

telephone music player radio television personal computer internet mobile phone smartphone shared autonomous vehicle

open.car



autonomous vehicles

"The technology with most potential to change our lives in the next years"

European Union report





Self-Driving based Uses & Applications



Internet based Uses & Applications





Johann Jungwirth - Volkswagen CDO (Digital Chief) -

When?

Ready for Public or Marketing Date announced by companies

"With the adquisition of Mobileye, Intel aims to supply a complete self-driving system to manufacturers" Wall Street Journal

> "Google's autonomous car is already working flawlessly 99,9998% of the time" CNBC

Legalization advanced in USA, UK, Australia & Korea



Dollar Market"

"The Trillion **Travis Kalanick** Uber's CEO

Long-Term Predictions

Average Fare Average Yearly Revenue/Vehicle Final Number of Vehicles Shared Self-Driving p2p Sharing Market Size (Fares) 110

Sources: Deloitte, The Economist, Internal

Market Size

).880 mill.€	
28 %	
550 mill.	50% reduction from current number
€6.000	Long-Term, Worldwide
8 %	Currently of 20% (Uber, Lyft, etc.)







"Taxi Service at Bus Prices"

(24h)

Environmental Sustainability





Any Brand Autonomous Private Car



+



Part Time Autonomous Shared Vehicle



ies ´s	between particulars (monobrand)	between particulars (multibrand)	
WN	Ex: Honda, Daimler	Ex: open.car	
	closed p2p	open p2p	





Global solution for the user





Global solution for the user







Owners not open to car-sharing (except family)



Owners open to car-sharing



Solution for every demographics

a private fleet

Corporate fleets



Owners open to car-sharing

A car will be able to work as a taxi while idle (up to 92% of the day) and pay for itself in 2-3 years



Owners not open to car-sharing (except family)



Solution for every demographics

Owners that build a private fleet

Corporate fleets

Solution for every demographics



Owners not open to car-sharing (except family)



Owners open to car-sharing





Owners that build a private fleet

Small investors "Taxi-Style"



Corporate fleets



Owners not open to car-sharing (except family)



Owners open to car-sharing



Solution for every demographics







Corporate fleets

Provide passengers to: Rent-a-Cars (AVIS, Hertz) Manufacturers, **Smart-Cities**

like booking.com to hotel chains

. . .

Solution for every demographics



Owners not open to car-sharing (except family)



Big added value to sell an autonomous car + zero cost = potential default car equipment like Wi-Fi on a PC



Fast growth with little investment





Owners not open to car-sharing (except family)



Many Sources to offer mobility as a service for non-owners

Like AirBnB, that has become the largest Hotel Chain worldwide with 0\$ invested in rooms



Main problem: integrate in a fleet cars of different brands and different technologies





unified communication method

same communication tech. same communication protocol same data structure

unified vehicle behaviour

refuelling/recharging parking emergency, etc.

Main problem: integrate in a fleet cars of different brands and different technologies



Examples of communication protocols ARIB T-109 OFDM and TDMA IEEE 802.11 IEEE 1609.xx SAE J2735 C2C-CC IntelliDrive VSC etc. Examples of communication technologies 802.11p LTE Broadcast LTE D2D 3GPP C-V2X 5G etc.



NO unified communication method

 multiple communication tech.
multiple communication protocol multiple data structure NO unified vehicle behaviour

refuelling/recharging parking emergency, etc.

Main problem: integrate in a fleet cars of different brands and different technologies

Possible solutions

- Wait for the emergence of a standard 1.
- Adapt proactively your platform to all manufacturers 2.

open.car integration solution			
open.car	unified communication method	unified vehicle behaviour	

automatic refuelling & recharging



open.car integration solution

open.car

unified communication method

unified vehicle behaviour



content providers



High-value ecosystem

Facilitates the entrance to the sector for multiple providers and seamless integration for any manufacturer



admin. & smart-cities



connected car solutions



Roadmap

Take advantage of the time





open.car A mature & tested platform A complete ecosystem First to market Key advantage for open-network models (\bigcirc) No Standards Ρ 2022 2023 2025 2027 2028 2024 2026

Autonomous Vehicles available to the public



















"The best way to predict the future is to create it now"

