

# BUSINESS PLAN FOR OPENING A RIDESHARING FRANCHISE WITH YEGO

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## **ABSTRACT**

This Final Thesis will study the operational and financial viability, and the economic profitability of the start-up of a YEGO Mobility franchise. They are in the electric scooter rental per minute (ridesharing) through its APP, in cities such as Barcelona, Valencia or Bordeaux. The project will be assessed from the most basic concepts, to the costs incurred, the study to find an optimal location, and other details expected in a business plan.

**KEY WORDS:** Business Plan, Sustainable Mobility, Franchise, Ridesharing, Motosharing

## **RESUMEN**

El presente TFG estudiará la viabilidad operacional y financiera, y la rentabilidad económica de la puesta en funcionamiento de una franquicia de YEGO Mobility. Esta se dedica al alquiler de su flota de escúteres eléctricas, por minuto (“ridesharing”) a través de su APP, en ciudades como Barcelona, Valencia o Burdeos. Se estudiará desde los conceptos más básicos, hasta los costes en los que se incurre, el estudio para encontrar una localización óptima, y otros detalles propios de un plan de negocio.

**PALABRAS CLAVE:** Plan de Empresa, Movilidad Sostenible, Franquicia, Ridesharing, Motosharing

## **RESUM**

El present TFG estudiarà la viabilitat operacional i financera, i la rendibilitat econòmica de la posada en funcionament d'una franquícia de Yego Mobility. Aquesta es dedica a l'lloguer de la seva flota d'escúters elèctriques, per minut (“ridesharing”) a través del seu APP, en ciutats com Barcelona, València o Bordeus. S'estudiarà des dels conceptes més bàsics, fins als costos en què s'incorre, l'estudi per trobar una localització òptima, i altres detalls propis d'un pla de negoci.

**PARAULES CLAU:** Pla d'Empresa, Mobilitat Sostenible, Franquícia, Ridesharing, Motosharing

## Index

<b>1. Intro summary .....</b>	<b>0</b>
<b>2. Introduction of concepts.....</b>	<b>0</b>
2.1. Sustainability & Sustainable Development.....	0
2.1.1. Introduction of SDGs.....	2
2.1.2. SDGs related to this thesis .....	2
2.2. Mobility (& Micromobility) .....	3
2.3. Market Research .....	5
2.3.1. Rise of trends around the world (Market Research) .....	5
2.3.1.1. Rise of moto-sharing Apps (Muving, YEGO, etc...).....	6
2.3.2. Flowchart study, understanding mobility in cities.....	8
<b>3. Ridesharing &amp; YEGO .....</b>	<b>11</b>
3.1. What is ridesharing? .....	11
3.2. An introduction to the company: YEGO.....	11
3.3. What is a Franchise? .....	12
3.4. Setting up a YEGO Garage: What is provided? .....	13
3.5. Comparison to Biggest Competitors .....	14
<b>4. Finding a Location .....</b>	<b>15</b>
4.1. Location Options .....	15
<b>5. The Location .....</b>	<b>18</b>
5.1. Transport in Marseille .....	19
5.2. Defining 3 areas (based on Flow chart) .....	21
5.3. SWOT Analysis.....	26
5.3.1. STRENGTHS .....	26
5.3.2. WEAKNESSES.....	29
5.3.3. OPORTUNITIES .....	29
5.3.4. THREATS.....	29
5.4. PESTEL .....	31
5.4.1. Political (Stability, Policy in sector, Tax).....	31
5.4.2. Economic (Stability, Fiscal Taxes on companies, EU & Euro).....	33
5.4.3. Social (Population Pyramid, Crime Vandalism, Qualified Work Force) .....	36
5.4.4. Technological (APP, Socially accepted smartphones).....	38
5.4.5. Environmental (Accessibility, Pollution & Weather).....	40

5.4.6. Legal (Driver License, Parking in the street, EULA, Create the company) .....	43
<b>6. Marketing Plan .....</b>	<b>44</b>
<b>7. Financial Layout .....</b>	<b>50</b>
7.1. Cost of capital Estimation .....	50
7.2. Set-up: Cost & Revenue Estimates.....	51
<b>8. Return Analysis.....</b>	<b>54</b>
8.1. Risk Analysis with Scenarios.....	55
<b>9. Conclusion .....</b>	<b>57</b>
9.1. Looking ahead.....	57
<b>10. References .....</b>	<b>58</b>

## Table of Figures

Figure 1: List of Sustainable Development Goals (UN, 2015).....	2
Figure 2 - Share of Urban and Rural Populations 1950-2050 .....	3
Figure 3: Micromobility Revolution in the US (CBInsights, 2020) .....	4
Figure 4: Mobility explained, what is the Last Mile? .....	4
Figure 5: Pollution interest over the last 5 Years - Worldwide (Google Trends) .....	5
Figure 6: Sustainability interest over 5 Years - Worldwide (Google Trends) .....	5
Figure 7: Upcycling interest over 5 Years - Worldwide (Google Trends) .....	5
Figure 8: Scooter Sharing Market (Prescient & Strategic Intelligence).....	6
Figure 9: Electric Scooter interest over 5 Years - Worldwide (Google Trends) .....	6
Figure 10: Countries with highest number of scooters for sharing (Statista, 2018).....	7
Figure 11: Distance per Kwh (CBInsights, 2019) .....	8
Figure 12: Caption of a Day in the Life of an Average American (Yau, 2015) .....	8
Figure 13: Identifying the different areas in the simulation .....	9
Figure 14: Flow analysed at 17:00pm end of the day (Yau, 2015).....	10
Figure 15: What YEGO provides their Franchisees ( YEGO Mobility, 2019) .....	13
Figure 16: Why choose YEGO ( YEGO Mobility, 2019).....	14
Figure 17: Motosharing services at a glance (2017).....	14
Figure 18: Los Angeles from above (Google, 2020).....	16
Figure 19: Miami from above (Google, 2020).....	16
Figure 20: Percentage of households that have a motorcycle (Pew Research Centre).....	18
Figure 21: Marseille (Google Images, 2019) .....	18
Figure 22: Marseille on a map (Google Images, 2019).....	19
Figure 23: Marseille´s Tram and Subway Lines (Google Images: Orangesmile.com).....	20
Figure 24: Universities in Marseille (Google, 2020) .....	21
Figure 25: MOSCOW analysis (Google Images).....	21
Figure 26: Bars in Marseille (Google, 2020).....	22
Figure 27: Pubs in Marseille (Google, 2020) .....	22
Figure 28: Football Stadiums in Marseille (Google, 2020) .....	23
Figure 29: Main in-city Businesses Locations (Google, 2020).....	23
Figure 30: Hotels in Marseille (Google, 2020).....	24
Figure 31: Rideable Area Year1(Red) and Year2(Blue) - (Google, 2020).....	25
Figure 32: Scooter Design (YEGO, 2019) .....	26
Figure 33: Visual Grid with Avg. Downtime per scooter per area (YEGO Motor Club, 2019).....	27
Figure 34: Screenshot of Relocation (YEGO Motor Club, 2020) .....	28
Figure 35: YEGO´s 2020 All Electric Line-up (Bike/Scooter/Stand-up).....	28
Figure 36: SWOT Summary (Own Creation) .....	30
Figure 37: PESTEL Analysis at a glance (Pinterest, 2020) .....	31
Figure 38: Lightweight Electric Stand-up Scooter      Figure 39: Normal Electric Scooter .....	31
Figure 40: Lime-S scooters parked on a street in Paris - Getty Images - June 12, 2019 .....	32
Figure 41: Corporate Tax Rates through European Area (Taxfoundation.com - OECD, 2019) .....	33
Figure 42: Yield Spread on 10-year vs 3-month Treasuries (The Economist, 2019) .....	34
Figure 43: GDP Per Capita 2008 vs. 2018 (EU-28 as Base:100) - (European Comission, 2019) .....	35
Figure 44: Predictions on Economic growth for main EU countries (Bloomberg, 2019) .....	36
Figure 45: France Population Pyramid 2020 (Worldometers, 2019) .....	36
Figure 46: France Population by Age Groups 2020 (Worldometers, 2019) .....	37
Figure 47: Projected employment in France 2020 (McKinsey&Co, 2019).....	38
Figure 48: Smartphone Use by Age Group in France 2019 (Statista, 2019) .....	39
Figure 49: Penetration of Mobility Apps per country (Statista, 2017) .....	39
Figure 50: Average annual Temperature (°C) (Climatedata, 2014) .....	40
Figure 51: Average rainy days (Climatedata, 2014) .....	41
Figure 52: Average annual sunshine (in hours) (Climatedata, 2014).....	41
Figure 53: Average days of strong wind (>57 km/h) (Climatedata, 2014) .....	42

Figure 54: Sticker on YEGO’s scooters (Silicon Canals, 2019).....	44
Figure 55: Facebook & Instagram Users split by Age (Medium, 2018) .....	45
Figure 56: Monthly Active Users per Social Network (Statista, 2020).....	45
Figure 57: Facebook Posts from Valencia’s YEGO Team (YEGO Valencia, 2019-2020) .....	46
Figure 58: Facebook Ads Platform (Sherman, 2019).....	47
Figure 59: CTR, CPM & CPC - Facebook vs. Instagram.....	48
Figure 60: Ecooltra’s Advertising Example (Ecooltra, 2019).....	48
Figure 61: A/B Testing on Ads Strategy (Smith, 2019) .....	49
Figure 62: Stages of Start-up Equity Funding (Shenoy, 2019) .....	51
Figure 63: WACC Calculation through CAPM.....	51
Figure 64: Costs through 1st Year Estimates .....	52
Figure 65: Full Excel Calculations Break-down .....	52
Figure 66: Payback (Calculated from Profit).....	54
Figure 67: IRR & NPV .....	54
Figure 68: Cash Flows.....	54
Figure 69: Scenario 1 Payback.....	55
Figure 70: Scenario 1 IRR & NPV .....	56
Figure 71: Scenario 2 Rides/Scooter/Day = 5	Figure 72: Scenario 2 Ride Duration = 10 min .....
Figure 73: Scenario 2 Rides/Scooter/Day = 6	Figure 74: Scenario 2 Ride Duration = 12 min .....
Figure 75: Scenario 2 Rides/Scooter/Day = 7	Figure 76: Scenario 2 Ride Duration = 14 min .....

## 1. Intro summary

When the time came to decide what to do for this thesis, we had a very clear idea that it would have to be something which we liked, and it would have to be linked to sustainable development in some way.

After becoming avid users of mobility apps such as Muving, YEGO or Ecooltra in our day to day life, we thought it would be great to analyse the possibility of setting up a company and becoming a franchisee for YEGO, focusing in sustainable mobility in cities where this service is not currently offered or lacks supply.

After doing some research and asking some questions to the YEGO Team directly we realized it could be the perfect idea for this final thesis.

## 2. Introduction of concepts

### 2.1. Sustainability & Sustainable Development

In the first place, we'll look at the early mentions of sustainability and the birth of sustainable development as we know it, we'll try to delimit a proper definition of it and try to understand its dimensions.

The first time we started hearing this concept of 'sustainability' was around the early 70's and 80's. But, as we know it today, the concept was born surprisingly for some, only around 30 years ago, after the creation of "The World Commission on Environment and Development" in 1982 proposed by the General Assembly of the UN: a commission that was headed by Gro Harlem Brundtland, who was by then Prime Minister of Norway; thus earning its name: the "Brundtland Commission".

This was later in 1987, a couple of years later when this report came out to the world, "Our Common Future".

The Brundtland Commission defined in this report, sustainable development as the *"ability to make development sustainable—to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs"* (Brundtland Commission, 1987)

*"The word "development" has also been narrowed by some into a very limited focus, along the lines of "what poor nations should do to become richer" (...) But the "environment" is where we live; and "development" is what we all do in attempting to improve our lot within that abode. The two are inseparable."* – (Brundtland, 1987)

Thus, when we think of development, we must be thinking about our environment as well, for one is part of the other, and as he says they are inseparable.

Taking this fragment as reference, it would be best to define it, by breaking down "Sustainable Development" into its two main parts: "Sustainability" & "Development"

In “Sustainability”, there seems to be no problem in understanding its definition:

*“the quality of being able to continue over a period of time”*  
– Cambridge English Dictionary

Thus, we say something which can sustain itself, keep doing what it was meant to be doing at the same rate or level, through time, is sustainable.

“Development”, on the other hand, has nowadays become a word which, for the vast majority means: “What the lesser/under-developed countries should do in order to become more mature, advance and rich” instead we should view it as all the actions we take in trying to improve our existence within the environment we live in.

So, when we come up with ideas to improve this development we introduced previously, we should think about the future consequences of it in perpetuity. Put in simple words: Could we keep doing this forever?

Throughout time there have been many theories and approaches towards Sustainable Development, which have tried to highlight the main problems and dimensions, specially focusing on its dimensions. Of which, three approaches stand out, all very similar, and with the same underlying principles. These are:

- Triple Bottom Line (3BL)
- Three Pillars
- Three-Legged Stool

The Triple Bottom Line, first introduced in 1994 by John Elkington, sets a triple dimension to sustainable development. The first is of course referring to the classic corporate bottom line: Profit & Loss. The second dimension proposed is the “people’s account”, which measures how socially responsible an organisation is. And lastly, the third dimension, the “planet account”, which measures how environmentally responsible it has been. That bottom line therefore is made up of: Profits, People and Planet.

These dimensions later evolve into: Social Progress, Economic Development and Climate and Environmental preservation; which with the subsequent analogy of the three pillars and the three-legged stool theories add the concept of balance between all three dimensions.

“Since the Brundtland Report, of sustainable development’s definition has developed further to focus more on a *socially inclusive and environmentally sustainable economic growth*” as (Sachs, 2015) rightly points out.



### 2.1.1. Introduction of SDGs

This first idea of Sustainable Development grew with time to what we know today as: The Sustainable Development Goals (SDGs).

The SDGs are also known as Global Goals and were undertaken by all Member States of the UN in 2015 as a universal calling to put an end to poverty, protecting our planet and ensuring that every human being can have peace and prosperity by 2030.

## SUSTAINABLE DEVELOPMENT GOALS



Figure 1: List of Sustainable Development Goals (UN, 2015)

There are 17 SDGs which are interconnected with each other, given that any action taken in one area will affect the results of other and that development must always (as mentioned before) balance the environmental, economic and social sustainability.

Staying true to the promise to Leave No One Behind, the member states have agreed to bring a lot of life-changing “zeros” to the world. These include goals like: Zero Poverty, Zero Hunger, Zero AIDS and Zero Discrimination against women. (United Nations, 2019)

### 2.1.2. SDGs related to this thesis

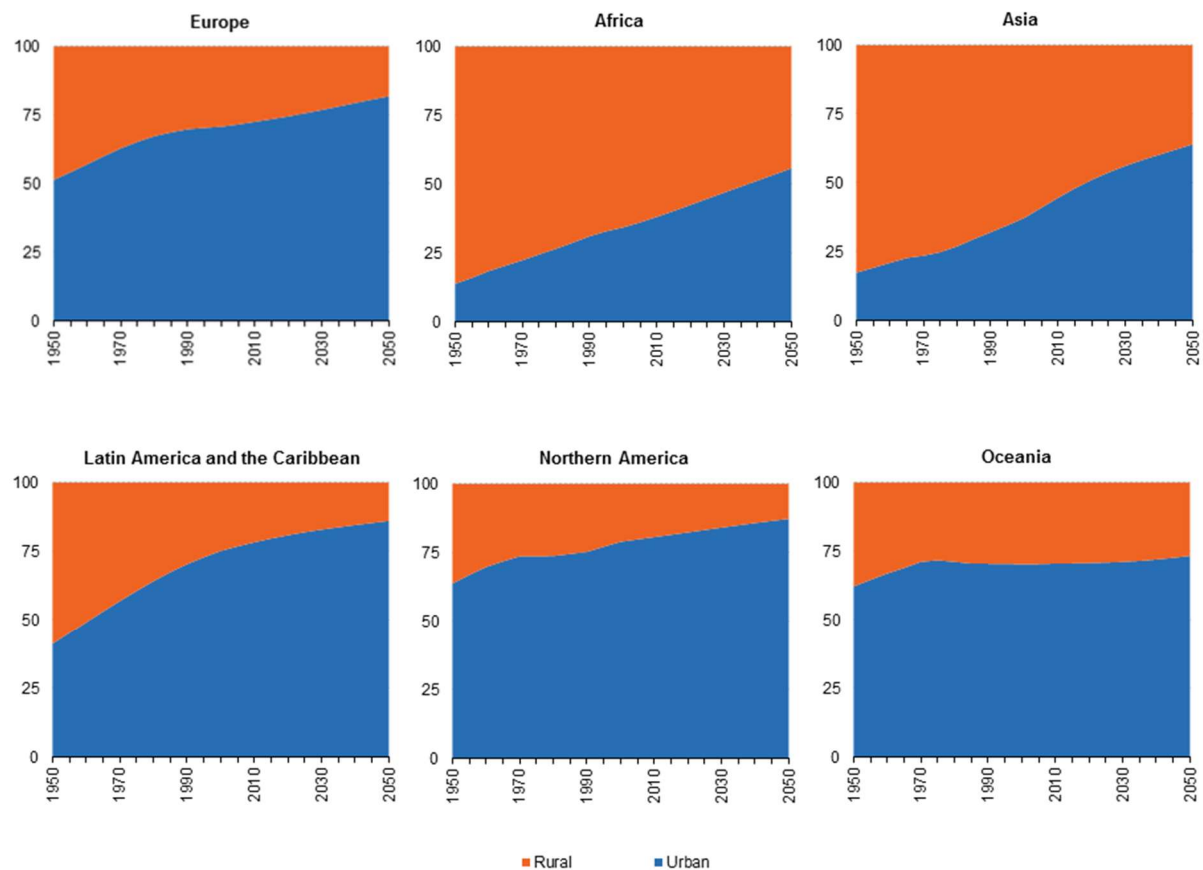
With a bit of background on SDGs, we know now that the focus of this project will be affecting directly the SDGs #11 and #13. How so?

By using a service such as ridesharing in the cities, these become indeed more sustainable, each user helps in lowering the emissions of CO<sub>2</sub> thanks to the battery powered scooters. In addition, for most cases of mobility inside of the city and daily commutes, this service can potentially lower the need for a car for those living and working in the cities. This will economically benefit most of them and convince them into using their car less in their day to day.

## 2.2. Mobility (& Micromobility)

In Europe most of its citizens live in an urban environment, and over 60 % of them live in urban areas with more than 10.000 inhabitants and this number is expected to go over 75% of the population through the next couple of years, to get an idea, it is estimated by the UN that 5 Billion people will live in urban areas by 2030 (United Nations Population Fund, 2019) (Figure 2). These citizens live their daily lives sharing a common space, and they share the same infrastructures which looking forward will be a challenge we need to prepare for.

(European Comission, 2016)



(\*) United Nations data are based on national definitions; as such there may be a discrepancy with respect to the Eurostat data used elsewhere in this publication.

Figure 2 - Share of Urban and Rural Populations 1950-2050

“Urban mobility accounts for 40 % of all CO<sub>2</sub> emissions of road transport and up to 70 % of other pollutants from transport. These cities are constantly challenged by transport and traffic, which account for problems such as congestion, accidents and pollution.” (European Comission, 2019)

To get a better picture, the Transport sector accounts for 14% of all annual emissions (including non-CO<sub>2</sub> gases) and close to 25% of all burning fossil fuel CO<sub>2</sub> emissions. But the alarming part is that at a time where a mind-shift towards lowering emissions is needed, transport emissions have been on the rise, despite the efforts to technologically improve the efficiency of our vehicles they have been completely offset by the increase on the overall volume of travel. (World Resources Institute, 2019)

Another relevant concept as we dive into our dissertation, is the concept of Micromobility.

Which is a type of mode of transport which is the one carried out by means of light vehicles like: electric scooters, electric skateboards and bicycles (all of which can be shared or not), in this case we'll refer to the ones which are more often.

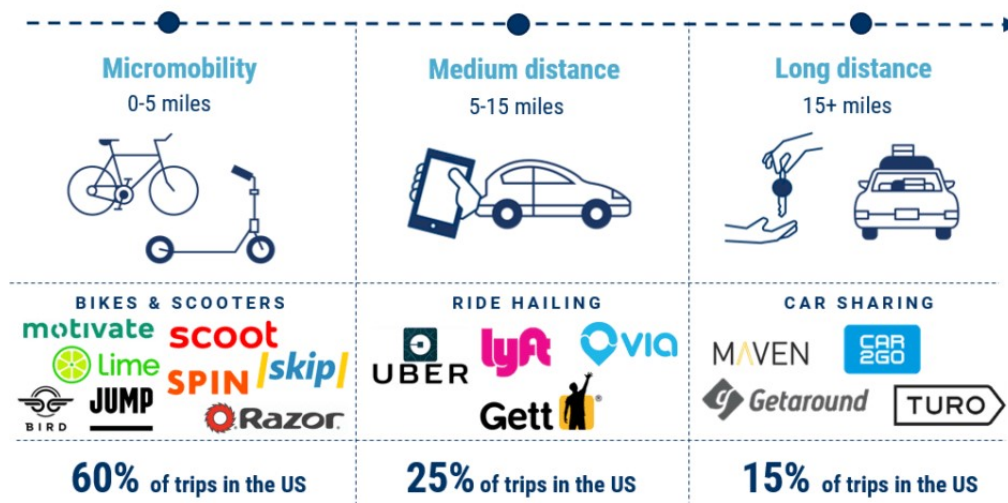
The main condition to be classified in the category is a gross vehicle weight of under 500 kg. Additional conditions are the provision of a motor, primary utility use, and availability as a shared service.

Implementations of Micromobility started in the late 2010s to solve the 'last mile'(Figure 4) of personal transportation, particularly in cities with high tendency to congestion.

Rather than use existing modes, a user would join a Micromobility sharing network to be able to ride distances typically less than one mile. Early services specified locations, or docks, where vehicles needed to be picked up and left, but the second generation of sharing services employed a dock-less model in which vehicles can be left anywhere or within a geo-fenced area (such as YEGO's motosharing). Micromobility has been instrumental in what is known as the unbundling of the automobile, or the availability of personal shared vehicles designed for short journeys. (Wikipedia, 2019)

## DISRUPTING THE CAR

Alternatives to car ownership by trip length



Source: NHTS

CBINSIGHTS

Figure 3: Micromobility Revolution in the US (CBInsights, 2020)



Figure 4: Mobility explained, what is the Last Mile?

## 2.3. Market Research

For the next couple of points, we will be making use of a very well-known tool called: Google Trends. This tool is used to measure the behaviour of internet users worldwide or by regions to determine their sentiment or their attraction towards a certain topic.

### 2.3.1. Rise of trends around the world (Market Research)

When analysing the below charts, we see a very clear trend in important topics throughout the population Worldwide. Pollution, Sustainability, and Upcycling are at their highest peaks regarding interest and searches in the world wide web. Demonstrating the public’s increasing concern over the environment.

(Google Trends, 2019)

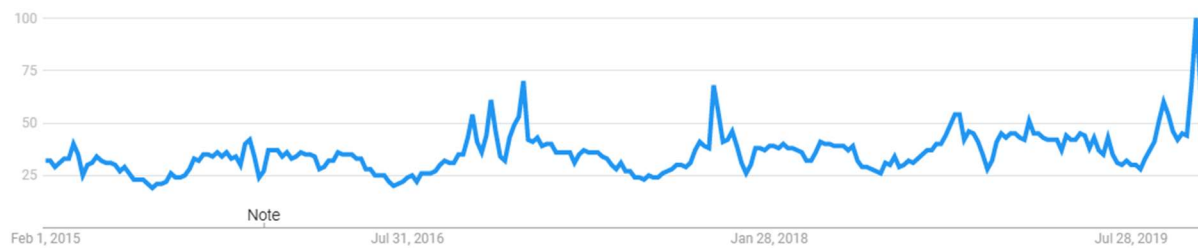


Figure 5: Pollution interest over the last 5 Years - Worldwide (Google Trends)

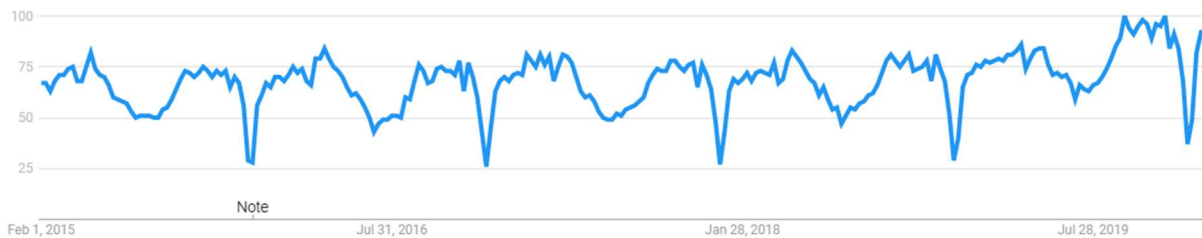


Figure 6: Sustainability interest over 5 Years - Worldwide (Google Trends)

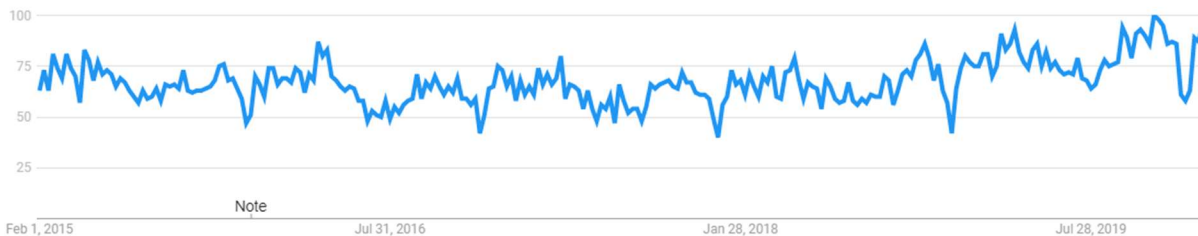


Figure 7: Upcycling interest over 5 Years - Worldwide (Google Trends)

### 2.3.1.1. Rise of moto-sharing Apps (Muving, YEGO, etc..)



Figure 8: Scooter Sharing Market (Prescient & Strategic Intelligence)

A market that is growing due to the main drivers we find in Figure 8:

- Increasing Traffic Congestion in Urban Areas.
- Technological advancements and accessibility by majority of population
- Rising concern about pollution, emissions, climate change, greenhouse gases, etc...
- Greater convenience and solves micro-mobility issues in urban areas.



Figure 9: Electric Scooter interest over 5 Years - Worldwide (Google Trends)

Also, in Figure 9 we see again a very clear growth in the interest for electric scooters worldwide. Yet another piece of evidence that supports our idea so far.

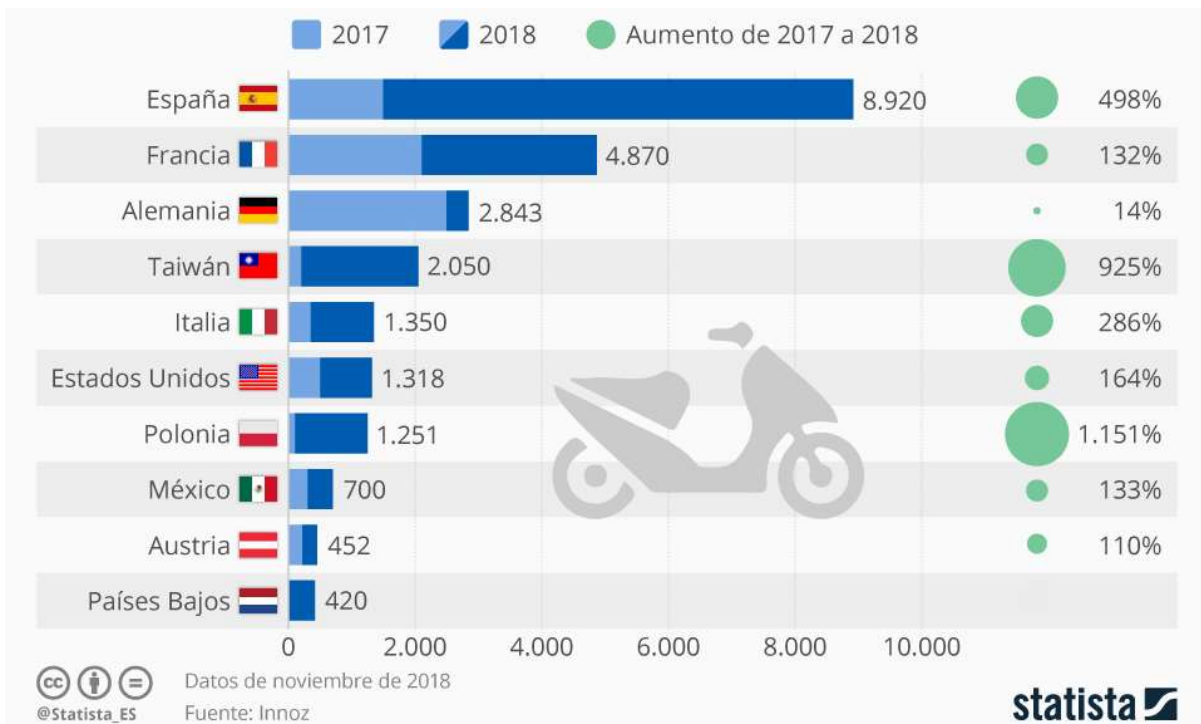


Figure 10: Countries with highest number of scooters for sharing (Statista, 2018)

As we see in Figure 10, over the last years the number of scooters and presence over the main European countries has increased. It's important to emphasize the growth and absolute numbers in Spain, were nowadays, the market seems to be saturated. This will very likely start happening across the countries if this mobility solution keeps maintaining this increasing trend.

According to EMCO, YEGO's supplier for electric scooters: "Between 2016 and 2017, the number of sharing scooters worldwide almost quadrupled" (EMCO, 2020)

Eventually leading to governments having to take measures to limit the supply of these services like we see already happening in Spain, with the use of licenses handed out by the government to the companies, in the same way it was done with taxis in this region.

All of this and along with a solid market in the EU countries along with a high expected growth, estimated to be upwards of 20% CAGR (Compounded Annual Growth Rate). Every argument ensures it will be a very interesting market to watch over the next 10 years.

As seen below in Figure 11, when taking into account the efficiency of each option, the correct choice is, as shown, orders of magnitude away from the common option. Per Kwh, an electric scooter can run 333 laps around a football field, against the 17 laps of an electric vehicle and the mere 3 laps of a gasoline powered vehicle.

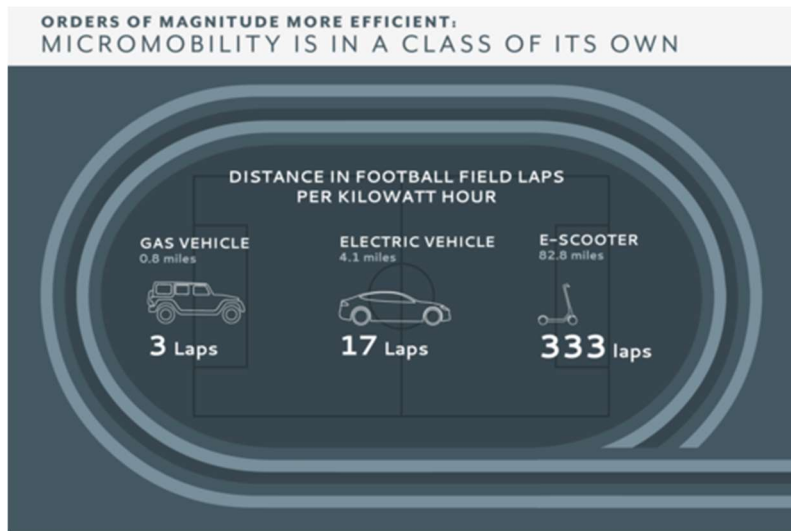


Figure 11: Distance per Kwh (CBInsights, 2019)

### 2.3.2. Flowchart study, understanding mobility in cities

We wanted to use a very interesting visualization of a 2014 study we had stumbled upon some time ago, which explained routine mobility of people during the day. This study is very interesting because of the use of the flowchart in it. Though it studied the routine of Americans, but in any case, we think that human behaviour in mobility is alike to a very high degree of correlation, at least when looking at developed countries.

The simulation and visualization are based on a 2014 survey called the “American Time Use Survey”. The data gathered in this study helped to simulate the life of 1000 Americans on an average day. By the way, this Flow Simulation was possible thanks to 1.440 transition matrices and a Markov model. Which we are familiarized with thanks to the Mathematical Modelling problems involving Virus and Brand Loyalty during this degree. (Flowingdata, 2015)

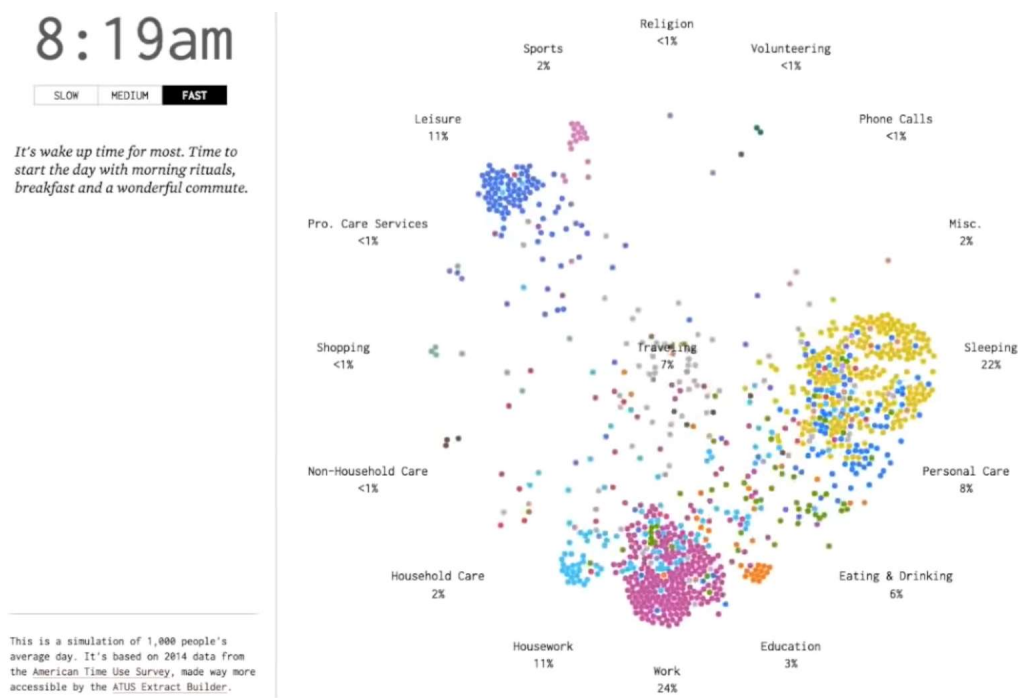


Figure 12: Caption of a Day in the Life of an Average American (Yau, 2015)

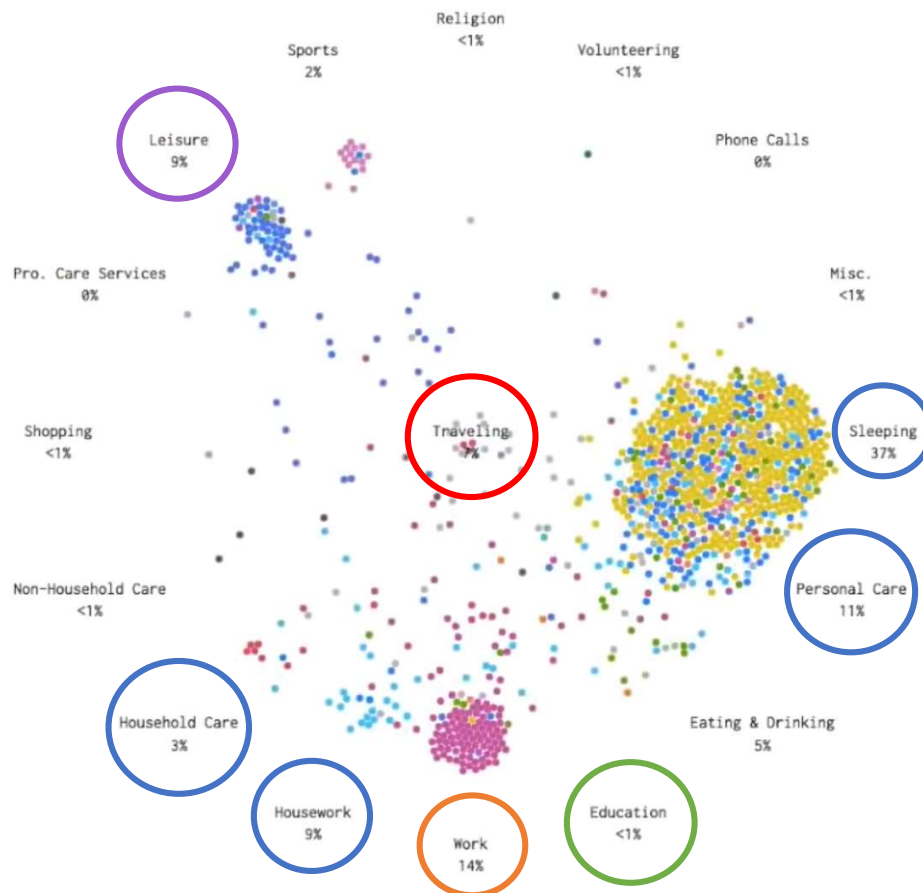


Figure 13: Identifying the different areas in the simulation

We see by looking closer at the simulation that there are common locations for the main actions we see among the possibilities.

The areas or activities marked by blue circles in Figure 13 usually take place at home, the Purple Circle is assigned to Leisure which can be anywhere but usually tends to locate towards the centre of the city and the more urban areas.

The Orange Circle is for the Workplace and the Green Circle for Education. The in between point marked in Red, which connects different locations is the corresponding to Traveling, at any given time inside the 8am - 8pm time frame around 10% of population are traveling.

Having noticed this, if we see the whole visualization through the whole day of simulation on an average day in an American life, we observe that most of the traveling occurs at the beginning of the day (06:30-08:30 h) and towards the end of it (16:30-18:30 h), coinciding with the working hours almost to perfection.

Also, important to mention the fact, that the end of the day (17:00 h), is the moment of the day where we see the clear moves between the main areas as seen in the below Figure:



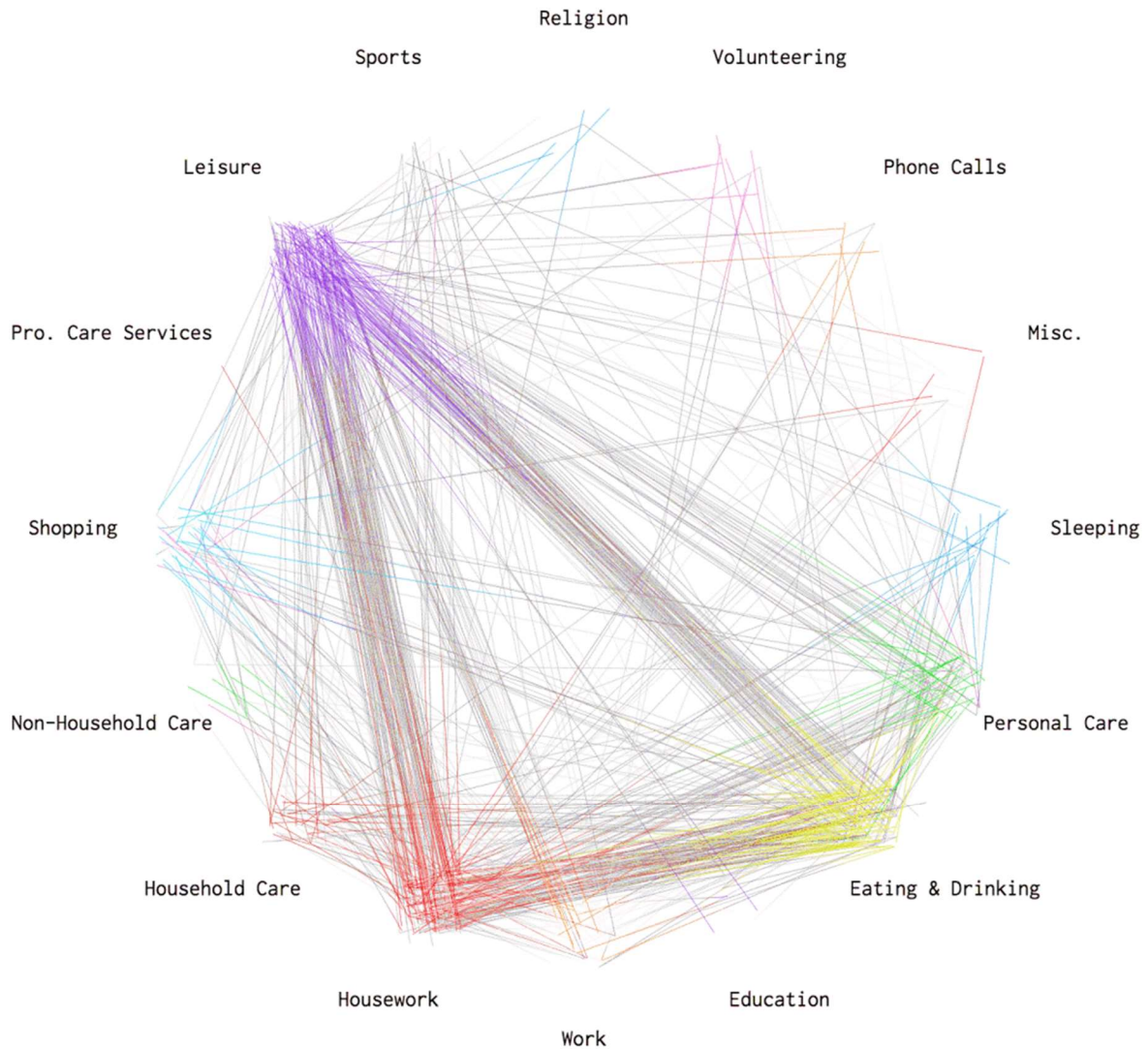


Figure 14: Flow analysed at 17:00pm end of the day (Yau, 2015)

We also gathered useful information regarding peak usage times of the services during our interview with Elio Martinez (YEGO City Manager in Valencia) in 2019.

According to him, the peak times concentrated around the first days of the weekend but spread through the surrounding days as well. There was a clear increasing trend starting on Wednesdays reaching maximum rides on Thursday, Friday and Saturday. Therefore, we can understand that this peak comes out of the rides performed by younger users looking to go out and move around the city, not having to worry about finding a parking spot or moving the car from the garage. We must acknowledge that this shows two different common uses to our services: the daily commuting and the leisure driven mobility.

This is only an average of what we find in our usual week in Valencia. We must understand that cities may behave differently when we extrapolate to a different country and different people, but perhaps this piece of information can help us later in making decisions and estimates.

## 3. Ridesharing & YEGO

### 3.1. What is ridesharing?

The concept of ridesharing; also referred to as ride-hailing in some occasions, since not all rides are shared after all; was born some time ago, around 2015, with the emergence of Apps like UBER or Lyft in the US, which brought the concept closer to the general public. The idea behind ridesharing is very simple: to match passengers with vehicles. This is usually done by means of an electronic device or portal such as: an App in our smartphones (the most mobile and commonly seen) or a Website (Wikipedia, 2020).

It was estimated that ridesharing provides at least \$7 billion in consumer surplus per year in the United States (2015 prices). (Cohen, Hahn, Hall, Levitt, & Metcalfe, 2016).

Inside ridesharing is where we find what is known better in Europe as Motosharing, whose cumulative trend we have already mentioned along with Figure 8 and Figure 10. As of the last 2 years another trend of the simpler versions of scooters have been on the rise, the also known as scooter sharing, which is more popular in the US currently as we'll see later.

### 3.2. An introduction to the company: YEGO

YUGO (YEGO in Spain) is a company which was launched in February 2016 by 6 young French friends. YEGO's ambition is to simplify urban mobility and bring electric mobility closer to as many people as possible. YEGO started operating in the most competitive city and the capital of moto-sharing in Europe: Barcelona. ( YEGO Mobility, 2019)

They have developed their own software allowing them to open their platform to new partnerships in order to make their expansion plans even bigger, although so far, the only cities where they are present are Barcelona, Valencia and Bordeaux. Their goal is to expand more efficient and happy mobility to other cities; thus, they have created a franchise program to attract the talented entrepreneurs and investors to launch other cities. ( YEGO Mobility, 2019)With an economic fare (set last year to 0.25 cents per minute), and an even lower average fare when using their bundles (which lowers the fare down to 17 cents/min.) along with an autonomy of 60 km motorcycles (newest version of EMCO can go up to 130km). ( YEGO Mobility, 2019)

This gives YEGO an edge in the market and due to the attractive offer of this company has positioned it as one of the best options of motorcycle sharing to move around the city quickly, economically and sustainably. In 2018, YEGO had a global growth of 350%, so you get a rough idea of the opportunity in growth only. And in Valencia they started out in December 2018 and started to have benefits already in March 2019, a very attractive payback. (Martinez, 2019)

Using as a sample the users of this company in the city Valencia, these are women and men with an average age of 31 years. They are short, sporadic and / or routine journeys with an average of 14 mins. per ride, usually within peak hours (before 9 in the morning and after 7 in the afternoon). Nowadays with numbers close to 190 motorcycles in Valencia, with around are around 1.000 daily active users, and usually around 175/190 of the scooters active. (Redacció VIA Empresa, 2018) (La Vanguardia, 2019) (Martinez, 2019)

Present already in 3 European cities: Valencia, Barcelona and Bordeaux with a fleet of around 1000 electric motorcycles and close to the 110K drivers. A company that grew from 100K in 2016, to 1.2 million in revenues in 2018 (growing revenues by 350% that year) and is expected to earn over 4 Million € 2019. All of this, in a sector which is expected to grow +30% from 2015 to 2030, is a very good combination for profit making. (La Vanguardia, 2019)

### 3.3. What is a Franchise?

According to Investopedia:

A franchise is “a type of license that a party (franchisee) acquires to allow them to have access to a business's (franchisor) proprietary knowledge, processes, and trademarks in order to allow the party to sell a product or provide a service under the business's name. In exchange for gaining the franchise, the franchisee usually pays the franchisor an initial start-up and annual licensing fees.” (Investopedia, 2019)

When a businessman or entrepreneur is not sure about buying an existing company or starting one from scratch, a franchise provides a safe in-between haven. In exchange for an initial fee and following royalties which the franchisee pays the franchisor, he is allowed to use trademarks, use existing infrastructures, support and the franchisor's system to sell their products or services.

Here are some of the benefits of becoming a franchisee:

Reduction of risk, since the company already exists and hopefully is successful enough, demand for the products and services offered will be already out there which takes some of the risks of having an empty shop during the first days. The Standardized products and systems: the franchise already has a well thought out, efficient system and way of working to get the most out of the business.

Collective buying power, since there are many others like you, you can benefit from economies of scale and collective bargaining power since all the franchises are supplied with the same raw materials. This also helps with other functions such as advertising, guidance and assistance in financial or operational matters. The mother company is used to having other franchises and has encountered many problems around the world, this way if a problem does come up, they will most likely have experienced it before and have a contingency plan or a solution ready for you.

And perhaps on one of the most important aspects when building a business: Location, they can also assist you on which is the best and most strategic place to set up your franchise to benefit the most from it.

But there's a possible downside as well:

You must bear into mind the reality of the situation and make sure you make thorough Cash Flow projections in order to analyse the business opportunity, otherwise the performance of the franchise could turn out to be disappointing and since of course you have a legal binding contract with the franchisor, it's not something you can easily get out of. Of course; last, but not least; the franchisor problems are your problems, which means that if something in their calculations and systems is wrong, it'll cost you your business. (Entrepreneur Magazine, 2020)

### 3.4. Setting up a YEGO Garage: What is provided?

Just as we mentioned before, becoming a franchisee for an already created brand comes with a lot of benefits. For this particular case, we've put together a small summary of everything which is taken care of and provided by YEGO to every Franchisee that decides to open a YEGO Garage with them.

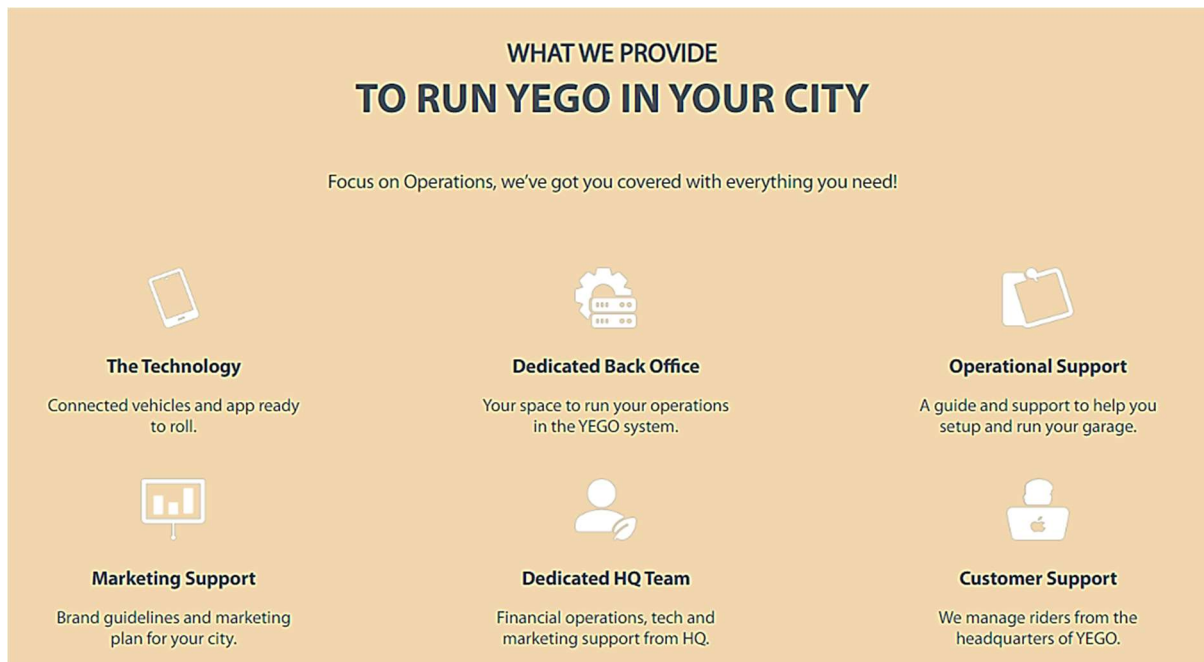


Figure 15: What YEGO provides their Franchisees ( YEGO Mobility, 2019)

As we see in Figure 155, the Franchisor would provide:

**Technology:** Sourcing for us our new fleet from their German supplier, EMCO of their GPS trackable, sensor packed, vintage electric scooters. As well as of course their APP.

**Back Office:** an in-house especially designed set of back end servers and software applications, which are constantly updated and improved, to let our team (City Manager and Battery Swappers) keep track of the day to day operations in the most efficient way possible.

**Operational Support:** a guide to help us during our first months of roll-out, as well as a support team to help us through the many operational struggles and bumps along the road which one faces in the beginning phase.

**Marketing Support:** Not only an initial marketing plan but also brand materials and guidelines to plan your own marketing projects in your city.

**HQ Team:** A centralized team making sure we can focus on the operations. This means forgetting about Finance, IT & Marketing Support

**Customer Support:** Last, but perhaps one of the most important components, is the 24h open hotlines (call centres) and different points of contact our customers will have in case of doubt or emergency are also centralized and taken care of.

If any of the already mentioned perks seem simply not enough for us to make a choice, we also have a few other details that finally helped us in our decision in Figure 16 below:

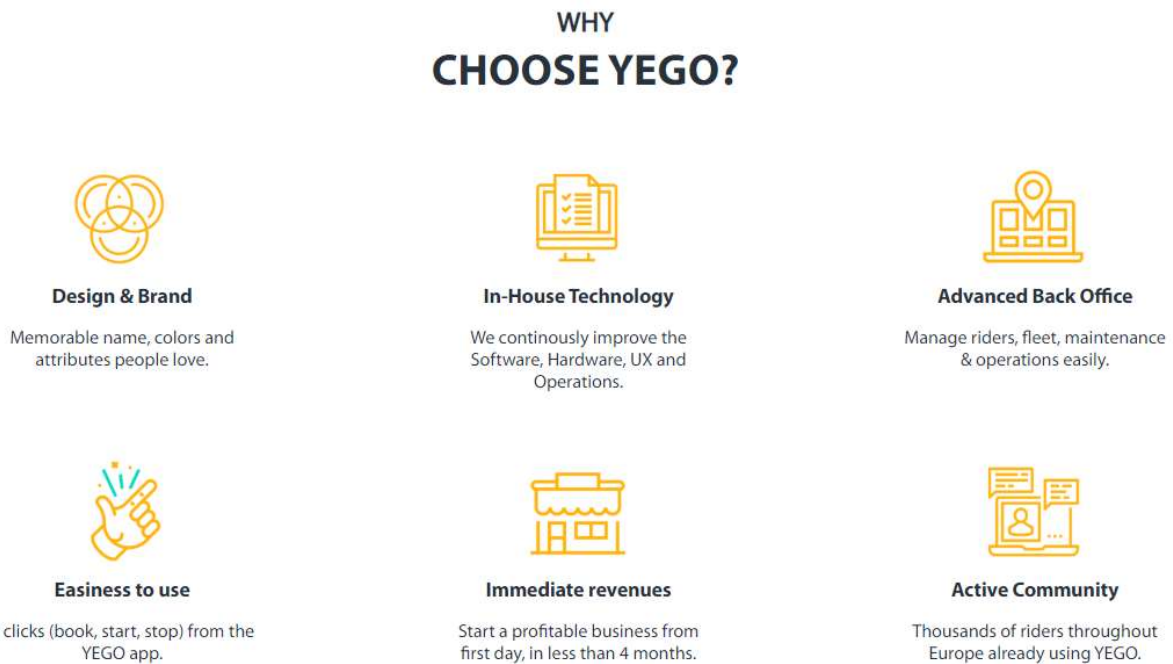


Figure 16: Why choose YEGO ( YEGO Mobility, 2019)

### 3.5. Comparison to Biggest Competitors

As we've seen in the data shown in Figure 17, Spain is one of the most competitive markets for motosharing services therefore we will make use of this market to draw a comparison between all of the companies which provide the same services as YEGO, and are therefore direct competitors. (OCU, 2019)

PLATAFORMA	CIUDADES	FLOTA	PRECIO MIN/MIN	PRECIO MÁX/MIN
<b>Acciona</b>	Madrid y Valencia	1.300	0,25 €	0,27 €/min
<b>Coup</b>	Madrid	1.350	0,25 €	
<b>eCooltra</b>	Barcelona, Madrid y Valencia	2.000	0,26 €	
<b>loscoot</b>	Madrid	300	0,24 €	
<b>Motit</b>	Barcelona	200	0,18 €	0,24 €
<b>Movo</b>	Madrid	300	0,11 €	0,20 €
<b>Moving</b>	Barcelona, Cádiz, Córdoba, Granada, Madrid, Málaga, Puerto de Santa María, Sevilla, Valencia y Zaragoza	2.500	0,25 €	
<b>Yego</b>	Barcelona	150	0,25 €	

Figure 17: Motosharing services at a glance (2017)

Though we find a lot of competitors we'll explain later on how this will affect our particular project, for now let's not focus too much on it.

## 4. Finding a Location

### 4.1. Location Options

Judging by the recent evolution of the market as of 2019, and putting our eyes back on Figure 10, we have Spain as a clear winner in this race over scooter sharing domination. Country with the highest number of cities where this service is supplied and also, leading in overall number of scooters.

In order to find the perfect location, the perfect city, it will have to tick on all the right boxes for the following variables:

1. EU vs US
2. Demand (Existing and High)
3. Competition (Low or very little)
4. Weather
5. Synergies

Our initial thoughts were to expand the business towards the US, since it seemed like a very big market beforehand. Also, especially when other competitors like Muving have already been expanding to new markets in EU (France) and also in the US initially in cities like: Toulouse in France, Atlanta, Georgia to be present on the American East coast and Bay Area & Mountain View on the West Coast, a strategic positioning close to universities like Stanford & Berkley Universities. (Muving, 2018)

These markets are according to Muving filled with users that fit the user profile perfectly: a young, modern and aware public.

Of course, since that expansion was reported, almost 2 years have gone by, and we have reconsidered the US market. There has been a spree of scooter sharing companies like Bird or many others that have followed their dock-less business model, like Scoot & Co. or Lime (Where. This type of scooter sharing has won over some Americans and seems to be winning the race in bigger US cities. They achieved this by having a lower price of 15 cents/min which is possible thanks to the lower cost of their much simpler scooter versions compared to any European moto-sharing brand.

One of the main problems with the American market is the way the land is structured and organized. Only with the exception of the more densely populated and concentrated urban areas like NY for example. Most of the bigger or well-known cities, where the market would be filled with users that would fit our profile, are huge to the point of making it very complicated to define an area of usage.

Knowing by the flow chart visualization that people want to move between three basic points:

- Home
- Work/Education
- Leisure (usually in the Centre)

When we think about the American way of moving, it's just like in the movies, Home is usually in the outskirts of the urban area, in big suburbs; and the car is usually taken to go anywhere from work to groceries (that is if they're not delivered in your front door). Work is usually either in the centre of the cities or in a more industrialized space further away from the city centre than the suburbs. Finally, social life is directed towards the centre of the city.

And all these areas are connected by highways all around, which explains why the US is the #2 country in % of household that have a car (Pew research Center, 2015) and #4 in vehicles per capita (Wikipedia, 2017).

With city plans like the ones seen below (Los Angeles or Florida) compared to a more mid-small size city like Valencia which is perfect size for this type of business. This is a clear barrier for success.

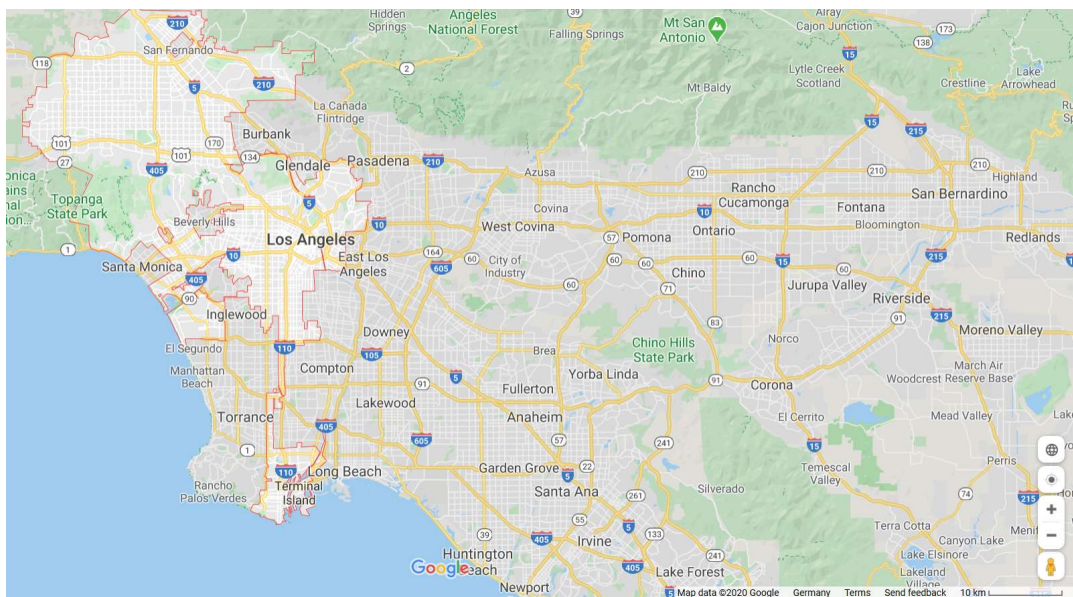


Figure 18: Los Angeles from above (Google, 2020)

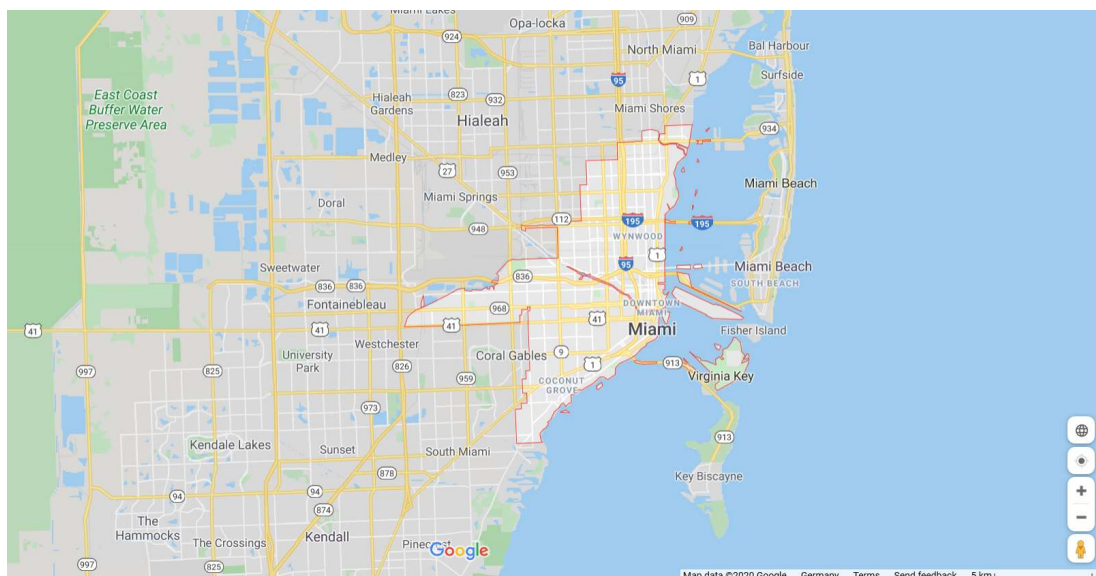


Figure 19: Miami from above (Google, 2020)

We would even find problems with autonomy and range of our scooters in such large city plans, making them less profitable, while keeping prices attractive to compete against Bird, Lime and others in the market.

Another problem is that such large urban and sub-urban connections call for infrastructure like highways where our scooters would not be able to circulate due to our speed limit of 50 km/h.

Thus the US market was discarded, Asia was still an option but, due to complexity in support and supply, as well as culture and language barriers, along with high levels of congestion of these vehicles and already high ownership of motorcycles shown in Figure 20, our focus was set on the possibilities inside the EU market. (Pew Research Centre, 2015)

When analysing the Demand, it's good to have a look at Figure 20 where we see that the market in the US is not very used to driving around in motorcycles, as we know the car is still king in North American culture. Though the Asian countries are on top of the list, precisely because the ownership of motorcycles is so high up, it makes it less attractive for this type of business to show a higher value when comparing renting per minute to ownership.

In terms of Competition, the European market is quite saturated in certain areas and growing as we could observe in Figure 10, while in the US the smaller scooter companies like Lime and Bird are winning over market share in the few profitable and densely populated cities, which will soon come to the same saturation problems found in some cities in Europe already and lead to stricter regulations, like the ones imposed in France's latest reform.

Another important point against shifting YEGOs business away from Europe comes down to possible synergies and other costs it could imply to the franchise. As of right now, they only offer their services in Spain and France. Moving the business partially to the US or Asia, would mean different timeframes and languages that support would have to take care of as well as different laws.

Also, our supplier for motorcycles and spare parts, EMCO, is settled in Germany, therefore staying close to our suppliers could help us in lowering our costs and staying efficient in our operations. And since YEGO already have a garage opened up in Bordeaux, we can make use of support infrastructure creating synergy using the same French customer support provider to supply service to both cities.



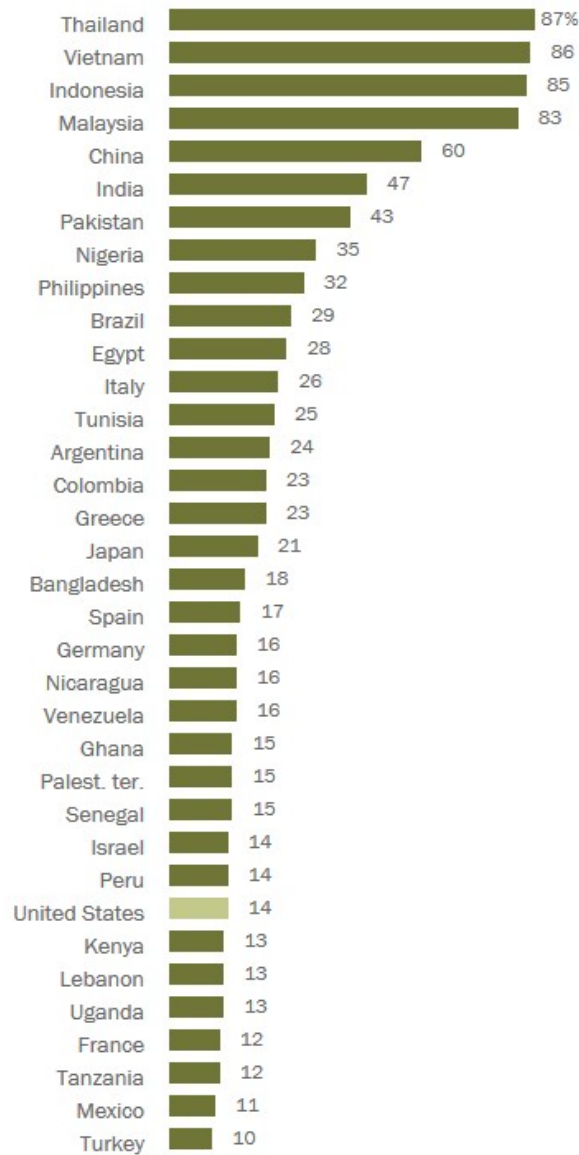


Figure 20: Percentage of households that have a motorcycle (Pew Research Centre)

## 5. The Location

With a population of close to 800.000 inhabitants, which is great as we will use Valencia (also around 800.000 inhabitants) for comparison purposes constantly.

This city ranks as second city in France and situated on the south coast of the French. A combination of the external factors and particular features, specific to this region and particularly this city offer, potentially a very good level of suitability and viability for the YEGO Garage project.

Figure 21: Marseille (Google Images, 2019)





Figure 22: Marseille on a map (Google Images, 2019)

Through the following sections we'll analyse the potential advantages and inconveniences as well as all the relevant market research and current situation, in order to assess the likelihood of this project to potentially end up succeeding or not.

### 5.1. Transport in Marseille

France, with over a total of 23.2 million employees, no less than 7 out of 10 use their car to commute according to new INSEE study. The only exception to this, are those who live in the Lyon and Paris metropolitan areas, where public transport is more commonly used.

In general, public transport is only used by 16% of the commuters, while going on foot (7%) and using a two-wheeler (4%) are even less common. We must consider that currently there is not a big supply of services like the one YEGO offers in France, therefore it is understandable to see low numbers on two-wheelers. (Blanckaert, 2019)

On top of this, a car can take up to 4/5 people at once and is usually always used to transport 1 person only through the commute, leading to higher emissions of CO<sub>2</sub> into the atmosphere.

Also, important to mention that France and Lyon are much rainier locations therefore are not convenient to offer this type of service, but this can be analysed more into detail when looking at our Weather maps in the later section of this thesis.

Analysing a bit more into detail the current mobility offers that the city offers to their inhabitants and tourists, we see that Marseille has a public transport system composed of 2 Subway lines, 2 Tram lines, and 74 Bus lines. Régie des Transports de Marseille (RTM) is the company in charge of managing it all and one can check their website to plan a specific route, or to look up info on times and ticket prices.

Bus lines are active between 5:00 and 21:00 and night-time rides only run until 00:30. The Subway lines on the other hand run 05:00h to 22:30h Monday to Thursdays and on the weekend, runtime is extended to 00:30h.

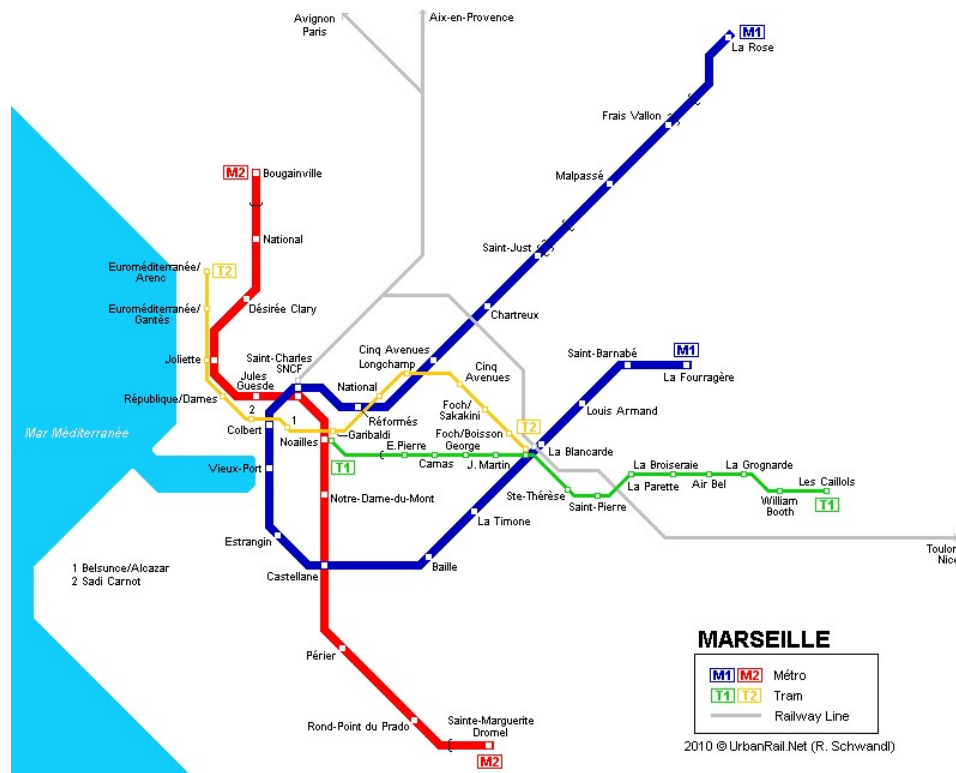


Figure 23: Marseille's Tram and Subway Lines (Google Images: Orangesmile.com)

Marseille also has an extensive system of Docked Bicycles called Le Veló. Working in a very similar way to Valenbisi (equivalent in Valencia). User simply has to pay a yearly subscription and with their card they'll be able to do trips under 30 mins for free. However, the city does not offer a lot of bike lanes and therefore is not very bike friendly. (Marseille Tourisme, 2020)

Lastly taxis can be found anywhere around the city, but end up costing more than our services, and therefore should not worry us.

Considering; that cities like Valencia & Barcelona, have even better public transport connections to all parts of the city, with Bus, Subway or Docked Bike services; adding to this the low affinity to bike lanes of the city, success of our business would look positive.

Since Marseille is also a very tricky city when it comes to owning a car due to the lack of parking space in the city itself, we'll look at the cost of traveling with public transport. Although it might not be as fast and direct, in terms of prices we expect public transport to have the edge.

The price for a one way ticket of metro or tram is at 1.60€ but of course they offer their TransPass which is a rechargeable card which you can top up, and also the CityPass option, great for tourists visiting the city, since it offers unlimited use of the network for 24h, 48h and 72h which come at 24€, 31€ and 39€ respectively. There is also a 12-month pass that ranges in prices from 40-18€/month. (Marseille Tourisme, 2020)

In the case of a one-way ticket, 1.60€ could buy you a bit over 6 mins in a YEGO motorcycle, so for the shorter distances it might be more convenient. And as mentioned, if you're going to a specific place away from any bus, metro or tram station, or need to switch between these means of transport more than once, you can always opt for a YEGO scooter.

As of today, no other competitor of YEGO offers their services in the city. Only CityScoot is present in Paris, but other competitors like Coup, have jumped out of the race according to their website, so it doesn't look like a profitable city for these services. (Coup, 2020)

## 5.2. Defining 3 areas (based on Flow chart)

### Education



Figure 24: Universities in Marseille (Google, 2020)

We see here most of the universities are concentrated in the centre of the city with the exception of 2-3 universities.

The objective is to connect the main areas as well as possible but we also must keep into mind that for the first year of runtime with this project, our objective should be to restrict areas in the most efficient way to make sure that our scooters are used as much as possible and don't fall into an area of low profitability and high levels of down-time, as we'll explain in further detail later on.

Therefore, we are marking in red the area which we feel, could critically affect our business and must be covered to ensure success. In a way, we are implementing the MUSTS of a MOSCOW analysis to the areas which our services must, should, could and won't cover.



Figure 25: MOSCOW analysis (Google Images)

**LEISURE**



Figure 26: Bars in Marseille (Google, 2020)

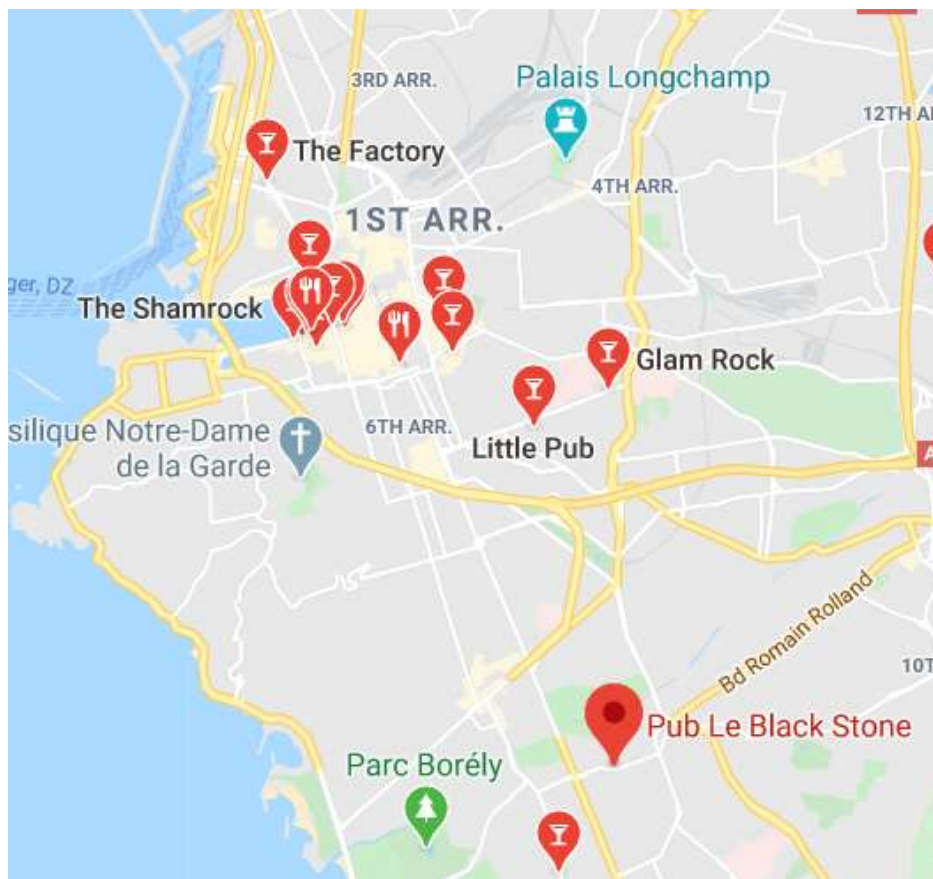


Figure 27: Pubs in Marseille (Google, 2020)



Figure 28: Football Stadiums in Marseille (Google, 2020)

## **BUSINESS**



Figure 29: Main in-city Businesses Locations (Google, 2020)



Figure 30: Hotels in Marseille (Google, 2020)

Here we observe that also most of the leisure is concentrated in the centre 1st – 6th Arr. (Neighbourhood), finding there, most bars, restaurants, museums and other attractions. Maybe the clearest exception to this rule is the OM (Olympique de Marseille) Stadium, situated in the south of the city which is an important point to be included into our rideable area.

Also, nice to mention that most of the stadiums are located towards the outskirts of the city so choosing which ones must be kept in our rideable area and which not, might come down to testing

Looking at Hotel positioning throughout the city is very convenient, because it can potentially let us know, where people prefer to stay. This is usually closer to the main purpose of their visit. We see a high degree of concentration in the Harbour part of the city, of course close to restaurants, main touristic attractions and centred.

But, along quite a lot of these maps show us a tendency towards the importance of the centre area as well as the southern area, where we see parks, pubs and bars (probably driven there by the Olympique de Marseille pre-game excitement) as well as some businesses.

## HOME

The case of Marseille has nothing to do with its opposite American cities, and residence of inhabitants is well spread among all the areas of Marseille which will make it even harder to draw the limits to our rideable area.

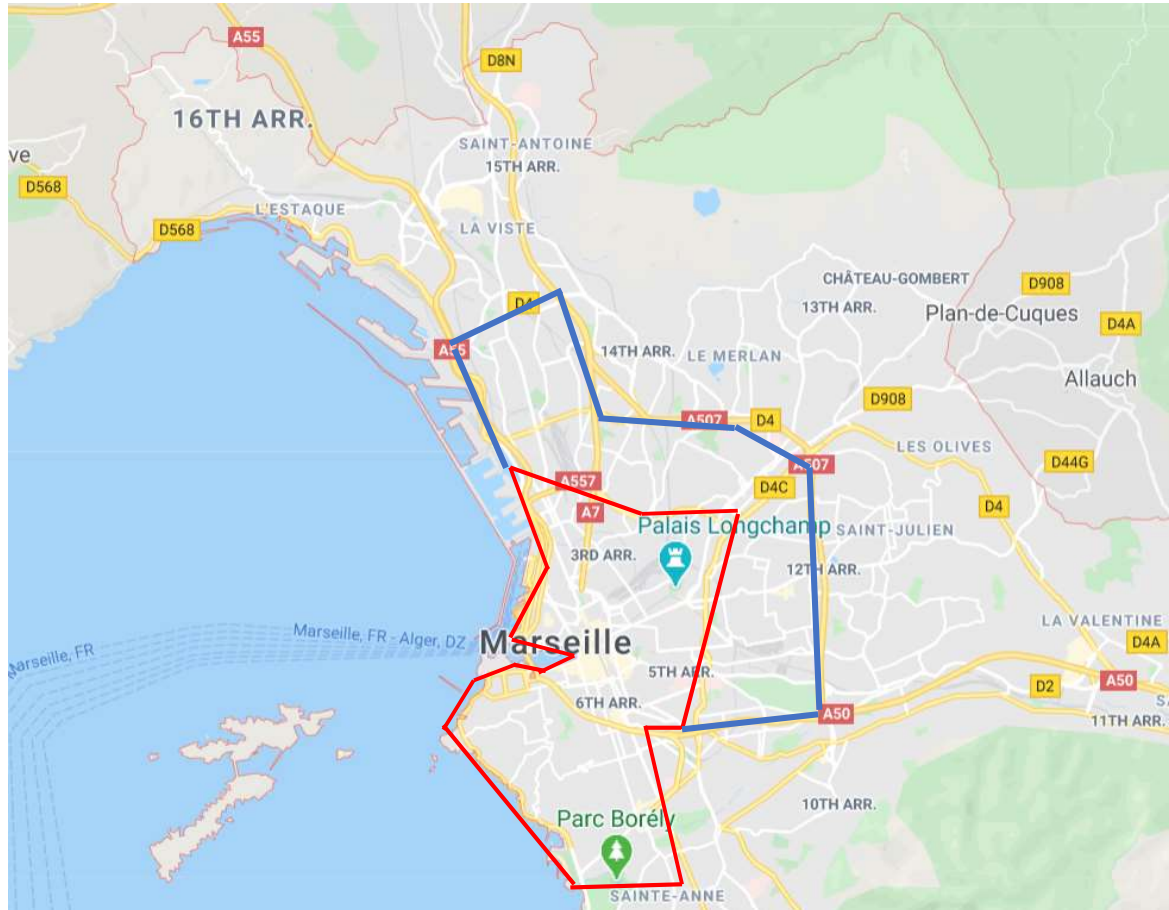


Figure 31: Rideable Area Year1(Red) and Year2(Blue) - (Google, 2020)

Though this first draft of the area might come at a surprise, given the size of it, after identifying the main areas in urban mobility, our objective is to link these through our services, while being efficient in setting the limits of our usage zone to improve the speed of our battery replacers (Power Rangers).

The main challenge here is to figure out exactly where to draw the limit to be as efficient and concentrated as possible. Therefore, for our second draft, we considered slimming down the area. In our case we think for the initial year it's best to try with a well condensed area.

With these limits we can connect the main areas showed in the captions above, making emphasis in the southern area of the city where Parc Borély and the city's team stadium (Orange Velodrome) sits whilst maintaining an efficient area inside of the A557 along the north and eastern borders.

Rideable area will surely be expanded for 2<sup>nd</sup> year if business is successful to blue area.



## 5.3. SWOT Analysis

### 5.3.1. STRENGTHS

One of YEGO's biggest strengths and especially the most appealing to the riders, is the visual design which separates them from the rest. A vintage looking EMCO Nova R 3000 (Retro) which pack a battery with an autonomy of up to 130km and can reach a top speed of 45 km/h.



Figure 32: Scooter Design (YEGO, 2019)

The Brand has come up recently with a revolutionary idea to fix one of their most preoccupying problems. The problem first presented itself and was first analysed in the city where they started, Barcelona.

As we observe in Figure 16, depending on the area the scooter was dropped by the last user, there were notable differences in the down times of the scooters. These down times ranged from 45 min to 9h and 30 mins. This was a problem because a scooter that is not moving is a scooter that brings no money.

Also, on the other side of the coin, it was not only the company that lost money with this problem, but also new customers were unhappy when they didn't find a scooter around the corner from their position. Unhappy users meant, less conversion to frequent riders, which in the end affected YEGO negatively.

This created the necessity of what YEGO calls their Space Rangers, whose job was to relocate these scooters, but then again hiring these Space Rangers was an expensive workaround.

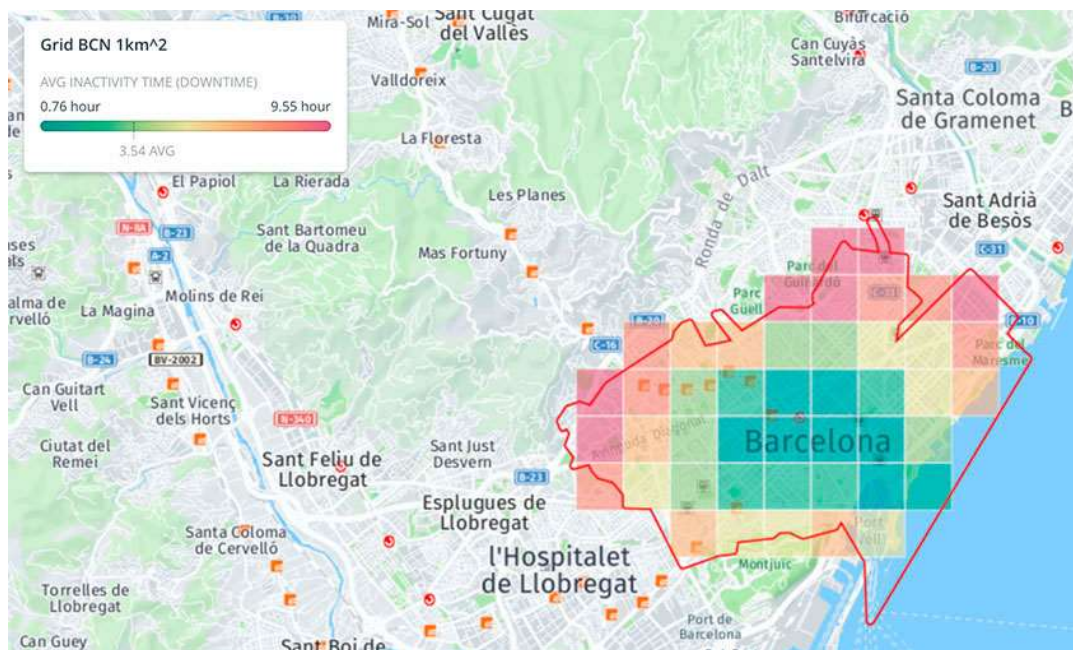


Figure 33: Visual Grid with Avg. Downtime per scooter per area (YEGO Motor Club, 2019)

That was, until YEGO came up with the Relocation system, this is basically an algorithm incorporated to the APP which allows the user to find "Special Scooters" as seen below on the screen caption in

Figure 34: Screenshot of Relocation (YEGO Motor Club, 2020) .

The algorithm activates scooters to make them special if they are in one of the less profitable areas. The user gets a visual hint to be alerted of this. If he unlocks that scooter and rides it to one of the better, more profitable areas for YEGO, the rider will get up to 15 mins free on his ride.

Riders have better availability in key areas, as well as discounts or even free rides for moving less profitable scooters for YEGO to more profitable areas.

This is something YEGO had introduced, but soon after, Ecoltra one of the biggest competitors in Europe and particularly to them in Spain, started introducing as well. Still it becomes a differentiating factor when compared to all other competitors that don't incorporate yet

Perhaps one of the biggest differentiating factors of this Brand against their competitors is their YEGO Motor Club, through it they try to bring together users and create a community, the idea of the brand is to create a kind of lifestyle for their users making them proud of their identity as YEGO Riders. They encourage this platform through their app, paying attention to details when creating personalisation and inviting users to see how the scooters are charged and repaired. The club is also open to other start-ups and all riders. (Pastor, 2018)

Also, their APP has a well thought out design that enables users to enjoy the ride in only 3 clicks, since it finds the closest motorcycle to you automatically.

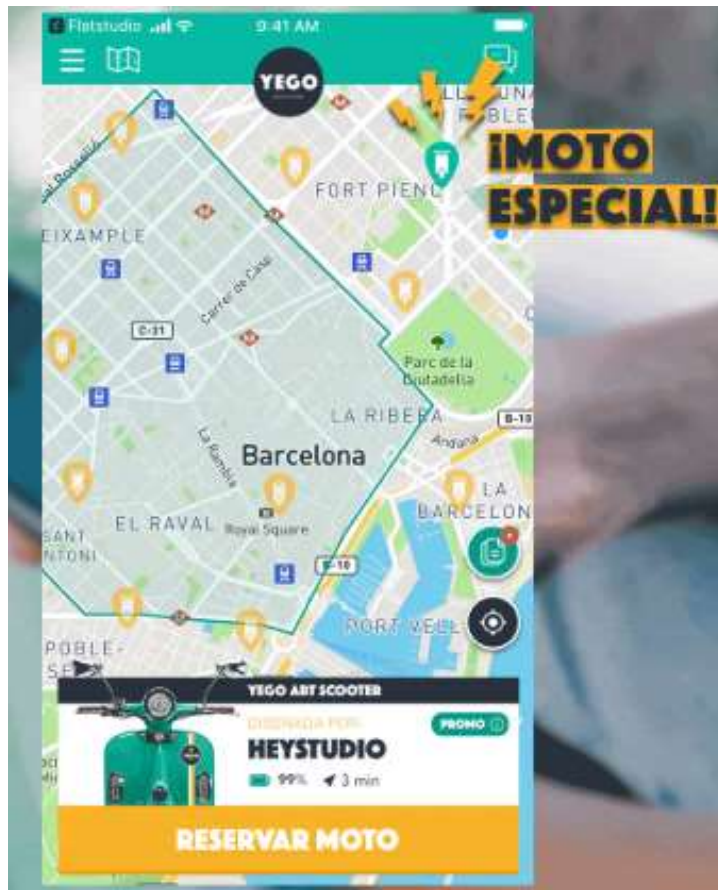


Figure 34: Screenshot of Relocation (YEGO Motor Club, 2020)

Just recently the Brand has announced it will be expanding their portfolio to offer different mobility vehicles to their users, making possible competition against other potential competitors like BIRD and Lime with lighter weight stand-up scooters.

In Figure 35 (below), we can observe they will be offering electric bikes and stand-up scooters in addition to their classic scooters.



Figure 35: YEGO's 2020 All Electric Line-up (Bike/Scooter/Stand-up)

Yet another differentiating factor for YEGO is that when bicycles and stand-up scooters are parked, the user will have to send a picture through the app as a closing mechanism. This also ensures that the user parked it correctly and creates a better image for the brand differentiating it from others. (Garcia, 2019)

These are the prices YEGO offers currently in Spain:

**Standard price: 0.25€ /minute** (in line with Ecooltra)

Pack **Basic 100 minutes** for **20€**. (Discount of 20%)

Pack **Crazy 500 minutes** for **85€**. (Discount of 32%)

This last Pack is one of the cheapest in the sector and gives YEGO an edge over lots of their competitors. All this along with a great customer support with an average response time of 36 seconds in case of any incidence, are major strengths for this brand.

### 5.3.2. WEAKNESSES

One of the few weaknesses one could come up with is the fact that there is not much knowledge of our brand in the given region, having only presence in one other French city, it is hard to tell whether the market is ready for us or not.

The Entry Cannon for this royalty is quite high taking into consideration all costs which will be split up and adapted to the project, YEGO estimates around 400K to 500K of initial investment to carry out. Out of the conversation we had with Valencia's city manager we estimated that the current entry royalty payment amounts to a 10% of the total set-up costs. ( YEGO Mobility, 2019)

### 5.3.3. OPORTUNITIES

Given the current market situation and predictions of growth already presented in other sections of this thesis before, it seems like there is a bright future for this sector.

The market is more ready than ever, there is a growing concern with the environment every day and we see tendencies of social responsibility growing amongst the citizens of the world.

Competition-wise, no other company is offering services like ours in this specific city yet, which makes it a very good location in this sense for now.

### 5.3.4. THREATS

There are many possible external threats to this project. The current public transportation system is without a doubt one of them, with metro, bus lines and other resources covering the main area, will our potential users see the benefits in using our services?

Possible success of our brand in this area could prompt the appearance of lower cost competitors which would become a problem for us in the future.

Global economy threatening to slow down can affect potentially consumers, if a recession was to come, it would hit this business project at the beginning and potentially close us down.

Regulation is something which has already started in saturated and densely populated areas such as Paris in France, or in Spain for example with the introduction of limited licenses for all suppliers of these services to fight for.

**SWOT Summary**

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Scooter &amp; Brand Design</li> <li>• Relocation Software</li> <li>• Low Bundle Pack Prices</li> <li>• Extended Line-up (3 types of vehicles now)</li> <li>• 3-click APP Design</li> <li>• YEGO Motor Club</li> </ul>	<ul style="list-style-type: none"> <li>• Not well known in France (Only in Bordeaux)</li> <li>• High Costs Set-up &amp; Franchise costs</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Industry is growing and expected to grow</li> <li>• Growing Concerns: Environment &amp; Sustainability</li> <li>• No competition in our city</li> </ul>	<ul style="list-style-type: none"> <li>• Government Regulations</li> <li>• Entry of Competition to our Market</li> <li>• World Economic Recession</li> <li>• Market preferences shift</li> </ul>

Figure 36: SWOT Summary (Own Creation)

Strength + Opportunity = **Attack**

Weakness + Opportunity = **Re-orientation**

Strength + Threat = **Defend**

Weakness + Threat = **Survival**

From this summary we can set the strategies for the future, which will be to focus on our strengths and promote them to get an edge over possible threats.

Make sure we resolve the weaknesses which we can solve, the first one will be addressed through our marketing plan, while the second one we'll try to drop as much as possible by making our cost structure more flexible relying on leases and rents split in monthly payments and cancellable at any time.

Make use of the momentum in the opportunities to use them in our favour, especially with the current trend and growth in both industry and user mentality.

When looking towards the survival strategy, it's best to be prepared and tread carefully in case a recession hits, especially when having high initial costs. Making sure we can dodge bumps along the road without taking a big financial hit, even if this would mean to drop out of the race at some point.

## 5.4. PESTEL

In order to understand fully the macro forces in this particular set, we'll perform a PESTEL analysis, created to look closer to the external factors which affect our business plan in the following areas: Political, Economic, Social, technological, Environmental and Legal.

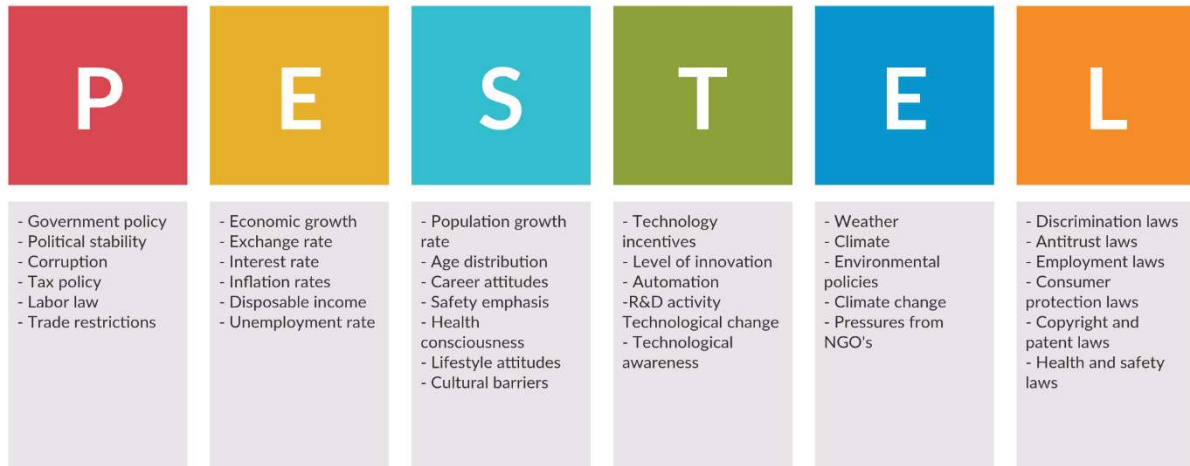


Figure 37: PESTEL Analysis at a glance (Pinterest, 2020)

### 5.4.1. Political (Stability, Policy in sector, Tax)

In terms of political situation, as of today and after all the yellow jacket protests and scandals, is currently stable and the president Macron is still in power as the president. Regarding any political decisions taken on mobility and transport:

“The National Assembly on Tuesday signed off on France’s first overhaul of mobility policies since 1982. The bill is an attempt to blend together three policy aims: to green transport, boost innovation and digitization, and improve transport links — all while not leading to an explosion of popular opposition” (Cokelaere, 2019)

Very important actions were taken in this recent reform to control modern scooters which have taken on Europe by surprise, like the ones seen below in Figure 40, since they did not abide by the old 1982 legal framework. This does not affect our EMCO scooters which abide by the same rules as motorized motorcycles or scooters.

See Figures 38 & 39 below difference between stand-up light weight scooters and normal scooters (also known as mopeds in the UK).



Figure 38: Lightweight Electric Stand-up Scooter



Figure 39: Normal Electric Scooter



*Figure 40: Lime-S scooters parked on a street in Paris - Getty Images - June 12, 2019*

To check the current law regarding circulation speed limits and parking around the city, something which is crucially important in this industry because it can potentially limit one of the great advantages of this mean of transport.

The French speed limits are set very similarly to the Spanish, which we are a bit more familiar with:

- In town – 50 km/h
- Outside town – 90 km/h
- Motorways – 110 km/h or 130 km/h depending on region

For us the main figure is the 50 km/h limit inside the town. Nothing to worry about in this case because our EMCO scooters are already designed to have a maximum speed of 50 km/h.

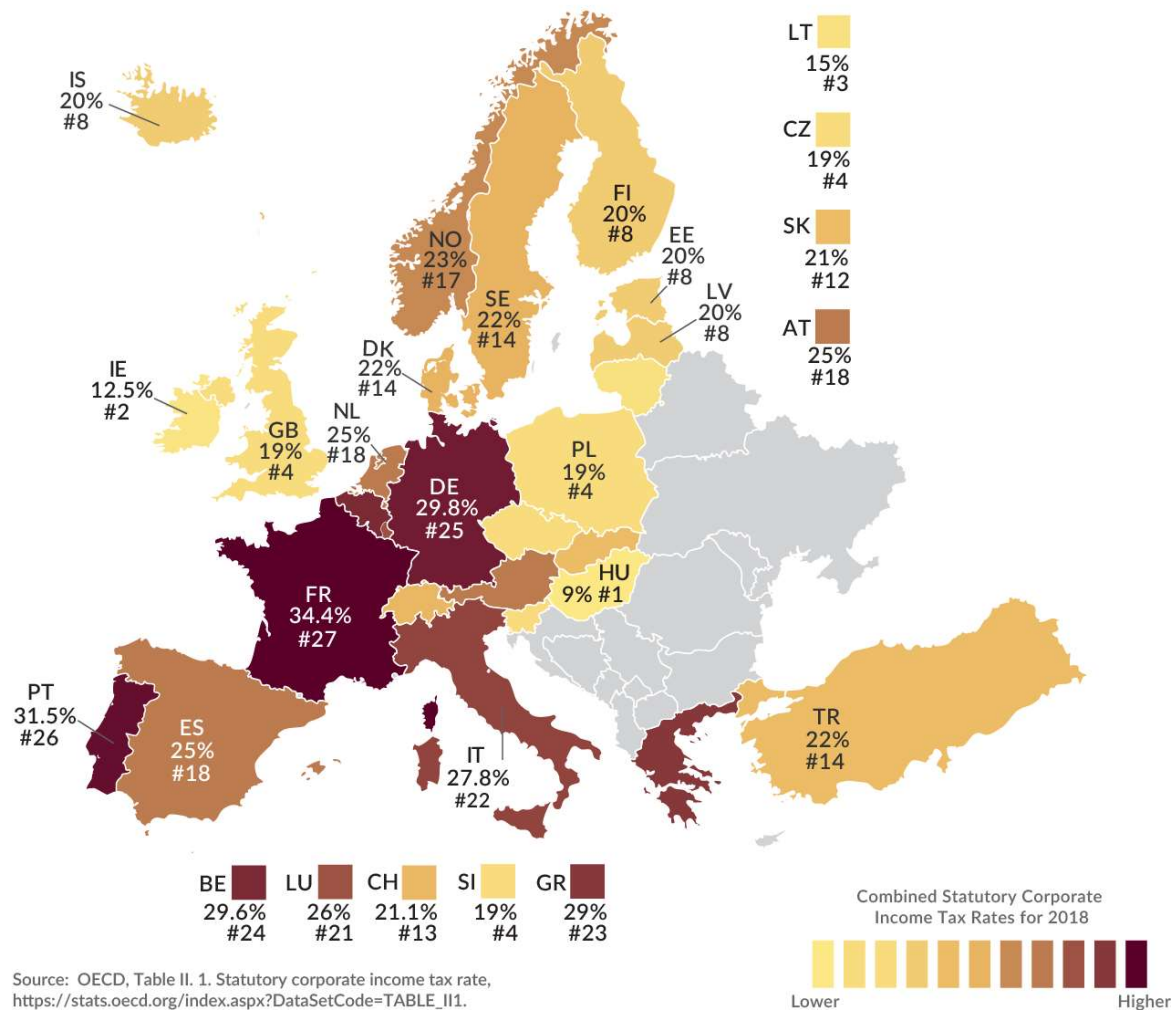
Regarding the parking limits we looked into travel and renting websites specifically for the South of France, which is said to be very lenient regarding motorcycle parking as long as it doesn't obstruct or disturb pedestrian movement. If a user is to park the scooter in the wrong place, since there is a log of all users of a particular bike, and the time of ride and duration, ticket is forwarded to the user.

In order to avoid discontent amongst users it is good to explain through the app how to make sure the user is parking it correctly. (Motor Bike Trip, 2014)

One of the least attractive points when looking at our business plan is the Tax Rate in France, at the moment it sits at a 34.4% which is the highest when compared to any other country in or near the EU region, as seen in Figure 41.

## Corporate Income Tax Rates in Europe

Combined Statutory Corporate Income Tax Rates for 2018



TAX FOUNDATION

@TaxFoundation

Figure 41: Corporate Tax Rates through European Area (Taxfoundation.com - OECD, 2019)

### 5.4.2. Economic (Stability, Fiscal Taxes on companies, EU & Euro)

Economics are currently stable overall in EU but there's been a recent worldwide concern since Q3-Q4 2019 regarding the US yield curve differences between the short-term notes vs. long term bonds.

This has been previously regarded as a clear indicator of recessions so it is predicted that a possible recession might be on the verge in the upcoming 1-3 years. Of course, this measure applies only to US treasuries, but having all economies connected this is a very important red flag to keep in mind.





Figure 42: Yield Spread on 10-year vs 3-month Treasuries (*The Economist*, 2019)

The Eurozone in general has been undergoing some tension through this long Brexit process, with US going to trade wars with everyone, Euro's strength has been under question lately. But it is still one of the stronger currencies when it comes to FOREX.

However, in recent months, due to COVID-19 also known commonly as Coronavirus, a fast spreading virus has taken over the world and economies by surprise. The deadliness of the disease is not critical, averaging 2% death rate on average, but elderly people or people with any sort of condition that can be worsened by the virus have a higher rate of death 10-15%.

Starting in China, one of the world's largest manufacturers and exporters, this virus can potentially cause panic in the markets; as it has already shown it can, tumbling the global market down 11% in a seven day period; and also potentially in all supply chains that depend on China & Asia region in general. This is one of the biggest falls in a 7-day period since 2008.

The concerns and panic worldwide has started to cause drops on EU and US stocks of 7-10% over the past weeks, and rumours say it might accelerate the next recession. So far, the virus has infected close to 100K people around the globe making its way to 70 countries.

However it is important to bear in mind that, this is a circumstantial situation, depending on how this disease progresses it could mean a rather complicated situation to launch our branch expansion to Marseille, or the contrary as well, in case it resolves rather quickly.

**GDP per capita at current market prices, 2008 and 2018**

(EU-28 = 100; based on PPS per inhabitant)

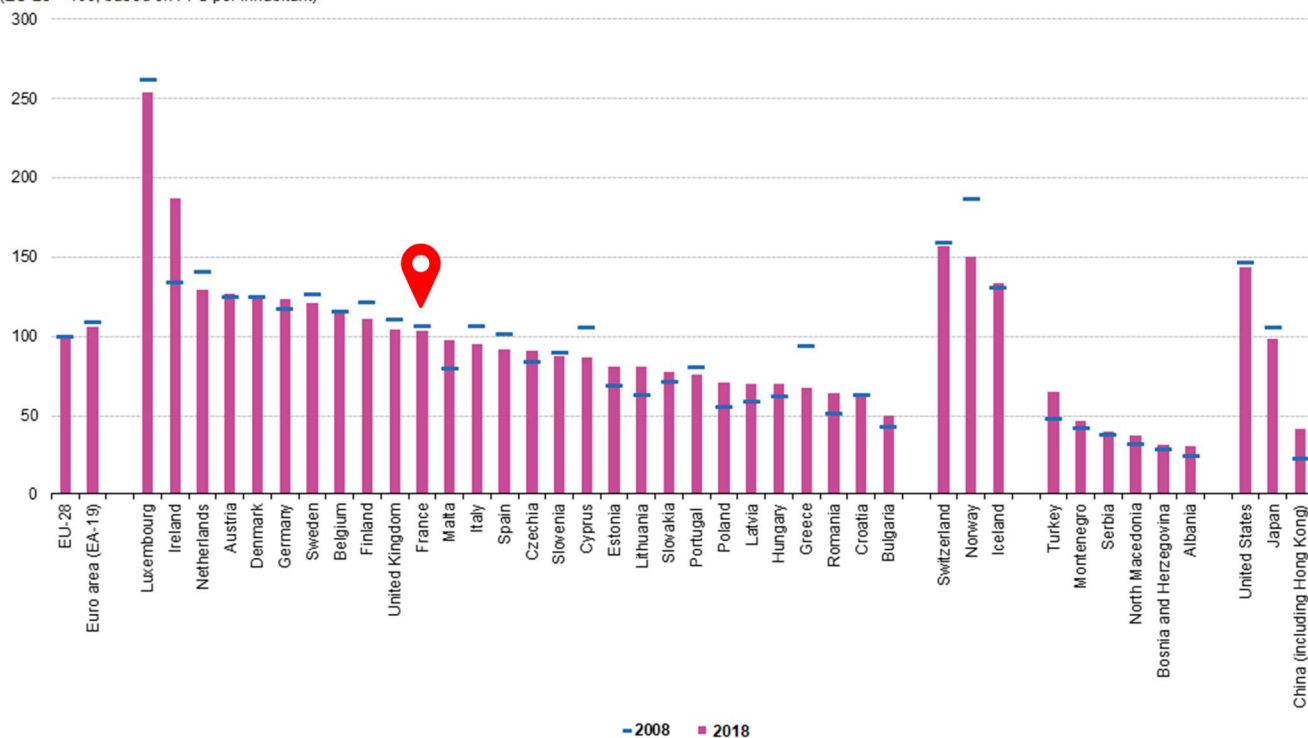


Figure 43: GDP Per Capita 2008 vs. 2018 (EU-28 as Base:100) - (European Commission, 2019)

At the same time in the figure above we can see how the economy in comparison to 2008, all referenced to EU-28 (as the 100 Base) in terms of GDP per capita. Here we sense a bit of stagnation, in the figure we can find France marked in red, a bit above the average EU-28 but absolutely in line with Euro Zone numbers.

We can also see the only countries which have been growing more than EU-28 in these years and now find themselves in a better situation than 10 years ago, at least in terms of GDP per capita.

Here we can find countries which had quite some room for growth, some Eastern European countries like Poland, Latvia, Hungary, Romania and Bulgaria. Whilst among the more western developed countries we find only a few outliers to the trend, like Ireland (biggest grower), Germany (only just, but always expected), Malta and Czech Republic.

Outside the EU area we see also growth in countries like Turkey and of course China, a GDP powerhouse, that has been growing mainly thanks to the investments and efforts of the government to modernize the Belt & Road Project known also as (The Silk Road) using a Debt-Trap with underdeveloped countries like as we can see very well explained in the following [video](#) and this other [video](#) by Vox Video Lab. In this case US and China are undergoing a trade cold war through other countries and strategic projects. (YouTube, 2019)

In the Figure below, we can observe the growth over the last 2 years and the prediction for the next year (2020) of the main European countries against the Euro Area average. Though predictions are still driven by positive growth, overall, we can perceive a certain tendency of slowdown on the long run, which is not something very positive.

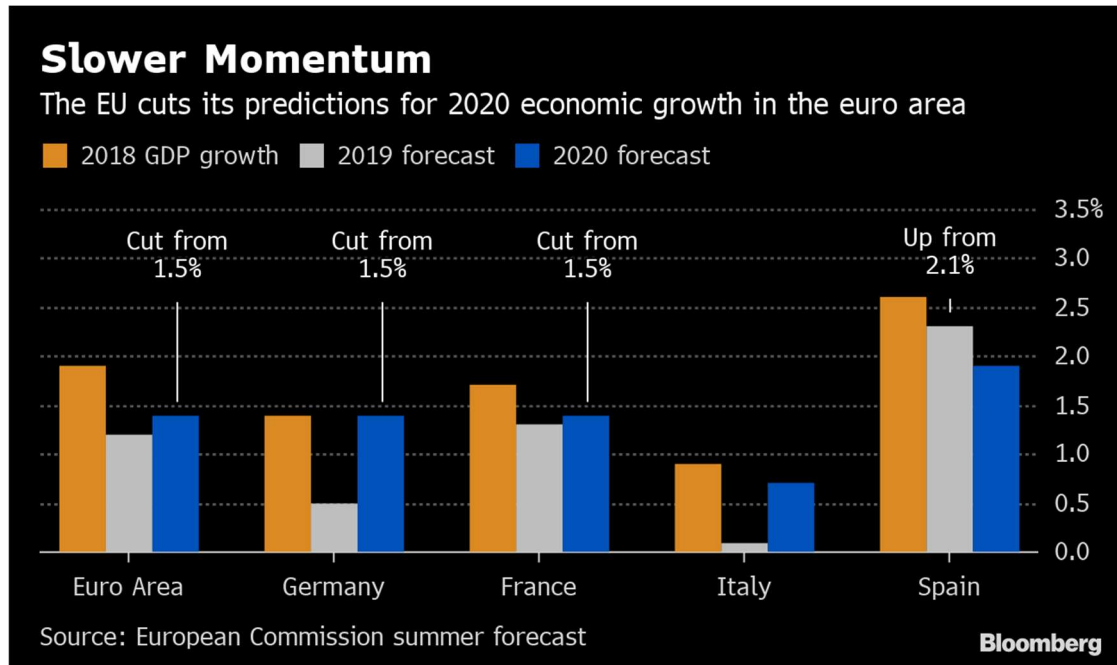


Figure 44: Predictions on Economic growth for main EU countries (Bloomberg, 2019)

### 5.4.3. Social (Population Pyramid, Crime Vandalism, Qualified Work Force)

This graphs in Figure below shows the distribution of the population by age and sex in France:

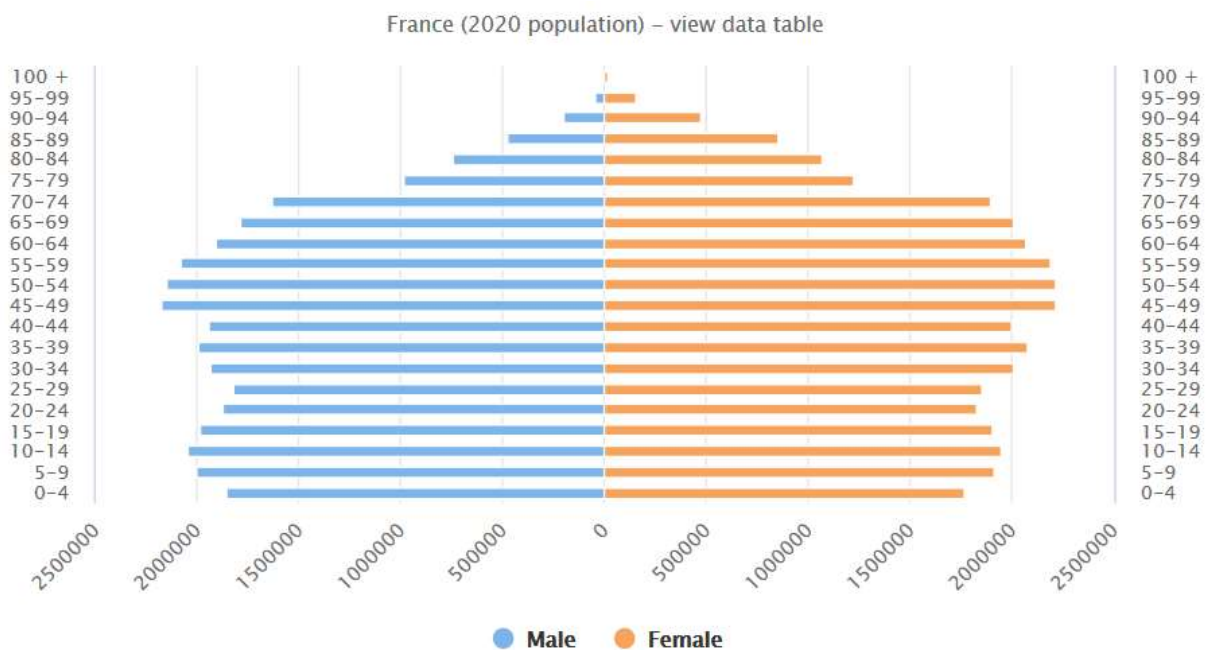


Figure 45: France Population Pyramid 2020 (Worldometers, 2019)

## Population by Broad Age Groups (2020)

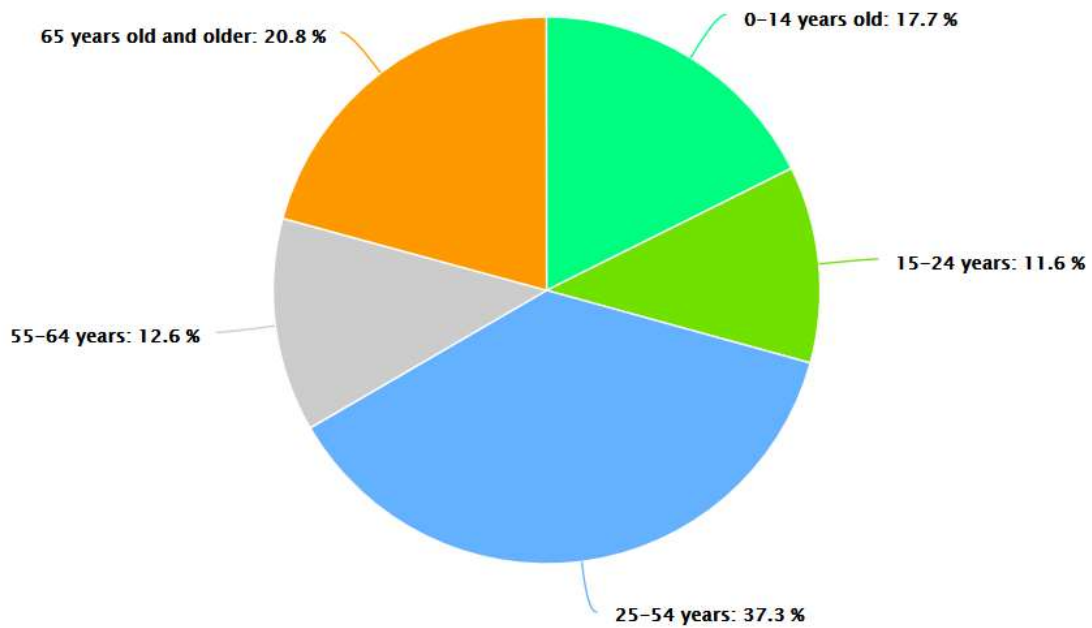


Figure 46: France Population by Age Groups 2020 (Worldometers, 2019)

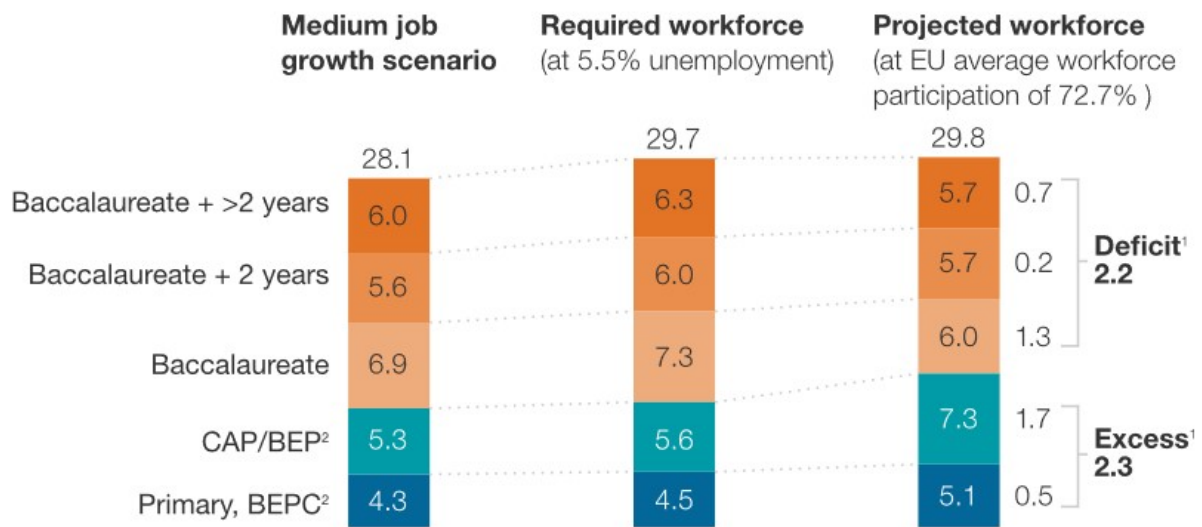
As observed in Figure 46, we have approximately 50% of population belonging to the age range in which we are interested in (16s-50s).

Another social issue to bear in mind is Motorcycle Theft, which seems to be a problem in France according to [we-rent-motorcycles.com](http://we-rent-motorcycles.com). But that is for privately owned motorcycles. We've spent some time in the Netherlands looking at other markets and there is a very clear case which can be extrapolated to these high levels of vandalism/theft. (MotorBikeTrip, 2014)

In the Netherlands, about 2/3 years ago a company called Swapfiets started to do low cost, long term renting of bicycles. It's had a tremendous success among students and exchange students, since maintenance is nothing to worry about and monthly payments along with student discounts are around the 10 euros/month. Also bike theft is something to be mindful in the Netherlands and everyone has more than one lock on their bike. But Swapfiets' bikes are not stolen at all practically because they are impossible to sell on the secondary market so easily.

After understanding this and adding to the story the fact that our EMCO motorcycles are equipped with lock, alarm, sensors and GPS location; chances of it being stolen are very low.

Projected 2020 employment, millions of workers



<sup>1</sup>Figures may not sum to totals, because of rounding.

<sup>2</sup>CAP: certificat d'aptitude professionnelle; BEP: brevet d'études professionnelles; BEPC: brevet d'études du premier cycle..

Source: Global Insight; International Institute for Applied Systems Analysis; National Institute of Statistics and Economic Studies, France; McKinsey Global Institute analysis

Figure 47: Projected employment in France 2020 (McKinsey&Co, 2019)

Another social aspect which is usually considered in PESTEL analysis is the workforce, as we see in Figure 47, according to prestigious consulting company McKinsey & Co. and their predictions, by 2020, France will have a deficit of qualified workforce and an excess of unqualified workforce. This will be relevant for the economy but not for our industry, since most of the work required is either little or non-qualified.

#### 5.4.4. Technological (APP, Socially accepted smartphones)

Of course, we are going to look at our market and try to understand which parts of it are familiarized with APPs and the use of smartphones, which without diving into the data, we expect it will be quite a high percentage of the overall market

The Graph below shows who uses phones nowadays according to the different age ranges in population, something good to have split by age since our interest lies in the 16s-50s age range. Mainly because as we know from previous sections, our typical user has an age of about 31 years old on average.

### Smartphone penetration in France in 2019, by age group

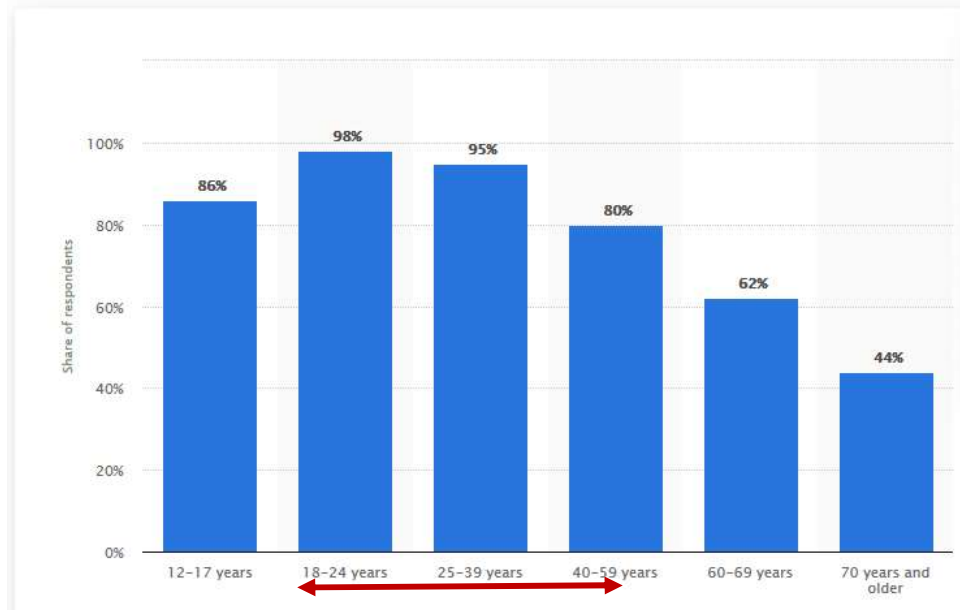


Figure 48: Smartphone Use by Age Group in France 2019 (Statista, 2019)

Between the drawn red arrow on top of Figure 48, we find our market, the sweet spot, old enough to drive and use smartphones, but also to have purchasing power and job or some source of income to sustain expenses.

Besides this, the only other technological external factor that could, perhaps in the long term affect this market, would be the advancements in batteries. The more efficient we become at doing this the longer our scooters will be able to run. Besides the two factors already mentioned, we didn't find any other possible technological findings that could change the business plan in the short term.

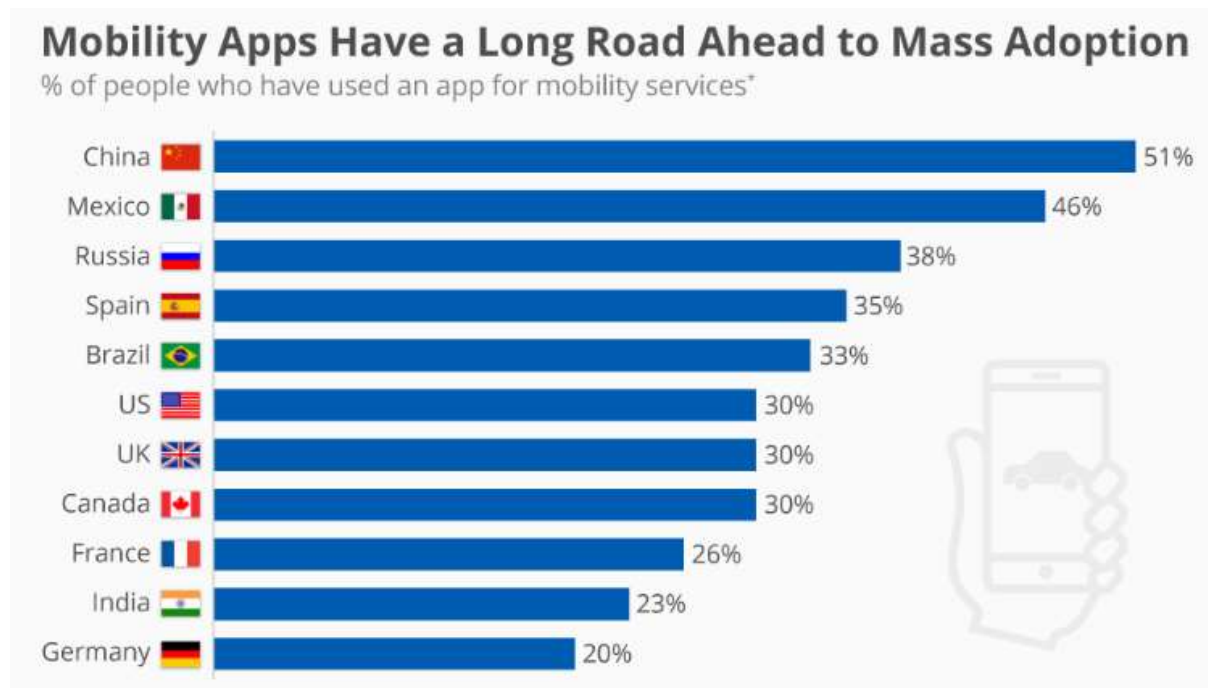


Figure 49: Penetration of Mobility Apps per country (Statista, 2017)

#### 5.4.5. Environmental (Accessibility, Pollution & Weather)

Weather was one of the main reasons to choose the South of France (Marseille), since it has close to 300 days of sunshine per year. On top of this it has very low rainfall, overcast days, and a very high average annual temperature in comparison to the rest of France. We can see a very visualized summary in the Figures 50, 51, 52 and 53 seen below of the weather conditions in France.

We notice very clearly, especially thanks to the colored maps, a constant through all these illustrations, which is a clear difference between the south-east and the rest of the regions in almost all the measurements.

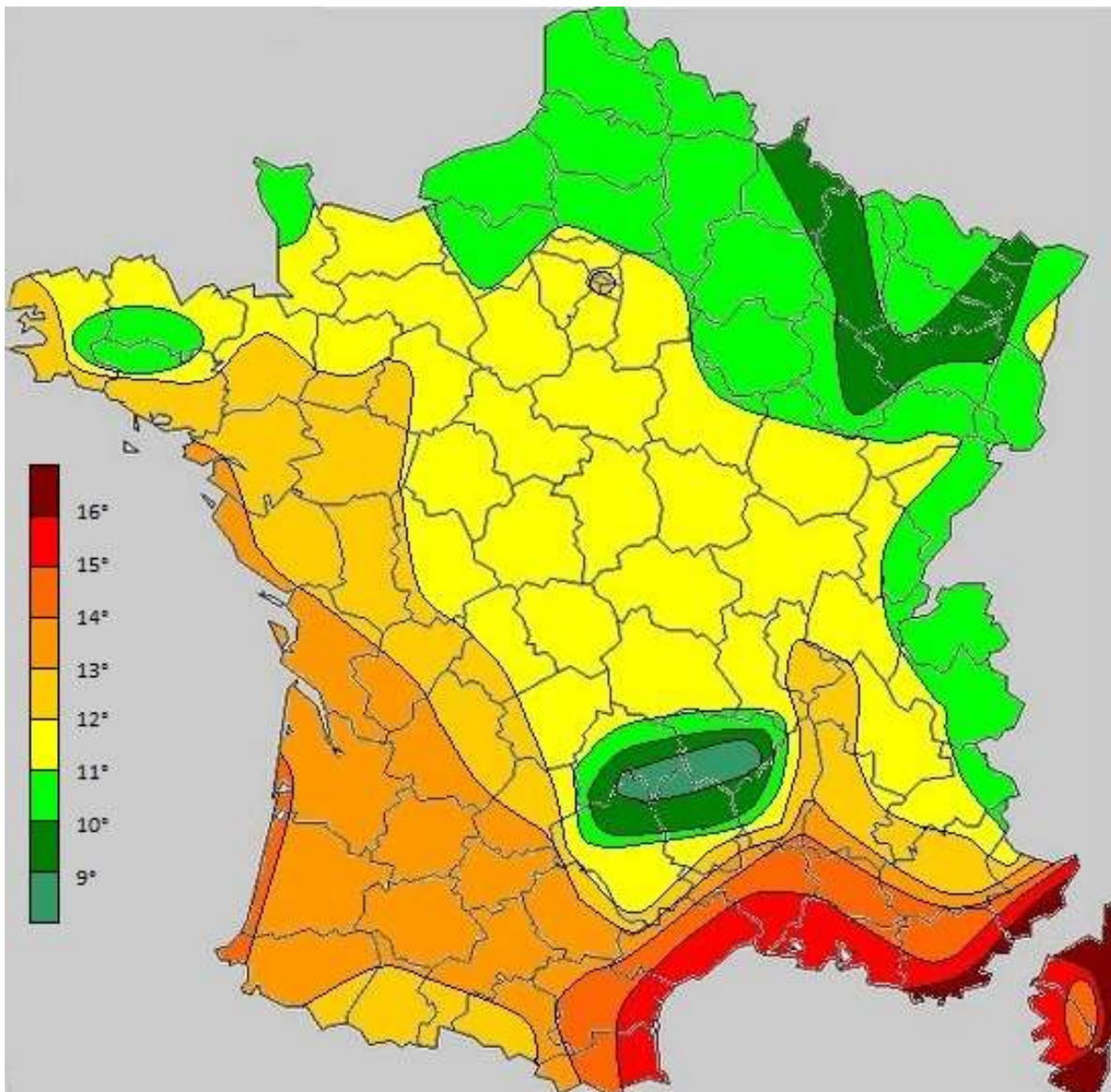


Figure 50: Average annual Temperature (°C) (Climatedata, 2014)

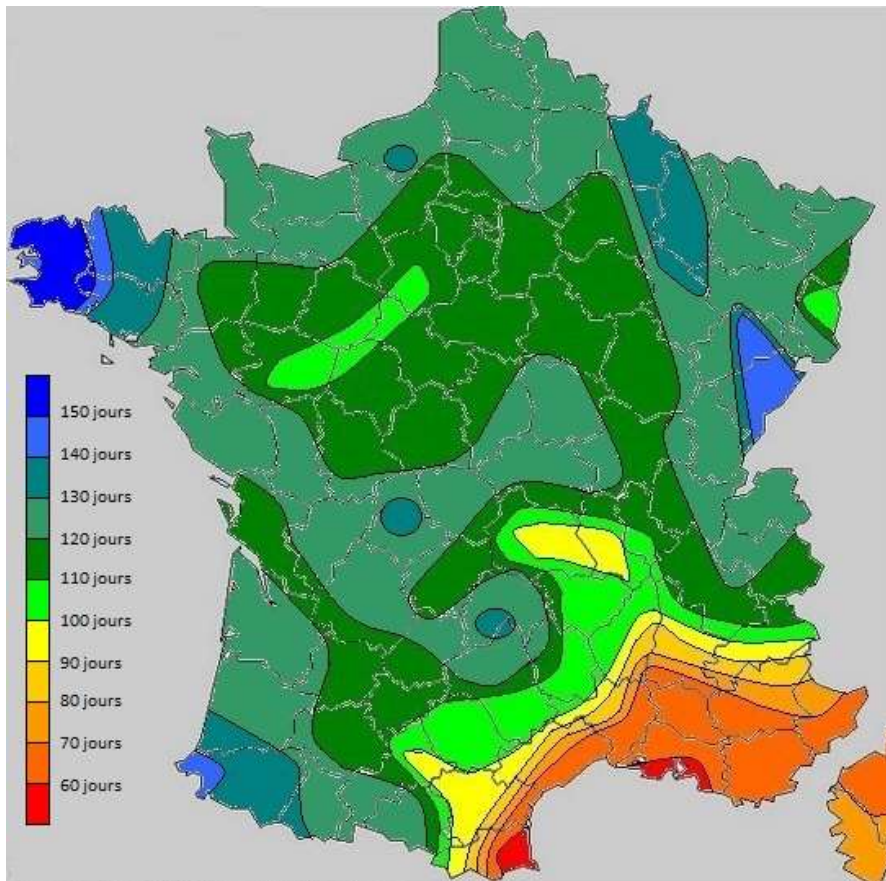


Figure 51: Average rainy days (Climatedata, 2014)

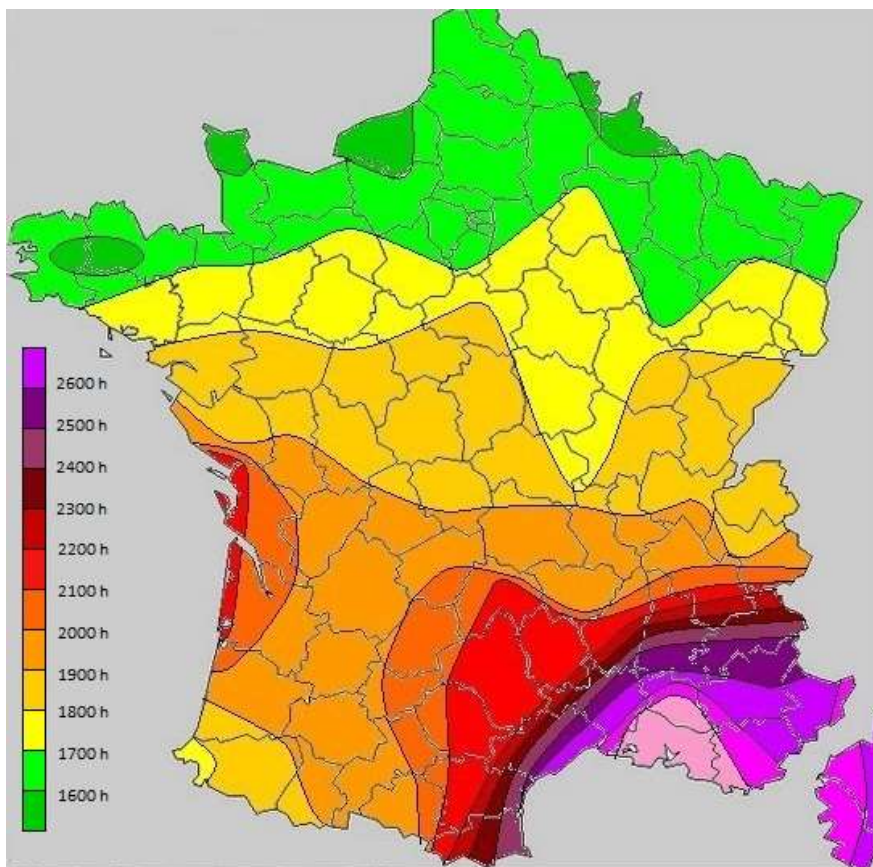


Figure 52: Average annual sunshine (in hours) (Climatedata, 2014)



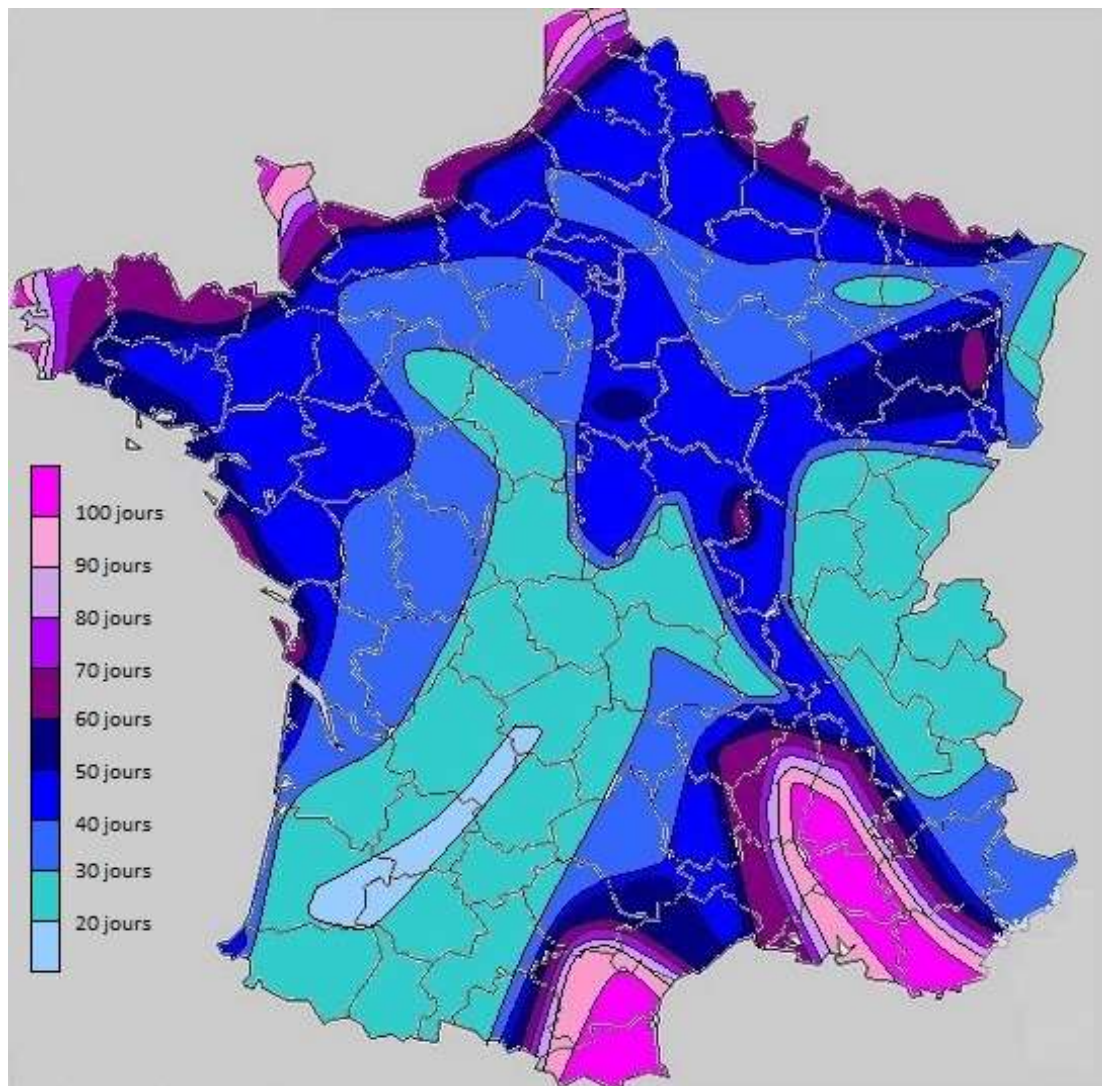


Figure 53: Average days of strong wind (>57 km/h) (Climatedata, 2014)

Perhaps the only “bump in the road” we felt necessary to comment on, was the information presented in the last graph regarding days with heavy wind around the area. For some people it might discourage them to take a scooter, for others it might be a reason to do so instead of, for example, taking the bicycle.

Last but not least a very important factor we considered was the terrain, when looking at pictures of Marseille you can see that, though it sits in the southern coast of France it has quite a lot of steep hills and slim city streets, a really good environment to promote the use of our scooter.

Especially when we think of tourists and European travellers enjoying their vacation in Marseille, which are older than our average or even have certain mobility problems which impedes them from walking up and down a city all day long.

Our services can be of very good use to this public making their visit smooth and easy, as well as letting them choose their path and timings, not sticking to any pre-defined tour or public transport schedule.

#### 5.4.6. Legal (Driver License, Parking in the street, EULA, Create the company)

Becoming a YEGO rider is perhaps the only part of using our service that requires a more legal perspective of things. It is crucial to have all info on potential riders like ID, driver's license and a connected debit or credit card linked to our system in order to make their day to day riding swift and easy. This should be nothing to worry about since the company (franchisor) will support in everything needed.

Also, something to consider in today's technological world and GDPR ruled Europe is a EULA, or end-user license agreement.

YEGO Mobility currently offers their services in Bordeaux, so we know that compliance to both French and EU Law shouldn't be a problem and these details should be already taken care of.

As to the legal form that the company should take probably a EURL according to French law, a limited responsibility company (LLC in English).

With regards to the permits and license type needed to drive YEGO scooters, we thought it would be the same throughout EU, since the driving license was standardized a long time ago. But this is far from the reality where there are still differences in the way each country deals with these matters as well as many other policies and laws.

For example, in Spain, a B license driver is entitled to drive a 125cc motorcycle as long as he acquires a certain level of experience as a driver (2-3 years). In France it is fairly similar, the only difference is that you need to prove the authorities with a 3 to 7-hour course, that you are able to drive <125cc motorized two-wheel vehicles.

This is an important aspect to keep in mind, but in spite of it, we haven't considered a 3 to 7 h course to be such a big barrier of entry to our services for our potential users.

## 6. Marketing Plan

To cope with the struggle of not having a strong presence in France, we'll need to reach our potential users with specialized and directed digital marketing strategies as well as physical ones.

In order to do so, we will make use of Facebook and Instagram, since as we all know, nowadays our smartphones have become an extension of ourselves leading to mass adoption of technology, as we've seen in the PESTEL section already.

But first and foremost, it is important to realize that our scooters on their own, are great publicity, therefore, as soon as we start the business, we'll spread our fleet of motorcycles across the city. Their colour and design, being one of our strengths, can help us battle the weakness that our popularity is at the moment.

Printed inside of each one of our scooters' bodywork, we have QuickStart Guide and Icons printed on top of which we could potentially include QR codes to be scanned, which will guide our user straight to our APP. Our first bait for creation of leads is in place.



Figure 54: Sticker on YEGO's scooters (Silicon Canals, 2019)

On the other hand, as mentioned, we'll have an important digital focus alongside the physical presence on the streets of Marseille, to plan better our strategy, let's first look at some graphs and numbers to guide our decisions and check our initial thoughts.

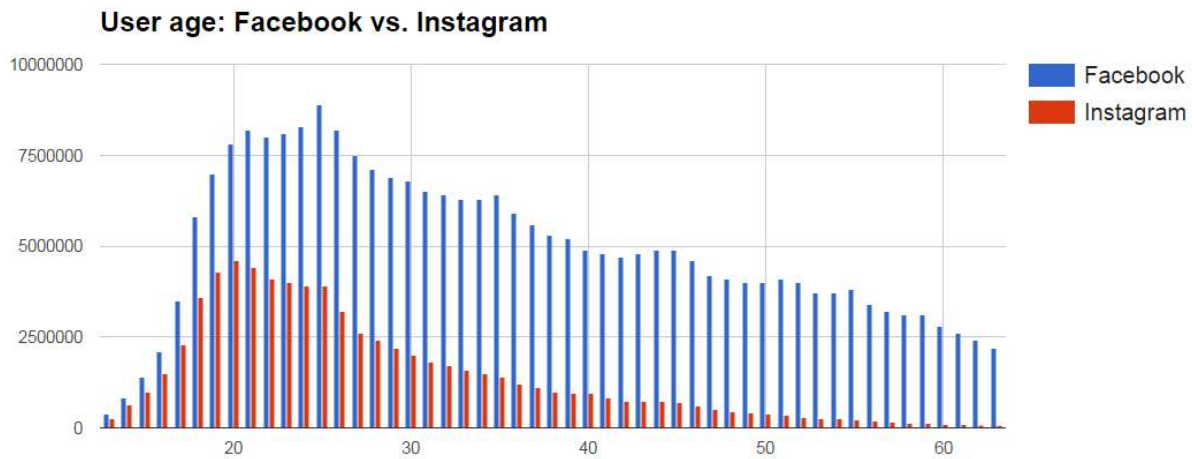


Figure 55: Facebook & Instagram Users split by Age (Medium, 2018)

Indeed, we can conclude several things from these graphs. Instagram has a lower number of total registered users, (which doesn't mean active users) but has a younger market, hitting peak at 19 to 21-year-olds. Whilst Facebook, has a huge user base, age is evenly spread through all range, hitting peak at mid-20s. Also, very important in our marketing efforts is to keep alive the YEGO Motor Club (YMC) community of riders alive, which will mean creating both, a Facebook account (@yegomarseille) and an Instagram account (@yego\_marseille). Both of which will be managed by our hired Marketing Manager, who will have to keep both of them up to date as well as managing the YMC Community through them.

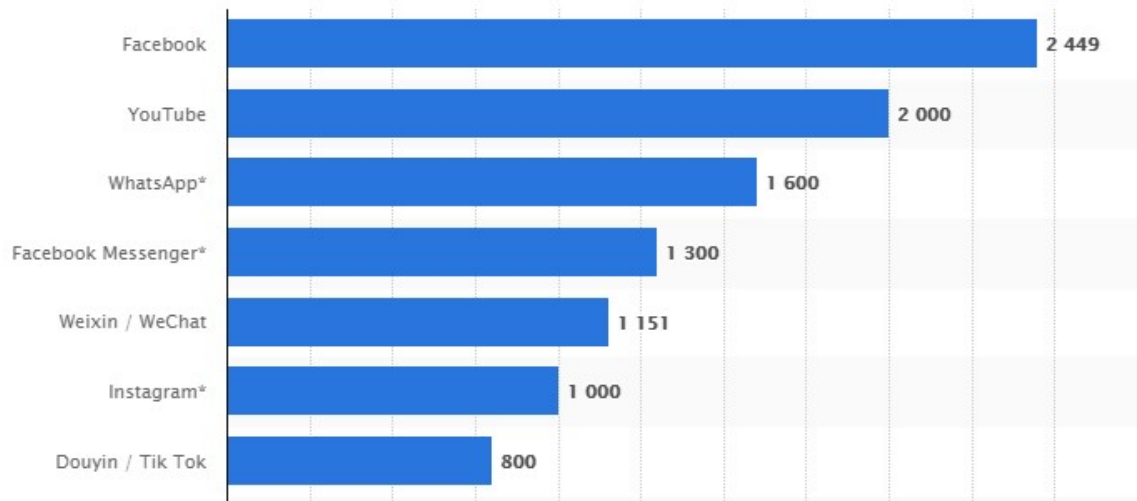


Figure 56: Monthly Active Users per Social Network (Statista, 2020)

In Valencia, the team has worked closely with regional and local artists to create content and promote the brand, as well as other events as we can see in the images below:

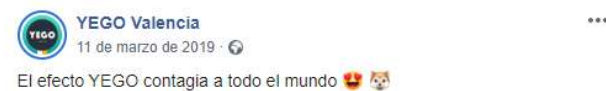


Figure 57: Facebook Posts from Valencia's YEGO Team (YEGO Valencia, 2019-2020)

Looking closer at the Advertisement part of the Marketing Plan, our main focus will be Facebook & Instagram Ads, which since Facebook owns Instagram, all are merged and managed under the same Facebook Ads Platform.

Our objective in this case won't be converting to a purchase, we are looking for impressions and reactions, as much exposure as we can. On top of this we'll have especial offers lined up for the first 6 months, which we'll explain later on.

Our target audiences will be indeed as mentioned, our average rider, who can vary in age from 16-50s. Moving forward and looking at the reasons on why we choose this platform:

The screenshot displays the Facebook Ads Platform interface for creating an audience. The account is 'TEGNA Loc...'. The main section is 'CREATE AUDIENCE' for a 'New Audience' of 'People on Facebook' (more than 1B monthly active people). The audience is defined by 'Demographics', 'Page Likes', 'Location', 'Activity', 'Household', and 'Purchase'.

Key targeting options include:

- Age and Gender:** Age range 18 to Any; Gender: All, Men, Women.
- Interests:** A search bar for '+ Interest'.
- Connections:** A search bar for '+ Your Page'.
- Pages:** A search bar for '+ Your Page'.
- Advanced:** Behaviors, Language, Relationship Status, Education, Work, Financial, Home, Market Segments, Parents, Politics (US), Life Events, and More Categories.

Analytics and matching data:

- Retail Spending:** Estimated US retail spending compared to i... (Low: 70%, High: 38%). 2% of audience matched.
- Online Purchases:** Estimated US online retail spending compar... (Low: 40%, Medium: 39%, High: 20%, None: 9%). 3% of audience matched.
- Purchase Behavior:** US consumer behavior based on purchase activity. Source: Datalogix, Epsilon and Acxiom. 9% of audience matched.

Category	Selected Audience	Compare
Home and garden	17%	+0%
Clothing	65%	+0%
Business purchases	3%	+0%
Sports and outdoors	29%	+0%
Pet products	39%	+0%
Kids products	4%	+0%
Health and beauty	42%	+0%
Subscription services	58%	+0%
Food and drink	70%	+0%
Household products	32%	+0%

Additional analytics:

- In Market For A Vehicle:** US automotive purchase behavior based on geography, demographics and vehicle registration... (Category: Selected Audience, Compare).

Figure 58: Facebook Ads Platform (Sherman, 2019)

One of the main reasons it's become so popular over the last years, is because Facebook Ads Platform offers some of the highest quality of targeted advertisement, which as we can see in the figure above, means we can be very specific as to the kind of user we are looking to reach. Its platform is filled with details and data, like we couldn't imagine.

Age location, politics, market segment, education, relationship status, interests, behaviours when using the social network, the list goes on... up to even advanced settings.

Another reason is the price, advertising in Facebook or Instagram, you can reach around 1.000 people with a mere 5€ investment. In terms of Cost per Click (CPC), depending on how the bidding and the time of exposure of your ad works, it could be anywhere from 0.20€ to 2€ per click. One important number to keep in mind is the Click Through Rate, basically when shown the ad, how many people actually click on it and follow it.

### Mobile App Install Ad Performance Benchmarks, Facebook vs. Instagram

	Facebook			Instagram		
CTR	0.6%			0.8%		
CPM	\$5.12			\$5.14		
CPC	\$0.80			\$0.61		
CPI	LOW \$2.84	MEDIUM \$4.27	HIGH \$8.53	LOW \$2.14	MEDIUM \$3.21	HIGH \$6.43

Figure 59: CTR, CPM & CPC - Facebook vs. Instagram

As shown in the image above, it is good to understand that Instagram has the edge over CTR therefore diluting our CPC in our Instagram section, so for a higher conversion and therefore lower CPC, it would be more efficient for us to concentrate a bit more on Instagram.

The conversion we are looking for as mentioned will be the download of our APP and the use of promotional codes given through advertisements like the one below used by our competitor Ecooltra in Spain:



Figure 60: Ecooltra's Advertising Example (Ecooltra, 2019)

To measure success in our design we can always use A/B testing of some sort, like the sketch below shows us, trying to find through our results which one has better impact and is more relevant to our potential users.

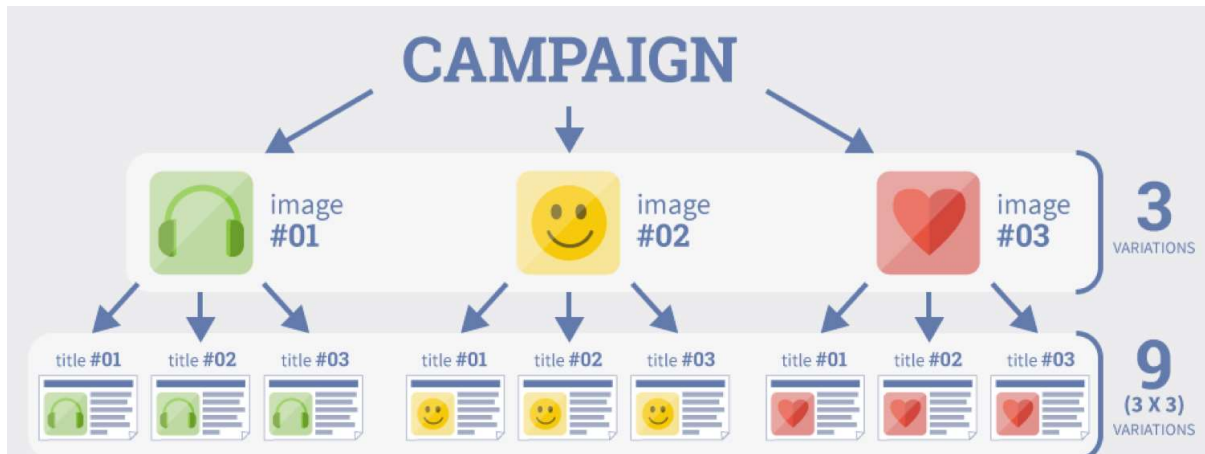


Figure 61: A/B Testing on Ads Strategy (Smith, 2019)

Now that we have a clear idea of our objectives and the means to do it, let's draw an estimate of the costs. To do this we'll make use of some information which we have mentioned in previous sections before.

In Marseille we find a total of 800.000 inhabitants, of which as we saw when looking at the demographics of France in detail, 11.6% should be within the 15 to 24-year-old range, and 37.3% should account for the people within 25 to 54 years old. These are the brackets that most target our preferred target group.

For the simplicity of calculations, we'll want to reach around 50% of the population in Marseille, 400K users which according to the numbers mentioned before should cost around 2000€. Of course, we would be able to set limits as to how many times per day can our advertisement be shown to the same person, which we would not go over 1-2 times per day. We don't want to overwhelm the user, but we do want to keep the idea in the back of their head.

To manage the costs, we can set up average cost per day which we wish to spend on advertising and let Facebook's algorithms do the work to give us the best CTR and conversion.

As it is usually recommended, we'll follow the trend and set our budget for advertising at a 10% of our revenues every year. But on the first year, we'll emphasize on it by spending 20% of the estimated revenues we'll get.

Therefore, the budget for the first year will be set at around 80K for the full year as we'll see later in our calculation sheet captions.



## 7. Financial Layout

### 7.1. Cost of capital Estimation

To compute the weighted average cost of capital (WACC), we used as a reference one of the excel sheets we developed in Corporate Finance. By using the CAPM function and gathering info on the Beta for the sectors in Damodaran.com the recommended page to look at these numbers. The main components of the CAPM are chosen as follows:

1. In order to simplify estimates and calculations, Cost of debt was set to a rounded 2% which is the usual fixed rate mortgage we see when looking at comparison websites. (Rankia, 2020)
2. The Beta was estimated by use of Damodaran.com vast amount of data gathered for all different sectors, and we decided to opt for the Transportation sector which had a 0.6 Beta. (Damodaran, 2019)
3. As risk free interest rate, usually a 10-year treasury Bond yield from the US is commonly used, but since the project would take place in Europe we decided to look at the French and the Spanish 10-year bond to get a better picture of the overall market right now. US yields a 1.47% coupon, France stands at -0.20% and Spain at 0.22% for their respective 10-year bonds and obligations. In order to not set it negative and also not overestimate it, we decided to go for the Spanish 0.22%. (Investing.com, 2020)
4. The other point of change needed to be the equity - debt relation which considering that we would be starting a project from scratch but with a Brand that is backing us up. First place to go are the banks, which offer a lot of possibilities to finance, like loans or lines of credits for start-ups.

A deal could be proposed to the mother company, which also puts together investors that have similar goals and ideas to finance bigger projects like this one, perhaps there we could also find investors.

Of course, we can also use the 3F resources: Family Friends and Fools; as well as Angel investors. If all of this wouldn't work, we can also opt for crowdfunding the project. The bottom line is that there's definitely lots of ways to pull this off, we just need to show a convincing business plan.

Given the uncertainty to this case and the many unknowns we would have to assume, we decided to estimate a 40/60 Debt-Equity distribution in WACC calculation. The edge is given to Equity because it is the most common source of funding for small projects and also gives the liberty of not having to pay back with interests to a bank.

Usually these projects are even a bit higher on the Equity side, especially when talking about Startups (where funding is usually Full-Equity) or small Crowdfunded projects.

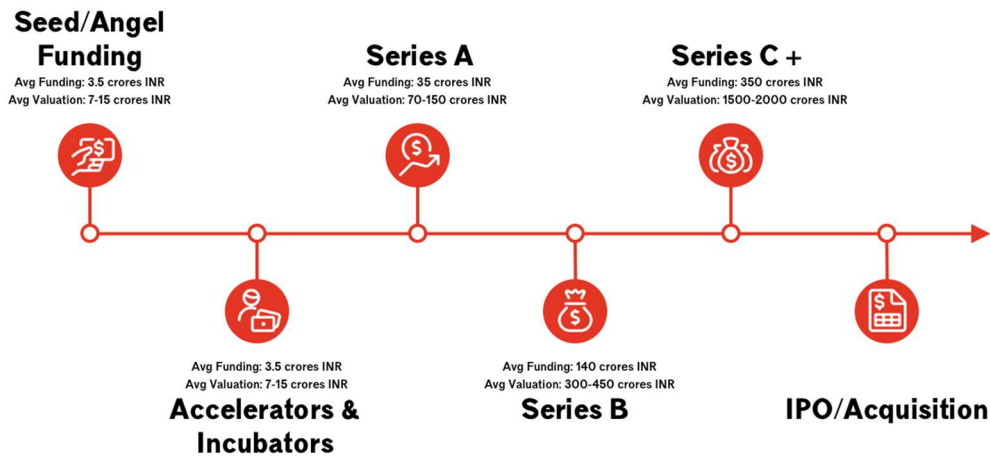


Figure 62: Stages of Start-up Equity Funding (Shenoy, 2019)

Taxes as seen in previous section PESTEL Analysis we will set it to the French Corporate Tax as of today, which is 34.4% the highest in Europe.

Our WACC excel sheet leaves us with the following:

CAPM		Cost of Debt	
Risk Free	0,22%	kd	2,00%
BETA	0,84		
Market Premium	5,69%	Taxes	
Ke	5,0%	t	34%
Capital Structure			
Equity	60%		
Debt	40%	WACC	3,51%

Figure 63: WACC Calculation through CAPM

## 7.2. Set-up: Cost & Revenue Estimates

The minimum estimated cost offering up a YEGO Garage in a new city, which would need the purchasing of the scooters, setting up the garage, staffing your team, and one year of runway, is according to YEGO of around 400K-500K €. Since all of this would be carried out by or working closely with YEGO’s team, according to the needs in each phase of the project, we decided to calculate this by means of estimations to see if indeed the number is around those, and the viability of the business

After our initial assessment the first year we’ll need to prepare for:

- Ground Floor Commercial area of 350-400 square meters
- 100 EMCO Electric Motos (36-month Lease)
- 2 vans for battery replacement of the motos
- Staffing and Team Costs – 5 hired FTE
- Other Costs (Maintenance+Reparation)


- Entry Royalty Fee: **40.000€** (est.)
- Monthly Royalties: **5% Monthly Revenues** (common among Franchises in general and industry) (FranquiciasHoy, 2020)

Initial Costs			
Item	Qty	Cost Estimate	
Garage Size (sqmt)	350	30.000,00 €	
Fleet Size	100	192.000,00 €	
Extra batteries	10	13.000,00 €	
Number of Vans	2	8.600,00 €	
Incident Rate (5%)	260	26.000,00 €	
Personnel (FTE)	5	150.000,00 €	
Marketing Campaign	1	65.700,00 €	
Royalty Payments	40.000 + 5%	56.425,00 €	
		541.725,00 €	

Figure 64: Costs through 1st Year Estimates

### Justified estimation of the investment parameters.

Figure 65: Full Excel Calculations Break-down

Investment Parameters	
Initial Investment	- 541.725,00 €
Lifespan	5
Total Revenue (World wide estimate)	5.250.000,00 €
Ex-ante Sales	5.250.000,00 €
Ex-post Sales	6.326.166,00 €  20%
Capital Cost (WACC)	3,51%

Data from YEGO	Estimated Revenues	
Rides al año	1.500.000	5.250.000 €
Usuarios	140.000	37,50 €
Folta de Scooters	1.000	5.250,00 €
Average time per ride	14	
Price per min of ride	0,25 €	

Valencia started with 100-120 vehicles      expanded in 2019 to 188

- To start realistically, we assumed that on the first year though costs will be present the full year, we won't see revenues picking up to a normal pace until a few months in. Therefore, we assume that it takes a few months to pick up the pace to expected numbers. To do this we assumed revenues would be cut by 20%.
- We assumed the need of some extra batteries. Usually EMCO ships their bikes with 2 batteries, we'll ask for an extra battery for every 4 bikes we have in our fleet.

- We assumed that 100% of the scooters are not running every day, full time, so a 90% activity threshold was set. If investment is a success after 1<sup>st</sup> year, fleet is boosted to 150 scooters also increasing Garage space by 50% and most of the other costs x2 and revenues x2. With time we assume costs will rise 2% per year.
- The Revenue estimate was simple: Taking from our source an average use time of 14 mins/ride and a cost of 0.25€/min having currently a fleet of around 1000 vehicles in all their cities, and rides in 2019 added up to 1.5 Million rides, which computes a turnover of: **5.250.440 €/year**. (Garcia, 2019)
- Looked up leasing plans for the 2 vans needed for the transport of crashed scooters and changing of batteries, along with other maintenance activities. LeasePlanGO offers a wide variety of commercial vans that would fit our purpose we estimated costs for 2 FORD Transit Courier vans --> **8.600€/year**. (LeasePlanGo, 2020)
- An initial investment and trial run of 100 scooters in the city for the year was considered. And prices for the scooters were looked up in EMCO's website assuming a discount for partnership (scooters are not sold to firms and particulars at the same price due to volume in orders) and was estimated to be around 4.500-5.000€/scooter. But a better option due to high intensity of use was to assess a leasing plan with EMCO, so we used a calculator for lease (Banco Sabadell, 2020).

We estimated a wear and tear of around 18.000 Km/year/scooter, but according to YEGO City Manager in Valencia, in the first 3 years running in Barcelona they only had to change 1 scooter from all their fleet (900 scooters at the time), for a 36-month lease plan the price and after all calculations **150-200€/month/scooter** is the range for cost assigned, to apply a worst case scenario, we'll use 160€ in our calculation sheet, but this estimation is quite complicated to come up with precisely.

- I researched for prices of similar spaces to the ones needed and as we couldn't find any of that same size, we took an overestimated of **2000€/month** of rent for the 350 m<sup>2</sup> garage space. To which we added a buffer of 500€ for electricity costs. It is best to expect pessimistic numbers in advance. We think it will suffice to cover the costs.
- For the personnel costs we assumed an average pay of around **30.000€/year/worker** in the garage and hired workers full time. Customer Service is already paid for, since it's an externalized service YEGO already has. The estimated number of workers is: 2 Power Ranger (YEGO's name for battery changer), 1 Mechanic, 1 Marketing Manager and 1 City Operations Manager. The workforce will be expanded proportionally as we expand areas in the future or increase fleet size.
- According to Valencia's Chief of Operations, their mechanic repairs around 10 scooters per week (5% of fleet) and a reparation costs around 100€ depending on the damage, but for scooter parts they have a deal with their provider EMCO. Considering that in Valencia the fleet is close to 200 scooters, the estimate for 100 at the same % rate of incidence, results in a number close to **25.000€/year**.

In many aspects we opted for leasing as it is an expense which is deductible and will benefit us tax-wise, while keeping our cost structure variable. We consider a 1-year period of trial for the first 100 scooters, if as predicted it is successful, we will add another 50 to the fleet, doubling revenues but optimizing and sharing some of the costs, therefore boosting profits. From there onwards we'll increase fleet size and rideable areas as estimated in calc. sheet.

All expenses follow a multiplier of 2%, expecting prices could increase every year in salaries or rent. This way we have yet another pessimistic buffer to give us security through our estimations.

For the Revenue side of things in our model, we'll focus on defining:

- **Price**  
Which we'll keep at 0.25€/min for the first year and then move to 0.26€/min.
- **Rides/Scooter/Day (Demand)**  
Worldwide we estimated this at 4.5 with high degree of competition, so in a place like Marseille we estimate a 6 or even 7. We'll take 6
- **Average minutes per Ride (Ride Duration)**  
Even though YEGO Co-founder claims a 14 mins/ride we'll use 10-12 mins.

## 8. Return Analysis

(Separate Excel contains all Calculations)

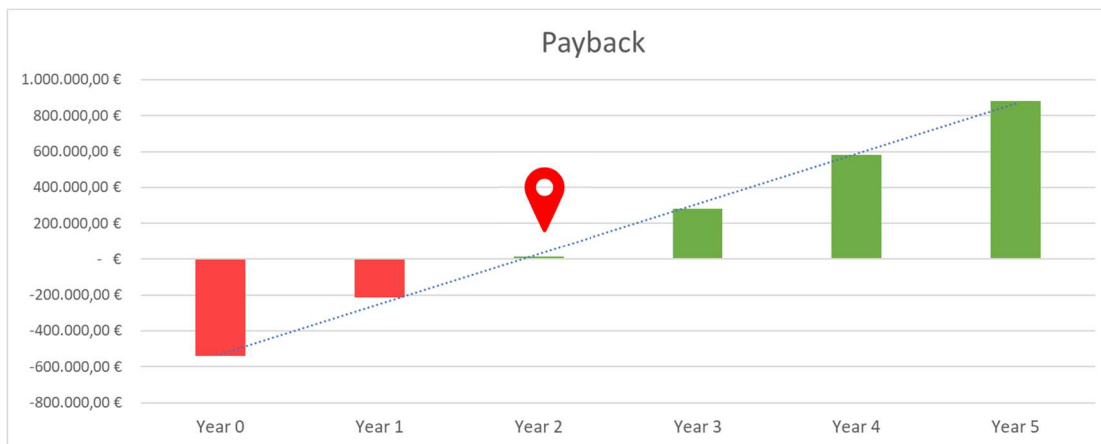


Figure 66: Payback (Calculated from Profit)

<b>IRR</b>	<b>44,5%</b>
<b>NPV</b>	<b>718.879,14 €</b>

Figure 67: IRR & NPV

Using **NPV**, **IRR** and **Payback** to evaluate the investment we obtained these results. Positive and quite large NPV, a good IRR of around **+60%** combined with a relatively quick **payback of 2 years**, considering such a large initial investment.

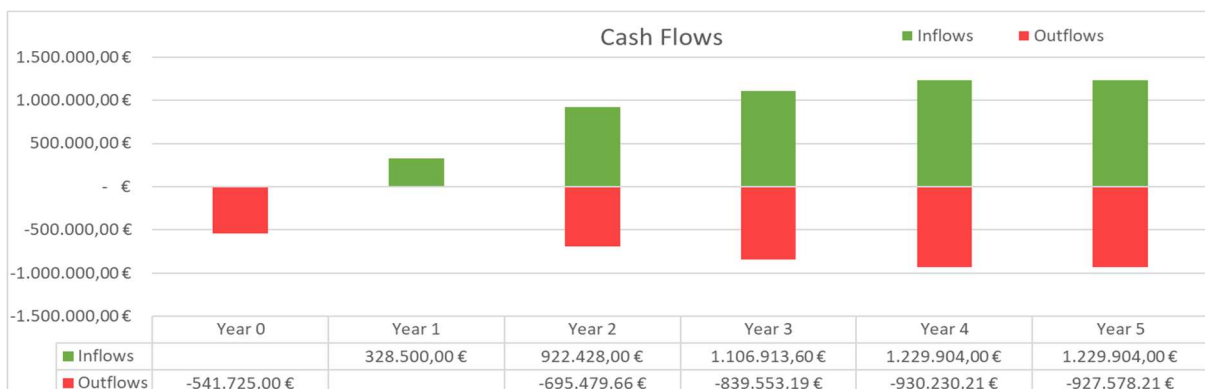


Figure 68: Cash Flows

## 8.1. Risk Analysis with Scenarios

Since our model can be quite sensible to variations in some of our variables and most of them are estimated, which means possible errors, we'll go over some scenarios that could possibly happen and elaborating an adequate hypothetical response from our side, we'd evaluate the results of the business and viability of the project.

The most probable scenarios we can foresee are:

1. Entry of competition on 2<sup>nd</sup> year
2. Ride Duration or rides/scooter/day unexpected variations

### 1. Entry of Competition on 2<sup>nd</sup> Year

What we could most probably experience is the surge of other companies that see the potential in our location and decide to join the battle. The incoming competitors will force us to compete for users, which will definitely mean we will increase spending in advertising from our initial 5% to 10% to keep up with the competitor's efforts.

Though our initial idea was that a price war would take place, through the recent years where motosharing has become popular in Spain, and competition has grown, we've seen exactly the opposite, though promotional packs of minutes come at a very good price for the most part, price/min has only risen through the year. Where once all suppliers had a price of around 0.19€/min, now a user pays 0.25€/min on average. So, prices are not expected to drop, if anything they will rise to 0.26€/min. (OCU, 2019)

What will most likely drop and indeed affect the bottom line quite a lot, is perhaps one of our most sensible variables, the rides per scooter per day. If we take the total rides in 2019 and divide it by the fleet and all days of the year, we get around 5 rides per scooter per day average. This is of course in competitive markets. So, we'll assume that this is as the worst it could get to and set rides from year 2 onward at that pace.

The best graph to show the difference is the payback, it's clear how this would hit business at its core (demand) and delay payback by 2 years. A payback of 4 years is too much for such an investment.

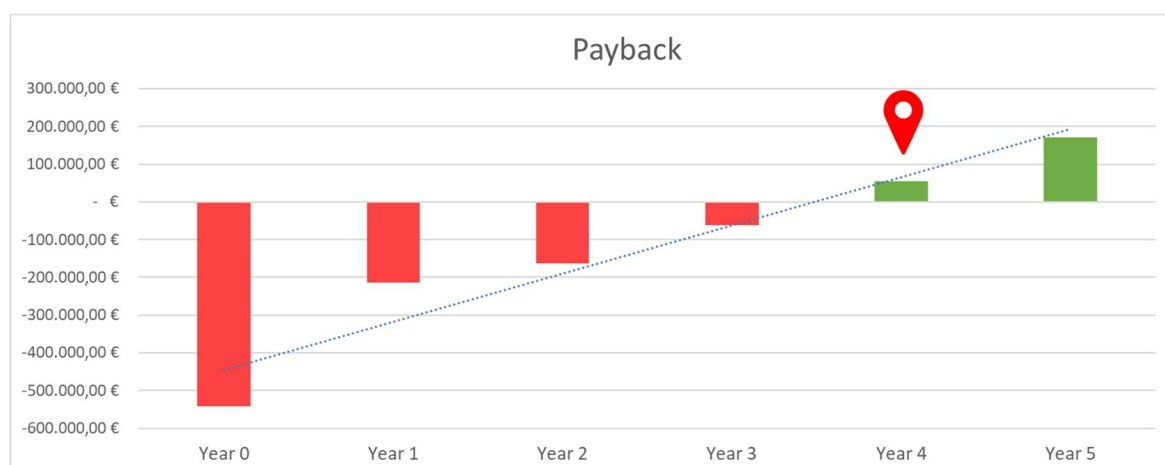


Figure 69: Scenario 1 Payback

On the other side IRR and NPV also take quite the hit, thankfully not drowning our investment completely, and leaving us with:

<b>IRR</b>	<b>12,4%</b>
<b>NPV</b>	<b>110.095,87 €</b>

Figure 70: Scenario 1 IRR & NPV

Considering the hit, we should maybe reconsider cutting on other expenses if this case was to be true. Perhaps we have built a solid user base through the first year, and we don't need 15% of revenues allocated to advertisement. Maybe we can consider re-sizing the headquarters to drop rent prices, renegotiate lease on scooters, adjust headcount/salaries or even consider not buying the extra batteries. Anything that can either drop costs, or increase the use of our scooters, could be a solution. But this would be quite an extreme case.

## 2. Ride Duration or rides/scooter/day unexpected variations

This scenario deals with the two most important factors in revenue and perhaps our whole model, especially when they're moved hand in hand. If we were to overestimate the market and predict wrongly the usage that would be given to our scooters, our whole model would break apart.

To analyse which one can vary our results more, we'll use *ceterus paribus* method and leave everything still but one variable and the repeat the process for the other one, measuring by changes in 1 unit, how it would affect our result.

### Ride Duration fixed at 12mins

<b>IRR</b>	<b>15,3%</b>
<b>NPV</b>	<b>145.447,23 €</b>

Figure 71: Scenario 2 Rides/Scooter/Day = 5

<b>IRR</b>	<b>44,5%</b>
<b>NPV</b>	<b>718.879,14 €</b>

Figure 73: Scenario 2 Rides/Scooter/Day = 6

<b>IRR</b>	<b>64,0%</b>
<b>NPV</b>	<b>1.292.311,05 €</b>

Figure 75: Scenario 2 Rides/Scooter/Day = 7

### Rides/Scooter/Day fixed at 6

<b>IRR</b>	<b>15,3%</b>
<b>NPV</b>	<b>145.447,23 €</b>

Figure 72: Scenario 2 Ride Duration = 10 min

<b>IRR</b>	<b>44,5%</b>
<b>NPV</b>	<b>718.879,14 €</b>

Figure 74: Scenario 2 Ride Duration = 12 min

<b>IRR</b>	<b>64,0%</b>
<b>NPV</b>	<b>1.292.311,05 €</b>

Figure 76: Scenario 2 Ride Duration = 14 min

We interestingly concluded that:

1. Through intervals 5-7 rides/scooter/day and 10-14 mins/ride, 1 unit of the one cancels 2 units of the other and vice versa.
2. We found out our lower limits for these variables, anything under 5 rides/scooter/day will result in a loss, and around 8-9 mins of ride duration will do the same.
3. We realised that estimating 6 rides per day without any other competitor might be an underestimation.

## 9. Conclusion

In a nutshell, the obtained results were good, and the investment looks profitable, re-obtaining the invested principal in a short amount of time is also an attractive idea.

Although estimates might not be the most accurate and will vary depending on assumptions, it is fair to say that this business looks profitable and taking into account that the growth of this sector is on the rise as it is expected to grow a 30% in the next 10 years. When we see a company growing their revenues from 100K to over 4 million since their start in 2016, they're definitely doing something right. The expansion investment analysed could generate a growth on their revenues of +20%, and we think it could be a viable profitable project.

With numbers like these one might think it's a great idea to invest, but it's important to keep in mind that the level of uncertainty in this project of such degree of investment (500K), is perhaps a bit too risky.

### 9.1. Looking ahead

We wanted to take up some space in the conclusion to mention other products which are also interesting to look at. All aimed to solve the decrease of rides during the summer months due to vacation.

The first idea is to expand our fleet to Mallorca, to have a test on the markets we face on the islands which is completely different and therefore our offer should also change considerably. Thought has been put into this project to make our scooters available in this island as a trial, with a pricing strategy based on day and not minutes. Problems would be to set and delimit areas of usage, which is important in an island and complicated logistically due to charging and range of motorcycles, even though EMCO currently offer a high range scooter capable of running up to 130 km in one charge. Also, competition already exists in the market of rental per day.

The second idea, which has quite some potential, is the possibility of extending a project where some scooters are moved from certain Spanish cities such as VLC, to other surrounding summer destinations, precisely throughout the months of June, July and August.

This idea comes from the fact that residents flee the city of Valencia during the summer months, the main summer destinations are: Dénia, Jávea, Náquera, Perelló/Perellonet and all sorts of villages over the Valencian Community ("Comunidad Valenciana").

With enough background study on the financial and operational viability, this project would work on migrating the business partially, starting with a focus on one of these summer destinations (e.g. Jávea) and testing it out for one summer. With this sample we could get a clear idea about the possibilities.



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