

Mobile Systems to Support and Enable Electric Car Sharing



Figure 1: Car Sharing with Quicar (Electric Starting End of 2013)

Over the last decades, owning a car has been very important to people because cars represented a significant status symbol. Owners are faced with purchase, parking problems, insurance, inspection, congestion, and maintenance. But, owners also can take advantage of the benefits of private cars like optimal models or even smoking in a car, see Fig. 1.

Nowadays some key urbanization trends like

- mega cities and mega regions,
- technology developments,
- new economic developments,
- standardization and harmonization and
- smart and sustainable cities and intermodal mobility

drive the development of new mobility solutions. An adequate and efficient (electric) car sharing program is characterized by ecological and economic benefits and increases the individual mobility of its users. Newer car sharing offerings are often becoming city-centric: to meet customers' demands for flexible, spontaneous and one way trip usage, a dense electric car sharing network, complex information systems and IT (including mobile systems like smartphones) and a reliable fleet management are mandatory.

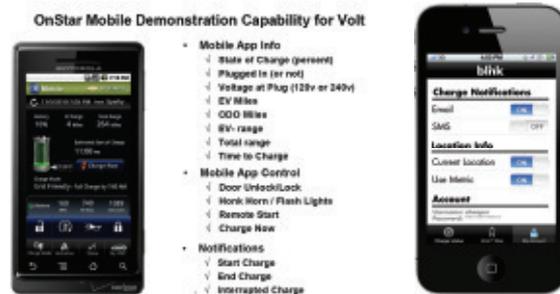


Figure 2: Smart Apps for Smart Electric Car Sharing Users

An important issue needs to be addressed in this context:

- What drives the technology acceptance of mobile systems in electric car sharing to make electric car sharing an additional business opportunity for automotive manufactures to improve customer retention and long term sustainability?

Certainly, electric car sharing success crucially depends on the fact that people accept and use mobile systems, see Fig. 2. Future mobility is not just about cars and mobile systems or services, it is a convergence of different industry sectors that interact seamlessly, e.g.,

- payment providers and financial services,
- charging and telematics providers,
- technology solution and integration providers,
- online mobility booking agencies,
- transportation and logistics operators and
- telecommunication providers.