Adding Value To In-Vehicle Apps

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Adding Value To In-Vehicle Apps

**Agenda**

1. The evolution of Audi connected car services
2. Audi connect – future of cross-linked mobility
3. Realization of an overlapping Mobile Online IT-Platform „MOP“
4. Different global strategies
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The car as a part of our life
Global challenges

Volume (VW Group)

Services
- Infotainment
- Car-based service
- Electro mobility
- Apps

Brands

Markets

Processes & Enabler


500,000 1,500,000 2,500,000 3,500,000 4,000,000 3,000,000 2,000,000 1,000,000

0
Audi connect – market rollout

Target: internationalization in all relevant markets until 2017

Europe
- Feb 2010
- Jun 2012
- Nov 2013

North America
- Jan 2011

China
- Jun 2012

Japan
- Nov 2013

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“A defining feature of the last decade was that we fully integrated all the functions in the vehicle.”

“This decade, the vehicle will become seamlessly integrated with its environment.”

Ricky Hudi
Head of Electrics/Electronics Development
“My car is my second home.”

“My car enables me to live my life as flexibly as I want!”

“I drive because I want to enjoy my car.”

Individual solutions – tailor-made for our customers

Home to work

“My car supports me making optimal use of my way to work every day.”

Business

City trip

Experience drive
1st phase – the perfect assistant

The perfect assistant

Integration of smart phone apps: remote control via smart phone
Integration of internet services
Retrofitting of functions

Car-2-X / swarm intelligence

Car-2-infrastructure
Car-2-service
Car-2-car

Piloted driving

Piloted driving
Piloted parking
Audi connect – more innovation in the new Audi A3
Modular infotainment platform – the core of power
Audi’s operating and display concept – seamless integration

Voice operation and read-outs

Consistent operation via MMI touch and rotary pushbutton

Display with integrated content
Audi phone box – the perfect connection for every cell phone
Display screen – for pin sharp information
MMI Touch – one letter ahead
Audi connect connected car services – petrol stations
Audi connect connected car services – petrol stations
The perfect assistant

Integration of smart phone apps: remote control via smart phone
Integration of internet services
Retrofitting of functions

Car-2-X / swarm intelligence

Car-2-Infrastructure
Car-2-Service
Car-2-Car

Piloted driving
Piloted parking

2nd phase – Car-2-X / swarm intelligence
Audi connect – swarm intelligence & car-2-X communication

- Traffic Online Info
- Traffic Light Assistant
- Wireless Payment
- Weather Data
- Navigation Data

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3rd Phase – piloted driving

The perfect assistant
- Integration of smart phone apps: remote control via smart phone
- Integration of internet services
- Retrofitting of functions

Car-2-X / swarm intelligence
- Car-2-infrastructure
- Car-2-service
- Car-2-car

Piloted driving
- Piloted driving
- Piloted parking
The intelligent interaction between Audi connect and driver assistance systems enables new stunning functions.

- Parking maneuvers in garages
- Parking maneuvers in parking areas
- Piloted driving in traffic jams
Piloted driving and parking

When I don’t feel like driving... I let my car do the work

In traffic jams

For parking
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VW AG – module strategy

Vehicle point of view

VW AG

AUDI AG

Modules

Platform
Audi IT – module strategy for connected drive

IT point of view

Customer
- VW AG
- AUDI AG
- Other labels

International markets
- Touch
- Technology
- Business Services
- Rotary push button

Core services
- R-HMI
- MBB
- Hardware

Authentication
- MIB

Internet / content provider

Distribution of services overall markets

Marktes / country adaption

IT modules

IT platform

Other labels

VW AG

AUDI AG

Other labels
Updates and new services are permanently integrated into cars.

New services over night

New services & releases

MBB (Backend)

Available in your car

Your car – always up-to-date

New over night

Just like App updates on your smart phone.
Showing the MBB on the basis of „Weather Online“

Modularer Infotainment Baukasten (MIB)

Modularer Backend Baukasten (MBB)

Access & security

Authentication

Business service platform

Content- & service provider

Service integration

Internet

B2C Portal

myAudi
Audi Connect – infrastructure

For **Audi connect** we operate

- 40 physical servers
- 405 virtual machines with
- 682 web instances and
- 810 instances for applications,

and 41 terabyte hard disk capacity
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Backend locations – status quo

Group IT backend
Ingolstadt

Group IT backend
China

Group IT backend

Backend locations - future

Worldwide application distribution

Local datacenter
North America

Main datacenter
Europe

Local datacenter
Asia

Local datacenter
South America

Existing

Planned
Backend locations – global strategies

- USA
  - Driver distraction
  - Voice control
  - Piloted driving
  - Rotary push button
  - Remote control
  - Cross-linked services (Facebook, Twitter)

- Group IT backend
  - Ingolstadt

- Europe
  - Driver distraction
  - Voice control
  - Web- and app-based services

- Group IT backend
  - China

- Asia
  - Personalized services with human contact
  - Call center services
  - China specific services

- Driver distraction
- Voice control
- Piloted driving
- Rotary push button
- Remote control
- Cross-linked services (Facebook, Twitter)
Audi connect – conclusion

- Audi connect started in 2009
- Additional, individual services started in the new Audi A3 in 2012
- Innovative technologies for more customer enthusiasm
  - Modular Infotainment Platform
  - MMI touch and voice control
  - Brilliant display technologies
- Car-2-X communication and piloted driving for future mobility
- Concern module strategy for connected drive (MBB/MIB)
- Different global strategies for the markets
Thanks for your attention