ivanto

IT for urban mobility
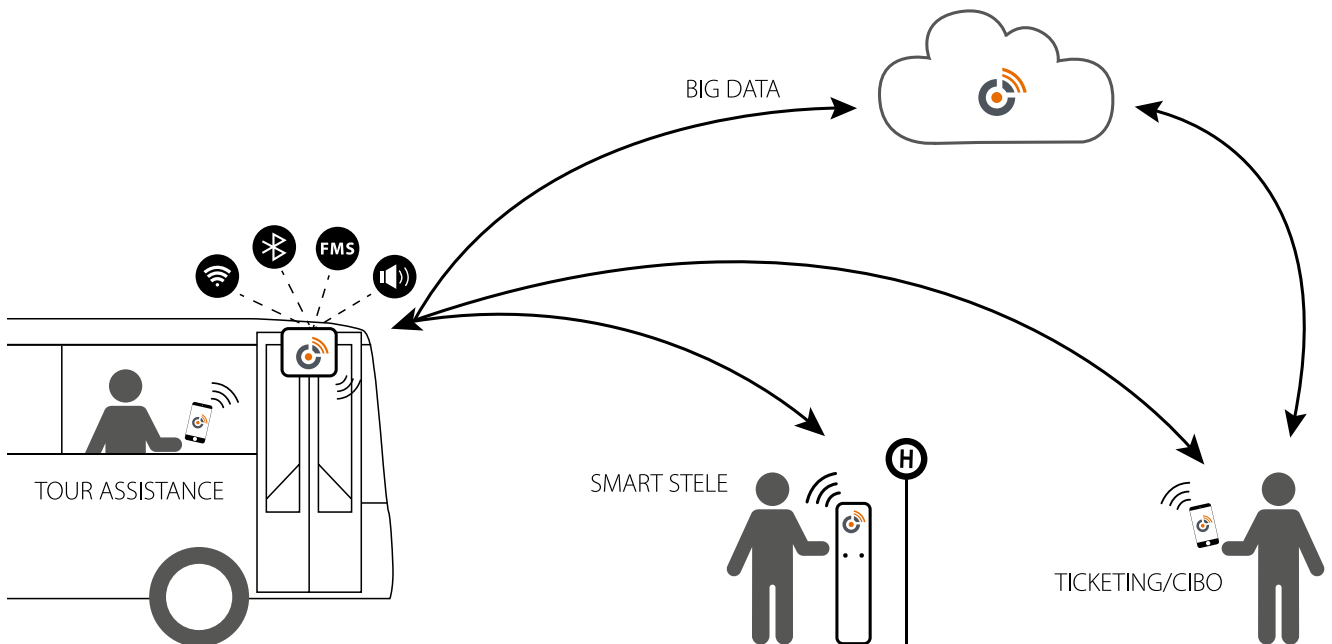
Digital transformation in urban mobility
Reducing entry barriers

The increasing digitalisation provides a promising basis for innovative urban mobility services. It brings new opportunities to public transport companies to better meet individual customer needs.

Passengers expect increasingly intermodal mobility services, merging public transport and individual means of trasport. Easy information, ticketing, payment, the smartphone for door-to-door travel assistance and good accessibility are nowadays required.

In addition to structural measures ivanto offers digital, interactive value-added services that reduce access barriers and achieve the legally required accessibility for urban mobility.

As smartphones become remote controls for the Smart City of the future, ivanto turns vehicle and station buildings into smart objects that are accessible for human interaction and that support users' activities – the Internet of Things for urban mobility.

BIG DATA

TOUR ASSISTANCE

SMART STELE

TICKETING/CIBO

ivanto is an integrated system solution for innovative, urban mobility services. It removes barriers and improves passenger information. Streamlining operational processes, ivanto helps reducing costs. The requirements of the visually impaired and people with reduced mobility are regarded the highest standard in terms of usability and accessibility demands. An intermodal routing engine, the ivanto white-label smartphone app, the ivantoCore hardware module and Mobility Data Cloud are the key components of the system.

ivanto Smartphone App

The ivanto app for smartphones is the centrepiece of the ivanto urban mobility solution, a cutting-edge personal mobility companion for innovative public transport companies and mobility service providers. The smartphone app is the transport companies' mobile communication channel to their customers. It delivers the right information and the right services, at the right place, at the right time. It is easy to use and enables a bidirectional interaction with the public transport infrastructure.

- *intermodal route calculation*
- *interactive map with live positions of vehicles*
- *pervasive travel companion with assistive mode*
- *push notifications for users*
- *indoor guidance for station buildings*

ivantoCore Hardware

The ivantoCore smart communication module enables bidirectional communication between smartphones and public transport vehicles in real time. ivantoCore at the station supports accessibility vehicle-interaction for passengers without smartphones. ivantoCore has many communication modules and sensors and provides the data base for numerous functions.

- *vehicle radar and passenger WiFi*
- *remote control of vehicle pushbuttons*
- *BiBo (be in - be out) and CiBo (check in - be out) journey data*
- *fleet management system and live-tracking of vehicles*

ivanto Mobility Data Cloud

Anonymous access, tracking and interaction data of passengers is collected through the ivantoCore hardware and is processed and analysed in the MobilityDatacloud.

A web portal provides easy access to the ivanto Mobility Data Cloud that features services for remote device administration and fleet management. Furthermore, it is the source for innovative value-added data-driven services including easy mobile ticketing and counting passenger numbers. Mobility data of users is continuously recorded and aggregated to advance traffic management and urban planning.

- *remote device administration*
- *portal access for fleet management*
- *anonymised data collection*
- *BigData analysis tools*

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a product made by GeoMobile