
OPPORTUNITIES FOR BUSINESS MODELS IN MOBILITY ON CONNECTED AND AUTOMATED DRIVING (C&AD)

Brief presentations of results on CSA – Safe and Connected Automation in Road
Transport (SCOUT)



Archivierungsangaben

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AGENDA

- Introduction
- Description of use cases and corresponding business models
 - Connected Maintenance and Safety
 - Automated Valet Parking
 - Connected Truck Platooning

What is SCOUT?



- Coordination and Support Action on „Connected and automated driving“
- Objectives
 - Capture expectations and concerns on C&AD
 - Explore feasible use cases for C&AD
 - Analysis gaps and risks to take up of C&AD
 - Identify sustainable business models
 - Create common cross-sectorial roadmaps

Identification of business models

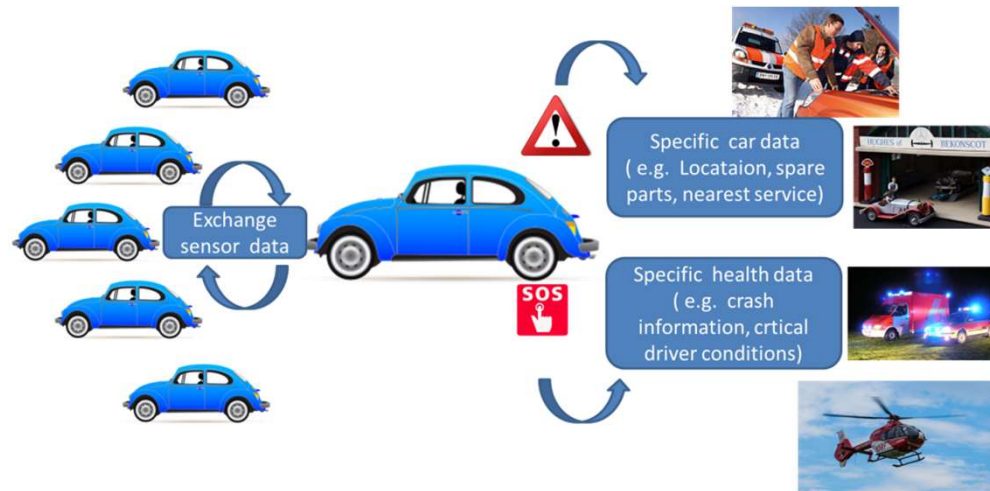


- Main elements of a business model within the analysis
 - Product/Service
 - Customer Segment
 - Value Proposition
 - Value Creation Partners
 - Monetization
- Investigation of possible realizations for each element through a structured approach (morphological analysis) and validated regarding customer expectations and offered services (value proposition canvas)
- Analysis of implications for each value creation partner and overall societal implications

Use Case – Connected maintenance and safety

Driving recommendations through c2c-communication based on sensor information
Prevent:
- critical situations
- premature wear

Automated information of driver/garage in case of maintenance or breakdown



Automated/driver initiated information of emergency service in case of crash or other health issues

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Business model – Connected maintenance and safety

- Own service network
- Cooperation

OEM

Automotive Supplier



- OEM - After Sales
- Independent

Garages

Breakdown services



Individual driver

Fleet operator

Monetization

- Pay per use
- Subscription fee

- Provide infrastructure
- Paid by OEM/End-user

Telecommunication provider



Emergency services

Service free for End-User

- Potential traffic data for enhanced navigation/routing

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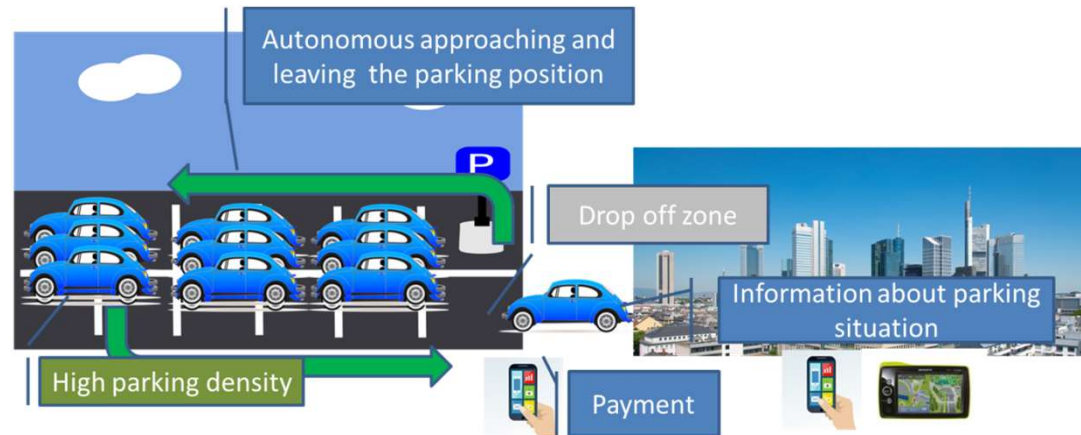
Use Case – Connected automated valet parking

Car drives fully autonomous to its final parking position and back to the driver.

Value proposition:

- Increasing parking space (high parking density)
- Exonerating the driver from search traffic
- Organized and safe parking in large areas

Location based information on public or private parking areas depending on navigation destination



Dropping off and taking over the car at a special entrance point. Administration and payment via App by user.

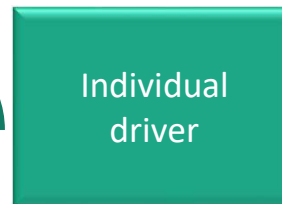
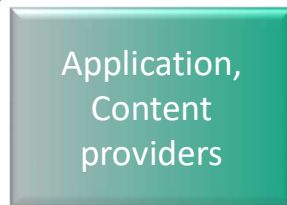
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Business model – Automated valet parking

Technology provider



- Investment in infrastructure
- Active listing in navigation data



OEM independent
Location based
information, Payment
solutions

Monetization

- Pay per use (parking)
- Subscription fee (parking information)
- (App purchase)

- Provide safe and stable mobile infrastructure

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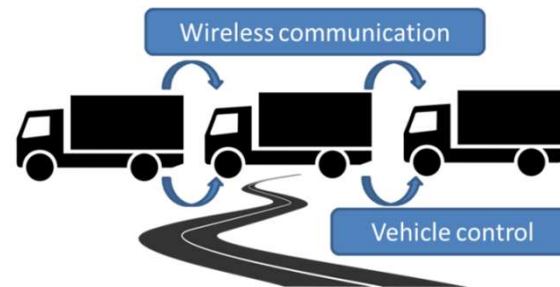
Use Case – Automated truck platooning on motorways

Full control of the following vehicles without driver interaction (Level 3+). Sensor data could be used for enhanced traffic information.

Value proposition:

- Lower fuel consumption
- Less emissions
- Reduction/ceasing of driver rest periods

Several trucks aligned on closely following the other mutually communicating.



All relevant information for lateral and longitudinal control is sent from the front truck through the platoon by wireless c2c-communication

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Business model – Automated truck platooning on motorways

Vehicle/
Technology
provider

OEM

Automotive
Supplier

- Increasing road efficiency
- Infrastructure communication

Infrastructure
operators

Content
providers
(navigation)

Telecom-
munication
provider

Cost saving/efficiency increase

- Lower fuel consumption
- Reducing rest times

Individual
driver

Haulier
(Truck fleet
operator)

**Monetization of
traffic
information**

- Pay per use
- Subscription fee

- Provide infrastructure
- Paid by OEM/End-user

Platoon traffic data to enhance navigation/routing information (own offer or selling to content providers)

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THANK YOU FOR YOUR ATTENTION

Questions?

