Telematics Trends and Next Generation Solutions

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2. Next Generation Solutions
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Telematics Trends
Increased Visibility with Mobility and New Applications

- 86% of drivers are carrying some type of mobile communication device, and 44% of those are smartphones.
- Nearly one-third of drivers use mobile applications to monitor weather, gas prices, and traffic conditions.¹

Cleaner, Greener Footprints

- Organizations are adopting technologies that will help drivers find the best route to decrease travel time and improve delivery schedules.
- Drivers can also complete time sheets from the road, saving paper by using electronic forms and also improving the timeliness of data.

Delivery Ecosystem and Customer Insights

- Technology has enabled organizations and customers to see into delivery schedules, monitor driver behavior, and track their products at any time.
- In turn, technologies have also made it possible for organizations to better understand and serve their customers and partners through insights gathered across the supply chain.

¹ Greg Johnson, “Smart Phone apps for Trucking,” iTECH, February 2012
Machine-to-Machine (M2M) Intelligence

• By 2017, more than 60% of the world’s vehicles will be connected, actively monitoring the safety and security of vehicles and drivers.²

Rapid Application Expansion

• Today there are thousands of transportation apps that over everything from finding cheap fuel to locating the closest bus or taxi.

Real-time Information from the Cloud

• IDC estimates that the services and distribution sector’s public IT cloud market will more than double to $8.5 billion by 2014.³

² ABI Research, “By 2017 60% of New Cars Shipping Globally Will Feature Connected Car Solution,” July 2012
**Market Trends**

### Service Priority

**Europe**
- Traffic Information
- Navigation
- Safety & Security
- Diagnostics
- POI Information

**China**
- Safety & Security
- Traffic and Navigation
- POI Information
- Diagnostics

**USA**
- Safety & Security
- Diagnostics
- Navigation
- Traffic Information
- POI Information

### Current GEN1 Status

**4 of top 16 OEMs Operational**
- 7 of top 11 in 2011
- 16 of 16 in 2014
- Mixed S&S and Navigation
- All Embedded solutions
- 1 Internet Radio Mobile App

**3 brands launched**
- Both embedded solutions
- 28 by 2014
- Mixed S&S and Navigation
- No mobile apps

**6 of top 11 OEMs Operational**
- 8 of 11 in 2011, 11 in 2013
- Safety & Security Focus
- Navigation Secondary
- 2 Tethered Solutions
- 1 Mobile Application

### Business Models

**Europe**
- Mostly B2C with one B2B
- Minimal service offerings
- Many EV applications
- Plans address eCall mandate

**China**
- Most programs still in trial
- B2C with trial followed by subscription
- Pricing not yet announced

**USA**
- Three B2C Models
- B2C includes Trial
- Subscriptions $140-$280
- One tethered model is a one-time price of $395, TDI subscription price $69

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ABI Research reports that telematics users will grow from 37 million in 2010 to 211 million in 2015. HTI’s proprietary research suggests all top tier global OEMs will have a telematics solution in all three major markets by 2013. Safety & Security remains core to all current and announced programs. Business models are still evolving especially in China.

Source: iSuppli and ABI Research
Benefits of a Tethered Solution

- Leverages customer’s media
- Leverages customer’s applications
- Reduces redundancy
- Addresses driver distraction
- Leverages market creativity
- Leverages existing application stores

Tethered Solution Challenges

- Not optimum for certain Safety & Security services
  - Stolen Vehicle Tracking
  - Auto Crash Notification
- Limitations to Automotive Services
  - Diagnostics
  - Quality Data Feeds
  - CRM
  - Door lock and unlock
  - Vehicle locate
  - Geo fencing
- Bluetooth pairing complexity
Enhanced capability for premium services

**Gen.1 Service**
- Automatic Crash Noti
- Manual E-Call
- Stolen Vehicle loc
- Automatic Alarm Noti
- Roadside Assistance
- Crisis Assistance
- Door Lock/Unlock
- Vehicle Finder
- Concierge
- Mobile App.
- Voice Texting
- Restaurant Finder
- Vehicle Health report
- Maintenance reminder
- Dealer Connect
- Agent&Web Route D/L
- Agent based POI Info
- Traffic D/L To Navi
- Weather News, Stock
- Song Tagging
- Weather Safety alert
- Vehicle messaging
- Application Store
- Social Network
- POI advice service
- Mobile device Sync w HU
- Mobile AR Visual Diagnostics
- Easy Pick-up
- Detailed POI Info
- Driver location Notification
- RSS Feeds / Movie times
- Smart radio
- Multimedia Tagging& purchase
- Local event
- And more

**Gen.2 Service**
Benefits of a Hybrid Solution

- Leverages benefits of embedded and tethered
- Provides customers choice
- Allows for package and service differentiation
- Allows premium package options
- Provides for more flexible business models
- Can reduce customer TCO
SHARE Everything Plans Drive Vehicle Connectivity

**SHARE Everything Plans**
- Customer adds their OEM vehicles to VZW plan
- Data shared across vehicles and devices
- HTI Services, Infotainment, Wi-Fi Packages
- Convenient One Bill Options

**Custom Plans**
- Flexible and Custom Data Bundles
- Pre-paid, Pay-Per-Use
- HTI Services, infotainment, Wi-Fi Packages
- Flexible Single Bill Options

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**SHARE Everything Adoption Rates**

- 0% 3Q 2013
- 20% 1Q 2014
- 40% 2Q 2014
- 60% 3Q 2014
- 80% 4Q 2014
- 100% 1Q 2015
- 120% 2Q 2015

**CLASSIC DATA PLAN**
- Pay for Data
- 3GB of Data
- 2GB of Data
- 1GB of Data

**INFOTAINMENT PACKAGES**
- Pay Only For Apps / Service

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**SHARE Everything Plan**
- Connect up to 10 Devices
50 billion devices will be connected by 2020

Machines will become the enterprise’s eyes and ears, collecting and sharing new forms of data that can be acted on to increase efficiency and create new business opportunities.

- Capture new forms of data in real time to improve operations.
- Act on data-driven insights to develop new products and business models.
- Connect devices via networks that provide reach, reliability and performance.
Evolution of demand and technology

1. Building technology platforms that securely integrate:
   - Mobility
   - M2M
   - Cloud
   - Analytics
   - Security

2. Developing a service-centric architecture that supports flexible, responsive, and agile business models and global capabilities.

3. Creating social platforms to drive business intelligence and create new customer channels, and the employees to support them.

4. Partner with trusted global technology provider(s).
Meet evolving customer demands, expand into new markets, and grow revenue.

Differentiate your business, reach new customers, and outpace the competition.

Supplement your strengths and complement existing capabilities by partnering with an expert.

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- Testing & Provisioning
- Asset Tracking
- Demos & Trials Telematics
- Vehicle Plans Infotainment

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