



GRIMALDI STUDIO
LEGALE



WAVESTONE

TNO



KOMIS

Services and data needs

Mr. Georgios Tsimiklis
ICCS

Big Data and B2B platforms: the
next big opportunity for Europe
EASME/COSME/2018/004

EASME - European Commission
Executive Agency for Small and
Medium-sized Enterprises

Online Workshop
23JUN2020

Items

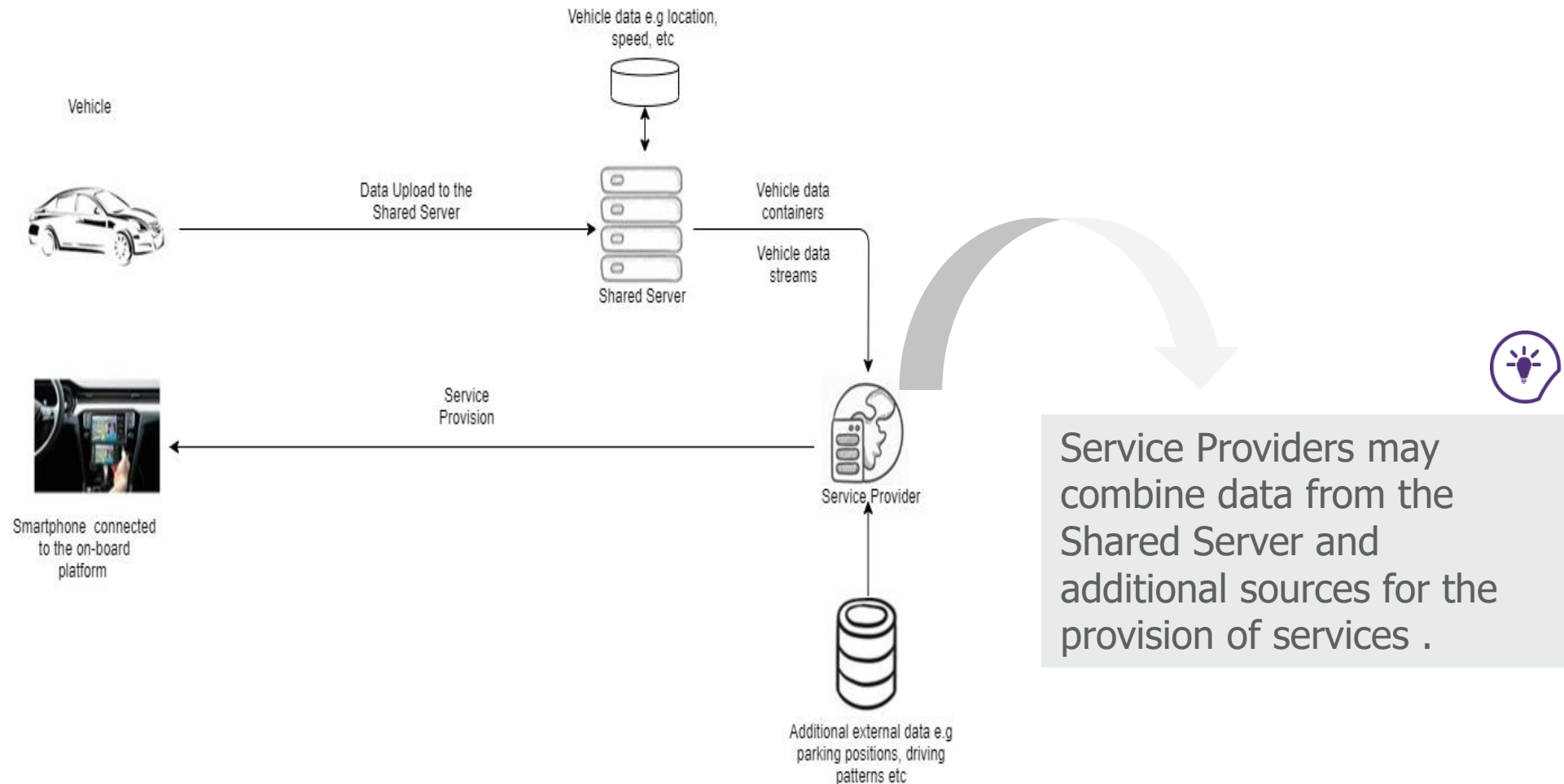
- Recap of the findings of the previous workshop , about the data attributes and the services and 3rd workshop objectives
- Presentation of developed services , state of play in services and advantages of the usage of the Shared Sever Architecture
- Possibilities of services with aggregated and anonymized data
- Pricing of the services , state of play and relation to the equal access principle



Presentation and demonstration of deployed services

/ 01

Service provisioning with the Shared Server Architecture



Most Important Services identified and an alpha Version is implemented



**Park
and ride
service**



**Usage-
Based
Insurance
(UBI)**



**Usage
monitoring
and scoring**



**Hazardous
Location
Notification
(HLN)**



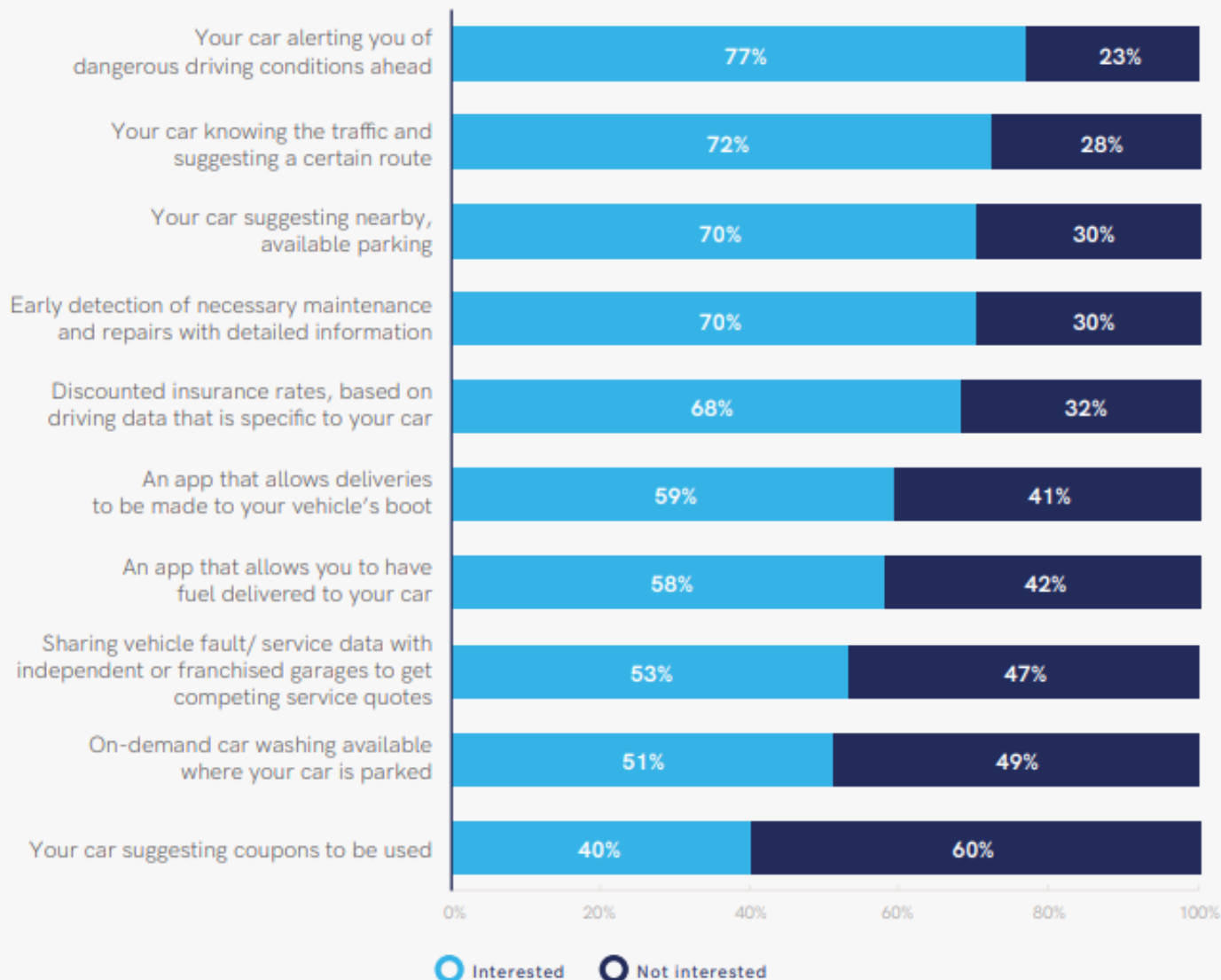
A Shared Server solution could be a **faster way to empower SMEs**, as the access of the data is made easier



Safety emerges to be of **high importance**, and it goes beyond pure monetisation

The **monetisation** of new services is needed to apply a **viable model for the Shared Server solution**

European Consumer Interest in Connected Car Services



Source: Consumer Survey Conducted by Otonomo and SBD Automotive



MyCarMyData : *The exact number of collected data per manufacturer is not currently defined, as more and more sensors are added in the cars. However a first list is defined .*

CarDataFacts : *The type of data cars generate – and which thus can be used for providing certain services – differs from brand to brand, and even within brands, from model to model , but a first list is provided .*

Proposal for data in the Shared Server

| Car Data | Value |
|--------------------------|--------------------|
| Car Identifier | VIN |
| Time | Date / Time |
| Longitude | Quantitative Value |
| Latitude | Quantitative Value |
| Tyre pressure | PSi |
| Speed | Km/h |
| Fuel consumption instant | KMs Per Liter |
| Fuel consumption average | KMs Per Liter |
| Mileage | KMs |
| Oil | Quantitative Value |
| Start/Stop Engine | True or False |

| Car Data | Value |
|---|---------------------|
| Engine Load | Quantitative Value |
| Acceleration | m/s ² |
| Engine RPM | RPM value |
| Battery charge status | (%) |
| Bearing | Quantitative Value |
| G(calibrated) (Cornering force) | Quantitative Value |
| Outside temperature of the vehicle | Celsius Degrees |
| ABS activation | True or False |
| ESP (Electronic Stability Program) activation | True or False |
| Error codes | Specific error code |
| CO ₂ Emissions | Gr/KM |

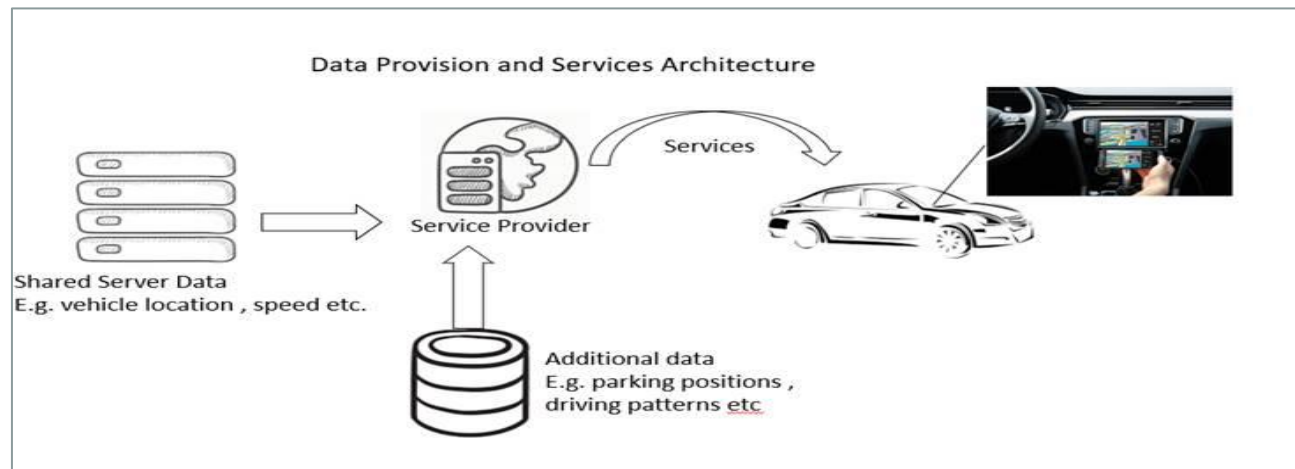
3rd Workshop Objectives - Services in Shared Server Solution



To present the developed services and get feedback



To introduce the usage of anonymized/aggregated data



To present the benefits of the usage of Shared Server architecture for the development of services



To elaborate on existing pricing schemes and the possibilities offered by the Shared Sever



Deployed Services

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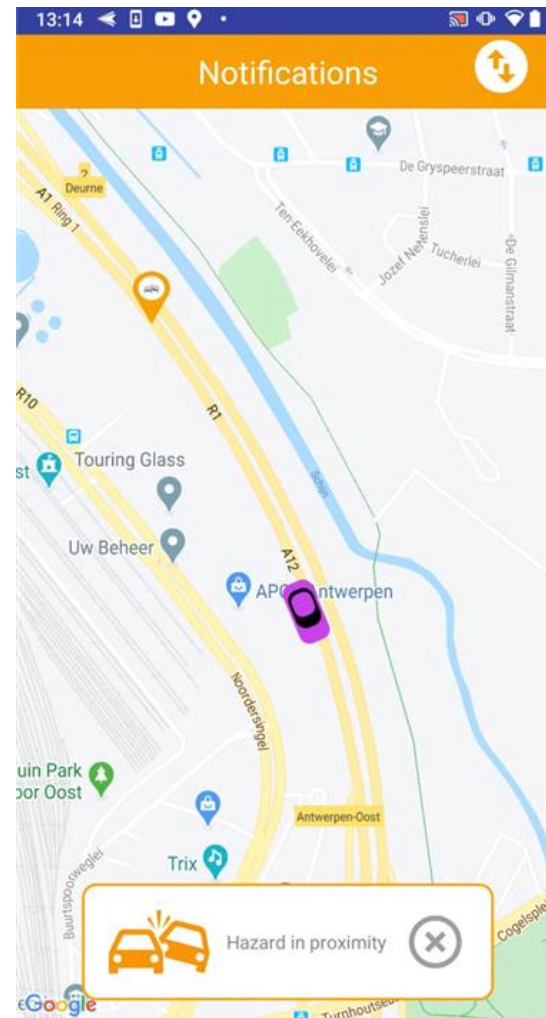
Hazardous Location Notification (HLN): a safety system that provides a warning notification to the driver in order to direct his attention to a potential hazardous situation or area. These areas have a higher risk of collision or incident

Key points:

- Stream data used for the identification of cars around the hazard point , limited latency
- Identification of Hazard points with a hybrid possibility:
 - i) manual annotation on the map
 - ii) identification of Hazard Points based on multiple ESP/ABS activations around a specific area
- Consent is needed

Data need:

- ✓ Car Location
- ✓ Location of the hazard Point
- ✓ ABS/ESP activation



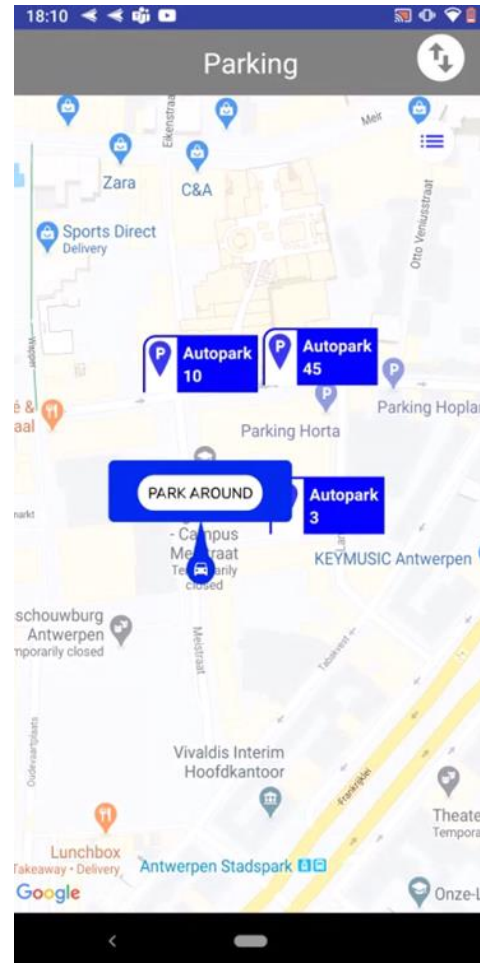
Park and ride (or incentive parking): facilities are parking lots with public transport connections that allow commuters and other people heading to city centres to leave their vehicles and transfer to a bus, rail system (rapid transit, light rail, or commuter rail), or carpool for the remainder of the journey

Key points:

- Data at rest are sufficient for the implementation of the service
- The notification to the drivers should be personal
- Consent is needed

Data need:

- ✓ Car Location
- ✓ Location of Parking Slots
- ✓ Availability



Could be expanded with sophisticated display of parking slots , based on traffic , free spaces etc.



Aggregated/ Anonymized Data

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Aggregated/Anonymized Data

Anonymous mobility data can help make many services we have today better, by offering macro-level lens :



Predictive Maintenance :

car companies can detect early part failures to avoid major recalls;



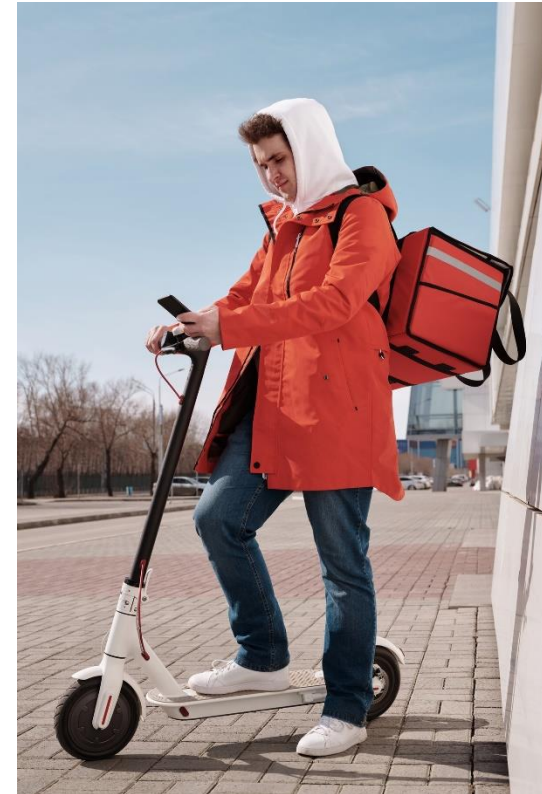
Services for Electric Vehicles :

energy analysts can pinpoint where to best place EV charging stations;

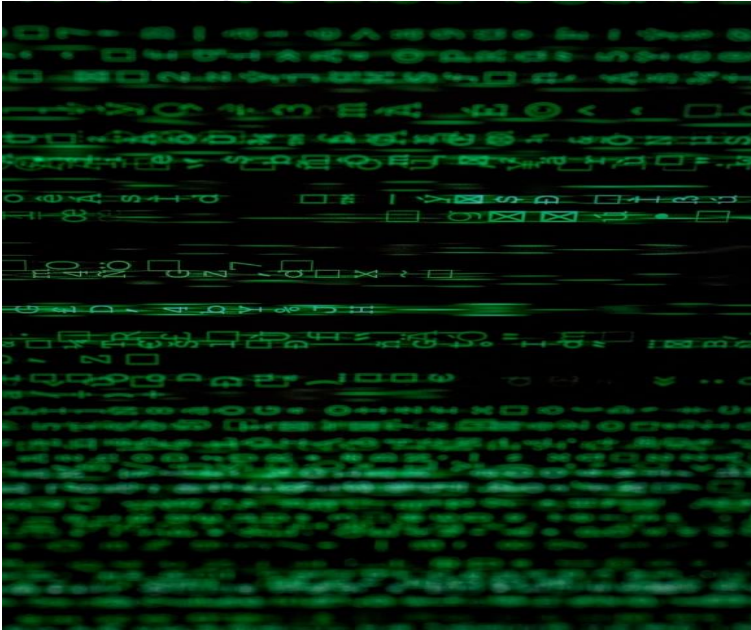


Smart Cities/Urban Planning :

Your city can reduce car idling carbon emissions;
retail stores can better match store hours to traffic

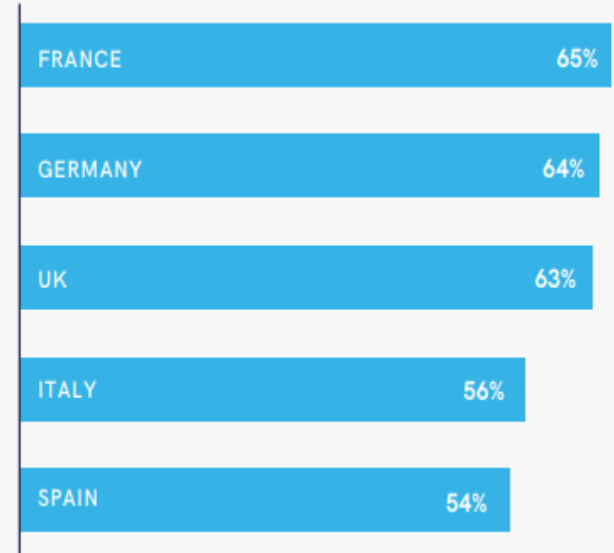


Aggregated/Anonymized Data

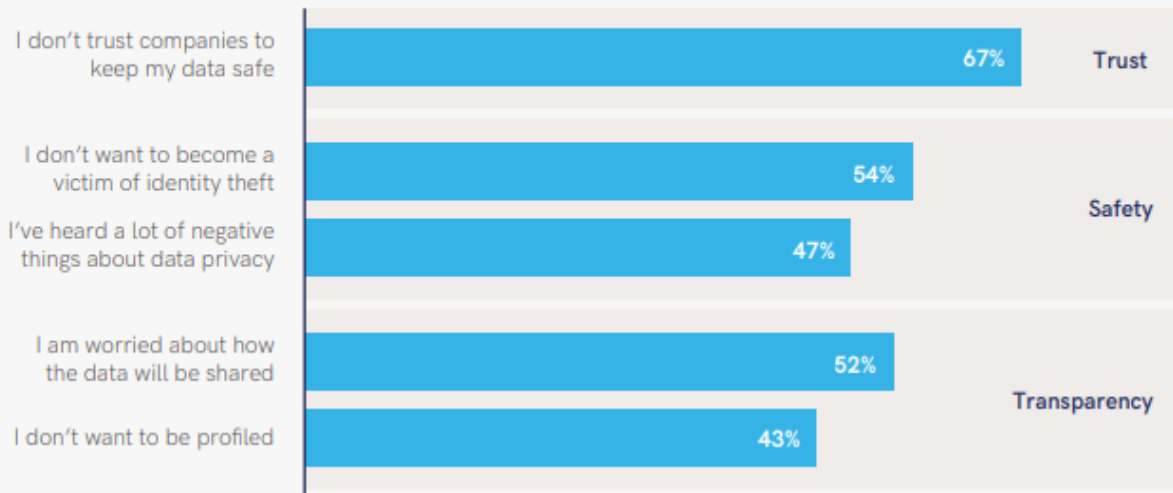


More than half of European consumers are generally okay sharing anonymized data.

Sample size: 2,512



Top Reasons Why Drivers Don't Want to Share Vehicle Data





Pricing of Services

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BMW example

Price overview

The following prices apply to the use of BMW CarData:

| | Price |
|---|--------|
| Individual data keys per retrieval ¹⁾ | €0.29* |
| Individual event keys per retrieval ¹⁾ | €0.09* |

¹⁾ You only pay for the provision of the keys that you have actually requested and received.

Maximum amount per vehicle and container

BMW CarData will only charge you for data transfers per vehicle and container up to a maximum monthly limit. This means that even very data-intensive services can be provided at fair conditions.

| | Price |
|--|--------|
| Maximum monthly amount per vehicle and container | €5.00* |

Otonomo example

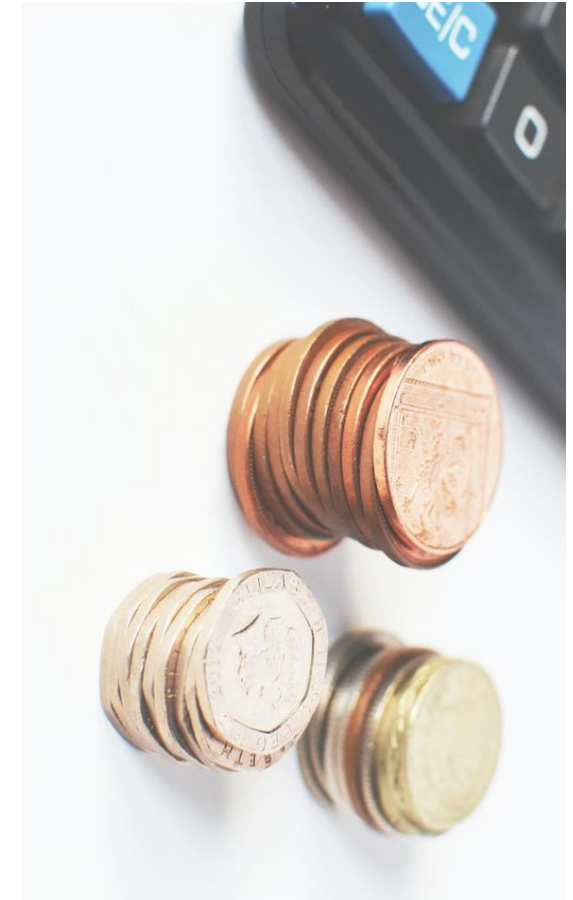
| | Pay Per Use Get started with a 30-day free trial | Custom Plan Contact us for a plan that is right for you |
|---------------------------------------|--|--|
| | <ul style="list-style-type: none"> ✓ Service-ready data for aggregate use cases ✓ Easy data integration ✓ Compliance with privacy regulations | <ul style="list-style-type: none"> ✓ Service-ready data for a wide variety of use cases ✓ Data integration with real-time streaming ✓ Compliance and consent management |
| Data Access | | |
| Report generator | ✓ | ✓ |
| Geofencing | ✓ | ✓ |
| Historical data | ✓ | ✓ |
| Report API | ✓ | ✓ |
| Streaming | | ✓ |
| Events | | ✓ |
| Aggregate Data | | |
| Points (standard car data attributes) | ✓ | ✓ |
| Points (expanded car data attributes) | ✓ | ✓ |
| Trips | ✓ | ✓ |
| Road signs | | ✓ |
| Ultrasonic sensor (USS) data | | ✓ |
| Personal Data | | |
| Vehicle status | | ✓ |
| Fleet interface | | ✓ |
| Data sharing consent management | | ✓ |
| | <p>\$60 for 1M points*</p> <p>\$60 for 20K trips</p> <p>START FREE TRIAL</p> | <p>Contact us for a personalized assessment</p> <p>TALK TO SALES</p> |



Extended Server/Neutral server, Data governance and Pricing

Access to **upstream data** has important implications **for downstream transport service markets**. The platform can **monopolise access to the data** in order to extract more revenue from suppliers and consumers (Martens and Muller-Langer, 2018).

The **platform may even decide to start producing its own transport services**, in direct competition with other service suppliers, because it has much better market information than individual services suppliers. This leads to questions about the **pricing of access** to the services offered by the platform.



Monopolies create **pricing** as well as **democracy issues** and since they deal with a service which has a strong public character, they will require **supervision by a regulator concerning pricing, access rules and other operating conditions**

Thank you

