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TÍTULO: Meals on Wheels

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ABSTRACT

Meals on Wheels puts into effect the social shared approach of making money by creating value to society.

The organization will tackle locally two worldwide problems: the food waste and the malnourishment of elderly & disabled people with moderate economic resources and, thus, out of reach of social services and food banks.

To do so, **Meals on Wheels** will collect sell-by date food from the main Spanish supermarket chains, will cook it and will deliver it to their consumer users.

By making a positive impact on the community, the company will guarantee the access to social investment facilities such as crowdfunding and low-rates bank indebtedness. In essence, **Meals on Wheels** is a business opportunity with a high potential growth, as the elderly population along with the disabilities associated to aging is a global trend in developed countries, where the shopping basket is growing on a par of tonnes of trash.

1. SETTING UP A COMPANY.

1.1. Kind of Society.

Meals on Wheels will operate as a co-operative and, specifically, as an associated worker. The main advantages of this kind of society are the variable share capital, that is laid down in the articles of association, the limited liability of partners, the tax allowances and government funding linked to their legal nature, the democratic decision-making and the high communication between members. On the other hand, is necessary to highlight as disadvantages the slow decision-making, the legal obligation to dedicate the 30 per cent of surplus to cover losses from previous financial years, and the legal limitation of hiring employees who are not shareholders. Nonetheless, the cooperative enables the service to have more people involved and working towards the mutual goal of the firm. Indeed, the use of co-operative has increased in the last years, with a total of 20.792 organizations in 2017, meaning the employability of 250.000 people in Spain (Molina, 2017).

The social economy is gaining strength in Europe, as they employ 6,5 per cent of the workers and implies 8 per cent of the GDP of the European Union. In fact, as a consequence of this international trend, 43.000 of this kind of societies are based in Spain (Molina, 2017).

1.2. Necessary Formalities.

Taking into account the Co-operative Act (Law 27/1999 of 16th of July), **Meals on Wheels** is a Service Co-operative and, thus, must involves as minimum 3 partners (article 8), who not only provide capital resources to the firm but also human capital or work resources. This kind of society will acquire legal personality with its inscription in Registrar Cooperatives Societies (article 7). Besides, as it is disaggregated by article 10, the articles of association will include:

- The identity of the signatory.
- Signatory's statement about their legal quality to become partners.
- Signatory's formal agreement to create a service cooperative society.
- Signatory's accreditation about the subscription and payment of the minimum capital resources to become partner.

- If they existed, assigned value of non-cash contributions.
- Signatory's accreditation about the payment value of cash contributions is not less than the social capital of the firm.
- Identity of the first Governing Council and controller of the company.
- Declaration about the no existence of a similar company with the same name.
 It must be submitted a legal copy given by the Registrar Co-operatives Societies.
- Articles of association. According to article 11, this will collect:
 - Name of the society.
 - Social purpose.
 - o Place of business.
 - o The territorial scope of the operations.
 - o The duration of the existence of society.
 - Minimum share capital.
 - The minimum contribution to become a partner, as well as the subscribed social capital, the social capital pending payment and the period and form of such payment.
 - o Forms of accreditation about the shares contribution.
 - Accrual or not accrual of interest due to shares contribution.
 - Types of partners, requirements of intake and forms of transmission of membership.
 - Rights and duties of the partners.
 - o Right of reimbursement in shares contribution.
 - Rules of social regulation, kinds of offences and sanctions, sanction procedure and loss of membership.
 - Composition of Government Council, number of counsellors and duration of office, along with controllers' determination.

1.3. Founding Partners.

The legal requirements regarding to partners are founded in the third chapter of the Cooperatives Act (article 12 ff.). Meals on Wheels Coop will have three founding partners in charge with the three core activities of the company: collection of food from supermarkets, cooking of sell-by date food and delivering to

consumer users. This system will guarantee the quality of the process flow chart by involving the human capital in their effectivity.

1.4. Share Capital.

There is no minimum share capital for co-operatives (article 45). **Meals on Wheels**′ project will need an estimated initial investment of 193,520.54€ (see appendix 1). However, as the partners currently lack of economic resources, the share capital will be fixed in 45.000 € and the other 150.000 will be carried out through indebtedness.

2. BUSINESS PROJECT.

2.1. Identifying the Market Niche.

According to the United Nations Food and Agriculture Organization (2018) approximately 795 million people of the 7.3 billion people in the world, one in nine, suffered from chronic undernourishment from 2014 to 2016. Besides, it should take into account that malnutrition is not an exclusive problem of developing nations. Indeed, the levels of undernourishment in Spain rose substantially in the aftermath of the 2008 recession reporting more than 1 in 5 people are currently in poverty, with 1,537,134 people accessing food supplies in the last decade (Fesbal, 2017).

Despite many people being unable to afford to buy food, supermarkets are wasting more of their food than ever before with 46,500 tonnes of unsold food going to landfill (Alfonso and Sastre, 2017). Subsequent to the 2008 recession, combined with the political and economic uncertainty brought to suppliers, supermarkets and consumers, the cost of grocery shopping for the average Spain household has increased by 0,6% in 2017 (Ministry of Agriculture, Fisheries and Food, 2017).

In Spain, the 70% per cent of the total population who suffers malnourished are in the old age (Macias Montero, et. al., 2012), in Madrid 459 of people were referred by their Primary Care to access a nutrition service during 2016 to 2017 (Madrid City Council, 2017). A majority of these referrals are from disabled community or dependant adults. In these cases, the physical and social condition results, along with the ineffectiveness of public and private social services, in a devastating paradigm. Specifically, in Madrid 169,554 citizenship have recognized their disabled condition, and the large majority of the cases happens as of 45 years old. Indeed, 121.347 disabled people find themselves

in this age bracket, where almost a 50% are 65+ (Madrid City Council, 2016). This is the social group in risk and, thus, the estimated target group of **Meals on Wheels**.

Besides, the population ageing is a global trend of the developed countries. According to General Foundation CSIC (2017), in Spain in 2050 the 30% of the population will be 65+, with a total data above 4,000,000 million people in the eighties. However, the number of elderly people in good health condition is estimated around 44%, suggesting a link between ageing, acquiring disability and the incidence of malnourishment cases. (Envejecimiento en Red, 2018). The conjunction of poverty, elderly and disability is already approached by the local government, but the elderly and disabled group with moderate economic resources is out the system.

Due to the lack of government provisions in tackling the social problem of this population group drops a gap in the market. Meals on Wheels aims to fill this gap in Madrid by creating meals for the elderly-disability community and dependant adults using sell-by date produce that the supermarket can no longer sell..

2.2. Business Plan.

Meals on Wheels will pick up the sell-by date food from Mercadona and Aldi (the main supermarkets in terms of sales and social awareness of food waste), will cook it and will deliver to the consumer users. Customers will be able to access **Meals on Wheels** in two ways, either through our website or by phone.

As discussed above, malnutrition is linked to the combination of two factors: the partial reply of public social services and the people's incapacity to cook by themselves due to personal characteristics. The cost of caring for people suffering from acute malnutrition is having a significant impact on health and social care costs and will continue to do so with the ageing population. However, the issues faced by the individual and society caused by malnutrition, can be prevented by having accessing to nutritious and healthy meals as part of a well-balanced diet. The collaboration with primary care, disabled associations, the council and the community as a whole is a key element of the project in order to detect and reach the potential consumer users.

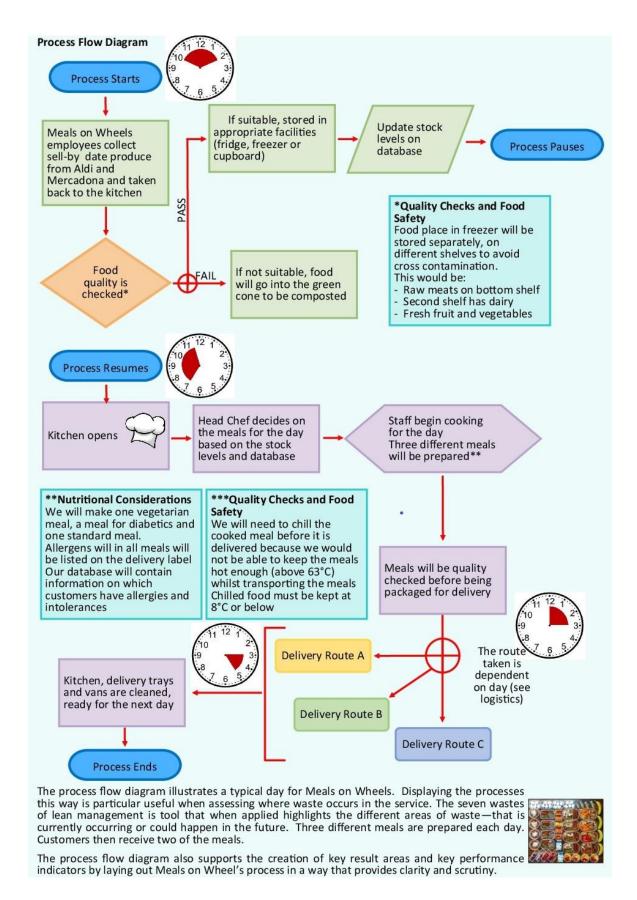


Figure 1: Process Plan Diagram of "Meals on Wheels".

2.2.1. <u>Mission Statement.</u>

To reduce and reverse the harmful impact of supermarket food waste through supplying cooked meal provisions for the elderly and disabled in society.

2.2.2. Value.

The service provides value to the customer through the high quality, nutritious meals created and delivered to their homes. Our value for customers is also derived from the affordability of the meals and through raising awareness about the environmental impact of food waste.

3. MARKETPLACE.

3.1. Global Analysis.

3.1.1. **PESTEL Analysis.**

<u>Political Analysis:</u> Spain is a parliamentary monarchy where the head of state is the monarch and the prime minister is the head of the government and serves under the official title of President of the Government. This multi-partied system is mainly dominated by PP and PSOE political groups with the recent emergence of other political parties such as Ciudadanos and Podemos.

Regarding to social venture draws attention the lack of a specific legal framework. Consequently, according to Global Sustainable Investment Alliance (GSIA), Spain is one of less developed countries in social entrepreneurship initiatives, with a rate of 0,51 per cent (APD, 2018).

Economic Analysis: Despite the economic recession, Spain is slowly increasing growth in its GDP. Indeed, the Spanish economy grew by 2.5 percent year by year in the second quarter, below a preliminary estimate of 2.7 percent and the previous revised figure periods of 2.8 percent. It was the weakest growth rate since the last quarter of 2014 (Trading Economics, 2018). In this context, the household consumption is the main component of Spain's GDP (58 percent), followed by gross fixed capital formation (21 percent) and government expenditure (18 percent).

Regarding to labour market, the unemployment rate in Spain fell to 15.28 percent in the second quarter of 2018 from 16.7 percent in the previous period and below market

expectations of 15.8 percent. It is the lowest jobless rate since the last three months of 2018. Among regions, the highest rates were recorded in Ceuta (29.5 percent), Melilla (28 percent), Extremadura (23.9 percent), Andalucía (23.1 percent) and the lowest in Navarra (9.9 percent) and Aragón (9.9 percent). In Cataluña, unemployment rate was 11.4 percent and in Madrid 12.1 percent. In the case of disabled people, the activity rate is 35,16% versus 77,98% rate of people without disabilities. Nonetheless, only 308,376 disabled people were hired along 2017, that is to say, the 1,43% (Ministry of Labour, Employment and Social Security, 2017). Besides, the disabled people are underpaid, with an average wage of 19,297.6 €, 17,1% less than people without disabilities (INE, 2016).

In Spain there are 3.8 million of disabled and 2,463,920 are out of labour market. When a disabled person is unable to work may occur two alternative scenarios: receive a contributory pension or get a non-contributory pension. If the person is receiving a contributory pension will earn 380,10 € per month (IMSERSO, 2018). In the event of getting a contributory pension the amount of money will depend on the base for Social Security Contributions. According to State Observatory for Disabled People, (2017) the acquired disability affects 1,580,830 people in Spain and 161,939 lives in Madrid. This last one is the main target group of Meals on Wheels.

Apart from that, directly related to **Meals on Wheels** is the Food Inflation. According to Trading Economics (2018), cost of food in Spain increased 1.70 percent in September of 2018 over the same month in the previous year. Food Inflation in Spain averaged 2.21 percent from 2003 until 2018, reaching all time high of 7.20 percent in June of 2008 and a record low of -2.75 percent in February of 2010. This indicator shows the same increasing trend of Inflation Rate which exceed in 0.1 the previous year rate.

<u>Social Analysis:</u> particularly related to **Meals on Wheels** is the lack of governmental and civic attention to the cooking difficulties of dependent persons. Elderly-disabled who are unable to cook will be out the system if they receive above the integration minimum income. However, Disabilities' Attention Office (OADIS) had not registered any complain linked to this topic in its last report.

<u>Technological Analysis:</u> Technologically Spain's strength is based on the industries of transportation, healthcare, and renewable energy. The healthcare system is extremely efficient, using a small portion of the GDP comparing to other countries, while simultaneously providing first-rate healthcare to citizens. Furthermore, the speed railways are a model itself and renewable energy sources are not only registering a researching rise but also an increasing use by the population.

Directly linked to **Meals on Wheels** are the effective implementation of electric car and the technological innovations offered in the International Consumer Electronic Show (CES). The most advanced concept is the smart kitchen. It includes touchscreens that populate recipes from Pinterest, a refrigerator that reminds you when you are low on milk and the ability to heat up a meal, such as a bowl of soup, by placing it anywhere on the counter, thanks to detection sensors (Yurief Kaya, 2017).

In this regard, the underlying concept is to place the technology at the service of people, including people with special needs such as disabled. Consequently, the refrigerator could sync up with a Fitbit to make food suggestions based on the health goals. Cabinets could include touch sensors that track what food you take out. Over time, the kitchen could serve up estimates for how many calories you eat every day.

Apart from that, the refrigerator connected to other kitchen appliances can be really useful. In this sense, a blender could download recipes from the internet based on what food you have in stock. A special mention was made to delivery systems. In this case, science research is testing Drones to deliver a variety kind of items, including food. All these technological improvements could be implemented by **Meals on Wheels** in the long term.

Environmental Analysis: Spain use environmental taxes and other economic instruments to influence firm's behaviour, as it is widely believed that they could affect competitiveness and employment. There is a considerable focus to improve efficiency through full recovery of the costs of supplying environmental services such as water and sewerage. Spain continues to make progress dissociating environmental pressures from economic growth (e.g. by reducing SO_x emissions and controlling the growth of NO_x emissions, nitrogen fertiliser use and water abstractions). However, further efforts are

needed to break up CO₂ emissions and the generation of municipal waste from economic growth (OECD, 2012).

Apart from that, according to Food and Agriculture Organization of the United Nations (FAO), Spain food waste is 7,7 tonnes per year, which is 4,79 million € going landfill. Meals on Wheels' purpose of reducing environmental footprint not only will focus on decreasing the food waste by cooking the sell-by date food, but also will implement a whole sustainable process chain. In this sense, the firm will also include the use of sustainable packing, fulfilling the rules of ECOEMBES. In this sense, Meals on Wheels will employ biodegradable trays made by Oneworld Packaging.

<u>Legal Analysis:</u> According to the World's Bank Doing Business 2015, it takes 13 days to start a business in Spain. Despite, the common tools to start a business is by being freelance or by using a limited company, **Meals on Wheels** focuses on the creation of a Cooperative. This kind of society takes around 6 months to start until it's formalization, and inscription fee entails a 10 per cent of its share capital (Ministry of Labour, 2015).

Regarding to the specific services offered, the more relevant regulation comes from European Union, where the Council and the European Parliament have developed a strict regulatory framework to control the food chain. The key European regulation is the Hygiene of Foodstuffs Act (Law 852/2004). In Spain, highlight the Food Security and Nutrition Act (Law 17/2011, 5th of July). This Act integrate the Food Safety regulation by informing the industry about food processing (measures regarding storing, cooking) and nutrition as well as personal liability. For that reason, it is mandatory to hire a business insurance and pay special attention to:

- Ensuring food is not damaged or damaging to an individual's health during processing, storing, cooking, or packaging.
- Ensuring that the food served is of a high quality standards and customers' expectations and needs are always meet (this can be deduced based on ingredients, price, advertising, labelling).
- Ensuring that the food is labelled, advertised and presented to show accurate information about the ingredients, not misleading and safe (especially important when considering allergies).

3.2. Specific Analysis.

3.2.1. Five Forces Analysis.

<u>Competitive Rivalry:</u> Meals on Wheels' business model has not been implemented for any Spanish company. There is no direct competitive, as any company marries up the double purpose of reducing the waste food along with increasing the quality of life of elderly & disabled people. However, there is some public and private organizations that provide food to elderly-disabled population.

In this sense, Madrid Town Hall has a food delivery service addressed to disabled with visual impartment and elderly people, but to be part of the system the family cannot be above the minimum guaranteed income (Madrid City Council, 2018). **Meals on Wheels'** target include the complete spectrum of disabilities to focus on families with economical resources but with physical, sensorial and mental difficulties to be able to cook by themselves.

A similar approach, focus only on elderly people, is given by the Spanish Confederation of Associations for the Elderly (known in Spanish as CEOMA) and the Spanish firm UCALSA. This program works since 2013 by the name of Gesgourmet. Nevertheless, Gesgourmet does not consider the disabled condition as a priority factor to take part of the system and the monthly prize is between 53€ and 131€ above **Meals on Wheels**, according in the upper range to the special needs and nutrition (Gesgourmet, 2017).

Meals on Wheels not only takes advantage of the sell-by date food but also socializes the expenses between the whole group of consumer by making one vegetarian meal, a meal for diabetics and one standard meal, the three of them sold at the same monthly price of 144€ or, in other words, a day price of 6€, including lunch and dinner.

Consequently, **Meals on Wheels** will likely to have a high impact with a strength and health profits, as provide a unique approach to society.

<u>Supplier Power:</u> on one hand must be assessed the donated food and in other hand the basic stock inventory. Mercadona and Aldi are the chosen supermarkets as they have already developed the environmental awareness within their business model, while being two of the main industry chains (FACUA, 2014). However, there is a high

probability to switch to other supermarkets as it is increasing the number of supermarkets involves in the business model.

Secondly, respect to basic stock inventory, Mercadona offers the lowest prices and will be considered in the first instance.

<u>Buyer Power:</u> the consumer of **Meals on Wheels** are spread along Madrid city. Despite there is some consumer association such as the Spanish Committee of Representatives of Disabled People (known in Spain as CERMI), it does perform as political party and not as an intermediary. **Meals on Wheel's** aim is to provide the service with a competitive price and to be able, in the long-term, not only to maintain it but also to make money with the development and implementation of economies of scale.

Threat of Substitution: As a substitute with a huge implementation in Madrid could be considered Just Eat, Take Eat Easy, Uber Eats or Deliveroo. However, this kind of company focusses mainly on fast food and the minimum order is 8 € with a delivery charge between 1,5 to 2,5 €. To choose free delivery the minimum order will be between 12 and 20 €. This companies could be an occasional alternative for elderly – disabled people, but Meals on Wheels model fill the needs of these group of society out of general business plan. On the other hand, Food Banks' target group is completely different: people without mobility difficulties and economical resources.

Threat of New Entry: Food Security and Nutrition Act is a complex regulatory body that requires a large initial investment in order to fulfil each requirement. Indeed, Meals on Wheels will need around 150.000€ each time they will open another operational centre. In this sense, and despite the technology of business gets to everyone, there is barrier of entry linked to legal requirements.

By contrast, other countries such as UK or US has implemented similar models and could implement it in Spain. However, in this case the barrier of entry is even greater, as the Spanish disabled model is completely different.

- 4. COMPETITIVE STRATEGY, COMPETITION ANALYSIS AND DEVELOPMENT STRATEGY.
- 4.1. Competitive Strategy.
- 4.1.1. Investment Strategy and Technology Development.

On the whole, **Meals on Wheels**′ aim is to run the business without depending on government grants or other citizenship's donations in order to avoid fluctuations and service's insecurity. The main outflow is to cover fix and variable cost of the 2019 exercise. The company will try to avoid operating under the standard capacity in order to guarantee the coverage of expenses. To do so, **Meals on Wheels** will start recruiting potential consumer 6 month in advance, by let them to signing a contract. However, the likelihood of being bellow the standard capacity the first year is medium and will imply losses below the 3197 meals per month (see appendix 2). On the other hand, the initial investment (see appendix 1) will be partially covered by the share capital and, therefore, 150,000€ must be paid in advance. On third of this quantity will be achieved by using crowdfunding through Verkami, Kickstarter or GoFundMe, and the two thirds through impact investment in the platform for Social Entrepreneur CREAS. It is about, thus, of bank indebtedness, but with low-interest loans and fiscal benefits to companies.

4.1.2. **Strategy of Intellectual Property.**



Meals on Wheels is an innovative business project. For that reason, its name, logo and process will be protected under Brands Act (Law 17/2001, 7 of December) in the Trademark Office for registration of Madrid.

4.2. Competition Analysis.

4.2.1. Value Creation.

Business and society have been pitted against each other for too long. That is in part because economics have legitimized the idea that to provide societal benefits, companies must temper their economic success. In neoclassical thinking, a requirement for social improvement impose a constraint on the corporation. Adding a constraint to a firm that is already maximizing profits, will inevitably raise costs and reduce those profits.

The share value, in contrast, recognizes that societal needs, not just conventional economical needs, define markets. It also recognized that social harms or weakness frequently create internal costs for firms—such as wasted energy or raw materials, costly incidents, and the need for remedial training to compensate for inadequacies in

education and addressing societal harms and constraints does not necessarily raise cost for firms, because they can innovate through using new technologies, operating methods and management approaches, and as a result, increase their productivity and expand their markets (Porter and Kramer, 2011).

Meals on Wheels will develop the shared value approach under a mix of non-profit/profit framework. Indeed, the economies of scale will provide in long-term a virtuous circle of financial enrichment.

Apart from that, the main value creation of the firm is the production of a high quality food at a low cost. **Meals on Wheels** is able to produce under low cost approaches by saving cost from the raw material. By its part, the quality control will be considered in the whole process chain. Consequently, the trucks used to pick up the food in the supermarket and to deliver cooked meals to consumer users will count with a refrigerated system in order to guarantee the cold chain. Besides, when the food arrives to the kitchen, first of all will have to pass a quality control check. If the food is under perfect conditions will be storage in the freezers, refrigerators or cupboard regarding its nature. Lately, the cooking process will be along with the legal systems and all the staff will have the required qualifications to manipulate food.

4.2.2. **Competitive Advantage.**

Meals on Wheels' strategy is a hybrid approach. In one hand, compete as and affordable business strategy, with the lowest prize of market. On the other hand, takes part of differentiation strategy as not only offers ready meal but also establishes professional human contact, that will be linked to health or social services, among others. They will provide brief company, and also ensure the elderly person is healthy, safe, warm, and has all their needs met. **Meals on wheels** can be a lifeline for many disabled-elderly people, making sure they have a regular meal and providing social contact for those who may be isolated or living alone. This social approach along with the price and the target are the main competitive advantage in terms of benchmarking.

Along with the business strategy, the other competitive advantage is the exclusive access to distribution networks. Meals on Wheels will sign an agreement with the Spanish Committee of Representatives of Disabled People (CERMI) in order to guarantee

preferred access to consumers. Besides, the main assets of Meals on Wheels will be the employees and, for that reason, is chosen the co-operative model as a kind of society. In line with ethics model, the company will employ disabled people preferentially.

The whole business plan will be register in the Trademark Office to ensure the patent granting and avoid the entry of future competitors.

4.2.3. Flagship Resources.

Meals on Wheels hallmarks are:

- Positive social impact by solving locally two worldwide problems: food waste and malnourishment in elderly and disabled people.
- Affordable price.
- Social support for groups of peoples excluded by the system.

To do it, **Meals on Wheels** flagship resource is people. Meals on Wheels is a revolutionary business model run by and for people. The business idea is born on social awareness and will recruit the best staff to make it possible. On the whole, our employees must understand the disabled-elderly people, respect the environment and believe in an innovative way to change the world by means of business.

4.3. Development Strategy: Three Year Plan.

Year 1. 2019

Getting established in the six chosen Madrid districts. Investing in marketing to make ourselves known, contributing towards reaching our standard capacity by the end of the year.

Year 2. 2020

Increasing the number of potential customers in the existing market supported by marketing and partnering with Madrid Civil Council. **Meals on Wheels** will increase the number of Mercadona and Aldi chains that donate their sell-by date food to four more stores.

Year 3. 2021

Investing in electric vans which would make the company more environmentally friendly.

Increasing the number of vans to 3, we will be able to increase **Meals on Wheels** standard capacity to what on the first year is our maximum capacity.

On the other hand, the installation of food collection methods inside the supermarket will increase the amount of food donations. To do so, Meals on Wheels will take advantage of supermarket's fridge adding a system of weight. Consequently, the domestic households can bring to the usual supermarket their own sell-by date food and, as compensation, they will receive coupons immediately exchangeable in their shopping basket. This initiative not only benefits Meals on Wheels but also the supermarkets chains through social corporate responsibility actions. In this scheme both parts of the donated equation will be sign agreements: Meals on Wheels and Mercadona and Aldi.

5. DEMAND ANALYSIS.

5.1. Market Segmentation.

Meals on Wheels customers will be:

- Over the age of 65.
- Who live in the following areas: Carabanchel, Usera, Puente de Vallecas,
 Moratalaz, Villa de Vallecas and San-Blas Canillejas.
- Who needs help to carry out basic actions on a daily basis like cooking, struggling to prepare healthy meals for themselves.

It is necessary to consider the ideal customer for the service. This is important to ensure that the service is not overburdened and that is can achieve its mission statement and goals. Therefore, the customer priority table (see below) is essential to determine the 'ideal' customer who will benefit the most from accessing the service and receiving meals to their homes.

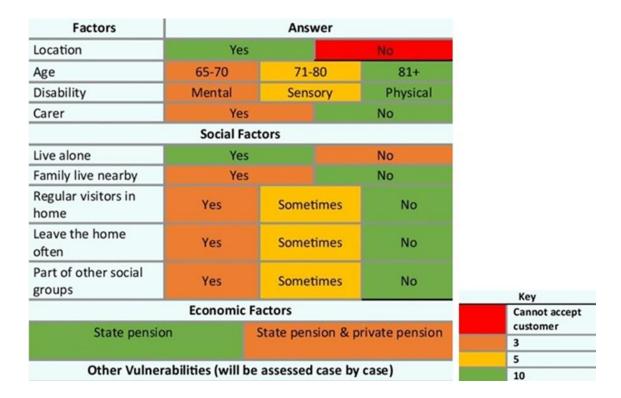


Figure 2: social way to identify the target group of Meals on Wheels.

Customers who score a 40 or above would be accepted with the most preferred customer being 80+. This number would indicate they struggle with day to day activities including the making of healthy and nutritious meals.

Customers' who score below 40 suggests that they are either:

- Able to support themselves independently in their own home.
- Receive significant support from a care service or friends and family already.

The establishing of a customer's need is not aimed as a discriminatory exercise but to ensure that the service is allocating resources to the customers who need it most. This also prevents the service from being abused or exploited.

Once the customer user is inside **Meals on Wheels** business model, the administrator will classify by considering his/her needs. **Meals on Wheels** will provide four kinds of meal: standard, diabetic, free-gluten and suitable for allergic. In addition, along the delivery the drivers will keep an eye in order to double-check all the needs of this vulnerable group are covered. If not, by following our internal guideline, the staff will refer the consumer user to the appropriate service (health system, social services, etc.).

5.2. Evolution of Demand.

Demand management is important to service operations as it gives a guideline to how much stock needs to be purchased, whether the capacity is adequate and how the service is coping overall, with demand (Croxton et al., 2002).

Changes in Future Demand.

According to Madrid City Council Statistics (2015), the number of disabled people per typology in the Community of Madrid are: 194,200 with physical disability, 43,926 with mental disability, 34,397 with intellectual disability, 22,288 with hearing impairment and 27,516 with visual impairment. The total of disabled people in Madrid is 322,327. **Meals on Wheels** only cover 144 consumer users the first year and is estimated to be up to 215 the third year.

Consequently, **Meals on Wheels** are expecting the number of meals increases in their demand in line with the capacity constraints. To ensure customers are not disappointed if they cannot access the service due to **Meals on Wheels** being at full capacity, a waiting list will be compiled of potential customers.

Seasonal demand is expecting to increase and decreases during the winter and summer months, respectively. This is based on the assumption that those with mobility issues and other vulnerabilities are less able to support themselves during winter weather.

Uncertainty of Future Demand.

Changes in governmental policy and resources could result in **Meals on Wheels** service being set up by Madrid City Council. Other charities might also provide similar services which could lower **Meals on Wheels** demand.

Consequences of Oversupply/Undersupply.

Due to **Meals on Wheels** commitment to avoiding waste in all their processes over supply is not an option. This would contribute to the increasing food waste problem which they are trying to minimise in 12,98%, as they plan to use 1 tonne of rubbish.

The consequences of undersupply can be detrimental to customers as they may be reliant on the meal deliveries. Therefore, it is important to avoid under supply at all

costs, even if this means having to switch supermarket suppliers or buy the ingredients at full price.

5.3. Revenue Sources.

The revenue resources of **Meals on Wheels** will come from: sales, citizenship donations and government grants. Despite **Meals on Wheel** is mainly a pro bono organization, it does not mean that the partners will cover the cost of running the company on the contrary, will be the consumer who will pay for the service. The price of the meal will cover, thus, the fix and variable cost, being the other two sources of revenues allocated to increase the capacity of the service by augmenting the number of consumer users, as well as by including other neighbourhoods of Madrid and by implement the business model in other territories of Spain in the long-term.

6. MARKETING.

6.1. Product.

Customers will receive x2 well-balanced and nutritious meals, appropriate to their dietary needs, in their chosen delivery time slot.

To keep the cold chain safe, Meals on Wheels will run using two refrigerated trucks to pick up the sell-by date food in the supermarkets. When the food arrives to the kitchen, will be implemented a doubled-check quality control system to guarantee good condition. Once the food pass it will be storage according to its nature in fridges, freezers or cupboards along the night. The delivery will be done placing the trays in the refrigerated trucks.

The sell-by date produce donated by the supermarket determines the menu choices for each day. It is unknown which food will be donated menus cannot be prepared in advance. To meet customer's needs and to offer variety and choice three meals will make each day. Again, depending on what is donated, the level of perishable ingredients used in the meals will fluctuate.

For example, if Meals on Wheels' receive a donated of bread it can be made into breadcrumbs and frozen until needed. By adopting approaches like this, Meals on

Wheels are ensuring that they are minimising their waste and utilising the raw ingredients as much as possible.

| Perishable Ingredients | Cupboard Ingredients |
|---|--|
| Lemon, 25g parmesan, parsley, fish fillets, | Breadcrumbs, salt and pepper, butter, rice |
| vegetable selection | |

Figure 3: an example of a meal.

6.2. Price.

The cost of two meals is 6.00€ (see appendix 2). This is good value for money as it provides some of their daily nutrition requirements delivered to their home.

The price setting will be based on costs. Therefore, the price per meal is the cost of producing it plus a margin for the company.

6.3. Place.

Our customer priority requirements ensure that customer's accessing the service will be in the six Madrid districts.

6.4. Promotion.

Meals on Wheels will be promoted using:

- Posters, leaflets and cards in health centres, hospital, social services, local council and disabled associations.
- Outdoors advertising in public transport such as bus or Madrid underground.
- Social Media: Twitter, Facebook, Instagram, among others.
- Website
- TalkTalk: in the case of disabled people this an important marketing tool as they are usually linked to disabled associations.

Promotion is the most important factor to consider as this will support **Meals on Wheels** in attracting customers and increasing their growth. The campaign for the first year will start in January 2019 and will cost 58,185 € (see appendix 1). The first action will be the

outdoors advertising that will be running 6 months. Specifically, will be a billboard in Puente de Vallecas metro station and in bus line Plaza Jacinto Benavente-Orcasitas. Along with the billboard **Meals on Wheels** will implement the posters, leaflets and cards along the whole year. All of them will provide information about social media and website.

To sum up, the campaign's aim is to make know the service. However, there are some differences between advertising measures. The posters, leaflets and cards will allocate in specialized services such as primary care, nutrition consultations, hospitals, social services and disabled associations. The goal is to arrive the consumer indirectly through professionals. By contrast, the outdoors campaign will be place strategically in the largest disabled population of Madrid and, thus, seeking to find directly the target group of the organization. On other hand, the website and social media are minor moves. Internet is not always accessible to disabled people, but would be useful if a third part intervenes in the communication process. Finally, **Meals on Wheels** trust on talk-talk, as know that Spanish disabled people are singularly connected. However, is a slow marketing activity and, therefore, will be effective in the long-term.

6.5. People.

As a co-operative, employees will share the mission statement to ensure good customer service is provided. The human resources structure will be settle in: 8 drivers (4 in the night shift and other 4 in day shift), 1 head kitchen, 2 kitchen helpers, 1 administrator, 1 cleaner, 1 nutritionist who will work as an external consultant.

6.6. Processes.

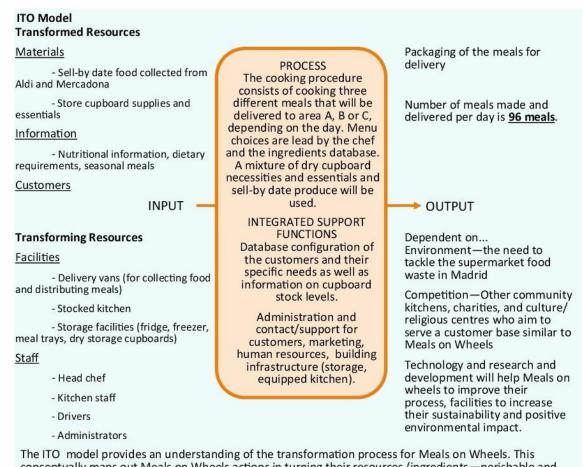
Delivery will take place with the customer present so information about the meals can be given.

6.7. Physical Evidence.

Customers will receive two meals that need to be reheated. Instructions will be provided along with nutritional information.

7. PRODUCTION PROCESS.

7.1. Productive Resources and Production System.



conceptually maps out Meals on Wheels actions in turning their resources (ingredients—perishable and long life-information, facilities and staff), in simplistic terms, into the tangible finished product of a cooked meal which is then ready for delivery to the customer.

Figure 4: transformation process for Meals on Wheels.

7.2. Core Activities.

Taking into account the information given by the graph above this line, the core activities of the company are the followings:

- Collection of the food from the chain supermarkets.
- To cook the food donated along with the stored cupboards and essentials.
- To deliver the prepared food to the consumer.

7.3. Logistic.

Meals on Wheels operation hours can be divided into two segments. Sell-by date food collection and sorting operatives from 10pm to 1am. These are unsociable but necessary

hours to work because this is when supermarkets are sorting their stock and getting rid of any sell-by date food. If it was not collected by **Meals on Wheels** during this time they may be unwilling to store it overnight as this is a cost to them in terms of space and correct storage facilities. Each truck, represented in the graph above by a different colour, will collect 17 supermarket stores. It is estimated a time of 5 minutes per store to pick up the sell-by date food. The driver helper will be picking the food inside the supermarket while the driver will storage the food indoors the truck. Both trucks will arrive the kitchen at 1am and the four employees will continue working for an hour (until 2 am) to double-checked the quality food and storage by nature in freezers, fridges and cupboards.



Figure 5: Meals on Wheels collection system.

Meals on Wheel's service resumes from 7am when the preparation, cooking and packaging of the meals begins and runs until 11am. Three meals will be prepared during this time: a standard meal, a vegetarian option and a diabetic option.

Two meals will be delivered to customers. It is down to the customer to decide whether they want three lunches, three evening meals, a mixture of both etc. All meals will be cooked so customers only need to heat it up. Instructions and serving recommendations will be given.

Delivery

Meals on Wheels will have two vans. These will be specially adapted to have refrigerators and freezers compartments to store the sell-by date food and to store the cooked meals

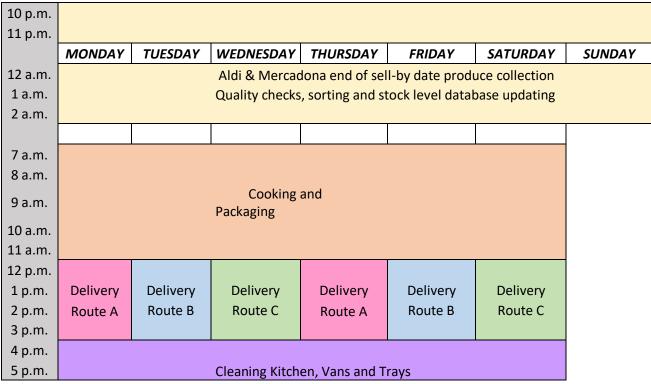


Figure 6: Meals on Wheels weekly schedule's estimations.

The delivery routes:

- Route A: Carabanchel and Usera.
- Route B: Puente de Vallecas and Moratalaz.
- Route C: Villa de Vallecas and San Blas-Canillejas.

Meals on Wheels are currently unable to use electric vans as the technology is still new and therefore, priced higher to reflect this. **Meals on Wheels** will make the switch to a hybrid or completely electric van in 2025 as they estimate price decreases by this time.

7.4. Localization.

Meals on Wheels will start running in 6 neighbourhood of Madrid. This 6 places have been chosen due to the lack of social services coverage. Despite there is a council services regarding to deliver food to elderly and disabled people, this service is leaving out families with a rent above minimum income allowance (known in Spain as RMI) and disabled people without visual impairment. Consequently, this service is not effectively reaching people with an average family remuneration or other kinds of disabilities that can limit the cooking skills such as patients of neurodegenerative illness (amyotrophic lateral sclerosis, for instance, fibromyalgia, chronic pain, profoundly hearing impairment, reduced mobility or severe mental illness like schizophrenia, bipolar disorder or major depression, among others).

It is not about a service targeted to people without economic resources. It is about a service that arrives where social services and charity do not do it. Hence, considering the disabled people or dependant adults per district and population density, **Meals on Wheels** will start covering the area of Carabanchel (with 15.040 possible consumer users), Usera (with 9.025 possible consumer users), Puente de Vallecas (with 16.459 possible consumer users), Moratalaz (with 6.494 possible consumer users), Villa de Vallecas (with 5.805 possible consumer users) and San Blas-Canillejas (with 8.353 possible consumers users) (Madrid City Council, 2017 statistics).

7.5. Standard Capacity and Maximum Capacity.

Meals on Wheels estimations about demand and food waste provide an excellent framework, as ensure the system scalability. On one hand, respect to demand, less than a 7 per cent of disabled population is covered by Madrid Council services. Therefore, Meals on Wheels' target group is large, with a proportion of 9,8 per cent of general Spanish population.

| | # physical disability | # mental disability | # intellectual disability | # hearing impairment | # visual impairment |
|---------------------|-----------------------|------------------------|---------------------------------|----------------------|---------------------|
| Demand in Madrid | 194200 | 43926 | 34397 | 22288 | 27516 |

Figure 7: Meals on Wheels' estimations demand in Madrid.

On the other hand, there is a huge quantity of sell-by date food in supermarkets, but is even bigger in the last part of food chain: the consumers. For that reason, **Meals on Wheel** will focus as well on consumers as of 2021. However, due to the high initial investment the company will start running under a small standard capacity. Once, the business model is settled, **Meals on Wheels** will increase its operational capacity until covering all the Spanish disabled-elderly population.

| | # kg/day in Spain | Spanish population | kg/citizen | # of Madrid's residents | kg/year in Madrid | kg/day in Madrid | # chains | # kg/day/ in Madrid |
|-------------|----------------------|--------------------|------------|-------------------------|----------------------|---------------------|----------|------------------------|
| Food waste | | | | | | | | |
| at | | | | | | | | |
| supermarket | 1463000000 | 45813140 | 31,9340696 | 8409738 | 268557158 | 735773,037 | 28 | 52555,2169 |
| Waste food | | | | | | | | |
| at home | 4081000000 | 45813140 | 89,0792467 | 8409738 | 749133126 | 2052419,52 | | 2052419,52 |

Figure 8: Food waste estimation per day.

| | # kg/day in Madrid | | 9 | # kg of fruit & vegetables | • | # kg of bread & pasta | # kg of milk products | |
|--------------------|-----------------------|------------|------------|-------------------------------|------------|--------------------------|--------------------------|------------|
| Sell-by date food | 52555,2169 | 1576,65651 | 12518,6527 | 4341,06092 | 22104,7242 | 5255,52169 | 6779,62298 | 52576,239 |
| Waste food at home | 2052419,52 | 61572,5857 | 488886,33 | 169529,853 | 863247,651 | 205241,952 | 264762,118 | 2053240,49 |

Figure 9: sell-by date estimations by the nature of product.

Meals on Wheels' first year standard capacity is 3,456 meals per month. 144 customers are served each day and are given three meals. The service runs 6 days a week.

| | Hours | Customers/h | Meals/custo | | | | # meals a |
|----------|----------|-------------|-------------|--------|-----------|-------|-----------|
| | delivery | our | mer | Trucks | days/week | Weeks | month |
| Standard | | | | | | | |
| Capacity | 6 | 4 | 3 | 2 | 6 | 4 | 3456 |
| On MAX | | | | | | | |
| capacity | 6 | 6 | 3 | 2 | 6 | 4 | 5184 |

Figure 10: standard capacity and maximum capital of **Meals on Wheels**, considering the logistic approach.

The standard capacity for meal delivery is four customers served each hour. The flexibility of the delivery capacity has the potential to serve a maximum of 6 customers per hour. This approach would enable **Meals on Wheels** to reach more customers, and have a greater impact in the community. However, operating a service on maximum capacity cannot be a long term plan as this does not give any flexibility. If there was a delay in delivering the meals to customers (for example, because of traffic) other customers will not receive their meals inside the timeslot. This prevents **Meals on Wheels** from achieving their goals and breaks their service level agreement with customers.

It would be unsuitable to use the popular chase capacity approach for **Meals on Wheels** as the nature of a cooperative demands level capacity. This is because demand for the service is expected to be high and the level of possible supply (sell-by date produce) can be incremented almost infinitely, as this would simply minimise the food waste problem on a larger scale.

The availability of supplies is important to factor into capacity planning as the service is dependent on the ingredients used to make the meals. For **Meals on Wheels** the sell-by date food collected from supermarkets will always be the basis of the main meals that are prepared. These meals will then be supplemented with dry ingredients, like spices, to create an interesting and well-balanced meal. As the store cupboard ingredients are a crucial element in creating a meal it is vital to keep these well stocked.

8. ORGANISATIONAL STRUCTURE AND HUMAN RESOURCES STRATEGY.

8.1. Attracting Talent.

Attracting talent holds is basis on workstation design. For that reason, it is necessary to specify the requirements of each workstation.

Requirements of the Drivers:

- 1. Ability to obtain and maintain a Driving Permit.
- 2. Familiarity with and understanding of the logistics and distribution sector and the critical role that the sector plays within the Spanish food industry.
- Experience of transport/logistics planning or interested and capacity to develop those skills.

- 4. Ability to maintain accurate route delivery sheets and communicate meal orders with appropriate timing.
- 5. Demonstrable ability to manage multiple customers with professionalism and integrity, consistently meeting or exceeding challenging targets.
- 6. Interviewing and assessment skills, with the ability to effectively identify specific needs.

Requirements of the Administrator:

- 1. Strong and effective spoken and written communication skills
- Strong math and record-keeping skills, including the ability to effectively compile
 and review fiscal and statistical information, and to create clear, concise reports
 and spreadsheets.
- 3. Ability to work with sensitive and personal information and maintain appropriate confidentiality.
- 4. Ability to interpret data and statistics for monthly and quarterly reporting. Ability to effectively access and utilize computerized systems and equipment (e.g. word processing, spreadsheet, database management, publications, etc).
- 5. Ability to develop and maintain effective working relationships with co-workers and the general public, with special sensitivity to the needs and priorities of older individuals and adults with disabilities.

Requirements of the Nutritionist:

- 1. Associate's degree in Human Services, Nutrition, Social Services or a related field.
- Minimum 2 years of work experience in a social services field to include assessing client needs, referring as appropriate and/or assisting with the completion of an application for service.

Requirements of the Chef:

- 1. Formal culinary studies with a minimum experience of 5 years.
- 2. Hold a Certificate in Foodstuff Handling.
- 3. Ability to use own initiative working independently, and having responsibility as an individual.

- 4. Ability to effectively organize work, determine priorities, make independent decisions and complete assigned duties with minimal supervision.
- 5. Ability to translate strategies into plans that can be effectively executed.
- 6. Able to demonstrate respect for work colleagues and company's beneficiaries.

Requirements of the Kitchen Helpers:

- 1. Hold a Certificate in Foodstuff Handling.
- 2. A positive and "can-do" attitude with the motivation to collaborate with others.
- 3. Ability to pack and label the cooked food for customer.
- 4. Desirable formal culinary studies.

Requirements of the Cleaner:

- Knowledge of the Food Security and Nutrition Act in its implications on the workplace.
- 2. Minimum of experience of 2 years.

8.2. Remuneration System.

| WAGES | # of employees | €/h | # of hours | # days/week | # week | TOTAL/month |
|-----------------------|----------------|---------------------|------------|----------------|--------|-------------|
| Head Chef | 1 | 15 | 4 | 6 | 4 | 1440 |
| 2x Kitchen Helpers | 2 | 10 | 4 | 6 | 4 | 1920 |
| 2x Delivery DAY | 4 | 12 | 4 | 6 | 4 | 4608 |
| 2x Delivery NIGHT | 4 | 14 | 4 | 7 | 4 | 6272 |
| Administration | 1 | 8 | 5 | 6 | 4 | 960 |
| Cleaner | 1 | 7,5 | 3 | 6 | 4 | 540 |
| Nutritionist | 1 | 1200€ / 6 months | | | | 200 |
| | | | | | | 15940 |

8.3. Performance Measurement.

Many years ago, Peter & Waterman's (1982) cited in Delaney and Huselid (1996), highlight the importance of employee participation and empowerment of job redesign in the performance of the organization as a whole. A decade later, Pfeffer (1994) cited in Delaney and Huselid (1996) emphasis positive associations between firm-level

measures and organizational performance. As a consequence, not only the firm must focus on rising the hiring standards, but also in motivational practices linked to individual performance. Nowadays, there is a full battery of tools regarding performance measurement and companies worldwide use them to guarantee it quality service. **Meals on Wheels** will design 360 Degree Feedback Survey twice a year within the logic of continuous development of teamwork environment. The high performance shall be awarded with wage premium and professional training of the interest for the worker and the company.

9. FINANCE PLAN.

9.1. Profit and Loss Account.

| PROFIT & LOSS STATEMENT | |
|---|------------|
| | |
| for the period 1 January 2019 to 31 Decem | ber 2019 |
| | |
| Income | |
| Sales | 248832 |
| Government Grants | 0 |
| Citizenship Donations | 0 |
| | |
| Total Revenue | 248832 |
| Cost of Goods Sold (basic inventory) | -793,31 |
| Gross Profit | 248038,69 |
| | |
| Operating Expenses | |
| Salaries | -191280 |
| Rent | -12000 |
| Utilities | -1800 |
| Telephone | -600 |
| Fuel | -11346 |
| Advertising | -900 |
| Insurance | -3600 |
| Depreciation | -12432,48 |
| Office Supplies | -360 |
| Total Operating Expenses | -234318,48 |
| Operating Profit (EBIT) | 13720,21 |
| | |
| Interest Expense (CREAS) | -1000 |
| | |
| Income Before Taxes (EBIT) | 12720,21 |

| Taxes | -4452,0735 |
|------------|------------|
| | |
| Net Income | 8268,1365 |

9.2. Company Valuation.

9.2.1. <u>Cash Flow Analysis.</u>

| | Year 0 | Year 1 | Year 2 | Year 3 |
|-----------------------|-------------|-------------|-------------|-------------|
| Av. Meals Delivered | | 41472 | 50400 | 62208 |
| Prize | | 6 | 6 | 6 |
| Sales | | 248832 | 302400 | 373248 |
| Citizenship Donations | | 0 | 2500 | 4000 |
| Government Grants | | 0 | 10000 | 30000 |
| Total Income | | 248832 | 314900 | 407248 |
| Wages | | -191280 | -191280 | -191280 |
| Rent | | -12000 | -12000 | -12000 |
| Utilities | | -1800 | -1800 | -1800 |
| Telephone | | -600 | -600 | -600 |
| Basic Inventory | | -793,31 | -793,31 | -793,31 |
| Fuel | | -11346 | -11346 | -1418,25 |
| Insurance | | -3600 | -3600 | -3600 |
| Adversting | | -900 | -30000 | -30000 |
| Office Supplies | | -360 | -360 | -360 |
| Interest expense | | -1000 | -1000 | -1000 |
| Total Expenses | | -223679,31 | -252779,31 | -242851,56 |
| Kitchen Equipment | -35328,99 | | | |
| Kitchen Construction | -50000 | | | |
| Trucks | -37500 | | | |
| Inscription fee | -12300 | | | |
| Opening licence | -206,55 | | | |
| Adversting | -58185 | | | |
| Initial Investment | -193520,54 | | | |
| Year's Value | -193520,54 | 25152,69 | 62120,69 | 164396,44 |
| r (WACC) | | 35 | 35 | 35 |
| Present Value | -193520,54 | 18631,62222 | 34085,42661 | 66817,63552 |
| DCF | -73985,8556 | | | |

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APPENDIX

1. Running Cost of the Business

| Initial investment: kitchen equi | | | |
|----------------------------------|------|----------------|-------------------|
| | | | |
| Concept | Unit | Prize per unit | Prize per concept |
| Eight Burner Cooker | 1 | 5772,18 | 5772,18 |
| Kitchen Sink | 2 | 249,24 | 498,48 |
| Fryer | 1 | 365,2 | 365,2 |
| Freezer Cabinet | 3 | 409,1 | 1227,3 |
| Microwave | 3 | 424,71 | 1274,13 |
| Meat Mincer | 1 | 487,63 | 487,63 |
| Working Table | 3 | 536,15 | 1608,45 |
| Industrial Oven | 3 | 575,96 | 1727,88 |
| Refrigerator Cabinet | 4 | 724,79 | 2899,16 |
| Dishwasher | 1 | 3227,6 | 3227,6 |
| Storage Closet | 1 | 4694,62 | 4694,62 |
| Trays Cart | 3 | 444,68 | 1334,04 |
| Wardrobe Table | 4 | 740,52 | 2962,08 |
| Broom Cupboard | 1 | 774,64 | 774,64 |
| Garbage Bin | 4 | 24,2 | 96,8 |
| Gloves Protecting Against Cut | 3 | 97,41 | 292,23 |
| Sterilizer | 1 | 311,7 | 311,7 |
| Plate | 50 | 1,68 | 84 |
| Bowl | 20 | 1,65 | 33 |
| Steel Glass | 10 | 3,96 | 39,6 |
| Trays | 300 | 7,44 | 2232 |
| Chooping Board | 10 | 14,71 | 147,1 |
| Set Professional Knives | 5 | 249,45 | 1247,25 |
| Industrial Pot | 5 | 40,37 | 201,85 |
| Professional Pan | 5 | 27,65 | 138,25 |
| Industrial Blender | 2 | 411,73 | 823,46 |
| Industrial Grinder | 2 | 414,18 | 828,36 |
| | | | 35328,99 |

| Initial invesment: ot | her expenses | | |
|-----------------------|--------------|----------------|-------------------|
| | | | |
| Concept | Unit | Prize per unit | Prize per concept |
| Assembling kitchen | 1 | 50000 | 50000 |
| Opening Licence | 1 | 206,55 | 206,55 |
| Inscription fee | 1 | 12300 | 12300 |
| Truck | 2 | 18500 | 37000 |
| | | | 99506,55 |

| Initial investment: marke | ting | | | |
|---------------------------|-------------------|------------------|----------------|-------------|
| | | | | |
| Concept | Number of actions | Number of months | Price per unit | Total price |
| Outdoors advertising | 2 | 6 | 4225 | 50700 |
| Posters | 1500 | 12 | 1,99 | 2985 |
| Leaflets | 3000 | 12 | 0,5 | 1500 |
| Website design | 1 | 12 | 3000 | 3000 |
| | | | | 58185 |

2. Cost per month estimations

One of the main cost of our service company is the wages. Meals on Wheels decided not to take into account volunteers in their main activity because it can lead to fluctuations in the service that run to customer dissatisfaction and, consequently, to loss of clients and, finally to bankruptcy. For that reason, our firm has a team of 13 person (1 chef, 2 kitchen's helpers, 4 drivers, 4 drivers' helpers, 1 administrator and 1 cleaner). Besides, the company externalized the services of a nutritionist that advice with the meals and personalized it for a 3 different profile of services users: main standard (low fat, salt and sugar), gluten free and diabetes. Bearing in mind this employees, the total amount that our firm is going to spend per month in wages is estimated in 15,940€. Apart from that, rent and utilities are estimated in 1,200€ considering expenses of similar business. Respect to basic inventory, obviously Meals on Wheels cannot trust in the fluctuated donations of supermarket. Despite we estimated, that the amount of food will be more or less constant, it is true that is estimation is related with past amount waste food considerations and, in that sense, we have to provide ourselves with a basic inventory that avoid out of stock. Besides, there is food that is not going to be donated such as oil, butter or salt, for instance. The basic inventory involves us 793.31€ per year and, thus, 66,11€ per month.

| BASIC INVENTORY | Quantity | Av Price | Total | |
|-----------------------|----------|----------|--------|--|
| Legumes (kg) | 70 | 1.80 | 126.00 | |
| Rice (kg) | 50 | 1.21 | 60.50 | |
| Pasta (kg) | 60 | 1.10 | 66.00 | |
| Eggs (dozens) | 30 | 1.86 | 55.80 | |
| Sal (kg) | 3 | 1.07 | 3.21 | |
| Butter (kg) | 10 | 6.40 | 64.00 | |
| Oil (litres) | 30 | 3.95 | 118.50 | |
| Potatoes (kg) | 200 | 1.16 | 232.00 | |
| Garlic (unit) | 20 | 0.19 | 3.80 | |
| Onion (kg) | 50 | 0.93 | 46.50 | |
| Spices (unit bottles) | 20 | 0.85 | 17.00 | |
| | | | 793.31 | |

Related with fuel, it is calculated taking into account the number of kilometres per district and the average price of fuel in the market. In that context, route A and B arises a cost per truck and day of 1.2€, while C is estimated in 4,19€. Each route runs two days per week and, thus, the total amount per month is 19.2€ per route A and B and 67.04€ per route C. The total amount of fuel is, for that reason, 105.44€ per month and truck.

| ROUTE A | | ROUTE B | | ROUTE C | |
|-------------|-------|-----------------------|-------|-------------------------|-------|
| Districts | Km | Districts | Km | Districts | Miles |
| Carabanchel | 14,09 | Puente de Vallecas | 14,89 | Villa de Vallecas | 51,56 |
| Usera | 7,7 | Moratalaz | 6,34 | San Blas- Canillejas | 21,81 |
| | 21,79 | | 21,23 | | 73,37 |

| | Estimated km | 10% desviation | Total km | Cost per truck | # truck | #days | #weeks | Cost per month |
|------------|--------------|-------------------|-------------|----------------------|---------|-------|--------|----------------------|
| Route A | 21,79 | 2,179 | 23,969 | 1,2 | 2 | 2 | 4 | 19,2 |
| Route B | 21,23 | 2,123 | 23,353 | 1,2 | 2 | 2 | 4 | 19,2 |
| Route C | 73,37 | 7,337 | 80,707 | 4,19 | 2 | 2 | 4 | 67,04 |
| | | | | | | | | 105,44 |

Plus, considering the kilometres will do the two trucks to pick up the food the cost of fuel is estimated in 367,31 € per month and truck. Totally, the fuel of picking up the food and deliver it to consumer users is estimated in 945,5 €.

The insurance is a key element of our service model, especially is we considering the current regulation that transfer the liability from supermarkets to our business model. In that sense, the insurance will cover us from cooking and delivering food and will fix in a total amount of 300 per month. Finally, in other to replace the initial investment in the future, we have to consider depreciation and per month is estimated in 1,036.04.

| | | Amortization | Am. | Am.cost |
|---------------|-----------|--------------|------------|------------|
| | Cost | (t) | Cost year | month |
| Kitchen | | | | |
| equipment | 35328,99 | 5 | 7065,798 | 588,8165 |
| | | | | |
| Kitchen build | | | | |
| out | | | | |
| consttruction | 50000 | 30 | 1666,66667 | 138,888889 |
| Trucks (2) | 37000 | 10 | 3700 | 308,333333 |
| TOTAL | 122328,99 | | 12432,4647 | 1036,03872 |

Taking into account all these cost our business arise a total cost per month of **19,187.65€** and, thus a total cost per two meals of **5.55€.**