Microsoft in Automotive and the Future of Connected Vehicle Consumer Experiences

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Microsoft in Automotive
T.A.G.

Microsoft

Xbox

"Not A Simulation/Forza 3 Brand Video/NFA"

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Microsoft in Automotive

- Unified Communications
- Nissan
- Engineering Simulations
- Chip Ganassi Racing
- Multi-Channel Mktg Mgt
- Volvo Group
- Pricing Optimization
- Chrysler
- Innovation & PLM
- Manufacturing Operations
- Operational Intelligence
- Volvo Car
- Inventory Management
- Dow Corning
- Cloud Platform & Svcs
- Toyota
- Cloud Platform & Svcs
- Delphi
- Marketing & Sales
- Connected Vehicles
Future of Telematics and the Consumer Experience
Future Vision Video

The future of the telematics consumer experience is deeply tied to the future of the technology consumer experience in general.
A few important recurring themes...

Natural User Interfaces
(speech translation)

Augmented Reality
(projected loading zone)

Sense & Respond Adaptations
(dynamic loading zone)

Multiple Device Integration
( )

The technology in her environment helps Ayla feel comfortable in an unfamiliar location and get quickly to her hotel.
A few important recurring themes...

- Natural User Interfaces
- Augmented Reality (hotel distance, mtg locations)
- Sense & Respond Adaptations (Agenda context, Bellman)
- Multiple Device Integration / transition
A few important recurring themes...

- Natural User Interfaces
  (voice comments)

- Augmented Reality

- Sense & Respond Adaptations
  (Hotel TV)

- Content/Context Between Devices
  (Phone/tablet)

The next morning, Ayla works from her hotel room. She can easily access all of her content and software, even on hotel devices, turning the room into her personal office.
A few important recurring themes...

- Natural User Interfaces (Speech, Touch)
- Augmented Reality (Recipe Projection)
- Sense & Respond Adaptations (Refrigerator Inventory)
- Content/Context Between Devices (tablet/counter)
Car is becoming the “4th Screen”
Simple Connected Car Experience Taxonomy

**Examples**

### On Car
- Radio
- Navigation
- In-Car Health Report
- Pandora, Netflix
- EcoRouting
- EV Range Analysis
- Portable Personalization
- Discovery Mode
- More...

### Car + Devices
- Media Player Integration
- Hands Free (Call / Text)
- Cabin Pre-Conditioning
- Remote Start
- Door Unlock
- Mirror Link
- More...

### On Devices – Uses Car data + 3rd Party Data
- Health Record
- Car Finder
- Family Finder
- Friend Finder
- Discovery Mode
- Premium Service
- Internal Car diagnostics
- Supply chain diagnostics
- More...

[Microsoft Logo]
Connected Car:  
- The Connected Car is about experiences, which means it is about the brand.  
- Perception of brand driven by product/service attributes and how they fit into consumers lives  
- Consumers lives are more complex than traditional infotainment & nav features in the vehicle cabin – this is an opportunity
How do we get there?

Critical Success Factors and Key Capabilities
Connected Vehicle Success Factors

Organization

Strong Business Champion
- Cross-Org Voice
- Clear Value Message

Organizational Collaboration
- Product Development Knowledge
- Information Technology Disciplines

Management / Operational Capacity
- Implementation Discipline & Mgt
- Deployment and Configuration Mgt
- Learn Over Product Lifecycles
- New Trade-Off Analyses (e.g., Marketing, PD, Mfg, Warranty/Service)
Connected Vehicle Success Factors

**Technology**

- **Compute / Communications Platform**
  - Replace multiple modules with central compute capability
  - Leverage consumer devices
  - Allow dynamic upgrades to vehicle features

- **End-End Architecture**
  - In-Vehicle
  - Consumer Devices
  - Cloud Services
  - OEM Apps
  - Third Party Apps + Services

- **Contextual, Flexible Interface**
  - Multi-modal
  - Adaptive
  - Reduce cognitive load
Four Platforms to Enable New Telematics Experiences

Extensible and In-vehicle Platforms
- Windows Embedded Automotive

Scalable and Global Cloud Platforms
- Windows Azure

Customer Experience Management Platform
- Microsoft Dynamics CRM

Big Data and Real-Time Analytics
- SQL Server StreamInsight
1. Car is the 4th screen → A First Class Citizen in the Ecosystem of Ecosystems
2. Connected Car = Connected Consumer
3. Experiences define the brand... Transcend the Vehicle Cabin
4. Data From the Vehicle Changes Everything – Future Telematics Experiences and How the Industry Operates are Intimately Linked
5. 90% of the Future Telematics Effort is on New OEM Vehicles, but 90% of the Vehicles Already in Service
6. Organizational and “Soft” Issues Matter – A Lot – and some hypotheses are yet to be proven (e.g., ability to optimize via trade-off analyses, predictive diagnostics, etc.)
7. Safety – Having Future Telematics Experiences Must Be *SAFER* Than Not Having Them
8. Adaptive, Contextual Experiences a Game Changer
10. Microsoft is Committed to the Automotive Industry and Provides In-Vehicle, Cloud, Analytic, and CRM Platforms to Help our Customers Lead
Appendix