



GRIMALDI STUDIO
LEGALE



WAVESTONE

TNO



KOMIS

Opportunities of Service Development and Market Updates

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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
08OCT2020

Items

- Overview of the available Real-Time Traffic Data Sources and the importance of connected Vehicles - Data Barriers for the service providers towards an undistorted Market (Availability , Heterogeneity , Privacy)
- Validation of the importance of services created with data from the Shared Server-Review of the developed services of the team
- Pricing and Market limitations towards an undistorted Market
- First mover advantage , importance of immediate action



Overview of the
available Real-Time
Traffic Data Sources –
Data Barriers

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Overview of the available Real-Time Traffic Data Sources

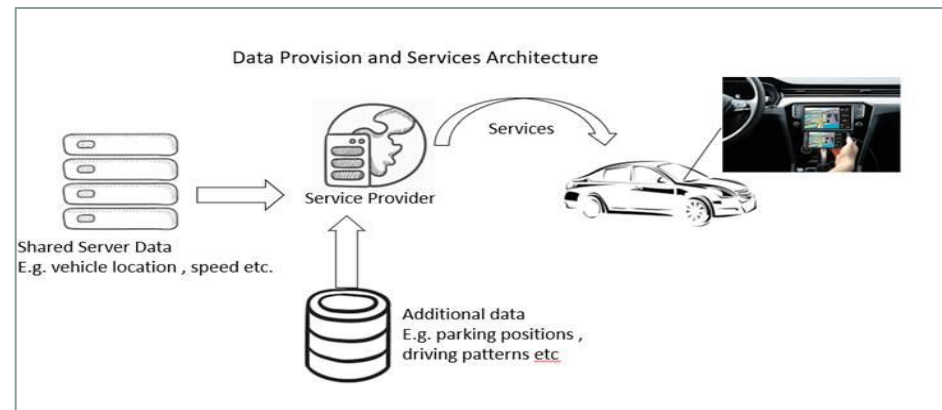
	Video Analytics	In-Roadway Traffic Flow Sensors	Toll-Payment Devices	Mobile Phone Data	Connected Car Data
Pros	<ul style="list-style-type: none"> • Ongoing cost • Coverage 	<ul style="list-style-type: none"> • Ongoing cost • Few Privacy Concerns • Coverage 	<ul style="list-style-type: none"> • Low-cost • Consumer Consent 	<ul style="list-style-type: none"> • Low/No-cost • No Practical Limits on Geographic Reach 	<ul style="list-style-type: none"> • Low cost • Data Richness • Data Privacy and De-identification • Consumer Consent
Cons	<ul style="list-style-type: none"> • Overall Cost • Consent • Limited Access • Accuracy • Limited Data Richness 	<ul style="list-style-type: none"> • Overall Cost • Limited Access • Limited Coverage • Limited Data Richness 	<ul style="list-style-type: none"> • Privacy Concerns • Dispersed Datasets/ Limited Geographic Coverage 	<ul style="list-style-type: none"> • Privacy Concerns • “Noise” in Data 	<ul style="list-style-type: none"> • Data Availability • Heterogeneity • Privacy Concerns
Data source	CCTV systems	Traffic Flow Sensors	RFID transponder devices	Smartphones	ECUs or CANs

Connected Car Data and possibilities with the Shared Server

Data Availability

Data Heterogeneity

Privacy Concerns



Data from all the OEMs can be supported with the Shared Server in a common access model .

An agreed set of attributes can be the starting point of shared server with expandable features . A common data format for everyone .

Privacy by design principles as seen in the technical solution of Shared Server ,respecting the legal framework .



Validation of the
importance of services
created with data from
the Shared Server-
Review of the
developed services

Most Important Services identified in the previous workshops



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**

HLN Implementation

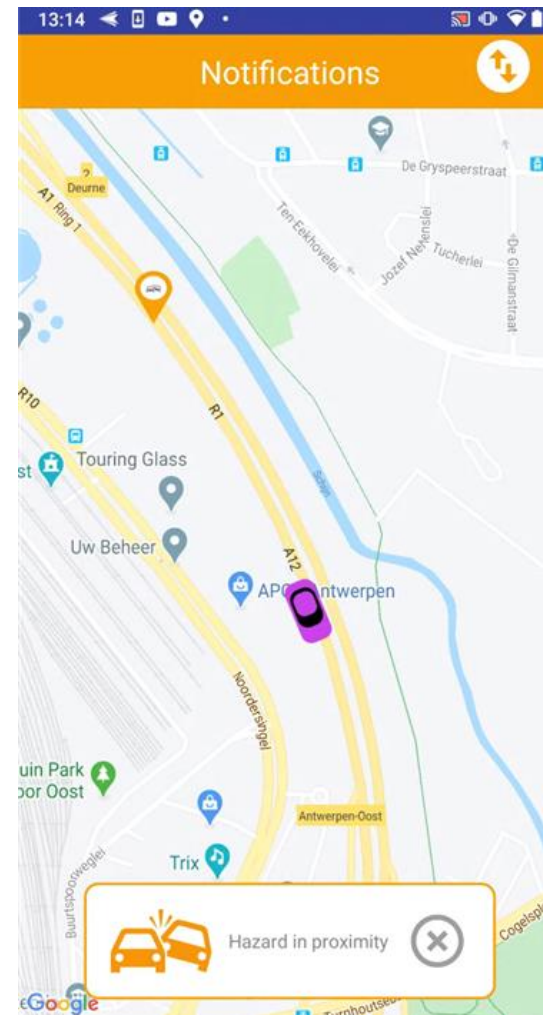
Hazardous Location Notification (HLN): a safety system that provides a warning notification to the driver in order to direct his attention to a potential hazardous situation or area. These areas have a higher risk of collision or incident

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

Advantages of the Service with Shared Server Data:

- ✓ All the vehicles contribute to the identification of hazard points
- ✓ Improve the safety for the whole ecosystem with a common view of hazardous locations



Park and Ride Implementation

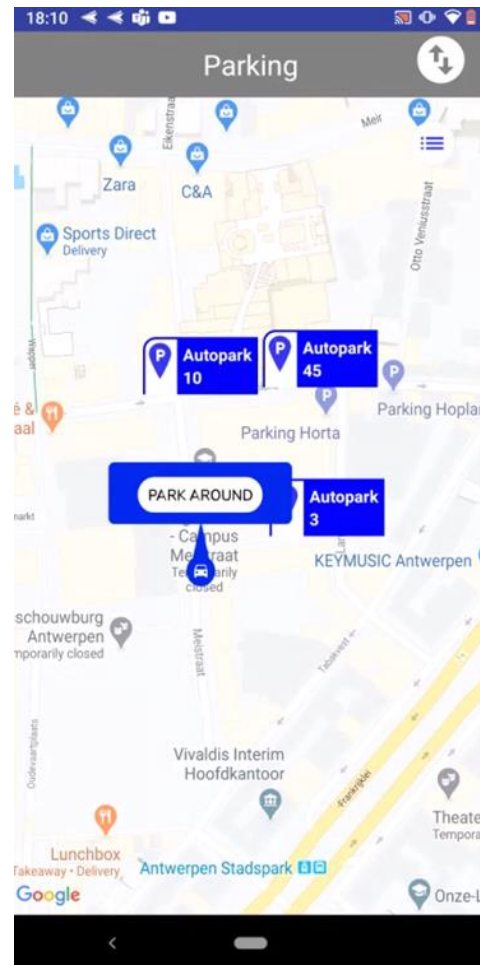
Park and ride (or incentive parking): facilities are parking lots with public transport connections that allow commuters and other people heading to city centres to leave their vehicles and transfer to a bus, rail system (rapid transit, light rail, or commuter rail), or carpool for the remainder of the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

Advantages of the Service with Shared Server Data:

- ✓ Unique ways to identify available parking slots based on traffic data
- ✓ Common services for Smart Cities and traffic allocation around the city



O7 Service –Eco Rating/Fuel Consumption

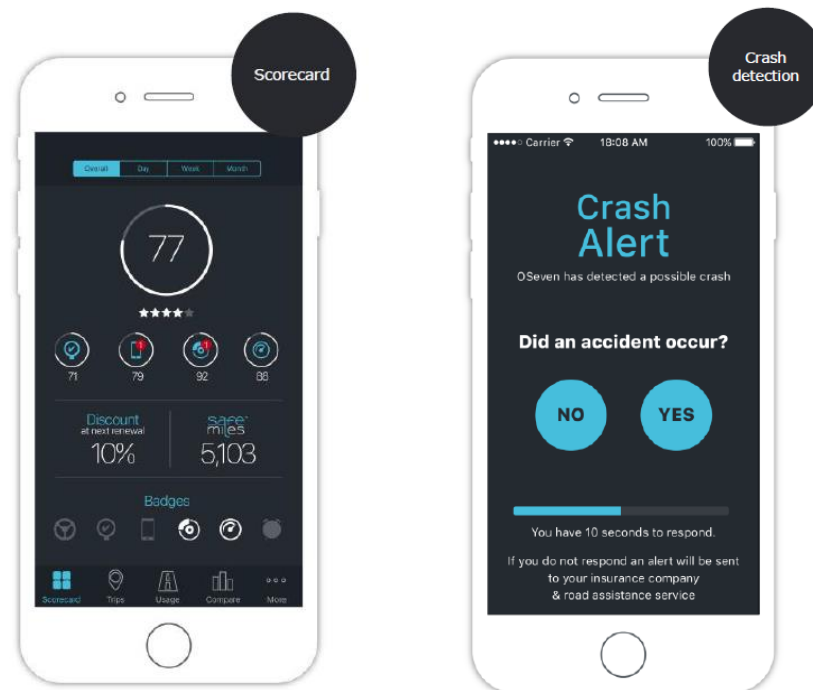
Eco rating / Fuel consumption : Driving data has been successfully processed producing driving behaviour metrics, scores coaching features and gamification data.

Key points:

- Data format has been customized so that it can be processed by the O7PLATFORM
- Trip data has been processed with the OSeven filtering, signal processing, machine learning and scoring algorithms

Advantages of the Service with Shared Server Data:

- ✓ Increase driving behaviour **data accuracy**
- ✓ New features using additional data from connected vehicles
- ✓ Provide data on vehicle maintenance and engine faults- **New products**





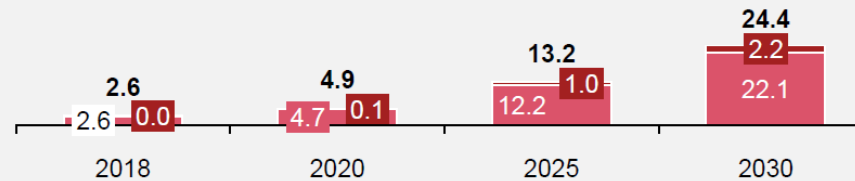
Pricing and Market
limitations towards an
undistorted Market

- PRICING AND MARKET LIMITATIONS TOWARDS AN UNDISTORTED MARKET

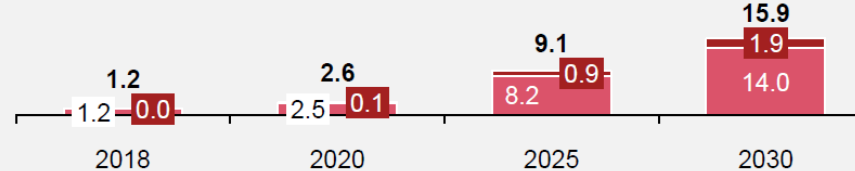
Projected Connected services market size

- Connected services will be worth \$81bn in US/EU/CN by 2030

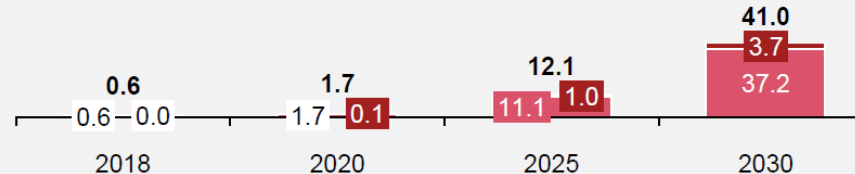
Estimated market size development, US (in USD billions)



Estimated market size development, EU (in USD billions)



Estimated market size development, China (in USD billions)



■ B2C monetization of connected Services (on-top) ■ B2B monetization of 5th screen content

Note: based on Strategy& 2030 scenario GMV = Gross Merchant Value
Source: expert interviews, PwC AutoFacts®, Strategy& analysis



- PRICING AND MARKET LIMITATIONS TOWARDS AN UNDISTORTED MARKET

Major players in the automotive data distribution market: Otonomo

- Over 20M vehicles
- Total company funding: \$89M
- Company Market valuation: \$370M
- Major investor groups: SK Holdings, Avis Budget Group, Alliance Ventures, Bessemer Venture Partners
- Major contracts: Mercedes-Benz, Avis, BMW, FCA Group
- Pricing model



	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		✓
	\$60 for 1M points* \$60 for 20K trips START FREE TRIAL	Contact us for a personalized assessment TALK TO SALES

* Price for standard car data attributes

- PRICING AND MARKET LIMITATIONS TOWARDS AN UNDISTORTED MARKET

Major players in the automotive data distribution market : Wejo

- 18M active vehicles
- 52.5M accessible vehicles
- Total company funding: \$131.2M
- Company Market valuation: over \$244M
- Investor groups: General Motors, DIP Capital, Future Fund, Draem Ventures
- Major partners/Customers: Daimler AG, Hyundai, Bliq, Waycare, TrafficCast
- Pricing model: Not available to the public. Decided on a B2B basis.



- PRICING AND MARKET LIMITATIONS TOWARDS AN UNDISTORTED MARKET

OEMs, first movers and the Neutral Server solution

Neutral server option: Server owner has control over the data

Effects on the market:

- OEMs maintain their leverage on upstream data pricing conditions. (Ref.1)
- OEM has access to customer info and preferences (can be perceived as unfair competitive advantage). (Ref.1)
- Fosters the creation of oligopolies or monopolies should one or a few first movers create high market concentration conditions.
- Will require continuously updated regulations on behalf of the EU to ensure a fair competitive framework. This may result in loss of profits and reduction in investments. (Ref.1), (Ref.2)
- 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. (Ref.1), (Ref.2)
- Otonomo and Wejo are taking steps to consolidate market share. Major investments have been made on those platforms.

Ref.1: JRC Digital Economy Working Paper 2018-06, Access to digital car data and competition in aftersales services, September 2018, <https://bit.ly/3nih7wX>

Ref.2: Access to In-vehicle Data and Resources Final Report, 2017-05, <https://bit.ly/33zgMya>





First mover advantage,
importance of
immediate action

- FIRST MOVER ADVANTAGE, IMPORTANCE OF IMMEDIATE ACTION

First Movers and the Shared server model

Facts/Challenges

- Shared server tech validation is ready
- First movers (Otonomo, Wejo) already setting strong footholds in the market
- The Neutral Server solution engulfs high market distortion risks

Actions

- Share Server Requires immediate market deployment to safeguard fair competition.

Requirements

- EU legal framework support to the Shared server model
- Funding of the shared server deployment

Thank you

