

MIVE: AN INTEGRATED ELECTRIC MOBILITY SOLUTION

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INTRODUCTION

The growing use of electric or hybrid cars is a reality. Their contribution to the environment, sustainability, and health of all is undeniable. Nevertheless, this new reality also brings the need to create services and an infrastructure capable of optimizing it and making it grow.

Efficient management of the various aspects of electric mobility must seek to enhance commercial and business benefits and offer a better service to endusers. This vision led EDP Spain's electric mobility department to a comprehensive approach to these aspects, in the form of the MiVē project.

MAIN CHALLENGES

- A new business area. The traditional activity of EDP Spain's electric mobility department was the management of its public network of charging points. To take a step further required a broader vision, new resources, and concrete tools to make it happen.
- To solve home charging. Offering a network of external chargers was not enough. Most people needed to charge their electric vehicles at home, and in the Spanish market, there was no integrated solution to meet this demand.
- **Dispersion of services.** The different aspects of electric mobility were dealt with separately, making management and optimization more complex, both from a practical point of view and in terms of the cost of services for the customer. Therefore, a comprehensive solution was needed.
- Create a modular service. Not all users have the same needs. The solution had to respond to this by being flexible and customizable, as well as complete.

SOLUTION

MiVē was created to respond to the challenges imposed by more global and efficient management of electric mobility. Its fundamental objective is to solve three key points related to home charging of vehicles, optimization and lowering the cost of recharging outside the home, and assistance in travel and daily use.

It is a service that offers complementary solutions. It allows customers to solve these three issues together but with the flexibility to customize them to their specific needs. 14 436

12 593

11 442

simulations

1044

14

services contracted

About Digital Global Unit (DGU)

Digital Global Unit (DGU) was born to help EDP Group drive transformation to digital by developing outstanding ideas to improve and optimize processes and thus simplifying both clients and employees' journey. Comprised of a multifaceted team of developers, engineers, designers, data scientists, and other experts, DGU works every day to turn impossible ideas into successful business projects at EDP Digital Factory.

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SUCCESS CASE



HOW IT WORKS



↑ INTEGRATED SOLUTION

MiVē solves jointly and straightforwardly needs related to an electric vehicle that until now had to be dealt with separately or for which there was no suitable solution. All of them can be combined in a single service that offers various extra benefits and recharging, both at home and away from home, in a more convenient way.



FLEXIBILITY

The MiVē configurator allows you to adopt different electric mobility solutions. The option to customize the service is key and is given in several aspects. The starting point is installing a home charger for the vehicle, with various options to choose from. A range of optional services is offered to meet the additional specific needs of different user profiles. For example, there are plans for those who only want to charge at home and those who also want to charge at public charging points. Another option is to contract an assistance service suitable for possible battery shortages, the need for a replacement car, or the need to make a trip or other long journeys with the electric vehicle.



INNOVATION

MiVē was the first service of these characteristics to emerge in Spain. Such a challenge demanded addressing technical requirements. Its entire infrastructure is based on "the cloud." It implements a powerful and versatile microservices architecture, with separation by layers and KPI-based functions.



AGILITY

The project is managed in AGILE and uses the Scrum framework. It is a methodology that promotes continuous improvement and allows faster and more agile development of the service. In addition, it offers a much greater capacity to adapt to unexpected changes or meet new objectives that may be set by commercial criteria or as a result of customer feedback.



BENEFITS

- Answer the challenge of home charging of electric vehicles.
- Complete and compreenhsive management of the needs related to electric mobility.
- Centralization of several services regarding the optimization electric vehicles' use.
- Possibility of interrelation between different business areas enhancing all of them and offering a better service to the end-user.

BUMPS IN THE ROAD

Launched in March 2020, MiVē project was initially scheduled for completion in June, but the arrival of the COVID-19 pandemic shook up those plans. Suddenly, the multiple teams involved in the development were forced to work remotely, separated from each other and in a more dispersed way. The pandemic also resulted in a considerable drop in the sale of electric vehicles, whose owners were the new service's primary customers.

In the meantime, a cyberattack suffered by EDP provided additional challenges, thus delaying its market launch, which only happened at the end of November 2020.

However, perhaps the biggest challenge was selling TOTAL EDP's energy marketer's entire domestic customer portfolio in Spain. That forced a rethinking of the service in multiple areas. On the one hand, it affected its development phase since the sale involved a series of actions to separate portals, among other measures. But above all, it affected the commercial launch and business strategy initially planned. All in all, these bumps in the road required that the Team rethink the right strategy in a creative, ingenious, and "out of the box" way. And they succeed incredibly on their mission!

RESULTS

In a very short time, MiVē has demonstrated the usefulness of integrated management of electric mobility. Despite the many setbacks this project has had to face, its success was built upon the adaptability, resilience and initiative of all those involved. Everything learned during its development and commercialization is being used to achieve an even better product. The guidelines for this evolution include simplifying its design to make the service easier to understand and facilitate its adoption by customers. In the same direction, new functionalities have also been included, such as the Smart View, which calculates what is needed to install a domestic charger based on photos taken by the customer himself, thus speeding up the process and reducing costs.

Another major line of development is oriented towards agreements with companies or other entities. This opens the door to fully customized and configurable offers for each partner that can provide added value to the customers of these companies and the MiVē service.