

Project study

Development of a user journey for bidirectional charging in the energy / mobility sharing economy

Background

In the wake of increasing mobility and energy demands, available infrastructure should be used efficiently. The Sono Motors start-up pursues a sustainable mobility concept that is independent from fossil fuels. They develop and build solar electric cars and offer innovative mobility and energy services. The technology of bidirectional charging enables their car to transfer power to another electric car (V2V) and to operate electrical devices (Vehicle-to-Device).

Research Questions

In a first step your work should cover possible application scenarios of the technology, identify potential user groups and characterise a typical user. The project study should deliver user journeys and break them down into stories. Building on this it should provide a feature release map. Main working packages are:

- Identification of prototype application cases
- Identification of potential user groups and creation of "personas" for V2V
- Development of user journeys and technical user journeys
- Derivation of narratives and stories from user journeys
- Creation of a feature release roadmap

Sono Motors was founded in 2016 and employs a motivated team of experienced engineers, designer, technicians and industry experts. The research work can be carried out in the office of Sono Motors in Munich.

The selection of suitable candidates and the detailed specification of the project will take place in close cooperation with Sono Motors. Interested students with high motivation, strong analytical skills and very good knowledge of English and German are invited to send their electronic application to cem@wi.tum.de.