



DigiEduHack Solution

Global - Exciting E-Mobility

Challenge: Global - Exciting E-Mobility

Challenge 2020

charma.ai

AI platform for charging infrastructure investments decisions

We build a proprietary AI solution for corporations and cities to identify the best location, type and time of installation for their new charging stations. Our platform brings together financiers, installers, operators and the end customers to facilitate the adoption of EV in scale.

Team: The fire team

Team members

Wade Bitaraf, Michele Ranaldo, Sagar Yadav

Members roles and background

Wade Bitaraf, CEO, Master in Chemical Engineering, Master in Petroleum and Natural Gas Engineering

Michele Ranaldo, COO, Master in Civil Engineering

Sagar Yadav, CTO, MBA and Master in BioTech

Contact details

michele.ranaldo@satt.conectus.fr, bitarafv@gmail.com, sagar@sagaryadav.com

Solution Details

Solution description

AI based decision maker for cities and corporations to get the most accurate and comprehensive data before making critical infrastructure decisions. We aggregate public data from EV charging points, manufacturers, installers, concessionaires and managers to provide strategic insights on the following:

- **Where** should we install our next EV charging points?
- **What** charging infrastructure should we install?
- **When** should we carry the investment?

charma.ai is the largest database of EV charging value chain and provides the most comprehensive and accurate intelligence tool for charging infrastructure investment decisions.

Utilizing the right mix of economic, demographic data and proprietary data charma.ai will make the investment in new charging infrastructures easier and smarter. facilitating the deployment and accessibility of the infrastructures to the masses.

Our vision is to support the process from decision to investment, installation and maintenance of chargers.

Solution context

In the European Union charging will likely shift toward public options and away from the home. The industry will require 40 million chargers at least, representing an estimated \$50 billion of cumulative capital investment through 2030. All these investment decisions have to be taken wisely to maximize the utilization of resources and maximize the returns on these investments.

Our solution will initially drive the customers to the selection of the best locations and type of chargers that will maximize the ROI and minimize the risk for losses and damages to the infrastructure.

Solution target group

Our initial addressable market are automakers, charging operators and installers to be able to provide informative insight for corporation and cities.

In the second phase of growth, we will be partnering with financial institutions and maintenance companies to be able to take care of the entire process on our own.

Using charma.ai the customers will be able to choose the best investment strategy based on their specific needs.

They will maximize the ROI and minimize the risks of losses, they will be able to serve the customer base they are looking for, improving also accessibility to the infrastructures.

Solution impact

The solution have measurable KPI:

- better ROI for our customers projects
- potential reduction of losses and damages by choosing the right locations
- rise in the number of EV charging infrastructures therefore improving the environmental and

social image of our customers

Through our platform our goal is to reduce greenhouse gas emissions one charger at a time. We measure success based on the number of chargers installed. Our short term metric of success would be the number of corporations and cities who sign on to our platform.

Solution tweet text

charma.ai is the ultimate business analysis tool to smarter locations for future EV chargers. charma.ai will help you placing the right investment, in the right place, in the right time

Solution innovativeness

charma.ai is able to enrich the data already in possession of the customers and run an intelligent analysis to predict the best type of investment of EV charging points.

Our solution is hardware agnostic. Today there isn't a really similar tool on the market. Some of the potential competitors are focused on a particular type of EV vehicles (i.e. industrial fleets).

Our model has an innovative business solution that unlocks the opportunities to adopt EV in a large scale, by bringing all the stakeholders together on one platform

Solution transferability

The solution can be utilised anywhere in the world, is scalable and easily accessible to SME and large corporations.

The AI engine can be easily transferred and adapted to other environments and contexts (i.e. selection of plants locations, manufactory lanes, etc).

Solution sustainability

The first target group of customers will be composed of operators and automakers cause they have the larger set of data to validate the product. The customers will receive insights for the type and location of new chargers.

In the second phase of growth, we partner with financiers and installers to sign corporates and City clients onto our end to end e-mobility solution: the joint-ventures will fund the chargers and install them for the customers for a flat subscription fee per charger per year

Solution team work

We worked very well as a team. Our skills were complementary and we have been free to bring in our ideas and experiences to enrich the proposition.

We would be happy to continue working as a team in the future