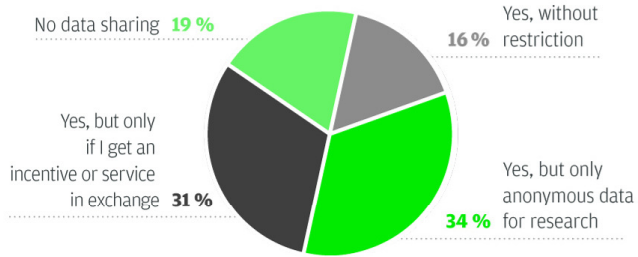
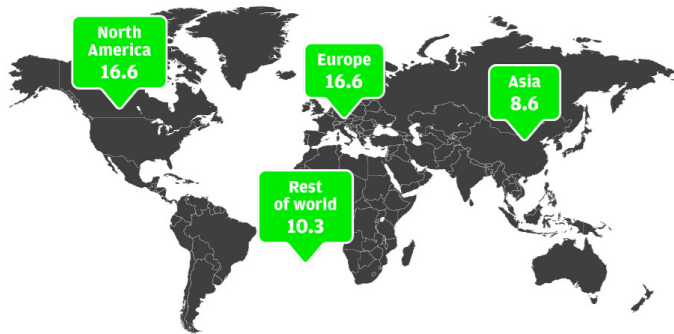


Drivers willingness to share vehicle data



Number of connected cars worldwide

43.2 millions
Number of connected cars 2017 (in millions)



Evolution of vehicle diagnostics

Conventional on-board diagnostics

- Need of physical access
- Time-consuming

After market

- OBD-adapter in the car
- Only limited data available

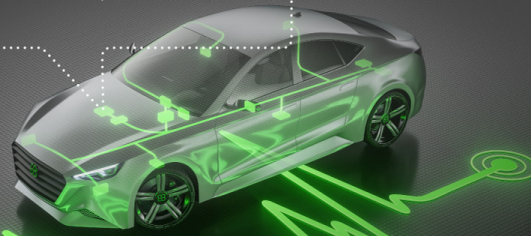
EB cadian

- Highly flexible system
- Specific, targeted data collection and analysis
- Consideration of security and data privacy



Available vehicle data

- Voltage
- Speed
- Vehicle status
- Mileage
- CAN data
- Average fuel consumption
- Diagnostic trouble codes
- Function counter
- ECU-specific measurements



Relevant standards & technologies:

- Open Diagnostic Exchange (ODX)
- Unified Diagnostic Service (UDS)
- Bus system protocols, e.g., CAN

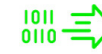
Benefits of EB cadian



Time- and cost-saving



Without visiting a dealer garage



Reduced data transfer over the air



Data security through encryption and authentication



On-demand or long term data collection

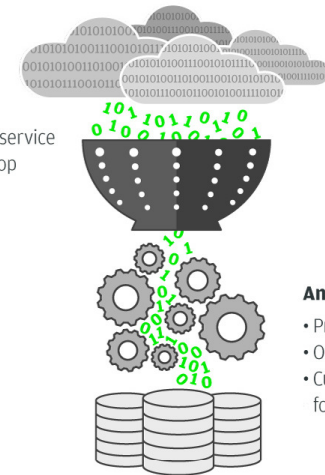


More flexibility through a scalable backend

Vehicle data analytics

Relevant standards & technologies:

- REST
- Spark
- Microservice
- Hadoop



Analytics improves:

- Prediction of outages
- Overall vehicle efficiency
- Customized services for drivers

Sources, Dec. 2016:

1) Elektrobit Automotive GmbH 2) Oliver Wyman, M2M Now, Booz & Company, IHS Automotive Center of Automotive Management, Capgemini, GSMA 3) Statista, Selected region includes countries listed in the Digital Market Outlook