

# MARKETING PLAN OF

# x MYBY DRONE



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## 1. EXECUTIVE SUMMARY

Myby Drone is a small company specialized in offering aerial image capturing services in high resolution by drone technology. In 2013, a young entrepreneur of Castellon de la Plana, Miguel Solsona, decided to create a company joining one of his passions, driving vehicles by remote control, and his job, leading to the birth of this company.

### Image 1. Company logo



The company was born in the technological era, in which drone industry is in constant growth. We will try to understand the development of this industry in the current context, marked by the global economic crisis that still lingers since it began in 2008.

Throughout this marketing plan we will analyze the available resources of the company, and we will carry on a detailed analysis of the environment in which it operates. At this point we will give special importance to know the current legislation on drones. As a novel technology, its legal regulation is not yet adequately adapted to the demanded needs of this market today.

Finally, after an exhaustive analysis of the company and everything that surrounds it, will pose some recommendations, strategies and procedures to be followed to achieve the goals.

## 2. SITUATIONAL ANALYSIS

Before beginning with any concrete analysis of Myby Drone it is important to know the basic aspects that shape it, to be able to work from a solid base of information about the company. Knowing aspects as its mission, its physical location or the values that identify it, will allow us to develop a more precise analysis throughout this marketing plan, being aware at all times of where the company is at the present time and what are its possibilities.

## 2.1. INTERNAL ANALYSIS

### 2.1.1 COMPANY PRESENTATION

Myby Drone was born in Castellón and it is dedicated to offer services of aerial image using drone technology that has a presence both in Spain as in United States.

Miguel Solsona, the owner, was born in Castellón and studied graphic design. Professionally has been dedicated to the realization of audiovisual content, either capturing photo or video through his camera, as doing it through his computer. Since he was ten, Miguel has spent part of his leisure time in drive vehicles by radio control, learning throughout its mechanics and acquiring great skills on mount and understand these appliances. In addition he has competed in races of vehicles by radio control where he has acquired a huge driving ability.

Before the rise of the drones, he decided to buy one as an amateur to learn its operation and use for leisure. However, in 2013 he decided to join his job to his hobby of driving vehicles by remote control and acquired its first professional drone with a camera. Thus, Myby Drone was born.

The headquarter is located in Castellón de la Plana, in Colón Street, 45 - 12002 Castellón de la Plana.

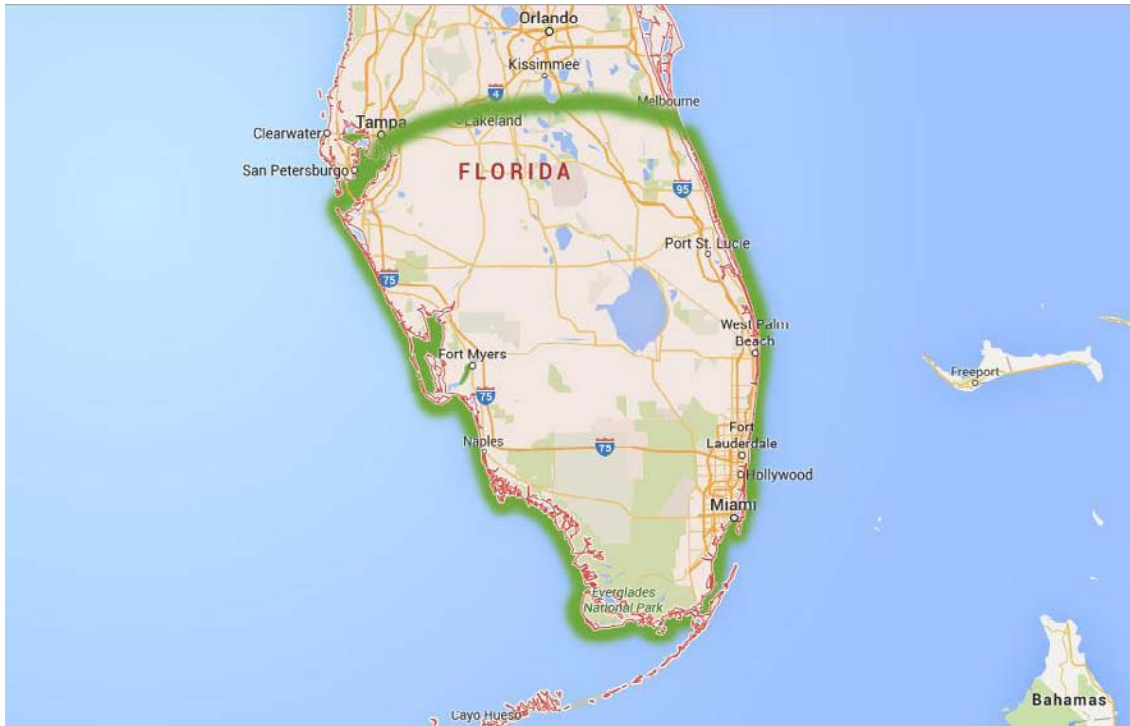
**Image 2. Colón Street, 45 – 12001 Castellón de la Plana**



Source: Google maps

In the United States he only offers his services in Miami and the whole area surrounded in green in Image 3, in a small radius of action and without having a physical headquarter. When someone from Florida hires his services, he moves expressly from Spain with his recording equipment to do the job, so that it is not necessary to have an own local.

**Image 3. Florida – United States**



*Source: Google maps*

The company offers all kind of image drone services, without having a closed portfolio of specific services. Customers can expose their needs through the way they prefer (social networks, telephone, e-mail or personally) and the company adapts itself, always complying with the legal provisions, to meet their particular needs.

Among the most popular services are:

- Sports Events
- Corporate videos
- Marketing for companies
- Real estate promotion
- Documentaries

Image 4. Drones in the stadium



Source: Kemik compro lo que quiero

However the possibilities are infinite and are limited only to the ignorance of the possibilities that drones offer or to the own imagination of the customer.

The mission, vision and values that define this company are:

**Mission** - Capture the moment from incredible perspectives with our last generation equipment to be able to offer the highest image quality possible to our customers.

**Vision** - To be the leading company in capturing aerial photography and video in Spain and Florida, working for companies and individuals.

**Values:**

- Quality - The Company always offers the maximum quality of the market. Currently performs recordings in 4K quality with a high transfer rate, which means a maximum fluency of images.
- Professionalism - The owner demonstrates a very large implication in his work and this is reflected in the outcome of its work.
- Passion - Miguel has succeeded in converting his hobby on his job and this means a very high degree of passion for his job.
- Protection of the environment - The work of capturing aerial images with drones contributes to the conservation of the environment and is an advance in comparison with the techniques previously used.



## **2.1.2 COMPANY RESOURCES**

The available resources of the company are the essential elements that bring value and allow for the development of its activity, to try to position itself in the best way within the market. We will analyze it from three different aspects: human, tangible and intangible. In the tangible resources are include those material goods which the company owns differentiated in physical and financial, while in the intangible assets are those that provide value in spite of not being physical elements, which are the marketing resources.

### **2.1.2.1 HUMAN RESOURCES**

The only human resource available to the company is the owner himself, Miguel Solsona. The fact of joining hobby within job constitutes a tremendous value for the great functioning of this company. Its owner works in that what he loves and from years ago has contact with this world, so that, despite of being a young company, gives him a great deal of experience. To this experience must be added the enterprising spirit of Miguel that previously was the owner of his own business in different areas. The enthusiasm at work gives a great motivation in his professional development day to day.

In addition, the knowledge of a key language as English allows the development of its activity in any part of the world where need its services.

### **2.1.2.2 TANGIBLE RESOURCES**

In the tangible resources we will make a distinction among financial resources and physical resources.

#### **2.1.2.2.1 FINANCIAL RESOURCES**

This section is not possible to develop it. The owner prefers not to provide financial data of the company.

#### **2.1.2.2.2 PHYSICAL RESOURCES**

- **Dispatch** - This is a small office located in Colon Street 45, in a very central area of Castellón de la Plana. Despite its good location hasn't got any badge of the company to allow the bystanders identification. This is due to the fact that the office is located within a shared local family-owned designed also to other professional activities of another nature. This place is mainly intended to the job of editing of the captured images prior to delivery to the customer, if they so requested.

- **Computer and hardware** - To carry out the task of editing video and photos he makes use of a modern computer enough to be able to withstand the high quality of the images collected by the drone without presenting any kind of reluctance. It is also essential to the use of numerous high capacity external memories where store images in raw or completed projects and be able to comfortably transport.

- **Drone** - The main physical resource necessary for the implementation of the activity is the drone. The company currently has an Inspire Model 1 Pro drone equipped with a DJI X5 camera. This is a quadcopter, which have 4 propellers to achieve its flight. It is one of the smaller professional drone dedicated to recording of the whole market but by no means worse. The design of its engines and its propellers make it a very agile and quick drone, with which a highly skillful pilot can get incredible images. Its DJI X5 camera is one of the smaller cameras built to incorporate a drone and achieves a pristine quality in 4K, recording at 30 frames per second and capture 16 Megapixels photos. In addition it counts with different modes of intelligent flight where the drone is capable of recording the desired object approaching and moving autonomously.

**Image 5. Inspire 1 Pro**



*Source: DJI*

- **Personal vehicle** - Although it is not owned by the company, Miguel makes use of it to carry his drone and move himself to the places where it has been hired within the national level.

### **2.1.2.3 INTANGIBLE RESOURCES**

To have knowledge about its intangible resources, it is essential to analyze the four marketing elements that define the personality of the company and making a special mention of the social responsibility acquired in this type of business.

#### **2.1.2.3.1 MARKETING RESOURCES**

##### **2.1.2.3.1.1 PRODUCT**

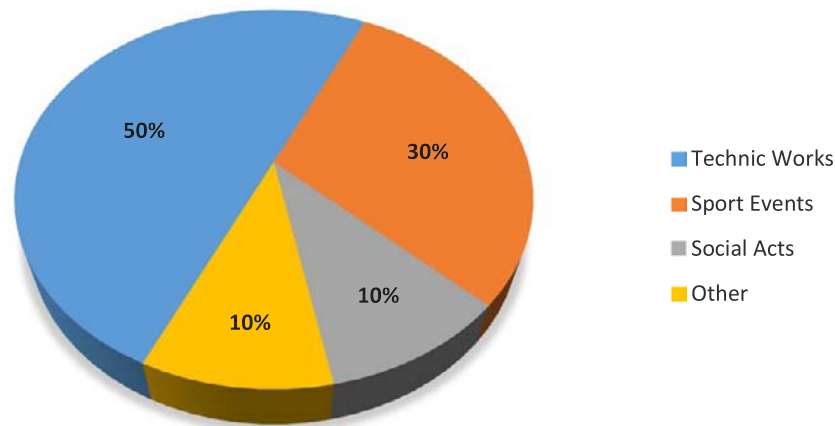
The products that Myby Drone offers are all kind of image services through the use of drone technology for both, companies and individuals. It is characterized by offering a high quality final product, both by the image quality as by the shots that the skill of piloting of the pilot allows to obtain. By the use of this appliances is possible obtaining imaging, either photo or video, from points of view that only a few years ago seemed impossible to achieve or were economically expensive.

There is also the further treatment of the images in the field of editing and adjustment if the client so requests. Demanded services are usually both the adjust image stabilizer to reduce any type of vibration in the recording caused by the drone and the color setting. The hiring of this additional service is usually linked to creative or high level of production works, as can be weddings or corporate videos of companies.

The customer may decide another type of elements that should have its contracted product: duration, recording angle, etc. However the owner has enough knowledge and experience to analyze the situation of the environment and the needs of the customer and so advise the customer the best options to obtain a product with the highest quality.

In Graph 1 are collected the most demanded services to the company.

Graph 1. Current rates of amount of work by type of service



Source: own elaboration. Data: Myby Drone

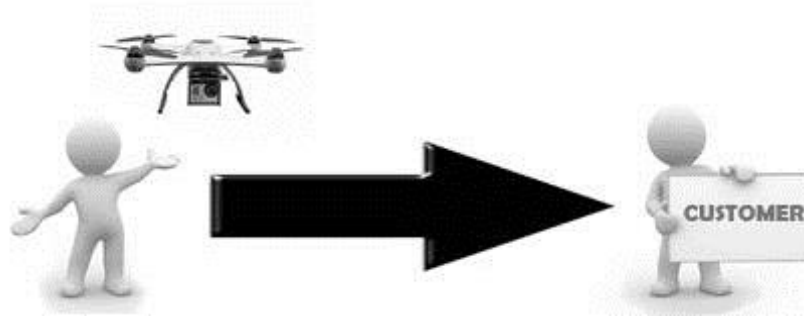
As we see half of the provided services are technical works contracted by companies such as measurements of perimeters of plots, labor tracking or recording of infrastructure. Sport events correspond largely to the recording of running or cycling races. In social events highlights the recording of weddings, which is growing within the sector of aerial recording.

It is, as it is obvious, an intangible product since the customer purchased the service of obtaining images that will be delivered later in digital format. It has a durable character as their use does not imply the consumption nor expenditure of the same.

#### 2.1.2.3.1.2 DISTRIBUTION

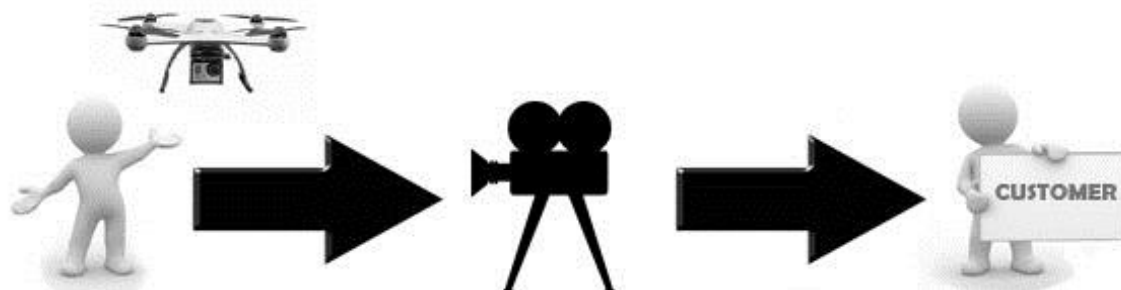
Myby Drone offers service to the customer through two different distribution channels.

The main distribution channel follows a direct way without any type of intermediary. The customer contacts the company through the way he wants (internet, telephone, personally, etc), presents its needs and the company, after completion of the work, offers the finished product to the customer directly.

**Image 6. Direct distribution channel**

*Source: own elaboration*

The second option related to the distribution channel is the hiring of Myby Drone through audiovisual producer agencies that would act as an intermediary in the process. The client requests the product to the producer, and this agency contact with the company who will perform the capture of images. Once the recording is done the product is sent to the producer agency that would be responsible for carrying out the editing and the assembly and make the product available to the end customer.

**Image 7. Distribution channel with an intermediary**

*Source: own elaboration*

### **2.1.2.3.1.3 PRICE**

The provision of a service as the recording and the aerial photography with a drone presents some particular features. This is a service that does not have a fixed cost beyond the one generated in the displacement to the point of need. This fact allows many competitors to implement a policy of low prices and thus obtain a high quantity of work in spite of the fact that the benefit would be very small.

But this low-price policy entails a considerable risk. There are many risks in that the appliance may be damaged in the air being able to get to be wrecked by a; failure of the engines, unexpected air currents, impact of a bird, etc. In this way the work can be impossible to obtain if the pilot does not have the ability and the necessary experience. This kind of setbacks could cause serious problems in the viability of the company.

That is why Myby Drone applies a policy of high prices based on the perceived value for the customer, where all the risks existing in the flight of drones are covered and where the skill and experience of the pilot are a fundamental part, not only in security, but also to quality of work; more even taking into account that this is a professional equipment valued at 5,000 euros whose risk is higher than with any other amateur appliance. In addition, depending on the situation and the conditions of the environment is appropriate to debit an extra supplement for dangerousness, for example in recordings in which the drone flies over the sea.

**Image 8. Prices**



*Source: own elaboration. Data: Myby Drone*

As we see, the price of hiring the same service is different in each country. The economic situation of the countries and the purchasing power of their citizens is not the same among both and therefore the situation in the United States allows setting higher prices.

#### **2.1.2.3.1.4 COMMUNICATION**

Myby drone carries out three of the main tools of communication at different levels: advertising, promotion and direct marketing.

Of the three tools used, advertising is the one that maybe would be at a lower level. The company does not perform any type of advertising campaign in the media, but it owns shirts and jackets with the logo of the company to broadcast mode.

**Image 9. Clothes**



*Source: Myby Drone Facebook*

The second tool is promotion. Sometimes recording services are hired, especially on the part of other companies dedicated to technical works, to perform the regular monitoring of a place or a particular construction. For these occasions the company give away a discount to the customer based on the volume of days contracted to perform the necessary recordings.

The last and most used tool is direct marketing. The company makes use of the social networks; Facebook and Vimeo, because they are two of the social networks that allow to display any video efficiently. The main function of the Facebook account is to maintain a close treatment with his followers and inform them of news about the company. Before any doubt that may arise to any person, the company responds in a cordial manner in a short period of time. In regard to the account on Vimeo, it is oriented toward a more professional level. On it, is published the last work done that at the same time serves as a presentation to other potential clients.

Another element of direct marketing carried out is "mailing". Usually performs an offer of services and reports about the possibilities that offers a drone to different companies by email. As is evident not all kind of companies could be interested in the hiring of this type of services, but there are some that are potential customers due to the activity that play; construction, real estate, etc.

### **2.1.2.3.2 CORPORATE SOCIAL RESPONSIBILITY**

Currently any company must have the responsibility and ethic not only to not be harmful to the environment but of providing direct environmental benefit and contribute to the maintenance of the ecosystems that each time are most devastated by guilt, in large part, of many companies that have as a priority the generation of economic profits without any concern of the impact that produces around it.

The use of technology seems to be automatically associated to damage the environment. However, in a business like Myby Drone that does not happened. The use of drone technology involves not use previous technologies that were used for the same purpose, as could be airplanes or helicopters. These air appliances, besides being enormously expensive, produced a very damaging impact in terms of pollution. Drones are electrical devices altogether that do not emit any type of contamination by use of fuels to the outside.

Not only that. These devices can be used exclusively to measure parametric values related to the ecosystem and fight directly against the destruction of the environment.

## **2.2 EXTERNAL ANALYSIS**

It is vital for any organization to understand the world around them. The company is in constant interaction with their environment and must know all the factors which are out there and that exert a direct or indirect influence within the company itself.

### **2.2.1 MACROENVIRONMENT**

In the macroenvironment analysis we are going to study the external factors that affect the whole of companies of the same sector from different points of view.

#### **2.2.1.1 POLITICAL AND LEGAL FACTORS**

The unstable political situation in which is currently Spain is of total uncertainty. After the last elections and the numerous cases of corruption, the political situation in the country is very unstable and are moving toward an unknown situation. The announcement of the repetition of the general elections makes the country take an entirely uncertain course.

The political situation in the United States does not differ much from the Spanish one. There is a lot of uncertainty for the future by the ignorance of next elections. The country is in the midst of the election process for the candidates of the Republican and Democratic parties to stand in the elections to be held in November 2016, and which is marked by the billionaire candidate Donald Trump, which has many support with his



radical discourse. His victory would lead the country to an absolute unknown situation in all aspects.

In Spain, airline regulation did not contain any type of regulation of these unmanned flying devices prior to the rules adopted in July 2014. This led AESA (Agencia Estatal de Seguridad Aérea) to develop an interim restrictive control plan to restrain efficiently this growing phenomenon. This is the responsible organization for ensuring compliance of the rules of civil aviation in the Spanish airspace. The main norms are the flight of the drone to a maximum height of 120 meters, prohibition of flying at night and over urban areas, minimum age of 18 years old or a maximum distance of 500 meters between the appliance and the pilot.

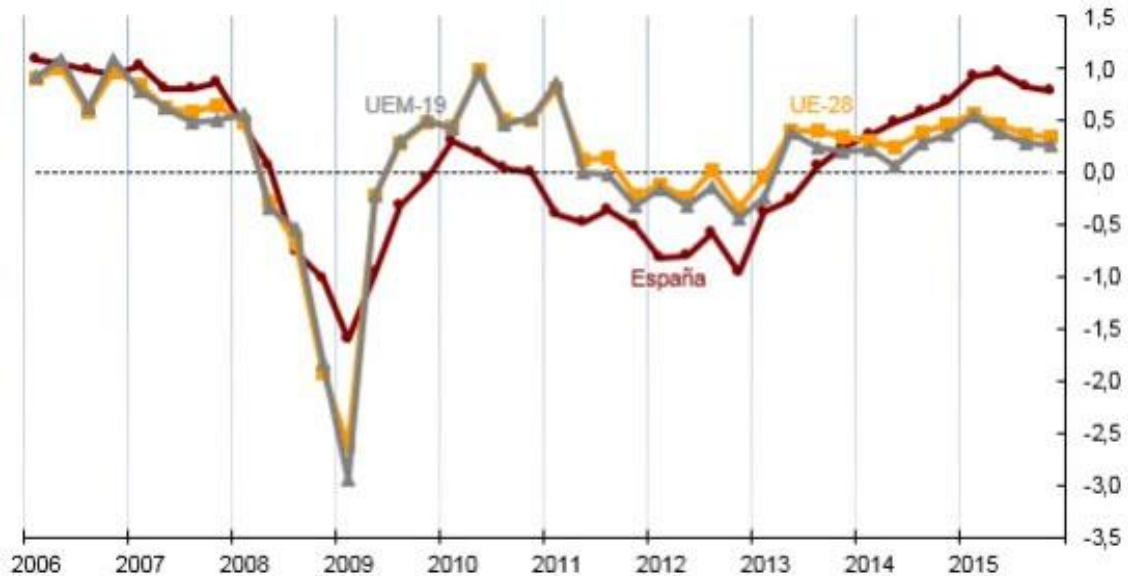
Due to the political uncertainty referred to above, the elaboration of a new legal framework adapted to the actual needs of the airspace has been relegated to the background temporarily. Therefore the limitations to control these units are very large currently and companies in the sector are expressly requesting the regulation of this law.

Drone legislation in the United States was regulated in February 2015. The federal agency of civil aviation (FAA) together with the Department of Transport developed the rules that would fill a legal vacuum been so far in the field of drones. For under 25 kilogram drones is established a minimum age of 17 years to pilot, a maximum height of flight of 152 meter, prohibition of night flight and a speed limit of 160 km/h for engines of the appliances.

### **2.2.1.2 ECONOMIC FACTORS**

The main economic factor that alters virtually all businesses is the global economic crisis that affects especially to countries such as Spain. As we can see reflected through the GDP, there has been a downward trend since they occurred the first symptoms of the crisis in 2007, reaching negative values of growth since 2008 until mid-2013, except for a small growth at the beginning of 2010. From mid-2013 the growth has been positive and braked the harsh impact of the crisis so far.

Graph 2. GDP in Spain



Source and data: INE

From Europe are increasingly the voices that say that it will be necessary a restrictive fiscal reform, that results into an increase in similar taxes to the one carried out during the previous years of crisis. This would directly affect the consumption of goods and services of the citizens and therefore to the shops and businesses. This is due to the fact that the economic figures of Spain are still not good enough. The growth of GDP from 2014 became positive values standing at 0.8% for this year to 2.5% estimate for the present year. These signs of recovery are mainly due to the recovery of confidence in both households and investors, aided by the reduction of unemployment over the past three years, despite the fact that there are still some very high unemployment figures; 21.8% in the year 2015. The main factors of this positive trend of unemployment are the reduction of the active population and the new creation of temporary contracts.

In contrast, national debt of the country keeps growing as we can see in Table 1, standing at an estimated value of 98.8% for the year 2016, and is expected to continue growing in the coming years. It can be said generally that the economic crisis has affected particularly to Spain and has caused a severe downturn in the standard of living of the population.

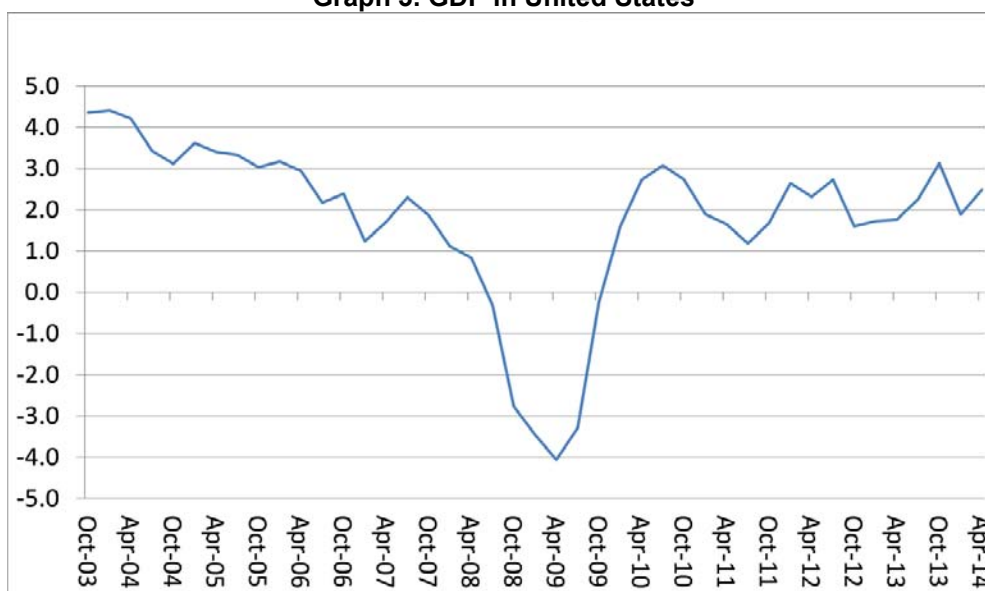
**Table 1. Debt and unemployment rates in Spain**

|                                    | 2012 | 2013 | 2014 | 2015 | 2016 (e) |
|------------------------------------|------|------|------|------|----------|
| <b>National debt (in % of GDP)</b> | 84,4 | 92,1 | 97,7 | 98,6 | 98,8     |
| <b>Unemployment rate</b>           | 24,8 | 26,1 | 24,5 | 21,8 | 19,9     |

Source and data: Santander Trade

The United States economy is the main worldwide. In spite of this, the economic crisis has also caused a big impact on its economy. From 2014 the country has entered into a state of recovery with an annual GDP growth of 2.4% for this year, 2.6% for 2015 and an estimate of 2.8% for 2016, thanks largely to the consumption and investment in corporate modernization. Thanks to this growth has managed to pass from a GDP of 16.115,25 (billions of USD) in 2012 to 18.697,92 (billions of US dollars) in the first period of 2016. The national debt of the country is 105 per cent of GDP and this amount is expected to continue growing. In addition the strength of the dollar respect to the European and Japanese currency has generated worst values to the usual in exports.

**Graph 3. GDP in United States**



Source and data: BEA

With regard to the rate of unemployment in the American country, is located at an estimated value of 4.9% in this 2016. As we see in Table 2, has undergone a significant evolution in comparison with the rate of 8.1 per cent in the year 2012. As in Spain, service sector constitute the main sector of the country with 81.2% of the volume of total employment.

**Table 2. Debt and unemployment rates in the United States**

|                                    | 2012 | 2013 | 2014 | 2015 | 2016 (e) |
|------------------------------------|------|------|------|------|----------|
| <b>National debt (in % of GDP)</b> | 2,2  | 1,5  | 2,4  | 2,6  | 2,8      |
| <b>Unemployment rate</b>           | 8,1  | 7,4  | 6,2  | 5,3  | 4,9      |

Source and data: Santander Trade

### 2.2.1.3 SOCIOCULTURAL FACTORS

There is a positive trend associated to the educational level of the world population. A few years ago it was rare that there was qualified people with higher education. However this situation is in throwback and as we see in Table 3, each year a greater percentage of the population acquires a title on higher education. This improvement in the educational level of the general society implies an advance in science as the technology and therefore the provision of a highly qualified staff to all related industries.

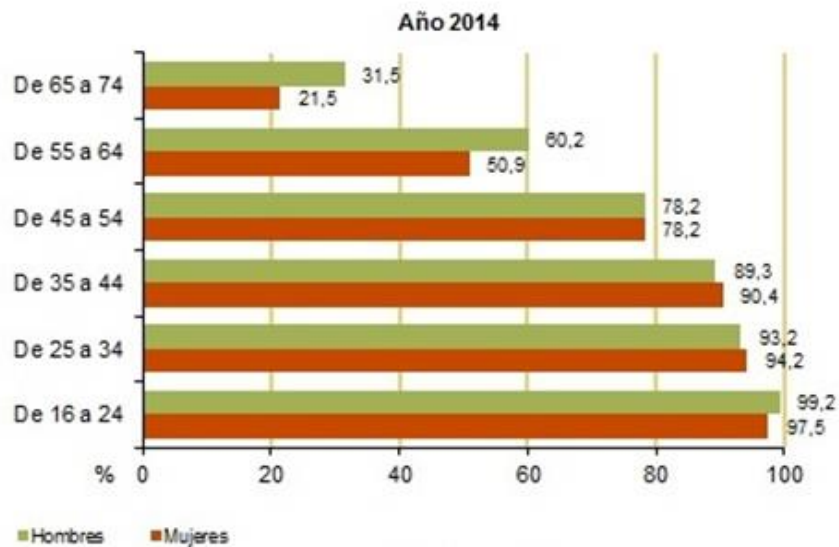
**Table 3. Percentage of the population over 25 with higher studies**

|                    | E. Superior |      |      |      |      |      |      |      |      |      |      |  |
|--------------------|-------------|------|------|------|------|------|------|------|------|------|------|--|
|                    | 2004        | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |  |
| <b>AMBOS SEXOS</b> |             |      |      |      |      |      |      |      |      |      |      |  |
| España             | 26,7        | 28,5 | 28,8 | 29,3 | 29,5 | 30,0 | 31,0 | 31,9 | 32,6 | 33,7 | 34,7 |  |

Source and data: Ministerio de Educación, Cultura y Deporte

In addition the adult population over 55 years old are interested and makes use of the technologies in their day to day. In Graph 4 we can see the range of age in which the population makes use of the most widespread technology; Internet. We can consider these data as a rough estimate of how society is becoming familiar with the technologies. In a period of 30 years, 95 per cent of society will be composed of people who have lived in their day to day with technological gadgets and therefore every time a greater percentage of the population will make use of this type of equipment on a daily basis.

**Graph 4. Population that has used the Internet in the last three months by age (%)**



Source and data: INE

In this new society there is also a change of awareness focused on the maintenance and care of the environment, where the people are becoming increasingly sensitized to the use of clean alternatives. It is increasingly to the common use of new technologies aimed at energy savings as appliances, hybrid vehicles or purely electrical, or the own aircraft by air.

### 2.2.1.4 TECHNOLOGICAL FACTORS

The technology evolves very quickly and as a result, drone industry advances and grows at the same speed. There are several types of drone that presently exist and which can be classified in different ways.

According to the type of wing:

**Fixed-wing** - Its wings are fixed, similar to those of a plane.

**Multirotor** - There are quadcopters (4 rotors with propellers), hexacopters (6 rotors with propellers) or octocopters (8 rotors with propellers). Its flight mode is through the rotation of half of its propellers in same direction and the other half in the opposite direction, thus achieving the pull force required to lift the appliance in a stable manner. This system is ideal to hold it in the air and be able to capture image and video efficiently.

Image 10. Types of drones

## Fixed-Wing drone



## Multicopter drone

*Source: Own elaboration*

According to the control method:

**Autonomous** - The drone has incorporated its own pilot system and sensors through which guides itself, not being necessary the management of a human pilot from the ground.

**Monitored** - It is necessary a human technician that controls and interpret the information issued by the appliance, because it calculates its own flight plan. The technician has the ability to decide the actions that must be carried out by the drone despite not having a direct driving of the controls.

**Supervised** - The handling of drone occurs through an operator from the ground, although the appliance is also capable of performing certain tasks autonomously.

**Pre-programmed** - A technician programs the flight path that the drone will continue without having own capacity to perform any kind of variation of the same.

**Remotely controlled (R/C)** - The drone is controlled directly by a pilot through one console. Usually is used for commercial works.

According to its use:

**Military** - Are known as UCAV (Unmanned Combat Air Vehicle) and are used in military missions. Stand out as being autonomous vehicles armed without a pilot, so they do not have the need to adapt to the physical limitations imposed by an operated aircraft.

**Civilians** - Is the large group within the classification and they are also known as UAV (Unmanned Air Vehicle). Do not have military purposes and can be classified into the following three groups:

**For amateurs** - Have had a great growth in the last few years since the popularization of these appliances. Their prices may vary from a few euros to several thousand depending on their characteristics or the image quality of those who have camera. Can be regarded as a low-cost model of the commercial use drones. This type of drones has a great potential of growth thanks to the new applications that are emerging.

**Used by the government** - Government, in addition to use these appliance to the military use, has the possibility of using them to civilian tasks as recognition or exploration of difficult terrain. Also it begins to use in works of fire extinguishing, surveillance, agriculture or care of protected areas.

**For commercial purpose** - Despite sharing certain characteristics with those intended to fans, they are more expensive due to the higher quality components that incorporate. They have both batteries of more capacity, more amount of rotors or cameras with the latest technology 4K. Thanks to these features they are used to give professional services both to individuals or companies.

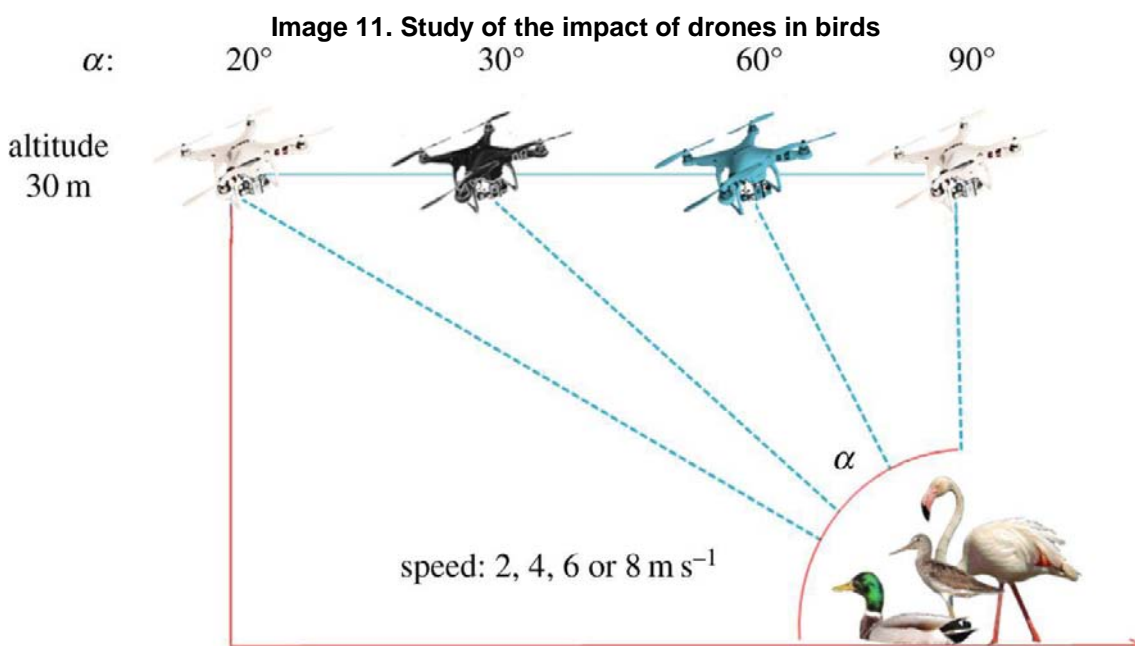
### 2.2.1.5 ECOLOGICAL FACTORS

Definitely one of the most important aspects in the use of these unmanned aircraft is its benefit to the environment compared with other aircrafts used until the time to perform the same functions, such as planes and helicopters. The impact produced by these devices is infinitely lower in the ecosystem because their electrical batteries system do not generate any type of harmful emissions.

With regard to the noise and visual impact that the UAV produces in the environment is much less than the rest of aircrafts. The noise emitted by the propellers of these

appliances, joined to its electric motors, have made it possible to reduce a large percentage of noise pollution caused. In addition, thanks to its small size, sometimes can be imperceptible to the human eye.

On the other hand, the use of these devices in natural environments can cause that certain animal species feel threatened thereby altering their behaviors or responding by an attack. Through a study<sup>1</sup> conducted by the University of Montpellier (France), has been analyzed how can affect the presence of drones in certain species of aquatic birds. It has been able to demonstrate that in 80% of cases, birds do not have felt threatened and have not shown any interest in the apparatus. Elements such as the color of the drone, the speed or the insistence have not influenced the conduct of the study, contrary to the approach angle. The animals were beginning to feel threatened when the appliance is placed at a 90° angle regarding to themselves.



Source and data: The royal Society publishing

### 2.2.1.6 LEGAL FACTORS

Legislation that regulates the use of drones in the Spanish airspace is embodied in Ley 18/2014, de 15 de Octubre, de aprobación de medidas urgentes para el crecimiento, la competitividad y la eficiencia (Boletín Oficial del Estado, 252, de 17 de octubre de 2014), which complements the Ley 48/1960, de 21 Julio, sobre navegación aérea (Boletín Oficial del Estado, 176, de 23 de julio de 1960) in force until the date. Current

[1]Elisabeth Vas, Amélie Lescroël, Olivier Duriez, Guillaume Boguszewski, David Grémillet. (2015). AppRoaching birds with drones: first experiments and ethical guidelines. The Royal Society, 11, 2.



rules are strict enough for aircraft between 2 and 25 kg, in which are used for commercial purpose, and requires that companies comply many requirements to obtain your registration in the AESA and proceed with the implementation of its activities. The breach of this law may result in sanctions between 3.000€ and 60.000€.

The necessary documentation is the following:

**Document of the characteristics of the aircraft.** This document contains in detail the features of the appliance and its specific functions. On it should appear the following documentation:

System description:

1. Manufacturer, model and serial number of the aircraft, engine, propellers, support of the payload, automatic pilot, control station...
2. Plans/diagrams with dimensions of the air vehicle. Photographs of 3 views.
3. List of components and equipment.
4. Mass of the vehicle in vacuum and maximum mass on takeoff. MTOM (including payload and fuel).
5. Description of the auto-pilot and navigation system.
6. Description of the electrical power system or fuel.
7. Capacity of the batteries.
8. Description of the propulsion system. Power in Kw.
9. Description of the radio link system of command and control and charging system of payment. Frequencies used. Maximum range system of command and control. Output power of the issuer
10. Description of the payload.
11. Description of the load support of payment.
12. Description of the flight termination system.
13. Description of the control station.
14. Description of the installed lights and paint scheme.

Performances and limitations of the air vehicle:

1. Scope and autonomy.
2. Maximum altitude of flight.
3. Normal speed and maximum of operation.
4. Normal speed and maximum of ascent.
5. Normal speed and maximum of lowering.

6. Limitations related to speed and direction of the wind, rainfall, ice formation, temperatures of operation...

Communications:

1. Radio communications with ATC. Alternative media.
2. Communications between the pilot of the drone and other personnel involved in the operation.

**Operations Manual** - The company shall specify its own organizational structure and the responsibilities of its members. It should be explained in detail in addition of the activities that the company can develop, their operational control and supervision programs, and a flight safety and prevention of accidents program.

**Aeronautical study of security of the operation or operations** - Will assess the degree of safety of the activity that is going to develop, as well as the potential risks that may arise during the same. There will be a classification for the activity on the basis of the risks: acceptable, tolerable or intolerable.

During the process of risk analysis is necessary to make the following five questions taking into consideration the means, people and the environment:

1. What could happen?
2. How likely is that to happen?
3. What are the consequences if this happens?
4. Can we mitigate or reduce the risks?
5. Is the residual risk acceptable?

**Program maintenance of aircraft** - Includes minimum maintenance checks carried out in the appliance, periodic revisions and any other hotfix that set the manufacturer itself.

**Insurance in accordance with regulations** - It is obligatory the recruitment of a civil liability insurance with a maximum compensation limit per claim of 286,000€.

**Pilot License** - As with any vehicle, is an essential requirement to obtain a license of pilot that will be accessed by any user older than 18. It should include a medical certificate of Class 2. The pilot license will have a theoretical and practical part.

Theoretical certificate - Can be basic or advanced type, and are obtained in the authorized aeronautics training schools, known as ATO. Each one of these schools will establish their own methods of teaching, schedules and prices. The distinction among the two types of license is in the radius of flight allowed.

Practical Certificate - Is developed by authorized organizations to do so or the manufacturers themselves and have a periodicity of convening monthly. The aspirant to a pilot will carry out a maneuvers exam with the aircraft that it aim to use on his activities. In the case of wanting to get the certificate with more than one aircraft will be able to perform in the same call.

After possess the necessary documentation, the pilot must obtain a special permit with a notice of 5 days to the conduct of the activity, because of making use of airspace belonging to AESA.

During the conduct of the activity the pilot must works within the limits of the law that are the following:

1. Prohibited flying over urban cores or crowds of people in the open air.
2. Obligation to fly during the day.
3. Maximum height of flight of 120 meters.
4. Maximum distance of 500 meters between pilot and drone.
5. Prohibited to fly to less than 8 kilometers from an airport or aerodrome, or 15 kilometers in the case that it is allowed to operate on instrumental flight or have reached an agreement with the necessary authorities.

In regard to the requirements to fly in American sky are different depending on the purpose to which it is intended the activity. There is not yet a definitive regulating law, although it established some provisional requirements. For commercial activities with less than 25 kilograms drones, shall be necessary:

- **Approval by the FAA (Federal Aviation Administration)** - This can be obtained in two different modes:
  - o Section 333 Exemption: consists in a custom review of the activity that will be carried out. Is performed through a form and in positive case would have the necessary permission to fly the drone in an approximate period of 120 days.

- Special airworthiness certificate (SAC): it is a comprehensive record of the aircraft describing its composition, quality controls, design, etc. Its concession period is between two months and one year. It is necessary to provide the information of where we intend to fly the appliance. There are two categories according to the activity:
  - SAC in the experimental category: For research and development tasks.
  - A UAS type and airworthiness certificate in the Restricted Category: for special purposes.
  
- **Pilot License** - Just enough with one pilot license of sport or recreation, which can be obtained at the age of 16, though the minimum age to operate with a drone is 17 years.
  
- **Medical Certificate** - As evidence of physical and mental health of the pilot.

Limits set by the FAA for use of drones are:

- Maximum height of flight on 150 meters above the ground.
- Visual contact of the pilot.
- Prohibited to fly at night.
- Maximum speed of flight of 160 km/h.
- Minimum age of the pilot of 17 years.
- Renewal of the obtained certificate by the FAA every two years.
- Flight ban on crowds of people.

As we see, the regulation and control is tougher in Spain than in the United States. However the American nation is stricter in their sentences because not only is limited to economic punishment by misuse of these devices, but that can result in severe prison sentences of up to three years for the user.

### 2.2.2 MICROENVIRONMENT

In the analysis of the microenvironment we are going to study the different agents that interact directly with the company. Thus it is possible to know in a realistic manner the position in which it is located within the market and predict how these factors may vary in the future.

### **Existing competitors rivalry**

This sector offers some huge possibilities of future in comparison with other traditional sectors or technologically stagnant. Although the number of competitors is constantly growing, there are some elements that act as barriers to entry and make that not a lot of people wanted to join nowadays to a business with both potential.

In the first place it takes much knowledge in the area of flight, maintenance of the equipment or legislation in force. This is not any business in which you can enter without difficulty. In addition the access to a large part of the knowledge of which we speak about requires an investment of money and time, like obtaining the permission of pilot.

The ability of the pilot is also a matter to be taken into account. Any person is not qualified or prepared for handling of one of these devices. Its complexity makes it essential to people to have a high level of skills, without which it will not be possible to obtain the permission of actuation.

Another issue to consider is the legislative factor. Both in Spain and in the United States we find a regulation that greatly limits the use of drones because they are provisional regulations until they pass new laws adapted to the current situation. Many entrepreneurs prefer to wait for the new law to assess the new situation of the sector.

We see as these factors influence considerably in the decision to launch a business oriented to the use of drones indifferently of the country concerned. It is a very young sector that is growing and needs to settle. Although there are few competitors, will soon take to collapse the market as soon as the regulations would be correctly regulated. In addition, another factors that will help to this are the exit barriers that are relatively small and it is very likely that there is always someone willing to buy a recording equipment drone for his own business, in the case of wanting to go out of this market.

### **Bargaining power of buyers**

The power that the customer has to negotiate depends mainly on the number of companies that offer this service and the number of customers willing to hire it. In drone services sector it is appreciated a number of customers still small. Given the youth of the sector, not a lot of people still known the functions and advantages that one of these devices can bring to their particular activity or business. Therefore, given this small amount of customers it is now considered that the customer has a high bargaining power. This is applicable to the case of the United States, where despite

being more widespread knowledge and use of these appliances, the number of customers is not bigger enough to consider that the company has the power of negotiation.

On the other hand, the number of enterprises capable of offering these services at present is also limited. This results in a relative negotiating advantage of the company to the client producing some compensation the advantage that the client had in reference to the previous factor.

### **Bargaining power of suppliers**

The relationship with suppliers is very relative to the type of company and business. In this case it is not a regular supplies of large quantities of products situation. It is a company that offers services from use of machinery, for which the supplier is limited to provide the appliance and provide a service of maintenance in some cases. The contact occurs through the internet and in this way anyone has access to a large number of providers around the world that do the shipment of goods at different prices. This globalized situation assumes that the number of homogeneous suppliers throughout the world is high and facilitates the task of searching for the best option either in quality or price effortlessly, which gives the bargaining power to the company itself.

As a counterpoint can be considered that the supplier-customer relationship is very distant and is not maintained throughout the time, beyond the period of purchase. In addition, obviously, the volume of purchase by the company is reduced. Is limited to the acquisition of a certain device, camera or specific component that replace or supplement to the material that has, not existing benefits options, such as discounts, during the purchase process.

### **New entrants**

The threat of entry of new competitors is conditioned by some factors that are the so-called barriers to entry. The higher these, the less likely to new competitors to enter the market. The main obstacles that may appear are:

Economy of scale - in this business is not possible to generate economy of scale. It is a provision of services and so, is not possible to use this concept. It would be necessary the mass production of a given asset or the provision of numerous services. However this is a unitary service specifically that the customer hires and it is really hard to offer the possibility of obtaining an advantage over competitors.

Initial investment - The initial capital outlay is not a major barrier to the entry of new competitors. It is true that the cost of a drone for professional works with an ultimate quality equipment is high and can reach around 6.000 €. However the payout on a local will be small in general conditions or even can be null. There is no need for a specific physical place for the development of the activity because the service is offered at the place where the customer demand, for which It would require some transport.

Therefore there is a high economic investment especially in drones and in a vehicle with which to travel, but on the other hand the costs of the rental or purchase of a local can be very low, thus meeting a middle point where not all pockets are able to enter the market but it would be easy to a medium-high rent.

Access to distribution channels and suppliers - As we have said previously, the access to suppliers is performed via the internet. This means that everyone can access to them easily.

Differentiation of services - Many companies that offer this type of services have tried to find a differentiation through the specialization in very specific branches. However this is not a big problem thanks to the great diversity of uses that a drone have, in addition to uses that are still to be exploited. With regard to patents, there are few companies that have any as it tends to occur in large companies such as Amazon with its draft breakdown Amazon Prime Air.

Experience - The experience it is usually an entry barrier to consider, but not much in this case. Although the sector of aerial photography is not novel, the emergence of new technology of drone leaves totally obsolete to the traditional methods. In this way, new methods used with this technology accounted for almost the entire sector being a new market in expansion, in which the experience still is not a determining factor.

Legal barriers - This is likely to be the most important barrier to entry due to the regulatory situation in which the sector is currently. The provisional nature of the current drone law represents many limitations to access both to have access to perform a flight with a drone as for the same moment of flying. The large amount of documentation, permissions and requirements necessary to operate in any air activity can cause the reluctance to the entry in a sector like this with the current regulation.

### **Substitute services**

As we have said, aerial imagery services are offered from years ago, but has always been done with what we consider to be the alternative to the drones; its substitutes. We

are talking about small planes and helicopters. The traditional way of obtaining images of this type was installing a photographic equipment in one of these aircrafts or flying the photographer himself in them with a camera.

One of the first uses that has been given to drone from its use on civil activities has been the capture of photography and video through the installation of a photographic equipment, remotely controlled or previously scheduled, in the bottom of the aircraft. Airplanes and helicopters offer some disadvantages that are deleted thanks to the use of drones, placing the use of these products as substitutes in a bottom step in the sector.

Through the use of drones in this activity has been reduced environmental pollution in comparison with the fuels used by the older aircraft, thanks to the use of electrical batteries. This coupled with the fact of not needing a pilot on board reduces the costs of recruitment considerably. In addition has been seriously reduced the noise impact that on many occasions could cause serious disturbances in the ecosystem and even in the neighboring towns around. Another point in favor of the drone is the stability offered in order to obtain high-quality images, since both the aircraft and the helicopters produce large vibrations constantly and mainly depends on the ability of the camera operator to obtain stable images.

It can also be considered as a substitute the satellite image. This technique consists of obtaining images through a computer installed in an artificial satellite, which is able to take pictures and send them to be processed. This method offers a wide range of options for processing images in order to obtain precise data. Although it is oriented to capture very concrete static images, without the need of that skillful feature to obtain adapted images to the particular situations, and offers very broad photographic ranges being able to photograph from a few meters areas to until kilometer-long extensions that span continents integers. Its price depends on the image features, and it can cost from \$10 up to several thousand.



Image 12. 5 Porter's five forces model



Source: Own elaboration

## 2.3 ANALYSIS OF THE COMPETITION

### 2.3.1 LEVELS OF COMPETENCE

- **First Grade Competitors** - This level of competition is the one that most resembles to the company studied. Includes all those companies that within the same market should offer the same or very similar services to the same type of customers, that is to say capture images through the use of drones for companies and individuals. Imagirec, Mediarec or Sky Drone would be three examples of this type of competitors.

**Image 13. Drone filming**

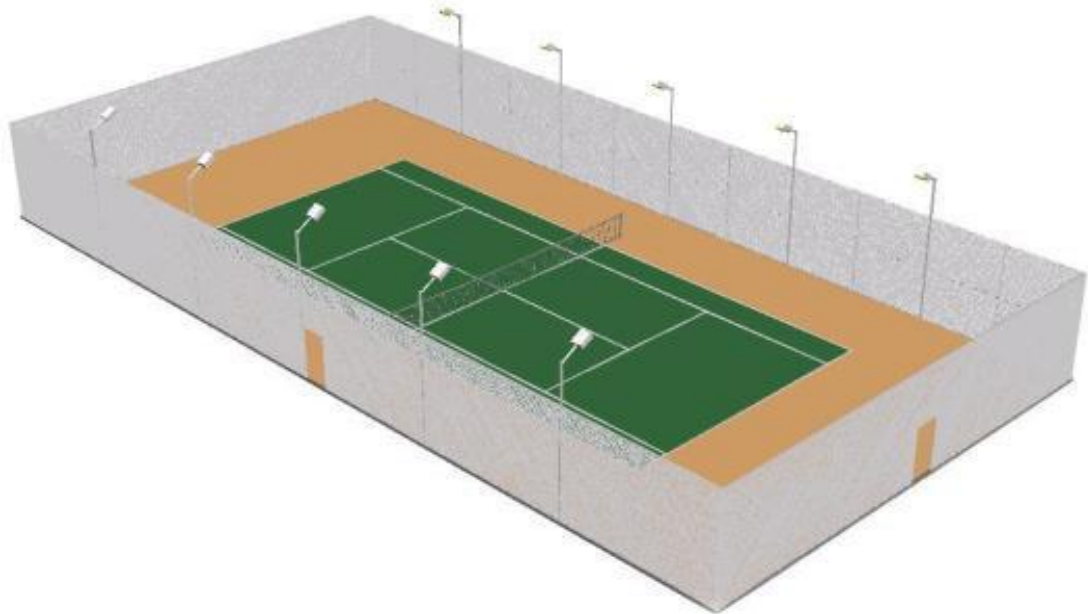
- **Second Grade Competitors** - In the second grade competence are those companies that within the same market and customers meet the same needs as the studied company but it does so through methods or products with many different characteristics. We could classify in this level the taking of image from planes, helicopters or satellites. This level of competence is maintained due to the restrictions that the legislation currently maintains on flying drones, but is destined to disappear in not much time. Companies like Heliptistas, Aero-Plan or Aerorec carried out this type of works.

**Image 14. Helicopter filming**

- **Third Grade Competitors** - Third level includes the competitors that satisfy the same needs despite doing so through a totally different method or with a product of

different characteristics. It is difficult to think about a substitute product of these type of services since the corners in which you can record a drone, as well as the image quality that pose make it a hardly accessible service type through alternatives. We could only think in recreations by computer that permit represent an approximate way. Pixel Dreams or Wion would be two of these companies that offer this type of services.

**Image 15. 3D recreation**



### **2.3.2 MAIN COMPETITORS**

The study of the competitors of Myby Drone is not complex. You must consider that we are in a relatively new sector and therefore is not saturated. The competitors still fall shyly in the market due to uncertainty and many prefer to wait to see how it evolves both the market in these beginnings as the current legislation. Among the main competitors that have decided to occupy a position in this growth market we will make a distinction among those of Castellón and Miami, parsing in their different levels according to their geographic position.

#### **Castellón (Spain):**

- **Local level:**

Competitors of Myby drone in Castellon de la Plana are limited only to the two companies that we see below.

### Panorami-Cas

Located in the heart of the city, offers services specifically related to the taking of pictures. Its specialty is the realization of panoramic pictures in 360° looking for a



surround experience that makes feel to who sees it as if it were in the place. In addition, its owner Manuel Cervera, as a photographer authorized by Google Company, offers the possibility to make photo tours similar to those that we can see in Google Maps but adapted to the interior of premises and businesses.

Although in its beginnings the company offered specific services of aerial image, in the summer of 2015 they decided to sell its aerial recording equipment and now offers this service through subcontracting other companies.

### Imaqirec



It is located next to Parque Ribalta in Castellon de la Plana. It was created by two experienced photographers. Although offer all type of photo and video services, its specialty is the photo reportage of social events and especially weddings. Works jointly with other companies related to the organization of social events and weddings as are Zank You or bodas.net, which could give them a significant advantage in that sector with respect to the rest of the competitors.

Although the company is not engaged so integrates to the air recording with drones, since they offered more types of audiovisual services, have a pilot of drone with which made the capture photos and video of the events for which they are employed.

- Regional level:

### Mediarec

Installed in Benicarló, they offer a wide range of audiovisual services. They have experience in graphic design activities and therefore perform any type of design work in physical format or web.



But the creation of audiovisual content like photo or video is a fundamental part of this company and offers an aerial recording service with a drone. Until now, they have only carried out works for hotels or in social acts, since it obtained the license that allowed them to make use of a drone on 6 April 2016, and they can be an important factor of inexperience.

### SkyDron



It is a company in Valencia that offers all kind of services of aerial recording. They can perform its activity throughout the national territory through an extensive network of pilots.

It is characterized by having a team of drones to adapt to different situations, among which they have an octocopter with thermal imaging camera. The company is specialized in aerial thermography to put at disposal of any company that requests it. They also offer other services as the realization of tourism, marketing or event videos, and are trained to serve requests in the agricultural sector or emergencies (fires, floods, rescue, etc).

They have recently launched a service of repairing workshop of drones and components of the DJI brand to achieve an advantage thanks to the extensive experience they possess in the treatment of these appliances.

### D-Drone

Born in Valencia in 2015, this firm is a producer that specializes in aerial recording with drone. Despite this youth,



have considerable experience on flying appliances by remote control. Mainly make recordings of different types of terrain, on land and sea and offers an advanced post-production service of the recordings made for media such as television and cinema.

Although offers quality recording in 4K, its appliances are not the most advanced ones of the market and there are many other companies that offer these services with a superior quality.

- **National level:**

- Dron Planet**



It is one of the aerial recording companies with higher presence on the national territory. It has presence, nothing more, nothing less in Madrid, Barcelona, Valencia, Malaga, Seville, Badajoz, La Coruña, Bilbao and Andorra. This way, they can covered all the peninsular area and is able to respond to any client regardless of the geographic point in which is found.

Drone Planet attends any request achievable by the customer, and also offers the possibility to make thermodynamic infrared recordings, perform inspections of agricultural or meet emergency needs as the search of people, transport of first aids and tasks for the prevention and control of fires.

- Dron Air**

Is located in Martorell, province of Barcelona, and it was one of the first companies arising in Spain dedicated to this activity. It works in the entire national territory and has



worked with all types of first level firms, in addition to the Barcelona Provincial Council and, national and international television channels.

In addition to providing the usual services of air recording, this company is able to perform professional works as the live broadcast of its content via streaming or recordings in 360° for virtual reality platforms.

- **Florida (United States):** since the company operates in a small geographic area that is limited to the city of Miami and its surroundings, we will analyze the competitors that have the capacity to operate in the same area.

**Miami Aerial**

This company stands out in the realization of videos for real estate sales and construction. It also offers the possibility of capturing panoramic aerial or terrestrial images. They count with a consultation and advice department on which customers can expose ideas and the company makes an assessment and planning to carry it out.



**FilMiami**



Is the result of the collaboration of two well-known film productions of Miami; City of Miami Beach and Miami-Dade office of Film&Entertainment. Its work is limited only to the filming and production of films, music videos and commercials to professional level. For it they have drones prepared with cameras of maximum quality.

Is the result of the collaboration of two well-known film productions of Miami; City of Miami Beach

**SkyCamUsa**

With over ten years experience in flight by remote control. Although is located in New York City, performs work in other states like Florida. Highlight its creative potential on creating content and are able to obtain a higher quality image to 4K for film productions. The system of rotation of their cameras installed in their drones and the technology with which they have allows them to create interactive images in 360°.



**Diego Pocovi**



Specialist in recording all kinds of social events such as weddings, concerts or celebrations. Even so



does not leave aside other services such as corporate videos for firms, music video clips or recordings for cinema. Account with a broad range of options for editing and post-production of the videos obtained. Offers a more personal treatment with the customers in comparison with the rest of the companies, in addition to have an international award in cinematography.

### **2.3.3 MARKET ANALYSIS**

#### **2.3.3.1 SECTOR ANALYSIS**

The unmanned flying machines were invented in the nineteenth century. It was not until the second decade of the twentieth century when its use began to be usual, limited to the completion of tasks for military purposes.

With the arrival of the twenty-first century, technological advances have allowed the use of these devices, which we know as drones or UAVs, in civilian uses. The rise of the internet and digital image was a 180° turn and therefore a huge revolution in the audiovisual sector. In this new globalized market that the internet has created, the competition is very large and users and companies need to resort to innovative and revolutionary content to try to emphasize with regard to the others. The merger of such technological advances and new needs in the market created the concept of image acquisition using these drones.

A few years ago was really complicated the access to capture images or recording videos from a different point of view than usual. The traditional flying equipment such as helicopters or planes managed to cover such need but it supposed a very large media deployment, in addition to the relevant economic spending that it entailed. Currently, the access to this type of services is available to any user both at the level of accessibility and at the economic level.

In Drone Industry Summit convention, held in the month of April in Madrid and organized by the communication consulting firm Kreab, were given a serie of first-hand data that allow to know in which point the sector is currently. The figures that the director of the Agencia Estatal de Seguridad Aérea (AESA), Isabel Maestre has revealed about the first 20 months since the birth of the drone rules confirm the high degree of growth that is affecting the sector:

- 1249 operators enabled in AESA
- 2241 aircraft registered



- 71 test, demonstration or authorized flights research
- 65 schools ATOS authorized to offer courses in flight with drones
- 89 agencies providing practical training

In such event, Jaime Olmos, partner in the area of Public Affairs of Kreab commented that "this is a greedy new industry that already moves around 15,000 million dollars at globally" and "it is expected that drones are positioned as one of the greatest technological trends of the world".<sup>2</sup>

Meanwhile, in United States there is a greater awareness of the potential of this sector and large companies have not waited to make investments of millions dollars. Among the most important investment is the SK Ventures through injection of capital in manufacturing companies for equipment and components for drones as 3D Robotics and Skycatch. 3D Robotics firm has already received in the past an investment of \$50 million by Qualcomm to integrate their new processors in their appliances. These investments reflect faithfully the enormous potential of the sector, having turned to a young company such as 3D Robotics, with only 2 years of life in an authentic referent in the manufacture of drone technology.

Also notable are the movements made from Silicon Valley with the acquisitions of companies like Titan Aerospace and Ascenta by Google and Facebook. In addition, another great company like Amazon has developed its own program for the creation of drones, named Amazon Prime Air. In this way seeks to make its shipments via autonomous drones.

Most performed activities by drone operators are mainly those intended to photography, filming and aerial surveys that means a 38,84% of the whole enabled operators in Spain and rescue operations, search and emergency is 22.45%.

- Photography, filming and aerial survey (topographical and photogrammetry) 38.84%
- Emergency, search and rescue operations 22.45%
- Research and development activities 12.15%

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[2] Drone Industry Summit. Conference by Jaime Olmos, partner of Public Affairs de Kreab. [Online] <http://infodron.es/id/2016/04/21/noticia-drone-industry-summit-concluye-destacando-crecimiento-sector.html> [Date of visit: 2nd May, 2016]

- Photography, research and instrumental recognition: equipment calibration, meteorological, geological, maritime, oil or archaeological exploration, liaison and transmissions, broadcasters, receiver, radio or television repeater 9.39%
- Aerial advertising activities 9.35%
- Air treatments, phytosanitary and other involving spread substances in the soil or the atmosphere, including product launch activities for firefighting 3.32%
- Aerial observation and surveillance including shooting and surveillance activities of forest fires 1.31%
- Special works 3.19%

In general, the figure of drones sold in the last year is around 4 million units. The growth of this figure is expected constant for the coming years and it is estimated that the number of devices sold in 2020 will be increased to 16 million units, at which time the drones will mean a 10 per cent of the whole aeronautical sector. Expenditure on the acquisition of drones is estimated that dramatically increases to reach a figure of 91 billion dollars in 2024.

The many applications that have these devices in so many different areas make it an excellent opportunity of investment for large companies that want to revolutionize the industry looking for new applications. Eric Shanks, chairman of the group Fox Sports Media bet to replace, in the not too distant future, traditional cameras of the sporting events by drones. In this way the viewer would feel an absolute experience to power observing that event as if they were in the place of its celebration and even being able to "walk" between the stars and celebrities. As we see, in the future a situation arises where the drones will have an enormous role, not only in our airspace, but also in the rest of the environment as the submarine.

But for that all these forecasts of growth in the sector become real it is crucial a rules regulation according to the current needs. There is still very restrictive regulation in Spain and in Europe, however both the Ministry of Promotion of Spanish as the EASA (European Aviation Safety Agency), are working to improve the current rules and adapt the law to the rapid growth of a sector that can pose a huge positive impact for the economy of the whole world.

On the other hand, the norm in United States is also restrictive with the use of these devices. However its use is much more accepted and its legislation is considered more flexible than the European. Use of drones in some sectors such as agriculture in the

state of Florida is accepted, allowing a reduction of costs to the farmers and assuming a huge impact on the sector of the drone in that state by the creation of new enterprises, new jobs and entry of new capital. In mid-2015 it is estimated that the business of the drones had created 3,000 new jobs assuming a business value of 600 million dollars for the state.

### **2.3.3.2 CONSUMER ANALYSIS**

The analysis of the consumer is really complex in a business like this. The recording sector of aerial image using drones is especially young. As we have seen it was not until 2014 when a legal regulation was established in Spain for the use of these devices. This, reflects the situation of immaturity of this sector perfectly. It is therefore extremely difficult to obtain reliable data about the behavior of consumers as the sector is not in a position to be able to perform any study with samples large enough to be taken as truthful.

However we can perform an analysis based on the data provided by Myby Drone about their customers and take as guidelines for the entire sector. The profile of the customers of the studied company is divided into three groups as are companies, individuals and public entities.

- **Companies**

8 of every 10 of recording works hired come from this group. Usually are small firms because these are characterized by a younger management team as reflected in Table 4. On it we can see that the highest percentage of age of the owners of a SME in Spain is between 36 and 40 years old and the highest percentage of managers between 30 and 35. The youth of their managers implies a greater knowledge of the situation of the technology market and the progress that arise with the passage of time.

**Table 4. Age of the founders, owners and managers of Spanish SMEs.**

| Edad             | Fundadores (%) | Propietarios (%) | Directivos (%) |
|------------------|----------------|------------------|----------------|
| Menos de 30 años | 4,6            | 5,6              | 4,3            |
| De 30 a 35 años  | 9,2            | 14,8             | 21,7           |
| De 36 a 40 años  | 16,5           | 20,4             | 11,6           |
| De 41 a 45 años  | 11,9           | 13,0             | 18,8           |
| De 46 a 50 años  | 18,3           | 13,0             | 17,4           |
| De 51 a 55 años  | 15,6           | 18,5             | 8,7            |
| De 56 a 60 años  | 13,8           | 7,4              | 11,6           |
| Más de 60 años   | 10,1           | 7,4              | 5,8            |

*Data and source: Características del propietario/directivo de la PYME española.*

In addition their advanced training in comparison with senior people over the age of 45 as we see in Table 5, leads them to take care of every detail related to their company and know the importance of transmit a good image to the outside. They are aware of the impact that can supposed any marketing activity in the company and therefore show a great interest on this.

**Table 5. Adult formation level by age**

|                        | Hombres | Mujeres |
|------------------------|---------|---------|
|                        | 2014    | 2014    |
| <b>De 25 a 34 años</b> |         |         |
| Educación superior     | 35,4%   | 47,5%   |
| <b>De 35 a 44 años</b> |         |         |
| Educación superior     | 38,6%   | 47,2%   |
| <b>De 45 a 54 años</b> |         |         |
| Educación superior     | 30,4%   | 30,1%   |
| <b>De 55 a 64 años</b> |         |         |
| Educación superior     | 24,4%   | 18,1%   |

*Source and data: INE*

For this reason many of these companies appeal to audiovisual services in order to achieve its purpose. That purpose can be either creating a corporate video of the company using points of view that distinguish them from the competition, or filming an infrastructure and land for sale from angles that would not be possible to record or photograph from the ground.

There is an instance of audiovisual firms that resorted to the hiring or, in some cases, to the direct purchase of aerial audiovisual material

recorded with a drone. It is the case of the Spanish television channels. As we can see in Table 6, these channels do not possess a drone or intend to buy one since it would be a very complex process. Therefore they prefer to appeal to companies or independent pilots to have access to this content.

**Table 6. Use of drones by the main Spanish TV channels**

| Cadena           | Posee un dron | Compraría un dron | Encarga grabaciones exclusivas con drones | Compra externa a pilotos independientes | Compra externa o cesión de agencias de noticias, etc. |
|------------------|---------------|-------------------|---|---|---|
| <i>La 1</i>      | No            | No                | No  | Sí                                      | Sí  |
| <i>Antena 3</i>  | No            | No                | Sí  | Sí                                      | Sí  |
| <i>Telecinco</i> | No            | No                | Sí  | Sí                                      | Sí  |
| <i>Cuatro</i>    | No            | No                | Sí  | Sí                                      | Sí  |
| <i>La sexta</i>  | No            | No                | No  | Sí                                      | Sí  |

*Data and Source: el profesional de la información*

- **Individuals**

The behavior of individual customers have certain similarities with the companies. They also hire these services for the same purpose that could do a real estate company. Customers, usually with a high purchasing power, who wish to sell a property go to a professional recorder to capture aerial video and images intended to the sale of the property.

- **Public entities**

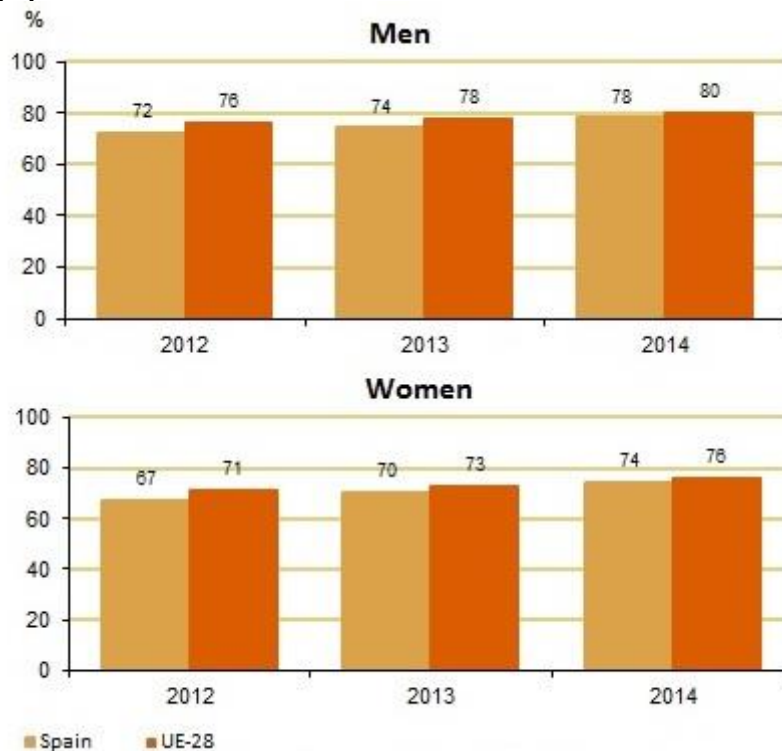
This one is the minority group of these three groups. With the objective of making a promotional video for a geographical area, some councils have the desire to make a video getting aerial images, since that is the best way to display a wide range of localization ground.

As we know, not the entire population is acquainted about technologies. There is a large part of adult population that has spent many years of his life away from any current technological apparatus and this situation makes them reluctant to make use of them for any personal or business activity.

In addition there is a huge gap between uses of technologies according to the gender of the person. Still a lower percentage of women are interested and make use of them if compared with the percentage of men. Graph 5 shows the difference between men and women with regard to the use of technologies, in addition to the development that

the society suffers, not only in Spain but also in Europe and the rest of the world in terms of growth in the use of these technologies over the years.

**Graph 5. Equipment and use of information and communication technologies in homes**



Source and data: encuesta sobre Equipamiento y Uso de Tecnologías de la Información y Comunicación en los Hogares. INE

However it is true that this type of gaps between generations or gender is being substantially reduced with new younger generations.

There are some of factors that the customer appreciates to take the decision to engage services of aerial recording:

- Price according to the product that is acquiring
- Professionalism of the hired company
- Commitment to comply with the service requested
- Capacities and skills of the pilot
- Quality of the image
- Presentation of previous works done
- Capacity of editing and adjusting

- Improvement of the brand of the contracting company (in the case that it was a company)
- Opinion of other customer in their social networks

### 3. SWOT ANALYSIS

#### Strengths:

- Possibility to hire any recording service possible with the available resources of the company: there is not a closed portfolio of services. Customers can propose the service that they want to within the possibilities of the company itself.
- Great experience: the owner account with many years of experience in the piloting of vehicles by remote control.
- Knowledge of the mechanics: know the operation of the drone is indispensable to avoid unforeseen breakdowns and accelerate the time to repair.
- Piloting skills: the ability in actuation of the drone allows to obtain most impressive and difficult scenes to achieve.
- Video and photo editing: the knowledge in computing and graphic design of the owner contributes to add value to the work with the editing of audiovisual material.
- Professional appliances: both the drone as the camera are last generation and have the best performance of the market.
- Great profit margin: the cost of performing each work is very low for the company and this means that the profit margin for each one is high.
- Company without debts: the company does not have financial problems or any type of debt.

**Weaknesses:**

- It only has a drone: the company only account with one drone, therefore in the event of a fault or indisposition of the appliance, the company cannot perform work of recording.
- Technological limitation: the company do not have the necessary material to be able to offer certain services such as thermal image or infrared.
- Inappropriate local: the local that company has as headquarters is not structured to be attractive to the customer or to passersby. It is very tucked away.
- Low web presence: do not have a web that act as a company presentation and form a good first impression to the customer.
- Low activity on social networks: there are long periods of time during which the company does not publish any content in their social networks. Should maintain a steady pace for publishing content, news or curiosities about the audiovisual sector and drones. In addition, is limited to the use of only two social networks.
- Limitation on maneuvers: as he is the only drone operator in the company, it is impossible to perform certain maneuvers as simple as actuate the drone and controlling movements of the camera at the same time.

**Opportunities:**

- Few competitors: the recent birth of this sector means a reduced number of competitors in comparison with other mature sectors.
- Sector with high potential: the possibilities that offers one of these appliances are enormous and allow a great capacity for innovation and reinvention of the business.
- Need for enterprises to improve using this new technologies: more and more users resort to the recruitment of this type of services in order to be innovative and to grow with regard to the competition.
- Many providers around the world: the globalized market of the internet allows access to a multitude of providers around the world that offer this type of technology.



- Unmanned vehicles, safer for the integrity of the pilot: the fact of driving from outside the aircraft signify an increase of the integrity of the person and a decrease of deaths or injuries in the event of an accident.
- Increasing demand: the audiovisual sector is in constant growth mainly thanks to the impact that cause the technologies of information and communication, and the aeronautical sector shows a similar trend. This translates into a steady increase of the demand of work carried out in both sectors.
- Low affected sector by the crisis: the demand for these type of services often come from customers with a high purchasing power which have not suffered the impact of the crisis in a direct manner.
- Growth in the number of potential customers: the evolution of society with regard to the uptake of technology daily makes the number of potential customers is positioned in a positive trend.

**Threats:**

- Legislation is very restrictive and ambiguous: at the present, the aerial law still does not adequately regulates the use of these aircraft.
- Need to know the technological innovations that are emerging: it is essential to have an updated knowledge of technological advances and the new emerging needs in the market in order to offer the customer all the options offered by the rest of the market.
- Possibility to use the drone for terrorist purposes: the capacity of these devices to be able to carry significant burdens and moving in all kind of places become them in a potential weapon on wrong hands.
- Risk of hack: the drone, like any technological device connected to a communication network, runs the risk of a computer attack that can result in serious consequences.
- Limits the privacy of individuals: the increase in use of drones opens a social ethical debate about the impact it may have on the intimate life of the persons who are in the street or in their own homes.

- Attractive to new competitors: the fact of being a market in constant growth and not having a strong competition involves an attraction for the incorporation of new competitors to the sector.
- World economic situation: the severe economic crisis that is affecting the whole world severely limits the economic potential for many consumers and businesses. The financing facilities are becoming increasingly smaller.
- Tutorials<sup>3</sup> on the internet that teach how to build your own drone: on the internet you can find tutorials to build any object. Drones are no less, and you can find many explanations that allow any user to build their own drone.

#### 4. MARKET SEGMENTATION

Myby Drone offers a recording and taking photographs services, as well as the subsequent necessary adjustments and editing. The target to which the company routes are both companies and individuals.

- a. **Construction companies:** seek mainly to track work for long periods of time, since the beginning of the field without build up until the completion of the build, or get images of land to perform virtual reconstructions prior to the start of the construction.
- b. **Real estate companies:** request aerial images of their properties for sale to present them in a realistic and modern way to their target.
- c. **Individuals between 30 and 45 years old:** this type of customer is looking for a purpose similar to the one sought by a real estate company. Trying to sell an own property or some high price elements, like a boat, through images obtained with a drone. The greatest technological knowledge of men makes them more prone to the recruitment of a service like this. They are individuals with a high purchasing power and with a sufficient age to know any advanced technique used in the audiovisual industry.

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[3] Drones baratos caseros. [Online] <http://www.dronesbaratoscaseros.com/> . [Date of visit: 4th May, 2016]

## 5. OBJECTIVES

They must be realistic and be reviewed periodically in the light of the new law that is to come.

### **Objectives of trade relations:**

- 1- Achieve 90% of customers satisfaction.
- 2- Achieve 50% of fidelity of construction and real estate companies for future works.
- 3- Increase 30% new customers.

### **Commercial financial objectives:**

- 4- Increase revenues by 20%.

### **Management goals for the marketing activities:**

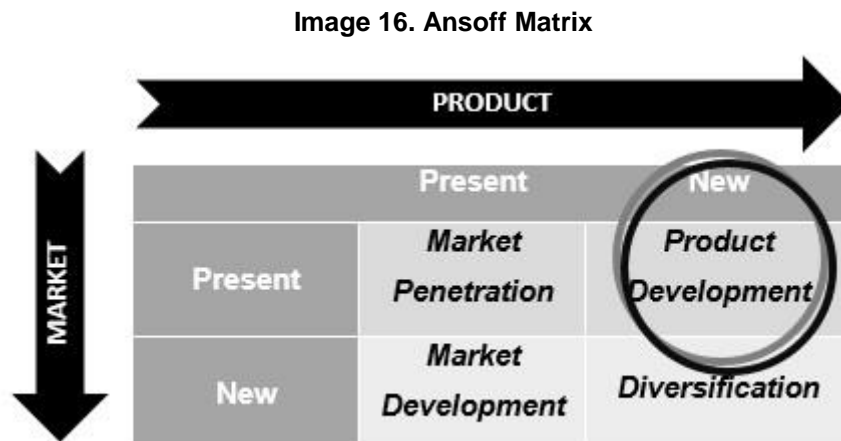
- 5- Increase the level of visibility of the mark.
- 6- Increase the average volume of works made per month to 8.
- 7- Develop two new services options to be contracted.
- 8- Increase the number of followers in social networks to 10,000.
- 9- Achieve a 25% market share in Castellón.

## 6. STRATEGIES

To achieve the set objectives by the company is necessary to plan the best way that would lead to their successful achievement. This road is built to planning some actions that are compatible with the different type of the established strategies; growth strategy, competitive strategy, strategy as competitive advantage, segmentation strategy and positioning strategy.

## 6.1 GROWTH STRATEGY

To ensure a growth trend is necessary to draw a plan that will lead to the established objectives. The Ansoff growth matrix, which we can see in Image 16, represents the different possibilities of the company to grow. Due to the conditions and knowledge that the company has about the market it would be absolutely right to implement a strategy based on product development. The company could enlarge the range of possible services or devise new applications.



*Source: own elaboration*

## 6.2 COMPETITIVE STRATEGY

The competitive strategy that the company should carry out is based on the surrounding elements; its environment and its competitors.

Myby Drone is an experienced company within the sector and was one of the first companies implementing drones to the audiovisual industry. This is why it is recommended that the company implant an explorer strategy and try to innovate within the sector taking advantage its experience, knowledge and taking the initiative. So, it would not be difficult to become a benchmark company in the sector.

Thus the youth of this industry, no company has managed to position itself as a unique leader, but there are many companies that hold this position. With the implementation of the innovative measures mentioned above, the company would have a very good opportunity to achieve a dominance position in the market leaving behind many other.

### **6.3 STRATEGY AS COMPETITIVE ADVANTAGE**

To enhance the features and qualities of the company it is necessary to follow an adequate strategy in which the customer receives an added value of the service in comparison with the competition.

Myby Drone stands out for the quality and professionalism of the work done. Offers all kind of services adapted fully to the needs of the customer, in addition to carry out complementary services to those of the main activity of the company, like the editing and retouching of the recorded images. This added value offered by the company to its primary service should be enhanced through a strategy of differentiation in which the final result and the guarantees of satisfaction are the main element.

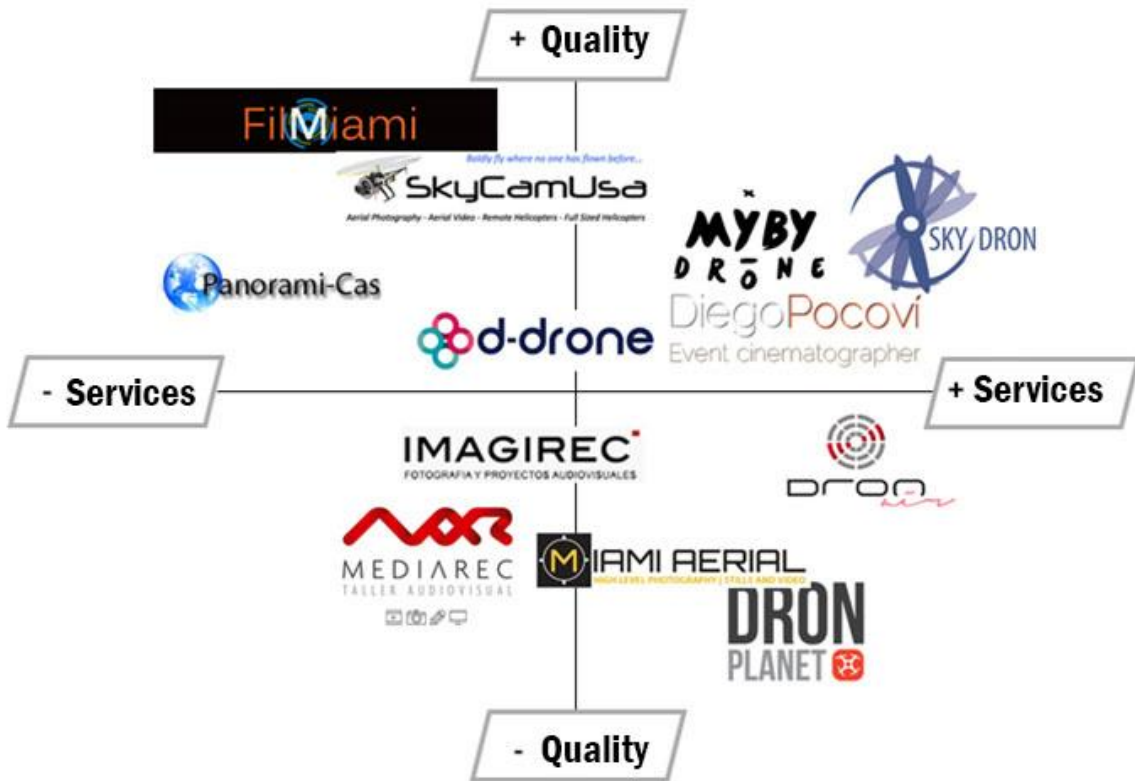
### **6.4 SEGMENTATION STRATEGY**

As we have seen, one of the keys of the company is its differentiation strategy. Provides different added values to the hired service by the client so that it is able to protrude regard to the other companies. One of these added values with which account is its flexibility to adapt to any customer that needed meet a need related to his business. Although the company works with firms and individuals, is predisposed to perform work for public entities since it does not focus exclusively on a particular segment of the market.

### **6.5 POSITIONING STRATEGY**

The main characteristics that affect this market are the quality of the final work and the number of services offered. These are the priorities that the customer considers when they enter in this sector. The strategic position encompasses the whole competitors next to the company concerned and the positioned within a map, as we see in Image 17, according to the mentioned features.

Image 17. Positioning map



Source: own elaboration

## 7. ACTION PROGRAMS

### 7.1 SUMMARY ACTION PLANS

Table 7. Summary action plans

| ACTIONS                                    | OBJECTIVES  |
|--|---|
| Action 1. Acquisition of new tools         | 3- Increase 30% new customers.<br>4- Increase revenues by 20%.<br>7- Develop two new service options to be contracted.<br>9- Get a 25% market share in Castellón. |
| Action 2. Offer terrestrial image services | 3- Increase 30% new customers.<br>4- Increase revenues by 20%.<br>7- Develop two new service options to be contracted.<br>9- Get a 25% market share in Castellón. |
|  | 3- Increase 30% new customers.  |

|  |   |
|--|---|
| Action 3. Create custom website  | 8- Increase the number of followers in social networks to 10,000.   |
| Action 4. Invest in advertising  | <p>3- Increase 30% new customers.</p> <p>4- Increase revenues by 20%.</p> <p>5- Increase brand awareness.</p> <p>6- Increase the average volume of works made per month to 8.</p> <p>8- Increase the number of followers in social networks to 10,000.</p> <p>9- Get a 25% market share in Castellón.</p> |
| Action 5. Increase presence in social networks                             | <p>3- Increase 30% new customers.</p> <p>4- Increase revenues by 20%.</p> <p>5- Increase brand awareness.</p> <p>6- Increase the average volume of works made per month to 8.</p> <p>8- Increase the number of followers in social networks to 10,000.</p>  |
| Action 6. Participate in technology fairs                                  | <p>3- Increase 30% new customers.</p> <p>5- Increase brand awareness.</p> <p>6- Increase the average volume of works made per month to 8.</p> <p>9- Get a 25% market share in Castellón.</p>  |
| Action 7. Promotions for construction and real estate companies            | <p>1- Achieve 90% of customer satisfaction.</p> <p>2- Achieve 50% of fidelity of construction and real estate companies for future works.</p> <p>4- Increase revenues by 20%.</p> <p>6- Increase the average volume of works made per month to 8.</p>   |
| Action 8. Establish collaborative relationships with audiovisual producers | <p>3- Increase 30% new customers.</p> <p>4- Increase revenues by 20%.</p> <p>6- Increase the average volume of works made per month to 8.</p> <p>9- Get a 25% market share in Castellón.</p>  |
|  | <p>3- Increase 30% new customers.</p> <p>4- Increase revenues by 20%.</p>   |

|  |  |
|--|--|
| Action 9. Carry out SEO and SEM strategies | 5- Increase brand awareness.<br>8- Increase the number of followers in social networks to 10,000.<br>9- Get a 25% market share in Castellón. |
|--|--|

Source: Own elaboration

## 7.2 ACTION PLANS

### ACTION 1. Acquisition of new tools

#### Related Objectives:

- 3- Increase 30% new customers.
- 4- Increase revenues by 20%.
- 7- Develop two new service options to be contracted.
- 9- Get a 25% market share in Castellón.

**Period:** Long term

**Description:** A big part of the companies that operate in the sector of aerial recording are focused on delivering solutions to particular or leisure needs (sport events, social events, etc). A good way to take a step to the front within this market and to achieve a greater degree of differentiation with the competition would be route the business to professional purposes.

To achieve this, it is proposed to the company to make an investment in two new tools or components that will allow a greater range of possibilities to offer to the customer.

The first tool would be a new thermal imaging professional camera with a good enough quality. In this way the company would be qualified to perform inspection works in



industrial plants, high-tension towers, wind turbines or photovoltaic plants, or for security and forestry surveillance, maritime, etc. A good option would be the FLIR VUE Pro 336 camera, which has a great versatility and allows its connectivity of very simple way through its USB



connections and multiple adjustments through the smartphone. It is able to make 8-bit videos or 14-bit images at a 336x256 resolution and allows the installation of different lenses depending on the needs.

The second proposal is the acquisition of an annual license of the PIX4Dmapper computer software. This software allows you to recreate 3D models from the photographs made, being an incredibly useful tool for cartographic and construction companies.

**Image 18. Software**



*Source: Pix4D*

With these new applications the company may achieve an important differentiation and would be one of the few companies that offers these services and the only one in the province of Castellón. This would lead to reach a more customers with the benefits that this entails.

## **ACTION 2. Offer terrestrial image services**

### **Related Objectives:**

- 3- Increase 30% new customers.
- 4- Increase revenues by 20%.
- 7- Develop two new service options to be contracted.
- 9- Get a 25% market share in Castellón.

**Period:** Long term

**Description:** The owner of Myby Drone, Miguel Solsona, before creating the company, was professionally engaged to the photography and the production of reports on video for events. It is a very similar work to the actual one, with the difference that some years ago he did it from ground level and now from the air. For this reason, he accounts with a professional photographic equipment that is in disuse since that will begin to operate with its new company.

It would be desirable to expand the possibilities of the company recovering this conventional photographic equipment to be able to combine with the air recording equipment when possible. This would add an added value more to the service offering new creative options that could attract new customers.

## **ACTION 3. Create custom website**

### **Related Objectives:**

- 3- Increase 30% new customers.
- 8- Increase the number of followers in social networks to 10,000.

**Period:** Long term

**Description:** Today, any business have a virtual place because is almost more important than having a physical place, up to the point at which we can say that if you are not on the web you do not exist. Websites act as welcome to new potential customers and generate the first impression that many of these perceived.

Myby Drone had a web that closed in April 2016 and remains closed yet, which represents a serious error. In this new website that I propose is very important to provide great information, but not only of the services that it offers, but also in the world of the drone in general. It shall inform of any novelty produced in the sector or the legislative changes that occur. By this way it will get much traffic of visits on the web looking for information and finally they shall be known the company. It is important to maintain links between social networks and the website so that a percentage of visits to the website will be transform into new followers in social networks, which will be informed instantly of everything related to the company. As is obvious, the website must incorporate an option to change the language from Spanish to English because we must not forget that the company operates both in Spain and in the United States.

#### **ACTION 4. Invest in advertising**

##### **Related Objectives:**

- 3- Increase 30% new customers.
- 4- Increase revenues by 20%.
- 5- Increase brand awareness.
- 6- Increase the average volume of works made per month to 8.
- 8- Increase the number of followers in social networks to 10,000.
- 9- Get a 25% market share in Castellón.

**Period:** 6 months

**Description:** investing in advertising is always economically costly, but may lead to a high economic return. Myby Drone has never carried out an advertising campaign and it is recommended to carry out one to check the impact for your business. To do this, will create some advertising banners, which can be similar to that of Image 19, and placed in different websites where the target audience of the company frequently visits: technology blogs, portals of cinema or websites related to weddings, from both Spain and Florida, may be appropriate places to carry it out.

Image 19. Banner



Source: own elaboration

In addition, to also get more varied audience will be published a banner on the web of newspaper "Castellón Diario" and "El Periódico Mediterraneo".

Image 20. Advertising in the newspaper



Source: Own elaboration

**ACTION 5. Increase presence in social networks****Related Objectives:**

- 3- Increase 30% new customers.
- 4- Increase revenues by 20%.
- 5- Increase brand awareness.
- 6- Increase the average volume of works made per month to 8.
- 8- Increase the number of followers in social networks to 10,000.

**Period:** Long term

**Description:** To attract all kind of customers is fundamental to have presence in those places that they frequent. Social networks are characterized by different audiences that make them different from each other.

Myby Drone is only present in Facebook and Vimeo. It is advisable to open accounts on both Twitter as on Youtube because, as we said, despite being very similar to the ones that already has, the public target is different. This is an economic measure that does not involve a great loss of time. There are many applications that facilitate working with social networks and offer a joint management of all of them being able to schedule messages and providing interesting facts about the followers of free. Some of these applications are: Hootsuite, Whos Talkin, Nielsen, etc. The together use of social networks in this type of application is a very important meter of views of users already contributing a feedback of first-hand about what they think about the company.

Image 21. Social network administrator



*Source: Own elaboration*

As in the website, he must publish content about the company and all kind of content about drones that affect to the sector. In addition they be used as forms of communication with any user who have any query or just to interact with them in an informal way.

Implementing this strategy, the company would get much more presence on the internet and reach a greater number of people, which translates into more customers.

#### **ACTION 6. Participate in technology fairs**

##### **Related Objectives:**

- 3- Increase 30% new customers.
- 5- Increase brand awareness.
- 6- Increase the average volume of works made per month to 8.
- 9- Get a 25% market share in Castellón.



**Period:** 5 days

**Description:** Go to fairs and exhibitions where other companies assist, whether in our same sector or another can bring many benefits. These places are often full of innovative ideas and creativity. In them can arise the inspiration of new working methods, great ideas for business or even start cordial relations with other companies with which they will be able to collaborate and work in the future.

It is also a very good option to make themselves known. The company can go there with its drone and presents the work carried out to other companies that may can be on interested. Drone sector has a very powerful visual feature, since it is very attractive to see a drone flying in front of us. This enables to perform simple demonstrations of flight that act as a claim to the stand of the company. This will expand the portfolio of customers and be announced to those who are not familiar with this technology.

**Image 22. Drone fair**



*Source: Expodrónica*

Spain hosts two fairs that comply with the earlier expectations and are Destaca and ExpoDronica, held in Castellón and Zaragoza respectively. The first of them is a fair dedicated to promote all those technological initiatives through the exchange of knowledge and the interaction among its participants while the second is dedicated in

full to civilian uses of drones so that companies come to know potential applications for their respective businesses.



### **ACTION 7. Promotions for construction and real estate companies**

#### **Related Objectives:**

- 1- Achieve 90% of customer satisfaction.
- 2- Achieve 50% of fidelity of construction and real estate companies for future works.
- 4- Increase revenues by 20%.
- 6- Increase the average volume of works made per month to 8.

**Period:** 8 months

**Description:** As we have seen before, the company works for companies and individuals overall. But of these two groups, companies are the ones which provides a greater benefit, mainly construction and real estate companies. Real estate companies request these services to perform a video or take pictures from various points of view of their properties for sale. Construction companies, on the other hand, are interested in making recordings of the land where they intend to carry out a project or track of the works that are in progress.

Due to the sustaining nature of these works is recommended the motivation to these companies for contracting these services. To do this, will be carried out a promotion that favors this group, in which they obtain a benefit by the recruitment of one of these long-service works. For each additional day that these companies hire, they will get a 5% discount accumulated up to a maximum of 30%.

Thus Myby Drone will get a protracted work to ensure an economic benefit, and the contracting company will get the service at a significant discount. In addition will



achieve the fidelity of these companies with which you can set long seasons of working together.

#### **ACTION 8. Establish collaborative relationships with audiovisual producers**

##### **Related Objectives:**

- 3- Increase 30% new customers.
- 4- Increase revenues by 20%.
- 6- Increase the average volume of works made per month to 8.
- 9- Get a 25% market share in Castellón.

**Period:** 12 months

**Description:** Myby Drone works occasionally for audiovisual production companies that need to perform a specific aerial work. These companies contact with the pilot that will be hired specifically for that job. My proposal is to contact directly with the audiovisual producers that do not count with drone pilot by themselves, and offer an exclusive treatment in which they always hire Myby Drone to perform the aerial work, in exchange offer a reduced price to compensate for their fidelity. Main producers would be Micrea Film Projects, Wanna Filmmakers and First Flat Productions.

#### **ACTION 9. Carry out SEO and SEM strategies**

##### **Related Objectives:**

- 3- Increase 30% new customers.
- 4- Increase revenues by 20%.
- 5- Increase brand awareness.
- 8- Increase the number of followers in social networks to 10,000.
- 9- Get a 25% market share in Castellón.

**Period:** Long term

**Description:** To increase the online visibility of the mark is basic to have a privileged position in the search engines. The customer enters their need in the finder, and that is the moment in which Myby Drone must appear in first positions. In addition to the privilege of appearing before the competitors, the customer will form a mental image of confidence and credibility of the company.

To achieve this privileged position is necessary to carry out a strategy of positioning SEO and SEM.

SEO positioning - Refers to the free results appeared after a search. To achieve a good result it is necessary to introduce key words that define the work of the company both in social networks as well as on the web. In these platforms should be clear that "Myby Drone is a company dedicated to the capture of aerial image with drones" and enter some keywords that identify the company, such as: " thermal image", "edition" or "aerial recording", both in English and Spanish. Following these guidelines the company will position itself among the first results when a user search for example something like "recording drones Castellón".

SEM positioning - SEM positioning refers to those advertising results appeared after a search. The search engine offers the user the results concerned of the companies related to their search that offers this service. Normally the advertiser will pay depending on the clicks that they receive their ads.

**Image 23. Google Adwords**



Source: Own elaboration

## 8. TIMELINE

Then, we have a table representing the times in which is carried out each one of the actions outlined above, within an annual periodicity in which each column represents a month and each row an action.

**Table 8. Timeline**

| ACTION  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 1. Acquisition of new tools   |   |   |   |   |   |   |   |   |   |    |    |    |
| 2. Offer terrestrial image services                                 |   |   |   |   |   |   |   |   |   |    |    |    |
| 3. Create custom website  |   |   |   |   |   |   |   |   |   |    |    |    |
| 4. Invest in advertising  |   |   |   |   |   |   |   |   |   |    |    |    |
| 5. Increase presence in social networks                             |   |   |   |   |   |   |   |   |   |    |    |    |
| 6. Participate in technology fairs                                  |   |   |   |   |   |   |   |   |   |    |    |    |
| 7. Promotions for construction and real estate companies            |   |   |   |   |   |   |   |   |   |    |    |    |
| 8. Establish collaborative relationships with audiovisual producers |   |   |   |   |   |   |   |   |   |    |    |    |
| 9. Carry out SEO and SEM strategies                                 |   |   |   |   |   |   |   |   |   |    |    |    |

Source: Own elaboration

## 9. BUDGET

The above actions will cost approximate as reflected in the following table:

**Table 9. Budget**

| ACTION  | BUDGET          |
|---|-----------------|
| 1. Acquisition of new tools   | 4.599 €         |
| 2. Offer terrestrial image services                                 | 0 €             |
| 3. Create custom website  | 1.000 €         |
| 4. Invest in advertising  | 8.000 €         |
| 5. Increase presence in social networks                             | 0 €             |
| 6. Participate in technology fairs                                  | 500 €           |
| 7. Promotions for construction and real estate companies            | 0 €             |
| 8. Establish collaborative relationships with audiovisual producers | 0 €             |
| 9. Carry out SEO and SEM strategies                                 | 2.000 €         |
| <b>TOTAL</b>  | <b>16.099 €</b> |

*Source: own elaboration*

## 10. CONTROL

To ensure that the path followed to attain the goals is the correct one, use should be made of the different possible control methods, and thus be able to correct possible errors in the planning of strategies with enough time in advance.

**Table 10. Control Methods**

| OBJECTIVE  | PERIODICITY  | CONTROL METHOD  |
|--|--------------|---|
| 1) Achieve 90% of customers satisfaction.  | Quaterly     | Satisfaction surveys that the customers fill after delivery of the completed work.  |
| 2) Achieve 50% of fidelity of construction and real estate companies for future works. | Twice a year | Compare the number of companies that repeated with the total number of enterprises. |

|   |                  |  |
|---|------------------|--|
| 3) Increase 30% new customers.                                    | Quaterly         | Comparison of the current customer base with the previous one.   |
| 4) Increase revenues by 20%.                                      | Twice a year     | Analyze the results of the company and compare it to the previous year   |
| 5) Increase brand awareness.                                      | Quaterly         | Compare past results on number of clients and visits in the network with the current ones.                         |
| 6) Increase the average volume of works made per month to 8.      | Every two months | Number of works made each month, divided between the months.   |
| 7) Develop two new service options to be contracted.              | Annual           | Number of services that the company is able to offer in comparison with those offered before.                      |
| 8) Increase the number of followers in social networks to 10,000. | Annual           | Check quantity of total followers of all the social networks of the company.                                       |
| 9) Get a 25% market share in Castellón.                           | Twice a year     | Work carried out by Myby Drone compared with published works in the network by competing companies from Castellón. |

Source: own elaboration

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