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MICROMOBILITY AND MUNICIPAL REGULATORY CHANGES. THE CASE OF ECOOLTRA

Micromobility represents an important development in shared urban mobility. However, as happens with every disruptive economic activity, regulators find themselves with the urgent need of establishing a legal framework that balances the interests of operating companies and the needs of users while protecting the citizens. This is what eCooltra is experiencing nowadays. The firm, whose activities are carried out in Barcelona and Milan, among other European cities, is seeing how it is subject to a licensing scheme in Barcelona while it finds itself with a more beneficial legal environment in Milan. These realities, and the evolution of the processes deriving from them, will impact the firm's business plan in several parts. The main objective of this study is to understand how these regulatory environments affect the firm and what impact do they represent to key areas of its business plan. Lastly, recommendations are drawn for the firm in order to respond to the environment challenges.

Key words: micromobility, regulatory change, municipal level, licenses, eCooltra.

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1. Introduction

In the latest years, the urban transportation system has faced the challenge of improving mobility across the city in both an efficient and sustainable way. Micromobility services can be found in most cities of developed countries, and those cities that are economically dynamic and have larger populations are the ones that benefit the most of this relatively new sector. Electric motorbikes, e-bikes and dockless e-scooters are the most common vehicles of the micromobility sector, and these vehicles are shared among users in the same city.

The companies offering micromobility services are startups that started operating at a local scale; however, some of them have pursued internationalization, such as the company on which we center our research: eCooltra. The Cooltra Group was founded in 2006 in Barcelona and through the years, eCooltra has become the largest scooter-sharing service in Europe, with growing presence in Spain, Italy and Portugal. It has a fleet of over 17,000 motorbikes and almost half of them are electric.

Cities are experiencing deep transformations in their understanding of urban mobility, as micromobility expands the concept of urban mobility beyond the movement of people in the city. It includes the preferences for small vehicles that fit one or two people, involves the sharing of vehicles and responds to immediacy. As some studies point out, municipalities, in general, have struggled with the legality and regulations of these new services (Bergal, 2018), since the startups enter in a brand new sector where no regulation exists at all. This lack of regulation, along with the changing urban mobility environment, has driven cities to implement certain regulatory changes that affect the growing micromobility startups in a negative way. In this project, we will analyze the case of the Barcelona license system in motorbike sharing, approved by the City Council in January of 2020 and awarded in May 2020. Moreover, we will also provide insights to the evolution this regulation might have, as outlined by Barcelona's Mobility Councillor on May 2020.

The change in framework these new regulations bring can negatively impact companies as they adapt to the new standards. Startups, however, are usually founded under scenarios of uncertainty in the market, and therefore claim to have the means to respond to the unexpected changes. In this project, we study the impact that a regulatory change in municipal regulation has on a startup in the above-mentioned sector. Concretely, the impact that the new Barcelona license system can have on the business plan of an important start-up in this sector, eCooltra. We focus in how does the licensing and permits system work and how should a company act in order to minimize the negative impacts.

In this project, we address the research question of "*How does a municipal regulatory change affect a startup in the sector of micromobility?"*. To reach the conclusions, the project is organized as follows:

we start by developing a general theoretical framework of the business and regulatory environment of startups.

Then, we carry out a case study that focuses on eCooltra and its context and potential evolution forecast after the regulatory change in Barcelona regarding the licensing and permit system versus the context and potential forecasted evolution of eCooltra in Milan, which does not present this type of regulation. We have chosen Milan due to its similarities to Barcelona in population, economic and regulatory terms. Moreover, we have taken into account that Italy is within the European Union, so any regulatory changes that may come from that regard will apply evenly to both cities.

After presenting the differences and comparing the prospects for the company each city offers, we will present a Business Plan adaptation for eCooltra in Barcelona following the regulatory change, focusing on the strategic issues that will arise and will have to be amended in order to successfully adapt to the current scenario and future prospects.

This project and its conclusions are addressed to the citizens of Barcelona, the City Hall and eCooltra Barcelona.

2. Theoretical Framework and Literature Review

After having stated the problem in which we base this study and the research question that we will focus on to address it, *How does a municipal regulatory change affect a startup in the sector of micromobility?*, we find it paramount to establish a theoretical framework and undertake a literature review of what has been published until now. Several concepts and new questions arise that need to be explored and framed. First of all, we need to understand regulation: which regulatory changes can have impacts and whether there needs to be any regulation at all. The local scope of the regulation also requires consideration, as we see that firms under the category of sharing economy are regulated mainly on a municipal level. Lastly, we focus on finding the most appropriate definitions for this study for two of the central concepts: startup and micromobility.

Regulation

When talking about **regulatory change** we acknowledge the profound variety of regulations that a business may be subject to. It is under Wood (2020) that we have a clear vision of the most usual regulations on business nowadays. Our focus is a specific type of regulatory change concerning licensing and permits that affects the shared motorbikes industry. In this case, we understand change

not only as a variation of the existing rules but also as a creation of new ones that modify the regulatory framework businesses are subject to.

However, before a regulatory change, there is a prior question to be discussed: whether the **sector needs to be regulated or not**. To answer this, we find two well differentiated positions. The first one is in favour of regulation, understanding that consumers of the service and also pedestrians need to be protected up to some extent due to the negative externalities that the firms may produce; and the second one defending that there is no need for such regulations, as they are harmful for businesses. Regarding the latter, the classic example is Friedman et al. (1962), who stated that "the scope of the government must be limited" and call for major personal liberty to decide what is best for the individual. Friedman gave impulse to all the political and economic theory regarding deregulation. However, several problems do appear when dealing with these services. Hjelm (2020) offers a list of them potentially applicable to firms like eCooltra, such as "clutter and wild-cat parking". The International Transport Forum (2020) points to safety issues and Burinsjienė and Zagorskas (2019) analyze the challenges micromobility vehicles cause in different European cities. It then appears clear to us that some regulation needs to be enacted to mitigate these issues, although it is still unclear up to which extent. Some actors are already asking regulators to find the right regulatory balance for these activities to avoid creating negative incentives for its practice (International Transport Forum, 2020).

Regardless of the stance on the need for regulation, we can see that regulation for firms in disruptive sectors such as micromobility is here whether we like it or not, as Pollman (2017) exposes, which is why it is important to analyze its impact.

Sharing economy on a local level

The regulatory and business analysis of this study is on a municipal (also referred as local) level, following the case of Cooltra in Barcelona and Milan. The reason behind this logic is that all over the world, especially in developed countries, not only the micromobility policies and regulations are decided locally but also those regarding the sharing economy firms. **Sharing economy** is understood as "the peer-to-peer based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services" (Hamari et al. 2015). Rauch (2015) offers a scope for local regulation for all the sharing economy firms. Anderson-Hall et al. (2019) dives into general lines of e-scooter and e-motorbike regulation under micromobility schemes in USA cities and campuses and Herrman (2019) tries to approach the same topic also in the USA under a more thorough study on e-scooter and e-motorbike regulations for micromobility firms comparing them with regulations for other micromobility vehicles such as bicycles. The lack of scholarly research in this field in Barcelona and Milan, two European cities with a growing demand on micromobility and

market potential gives to this paper even more reason to be worked on. Moreover, the comparison of both cities under the case of the same company gives a perfect picture to understand the economic development of eCooltra under two different regulatory environments and offers the opportunity to assess the benefits and disadvantages for all the parties involved in this regulation process while answering our research question.

Startup

A lot has been said during the last years about startups, often resulting in completely different definitions of what a startup is. The conclusion is that there is not yet a definition for the term *startup* widely accepted for the business and academic community. However, we have chosen the most appropriate definition for this study, provided by Ries (2010): "a ***startup*** is a human institution designed to deliver a new product or service under conditions of extreme uncertainty". The current regulatory context in Barcelona, which has experienced a sudden change, is the perfect definition of extreme uncertainty.

Micromobility

The term **micromobility** has evolved over the years. When the term appeared, it included all vehicles "with a gross vehicle weight of less than 500 kilograms" (Dediu, 2019) but it soon adopted the added category of electric, excluding devices with internal combustion engines. This last approach encapsulates better the current micromobility sector and eCooltra. Thus, the definition we use is the one provided by the Institute for Transportation and Development Policy (2019), which states that [electric] micromobilty refers to "a range of small, lightweight devices operating at speeds typically below 25 km/h and is ideal for trips up to 10 km". We also assume that this micromobility works under the pretext of urban mobility.

To conclude, we have framed and given an overall view of the main ideas and fields of work involving our study and our research question. The fact that there is not much scholarly research for this specific line of work and the importance that the micromobility sector already has and is bound to have in the recent future shows the importance of this research to help establish a better transportation model for cities in the next few years and for companies to be prepared for any changes that may come.

3. Case Study: eCooltra

a. Barcelona environment and eCooltra

Barcelona presents the perfect environment for startups to develop, as the 2019 Startup Ecosystem Review from Mobile World Capital shows, placing the city in sixth place among innovation hubs in Europe. It hosts a total of 1,500 startups, and the reasons behind its success and the creation of this startup ecosystem are its living conditions, its connectivity, its competitive salaries, a very large pool of venture capitalists and talent from all around the world, among others.

If we focus on the mobility sector, the City Council has established a plan towards reducing vehicle presence on the streets, increasing space for people and bicycles and moving towards a more sustainable transportation scheme. Moreover, it also hopes to promote shared transportation, as well as public transport in order to achieve more fluidity in traffic.

Barcelona, with 1.6 million inhabitants, and 4.8 million in its metropolitan area (INE, 2018), presents an average of 3.28 trips per person daily (AMB Report on Socioeconomic and Mobility Data in Barcelona Metropolitan Area, 2019), with 20% of the private vehicle trips being carried out by motorcycle. “Barcelona is the motorbike city, as Rome is”, as the Barcelona Mobility Councillor, Rosa Alarcón, stated in an interview in TOT Barcelona (Lizanda, 2020) this past April 29th. Public and private transportation have a similar share of total trips (29.3% and 28.5% according to the same Report), however, experts point towards an increase in private transportation methods, and specially vehicle sharing.

Regarding motorbike sharing, the city passed, on July 2019, a decree which regulated its use through a license system. This system imposes a maximum number of motorbikes that can operate within the city limits and certain conditions that ensure the public space has the capacity to integrate them. The decree establishes a total of 6,958 licenses to be given out, with a maximum of 2,319 licenses per company, with an initial validity term of 3 years and a yearly fee of 71,51€ per license.

The motorbike license awarding published in May 19th 2020 established a total of 4,176 licenses for 12 companies, with 348 licences per company. The difference between this total and the one laid out in the decree comes from the fact that some initial applicants did not complete the process due to a variety of reasons. However, the Mobility Councillor also announced that the 2,782 vacant licenses will be proportionally awarded through an urgency process (which is faster than the conventional one), which will allow these 12 companies to reach a total of 580 licences each. The detail on license-holding companies from the latest published license awarding can be found in Annex I.

The conditions or duties that companies have mainly focus on maintaining safety in the city, controlling parking locations and sharing real-time information on the location of all motorbikes. A company cannot concentrate more than 50% of its fleet in the city center for more than two hours, and their vehicles have to be parked complying with municipal regulations. Moreover, the decree lays out monetary or use sanctions for breaches in conditions and provisions for revoking licenses or confiscating motorbikes for use after the expiration date of the license.

In the press conference Rosa Alarcón gave on May 12th 2020, some future evolutions of the regulation were presented. Firstly, an increase in the number of licenses will be offered if the current system does not reach its saturation point. Furthermore, Barcelona's City Council wishes to expand this license system into the AMB (Barcelona Metropolitan Area), in order to allow motorbikes to go further than Barcelona's city limits and travel to and from Metropolitan Area cities. There is a map of Barcelona and its Metropolitan Area in the Annex II. This possibility is not in place, as it requires coordination between different City Councils and a unification of regulation, but it offers positive prospects for motosharing companies.

Another relevant aspect to take into account regarding motorbike mobility is the campaign the City Council has started to reduce parking on the sidewalk, which is a usual parking spot for motorbikes in the city. This reduces the convenience of using this mean of transport, and therefore, affects demand.

For eCooltra, this change in regulation implied initially taking 85% of its fleet off the market, as it had over 2,300 motorbikes in Barcelona before the regulation was approved, and it is therefore one of the most negatively affected companies of micromobility in Barcelona in terms of fleet reduction. However, this impact will be slightly offset in the near future when the vacant licences are distributed and in the medium term its market share can increase with expansions of the license system both within Barcelona and the Metropolitan Area.

b. Milan environment and eCooltra

Milan, much like Barcelona, has created a great environment for startups to develop and it has become Italy's startup hub. It presents similar advantages to Barcelona, such as its connectivity, its living conditions, local government programs that support startups, accelerators and many more. Furthermore, it is Italy's financial capital, which implies having a large pool of venture capitalists willing to invest in projects from various business areas.

In the mobility sector, Milan has long been pushing for a more sustainable model, as it used to be one of the cities with the highest rate of car ownership in Europe, 51 for every 100 inhabitants (Euro Cities, 2015). In order to reduce congestion in traffic and allow more space for its inhabitants, it promoted all types of shared transportation.

Milan, with 1.4 million inhabitants, and 4.3 million in its metropolitan area (Comune di Milano, 2018) presents 43% use of motorized methods of transportation, 38% public transportation and 18% cycling or walking (Kodkula and Rudolph, 2018). It also presents the highest share of shared means of transport of Italian cities (17 cars/square kilometer and 26 bikes/square kilometer).

The mobility model that the Council has been pushing for includes a promotion of shared green vehicles that started in 2012 in order to reduce car presence in the city, as it presented one of the highest car ownership rates in Europe. In 2015, the scooter sharing scheme was the last one to be introduced, after the car, motorbike and bike sharing strategies had proven their success, as can be seen with the ratio of shared means of transport per square kilometer. The wide success of this program shows the positive propensity the population has on these kinds of services.

Regarding local regulations on motorbike sharing, there are no restrictions on the quantity of operators or motorbikes operating in the city. While it is true that the City Council has long been pushing for more sustainable transportation modes, this has not translated in increased barriers of entry to motorbike sharing companies, as they provide sustainable and non-congestioning transportation methods for its citizens.

However, the most recent policies of the City Council show its preference for bikes, e-bikes and scooter sharing schemes, as they allow for more flexibility. This may be detrimental for shared motorbikes, as scooters and electric bikes are close substitute services due to their characteristics.

eCooltra in Milan has 500 motorbikes, and it is one of the city's most important supplier, only behind CityScoot in number of motorbikes (CityScoot has 1,000) and tied with Acciona (also offering 500 motorbikes). The prices of these operators are very similar (0,29 per minute on average), and smaller operators offer slightly lower prices. Moreover, Urbi is available in Milan and it combines most shared mobility suppliers in an app, allowing users to select among the different shared mobility options (different operators and different types of vehicles). This creates a very competitive environment in this industry in Milan, with incumbents fighting for the market share.

c. Comparison between the two cities

Both cities present very favorable environments for startup development or growth, as either through public policies or socioeconomic factors, startup hubs and technology hubs have grown in the recent years. Barcelona is the Mobile Capital and one of Europe's most important startup hubs, and Milan is Italy's financial capital, thus is able to provide the financing all startups require.

Moreover, both cities' town halls have been promoting more sustainable means of transportation, with a preference for shared methods, as a way to change mobility within the city and increase space for pedestrians. Both cities are and have been undergoing a transformation of the city model, especially regarding mobility, and this is an opportunity for shared methods of transportation to remain in the market and grow, as both cities are densely populated and shared methods save space. Furthermore, demand for these services is large and is expected to rise as private vehicle decreases.

Nonetheless, there are some unfavorable aspects to take into account. In Barcelona, the license system limits the growth eCooltra can achieve. Despite the fact that the city plans on increasing the number of licenses if the current system works and is working on enlarging the operational area to the whole Metropolitan Area, this is a slow process and does not allow for the fast growth a start-up aspires to. In Milan there is not a quantity limitation, but the impulse for shared bikes, electric bikes and scooters that has recently been started by the town hall can act as an implicit obstacle for shared motorcycle companies' growth, as customers may enjoy easier access to these other means of transport, which are close substitutes.

Overall, both cities presented a favorable environment before Barcelona's change in regulation for a motosharing company like eCooltra to have a market and grow there, as the existing demand and city mobility schemes favored such means of transportation. However, the regulation in Barcelona has impacted very negatively eCooltra's market share, as it has decreased substantially. Even though Milan's latest plan slightly shifts towards the promotion of shared scooters and bikes, motosharing companies still have favorable prospects, despite being in a very competitive environment. In comparison, while Barcelona's City Council plans to expand the license system do offer improved growth possibilities with respect to the current license system, they have no clear timeline, and the current situation for eCooltra requires a business plan adaptation for that city.

However, if we go one step further and consider the impacts that the Barcelona regulatory change has in the industry, its effects are not so clearly negative. The license system can be seen as a barrier of entry to the market but it can actually end up enabling new competitors to enter, as it limits the reach that established companies can have and gives guidelines to the new companies for what a quality

service implies. This entry of more competitors gives more space for innovation and consumer choice, and thus can result in benefits for the market overall. Still, the fact that established and experienced companies see their capacity extremely limited, may be detrimental for consumers in the short term. If we compare it to the regulation-free system Milan offers, we can see that barriers of entry are quite high, as established companies have a strong positioning in the market and have the operational capacity to grow with the market, allowing for little space to newcomers that are not already experienced in the sector (for example, that do not operate in any other cities). However, the competitive environment, considered together with the fact that Milan is the financial capital of the country, also favors innovation.

d. Future prospects: a Business Plan adaptation

Having reached a profound analysis of the general context and the firm current status in Barcelona, and compared it to the one in Milan, we adapt eCooltra's Business Plan taking into account the latest events that have occured. We acknowledge the variety of forms a Business Plan can have depending, mainly, on the audience that the document is presented to. For this case, we have taken into account that we analyze from an external point of view the current situation of eCooltra, but, as our work is hypothetically designed for the very same firm, we have chosen an internally-focused Business Plan.

With this in mind, we can establish a list of items that every in-depth Business Plan has to address. With a special focus on strategy and adaptability, we consider that Rhonda Abrams' Business Plan Model (2010) is the most complete to address challenges in this scenario. It is also one of the most influential models used by highly technological-driven startups, which is also fitting for this case. The following items are from Abrams (2010) Business Plan model, which should contain:

1) Executive Summary
2) Company Description
3) Industry Analysis and Trends
4) Target Market
5) Competition
6) Strategic Position and Risk Assessment
7) Marketing Plan and Sales Strategy
8) Operations
9) Technology Plan
10) Management and Organization
11) Community Involvement and Social Responsibility

12) Development, Milestones and Exit Plan
13) The Financials
14) The Plan's Appendix

The main goal of our Business Plan, however, is to face and adapt to a regulatory change. Therefore, our goal is to analyze the aspects that will change substantially due to this new regulation, not all of them, even though all are impacted as they are interconnected. A change in the legal environment implies that some of the items of the Business Plan will be more affected than others and, for the extent of this project, we only examine the items that we consider more at risk. In Annex III the items are organized by how sensitive they are to the new regulation.

i. Industry Analysis and Trends

Our goal in this section will be to correctly identify the micromobility trends in the industry, as well as the opportunities and problematic characteristics in relation to the services it offers. Several aspects have to be taken into account when analyzing an industry and its trends, and we will focus on the ease of entry, the supplier's power, the buyer's power and the availability of alternative products.

Regarding ease of entry, as we have seen, the possibility of operating in the Barcelona market is subject to a licensing scheme from the City Council, which acts as a strong barrier of entry, as applicants need to prove certain operational capacity. After a period in 2019 in which firms could apply for the distribution of licences and certify the required quality benchmark level, the current phase is focused on assuring that the firms that are in the market can operate with all the licenses initially granted and examine the market capacity that is being covered, making sure saturation point is not reached. This May, we have a step towards this direction, as 9 of the 21 firms that applied for licenses have been eliminated from the system. During the next months, if saturation point is not reached and the city center is not congested, the City Council plans to increase the number of licenses and add new ones to operate across Barcelona's Metropolitan Area. With all this in mind, we can conclude that there is no opportunity for newcomers to enter this industry in the short and medium run, as requirements to be granted a license are quite strict and can only be met by experienced companies. Therefore, we do not expect that the future increase in licenses number leads to new companies entering the market, so current companies have a huge competitive advantage to fully dominate the market.

Studying the suppliers' power, it is easy to see that there does not exist a traditional supplier figure to this kind of industry that can threaten the business activities of a firm. It is true, however, that, in the

case that any firm would want to expand its vehicle fleet in a short amount of time to cover the activity of all of its licenses, there could be a chance for an increase of suppliers power, represented in the figure of a electric motorbike provider. We do not expect this to be an issue in Barcelona, as most of the firms with a real possibility of having presence in the market have proven the required ability to operate all their granted licenses. Moreover, some firms choose to rent their electric motorbikes or even obtain them through franchising contracts (Gispert, 2019). It is even more difficult for suppliers to exert their power over firms operating in Barcelona, as the remaining firms are the most notorious ones (which is further developed in the Competition section), with a fleet big enough to respond to the City Council requirements. For example, eCooltra had a fleet of 2,300 motorbikes before the implementation of the license system, and with the license system as it is, it can only operate with 348 of them.

The opposite is observed looking at the buyer's power. The micromobility industry is characterized by being formed by different companies having to offer the same service, many times even using the same motorbike model. Under these circumstances, buyers have a strong bargaining power, as they are able to react rapidly and with a low opportunity cost to changes in prices and conditions. Because of this, companies have to establish very competitive prices, trying to match or even lower the prices of other companies, and always trying to offer a competitive advantage to the customers in order to attract them. Another risk that stems from this characteristic is then the existence of firms with economies of scale (larger fleet, presence in other countries…). These are able to offer lower prices for quality service, therefore attract a big customer base and push competition out of the market.

Lastly, when talking about the availability of alternative products, it is seen that the services offered by the other motosharing companies are the same: short rides within Barcelona -and in the medium run its Metropolitan Area- with a clear destination and with the goal of reaching it as fast as possible with electric motorbikes. This situation produces its advantages and disadvantages. On the one hand, a company that advertises its service eases the advertising for the next company since the second one will have to differentiate itself but the potential customers will already know what service both firms are offering. eCooltra has achieved being the top-of-mind brand for Barcelona consumers, but this has opened the path for the service other companies offer. On the other hand, a firm creating a slight change in the offered service or managing to offer a competitive advantage would represent a huge risk for the remaining firms since potential customers could be attracted to it perceiving it as a substitution and improvement in relation to the other services.

ii. Target Market

The license system as it currently is established does not change the target market, as the operational

limits are Barcelona's city limits, which are the ones eCooltra was already using before the license system. However, the upcoming prospect of having to offer the motosharing service not only in Barcelona but also in its Metropolitan Area will translate into a bigger target market in terms of number of users as well as different profiles of potential customers and their travel needs. Because of that, the location, lifestyle, size of the market and age of the potential customers are the key variables to understand the change in the target market that this new licensing system will generate. Before the future expansion into the Metropolitan Area, the current availability of the service is shown in Figure 1, extracted from the eCooltra website.

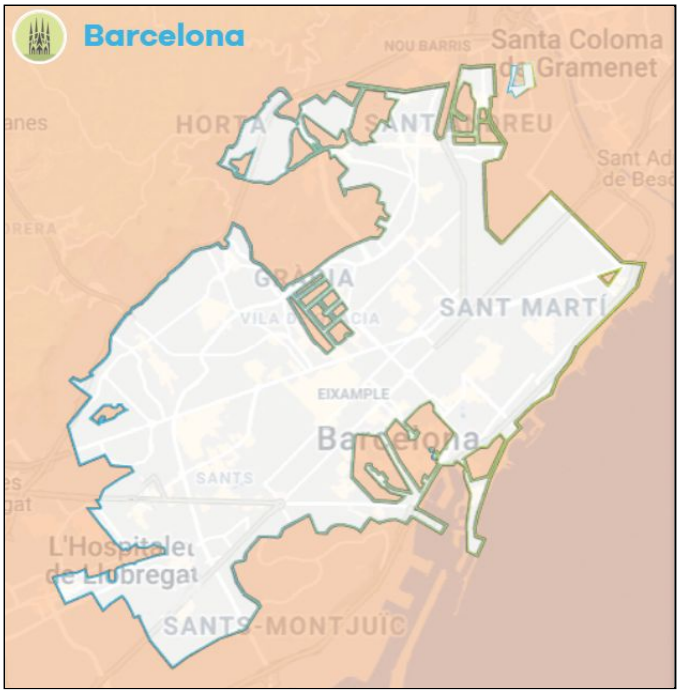

Figure 1. Current availability map for the eCooltra service

First of all, the increase of potential customers in absolute numbers will offer eCooltra and the other 11 firms currently competing in the market a huge expansion possibility. However, before looking at the raw numbers we have to firstly assume that the potential customer is between 21 and 65 years old, as we assume that motosharing services usage for people older than 65 years old is residual (since their incentives to use these services are lower or even nonexistent, for example, regarding commuting to work) and the regulation for the driving licenses in Spain result make it unlikely that people under 21 are able to use this service.

The reasoning behind our argument that the potential customer will be 21 years old or more is supported in Spanish driving licenses regulation and needs to be explained. In order to drive these motorbikes, someone needs to have had a car driving license for the last three years (the most common driving license in the last years in Spain, as shown in Annex IV) or have a motorcycle

driving license (a license that grants the permission to drive motorbikes but not cars). With the introduction of the three year rule to drive motorbikes up to 125cc (eCooltra ones have only 50cc) with a car driving license, incentives for the specific motorbike driving licenses diminished greatly. That is why we consider that potential customers are at least 21 years old, and we will only consider as potential customers people with a car driving license. However, it is true that someone can obtain the car driving license while being older than 18 and be considered as a potential customer when in reality he or she cannot use the service yet. Here we find ourselves without the specific data to assert these cases so, for the sake of simplicity, we add to our analysis these people as potential customers. Since we are only interested in the percentual increase in potential customers and again assuming that the ratio of people that obtains the car driving license in Barcelona and in its Metropolitan Area being more than 18 years old will be the same, we consider that it does not deviate our findings and conclusions.

Having explained our reasoning, it is time to look at the data. In 2017, there were 649,135 citizens in Barcelona with a car driving license (iermB, 2020). In the same year, there were 707,195 citizens in the Metropolitan Area, excluding Barcelona, with a car driving license (iermb, 2020). This represents an increase of potential customers of a 108,95%, more than the double of the initial quantity.

Regarding the existence of a market for this service, it is clear that it exists. Looking at the data offered by the Metropolitan Transport Authority (Àrea Metropolitana de Barcelona, 2018), the average length of intramunicipal trips on working days in 2018 was 15,9 minutes, and in intermunicipal trips, 32,6. If we compare the average trip length depending on whether it is a public transportation trip, a walking trip or a private vehicle trip (data can be found in Annex V), we see that eCooltra offers faster trips with respect to walking and public transportation trips and cheaper ones with respect to private vehicle trips. These are very strong reasons to attract customers in the Metropolitan Area and capture market share.

Other insightful aspects to take into account is that almost all the new potential customers will not have used any micromobility service before the licensing extension in the Metropolitan Area. Moreover, due to the COVID-19 pandemic and its sociocultural and economic consequences, people will be pushed to use cheaper and individual vehicles to commute and take short trips within the Metropolitan Area. Overall, these changes together with the appearance of public policies aiming at using more environmentally-friendly ways of transport such as electric motorbikes will increase the base of potential customers for eCooltra.

iii. Competition

With the last distribution of licenses on May 2020, there are 12 firms (a detail on the companies can

be found in Annex I) operating in Barcelona. With this new situation, and taking into account that this study aims at providing an internally-focused analysis, the main goal in this section is to understand and foresee challenges and opportunities in order to understand competition and develop strategic positioning.

First of all, however, it has to be noted that not all the firms with licenses to operate have the same capacity and logistics to represent a threat to eCooltra in the short run. Only Yego Urban Mobility (Yego), Mobilitas Futurus (Movo), Scoot Networks Iberia (Scoot Barcelona), Talban Krup (Cityscoot) and Acciona Mobility (acciona) are currently available in Barcelona or will be in the short-term.

The remaining six firms are in no shape either financially, logistically or both to operate in Barcelona as of now. TuCycle Bikesharing (TuCycle) is a firm that started in Gijón, Spain, but it has not expanded yet to Barcelona. Avant Fullstep is still looking for banking financing (Guerrero, 2020) to be able to enter the market with the granted licenses. Respiro is a car-sharing service with no electric motorbike fleet yet and operating in L'Hospitalet de Llobregat (in Barcelona's Metropolitan Area), Madrid and Palencia but not in Barcelona, Tirkil Invest and Oiz Ridesharing were created just before the start of the licensing process in 2019 (Méndez, 2020) but they lack the funding and infrastructure. Eco-Logia Turismo Sostenible doesn't offer any information for when it will be available in Barcelona.

The general context means that, currently, in this market, a total of six firms -including eCooltra- are the only ones with the capacity to operate. This will translate in a competitive advantage to these firms since they are benefiting from the first-mover advantage (even more important for eCooltra, which was the biggest e-scooter sharing service in the city before the license system and established itself as the top-of-mind brand).

A useful tool to understand competition is a positioning map. To create it, two variables which are key in explaining the success or the failure of the service will be taken into account: price of the service and market-entry date (the logic behind it is that in this industry the first-mover advantage will have been paramount in terms of granting a firm's publicity and customer base. The table with the services prices per minute and market-entry date can be found in Annex VI. Based on that table, we can establish the positioning map to understand the dispute for market share of the competitors.

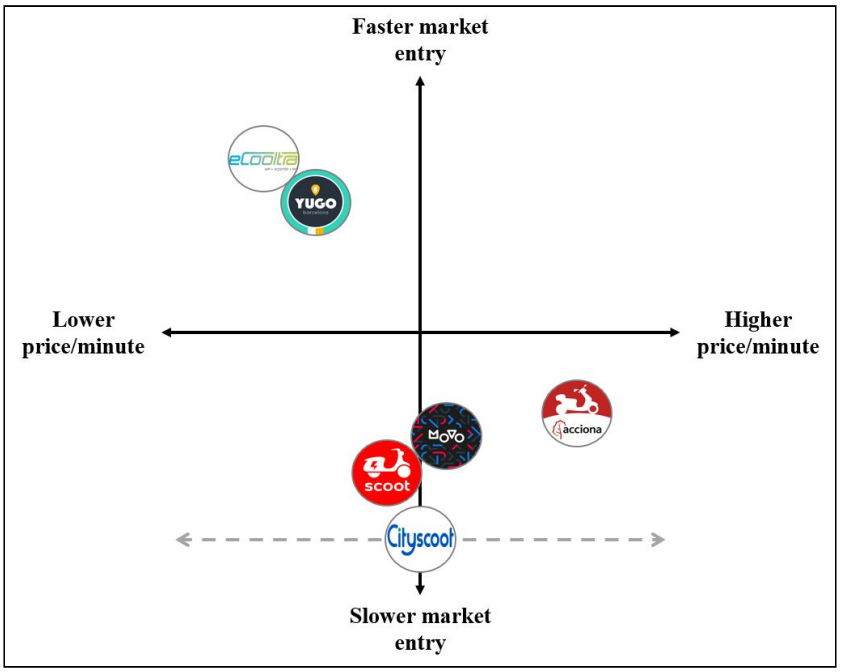

Figure 2. Positioning map

The rapid market entry of eCooltra and the low prices per minute make them the best positioned firm alongside Yego, with similar prices and similar market entry date. There exists a remarkable difference between these two firms compared to the rest with respect to its market entry (eCooltra and Yego entered the market in mid 2016 while the rest did so in mid 2019 or beginning of 2020). Because of that, the two first firms have more users and had more electric motorbikes available -before Barcelona's City Council licensing distribution-, which translated into the ability to offer better prices. Nevertheless, although eCooltra and Yego have the best positioning, other firms could dispute it through equity injections and lowering of prices. It is true that Scoot, Movo and Acciona offer a more expensive product but the price difference is not big enough for eCooltra and Yego to relax. There is no information on prices regarding Cityscoot yet, which is why we have not reflected them in the positioning map or Annex VI.

iv. Strategic Position and Risk Assessment

The strategic position that eCooltra has in the market is to be analyzed applying the SWOT model. Changes in the regulatory framework in Barcelona imply that the company has had to assess its strategic position in the city by exploiting its strengths, taking advantage of new opportunities and improving its weaknesses.

First of all, eCooltra's popularity in the motosharing ecosystem in Barcelona plays in its favor. Being the first in the city provided them with valuable experience in the sector and allowed them to develop adaptability over the years. As a start-up, they have the capacity of adapting to changes, since they

operate in a niche that did not have regulation at the beginning, and though it has developed in the recent years, they could progressively make the necessary changes. However, the licensing system has represented a more drastic change, as it gives the same number of licenses to each of the motosharing companies, which implies a big limitation to eCooltra's market share, as it will only operate, provisionally, with 348 shared motorbikes.

The equal sharing of licenses among operators will fragment the market, and this is perceived as an important risk because the companies will not be able to differentiate from the others in terms of fleet capacity and extension, so they will have to focus on other aspects such as the quality of the product. It is foreseen that this fragmentation will generate discontent among users, who will have to download many applications to use the motosharing service in Barcelona, as availability of one operator will be limited. Even though it is planned to incorporate motosharing services to an app (*SMou*, similar to *Urbi*, Milan's shared transportation app), which will centralize the availability of the service, each operator will still use a different system to lock and unlock the motorbikes. eCooltra, as well as other operators such as Yego, refused this initiative, since each company has a different rental system that already works through an app (Redacció Tot Barcelona, 2020). They argue that this would only end up allocating more resources in changing a system that already works, weakening the customer experience eventually.

Another significant risk is the strict sanctioning system related to the use of public space, area limitations and the maintenance of the licenses: if a company cannot comply with the requisites, the City Council will impose monetary sanctions and, as a last resort, revoke licenses and re-distribute them among the operative companies. The responsibility for not complying with the requisites of the regulation lays on the holders of the licenses, therefore the operators.

In this strict scenario we can identify opportunities that eCooltra can take advantage of to improve its strategic position. In the medium term, the target market will expand, as the Barcelona Metropolitan Area becomes the operational region, so shared mobility will operate in a larger public space and will make it easier to comply with the restriction of having a maximum of 50% of the fleet in the city centre. Also, the City Council is planning to distribute the licenses of the companies that dropped out of the process, and according to recent declarations by Rosa Alarcón (Lizanda, 2020), the total number of licenses will increase in July "in relation to the absorption capacity of Barcelona of having more shared vehicles". Since shared mobility has been previously identified as a urban mobility trend, then we expect this scenario to be favorable for eCooltra in the medium term.

It is highly unlikely, however, for eCooltra to obtain a number of licenses similar to the quantity of motorbikes it operated before the license system was put in place. The process of obtaining licenses is

a slow one and application processes take place on specific times, not on demand. Then, even if the target area expands, we do not expect eCooltra to regain fleet volume it used to have in the short term.

eCooltra has other strategic opportunities to offset the impact of the regulatory change. It has an important presence in other European cities and they have also opted for diversification. The company offers a large variety of services related to motorbike renting, and they count with a fleet for business-related activities, such as food deliveries. These other services will be growing in the upcoming months due to the sociocultural impacts that the COVID-19 pandemic has caused (Nicolás, M., 2020). One option for eCooltra is to progressively shift their efforts towards their other lines of business that are not limited in terms of fleet extension.

v. Marketing Plan and Sales Strategy

One of the areas that eCooltra will have to strengthen is communication and marketing. As eCooltra has a huge presence in the city, the lack of shared electric motorbikes available will also be a drawback for the image of the company, as it relied on availability of vehicles as part of their appeal. Moreover, even though they already have a great number of users, they will have to properly informed them of the new terms and conditions of the licensing system, as the responsibility of non-compliance with the terms of the regulation is undertaken by the company.

eCooltra is well-known for the good service that they have been offering the last years. Some of the companies that have been granted the same number of licenses as eCooltra are not as well-known or their service is not optimal. The company's CEO, Oriol Marimon-Clos, stated in a recent interview (Redacció Tot Barcelona, 2020) his concern regarding these companies, which, he feels, might be in the market for speculation activities and not to offer customer-oriented service. This situation can be transformed into a opportunity for eCooltra because they can consolidate their image as a customer-oriented company wanting to improve the shared mobility service which, in the end, is the objective of the City Council. Following this line of reasoning, they can now work on improving the customer experience through optimizing the electric motorbikes, accelerating the booking process and planning accurate strategies to respect the fleet limits of the city centre at all times.

During the last months, and due to the affectation of the COVID-19 pandemic, eCooltra has reinvented its image so as to stay on the market and maintain its users confidence. In response to the uncertain scenario where shared mobility was at stake, eCooltra has designed a communication campaign sharing details of how the company was working to ensure security through constant sanitation of the fleet, and has kept its users engaged to the company through online gamification and online marketing (Nicolás, 2020). They have created a strong link with their customers, which will

help them when communicating information related to the licensing system and its requisites.

vi. Operations

The CEO of eCooltra shared one of his greatest concerns in an interview (Lizanda, 2020), which is the reduction of the operative capacity in Barcelona due to the license system. The number of available motorbikes has decreased by 85%, and the company's approximation of the minimum fleet that is necessary to grant continuity of the service in the city is 1,500 (Redacció Tot Barcelona, 2020).

eCooltra, in contrast to other companies in the sharing ecosystem, does not offer the motorbike sharing service in Barcelona exclusively. It has expanded to other cities in Spain and to other countries, and the regulation that applies varies from city to city. This means that the assets that the company had acquired and was using to maintain the fleet of over 2,000 motorbikes in Barcelona before the regulation was introduced can be transferred to other cities that have a system different from the licensing one. Milan, as has been presented in this study, is one of the cities that is moving towards a shared ecosystem in the urban mobility sector, and the expansion can be nurtured from the readjustment in Barcelona.

Since the situation in Barcelona regarding the progressive increase of the number of licenses is uncertain at the moment, eCooltra also has to take into account that the City Council will be imposing sanctions to those who do not comply with the best practices code established to maintain the licenses, as some of the companies competing have no experience and do not know the market as good as eCooltra does. Once the competition decreases, eCooltra will be able to increase the number of motorbikes availables in Barcelona.

vii. Financials

The financials of eCooltra have been affected by two main unexpected factors: firstly, by the discussed regulations, and secondly, by the COVID-19 pandemic. Our goal here is not to develop an extensive study of the financial impacts, since it is out of the project scope. We acknowledge that it is one of the most sensitive parts of the business plan, and will require a deep revision by the company in order to respond to the changing scenario. Also, due to the lack of public information of eCooltra's financial statements, we analyze this part as consequential of the previously explained parts of the business plan.

Regarding the Barcelona license system, the analysis of the previous points of the business plan shows a negative impact in the financials of eCooltra. The forced reduction of the fleet in 85% will be the main driver of the financial restructuring of the company, as well as the new license fee per motorbike and the sanctions system. The physical assets that there were already in Barcelona will have to be

reinvested in other cities or for other purposes, such as pursuing the expansion of the other lines of business. For a micromobility company, investing on physical assets does not represent a high expenditure, therefore this will not turn into a drawback for eCooltra.

eCooltra, as explained in the marketing strategy, is now developing an extensive communication strategy so as to keep their users engaged. The fact that the regulation in Barcelona has requirements. such as the limitation on the percentage of fleet parking and present in the city center, is a big financial risk, as sanctions are imposed directly to the company and can easily make costs skyrocket. In order to prevent this from happening, eCooltra should design strategies to make sure that users comply with the City Council regulation, such as increasing the rotation of motorbike use, offering incentives during the highest hours of use in the city center to users who travel to other parts of the city, or creating campaigns to promote correct parking.

Regarding the current scenario driven by the COVID-19 pandemic, the vehicles that are expected to be mostly used are those that are individual; therefore, the forecast for micromobility is positive. The sharing sector is developing and implementing a series of sanitation measures that are meant to make the service safer. This will imply a great investment in sanitary aspects, but it will translate into benefits for the company due to the higher engagement of the users, their necessity of immediate mobility and the preference for private or shared individual vehicles. If the plans of Barcelona's City Council to expand the number of licenses in the short term come sooner rather than later, this will be extremely beneficial for eCooltra, since they have the capacity and resources to expand their fleet rapidly, compared to the competitors who can not provide the operational guarantees to do so, and therefore can not receive more licenses.

e. Business Plan conclusions

eCooltra has many competitive advantages compared to other market players. While the cap in market share that the license system has represented can negatively impact many of the differentiating factors the company had achieved during the last few years, the company has capacity to adapt to them.

First of all, it can shift the purpose of the motorbikes to other uses (such as delivery and business activities) in Barcelona, or move their operational capacity to other cities in which they already have an important presence and that have market capacity, such as Milan. The Italian financial capital offers similar socioeconomic characteristics to Barcelona and the local authorities are working towards a sustainable mobility plan, which is fitting for eCooltra's business. Moreover, eCooltra is an established company there, so it has the potential to gain more customer loyalty.

However, we do not recommend completely shifting the focus away from Barcelona, as the upcoming changes in regulation leave room for eCooltra to regain the market share it had before and increase their operational capacity. Moreover, as a response to the situation created by the COVID-19 pandemic, the City Council plans to speed up the process of distributing the vacant licenses and creating new ones in case the market is not saturated with the current license quantity.

While slow-changing regulation might delay growth, as eCooltra depends on efforts from City Councils from Barcelona's Metropolitan Area and Barcelona itself to increase the number of licences and be able to achieve such growth, eCooltra should not overlook all the advantages Barcelona and its Metropolitan Area offer. The company's reputation in the area, the startup environment Barcelona offers and the possibility of regaining part of the market, make us recommend maintaining efforts in Barcelona.

Secondly, eCooltra in Barcelona can create a plan that combines marketing to inform customers about regulations and operational coordination in order to minimize sanctions and avoid some of the financial costs arising from the license system.

Moreover, Barcelona's City Council is willing to work together with companies in the sector in the modifications of the regulation to better suit it to the customers and companies' interests, while maintaining their mobility model. This is an opportunity for eCooltra to establish conversations and have its interests considered when passing the new modifications of the license system.

Industry Analysis	**Target Market**	**Competition**	**Financials**
● Ease of entry: low ● Area: BCN ● Not traditional suppliers ● Buyers: strong bargaining power ● No competitive advantage	● Size of the market ● Drivers are +21 ● Driving license holders	● 12 competitors ● 348 licenses each ● Same capacity ● Low price & fast market entry	● Cost structure affected by the fee ● COVID-19: need for individual mobility will boost the service
Marketing Plan	**Operations**	**Strategic Position & Risk**	*Conclusions*
● Communication of the licensing system ● Strengthen image ● Gamification ● User's loyalty	● eCooltra's fleet decreased by 85% ● Reduced operative capacity ● Retirement of fleet	● S: first-of-a-kind in BCN ● W: loss of fleet, costs to cover ● O: market expansion ● T: equal share, fragmentation	● We recommend eCooltra staying in BCN's market ● The number of licenses will increase eventually ● Communication with City Council

Table 1. Key elements of eCooltra's Business Plan

4. Conclusions

Firstly, we would like to extrapolate conclusions from the differences in business model and business plan that stem from having a stable framework versus experiencing a change in regulation. First of all, there is no doubt that eCooltra's business plan needs to adapt as a response to the change in the current framework, as its most important market (Barcelona) suffers a strong reduction in the short and medium term. This reduction affects the number of operating motorbikes plummets, which implies that the growth predictions for the company disappear. On the other hand, Milan's conditions remain stable and it presents itself as a viable option to absorb the reduction of capacity from Barcelona. Therefore, the business plan for the stable environment does not suffer (as growth was already planned) but the one for the changing environment needs immediate adaptation and action.

The silver lining for eCooltra, however, is that it has market power in many stable environments (such as Milan), so the setback coming from Barcelona's change in regulation can be absorbed by other existing geographic markets of the company. eCooltra's widespread presence allows the company to canalize some of the business efforts towards Milan (or the other cities where eCooltra currently operates) as an option to absorb some of the business volume lost in Barcelona. Furthermore, another alternative is for eCooltra to keep pursuing the internationalization track, since micromobility has a strong demand in most advanced economies. The risk that emerges from regulatory changes can be diversified thanks to a good internationalization strategy, detecting those economies that are prone to implementing shared mobility policies in the short and medium term. However, given the future prospects for Barcelona's license system evolution, we do not recommend disconnecting from Barcelona, as potential for growth has not disappeared and can be created in collaboration with the City Council.

Moreover, it is important to note that the City Council is currently exploring new legal options that allow for an increase of maximum number of licenses awarded in total for micromobility companies. That is due to the interest of the Council to further promote shared transportation, public transport and green alternatives to achieve fluidity in traffic, which is already being pursued by similar cities in socioeconomic terms that are densely populated, such as Milan.

While it is clear that the regulation change results in setbacks for eCooltra, the adaptation capacity of startups and newly created industries in general can lead us to think that the earlier the regulatory changes are introduced, the better for these new sectors, as it marks the path in which they can grow. This is why it would be ideal for the City Council to detect those new businesses that are created to tackle mobility needs and to develop early regulation, since that would avoid any holdups for companies. That would be the case of e-scooters (as a two-wheeled electric vehicle that is different

from the electric motorbike analyzed in this project), whose sector is not currently regulated in Barcelona following a license system. Before it boosts, we would strongly recommend early negotiations so as to avoid damaging shared e-scooter companies. Going back to startups' adaptability, one of the key factors in the micromobility sector is that investment in physical assets is not high for sharing companies, as they do not produce the vehicles.

We cannot establish whether the Barcelona's regulation itself will be good for the overall market, as we saw in the comparison of regulation in Barcelona versus no regulation in Milan, but we consider that the fact that an experienced company with quality service such as eCooltra seeing its presence reduced so significantly can have an impact on consumers' experience, as fleet size is relevant in this sector. However, the initial equalization of market share of the companies is probably going to lead to innovation and increase in quality as a means to differentiate from other companies, which will benefit consumers. Moreover, if we take into account that the evolution of the license system considers companies' experience, growth may not experience a big restriction in the long term, as the Council and the companies cooperate. Comparing this situation with Milan's one, we can state that growth in that city is only limited by demand and competition from close substitutes (such as e-scooters, bikes and e-bikes), but innovation may eventually stagnate, as incumbent companies are well-established in the market and can use their power to drive out competition, which for now is existing.

Overall, regulations' impact cannot be underestimated. A municipal regulatory change such as this one greatly impacts existing startups, as they have to switch efforts to comply with local requirements. However, the characteristics they possess due to the nature of this type of companies give them great adaptability. Still, City Councils should consider the effects that new regulations can have on companies from the industry, which eventually affects its users. The evolution of the license system in Barcelona shows that further information could have been used when drafting the license system in order to adapt it better to the reality. One fundamental question local legislators and companies alike should consider then is how could communication between them improve in order to respond faster to the impacts a regulation has and achieve end results before, thus avoiding some of the negative consequences for the impacted sectors.

On a more theoretical aspect, our study and the evolution of the regulatory environment in Barcelona and its comparison with Milan opens the possibility of further research topics to be analyzed. It is clear that micromobility and shared mobility will be more used as time goes by and with it, new areas of study and question will appear. Our study can be the entry door for further research on micromobility habits in Barcelona and its Metropolitan Area but also in other cities through Europe and North America with characteristics similar to Barcelona. It can also be useful to explore the

evolution of micromobility regulation and its consequences for the firms in the market, for potential firms that would have wanted or would want to enter it, for the services' users and for the citizens. Lastly, it can also open the door to study and compare the regulation and its consequences to micromobility firms using bikes, e-bikes and e-scooters as to what to expect in the short and medium term and possible regulatory outcomes.

Finally, to give a clear answer to our research question ("*How does a municipal regulatory change affect a startup in the sector of micromobility?"*), we can conclude that regulatory changes in the municipal scenario translate into strong impacts in most business plan areas, can result in strategic decisions changes and can imply a financial struggle. Specially when implemented in the short and medium term, companies have to adjust quickly to the new requirements in order to stay on the market. Nevertheless, startups are better prepared for such alterations, as they have a high capacity of adaptability and therefore can give a better response to this situation. City Councils and legislators overall should profusely consider these impacts and ponderate interests in order to avoid many evitable costs (such as those arising from constant variation in regulations) and give better solutions for these kinds of services, as their ultimate objective is to provide an improved mobility environment for population.

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6. Annexes

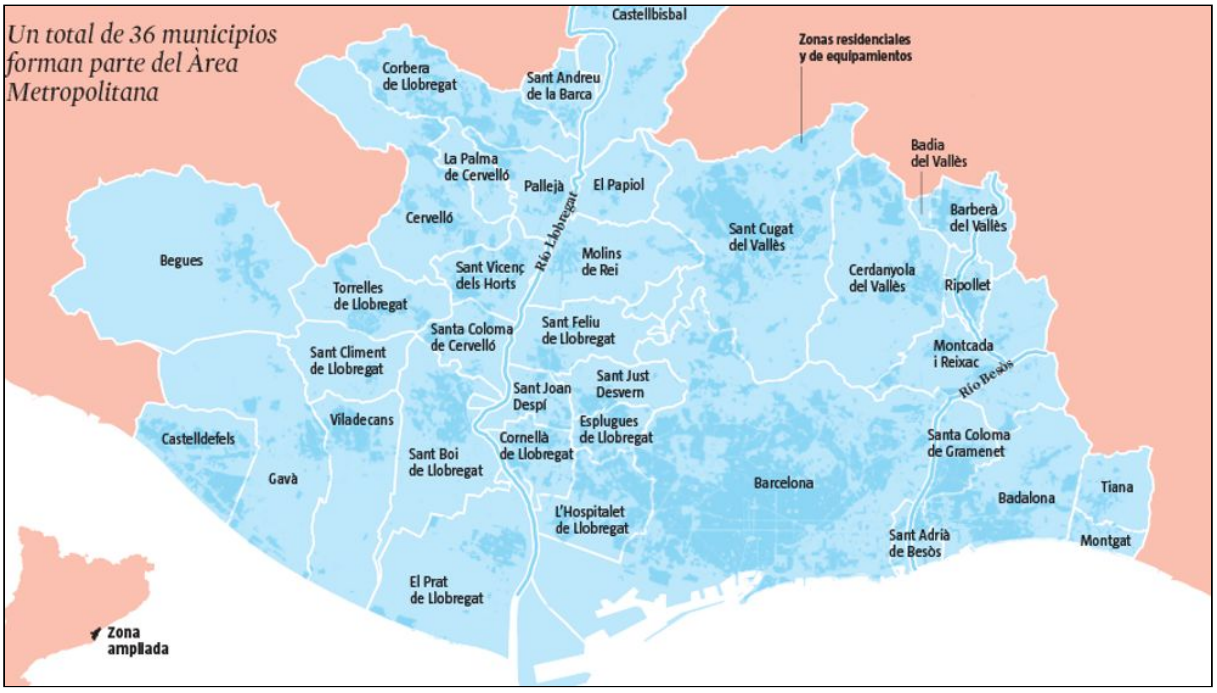
Annex (I). Definitive license awards from May 19th 2020

The companies which received the licenses (348 each) upon completion of the process laid out in the decree are the following:

1) Yego Urban Mobility
2) Tucycle Bikesharing
3) Avant Fullstep
4) Mobilitas Futurus
5) Scoot Networks Iberia
6) Respiro

7) Talban Krup
8) Tirkil Invest
9) Acciona Mobility
10) Oiz Ridesharing
11) Eco-Logia Turismo Sostenible
12) Cooltra Motos

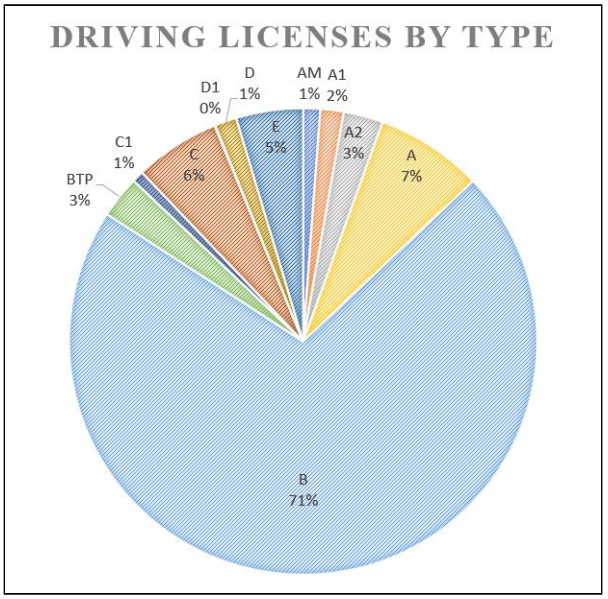
Annex (II). Barcelona's Metropolitan Area map



Map from Clara Penín, extracted from Sierra (2019).

Annex (III). Business Plan risk assessment

Annex (IV). New driving licenses obtained in Spain sorted by type of license (1998-2017)



- AM, A1, A2 and A licenses grant the driver the permission to ride specific motorbikes and scooters and they represent the 12,93% of the total driving licenses obtained in Spain between 1998 and 2007.
- B licenses grant the driver the permission to ride cars and any motorbike up to 125cc (hence, micromobility scooters are included) and they represent the 71,26% of the total driving licenses obtained in Spain between 1998 and 2007.
- BTP, C1, C, D1, D and E licenses grant the driver the permission to drive buses and trucks and they represent the 15,81% of the total driving licenses obtained in Spain between 1998 and 2007.

The data is from Dirección General de Tráfico (2020).

Annex (V). Average length in minutes for intermunicipal and intramunicipal trips in Barcelona's Metropolitan Area on working days

Trip by nature	Transport	Average length (minutes)
Intramunicipal	Walking	14,8
	Public transport	27,1
	Private vehicle	11,9
	Total	15,9
Intermunicipal	Walking	21,7
	Public transport	51,9
	Private vehicle	27,0
	Total	32,6

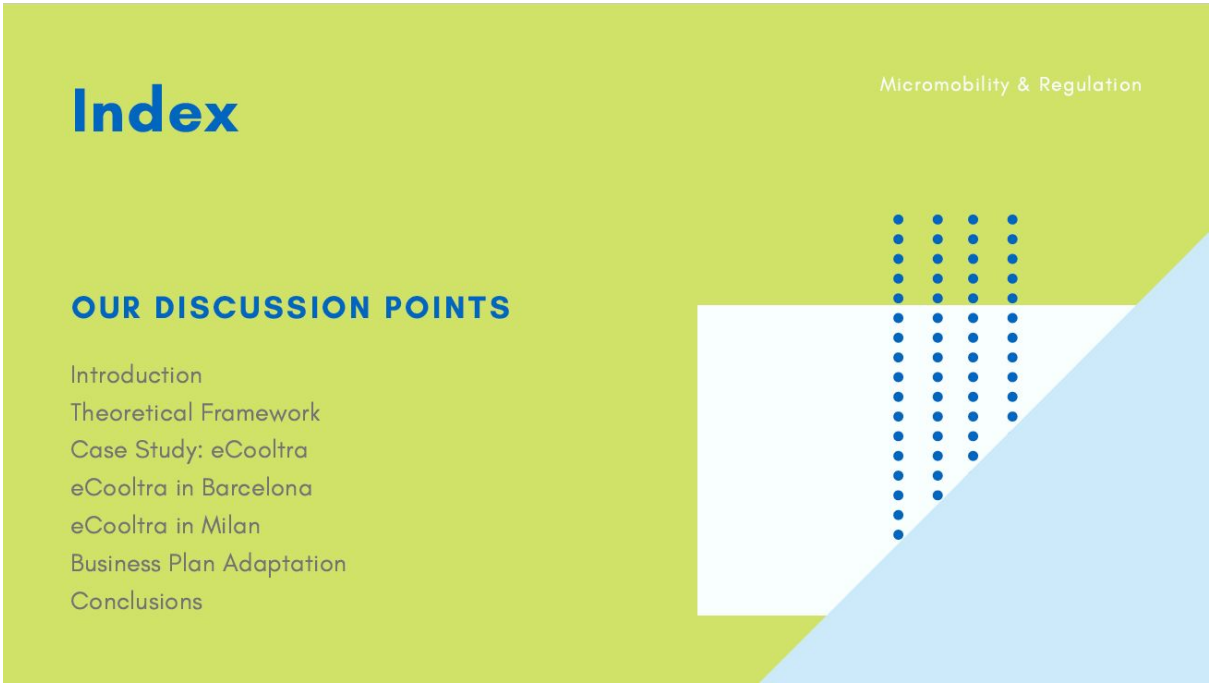
Data from Àrea Metropolitana de Barcelona (2018).

Annex (VI). Table with micromobility services' prices per minute sorted by firm and firms' entry date

	Price per minute	**Firm entry date**
eCooltra[1]	Standard price → 0,26€ Special pack prices → between 0,18€ and 0,22€	June 2016
Movo[2]	Standard price → 0,24€	August 2019
acciona[3]	Standard price → 0,26€ Premium prices → 0,28€ and 0,35€	June 2019
Yego[4]	Standard price → 0,25€ Special pack prices → between 0,19€ and 0,23€	Mid 2016
Scoot Barcelona[5]	Standard price → 0,28€ Special pack prices → between 0,22€ and 0,24€	January 2020
Cityscoot	-	Scheduled initially for April 2020, has not entered the market yet

[1] https://www.ecooltra.com/es/precio/
[2] https://help.movo.me/hc/es/articles/360001948694--Cu%C3%A1nto-cuesta-usar-una-MOVO-
[3] https://movilidad.acciona.com/es_ES/motosharing/faqs/precios/
[4] https://www.rideyego.com/barcelona
[5] https://scoot.co/barcelona/

Annex (VII). Executive presentation of the project



Scope of the project

QUESTION How does a municipal regulatory change affect eCooltra?

CASE STUDY Licensing system affecting eCooltra

WHERE Barcelona & Milan

SECTOR Micromobility

WE ANALYZE THE EXTERNALITIES THAT A CHANGE IN LEGISLATION IS BOUND TO CAUSE OR MAKE DISAPPEAR

Theoretical Framework

Regulatory change: licensing & permits

Sharing economy

Regulated vs. Unregulated sector

Barcelona

6th Europe's best Innovation Hub
Public Policies towards:

- Sustainable transportation
- Shared mobility

City Council Regulation (May 2020)

Barcelona & AMB
Operators: 12
Total licenses: 6,958
Licenses/operator: 348

- 3 years validity
- 71.51€ per year tax

Sanctions: up to 450.76€

Milan

Italy's startup hub & financial capital
Highest rate of car ownership in Europe (51%)
Promotion of shared mobility
Shared green mobility since 2012

No specific regulation

Promotion of shared green vehicles
No barriers of entry
Preference for bikes & e-scooters
Favorable scenario for growth

Similar socio-economic factors
Favorable for startups
Promotion of sustainable mobility

Case Study: eCooltra

Business Plan

The most affected aspects of the Business Plan by changes in the regulatory framework are analyzed

Target Market

Size of the market
Age: +21
Driving license holders

Industry Analysis & Trends

Ease of entry: low
Area: BCN (future: +AMB)
Not traditional suppliers
Buyers: strong bargaining power
No competitive advantage

Competition

12 competitors
348 licenses each
Same capacity as before
eCooltra
low price & fast market entry

Strategic Position & Risk

S: first-of-a-kind company in BCN
W: loss of fleet, costs to cover
O: market expansion
T: equal share, fragmentation

Marketing Plan & Sales

Communication of the licenses
Strengthen image: gamification & online marketing
Users' fidelity
Customer-oriented service

Financials

Cost structure affected by the tax
COVID-19 need for individual mobility will be positive financially

Operations

eCooltra's fleet decreased by 85%
Reduced operative capacity
Retirement of fleet
SMou application

Conclusions

eCooltra

- Already has many competitive advantages
- Shift to other lines of business - maintaining its total operative capacity
- Turn COVID-19 mobility needs into a opportunity
- Pursue negotiations with the City Council
- Push for AMB expansion

eCooltra has the means to stay in BCN's market and eventually benefit

regulations' impact cannot be underestimated

ultimate objective: to provide an improved mobility environment

quick adjustment to the new requirements to stay on the market

need for early regulation in emergent sectors (micromobility)