





## Electric motorcycles sharing services in Barcelona, more alive than ever

The Ele.C.Tra project started in 2013 with the aim of promoting a new model of mobility. With urban intention of improving the quality of life in cities, reduce pollution and raise awareness of the need of change towards more sustainable modes of transport, project aimed to promote the use of electric motorcycles through the development of models based on sharing.

Eleven partners from eight different countries (Croatia, Macedonia. Greece. Italv. Malta, Portugal, Romania and Spain) have joined efforts for thirty months to work on the Three cities project. (Barcelona, Florence and Genoa) were designated as pilot and they were going to implement different models of electric motorbike sharing, other partners could, SO subsequently. implement these services in their own cities, based on experience and on the mistakes and successes of the pilots.

Barcelona started with advantage since it was the only city where it was announced the launching of a service with these characteristics in the coming



To promote electric mobility was one of the objectives of Ele.C.Tra project



Barcelona has a wide fleet of motorcycles









months. In effect, Motit, an initiative of the company GoingGreen, began later the deployment of a service of electric motorcycles in the city. The system was based on the concept of "mobility on demand", which meant, at that time, certain evolution regarding other systems of sharing.

The users could make their with urban routes total freedom and flexibility, taking and leaving vehicles where it was more suitable for them. had However. it disadvantage that the area where motorcycles could be taken and left corresponded to a very specific and limited sector of the city.

For the implementation of the service, Motit had a vehicle of own manufacture which had a design very appropriate for this purpose. The model The Core, which manufactures in its industrial plant Palau-Solità in Plegamans (Barcelona), was robust and had a distinctive appearance that also helped deter its theft. The motorcycle was pink and black and although it could reach 90 km/h, had the speed limited to 65-70 km/h and a range of 40-45 km which allowed it to move around the city coolly. The motorcycle incorporated a helmet and a 7-inch screen that served to guide users

towards their destination of choice. It didn't need a key, because it was switched on using the user's smartphone

To access the service, the user needed to be previously registered through the Motit website or its application for smartphones. The user indicated the origin and destination of his displacement and the system responded with the exact location of the vehicle that had been assigned to it, which was always closest and the one that had enough battery to ensure the realization of the requested journey. Once at destination, the user parked vehicle and it was the available for a new user. One of the inconveniences was the recommendation of making the reservation in advance (the day before) to ensure the availability of the service, which detracted the immediacy.

However, some months growth later, the expectations of the company did not seem that were being accomplished. The number motorcycles was growing and they were not visible in the streets of the city. The service seemed to have ceased. What was on? Were there going internal problems of the company or the business model did not match the

successful expectations?

There are some hypothesis around it. In one hand, perhaps it was a too ambitious project for a small private company. It needs the deployment bia number of а motorbikes to offer service and good to achieve a critical mass of





Motit Service









users takes certain time. Another of the weaknesses was in communication. Without a big campaign of advertising, the availability of the service did not seem to have reach a wide audience. Besides, Barcelona was taken from the beginning as an ideal option to have this service implemented but, was it?

It is true that Barcelona has a wonderful climate that allows circulation in motorcycle throughout the year. It is already a city with a large fleet of motorcycles. At present, there are more than 200,000 motorcycles registered in the municipality; so, apparently, the citizens are prone to this type of vehicle. But it might means that who wants to use a motorbike, already has one.

On the other hand the public service of bike sharing, Bicing, is a success; and it could be said arguably that the culture of sharing vehicles is already strong among the inhabitants of the city. However, last year, the City Council extended the bicycle service with the addition of electric bikes, which could be assumed as a serious opponent in front of a motorcycle sharing service. But, months later, it does not seem to be any success. Adrià Gomila, director of Mobility of Barcelona City Council, explains that while a conventional bike makes an average of 7-7.5 trips daily; an electric one is making 0,7.In other words, it moves ten times less. What is happening? Is it possible that population is not ready yet for the change towards electric mobility?

It seems so. In the framework of the Ele.C.Tra project, they have been made a good number of surveys about electric mobility in the three pilot cities and data prove a big unawareness of the people about this technology. Lots of citizens express range anxiety, to become stranded without battery, when the truth is that present vehicles have a considerable autonomy and it is not as important to have public charging points as to have a private one at home to charge the vehicle at night. In the case of sharing services of motorcycles, that should not been even





The public service of electric bicycles may be seen as a big competitor for the services of sharing of electric motorcycles







taken as a possible problem. The big problem is that they do not know about the existence of this kind of services.

The advantages of a service of such characteristics are undeniable. To the lack of acoustic and atmospheric contamination, it must be added that a sharing service contributes to a less occupation of public space, in front of property vehicles. It is a convenience service, door to door, more comfortable that the use of other means of transport like bus or metro and cheaper than a taxi. Besides, a service like this helps to visible electric mobility citizenship, by which it contributes to the modal change towards this sustainable mobility.

A city without pollution or motor noises is a dream that can become true in the next decades. Every action in this direction counts. Revolution could be complete if the electric energy used by these vehicles could all be generated by renewable sources. In the case of Spain, a country that does not have fossil combustibles and that has to import them, a very interesting perspective would be opened.

But. what does need a sharing of motorcycles to succeed? First of all, to be known by a big mass of people; hoping that articles like this one will help a little. And that the service exists. Here is where we must explain that Motit has announced that will be back in 2016 with, apparently, new funding. But it won't return alone. Another rental company of motorbikes is making the leap to electric sharing in 2016. It will start with 250 vehicles. The system will be very similar to the one of Motit and it will be also free-flow, that is to say, that the motorbikes may be left in the more convenient place for the user inside the service area. In the case, the

service area will be wider, and it will go beyond the Eixample borders where Motit was working. The billing will be made by time of use and the menace that the users will try to circulate then faster than it is allowed does not exist because the motorcycles have limited speed. There is a pilot phase already working. Another of the improvements versus Motit service is that they can bring a passenger.

And there is still another company launching its services in 2016, Yugo. This start-up, far from wanting to compete against the other two companies, believe, as its co-founder, Tim Ougeot, explains, it is a good thing that two other companies with more economical resources pave the way. They will start in a very modest way, growing progressively as the market requires. The motorbikes used will be EMCO and they have a retro design that remind us antique Vespas but in a nice light green color, less striking that the black and pink of Motit. It is very likely that they will find its market niche among



The motorcycles that will be used by Yugo have a retro look









the young and modern public of Barcelona.

Three companies will be sharing the streets of Barcelona in 2016. It proves that a project like Ele.C.Tra had all the sense in the world. It will be necessary to wait, notwithstanding, to see if there is room for all of them or if it was a cake for only one.





