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# **BUSINESS PLAN FOR A SHIPPING CONTAINER HOUSING REAL ESTATE COMPANY**

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## **1. EXECUTIVE SUMMARY**

The purpose of the real estate company of maritime container housing is to carry out projects of different types of housing, such as townhouses, villas, and single-family houses throughout the Spanish territory.

The company was created with the need to provide solutions to the construction sector, which has been strongly affected since the financial crisis, in addition, at present, the salary levels of young people make it difficult for them to have access to a new home, causing the demand is increasingly low and the prices between second-hand and new construction are very similar.

Because of this, one of the main objectives of this business plan is that everyone can have access to this type of housing, the projects that will be carried out will be focused on different market niches, the most notable being people concerned about the environment, young people looking to buy their first home and finally both private investors and people of higher economic level.

The operational plan of the company is made up of two broad phases, the first being the promotion of the real estate project, which includes the purchase of the land, where the specific needs of the project in question will have to be analyzed and take into consideration that the final price of the house will be affected by the cost of the land.

The marketing of the houses and their design will also be the task of the company, which is why the organizational structure includes the hiring of expert personnel in these areas. Finally, the second phase is the subcontracting of the construction company, which will adapt the sea container into a house and install it on the purchased land.

Among the differentiating aspects of the company, we find that the clients will be able to personalize the house both on the outside and inside, this service is included in the final price and will be carried out by the company's architect. In addition, another of the aspects that differentiate the company from the competition is the energy efficiency of the houses, which will reach level A, by means of solar panels or small wind turbines which will be able to cover most of the electrical needs of the home.

These differentiating aspects, together with the cost advantage that container houses have over traditional houses, allow us to establish conservative but very attractive cooperative objectives, such as reaching a turnover of 8 million euros in five years, increasing sales at a rate of 25% per year with a promoter profit of around 18%.

As for the product, we have defined a catalogue of homes ranging from 60 square meters to 180 square meters, which can be used for both residential projects and single-family homes. The marketed designs have an innovative and modern character, being as mentioned 100% customizable.

The price of the houses will be marked based on the competition, also using psychological and geographical strategies, as for the distribution, B2C e-commerce will be promoted, the company will create an attractive and easy to understand website, taking into consideration that there will only be one office in Spain, specifically in the province of Valencia. It should also be noted that the promotion of the company and its products will be carried out through digital and personal media such as conferences and congresses.

We consider the company's staff to be its most valuable asset, which is why we will employ human resources policies that seek personal satisfaction and motivation at work. Initially, the staff will be made up of 9 workers, belonging to the following departments: administration and finance, operations, marketing, sales, and quality.

Finally, we have detailed the financial plan which contains the initial investment plan, financing plan, income and expenditure forecast and finally the viability of the project. With this plan and based on the business model and the company's environment, we have confirmed that the business plan is viable from its first year in which three projects have been set, two residential and one single-family housing.

## **2. IDEA JUSTIFICATION**

The origin of this business idea lies in the evolution of the real estate sector, which has been one of the most important economic engines for Spain in recent decades, despite being one of the sectors hardest hit by the economic crisis of 2008.

However, the current trend in the market is the construction of prefabricated housing from shipping containers, the most advanced countries in the implementation of these houses are the United Kingdom, Germany, Holland and especially the United States.

In the case of Spain, this type of housing is in an initial phase, so the growth is exponential and justifies the drafting of this business plan. The applications of this construction method can be used for almost any property, such as:

- Block of flats.
- Semi-detached houses.
- Villas.
- Hotels.
- Offices.
- Shopping centers.
- Museums.
- Schools.

This project seeks to satisfy the personal and social needs that are in demand in the last decade, such as socially responsible economy, recycling, use of renewable energies and prices within the reach of everyone.

In addition, the main economic reasons that lead to the construction from containers are the following:

- Cost savings.
- Construction time.
- Quality.
- Care for the environment.

### **2.1. Project objectives**

The main objectives of this business plan are:

1. Determine the viability of a real estate company dedicated to the development of sea container housing in Spain.

2. To share a catalogue of customizable products that adapt to the client's needs, always combining sustainability from shipping containers and modern architecture and innovation.
3. Study the real costs of marketing this type of alternative housing compared to traditional concrete-based construction.

## **2.2. Business plan structure**

The structure of the business plan is set out below, so that the reader will be able to locate specific aspects of the work more easily.

1. **Analysis of the environment:** by means of the Pestel analysis, a study of the real estate sector will be carried out, both at present and its evolution in recent years.
2. **Analysis of the specific environment:** the method devised by Michael Porter will be used, which allows a more specific study of all the environmental factors that affect the company, such as suppliers, customers, barriers to entry in the sector, substitute products and competition.
3. **SWOT Analysis:** a SWOT analysis will be carried out, which allows to know the external and internal factors that affect the company proposed in this business plan. This study is made up of the company's weaknesses, threats, strengths, and opportunities.
4. **Mission, vision, and objectives of the company:** once the company's environment and competition have been studied, the mission, vision, and corporate objectives for the first years of operations will be defined.
5. **Operations plan:** this chapter will explain the company's operations plan, differentiating between four processes: land purchase, housing marketing, design and subcontracting of the construction company, although this last function is not carried out directly by the real estate company, the process of transforming the container will be briefly explained.
6. **Catalogue of products and services:** to be able to show potential and current customers different options for both residential and single-family homes, a

catalogue of products and services will be designed, and the alternatives for internal and external finishes offered by the company will also be detailed.

7. **Marketing plan:** firstly, a study of the demand for prefabricated housing and its target public will be carried out, then the marketing objectives of the company and the marketing mix strategies will be established, with respect to price, product, distribution, and promotion.
8. **Organizational structure of the company:** this chapter will illustrate the organizational structure of the company and explain each of the functions to be performed by the five departments of the company.
9. **Human resources:** this chapter will define the different human resources policies that the company will follow in the process of selection, integration, and remuneration of the company's employees. New trends in people management and the importance of having motivated workers will be taken into consideration.
10. **Financial plan:** finally, a financial study of the real estate company will be carried out to determine its viability. The initial investment required will be established and the income and expenses will be projected for the first year of operations, in which three real estate projects will be developed, consisting of eight semi-detached houses, four villas and one detached house.

### **3. ENVIRONMENT ANALYSIS**

The market analysis will be carried out by means of a PESTEL analysis, which takes into account a variety of external factors that will serve to analyses and monitor macro-environmental factors.

#### **Analysis process to be followed:**

- **Political/legal:** ¿What is the political situation in the sector and how might it affect the industry; is there legislation that might affect the sector?
- **Economic:** ¿What are the predominant economic factors?
- **Socio-cultural:** ¿How important is culture in the market and what are its determinants?

- **Technological:** ¿What technological innovations are likely to emerge and affect the market?
- **Environmental:** ¿What environmental concerns does the industry have?

### **3.1. Policy and legal environment**

Among the main laws that regulate the sector are the rights that consumers have. Royal Legislative Decree 1/2007, of 16 November, approves the general law for the defense of consumers and users. In Chapter II, Article 8, we highlight the following basic consumer rights<sup>1</sup>.

1. "Protection against risks that may affect their health or safety.
2. "Protection of their legitimate economic and social interests; in particular against unfair commercial practices and unfair contract terms.
3. "Compensation for damages and redress for harm suffered".
4. "Correct information about the different goods or services and education and dissemination to facilitate knowledge about their proper use, consumption or enjoyment".
5. "The hearing in consultation, participation in the procedure for drawing up the general provisions that directly affect them and the representation of their interests, through legally constituted associations, groups, federations or confederations of consumers and users".
6. "The protection of their rights through effective procedures, especially in situations of inferiority, subordination and defenselessness".

As far as the real estate and construction sector is concerned, there is currently no specific regulation, the first thing to take into account is whether the container housing project will be a good or real estate, as the legal regulation that will be applied depends on this.

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<sup>1</sup> Real Decreto Legislativo 1/2007, de 16 de noviembre.

If the container is anchored to the ground (with cement in its foundations) and it has a public water and electricity supply, it will be considered as real estate. Containers are on the same scale as a dwelling made of normal materials.

Because of this, they must have the relevant building and location licenses, as well as complying with all the requirements of the building management law and the technical building code. This type of housing can only be located on urban or developable land.

An urban planning license is required, which entails the payment of a municipal management fee of between 0.5 and 2% of the PEM (material execution budget). And, on the other hand, the tax on constructions, installations and works (ICIO) is paid, which is determined in the tax ordinance approved by the city council, without exceeding a maximum rate of 4%<sup>2</sup>.

Once the work has been completed, as in the case of traditional dwellings, a certificate of habitability must be applied for, the payment of which depends on each autonomous community.

If the container is not anchored to the ground and has its own means of supply, it will be considered movable property, similar to motorhomes.

**In the political sphere that affects the sector**, it should be noted that Spain is part of the European Union and also belongs to the European economic system through the integration of the euro as the base currency, which makes Spain a relatively stable country for investment.

On the other hand, Spain is a country with housing aid programmes and tax reductions in the case of first-time buyers, which favours the sector.

On the negative side, there have been numerous elections in recent years, in most of which coalition agreements were not reached, causing instability in consumption and investment.

In addition, in 2020, the general state budget plan 2021 was approved, in which one of the measures was considered an "attack" on SOCIMIS (Listed Real Estate Investment Companies), which now have a minimum taxation of 15% when previously it was 0%. At the international level this causes a bad image for foreign investors.

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<sup>2</sup>Zorrilla, A. (n.d.). *Licencias de obra: Precio y Presupuestos*.

### **3.2. Economic analysis**

The analysis of the economic environment in Spain is strongly related to the 2006-2008 crisis in the real estate and financial sector, which caused many construction companies with high debt ratios to declare bankruptcy and consequently the banks to have serious problems.

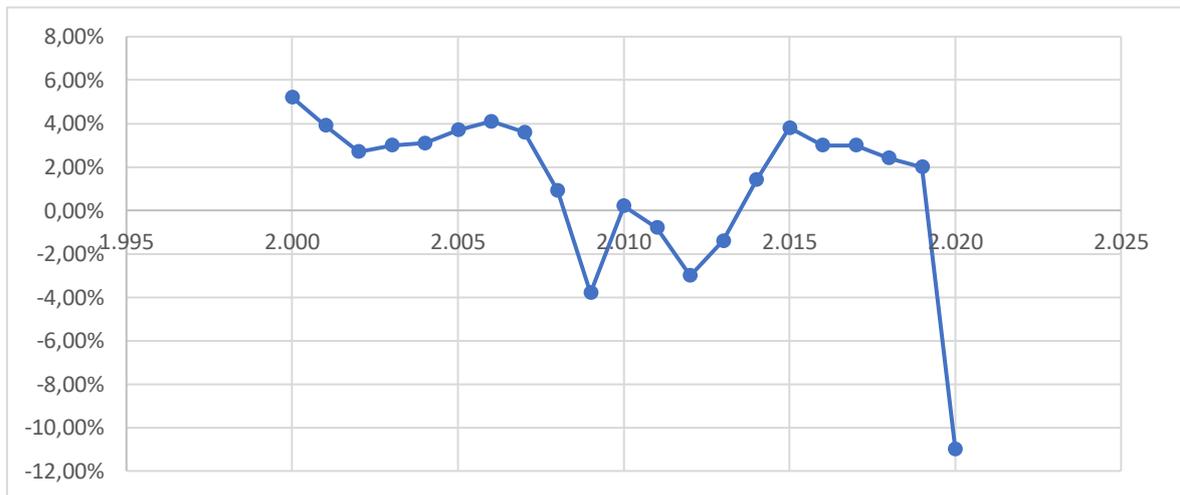
The quarantines demanded by countries have caused real estate projects to be completely halted for a few months, which means an increase in the cost of sales.

In addition, Spain's unemployment rate and GDP have suffered significantly. Below, we will detail what economic developments are expected in the coming years.

- GDP evolution: Spanish GDP fell by -11% in 2020 compared to 2019, its worst record since 1939. The pandemic has caused Spain to suffer more than the average of European countries, and this is due to the cyclical factor of Spanish GDP, where there is a high predominance of the service sector through tourism.

On average, taking GDP growth data from 2000 to the present, Spain is growing at a rate of 1.24%.

**Graphic 1: Evolution of GDP in Spain (%)**



Sources: INE<sup>3</sup>, own elaboration

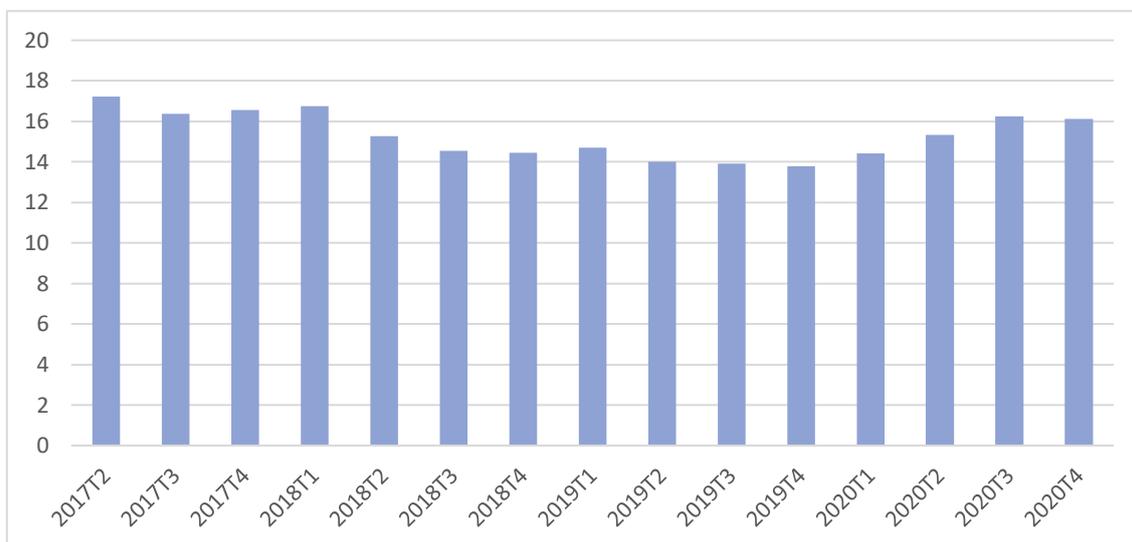
As for the projections for 2021 and 2022 the International Monetary Fund <sup>4</sup>, forecasts a significant recovery from current levels of 5.9% by 2021 and 4.7% by 2022. This recovery is caused by the progress of vaccination and the support of monetary policies.

<sup>3</sup> INE. (n.d.). *Producto Interior Bruto (PIB)*.

<sup>4</sup> FMI. (2021). *Actualización de las Perspectivas de la economía mundial, enero 2021*.

On the other hand, the evolution of the Spanish GDP has been reflected in employment. The following table shows the evolution of unemployment in Spain, where it can be seen that currently the unemployment rate reaches 16% without including the large number of people who are in ERTE.

**Graphic 2: Evolution of the unemployment rate in Spain (%)**



Sources: INE<sup>5</sup>, own elaboration

The effect of unemployment on the housing market is negative as the average purchasing power of the population deteriorates, and consumption decreases, causing the average price of housing in Spain to fall.

Specifically, residential construction in Spain fell by 13.5% in 2020, which is above the European average.

Also, another of the key factors that anticipate the growth of the sector is the consumption of cement, which remains well below the values before the pandemic, which predicts a slow recovery in residential construction and which will depend on the capacity of large cities to generate employment, and economic aid from the European Union<sup>6</sup>.

In conclusion, the economic sector in Spain is affected by the coronavirus crisis, from which a recovery is expected between 2021 and 2022, tourism has been the most affected sector, due to the closure of borders between countries and the numerous government requirements for travel. Unemployment and the evolution of cement consumption in the coming months of 2020 will determine the recovery of the

<sup>5</sup> INE. (n.d.). *Tasa de paro de la población. Ambos sexos. 16 y más años.*

<sup>6</sup> Diario 16. (2020). *El impacto del COVID en la construcción en 2020.*

construction sector, without forgetting the importance of different policies and aid that can accelerate recovery.

### **3.3. Sociocultural analysis**

Sociocultural analysis includes the beliefs, values, attitudes, and ways of life of the people who form part of a society.

Within the home buying and selling segment, there are different factors that can alter supply and demand. The main parameters are listed below.

**1. Ageing of the population:** life expectancy in the population could have an effect on housing prices, as the supply of housing would increase at a faster rate than demand. Specifically, Spain has one of the highest life expectancies in the world, at 80 years for men and 86 years for women<sup>7</sup>. Demand would fall due to a declining and consequently ageing population.

**2. Composition of Spanish households:** single-person households in Spain have been increasing in recent years, from 4.6 million people in 2016 to almost 4.8 million in 2020<sup>8</sup>. This has led to steady increases in demand in recent years.

In addition, the average number of inhabitants per household is 2.5 persons<sup>9</sup>, and this has declined markedly in recent decades, leading as in the previous case to an increase in demand.

**3. Migratory movements:** immigration to Spain by foreign nationals has increased considerably in recent years, from a flow of 255,000 people in 2013 to 665,000 people in 2019<sup>10</sup>. This situation is expected to continue in the coming years and may be positive for consumption, as migrants are generally older and able to work and will therefore need housing.

To conclude this section, it is important to highlight the Spanish culture of home buying as the main method of investment in the form of renting, which leads to a large flow of sales and purchases.

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<sup>7</sup> INE. (n.d.). *Evolución de la Esperanza de vida al nacimiento por periodo.*

<sup>8</sup> INE. (n.d.). *Número de hogares unipersonales según sexo, edad y estado civil.*

<sup>9</sup> Díaz, A. (2020). *Promedio de personas en los hogares de España en 2019, según comunidad autónoma.*

<sup>10</sup> INE. (n.d.). *Flujo de inmigraciones procedentes del extranjero.*

### **3.4. Technological analysis**

Technologies related to the building sector are geared towards saving energy and manufacturing costs. In addition to using environmentally friendly materials, which will be detailed in section 3.5.

There are technological institutes such as AIDICO (*Instituto Tecnológico de la Construcción*), which aims to optimize the capacity for innovation, quality, safety and sustainability of construction materials and systems, both in Spain and in international markets.

On the other hand, new information and communication technologies (ICT) are revolutionizing the building sector. An example of this is BIM (Building Information Modeling) technology, which is based on a virtual model that makes it possible to simulate the construction of a building in all its components, and thanks to this, to detect problems before they occur, save costs, and increase productivity and efficiency<sup>11</sup>.

As far as the internet is concerned, more and more Spaniards have access to it and use it as their main method of information. This has meant that in recent years real estate agencies have had to change their business model from physical to digital.

In addition, it is worth mentioning that there are platforms such as Idealista which allow individuals and companies to publish properties or land for sale or rent. This situation is positive as it creates a more transparent and wider market.

### **3.5. Environmental analysis**

This dimension reflects the policy of environmental preservation by the administrative authorities and the trend towards sustainability in the Spanish environment.

The requirements of the European Parliament have led to the approval of Royal Decree 235/2013, of 5 April, which approves the basic procedure for the certification of the energy efficiency of buildings<sup>12</sup>.

The energy rating is an index that shows how efficient the dwelling is, ranging from the most efficient letter "A" to the least efficient letter "G".

To determine this level of efficiency, the energy consumption needed to meet the daily demand over a year must be calculated.

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<sup>11</sup> IDEA INGENIERIA (n.d.). *¿Qué es la tecnología BIM?*

<sup>12</sup> Real Decreto 235/2013, de 5 de abril.

In this way, the promotion of energy-efficient buildings and investments in energy saving will be encouraged. In addition, the Royal Decree makes it compulsory to report CO2 emissions, which facilitates the adoption of measures to reduce greenhouse gases.

For this reason, more and more new buildings are including solar panels or small wind turbines to meet part of the energy consumption of the house.

It is worth noting that energy-efficient homes will have both tax benefits (IBI reductions) and financial savings in day-to-day bills, which is why it is common for the price of homes with an A rating to be higher than those with a lower rating.

Finally, it should be mentioned that renewable energies in Spain reached 43.6% of the electricity produced in the country in 2020, compared to 37.5% in 2019, which makes 2020 the cleanest year in history. results of the progress of the energy transition in which the Spanish Government is immersed by the hand of the National Integrated Energy and Climate Plan (Pniec), whose goal is that 74% of all Spanish electricity generation in 2030 is of renewable origin<sup>13</sup>.

#### **4. SPECIFIC ENVIRONMENT ANALYSIS**

We will carry out Michael Porter's 5 forces model to analyse the company's environment with the current competition, this model will allow us to know how the sector is doing in this respect:

1. **Customers:** ¿What bargaining power do customers have in the sector?
2. **Suppliers:** ¿What bargaining power do suppliers have in the sector?
3. **Barriers to entry:** ¿Is the sector with high barriers to entry?
4. **Substitute products:** ¿What products are substitutes for this type of housing?
5. **Sector rivalry:** ¿Which companies compete for market share and what are the competitive advantages of each?

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<sup>13</sup> Noceda, M. (2020). *Las energías renovables alcanzarán este año el 43,6% de electricidad producida en España frente al 37,5% de 2019.*

#### **4.1. Customer bargaining power analysis**

The bargaining power of customers is defined as the pressure that consumers can exert to impose conditions on transactions in the sector.

This ability to impose conditions is determinant for a firm to maximize its profitability, and depends fundamentally on the degree of concentration, switching costs, product/service differentiation, backward vertical integration, etc.

The customers of the target company in this paper are buyers of houses made from shipping containers.

Therefore, the proposed business has many potential home buyers, but the number of real estate agents specializing in this segment of the sector is limited, which means that the bargaining power of the customers in this respect is low.

As for the backward integration of buyers, we can also say that it is nil, as the average real estate customer does not have the capacity to make sales of container homes or to carry out the manufacturing process.

The differentiation promoted by container housing is high, as it completely changes the construction process and attributes offered by a conventional home and a container home.

However, we consider the substitutability between a traditional house and a prefabricated one to be high (to be detailed in section 4.4.), so customers can use this advantage to increase their bargaining power, and the switching costs are not a disadvantage for customers.

In conclusion, we give a **medium-low** level to the bargaining power of the customers, since, unless a rare situation occurs where one customer buys all the houses and can exert pressure, in general the bargaining power of the customers will be medium-low.

#### **4.2. Suppliers bargaining power analysis**

The bargaining power of suppliers represents their ability to impose conditions on the transactions carried out by companies in the sector. This is a determining factor since companies need supplies to produce goods and products, and therefore the dominant power of suppliers will have a direct impact on the costs and final price of housing.

In the real estate business, three types of key suppliers can be identified:

**The owner of the land:** the person who owns the land has a medium-low negotiating power, as the price of the land is not determined by the owner, but is established by the characteristics of the land, whether it is developed or developable, the buildability of the land, etc.

In addition, there are few plots of land that can have a high degree of differentiation; in general, this aspect is substitutable, and companies have a wide range of options when acquiring a plot of land.

The construction company: in the case of the construction company, this aspect has a medium-high degree of relevance, the aim is to create an alliance between the developer and the construction company, to jointly develop different projects. It is of great importance to correctly study the construction companies that are specialists in maritime container housing, as they will have greater advantages in terms of costs, as well as knowing the sector more precisely.

Among the main construction companies that are dedicated to this market segment in Spain, we identify:

- **Custom Home**
- **Mojuro modular building**
- **Box House**

The bank that finances the project: small and medium-sized construction companies have had problems in recent years in obtaining financing, as the conditions imposed by banks have increased considerably as a result of the financial crisis of 2006-2008.

Normally, a development project is now required to have a percentage of homes reserved, which gives the bank certainty when it comes to providing financing.

These difficulties of recent years, has led to the establishment of new methods of financing in the market, as is the case of real estate Crowdfunding.

Which we understand as a new mechanism of collective investment in which companies can be financed and where there is a process of exchange of resources typical of a collaborative economy.

It allows individuals and companies to publish their projects on different online platforms and, through these platforms, to raise financial resources to support a specific initiative<sup>14</sup>.

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<sup>14</sup> León, M. (2019). *¿Qué es el crowdfunding inmobiliario y que garantías tienen los inversores?*

A key factor that has enabled the development and success of this new financing model has been the Internet. The development of platforms that allow the negotiation between the promoter of a project with a lack of capital and the person interested in financing the project, regardless of their location.

However, Crowdfunding is still in its early stages of development, and the regulation that surrounds it is scarce, so we conclude that the bargaining power of banks is **medium-high**.

In conclusion, encompassing the three parameters identified throughout this point (landowner, construction company and financial institution) we can define the bargaining power of suppliers as **medium**.

### **4.3. Entry barriers analysis**

The analysis of barriers to entry refers to new companies wishing to enter and form part of the industry. Generally speaking, the more attractive an industry is and the more profitability it generates for each of the parties involved, the more potential competitors there will be.

In the real estate sector, there are the following barriers to entry that influence the access of new companies to the sector:

1. The construction process is not a standardized process, even though this business plan uses prefabricated elements, based on shipping containers, knowledge of the use of these alternative materials is required, so the experience of the construction company is of vital importance.
2. The economic crisis, as mentioned above, has caused the sector's profitability to be well below the pre-crisis period, which makes it less attractive and consequently creates a strong barrier to entry.
3. New companies in need of financing have problems, as mentioned in section 4.2, the supply of credit and loans has been greatly reduced.
4. In terms of regulations and commercial restrictions, the containerized housing segment is not very exposed, even though there is still no specific regulation beyond the differentiation between movable and immovable property, so in this aspect the barriers to entry are low.

5. The fixed capital needs will depend on the method of collection of the construction company, if it chooses to charge a constant percentage during the work it will have fewer liquidity problems than if it expects to be paid in a term at the end of the project, so in this case it will be linked to the bargaining power that the company has over customers, the barriers to entry regarding fixed capital can be medium.
6. Price competition is currently very high, the strong current crisis of the coronavirus together with the financial crisis of the past, have caused a "war" in prices in which not all companies can participate, in addition in Spain there is a low differentiation between the prices of new and old housing.

In conclusion, after analyzing the 6 factors above, we can consider the barriers to entry in the real estate sector and precisely the container housing segment as **medium-low**.

#### **4.4. Substitute products analysis**

Substitute products are those that satisfy the same customer need as the product offered by this industry segment (container housing).

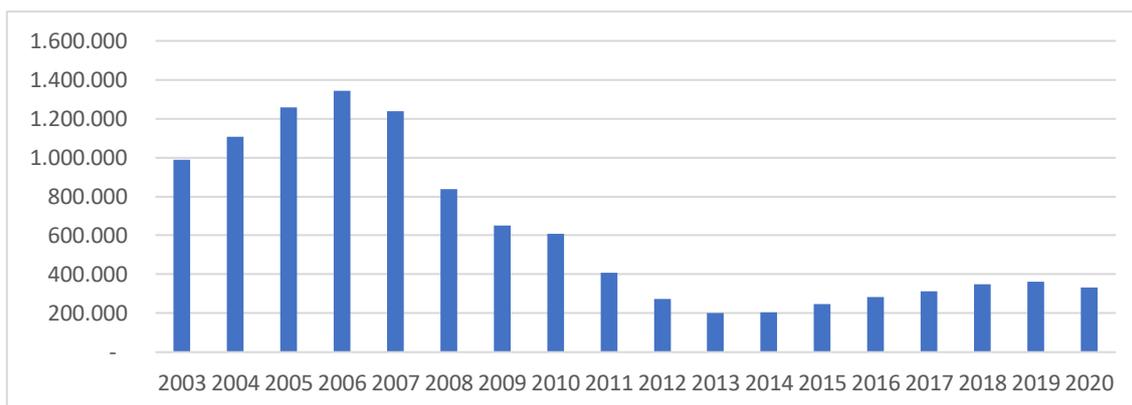
In this case, we consider the threat of substitute products to be high, as the need for housing can be covered by both prefabricated housing and traditional concrete-based buildings, so that consumers can choose from a wide range of products and can even opt for refurbishment in order to replace the new building in order to carry out a refurbishment according to specific needs.

#### **4.5. Sectoral rivalry analysis**

In this area of analysis, we will study the behaviour of companies currently operating in the sea container housing sector, which depends on key factors such as: industry growth, product differentiation, concentration, and balance of competitors, etc.

Before looking at the sea container housing segment, we will evaluate the growth rate of the real estate sector, based on data obtained from the INE.

**Graphic 3. Annual housing mortgages**



Sources: INE<sup>15</sup>, own elaboration.

Graph 3 shows the number of home mortgages taken out over the last 18 years, and its evolution has been fundamental in determining the current state of the real estate sector.

The data obtained show a slow recovery of the sector after the financial crisis of 2006-2008, where the average number of mortgages in the whole country annually exceeded 1.2 million homes. Subsequently, since 2008, the fall has been pronounced, reaching a low in 2013 with an average annual mortgage contracting of 200,000 homes.

Between 2018 and 2019, the sector was in recovery, with annual mortgages contracted standing at around 360,000 homes, a figure that had not been achieved since 2011. However, the pandemic weakened this growth by almost 8%, largely due to the increase in unemployment and economic uncertainty.

On the other hand, the evolution of new building permits has been very similar to that detailed for mortgages, where in 2007 a historical maximum of permits was reached, reaching 86,000, then in 2008 after the effects of the crisis and the great financial problems that involved the construction companies, especially the most leveraged ones, caused a fall of 40%, which lasted until the year 2013-2014<sup>16</sup>.

At present, the number of annual approvals for new construction is 22,800 and has increased by 20% in the last 4 years. This allows us to conclude that the sector is slowly beginning to recover, although it is a long way from the figures that existed before the real estate crisis, both in terms of the number of mortgages taken out and the number of new building permits applied for.

<sup>15</sup> INE. (n.d.). *Número de hipotecas. Total, nacional. Base nueva. Mensual.*

<sup>16</sup> Ministerio de Transportes, Movilidad y Agenda (n.d.). *Urbana Visados de dirección de obra de los Colegios de Arquitectos Técnicos (Obras en edificación).*

**The differentiation of products in the real estate sector is very high**, as the number of identical homes is practically non-existent, different types of homes can be distinguished: flats, townhouses, villas, etc.) in addition, the number of square meters, bedrooms, bathrooms, makes the type of existing homes even more varied.

Moving on to prefabricated housing made from shipping containers, as with traditional housing, there is a wide range of differences, as the containers can be adjusted to the needs of the client, both in terms of interior layout and total square meters by stacking containers on top of each other.

The mobility barriers for companies specializing in prefabricated housing are high, as bidding for civil works would entail technical and financial restructuring. However, **the exit barriers are considered low**, as prefabricated housing has a relatively small concentration of fixed costs, the main investment component being land and the process of adapting the sea container (a process that is outsourced in the case of this business plan).

**Due to the reasons given throughout this section, we conclude by stating that sector rivalry in the containerized housing segment is average**, currently the number of companies dedicated exclusively to this segment is low, which together with the differentiation that can be offered in the products makes it an attractive segment, and as mentioned, the exit barriers are low, which greatly reduces the risks of disinvestment.

## **5. SWOT ANALYSIS**

In the following section, we will develop a SWOT analysis of the real estate company proposed in this business plan. The aim is to know, on an internal level, the weaknesses, and strengths that the company can present, and on an external level, we will also analyze the threats and opportunities that can be found in the environment in which the real estate company operates.

### **5.1. Strengths**

The main strength of the real estate business in which margins are expected to increase compared to traditional construction is in the **construction costs** of housing. We highlight the following associated aspects:

- Ease of transport and variety of containers.
- Easily stackable.

- Execution times.

The reduction in costs due to the speed in the execution of the work and the optimization in the use of materials, machinery, installations and, above all, the control of the workflow during the construction process can generate savings of up to 15% to 30% in construction costs and 50% in time compared to traditional works<sup>17</sup>.

**The quality of the houses is also a great strength of this business model**, as the containers, unlike traditional construction sites, are transformed and adapted in specialized factories, where technological means are available to select and test alternative materials.

On the other hand, **the impact on the environment is less than in traditional construction sites**. This situation is very positive as there is a growing market niche for this type of more sustainable products.

### **5.1. Weaknesses**

The construction process of shipping container housing is new and **requires subcontracting companies with experience in the market**, which is currently complicated due to the small number of specialized suppliers.

This situation means that the main advantage of the company, which is differentiation and costs, does not depend on the real estate company directly but on the subcontracted companies.

On the other hand, **the main construction material (sea containers) and the price of the houses can give the client an idea of low quality**, which is why it is essential that the company develops an intelligent marketing campaign, where it manages to give an image of quality and comfort to the prefabricated houses.

### **5.4. Opportunities**

**The price of a prefabricated house can be considered a low-cost product as it is less expensive than traditional buildings**. This sector is becoming increasingly important and has undoubtedly revolutionized world trade.

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<sup>17</sup> Ovacen (n.d.). *La arquitectura con contenedores, análisis, ventajas y desventajas* .

Furthermore, container houses, despite being prefabricated, have a **high quality**, so that lowering the selling price does not mean that lower quality construction materials are used, it should be noted that the cost savings are achieved mainly in the construction phase where in most cases the customer is indifferent as the final result is valued.

On the other hand, **container housing construction companies are usually environmentally friendly** so they have energy efficiency certifications A-B, because of this, there may be opportunities to develop projects with advantageous financing from the government or subsidies, remember that Spain is a pioneer in renewable energy and aims to continue to encourage the sector and companies that promote it.

## **5.2. Threats**

As explained in the Porter analysis, the container housing segment is currently poorly regulated, with only a distinction being made between movable and immovable property depending on the characteristics of the dwelling.

This means that the sector is threatened by **possible future laws specific to this type of prefabricated housing**, which would mean that new building or permit requirements would have to be met, a situation that would lead to an increase in construction costs.

Another threat that could affect the proposed business model is **the economic situation in Spain**. The unemployment rate is around 16%, which leads to less wealth in the population and consequently lower levels of consumption.

**The lack of maturity of container housing in Spain** is also considered a major threat, as it is a new market segment, the acceptance of the product by potential customers may be uncertain.

Finally, the threat of the **covid 19** should be highlighted, although during the first quarter of 2021 countries have begun to vaccinate the population, there is still a risk of new strains, this uncertainty causes many investors who are dedicated to buying homes as a business, are currently more conservative.

It is also worth mentioning that under the assumption of new quarantines, projects could be delayed, which would cause delays in payment periods and higher costs, mainly for those of a fixed nature.

## **6. MISSION, VISION AND OBJECTIVES OF THE COMPANY**

Having analyzed the environment and the competition, we believe that the circumstances are right for a real estate company specializing in the segment of prefabricated housing from shipping containers to be disruptive and profitable in the Spanish market, which we will analyse in later sections.

Furthermore, the concept of prefabricated housing in Spain is practically new and the main objective is to reduce construction costs, using shipping containers that can be recycled from their main activity (transport of goods). We also believe that by having a sustainable image, the company will attract an increasingly important sector of the population such as people concerned about the environment and corporate social responsibility.

In the following, the mission, vision, and objectives of the real estate company will be detailed. In addition, an operational plan will be developed where it will be possible to identify those phases in which the process to carry out the proposed business model will be divided.

### **6.1. Mission**

Lead the construction sector's shift towards a more sustainable environment through prefabricated housing made from shipping containers and accessible to all types of publics.

### **6.2. Vision**

To design modern homes that can be customized according to the needs of each consumer, with short delivery times and affordable prices.

### **6.3. Corporate objectives**

The general and specific objectives of the real estate company are listed below.

#### **General objectives:**

1. To be a profitable company.
2. To maintain a constant increase in the number of projects.
3. To increase margins year on year.
4. To have the best suppliers specialized in the transformation of containers into housing.
5. To constantly improve our position in the market.

### **Specific objectives:**

1. To be a profitable company from the first year, developing three real estate projects.
2. To have an annual sales growth of 25% during the first 5 years.
3. To have a growing developer profit of 18-20% in 5 years.
4. To have a turnover in 5 years of around 8 million euros.

## **7. OPERATIONS PLAN**

In the following sections, we will detail all the phases in which the maritime container real estate company is involved. Specifically, we will divide two broad processes.

- **Promotion of the real estate project:** purchase of the land, design of the home in accordance with the client's needs and marketing of the project.
- **Subcontracting the construction company:** A company specializing in this market segment should be chosen to adapt the container to the specific needs of the project.

### **7.1. Promotion of the real estate project**

Main functions of the real estate company:

1. **Land purchase process:** this phase is fundamental in any real estate development project, the company must carry out a market study according to the needs that arise (magnitude of the project to be developed, square meters required, buildability, urban or unconsolidated land).

Then, based on the above guidelines, aspects such as: construction and installation costs of the containers, fees, licenses, fees and taxes, administration costs and the developer's profits must be included.

Therefore, as can be seen, there are many factors that are taken into account when purchasing land, as the IRR of the project will depend mainly on the outlay for land acquisition and the sale price of the dwellings.

2. **Marketing of the houses:** the sea container houses are aimed at a target public interested in innovation, environmental care and price. Although, as detailed in the marketing plan, there is another important market niche such as investors who can obtain profitability by buying and renting this type of housing.
3. **Housing design:** The real estate company will have an architect who will meet with the potential clients of the project to define the design of the housing. In semi-detached houses uniformity will be sought between the dwellings that make up the project, so exterior customization will be more limited.
4. **Subcontracting of the construction company:** the real estate company will have to contract a company specialized in the construction of housing based on maritime containers; it will be of great importance to look for companies with competitive advantages and experience in the sector.

In section 7.2, the characteristics of the sea container and the adaptation phases that the construction company will have to carry out will be detailed.

## **7.2. Characteristics of the maritime container**

A sea container is a mostly steel structure designed for the transport of goods, supporting large loads, and protecting them from the outside world, allowing intermodal transport between different regions<sup>18</sup>.

Due to these characteristics, maritime containers are equipped with the optimum materials and spaces to be used as prefabricated structures in the construction of houses, buildings, residences, etc.

Sea containers vary depending on the type of products or materials they transport, so we must find the container that is best suited to the habitability of people inside them. In this case, after carrying out in-depth research in various sources in the sector, we found OVACEN as the leading online media in architecture and urban planning.

The most suitable maritime container is known as the High Cube (HC)<sup>19</sup>, which is characterized by its larger size and height of over 2.5 meters, reaching the minimum

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<sup>18</sup> Rauno, A. (2016). *Tipo de contenedores y su uso*.

<sup>19</sup> Ovacen. (n.d.). *La arquitectura con contenedores, análisis, ventajas y desventajas*.

required by the majority of regulatory standards, it should be noted that it must also comply with the corresponding ISO standard.

The following table shows the different general measurements of the containers, where the advantage of height can be seen in the case of the HC.

**Table 1: Dimensions of maritime containers**

		20 FEET	40 FEET	40 FEET HC
<b>LONG</b>	Interior	5,90m	12,00m	12,00m
	Exterior	6,00m	12,20m	12,20m
<b>WIDTH</b>	Exterior	2,34m	2,34m	2,34m
	Interior	2,40m	2,40m	2,40m
<b>HEIGHT</b>	Interior	2,40m	2,40m	2,71m
	Exterior	2,50m	2,60m	2,89m
<b>TARA</b>		2.300kg	3.500kg	3.500kg
<b>STORAGE CAPACITY</b>		26.000kg	34.000kg	36.000kg
<b>CAPACITY</b>		33,3m3	67,7m3	76,5m3

*Sources: Ovacen, own elaboration*

With reference to the cost of the containers, there are numerous suppliers from different countries, so both the price of the container and its transport must be taken into account. Based on the data collected by OVACEN, in general the price of a second-hand 40-foot HC container can be between 2,000 and 3,500 euros, to which the cost of transport must be added, approximately for a distance of 200 km without unloading the cost is between 400 and 700 euros<sup>20</sup>.

### **7.3. Transformation of the maritime container**

This process, as mentioned above, will be subcontracted to suppliers specialized in this activity, as the business idea focuses on the promotion of this type of prefabricated housing. However, below we will mention the main stages of the process of adapting the container to housing, as they will be useful when estimating the manufacturing costs according to the needs of the client or project.

<sup>20</sup> Ovacen. (n.d.). *La arquitectura con contenedores, análisis, ventajas y desventajas*.

## Main stages of construction <sup>21</sup>:

1. **Clearance and foundations:** the ground where the containers are to be installed must be clear, the containers must be installed with an elevation in relation to the ground, as this will allow the horizontal channelling of the installation to be distributed.
2. **External treatment of the container:** the remains of sea salt and rust must be removed and any bumps on the container must be ironed/straightened.

The exterior paintwork will have a waterproofing and anti-rust treatment, and liquid solutions will be applied to the roof to prevent leaks. On the inside, latex paint is applied on top of the coating.

3. **Joining of the containers:** They will be joined with clips at the top and bottom, and plates welded to the containers will also be used to prevent the passage of water and air.
4. **Interior cladding:** both the walls and the ceiling, the container will have acoustic and thermal insulation in accordance with regulations, and self-supporting cardboard and plasterboard lining is usually used. The windows and doors will be on the smaller side.

Although the containers can be leaned against each other, for floor adaptation stages, separate work is necessary, and it should be noted that the containers used as a base must be in "as new" condition.

5. **Electrical installation:** the electrical network consists of a central control panel separating the interiors: kitchen, indoor and outdoor lighting, bathrooms, air conditioning, etc.
6. **Plumbing:** installation of cold and hot water for bathrooms, kitchen, and outdoor areas.

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<sup>21</sup> ContenHouse. (2011). *El proceso de transformación*.

**7. Renewable energies:** hot water by boiler must be complemented with solar energy, in compliance with the technical building code "CTE".

**8. Interior furnishing:** the last process carried out by the construction company is the interior finishing, which includes: kitchen furniture, bathrooms, showers, flooring, among others.

The cost of the container conversion, including all internal and external finishes, has been estimated on the basis of offers from specialized builders, at a cost per square meter of 650 € to 850 €.

The difference in the cost of the converted containers is determined by the number of floors of the house and the quality of the products such as flooring, bathroom furniture including shower and screen, kitchen furniture, lighting, windows, and air conditioning.

## **8. HOUSING CATALOGUE**

The real estate company will have a wide range of products and services depending on the category of the project in question (residential or single-family), the urban restrictions of the land and the specific needs of the client.

The selling price, both for residential projects and single-family homes, will be determined by the following equation:

**Selling price = Cost of land + Cost of construction + Development costs + Developer's profit.**

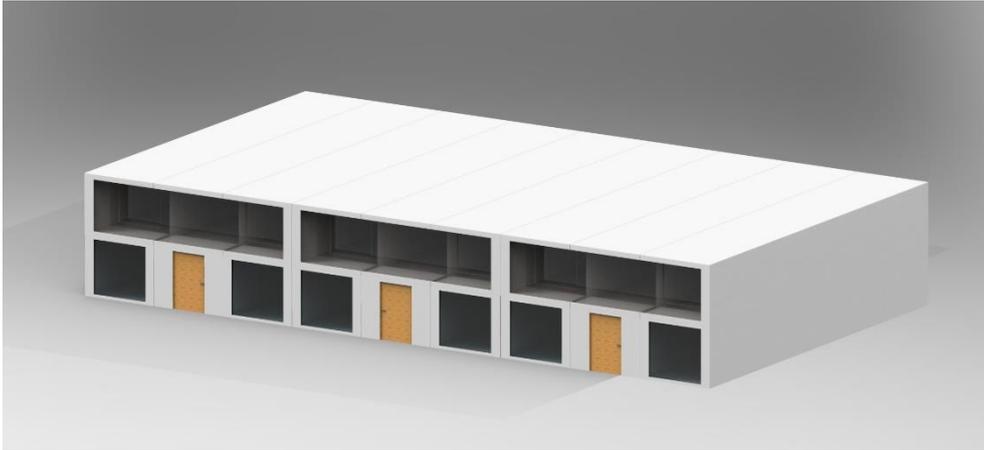
The company's catalogue for each type of project is detailed below.

### **8.1. Residential projects**

The residential projects will have a uniform design, where the personalization offered will be in the interior of the house, each client will be able to distribute the spaces in the way they consider appropriate, taking into account the limitations of buildability that will be exposed by the architect in meetings agreed before starting the work.

The townhouse projects will range from 120 m<sup>2</sup> to 180m<sup>2</sup>. The following image shows a design of this type of housing, which can serve as a starting point for future projects.

### Illustration 1: Townhouses



*Source: Own elaboration*

It should be noted that the townhouse projects begin to be built once at least 80% of the homes have been reserved. Customers who are part of the remaining 20% are not guaranteed the possibility to customize the interior of the house, the reason is the time margin and the difficulty of adapting the container once the work is completed.

### **8.2. Single-family houses**

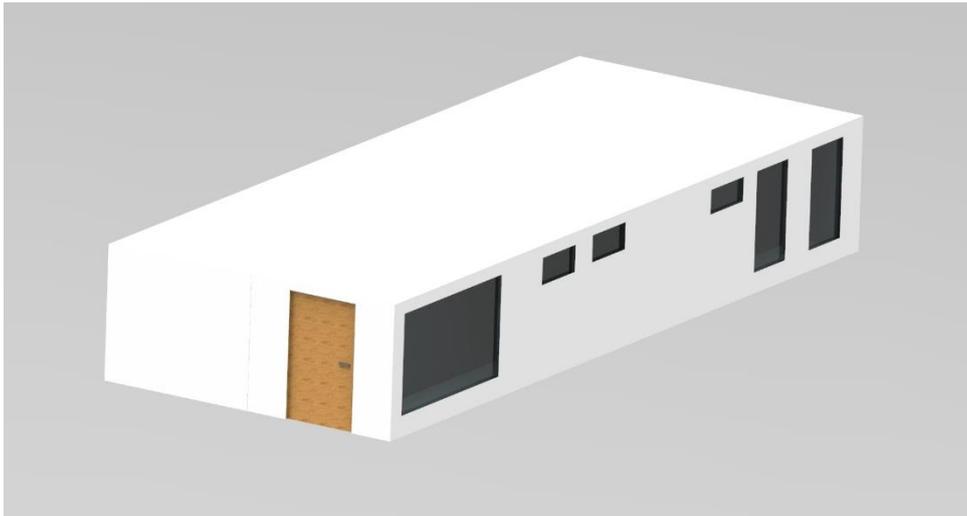
The single-family houses will be projects in which the real estate company will market a single home.

For this, we will have a catalogue of houses that will serve as a starting point, taking into account the needs of the client and the conditions of the land.

The price will depend on the number of containers to be used and the exterior and interior finishes that the client wishes, because of this, there are three initial stages that will be developed in the first meetings with the client.

First stage: choose the modules you need to create your home, taking into account kitchen, living rooms and bedrooms, we provide the client with models from 60 square meters to 180 square meters.

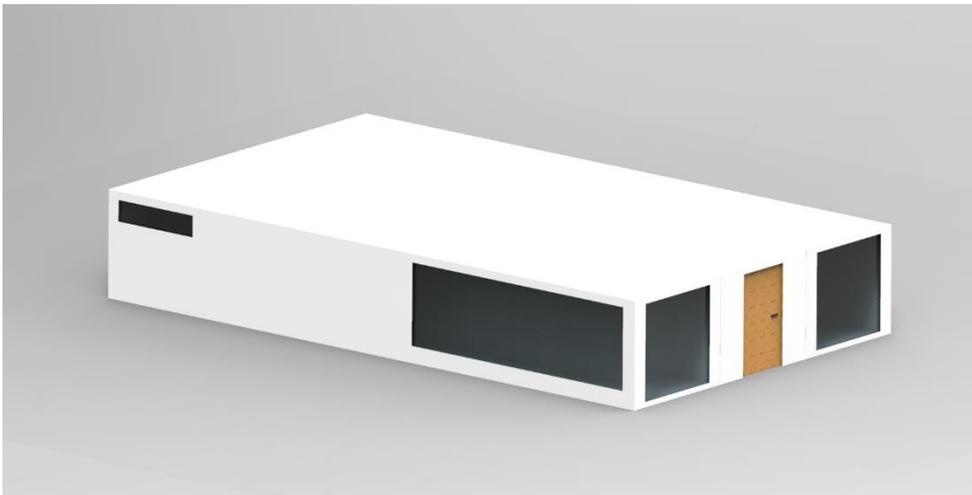
### Illustration 2: 60 square meter house



*Source: Own elaboration*

The 60 m<sup>2</sup> model is a ground floor dwelling that can be used as a permanent residence, a guest house, or a country house. The space can be adapted to accommodate two double bedrooms and a bathroom. Two 40-foot modules are used for this house.

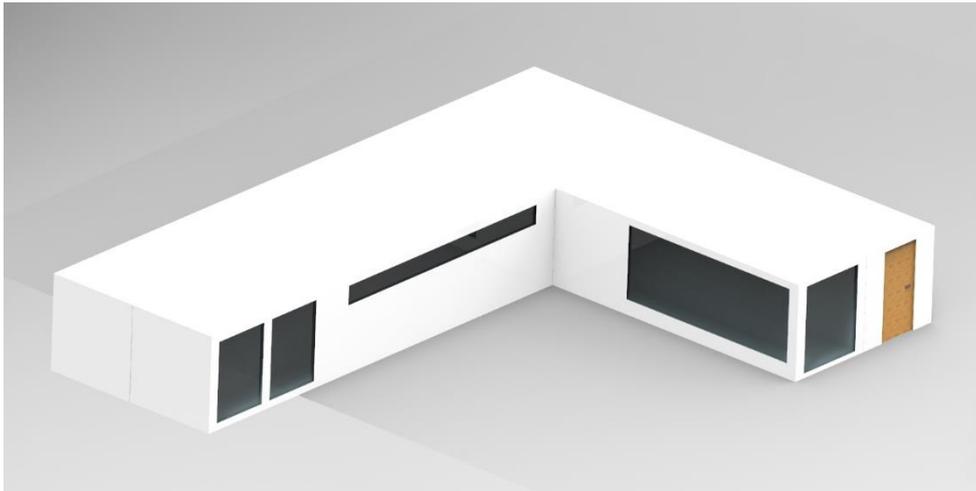
### Illustration 3: 90 square meter house



*Source: Own elaboration*

The 90 m<sup>2</sup> model is a ground floor dwelling with 3 bedrooms, compact and adaptable to any terrain. Maximum use has been made of the interior space of the modules to accommodate 3 bedrooms (2 doubles and 1 single) and 2 bathrooms. Three 40-foot modules are used for this house.

#### **Illustration 4: 120 square meter house**



*Source: Own elaboration*

The 120 m<sup>2</sup> model is the perfect solution for medium-sized plots. Its "L" shape allows the house to be completely linked to the outside and enjoy the possibility of having a house completely open to the terrace.

Starting from four 40-foot modules arranged in an "L" shape, two clearly differentiated areas are formed, distributing a large kitchen open to the living room with a laundry room and another section with three bedrooms and two complete bathrooms.

#### **Illustration 5: Two-storey house of 120 square meters**

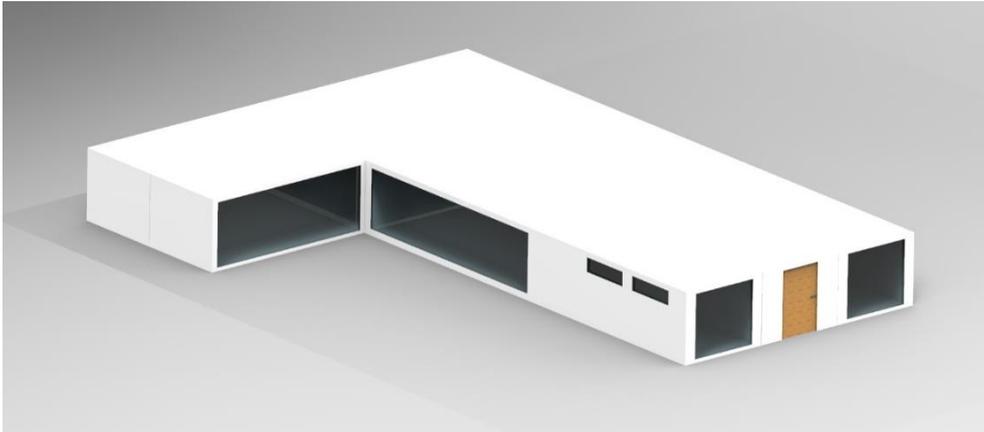


*Source: Own elaboration*

The 120 m<sup>2</sup> two-storey model is the solution for smaller plots, based on four 40-foot modules, the first two of which are located on the ground floor of the house, forming the day areas, and distributing a large kitchen open to the living room with a laundry room and a toilet. On the first floor are the sleeping areas, with three double bedrooms and two bathrooms.

The property also has the possibility of adapting to a garden space.

#### **Illustration 6: 150 square meter house**

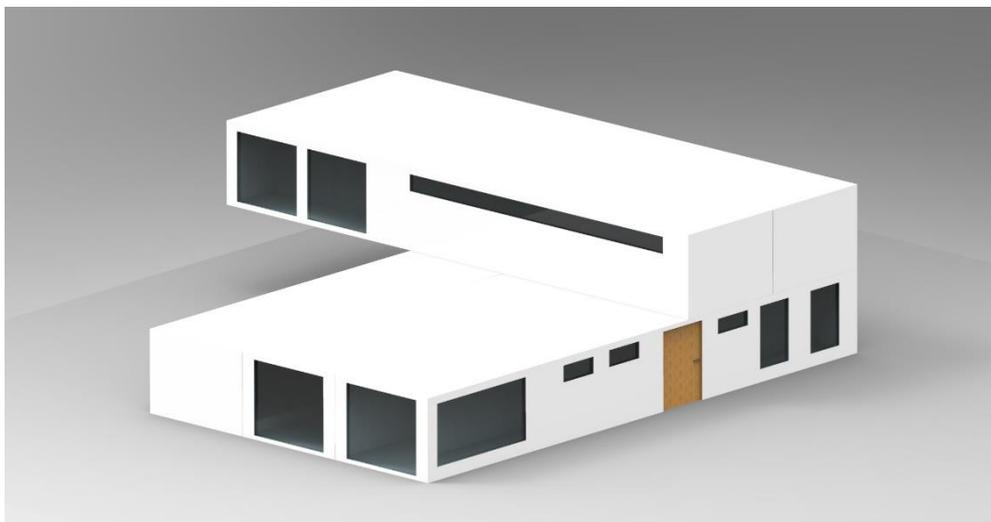


*Source: Own elaboration*

The 150 m<sup>2</sup> model is designed to offer a comfortable home for large families. The L-shaped design allows for a large terrace and even a swimming pool, ideal for summer.

Starting from five modules of 40 feet arranged in an "L" shape, two clearly differentiated areas are formed, the day area is located at one end and is completely independent from the night area, there are large windows to give a unique connection with the garden. The house can accommodate four bedrooms and three bathrooms.

#### **Illustration 7: Two-storey house of 150 square meters**



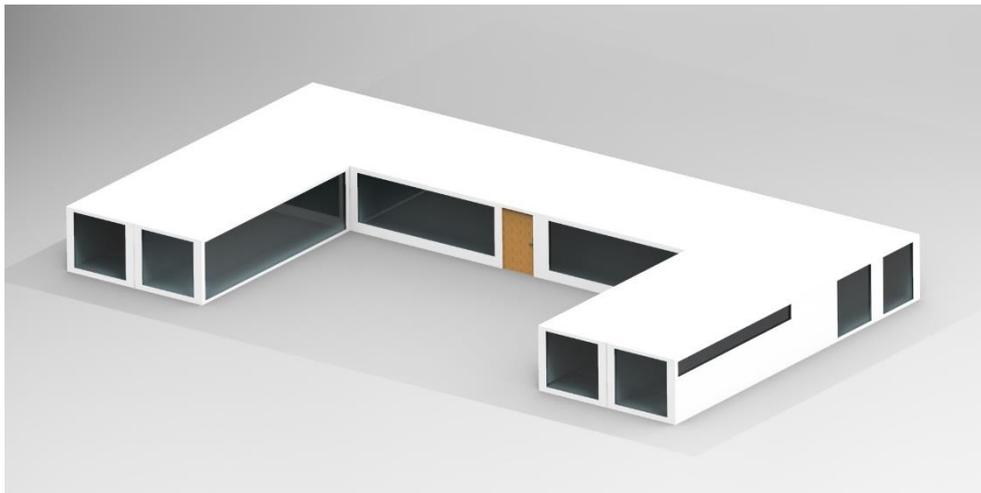
*Source: Own elaboration*

The 150 m<sup>2</sup> two-storey model, recommended for both small and medium-sized plots, has an innovative and 100% customizable design. Forming an "L" in two heights, apart from providing a very spectacular visual solution, it allows us to open a large covered space to fit out a terrace on the ground floor. Completely open to the outside, it allows

us to enjoy the garden and provides great versatility when it comes to defining the layout of the plot with a swimming pool.

Starting with five 40-foot modules arranged in an "L" shape between the ground floor and the first floor, we form two clearly differentiated areas. The kitchen and living area on the first floor and four bedrooms and two bathrooms on the first floor.

#### **Illustration 8: 180 square meter house**

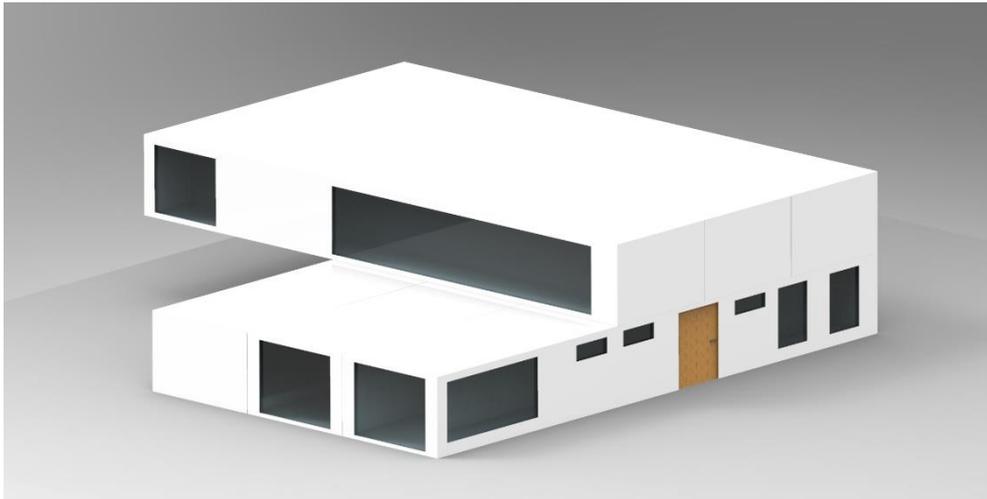


*Source: Own elaboration*

The 180 m<sup>2</sup> model is designed for large families with great needs and large plots. Forming a "U" on the ground floor, they have a central core where the day area is located and two side wings for bedrooms.

The center of the "U" serves to configure a large terrace that can be closed at its end by a swimming pool to enjoy the summer days. The side wings will be designed to measure, with the client having the option of placing five bedrooms and four bathrooms or games and cinema rooms. This dwelling is achieved from six 40-foot modules.

### Illustration 9: Two-storey house of 180 square meters



*Source: Own elaboration*

The 180 m<sup>2</sup> two-storey model is a ground and first floor dwelling with a large living area, but compact enough to adapt to a wide variety of plots.

With four or five bedrooms on the first floor, there is a large living/dining room with an integrated open-plan kitchen, and the way the containers are stacked allows for a covered terrace to be created. Six 40-foot modules are used for this house.

**Second stage:** customers will design their home using the modules they have chosen, the containers can be stacked one on top of the other as shown in the previous designs, they can also be joined horizontally, ideal for small plots.

**Third stage:** with all the options we offer the customer will choose the finishes of the house, we offer customers the following finishes and materials:

- Thermal insulation.
- Complete tiling in wet areas with porcelain material.
- Carpentry.
- Climalit double glazing with solar/thermal control and laminated security glass.
- Doors.
- Fully fitted wardrobes.
- Electrical installation.
- Interior lighting by means of decorative LED strips.
- Mechanical ventilation.
- Installation of ducted air conditioning.
- Kitchen worktops made of porcelain materials.
- Made-to-measure showers.

- Shower enclosures with fixed and sliding screens according to home design.
- Bathroom furniture with integrated washbasins, mirror, light fittings and mixer taps.

Once these parameters have been defined, the real estate company will commission the construction company to transform the container.

## **9. MARKETING PLAN**

### **9.1. Marketing plan objectives**

Relationship:

- Attract 150 potential customers in the first year.
- Create strategic alliances with builders.

Commercial:

- Increase brand image among the target audience by 2022.
- 20% of sales from 2022 through online procurement means.
- Achieve 5% market share by 2023.

### **9.2. Company's competitive strategy**

The real estate company will follow a differentiation strategy. Following Kotler's classification <sup>22</sup>, We will use a combination of the following strategies:

- Differentiation through the product, adding additional features such as: class A energy classification, bathroom and kitchen furniture included in the price, ducted air conditioning and interior lighting.
- Differentiation through services, home delivery and installation of the containers, adapting the floor to the specific needs of the project, guarantee superior to that of the competition, technical and architectural advice.
- Differentiation through image, creating a strong brand image through communication campaigns.

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<sup>22</sup> Kotler, Ph. y Keller, K.L. (2012). *Dirección de Marketing*. 14ª edición. Prentice Hall, Madrid.

- Differentiation through distribution channels, using direct channels belonging to the real estate company itself and indirect channels through third party companies. On the other hand, digital channels will be made available to potential clients, where they can schedule appointments and even carry out the entire purchasing process telematically.

### **9.3. Evolution of demand**

One of the most important aspects for the development of this business plan is to determine the profile of customers who buy prefabricated homes in Spain and to find out how the demand for this type of home has evolved.

The demand for prefabricated homes is becoming more and more common in Spain, according to Habitissimo data, since 2015 the purchase of this type of home has increased by 40% in annual terms, currently reaching around 15,000 prefabricated homes per year<sup>23</sup>.

About the geographical distribution of demand, this is mainly centred in Madrid and Barcelona, but also in other important areas of Spain, such as Valencia, Asturias, Seville, Las Palmas and the Balearic Islands: Valencia, Asturias, Seville, Las Palmas and the Balearic Islands. On the other hand, the dimensions with the highest demand are between 60 and 120 square meters.

The market is made up of different types of clients, each of them with different needs, because of this, if you want to optimize the budget of the marketing plan of the real estate company, it is necessary to divide the market into groups that have similar characteristics and needs and thus be able to offer a different value proposition that adapts to each public.

### **9.4. Target audience**

From the demand analysis, three target audiences for prefabricated housing can be identified:

1. People with a sustainable lifestyle, in Spain there is a large part of the population that leads a sustainable lifestyle, respecting the environment, specifically

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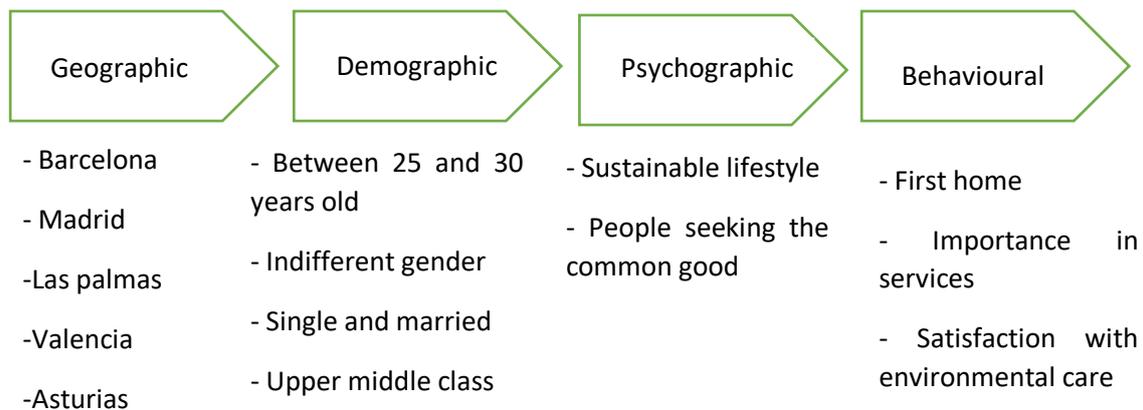
<sup>23</sup> Zuil, M. (2018). *El 'Boom' De Las Viviendas Prefabricadas: Más Rápidas, Más Eficientes Y Ampliables*.

according to a study by La Sexta, about 25% of the population in Spain are truly committed and 65% recycle<sup>24</sup>.

2. Young people in the process of purchasing their first home, potential customers are considered to be first-time home buyers, whose ages tend to range between 25 and 35 years old and whose buyer profile is that of someone looking to become independent and form a family home, mainly away from large cities.
3. Investors, another type of target public are those people with medium-high purchasing power, who are looking to invest in different markets with the aim of obtaining profitability through capital gains and rents. As the prefabricated housing segment is a sector that is not very mature and with lower prices than the traditional market, it can be considered attractive for this type of person.

The following illustration shows the segmentation of the target audience according to geographical, demographic, psychographic and behavioural parameters.

**Illustration 10. Target audience segmentation**



*Source: Own elaboration.*

## **9.5. Marketing Mix**

In this section, the company's marketing mix strategy will be developed, which consists of determining the behaviour of markets and consumers, with the aim of generating strategies that seek to retain and build customer loyalty.

<sup>24</sup> LaSexta. (2018). *Solo el 23% de los españoles están verdaderamente comprometidos con el medio ambiente.*

It is important to take into consideration at all times the company's target audience (analyzed in point 9.4), since by managing to meet the needs of these potential customers, the company can position itself as their main option when purchasing a home.

The marketing mix is composed entirely of marketing strategies that aim to work with the 4 P's: Product, Price, Distribution and Promotion.

### **9.5.1. Product**

We want to exceed the client's expectations by adding value to the home through supplementary elements and services, such as:

- Installation of the container, transport and ground foundations.
- 30-year guarantee on structural problems.
- Unique features such as self-consumption of electricity through solar or wind energy, with all our homes achieving an A energy rating.
- Shorter time from purchase to delivery of keys than the competition.

In addition, throughout the purchase process, clients have included the fees of the architect who will carry out the customized design according to specific needs.

Subsequently, once the property is delivered, a maintenance service is offered in order to guarantee its durability over time and, in the event of serious deterioration, the replacement of any of the parts of the property.

### **9.5.2. Price**

The final price of prefabricated housing from shipping containers may vary depending on the characteristics of the interior and exterior finishes requested by the customer, however, in the company's price catalogue these nuances are already contemplated, so that a price range of between 650 to 900 euros/m<sup>2</sup> is given.

Taking into consideration that a traditional building site costs around 1100/1200 euros/m<sup>2</sup><sup>25</sup>, the company will save around 40%, which has a direct impact on the final price and makes it more attractive to buyers.

When setting the final price, the company will rely on the following methods:

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<sup>25</sup> Arroyo, C. (2021). *¿Cuánto cuesta construir una casa? Precios en 2021.*

1. **Competitor-based methods:** analysis of the current price level and how our competitors react to an increase or decrease in our price.
2. **Psychological pricing:** prestige pricing, the company through its promotional campaign will try to ensure that the property is perceived as being of a higher quality than the competition.
3. **Geographical prices:** uniform delivery, all buyers pay the same amount regardless of their location, the cost of transport will be included in the price.

### 9.5.3. Placement

This variable will analyze the channels that the product goes through from the moment it is created until it is available to the final consumer, the distribution strategy includes aspects such as storage, transport, location of points of sale, order process, among others.

Regarding the transport process, it will be the responsibility of the real estate company to coordinate the shipment of the containers transformed into housing from the construction company's facilities to the construction site, although the cost of shipment is included in most cases by the construction company.

On the other hand, the company will attract potential customers through social networks and advertising carried out by the company itself. Finally, customers interested in purchasing a prefabricated home will have the option of a direct B2C service. The fixed marketing point will only be an office in the province of Valencia, so online methods will be promoted.

### 9.5.4. Promotion

Promotion refers to all the strategies that the company carries out to make the product and the company known, thus increasing its recognition within the target public.

Mainly to raise awareness of the company:

- Social Networking
- Congresses
- Leading trade fairs in the housing sector.

With regard to the product, communication and promotion campaigns will be carried out in the following media:

- Company website: Creation of the company website (design adapted for Smartphone), in addition to being easily understandable, taking into account that the entire purchasing process can be carried out through it.
- Digital platforms and recognized newspapers: advertising will be done on digital platforms such as Facebook, Instagram, specialized blogs and the most representative newspapers in the country.

On the other hand, the company will develop a manual on personal selling and customer loyalty, based on the guidelines of relationship marketing, sales strategies will be followed based on the attention and commitment to the needs of customers, thus defining the guidelines for the behaviour of all employees of the company.

The sales manual to be prepared will include the following lines of action:

- Company information.
- Environment.
- Product and service portfolio.
- Pricing.
- Ordering advice.
- Estimated lead times.
- Complaints and customer typology.

## **10. ORGANIZATIONAL STRUCTURE**

The departments necessary for the real estate company to develop its activities are the following:

**1. Administration and Finance Department:** the main tasks of this department will be the management of the company's accounting, cost analysis, elaboration of investment strategies and budgets.

In addition, there will be administrative tasks such as the management of payments and receipts and the processing of the necessary licenses to execute the work (for this last function, there must be full cooperation between the operations and administration departments).

**2. Operations Department:** the tasks of the operations department are complex and varied. They are mainly responsible for the architectural design of the house, both inside and outside, in order to subsequently order the manufacture to the builder of the house (who, in addition to building the container, will install the house on the ground).

On the other hand, they will have to acquire the raw materials necessary for the foundations of the ground, organize the transport of the transformed container to the site and supervise, together with the builder, the correct installation of the containers.

In order to carry out the aforementioned tasks of this department correctly, the different job positions are identified:

- Structural and interior architect
- Commercial
- Industrial organization engineer

**3. Quality control department:** this department will be in charge of carrying out the quality control of the real estate projects once they have been completed and the maintenance of the container throughout the guarantee period, as well as ensuring that the work complies with the requirements of the technical building code. **The tasks require the recruitment of a process engineer.**

**4. Marketing Department:** this department will be responsible for establishing the marketing strategies described in point 9, with the aim of reaching potential customers. It will also be responsible for the design of the website, social networks, advertising campaigns and organization of conferences. **For this work it will be necessary to hire a marketing specialist.**

**5. Sales Department:** The tasks of the sales department are to establish relationships between potential customers, to be responsible for the sales process of the property and for the ongoing customer loyalty. **A sales specialist is recruited, if possible, with experience in the real estate sector.**

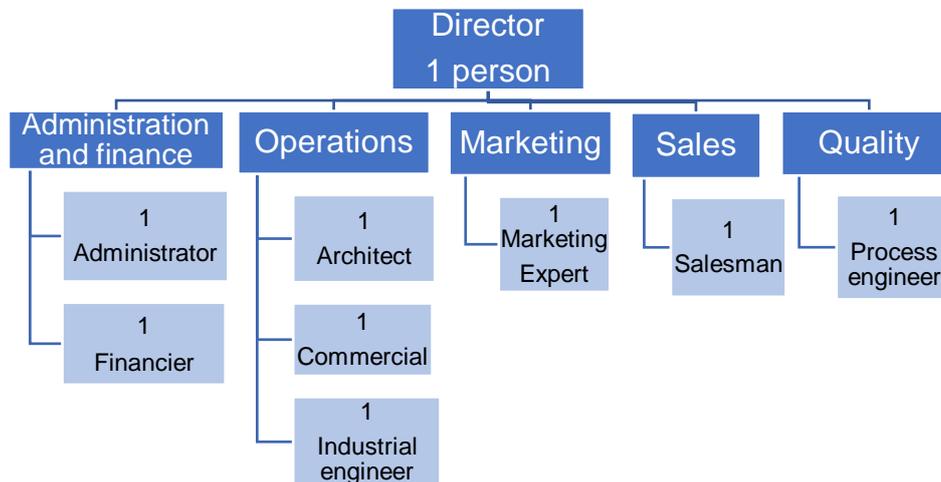
**6. Human resources department:** this function will initially be developed by the founders of the company, with specialist staff to be recruited at a later stage. The principles for attracting and retaining talent will be discussed in point 12.

Each department will be run by its own employees, who will elect a leader, and the general management of the company is made up of its founders.

## 10.1. Organizational chart of the company

A continuación, se ilustra el organigrama de la empresa, en el cual se detallan los distintos departamentos y la necesidad de plantilla por cada uno de ellos.

**Illustration 11. Organization chart**



*Source: Own elaboration*

## 12. HUMAN RESOURCES

The functions of the human resources department will be the responsibility of the founders until the company is larger and has a specialized department, however, personnel planning practices will be designed in accordance with new trends in people management, with the aim of making new workers feel part of the organization and its objectives.

For this, the founders will have to follow the recruitment, selection and integration process described in the next points. In addition, it will be the managers themselves who will be responsible for maintaining an atmosphere of motivation and harmony among employees, which is crucial for achieving higher productivity.

### 12.1. Recruitment

The first phase of recruitment consists of **creating the profiles** according to what the real estate company is looking for in the candidates for the vacant position.

The company will always have to prioritize the search for talent and motivation so that the people who are going to carry out the post give 100% in carrying out their tasks, as well as investigating what competences the candidates possess.

With regard to the competencies sought, the company will prioritize attitudinal competencies. that they are highly motivated to perform the job, that they are capable of solving problems within their position and that they know how to adapt positively to the company as a whole. Secondly, focus on the aptitudinal competencies, looking at what the person knows how to do, what training they have and their work experience.

After having defined the profile, you are looking for in new candidates, you have to move on to the recruitment process, which consists of attracting candidates to the company.

First of all, this process can be carried out through internal or external recruitment. Below, we explain when it will be more convenient to carry out each of the two types of recruitment:

- In internal recruitment, it will be used when the company is larger and has a database of current and former employees, explaining each employee's education, competencies, skills, character, etc. Then the company could create a page for employees or a noticeboard, so that only its employees can see the offers of new vacancies.

This type of recruitment we believe is good for motivating employees as being rehired or moved to another type of job at the same level or higher can motivate them and be rewarded for the effort they put in on a daily basis.

Once the company has received applications from a number of employees, we believe that it would then be appropriate for the company to conduct a more informal interview with each employee to test their skills and discuss the responsibilities of the new position.

- In external recruitment, we believe that it would be more important to rely on a competency-based selection model and that companies start to be more aware that the environment is increasingly changing and complex, that people knowing how to do a job now is no guarantee that they will be productive in the future, etc. That is why we believe that the most relevant instruments to carry out this recruitment are:

Looking for future graduates in universities, looking for young talent in society, providing the company with a totally innovative vision. Offering scholarships to the best students for curricular and paid internships, having the opportunity to obtain an associate position in the company.

Post ads on the Internet, through specialized job search web portals (Infojobs, Servijobs, Jobpilot) due to the low cost compared to other recruitment methods. Use employment agencies, as they tend to have many candidates with different profiles.

## **12.2. Selection**

Once the recruitment process has been completed, we will move on to the selection process, which consists of choosing one of the candidates for the vacant position. Here we believe it is important to focus on a skills and competency-based model, as companies need to be aware that jobs change, more information and knowledge is required.

We will ask interested parties for a video CV to contact them, instead of the classic CV. This method will give us much more information, as you can see the person talking and gesticulating, and as they have limited time they tend to highlight what they think is most important about themselves. In addition, we can also get information from the place they choose to record it and the music they play in the background.

On the other hand, we believe that it would be more convenient to use instruments such as skills tests, which can be of a physical or intellectual nature depending on the job that the candidate will perform in the company, as with these tests the company can find out what capacity the candidate has to learn a task, a skill, if they are able to use abstract reasoning, among others, in a specific and quick way.

We also believe that it is important to carry out assessment centers that consist of carrying out different exercises, normally by means of a simulation, with the aim of assessing the candidates' managerial behaviour, psychological and physical aspects in work situations.

For those who do not have the possibility of travelling to the company's facilities for the interview, alternative practices such as video-interviewing are available. This allows greater access to the selection process, not only to local or national people, but also to students and candidates from abroad, whether they are looking for a place in the internship program, a temporary contract, or for an associate position.

### **12.3. Integration and socialization**

Finally, once the candidate or candidates have been chosen, we must move on to the process of integrating them into the organization. We will carry out the following actions:

- Provide all necessary information about the organization, such as its mission, vision, values, rules, etc.
- Explain to the new employee in detail the content of his/her work, his/her responsibilities and the objectives of the organization.
- Introduce them to their colleagues, and to those responsible for the functions with which they are required to interact. During the first week in the company, a worker or manager will accompany him/her to show him/her the facilities and explain the most important aspects, as well as helping him/her to get to know other colleagues.
- Once a month, hold a fun day for colleagues to get to know each other better, learn to work as a team and communicate better with each other.
- Evaluate the need for training and coaching for new and existing employees in order to carry out the tasks entrusted to them in the most efficient way.
- Provide information on labor relations, internal regulations and the basic functioning of the company: canteens, parking, hygiene rules, etc. All these points may be set out in the welcome manual.

### **12.4. Remuneration**

In terms of remuneration methods, we find the possibility of rewarding people through **monetary and non-monetary rewards**. The company finds it essential to give priority to non-monetary rewards, which are those that make a person happy in their job and the fact of achieving this happiness brings countless positive consequences to the company, as well as being inclusive and egalitarian rewards.

Some examples of non-monetary rewards that the company will carry out are:

- For people with children or elderly dependants, teleworking is facilitated.
- Flexibility in choosing holidays.

- Payments in kind such as telephone and company car.

In the background, we find monetary rewards appropriate, to a lesser extent, but still enabling employees to improve their standard of living outside the company.

### **13. FINANCIAL PLAN**

Once the business activity and the operational plan of the real estate company have been analyzed, the last step is to carry out an economic-financial analysis of the company, where we can determine the economic viability of the business plan.

The first question we must address is the volume of investment necessary to start the company's activity, followed by the financing of these investments, distinguishing between public and private financing.

Subsequently, we will make a forecast of the income and expenses necessary to develop the activity, we emphasize that the income will come from the sale of real estate and the expenses will be the sum of fixed and variable costs.

#### **13.1. Initial investment plan**

##### **Company formation costs**

Start-up costs refer to the capital necessary to start the activity legally.

- Share capital: 3.000 €.
- Notary: € 300
- License: €600

The sum of the above items amounts to €3,900.

##### **Establishment**

The company will have an office in the province of Valencia, we will opt for the rental modality.

We estimate the rent at €1,100/month + €1,100 deposit, based on the offers on specialized websites, it will be necessary to have the equivalent of five monthly payments, thus avoiding current asset problems.

### **Fitting-out of premises and computer equipment**

The leased premises will have to be fitted out with the furniture and computer equipment necessary to develop the company's activity.

Based on websites specializing in the sale of computer equipment, we estimate an initial outlay of €11,000 (9 computers, 2 printers, 5 smartphones and 2 fixed telephones). And furniture in the amount of €3,500.

### **Computer applications and internet service**

In order to develop the architectural, interior and installation design, the following programs are required, in addition, we add the payment of internet and mobile tariff for one year.

- AutoCAD Architecture: €2.075
- InteriCAD T6: €1.990
- CYPECAD MEP: €4.300
- SAGE: 200 €/ month = €2400
- Office package: €2,277, equivalent to 9 licenses for each of the computers.
- WIFI + mobile telephony €250 / month = €3.000.

The prices have been estimated according to the website of the certified provider. The total sum of the different required software and internet service amounts to 16,042 €.

### **Marketing investment**

In order to fulfil the strategies described in the marketing mix and to be recognised by potential customers, the initial marketing budget is detailed below.

- Website: €1,000.
- Google advertising: SEM, paid advertising that Google offers us through its Google AdWords service; 2,000 €.
- Display advertising: through banners or other advertising formats made of text, images, video and audio. We estimate an investment of €2,000.
- Social networks and specialized blogs: in order to promote the company and its products, advertising will be paid for on Facebook, Instagram and specialized blogs. The initial investment will be €4,000.

The sum of the marketing investment gives a total of €9,000.

## **Current assets**

The initial investment of the business should cover five months of payroll, rent and energy consumption. Since no income is expected to be received during this period.

- Lease: €5,500 + €1,100 initial deposit = €6,600.
- Payroll and social security: equivalent to the 9 workers contemplated in the organizational structure; based on the average gross monthly salary we estimate an expense per month of €2,400 per worker = €108,000 in five months.
- Electricity and water consumption: €300 x 5 months = €1,500.

Adding the above parameters, we conclude that the need for current assets is €116,100.

## **Purchase of land for initial projects**

The creation and start-up of the real estate company requires sufficient resources to be able to execute real estate projects.

For this reason, it is necessary to invest in the land where the first works will be carried out and in this way be able to start receiving income that will finance the other projects in the future. In the first year, the following three projects will be promoted:

The first of these consists of two phases of four semi-detached houses of 120 square meters which will be developed in the province of Valencia, in the town of Rafebuñol, for which a plot of land of 1,204 square meters will be acquired for an amount of 350,000 €.

### Illustration 12: Land for townhouse project



Source: Idealista.com<sup>26</sup>

Each phase of four townhouses will be built and delivered to the final customers within a period of five months, so that the second phase will start at the end of the first phase, ensuring sufficient cash flow to complete the work.

### Illustration 13: Land for villa project



Source: Idealista.com<sup>27</sup>

The second project will be the construction of four villas in the province of Valencia, in the town of Moncada. A plot of land of 1.300 m<sup>2</sup> will be acquired which is divided into four independent plots of 325 m<sup>2</sup> where houses of 150 m<sup>2</sup> will be built. The price of the land is 390.000 €. Each house will have a unique and original design.

<sup>26</sup> Idealista. (2021). *Terreno en venta en calle la Font, 28.*

<sup>27</sup> Idealista. (2021). *Terreno en venta en calle n 105,3.*

Construction will be carried out in two stages, with the first two chalets starting in February and the second stage in July, with an estimated completion period of 5 months.

#### Illustration 14: Land for a single-family house



Source: *Idealista.com*<sup>28</sup>

The third project will be a single-family house of 180 square meters in the province of Valencia, in the town of El Puig. The house will be built over a period of four months and will require the purchase of a 205 square meter plot of land for €86,100 per square meter.

Below is a summary table showing the initial investment required for the real estate company to set up and start operations.

**Table 2: Initial investment**

Company formation costs	€3.900
Leased premises (5 months plus deposit)	€6.600
Fitting-out of premises and computer equipment	€14.500
Computer applications and internet service	€16.042
Marketing investment	€9.000
Payroll (5 months)	€108.000
Electricity and water (5 months)	€1.500
Purchase of land for initial projects	€826.100
<b>TOTAL</b>	<b>€985.624</b>

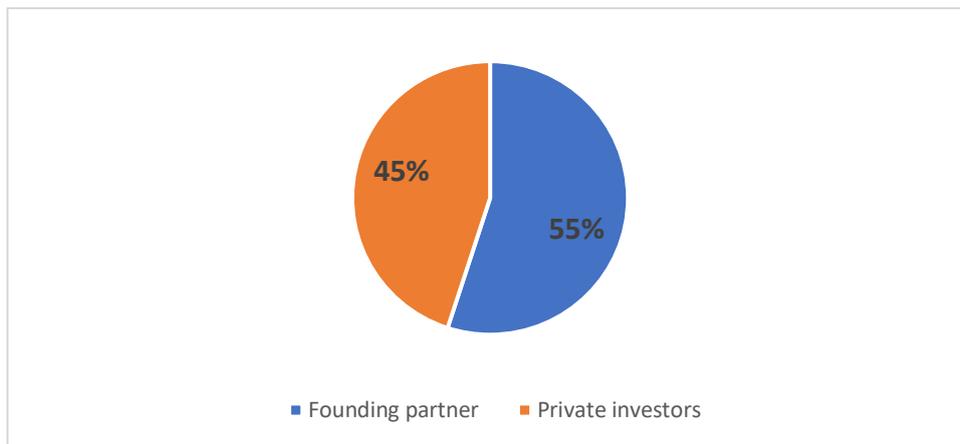
Source: *Own elaboration*

<sup>28</sup> Idealista. (2021). *Terreno en venta en AVENICA CORTS VALENCIANES s/n.*

### 13.2. Financing plan

The founding partner and managing director of the company will invest €542,093, equivalent to a 55% stake in the share capital. The remaining capital, €443,530, corresponding to 45% of the company, will be covered in private financing rounds, with the participation of private and institutional investors.

Graphic 4: Capital structure



Source: Own elaboration

### 13.3. Forecast of income and expenditure

The company's revenue comes from the sale of prefabricated buildings made from shipping containers. In a realistic scenario, we plan to carry out three projects in the first year and then increase sales by 25% in the first five years.

We recall that house prices are determined by the following equation:

**Selling price = Cost of land + Cost of construction + Development costs + Developer's profit (15%).**

First, we will project the income of the townhouse project, we know the land cost 350.000 € and the construction costs have been estimated according to an analysis among specialized suppliers (explained in point 7.3.). The construction cost of the terraced houses has been set at 700 euros per square meter, so the construction cost of the project of 8 dwellings of 120m<sup>2</sup> amounts to 672.000 €.

We must include the following costs:

- Licenses; 6% of the PEM (material execution budget) =  $0.06 * (350.000 + 672.000) = €61.320$ .
- Interest for the financing of the construction; The construction of each project will be financed by the bank, through a promoter type loan, the interest rate after consulting the website of various banks is estimated at 3.5% per annum and a capital drawn down of €758,870. The interest paid monthly will be  $€2,213 \times 10$  months = €22,130, the loan will be repaid at the end of the second phase.
- Other costs; in this section we include the geotechnical study, connections and insurance, estimated at 2.5% of the EMP =  $0.025 * (350,000 + 672,000) = €25,550$ .

The developer's profit has been estimated as 15% of all costs = €169.650.

Therefore, selling price =  $(350.000 + 672.000 + 61.320 + 22.130 + 25.550 + 169.650) / 8$

**UNIT SELLING PRICE OF TOWNHOUSES = €162,581.**

Secondly, we will project the income from the second project, corresponding to four chalet-type dwellings, for which a plot of land of 1,305 m<sup>2</sup> was acquired for an amount of 390,000 €. The construction cost, as in the previous project, is estimated at 700 euros per meter. This would give a cost for the four 150 m<sup>2</sup> houses of €420,000.

We will calculate the selling price by applying the formula seen in the previous project so we must calculate all the associated costs of the project.

- Licenses; 6% of the EMP =  $0.06 * (390,000 + 420,000) = €48,600$ .
- Interest for the financing of the construction; the interest rate after consulting the website of various banks is estimated at 3.5% per annum and a drawn down capital of €488,850. The interest paid monthly will be  $€1,425 \times 10 = €14,250$ , the loan will be repaid at the end of the second phase.
- Other costs; in this section we include the geotechnical study, connections and insurance, estimated at 2.5% of the EMP =  $0.025 * (390,000 + 420,000) = €20,250$ .

Developer's profit has been estimated as 15% of all costs = €133.965.

Therefore, selling price =  $(390.000 + 420.000 + 48.600 + 14.250 + 20.250 + 133.965) / 4$

### UNIT SELLING PRICE OF HOUSES = €256,766.

Once we know the selling price of houses, we will estimate the selling price of the third project, which corresponds to the construction of a single-family house of 180 m<sup>2</sup>, whose land amounts to €86,100.

The construction cost, being only one house, will be higher than in the previous projects. In this case it has been set at 750 euros per square meter or €135,000.

We include the following costs to determine the sale price:

- Licenses; 6% of the EMP =  $0.06 * (86,100 + 135,000) = €13,266$ .
- Interest for the financing of the construction; the interest rate after consulting the website of various banks is estimated at 3.5% per annum and a drawn down capital of 153,793 €. The interest paid monthly will be  $€448 * 4 = €1,794$ .
- Other costs; in this section we include the geotechnical study, connections and insurance, estimated at 2.5% of the PEM =  $0.025 * (86.100 + 135.000) = €5.527$ .

The developer's profit has been estimated as 15% of all costs = €36.253.

Therefore, selling price =  $86.100 + 135.000 + 13.266 + 1.794 + 5.527 + 36.253$ .

### SALE PRICE SINGLE-FAMILY HOUSE = 277.940 €.

The following table summarizes the revenues of the real estate company for the first year of operations.

**Table 3: First year income**

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
<b>Townhouses</b>	-	-	-	-	4 units	-	-	-	-	4 units	-	-
<b>Townhouses Income</b>	-	-	-	-	650.324 €	-	-	-	-	650.324 €	-	-
<b>Houses</b>	-	-	-	-	-	2 units	-	-	-	-	2 units	-
<b>Houses Income</b>	-	-	-	-	-	513.532 €	-	-	-	-	513.532 €	-
<b>Single Family Home</b>	-	-	-	1 unit	-	-	-	-	-	-	-	-
<b>Single Family Home Income</b>	-	-	-	277.940 €	-	-	-	-	-	-	-	-

Source: Own elaboration

The total income for the first year is 2,605,652 € corresponding to the sale of eight townhouses, four villas and one single family house.

The cost structure of the company is shown in the table below:

**Table 4: First year expenditure**

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Rental	2.200 €	1.100 €	1.100 €	1.100 €	1.100 €	1.100 €	1.100 €	1.100 €	1.100 €	1.100 €	1.100 €	1.100 €
Wages	21.600 €	21.600 €	21.600 €	21.600 €	21.600 €	21.600 €	21.600 €	21.600 €	21.600 €	21.600 €	21.600 €	21.600 €
Electricity and water	300 €	300 €	300 €	300 €	300 €	300 €	300 €	300 €	300 €	300 €	300 €	300 €
Amortization of bank loans	-	-	-	153.793 €	-	-	-	-	-	758.870 €	488.850 €	-
Bank interest	4.007 €	5.432 €	5.432 €	5.432 €	3.638 €	3.638 €	3.638 €	3.638 €	3.638 €	3.638 €	1.425 €	-
<b>TOTAL</b>	<b>28.107 €</b>	<b>28.432 €</b>	<b>28.432 €</b>	<b>182.225 €</b>	<b>26.638 €</b>	<b>785.508 €</b>	<b>513.275 €</b>	<b>23.000 €</b>				

*Source: Own elaboration*

The expenses including the repayment of the bank loans amount to €1,722,169. To these costs must be added **the cost of the land** used for the initial investment, **so that the total costs of the company in the first year are €2,548,269.**

### **13.4. Economic viability**

Finally, we will assess the viability of the company taking into account the revenues and expenses of the first year, as well as the break-even point at which the company's costs are covered.

We will then calculate the pre-tax profit for the first year of the company:

- + Income = €2.605.652.
- - Cost of land = €826.100.
- - Operating and financial expenses = €1.722.169.

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**Profit before tax = €57.383.**

The operational leverage of the company is highlighted, having a fixed cost structure of €277,100 (rent, salaries and services), the projects that are carried out after covering these costs will be mostly profit for the company.

Regarding the variable costs, these refer to all those expenses to carry out the construction, and are financed by the bank, only the company has to pay the interest.

Because of this, in a hypothetical case of carrying out four projects, the developer's profit from this last construction would have a positive impact on the profit since the fixed costs are covered by the developer's profit from the first three projects.

On the other hand, we will calculate the ROE ratio to know the return on equity that the company would obtain in the first year of operations. The formula is as follows:

**ROE = Net profit / Equity**

We will use as equity the equity corresponding to the initial investment table, since this way we can know the company's profitability over the initial capital needs. It should be noted that the company has no debt at its incorporation as the land is purchased with its own funds.

As for the net profit, we will apply an average corporate tax rate of 25%, so that we can obtain a conservative profitability ratio.

**ROE = 43.038 / 985.624 = 4,36%**

The return on initial capital is below the average for the construction sector (10%).

However, it should be borne in mind that the initial investment includes a cash flow of €116,100 corresponding to the current assets necessary to incur current liabilities until the first projects are completed.

Once the company has a sustainable pace of projects, it will not need to have 5 months of working capital and will be able to use part of this cash to develop new projects and expand the return on capital.

Finally, as for the company's financial leverage, we will measure it as: **the loan requested from the bank, divided by the value of the project (land cost + construction cost)**. The leverage for each of the real estate projects in the first year is detailed below.

- Project leverage 1 =  $(758.870 * 100) / 1.022.000 = 74.25\%$
- Project leverage 2 =  $(488.850 * 100) / 810.000 = 60,35\%$
- Project leverage 3 =  $(153.793 * 100) / 221.100 = 69,55\%$

The average debt ratio of the company is 68.05%, which we consider to be conservative, as it is below the average for the construction sector (75%)<sup>29</sup>.

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<sup>29</sup> Bankinter. (2020). *7 gráficos del banco de España para analizar el mercado de la vivienda*.

## **14. CONCLUSIONS**

The situation that society is going through worldwide with the COVID 19 pandemic is causing people to rethink their way of life and their conception of housing. Due to this, new trends point to an exponential growth of prefabricated houses, where recyclable materials and environmentally friendly processes are implemented.

In addition, the Spanish construction sector needs a change to recover the levels of turnover before the financial crisis. The real estate company described in this business plan brings a new differentiating approach to the industry, one of the most important factors being the savings in material costs and project execution time.

With respect to the objectives set at the beginning of the work, the following results have been obtained:

Despite being a prefabricated product, shipping container housing is still a quality product with innovative and elegant designs, as could be seen in the proposed housing catalogue. Due to this, projects can be carried out for different market niches such as young people or those with high economic resources.

On the other hand, once the proposed business model and the most important economic parameters such as the initial investment and the projection of income and expenses have been evaluated, it has been proven that the business is viable from its first year of operations.

The profitability and leverage ratios obtained are positive, in comparison to the sector, the company needs less financial debt to execute the projects, this is largely due to the reduction of construction costs which are around 40% less than in traditional constructions.

On the other hand, the return on equity ratio in the first year (5%) can be expanded in the following periods by utilizing a large part of the initial cash flow of the project.

Finally, it has been confirmed that the construction from shipping containers is a cheaper option than conventional construction and the final prices of the houses that the company will market in the first year have a more competitive price, mainly the houses corresponding to the project of townhouses and villas where the costs per square meter decrease significantly.

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