



VI JORNADAS sobre Tecnologías y Soluciones para LA AUTOMATIZACIÓN INDUSTRIAL

Vigo, 3 al 7 de NOVIEMBRE de 2014

Universidade de Vigo | Escola de Enxeñaría Industrial



SESIÓN PLENARIA



LUNES 3, 12:30-13:00

Car Easy Apps

**desarrollo de aplicaciones en el coche
conectado**

Ponente:



- **D. Antonio E. Fernández Barciela**
(R&D Connectivity Project Manager,
PSA PEUGEOT CITRÓËN)

The car: a connected object!



Antonio Fdez . BARCIELA
3th November 2014 Vigo



Consortium Members

- OEM:
 - PSA PEUGEOT CITROËN
- TIERS 1 :
 - CONTINENTAL
- SERVICE AND APP PROVIDERS
 - ALTIA
 - IMATIA
- TECHNOLOGICAL CENTERS
 - CTAG
 - GRADIENT

PSA PEUGEOT CITROËN 

Continental 

altia
Consultores

imatia
innovation


CTAG


Gradient



Trends & connected vehicle

How big the Internet of Things could become?

- 75 billion of connected objects expected by 2020 (Source Morgan Stanley)

Dynamic market development



Internet is the medium with the fastest market penetration.
Being online anytime and anywhere is today's reality.



Trends & connected vehicle

- Internet is a very dynamic revolution where new actors arise and traditional companies are challenged

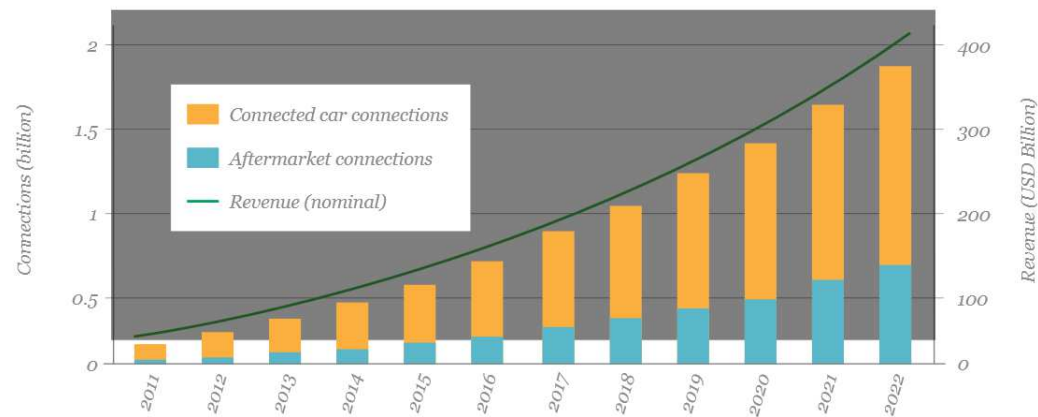




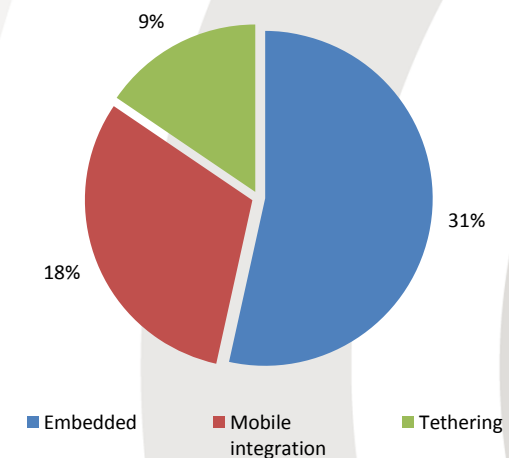
Trends & connected vehicle

Every new car will be connected by 2025 ⁽¹⁾

- 1.8 billion automotive connections by 2022 ⁽²⁾
 - 1.1 billion Connected Cars
 - 700 million Aftermarket devices for services
- Growth of embedded connectivity driven by regulatory mandates, smartphone integration and tethering also growing ⁽³⁾



Estimated penetration by 2018 ⁽³⁾



¹ Source GSMA Connected Living program me – 2013

² Telefonica Connected car industry report

³ C. Tode, Mobile marketer, June 2013

Connected vehicle eco-system

Business Model

Tele-services
e-Diag
Insurance
....

IT services
IT partners
Store
Cloud

Connectivity Interfaces

WiFi

3G

4G

WiFi

3G

4G

Carrier

CAR 2 X

API SDK Framework

Connectivity Interfaces

WiFi

NFC

Bluetooth

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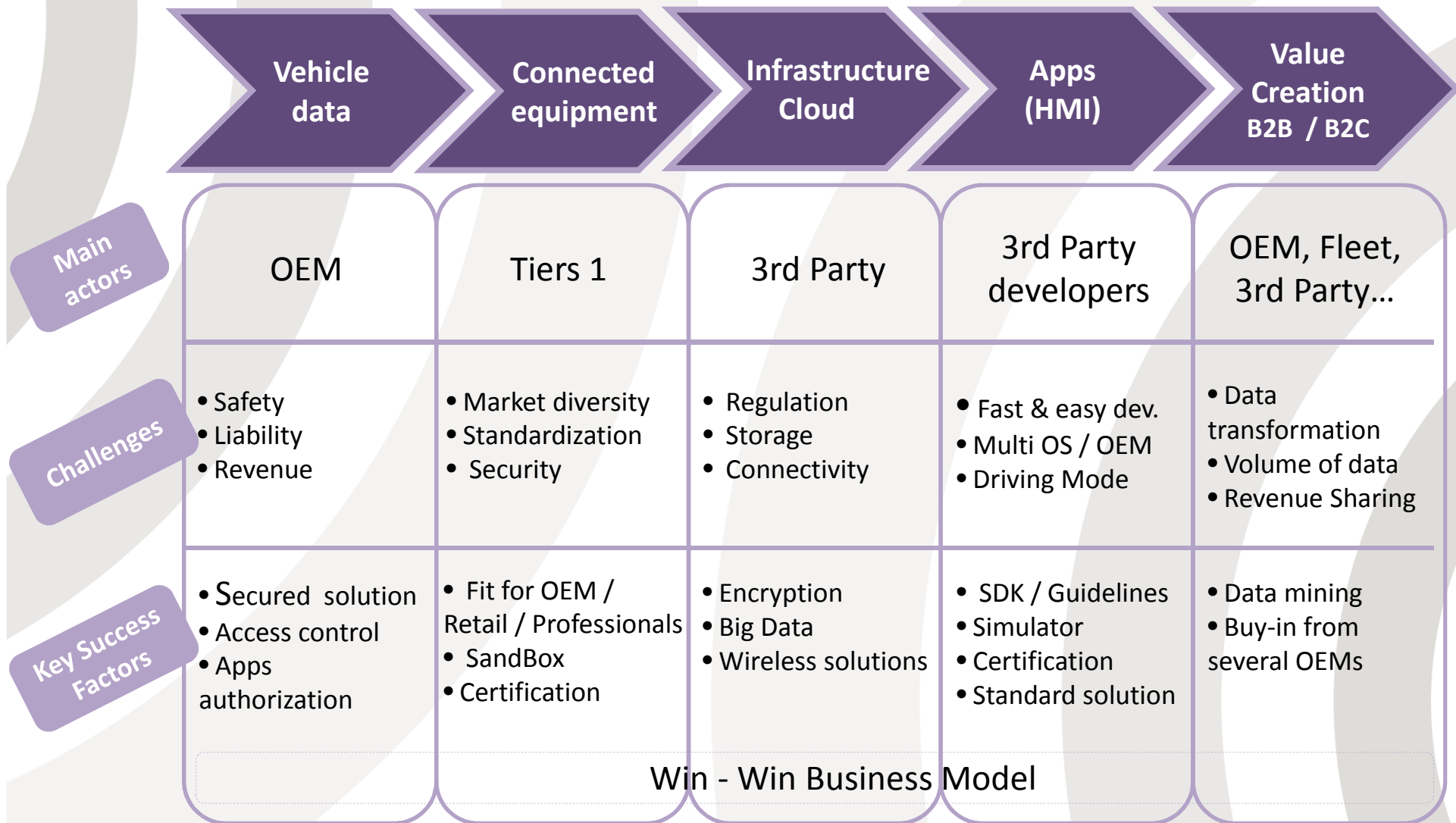


Security and safety



- **Liability** : OEM must always guarantee functional integrity of the vehicle, people and goods
- **Data regulation** is complex and not uniform worldwide
- **Different types of data**, with different needs and restrictions
 - Low risk: Entertainment and User Experience
 - Direct access to vehicle possible
 - Security risk: Car functions (engine, brakes, etc)
 - Integrity of the complete functional chain is mandatory

Value chain





Objectives of the Car Easy Apps project



Average lifetime



2 years



7-10 years

- **Liability**

Provide a **standardized car data access** taking into account **security and safety issues**

- Enable the **development of new value added apps using car data,**

- Stimulate 3rd Party creativity towards mobility and automotive world
- Provide an innovative platform (SDK and APIs) to avoid the market fragmentation
- Reuse of internet common protocols and techniques

- **Time to market is key**

- Follow the CE evolutions
- Address existing cars

Conclusion / Synthesis



- A flexible solution easy to deploy for several OEMs and mobile OS
- Motivate more use cases based on a complete car data set
- Preserve safety, security and privacy in data access
- Enable read and write data based solutions
- Propose HMI guidelines to avoid driver distraction situations
- Provide a platform to support profitable business for OEM and third parties



Thank you for your attention !

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