Future urban mobility

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Global megatrends

**URBANISATION**
- By 2050 68% of population will live in urban areas. (United Nations, 2014)
- Today, 64% of all travel happen within urban environments. By 2050 total amount of urban kilometers traveled is expected to triple. (Arthur D. Little, 2016)
- Growing congestion and parking problems
- Loss of time/productivity
- Increased pollution levels
- Restricted mobility for cars

**SUSTAINABILITY**
- We would need 1.5 Earths to renew the resources and absorb de CO₂. (WWF, et al., 2012)
- Rationalization of car usage
- Demand for greener cars
- Regulations on CO₂ emissions
- Restrictions on access to city centers

**SMART CITIES**
- Smart traffic management is expected to grow 18.3% every year until 2019. (Mobility Trends, June 2014)
- Shift to integrated mobility
- Parking limited, and dedicated spots for shared mobility
- Proliferation of small and sustainable urban vehicles
- Smart traffic flow management

**CONNECTIVITY**
- By 2019, there will be 24 billion networked devices globally. (VNI Global IP Traffic Forecast 2014 – 2019, Cisco 2015)
- Integration of connectivity services
- Greater on-board connectivity (Wi-Fi and 4G)
- V2V and V2X communication

**NEW OWNERSHIP**
- By 2020, there will be -5% of owned cars
- By 2020, it is estimated that over 40M cars will be replaced
- 55% of Europeans are willing to share (UBS Report, 2016)
- Paradigm shift from traditional ownership to sharing economy

**URBANISATION**

**SUSTAINABILITY**

**SMART CITIES**

**CONNECTIVITY**

**NEW OWNERSHIP**
Disruption for the automotive sectors

C: Connected
A: Autonomous
S: Shared & Services
E: Electric
The mobility services revolution

By 2030, less than 50% of travelled km will take place in individually owned & manually driven cars. The availability of autonomous driving technology is the catalyst for shared ownership exponential growth.

![Average personal mileage in Europe](image)

**Source:** PWC, “EASCY”, five trends transforming the automotive industry – Neutral scenario.
The mobility services revolution

Divergent product & technology portfolios are to be expected for both business models given their contrasting cost/revenue structures and magnitudes as well as use cases.
New mobility split

Mobility Split “today”

Mobility Split “future”

Differentiation mainly between driving or being driven
Sharing business models with high growths but extremely low percentage of overall PKM

Users become passengers in nearly all modes of transportation (autonomous)
Market of Individual & Shared Robotaxis will be segmented & needs differentiation strategy from providers
Mobility driven by robotaxis

NEW KEY COMPETENCES TO DEVELOP

Platforms
Community
Intelligence

Fleet operations
Infrastructure
B2A relationships
Takeaways

• Urban mobility will change drastically in the next decades

• The biggest disruption in automotive industry history is starting

• The connection of smart cities and connected vehicles could enable a much more efficient and safer mobility, also before automated driving becomes reality

• Local pilots from different OEMs proved use cases’ technical feasibility

• Smart cities bigger business nowadays in other sectors; business potential for smart transportation far to be completely exploited

• Barriers: Lack of standardization, cooperation between administration, automotive and ICT industries and interoperability between IoT smart cities providers
Gràcies!
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