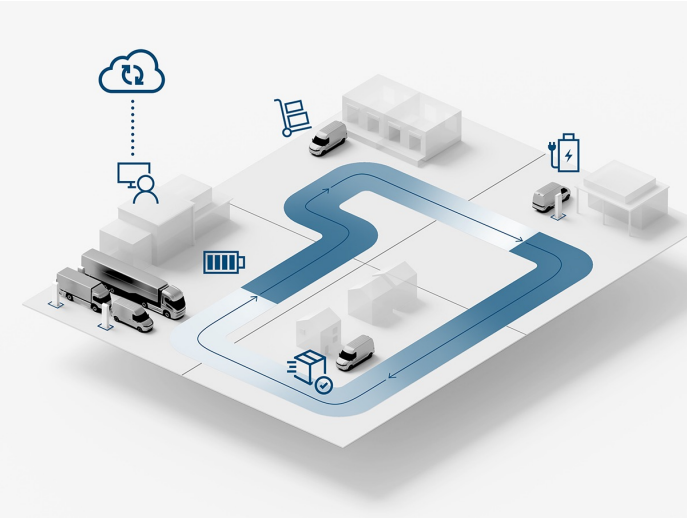
Software and Services

Energy consumption prediction

Forecasting the range of electric trucks to assist with reliable tour planning



Model-based

Range prediction models based on extensive Bosch powertrain expertise

Reliable

Transparent energy consumption prediction per route and per leg for each tour planning

- Convenient range prediction solution for battery-electric commercial vehicles which is easy-to-integrate into a TMS
- Minimize the Total Cost of Ownership (TCO) by efficiently using the electric vehicles, reducing standstill time
- Efficient tour planning including charging stops relieves dispatcher and driver
- Maximum certainty to reach all destinations and reliable prediction of On-Time Delivery (OTD)

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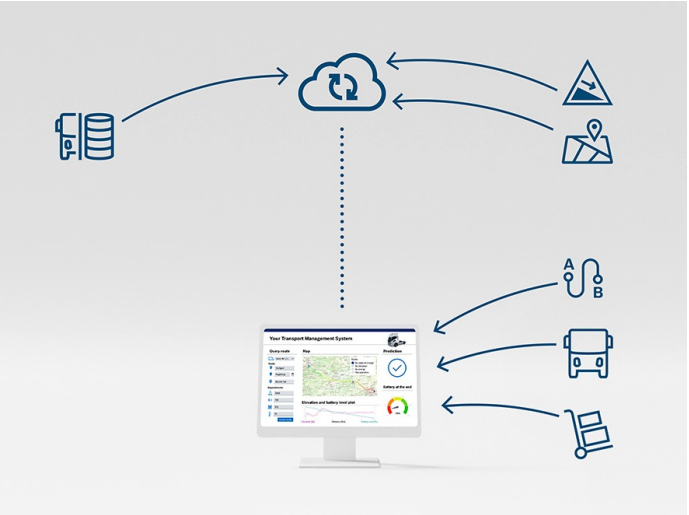
Accurate

Consideration of multiple effects that influence energy consumption to achieve maximum accuracy

Independent

Prediction models for various vehicle types, independent of their manufacturers



- The system considers multiple factors to achieve maximum accuracy
- This includes the vehicle model and its curb weight including semi-trailer/trailer, the ambient temperature, all loading and unloading data from the transport management system, as well as road and topography information
- The system results show the consumption prediction per route and an estimation of the battery state for each leg and at the end of the tour
- The energy consumption prediction can be retrieved via an API which requires the tour and further input parameters
- The API response includes the prediction of energy consumption over the entire route and the individual legs (in kWh and converted into the vehicle's individual battery charge level between 0 and 100%)

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