etc., on a wide range of time scales".

Climate change affects supermarket food stocks in different ways, as it has an impact on many factors, such as loss of biodiversity or degradation of fertile soils.

In turn, climate change increases the operating costs of supermarkets as they have to adapt to extreme weather events such as droughts or floods. It should be noted that agricultural production is affected by extreme weather conditions, which can have a negative impact on supermarket supply chains, leading to shortages of certain products and price distortions.

In the area of transport and logistics, climate change causes natural disasters that affect transport routes and logistics, which can make it difficult to supply food to supermarkets. We should bear in mind that climate change can distort food prices as it negatively affects agricultural production and the availability of food in supermarkets due to shortages of some products and surpluses of others.

Finally, we should note that climate change may affect demand for supermarket products as changes in consumption patterns may lead to changes in weather patterns, putting increased pressure on supermarkets to adopt more sustainable practices and reduce their carbon footprint.

Technological:

Valencia is a city with an important technological research and development centre as it has a good technological infrastructure, with a wide availability of high-speed internet services and a growing startup community.

We should note that there is a significant presence of technology companies in the region so technology is a booming sector in Valencia and is expected to continue to grow in the future.

Some technological elements or factors that we cannot overlook are:

- The use of technology in food distribution.

We must bear in mind that this is a complex process and will vary depending on the product to which reference is made, but with regard to the intervention of technology in the distribution process in a generic way we can highlight:

1. Warehouse automation: robots and automated systems are being used to improve efficiency in order picking and product storage.
 2. Traceability and tracking: IoT (Internet of Things) technologies and artificial intelligence are being used to track products from field to counter, allowing retailers and consumers to know the provenance and freshness of products.
 3. Online shopping: e-commerce is becoming an increasingly popular way to buy food, and artificial intelligence technologies are being used to enhance the online shopping experience.
 4. Data analytics: Data analytics techniques are being used to analyse shopping patterns and demand, helping retailers improve inventory efficiency and make informed business decisions.
- The use of technology in food processing and packaging.
Technology is being widely used in food processing and packaging to improve efficiency, food safety and product quality. Some examples of how the industry uses technology include:
 1. Automated processing: Robots and automated systems are used in a large part of the industry to increase the efficiency of food processing, such as product sorting, cutting and packaging.
 2. Quality control: image analysis, artificial intelligence and other advanced technologies are being implemented in recent years to monitor product quality, detect defects and ensure that products meet food safety standards.

3. Traceability: IoT technology and data analytics are used to trace products from production to the end consumer, helping to ensure food safety and quickly detect any problems that may arise.
- The use of technology in the management and tracking of inventories and orders.

The use of technology for inventory and order tracking and management in the food industry is becoming increasingly common. Examples of how technology is being used in the field include:

1. Inventory management systems (IMS): Inventory management systems are used to automate inventory management, allowing companies to accurately track their inventory and make informed ordering and production decisions.
2. Data analytics: Data analytics techniques are used to analyse buying patterns and demand, helping companies improve inventory efficiency and make business decisions that best suit their needs.
3. Order tracking system: Order tracking systems are used to automate the order tracking process and ensure that products are delivered at the right time.
4. Order automation system: An order automation system is used to ensure that products are automatically reordered when critical stock levels are reached.

We must bear in mind that the set of technologies that are nowadays present in the different processes, allow the integration between the different systems to be achieved. In other words, technology allows the integration of disparate systems for better visibility and control of logistics, financial and food safety processes as a whole.

6.2. Analysis of the specific environment (Porter's 5 forces)

The analysis of the specific environment based on Porter's 5 forces is an industry analysis technique used to assess the competitiveness of a company. This technique was developed by Michael Porter in 1979 and is based on five main forces: the bargaining power of customers, the bargaining power of suppliers, the threat of new competitors, the threat of substitute products and competition among existing competitors.

6.2.1. Existing competition (supermarkets and advantages)

With regard to the existing competition, we will now proceed to identify the different supermarkets in the Ruzafa neighbourhood and clarify the opening hours of each of them and classify them into different price ranges.

Table 3. Competitor information (opening hours and prices)

SUPERMARKET	TIMETABLE	PRICE
Carrefour Express	Monday to Saturday from 9:00 a.m. to 9:30 p.m. Sunday from 10:00 a.m. to 9:30 p.m.	Medium-high
Mercadona	Monday to Saturday from 9:00 a.m. to 9:30 p.m.	Medium
DIA	Monday to Saturday from 9:00 a.m. to 9:30 p.m.	Medium
Lidl	Monday to Saturday from 9:00 a.m. to 9:30 p.m.	Medium
Consum	Monday to Saturday from 9:00 a.m. to 9:30 p.m.	Medium
SUMA supermercado	From Monday to Sunday from 9:00 a.m. to	Medium-high

	10:00 p.m.	
Charter	Monday to Sunday from 9:00 a.m. to 10:30 p.m.	Medium-high
Supercor Exprés	From Monday to Sunday from 7:00 a.m. to 1:00 a.m.	High

Source: own elaboration.

6.2.2. Bargaining power of suppliers

The environment of the supermarkets we have analysed, located in the Ruzafa district of Valencia, is highly competitive and offers consumers a wide variety of choices. It should be borne in mind that these supermarkets have moderate bargaining power as they rely heavily on suppliers to supply their shops with the different products they offer to their customers.

On the other hand, supermarkets also have some bargaining power over prices and promotions as they compete with each other for consumers' attention and spending. In addition, supermarkets can also negotiate volume discounts and better payment terms with suppliers.

In turn, they can influence product demand through in-store displays and promotions. For example, placing a product in a prominent position or promoting it during sales can increase its demand, thereby increasing their bargaining power.

In summary, the bargaining power of the supermarkets we have analysed depends on a number of factors including competition, product demand, relationships with suppliers and the ability to influence product demand. Overall, however, it can be said that the bargaining power of supermarkets in the market is moderate.

6.2.3. Bargaining power of customers

The bargaining power of supermarket customers in Valencia is influenced by a number of factors, including supply and demand, competition and the information available to consumers.

We are faced with a competitive market, where customers have greater bargaining power as they can choose from a wide variety of supermarkets and products, allowing customers to easily compare prices and product quality. In addition, with the availability of online information, customers can compare quality and price before making the purchase process. This set of factors gives customers greater control over their purchases and thus greater bargaining power.

In turn, in a neighbourhood with a large number of supermarkets, competition between supermarkets can in some cases lead to lower prices and better deals for customers. Supermarkets sometimes offer additional incentives, such as loyalty programmes or special promotions, to attract customers and keep them loyal.

However, it is important to remember that although there is a wide range on offer, prices and quality can vary greatly from one supermarket to another. It is therefore important for informed customers to do thorough research before making a purchase in order to select the option that best suits their needs.

In summary, bargaining power is influenced by a number of factors, including supply and demand, competition and available information. However, in general, it can be said that the bargaining power of supermarket customers in the Ruzafa neighbourhood of Valencia is high, given the large number of supermarkets in the area, which means high levels of supply and competition.

6.2.4. Possibility of entry of new competitors

The ability of new entrants to enter the sector depends on a number of factors, including market demand, the presence of barriers to entry and existing competition.

However, the presence of barriers to entry, such as economies of scale, regulatory requirements including permits and inspections, the need for significant investment in infrastructure and technology, the difficulty of sourcing supplies due to a lack of established supplier relationships, strong brands and customer loyalty to established supermarkets, can make it difficult for new entrants to enter the market. In addition, we are faced with high existing competition, which means that new entrants will have to

compete for market share and offer quality products and services in order to gain market share.

In summary, new entry is possible, but it should be noted that despite high levels of demand, barriers to entry and intense competition may make it difficult for new entrants to enter the market.

6.2.5. Substitute products

One of the elements that we must take into account for the development of our business is the identification of substitute products, which are those that can replace those sold in our supermarket and can have an impact on the sales and profitability of the business.

In order to carry out this process, we have decided to look directly at nearby businesses that can influence the sales of our automated supermarket. After this analysis, we have concluded that among all the existing competition, those competitors that pose the greatest threat are vending machines, mobile applications for food and home delivery, websites that make your basket online by comparing supermarkets and online supermarkets without a physical establishment.

We will now proceed to explain each of these threats in detail.

Firstly, as far as vending machines are concerned, we must be aware that they offer, like our supermarket, 24 hours a day, 365 days a year availability, so they are a clear example of substitute products in terms of drinks and all kinds of snacks. At the same time, consider that our supermarket has the advantage of being able to offer alcoholic drinks and drinks packs where the customer benefits from volume discounts (given that in vending machines you can only buy single units), which is a competitive advantage for our company.

Another example of substitute products are those offered by mobile food and home delivery applications. A clear example of this model is the company Globo, which allows users to obtain any type of product or food directly from home.

One of the main advantages that our company has over this service is that the prices of the products are much lower, given that these home delivery companies must add a

profit margin on the products they acquire to be delivered to the customer and in turn have to assume a large number of costs such as the costs of delivery personnel or the costs of technology and software among others, which have an indirect impact on the price of the products.

On the other hand, we should consider the service offered by those websites that allow users to do their shopping online by comparing prices in different supermarkets. Some of the most popular are SoySuper and Carritus, which make it easy for users to compare prices and allow them to do their shopping online in different supermarkets, which can save their customers both in terms of money and time spent. One element to take into account is that a large part of the population likes to shop physically, as this allows a comparison of products in a much more direct and visual way. Therefore, despite the fact that this factor may pose a threat to our company, we believe that thanks to the different advantages offered by our supermarket, we can compete with these companies without worrying too much and we may even become partners with them in the not too distant future.

Finally, we cannot forget the online supermarkets without a physical establishment. One of the major references in terms of this business model is Amazon, given that for some time now it has been offering its customers the possibility of buying fresh and perishable products from home. We must bear in mind that, despite offering a large part of the products we sell in our automated supermarket, as with the price comparison websites, it does not allow the customer to see the product in person, so despite posing a threat, we still have certain advantages over this service.

In conclusion, substitutes are a key element in analysing an automated supermarket environment, but by identifying them and understanding their impact on the business, we can make informed decisions about pricing, promotions and marketing strategies to maintain profitability and growth in the long term.

7. SWOT ANALYSIS

According to Dyson (2004), SWOT analysis is one of the most widely used techniques in strategic planning and, as Hill (1997) argues, especially for the determination of a company's strategic position.

In short, the SWOT analysis is a tool used to evaluate the current situation of a company or organisation, identifying its Strengths, Weaknesses, Opportunities and Threats. It is important to bear in mind that the SWOT analysis is based on currently available information and the results may vary depending on changes in the company's situation. At the same time it allows to evaluate the strategic position of a company or organisation and to understand its competitive environment.

We will now proceed to carry out a SWOT analysis of our supermarket.

Strengths:

- Strategic location allowing easy access for customers.
- 24-hour opening allows customers to shop at any time of the day, offering great convenience.
- Highly competitive prices compared to other supermarkets in the area due to reduced labour costs.
- Greater efficiency in inventory management and stock tracking, which means a reduction in losses and greater stock control.
- Greater speed and convenience for the customer in the purchasing process.
- Efficient purchasing scheduling system.

Weaknesses:

- High initial installation and maintenance costs, taking into account the amount of technological elements that must be available.

- More frequent maintenance and cleaning, as the supermarket is open for a longer period of time.
- Limited size of the supermarket, which limits the amount of products offered.
- Limitations on the personalisation of customer service.
- Potential privacy and security issues, with an increased risk of theft and crime as the supermarket is open during night-time hours.

Opportunities:

- Increased interest in the use of automated technologies.
- Increased accessibility for people with disabilities or physical limitations.
- Potential to expand the business through online sales and home delivery.

Threats:

- Competition from other larger and better established supermarkets in the area.
- Rising prices of products due to external factors.
- Rejection by some customers who prefer personalised service.
- Changes in consumer trends and customer preferences.
- Changes in government and tax regulations that may affect the business.

In conclusion, our automated supermarket can provide greater efficiency in inventory management and give customers a faster and more pleasant shopping experience. However, this also means high initial setup and maintenance costs, as well as

limitations in customer service customisation. In addition, it is important to understand the potential privacy and security issues in an automated environment.

Despite these weaknesses, automated supermarkets have the opportunity to benefit from the growing interest in automation technology and the opportunity to expand their business through online sales. However, the implementation of an automated system will need to take into account competition and changing customer preferences.

8. MARKETING PLAN

8.1. Corporate image

- **Name:** TECO market
- **Logo:**

Illustration 1. Corporate image.



Source: own elaboration.

- **Why?**

Supermarket based on technological and ecological innovation. Both words form the acronym TECO, which has allowed us to create the name of our company.

On the other hand, with regard to the logo, we can see that the shopping trolley represents a tree leaf, an element that relates directly the company to sustainable development.

8.2. Mission, vision and values

Our mission is to provide our customers with a convenient and sustainable shopping experience using advanced technology through environmentally friendly business practices.

On the other hand, the company's vision, which refers to where we are heading and what our medium and long-term goals are, is to be the leading automated supermarket in the region, recognised for its commitment to sustainable development and its ability to offer innovative and efficient services.

Finally, with regard to the values, ethical and professional principles that characterise the company, we should highlight the following:

- Sustainability: Employ business practices that reduce environmental impact and promote social and environmental responsibility.
- Convenience: Provide our customers with a quick and easy shopping experience.
- Innovation: Focus on continuous improvement of our products and services to maintain market leadership using the latest technology.
- Excellence: Maintain high quality standards in all aspects of our business.
- Integrity: Conduct business in an honest and transparent manner, building lasting and trusting relationships with our customers and suppliers.

8.3. Target audience

The target audience of the automated supermarket can be specific and oriented to the characteristics and needs of the population living in the Ruzafa neighborhood.

There are different market segments that can be attractive for automated supermarkets and, in this particular case, we must take into account numerous factors that we are going to mention below.

It should be noted that Ruzafa is a young and cosmopolitan neighborhood known for its artistic and multicultural atmosphere. Our supermarket could be very attractive to this target audience, allowing them to shop quickly and efficiently in accordance with their busy urban lifestyles. At the same time, while Ruzafa is a neighborhood known for its nightlife and culture, there are also a growing number of young families and couples

choosing to settle in this part of the city. Automated supermarkets can attract this public because they allow them to shop quickly without having to travel far from their homes.

On the other hand, we should consider people who value sustainability since Ruzafa is a community that cares about protecting the environment, so a supermarket like ours, which promotes plastic and packaging reduction, sells local and seasonal products and tries to eliminate food waste could be very attractive to this public.

Finally, located in a young and trendy neighborhood, an automated supermarket in Ruzafa will appeal to people who value technology and innovation. The fact that the shopping process is automated can be seen as a strength and a differentiating element that can generate great interest among this public.

In conclusion, the target audience for the automated supermarket in the Ruzafa neighborhood of Valencia can be located according to the characteristics and needs of the population living in this particular area. Some market segments to consider include young people and urbanites, young families and couples, people who value sustainability, and those who value technology and innovation.

8.4. Marketing mix

The marketing mix is one of the classic elements of marketing, a term created by McCarthy in 1960, which is used to encompass its four basic components: product, price, distribution and communication (Espinoza, Marketing Mix: the 4Ps, 2014).

- PRODUCT

The marketing mix variable of our supermarket includes specific characteristics and attributes of the products and services offered by the supermarket.

Regarding the products offered, our supermarket can offer a wide selection of fresh, frozen and canned products, as well as organic, gluten-free and others.

It should be noted that our supermarket will be organized by product sections among which we will find:

- Basic foods: in this section we will find all kinds of basic foods such as eggs, milk and all kinds of canned products, classifying them according to the type of product and the brand.
- Fruit and vegetable section: in this section we find all the fresh fruit and vegetables, organised in piles or trays according to the type of product in question.
- Butchery: in this section we will find all the fresh meat and different types of sausages. We must bear in mind that these products must always be located inside special counters or refrigerators and are organised depending on the animal the meat comes from, such as chicken, beef or pork, among others.
- Fishmongers: in this section we will find fresh fish, seafood and all types of marine animals. As in the butcher's shop, these products must be placed in refrigerators or counters with optimal conditions for the preservation of this type of food.
- Bakery: this section contains fresh bread, which is classified according to the type of flour with which it has been made, as well as cakes and all types of sweet and savoury homemade pastries. In this case, the counters will be organised according to the type of product.
- Frozen food section: here all types of frozen products will be located, including meat, fish, vegetables, fruit, ice cream and frozen desserts. These products have the advantage of having a longer shelf life and usually offer more affordable prices.
- Cereals and bulk products: in this section we will find cereals, classified according to brand and type, and all bulk products such as pulses, pasta and rice, which will be organised in dispensers according to the type of product. In this section we will also find all kinds of snacks and sweets, classified into sweet and savoury.
- Drinks: this section will be organised into two sections, on the one hand we will find all types of non-alcoholic drinks such as water, soft drinks, fizzy drinks and

juices, and on the other we will find alcoholic drinks such as beer, wine and distilled drinks among others.

- Personal care: here we will find all kinds of products for personal hygiene such as toothpaste, gel and shampoo among many others. These products will be classified according to the function they perform, that is to say, according to the type of product, taking into account that there are numerous brands that make products with very similar functions.
- Cleaning: in this section we will find all kinds of products for home care such as products for the washing machine, for the dishwasher, for cleaning the bathroom or the kitchen among many others. These products will be classified by product type and brand.

On the other hand, as far as quality is concerned, the automated supermarket strives to maintain high quality standards in its products in order to provide customers with fresh, safe and healthy products while maintaining standards, allowing the different processes carried out to be in line with the different sustainable development goals and to be considered environmentally friendly. With regard to packaging, our supermarket is able to provide products with environmentally friendly packaging, which at the same time is aesthetically pleasing and facilitates the transport and storage of products by customers.

In turn, we must take into account the innovation carried out by our supermarket, which can adopt innovative approaches to product offerings, such as integrating technology into the shopping experience or offering exclusive branded products, while we can offer a wide variety of additional services such as home delivery, recycling of packaging with the aim of reducing environmental impact and promoting recycling among consumers, the provision of a proprietary mobile application that allows the customer to manage their online shopping process while at the same time providing access to the physical shop and automatic checkout after purchase, and loyalty and discount programmes and promotion of environmentally friendly and eco-friendly products.

Finally with regard to customisation, our supermarket can offer different product customisation services, such as the provision of a customised cutting and packaging service allowing customers to purchase products in portions according to their needs,

the customised offer of products according to customers' specific preferences and needs, such as gluten-free, lactose-free and organic, taking into account other factors that the customer may add to their profile such as allergies and nutritional needs and finally personalised recipes, offering customers customised recipes and recommendations of fresh and packaged products that meet their needs and preferences.

In conclusion, the "product" variable in the marketing mix of our supermarket focuses on offering quality products and services with innovative features to provide customers with a satisfying and personalised shopping experience by implementing measures and processes that are environmentally friendly.

- PRICE

The price variable will depend on a number of factors, including product costs, transportation costs, inventory costs, the level of competition and the level of demand. In addition, the purchasing power of the target market and competitive pricing are also taken into account in formulating attractive prices for buyers. This includes creating a competitive pricing strategy and offering discounts and campaigns to increase sales.

Regarding pricing, in our automated supermarket we are able to set competitive prices for products and services, taking advantage of the economies of scale offered by process automation.

On the other hand, with regard to pricing policy, we must bear in mind that, as we have mentioned above, we will implement a points accumulation system that allows customers to obtain different advantages and discounts while at the same time encouraging the purchase of ecological and proximity products. This measure will allow us to attract and retain customers while promoting the consumption of sustainable products.

Finally, as far as the pricing strategy is concerned, our supermarket will try to establish average prices in relation to the competition, taking into account that, thanks to the set of characteristics that compose it, it could present a price similar to that of the competitors, presenting higher quality standards.

- PROMOTION

In this section we will deal with three key aspects of promotion, namely advertising, public relations and experiential marketing.

Firstly, as we already know, advertising can be carried out through traditional media such as television, radio and newspapers. Although traditional media can have a large reach, we must appreciate the high cost of developing advertising on these platforms so, bearing in mind that we are mainly targeting young people and urbanites, young families and couples, people who value sustainability and those who value technology and innovation, we should emphasise digital media such as social networks and online advertising, which will allow us to address our target audience much more directly.

On the other hand, with regard to public relations, we will try to build strong public relations with customers, local communities and the media, thus increasing the popularity of our business and attracting new customers.

Finally, with regard to experiential marketing or marketing based on customer experiences, we will try to create a unique and memorable experience for each customer, taking into account the many differentiating elements that allow us to develop a competitive advantage in the market. At the same time, we will try to develop activities that allow us to grow our brand image such as product tastings and special events among others.

- PROMOTION BUDGET

We must bear in mind that the promotion budget can be broken down into two main sections: firstly, the creation of content and design, and secondly, the execution and monitoring of the marketing strategy.

Regarding content creation and design, we will focus on the following activities:

- Content creation for social media and online advertising: €15,000 per year.
- Design and production of graphic ads and videos: €15,000 per year.

- Design and production of brochures and other marketing materials: €8,000 per year.

Regarding the execution and monitoring of the marketing strategy, we will focus on the following aspects:

- Social media advertising (Facebook, Instagram, Twitter, LinkedIn, etc.): €10,000 per year.
- Online advertising (Google Ads, Bing Ads, etc.): €15,000/year
- Email marketing: €5,000 per year.
- Sponsored content: €15,000 per year.
- SEO and search engine optimisation: €6,000/year.
- Digital media advertising (local newspapers, magazines, blogs): €5,000 per year.

The total annual promotional budget for our automated supermarket is €94,000. It is important to bear in mind that this is an estimate budget given that we are in the initial phase of the creation of our business, but as the development of the business progresses, we will carry out a much more detailed analysis in order to manage the budgets according to the profitability obtained, taking into account which factors have had a greater influence on the development of the company.

-DISTRIBUTION

Distribution is a key element of the marketing mix. It is the way in which a product or service reaches the consumer, the process of connecting supply and demand.

In this case, we will focus mainly on logistics, which is based on planning, executing and controlling the different phases of the distribution process.

It should be noted that physical distribution refers to the process by which products are transported from the point of manufacture to the point of sale. In turn, we must place special emphasis on the set of phases that characterise the distribution process, which are inventory management, order tracking and control of the supply chain.

Firstly, inventory management is a process that involves establishing a plan to control inventories while ensuring that products are available to the customer and minimising storage costs. To develop this process efficiently, we will follow the steps below:

- Establish a minimum inventory: define the minimum level of inventory that must be held to meet demand. This should be set consistent with the quantity of products sold.
- Analyse orders: identify the pattern of orders to establish the appropriate inventory level. This will help to determine which products are most in demand and will allow orders to be planned in advance in order to minimise costs.
- Keep track: Monitor inventories on a daily basis to identify any discrepancies between actual and expected inventory levels. This will allow problems to be detected early and action taken to address them.
- Reduce waste: evaluate the quality of products and establish policies to minimise waste, allowing you to improve your company's profitability.

Also, another key part of our automated supermarket logistics process is order tracking. This involves setting up a system for order tracking to ensure that the ordered products arrive at their destination in a timely manner. The measures we will carry out to achieve this goal are as follows:

- Define a tracking process: we will set up a process that will allow us to manage the tracking of orders. This will include the identification of incoming orders, orders in process and completed orders.
- Establish a notification system: this measure will allow for the communication of order status to customers. This will keep customers informed, minimising customer uncertainty and improving customer satisfaction.
- Configure alerts: through this function we will be able to detect any anomaly in the order tracking process. This will allow us to detect problems in time and take measures to solve them.

- Evaluate the performance: carrying out a periodic analysis of the performance of the order tracking system will help us to improve the processes in order to correct errors and maximise efficiency.

Finally, supply chain control is a key part of our automated supermarket logistics. This involves setting up a system to control and optimise supply chain management to ensure the delivery of quality products. The steps we will employ to achieve this end are as follows:

- Establish a supply chain structure: carry out the definition of a structure that is in line with the business objectives. This step includes identifying suppliers, defining delivery processes and determining storage limits.
- Establish a reception policy: in order to guarantee the quality of the products, a process will be developed which, following verification of the products on receipt, will consist of assessing their quality and carrying out a control of the expiry date.
- Establish a tracking system: by means of a tracking system for order control, we will be able to know the status of orders in real time and make appropriate decisions to ensure on-time delivery of orders.
- Evaluate suppliers: Regular evaluation of suppliers will ensure that quality standards are met. This will help to maintain a good relationship with suppliers and ensure the delivery of quality products.

In conclusion, inventory management, order tracking and supply chain control are key elements to ensure the success of an automated supermarket, as far as the distribution process is concerned. Through the development and comprehensive control of these processes, we will establish a system that ensures that products are available to the customer, minimising storage costs, guaranteeing that the ordered products arrive at their destination in a timely manner and ensuring quality standards.

9. CORPORATE SOCIAL RESPONSIBILITY

The Sustainable Development Goals (SDGs) are a series of global goals agreed by the member states of the United Nations in 2015, with the aim of eradicating poverty, protecting the planet and ensuring prosperity for all.

Below we are going to develop the set of measures that we will carry out in our company with the aim of consolidating a company based on social innovation that is in tune with some of the SDGs that we consider most relevant and that are most closely related to our business activity.

The SDGs we are going to focus on in the following section are Goal 2: End hunger, Goal 9: Build resilient infrastructure, promote sustainable industrialisation and foster innovation, Goal 12: Ensure sustainable consumption and production patterns and Goal 13: Take urgent action to combat climate change and its impacts, which will be described and detailed below.

- Goal 2: End hunger.

Goal 2 of the UN Sustainable Development Goals is based on ending hunger and malnutrition by ensuring that all people have access to adequate and affordable nutrition.

To achieve this, it seeks to improve agricultural productivity and sustainability by promoting investment in rural infrastructure, enhancing food systems development and promoting fair and sustainable trade. It also seeks to ensure equitable access to food, with a particular focus on vulnerable groups such as children and people living in poverty.

That said, in our automated supermarket we will implement a system that, in line with goal 2, promotes fair and sustainable trade.

To do this, we are going to focus mainly on perishable products, as they are often the ones that represent the highest cost for families and often end up being wasted by large supermarkets as a result of an imbalance between supply and demand.

To this end, we must bear in mind that, as mentioned above, children and people living in poverty are the main victims of this situation, therefore, in our supermarket

application, which each of our customers must have downloaded on their mobile device to access and shop in the establishment, we will develop a sub-section within the process of creating the user profile, which allows all people with an income of less than 500 euros per month or those adults with children who earn the Minimum Interprofessional Wage to reflect their economic situation by means of a supporting document.

By means of this measure, all perishable foodstuffs which, with 2 days to go before their best-before date, have not been purchased by any consumer, will be excluded from sale to the general public and can only be purchased free of charge by those customers who have received the aforementioned accreditation.

We consider that this measure can be favourable for, as defined in Objective 2, guaranteeing food and nutrition security for all through the promotion of fair and sustainable trade, taking into account all those people who are in an unfavourable situation. At the same time, through this measure, we will reduce the waste of food that can be used by people who, given their economic situation, would not be able to have this type of food without making an extra effort.

- Goal 9: Build resilient infrastructures, promote sustainable industrialisation and foster innovation.

The implementation of this goal can have a significant impact on poverty reduction and sustainable development in general.

Specific targets include developing quality, reliable, sustainable and resilient infrastructure to support economic growth and human well-being, promoting sustainable industrialisation and increasing the participation of developing countries in the global economy, improving access to technologies and knowledge essential for sustainable development, and increasing research and development in clean and sustainable technologies.

In our automated supermarket, we will undertake a number of actions to help achieve UN SDG 9 by building resilient infrastructure, promoting sustainable industrialisation and fostering innovation.

Some of the actions we will take to achieve these goals are as follows:

Implementation of clean technologies: In our supermarket we will choose to use clean and sustainable technologies in all the facilities by using LED lighting systems, installing solar panels that generate energy in a clean way (in case this process could not be carried out due to logistical problems, we would proceed to contract a green lighting company, whose energy comes from photovoltaic plants) and the development of efficient ventilation, heating and air conditioning systems. These technologies not only reduce the environmental impact of the supermarket, but also help to reduce energy costs, benefiting both society at large in the short term and the company itself in the long term.

Reducing greenhouse gas emissions: The transport of products in the supply chain is one of the main sources of greenhouse gas emissions. The measures that we will carry out in our supermarket to reduce these emissions are: optimising product delivery routes, trying to work with those suppliers that are closest to us in geographical terms, using electric or hybrid vehicles for the different processes related to the supply chain in which we are involved and reducing the amount of packaging used through a system of promotion in the supermarket application of all those products that have a lower environmental impact, through a system of discounts and accumulation of points for all those customers who purchase these products.

Implementation of innovative technologies: Innovation is a key aspect to achieve objective number 9 and we must bear in mind that most of the technologies that our automated supermarket will implement can be considered cutting-edge. Some of the technologies that we will count on for the development of innovative technologies are the use of artificial intelligence (as we have already described in detail in the technological analysis of the PEST analysis) and robotics, which is directly related to all the phases of the automation of the different processes, among which we can highlight warehouse management and the different phases of the order process. These measures, in turn, will improve the efficiency of inventory management, product tracking, transaction processing and product quality control.

- Goal 12: Ensure sustainable consumption and production patterns.

This is an overarching goal whose main aim is to make production and consumption patterns more sustainable, reduce human impact on the environment and use natural resources more efficiently.

To achieve this goal, the active participation of governments, businesses and citizens is needed to promote more sustainable practices in daily production and consumption processes.

Specific targets under SDG 12 include reducing food waste at all stages of the food chain, promoting sustainable practices in the production and consumption of goods and services, improving efficiency in the use of natural resources and reducing the ecological footprint, ensuring that businesses employ sustainable and transparent practices in their operations, and promoting the development and transfer of sustainable technologies.

Some of the actions we will undertake in order to achieve this goal are:

- Promoting responsible consumption: our automated supermarket will inform and educate customers through its app about which products are more sustainable, such as organic, zero-kilometre and fair trade products, promoting responsible consumption through the aforementioned points system, in which a greater number of discounts are offered to those who buy these products more frequently.

- Promoting sustainable production: in our automated supermarket we will ensure that the products we sell are sourced from suppliers that meet sustainability and social responsibility standards. We will carry out rigorous research into their compliance with environmental regulations and will only work with suppliers who are committed to waste management and energy efficiency.

- Reduction of packaging used: We will implement several measures in our supermarket to reduce the amount of packaging used. Firstly, we will implement the offer of bulk products and refillable packaging, through this measure we will significantly reduce the consumption of plastic waste, as the customer will be able to reuse the same packaging every time he/she wants to buy this type of product. On the other hand, we will carry out the production of our own ecological and reusable bags and in the event that the customer has one bag from a previous purchase, selects the option "without bag" (process that was described above in the description of the business idea), you must scan the QR code that can be found on the bag and receive a monetary reward on your next purchase, applying a 5% discount on this.

- Goal 13: Take urgent action to combat climate change and its impacts.

This goal aims for countries to adopt policies and measures to reduce greenhouse gas emissions and limit global warming to less than 2 degrees Celsius above pre-industrial levels. It also aims to promote adaptation to climate change and strengthen the resilience and adaptive capacity of vulnerable communities by promoting the mobilisation of financial and technical resources to support climate action in developing countries and to increase education, awareness and human and institutional capacity related to climate change.

In summary, SDG 13 focuses on urgent and ambitious actions to address climate change and its impacts, promoting mitigation and adaptation, mobilising resources and strengthening human and institutional capacity.

Among the actions we will take in our company to contribute to the achievement of this goal, we can highlight the following two:

- Improve waste management: In our supermarket we will carry out a system to promote recycling. To do this we will try to reach some kind of agreement with Reciclos, a service belonging to the company ECOEMBALAJES ESPAÑA, S.A., which offers participation in raffles or the donation of the retributions obtained, to those people who carry out the process of capturing images and scanning the QR code of the products in its application at the time of carrying out the recycling process.

To this end, we will try to link the Reciclos application with the app of our own supermarket, so that all those products belonging to our supermarket that are recycled by our customers will be recorded.

Thanks to this measure we will be able to offer our customers future discounts on all those products that have been recycled by them, taking into account that the greater the volume of recycling that they have carried out, the greater the future discount that they will achieve for the purchase of these, until reaching a maximum level of discount.

-Monitor and reduce carbon footprint: Firstly, our supermarket will identify and measure greenhouse gas emissions at each stage of the life cycle, from production through to delivery and final disposal of products and waste. This can be achieved through a carbon footprint assessment, which identifies the sources of carbon emissions and measures the emissions.

Once greenhouse gas emissions have been identified and measured, clear carbon reduction targets should be set that are specific, measurable, clear, achievable, relevant and time-bound. In addition, it is important to regularly monitor and report on progress against these targets in order to hold the company accountable and maintain a steady improvement in emission reductions.

10. HUMAN RESOURCES PLAN

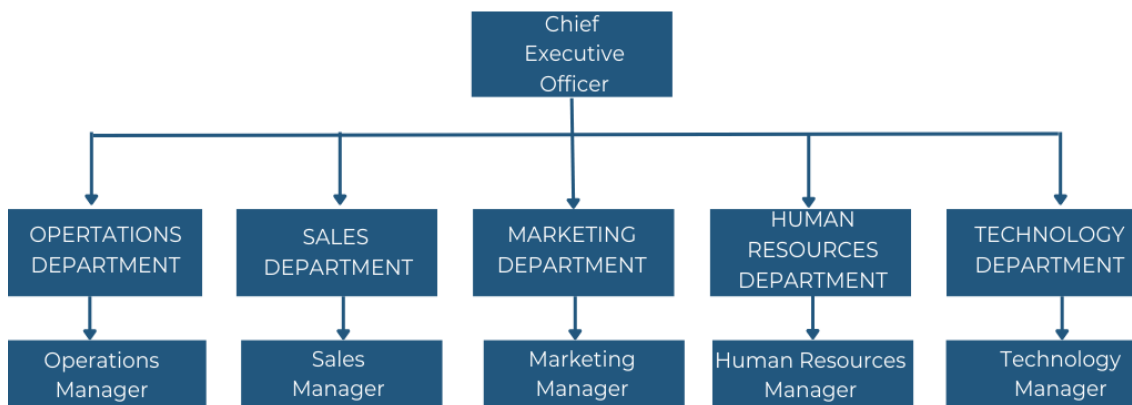
In order to draw up the human resources plan for our company, we are going to develop the different sections that make up the plan, including the creation of the company's organisational structure, the definition of the departmentalisation criteria used and the description of the jobs, detailing the salary costs for the organisation.

10.1. Organisational structure (organisation chart)

As Fincowsky (2009, p.65) points out:

The organisational chart is the graphic representation of the organisational structure of an institution or one of its areas, showing the composition of the administrative units that comprise it, their relationships, hierarchical levels, formal channels of communication, lines of authority, supervision and advice.

Illustration 2. Organisation chart of the automated supermarket.



Source: own elaboration.

10.2. Job descriptions

Next, we will proceed to detail each of the positions reflected in Illustration 1 (Organisational chart of the automated supermarket).

Firstly, we see the role of the Chief Executive Officer (CEO) who is responsible for the overall management of the automated supermarket and is the highest authority within the company.

Next, we observe the following departments:

- Operations Department: here we find the figure of the Operations Manager, the person responsible for the planning, organisation and control of the daily operations of the supermarket.
At the same time, he/she will also be in charge of managing and supervising the supermarket's automated warehouse and ensuring that the supermarket is always in optimal condition.
- Sales Department: The Sales Manager will be responsible for planning and executing sales strategies, ensuring that customers receive high quality service and resolving their queries and concerns.
- Marketing Department: in this department we find the Marketing Manager, responsible for planning and executing marketing strategies to increase visibility and attract more customers to the supermarket. He/she is also in charge of supervising and executing advertising campaigns and analysing the market and competition to design more effective strategies.
- Human Resources Department: The Human Resources Manager is responsible, as the name suggests, for the management of the supermarket's human resources. He/she is responsible for planning and implementing training programmes for employees and for the selection and recruitment of new employees.
- Technology Department: The Technology Manager is responsible for the management and maintenance of the supermarket's technology infrastructure by developing and maintaining the software used in the supermarket. He/she is also responsible for the supermarket's communication network.

In conclusion, it should be noted that each department and position would be responsible for carrying out specific tasks to ensure the smooth running of the supermarket in order to provide a high quality service to customers.

11. LEGAL STRUCTURE

Firstly, I consider that the most appropriate legal structure for the development of the automated supermarket is a Sociedad Limitada Unipersonal (S.L.U), characterised by having a single partner, who holds the entire share capital, regardless of whether it is a natural person or a legal entity.

We must bear in mind that in order to create a Sociedad Limitada Unipersonal (SLU) in Valencia, the following criteria must be followed:

- Trade Name: a trade name that is not already in use and that meets the legal requirements must be chosen. The acronym "SLU" must be added at the end of the company name.
- Share capital: The minimum share capital to create an SLU is 3,000 euros, which must be fully subscribed at the time of incorporation. It is also possible to set up an SLU with a non-cash share capital, provided that the legal requirements are met.
- Deed of incorporation: the creation of an SLU requires the drawing up of a public deed of incorporation in front a notary. The deed must detail the identity of the sole shareholder, purpose of the company, name of the company, share capital, articles of association and details of the sole director.
- Mercantile Register: Once the SLU has been created, it must be registered in the Mercantile Register of Valencia. Register by submitting the deed of incorporation and other required documents.
- Taxation: The creation of an SLU in Valencia is subject to taxes such as transfer tax and stamp duty (ITP and AJD) and corporation tax.

That said, we must bear in mind that these rules are general and may vary according to the particularities of each case. Therefore, in order to carry out all the procedures in a proper and timely manner we will proceed to contact a lawyer or manager specialised in this matter to ensure that all the necessary legal requirements are met in order to incorporate our Sociedad Limitada Unipersonal in Valencia.

12. ECONOMIC AND FINANCIAL PLAN

In this section we are going to calculate the initial investment necessary for the start-up of our company, which will allow us to know what the company's sources of external financing will be in order to meet the initial investment required.

Next we are going to draw up a table specifying all the elements to be taken into account in our investment plan.

Table 4. Initial investment required.

CONCEPT	AMOUNT
Machinery (all necessary for production including IT equipment)	75,000€
Facilities (contracts and installation of electricity, water, gas, telephone and local adaptation works).	40,000€
Tools and tools (tools necessary for the development of the activity)	15,000€
Furniture and furnishings (all kinds of furniture and equipment)	60,000€
Transfer Fees/ Patents and Trademarks (amounts paid for local lease rights and for patenting or registering the trademark and/or trade name)	2,000€
Deposits and guarantees (per rental contract)	200,000€
Incorporation and start-up costs (fees, taxes, licenses, advertising, licenses, start-up publicity...)	20,000€
Provision of funds (amount needed to meet expenses until the first invoices are collected)	80,000€
TOTAL	492,000€

Source: own elaboration.

In the following table we will reflect which are the main elements to take into account in order to carry out the financing plan of our company in an adequate way.

Table 5. Initial funding required.

CONCEPT	AMOUNT
Own resources (cash or non-cash contributions made by the partners)	250,000€
Loans	242,000€
TOTAL	492,000€

Source: own elaboration.

After having proceeded to analyse the initial investment needs, we are going to carry out the forecasting of the company's financial statements, based on the initial assumptions on income and expenses reflected in the previous sections.

Next, we will develop the income statement, also known as the profit and loss account, which reflects the accounting profit obtained by the company. This is calculated as the difference between the income generated and the expenses incurred during a period of time, taking into account that in this case and on most occasions, it is an annual period.

Table 6. Profit and loss account.

INCOME	FIRST YEAR	SECOND YEAR	THIRD YEAR
Sales (of products or services)	1,040,000€	1,235,000€	1,365,000€
Closing stock (value of products in	150,000€	150,000€	150,000€

products in stock)			
TOTAL	1,190,000€	1,385,000€	1,515,000€
COSTS	FIRST YEAR	SECOND YEAR	THIRD YEAR
Purchase of raw materials	800,000€	950,000€	1,050,000€
Initial stocks	0€	150.000€	150.000€
Own remuneration (employer's salary) employer's salary)	12,000€	12,000€	12,000€
Self-employed insurances	6,000€	6,360€	7,080€
Salary for staff or employees	125,000€	125,000€	125,000€
S.S. at the company's expense	36,500€	36,500€	36,500€
Financial expenses	9,353.3€	8,881.48€	8,391.43€
Supplies (electricity, water, telephone...)	3,000€	3,000€	3,000€
Rentals	18,000€	18,000€	18,000€
Insurances	2,500€	2,500€	2,500€
Maintenance and repairs	6,000€	6,000€	6,000€
External services (agencies)	2,000€	2.000€	2.000€
TOTAL	1,020,353.3	1,320,241.48€	1,420,471.43

PROFIT OR LOSS (Profit before tax)	169,646.7€	64,758.52€	94,528.57€
CORPORATION TAX (25%)	42,411.68€	16,189.63€	23,632.14€
NET PROFIT	127,235.02€	48,568.89€	70,896.43€

Source: own elaboration.

After having made the table referring to the profits and losses related to the development of our company during the first three years, and having obtained the estimated net profit of the company, we will proceed to explain each of the sections that compose it in order to understand the criteria we have adopted for the calculation of each of the sections corresponding to the estimated income and expenses of our company.

- To carry out the calculation of the purchase of raw materials, we must take into account the estimate made on the sales of these, establishing the existing profit margin on the sale of our products. After carrying out a small investigation, we have been able to clarify that in our supermarket we could obtain a margin of 30% on the acquisition cost of the products. Having said that, we must stress that the difference between the sale of products and the purchase of materials must be equal to 30% of the cost of the purchase of raw materials.
- For the calculation of the final stock for the three periods, we have estimated the total value of the sum of the products located in the supermarket plus the stock available in our warehouse. Taking into account that we have an automated system for inventory management, we can estimate that the amount of stock at the end of each of the periods will remain constant. We must bear in mind that the value of the closing stock in the first year will coincide with the value of the opening stock in the second year and, therefore, the closing stock in the second year will be the same as the opening stock in the third year.

- The calculation of the owner's own remuneration (salary of the entrepreneur) has been carried out considering that it is convenient for the owner to receive a modest salary in order to favour the development of the company. This measure implies a reduction in the fixed costs to be assumed by the company, an element that can be a key factor for the profitability of the company, favouring its growth and development through the reinvestment of profits.

- For the calculation of self-employed insurance (self-employed quota), we must take into account that this is the amount of money that we must pay periodically to be registered in the Special Regime for Self-Employed Workers (RETA) and to have access to social security coverage.

There are currently 15 contribution brackets, and given the estimates of the income that our company will obtain during the first three years, we can say that we will have to pay the monthly contribution corresponding to the last bracket, which refers to a net income of more than 6,000 euros per month. The monthly contribution is 500 euros per month during the first year, 530 euros per month during the second year and 590 euros per month during the third year. In annual terms, these instalments represent a cost of 6,000 euros in the first period, 6,360 euros in the second period and 7,080 euros in the third period.

- The salary of the staff or collaborators has been calculated through an analysis of the salaries established in the sector for the different positions existing in our business. That said, we have calculated an average of €25,000 gross per employee per year, which would mean an annual expenditure of €125,000.

This amount is linked to the Social Security expenditure that the company must assume and, in order to calculate this amount, we must take into account that the Social Security contribution rates for the year 2023 are as follows:

- Common contingencies: 28.30%.
- Occupational contingencies: varies according to the activity and occupational risk of the company.
- Wage Guarantee Fund (FOGASA): 0.20%.
- Vocational training: 0.70%.

Therefore, if we add the contribution rates corresponding to common contingencies, the Wage Guarantee Fund and vocational training, the total percentage of social security contributions by the company would be 29.20% of gross wages. That said, after carrying out the relevant calculations, we can state that the cost of social security payable by the company would be approximately 36,500 euros per year.

- The financial expenses section refers to the interest accrued on the loan obtained, referring to the external financing of our business.

It is important to clarify that in order to make the relevant calculations we have established an initial capital of 242,000 euros, to be repaid in 15 years and an annual interest rate equivalent to the value of the Euribor, which is currently 3.865%.

Next we will proceed to calculate all the terms referring to the first three annual instalments using the French amortisation system, which is characterised by the payment of constant instalments by the client throughout the life of the loan.

Tabla 7. French depreciation system.

Años	Amortisation term (a)	Interest (I)	Amortisation instalment (A)	Outstanding capital (C)
0	-	-	-	242,000€
1	21,560.78€	9,353.3€	12,207.48€	229,792.52€
2	21,560.78€	8,881.48€	12,679.3€	217,113.22€
3	21,560.78€	8,391.43€	13,169.35€	187,161.01€

Source: own elaboration.

- The amortisation term refers to the annual amount to be paid to the bank, corresponding to the sum of the accrued interest and the amortisation instalment (the part of the principal that is repaid in each period).

Finally, for the calculation of the interest (which corresponds to the financial expenses in the profit and loss account), we have proceeded to calculate the percentage share (3.865%) with respect to the outstanding capital in each of the previous periods.

- In order to calculate the cost of supplies for a supermarket, it should be borne in mind that the cost of supplies can vary significantly depending on a number of factors, however, for reference purposes, a rough estimate of supply costs can be made.
 - Firstly, the average cost of electricity in Spain is approximately €0.15 per kilowatt-hour (kWh). Assuming that the monthly electricity consumption of the supermarket is 1,000 kWh, the monthly electricity bill would be around €150, which is equivalent to around €1,800 per year.
 - On the other hand, the cost of water in Spain is usually around €1.50 per cubic metre. Assuming that the supermarket uses 50 cubic metres of water per month, the monthly water bill is around 75 euros, which is equivalent to around 900 euros per year.
 - Finally, for natural gas, the cost is usually around €0.05/kWh. Assuming a monthly gas consumption of 500 kWh, the monthly gas bill is about EUR 25, which is equivalent to about EUR 300 per year.

That said, we can estimate that the cost of utilities (electricity, water and gas) is approximately 3000 euros per year. It is important to keep in mind that these are only approximate figures and, as mentioned above, costs can vary according to various factors such as the season of the year or the number of customers the establishment receives.

- The cost of renting the establishment for the first three years has been calculated by means of an estimate, through an exhaustive analysis of the rental price of commercial premises located in the Ruzafa district of Valencia. After this research, we have been able to conclude that a commercial premises with the characteristics required for the development of our business activity

can cost approximately 1,500 euros per month, which means an annual cost for the company of 18,000 euros.

- Regarding maintenance and repairs, we must take into account that this expense may vary in each of the periods depending on different factors. On average, after an exhaustive search we have been able to estimate a cost of 6,000 euros per year. On the other hand, it is important to take into account that some structural problems or problems related to refrigeration or automation equipment could mean a significant increase in the maintenance budget, so in our company we must ensure that we have a well-defined repair and maintenance system in order to avoid any kind of unforeseen event as much as possible.
- The estimated annual cost of external services (agencies) for our company is approximately 2,000 euros per period. We must take into account that this is a very important service, so we must work with the best professionals in the sector who will take care of tax and accounting procedures, tax filing, payroll and social security, among other services, necessary to maintain the legality and proper functioning of the business.

13. CONCLUSIONS

One of the objectives of a business plan is to analyse the viability of the company, so after having studied in depth the different aspects that influence the feasibility of the project, we can affirm that it is interesting from an economic, commercial and ecological point of view. Having said that, to ensure the feasibility of the business, we could establish some further lines of research, such as, for example, a market study or an in-depth study of the growth strategy.

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14. ANNEX 1. POLITICAL-LEGAL REGULATIONS

- Government rules and regulations: Supermarkets in Valencia must comply with a series of governmental rules and regulations, among which we can highlight:
 1. Law 16/2021 of 14 December (Food Chain Law). This law establishes the obligations of the different actors in the food chain, including supermarkets, to ensure fair competition, transparency of information and compliance with health regulations.
 2. Law 7/1996 of 15 January 1996 on the Regulation of Retail Trade. This regulation sets out the rules for the operation of retail establishments, including supermarkets. It establishes requirements for customer information, obligations of the entity and protection of consumer rights.
 3. Hygiene rules: Supermarkets must comply with the hygiene rules established by the European Food Safety Authority (EFSA) and the Spanish Agency for Food Safety and Nutrition (AESAN) to ensure food safety and public health.
 4. Environmental regulations: Supermarkets have to comply with environmental regulations set by the Spanish government to reduce their environmental impact, including waste management and energy efficiency.
 5. Advertising regulations: Supermarkets must follow the regulations on advertising and promotion of food and beverages set by the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN) and the Spanish Association of Advertisers (AEA), ensuring that advertising is lawful, fair and not misleading.
- Political and trade union relations: Supermarkets may be subject to the influence of trade unions and other political organisations. They may also be subject to political campaigning or lobbying by interest groups.

In terms of trade policy, trade-related government policies such as price regulation and trade barriers can affect supermarket competition and product costs, and in terms of trade union action, if supermarket employees are organised in trade unions they can take actions that affect business operations, such as strikes or collective bargaining.

- Political and governmental changes. Political and governmental changes can have an impact on the operation of supermarkets. For example, changes in tax or labour regulations can affect your costs and profits.

The most recent labour reform in Spain is reflected in Royal Decree Law 32/2021, which came into force on 28 December 2022 and whose main objective is to guarantee employment stability and transform the labour market. This measure, like other sectors, directly affects supermarkets, as they will no longer be able to make use of temporary contracts, so they will have to assume greater risks when hiring staff.

We must bear in mind that this change can be a competitive advantage for our supermarket, as the recruitment of staff is much lower than in traditional supermarkets, which have been conditioned to a greater extent by this decree.

- Food safety rules and regulations.

There are a number of rules and regulations at national and international level that set standards to ensure food safety, among which we can highlight:

1. The Food Safety and Nutrition Law (Law 17/2011), establishes the legal basis for food safety in Spain, as well as the responsibilities of health authorities, producers and consumers.
2. Royal Decree 1786/2022, reflects the food safety rules to be complied with by all operators in the food chain, from production to sale to the consumer.
3. Royal Decree 952/1997, dictates the hygiene rules for food and beverages, including regulations for the cleaning and disinfection of production, storage and distribution facilities and equipment.

4. Royal Decree 1334/1999, clarifies the rules on foodstuffs and alcoholic and non-alcoholic beverages, including regulations on labelling and advertising of foodstuffs.
5. Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002, which creates regulations throughout the European Union determining the processes to be carried out to improve and guarantee food safety in all member countries.
6. The new UNE-EN ISO 22000: 2018: Food safety management systems. It details the standards that organisations must follow throughout the food chain to ensure that food is safe and fit for human consumption.
7. Commission Regulation (EU) 2021/663 of 22 April 2021. It lays down rules on pesticides and pesticide residues in food (mainly of plant origin and meat products), indicating the maximum residue levels that can be found in food.

These regulations are important to ensure food safety and consumer health protection, thus guaranteeing confidence in the Spanish food system.

- The rules and regulations on food labelling and nutrition information.
In Spain, regulations on food labelling and nutrition information are governed by the European Food Safety Authority (EFSA) and the Spanish Agency for Food Safety and Nutrition (AESAN).

These regulations set out requirements for food labelling, including information on nutrient content and ingredients. They require foods to contain information on the presence of potentially allergenic substances, such as nuts.

The information in its entirety must be available in Spanish and must be easily readable and understandable for the average consumer, and therefore clear and concise.

- The rules and regulations on the advertising and promotion of food and beverages.

In Spain, regulations on food and drink advertising and promotion are administered by the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN), the Association of Spanish Advertisers (AEA) and the European Food Safety Authority (EFSA).

These regulations are designed to ensure that food and drink advertising and promotion is legal, honest and not misleading, and promotes healthy eating. In addition, they have imposed restrictions on the advertising of unhealthy foods and beverages to children and young people, including on television and digital media. There are also restrictions on misleading or comparative advertising and the use of terms such as "light" or "low calorie" in labels and advertisements.

Moreover, there are self-regulatory codes for food advertising in Spain, such as the AEA Code, which establishes guidelines for food and drink advertising, including the prohibition of misleading or comparative advertising, and the prohibition of advertising aimed at children under 12 years of age.

In summary, the aim of Spanish regulations on food and drink advertising and promotion is to ensure transparent and legal advertising that promotes healthy eating.