



What the World Demands

Focus Innovation on:

Megatrends

Market-relevant technologies

Government requirements

Consumer wants and needs

What the World Demands

**Safe**




**Green**

**Connected**

Innovations and Technology Focused on Solutions Responsive to Megatrends

Technology and Innovation Focused on Megatrends

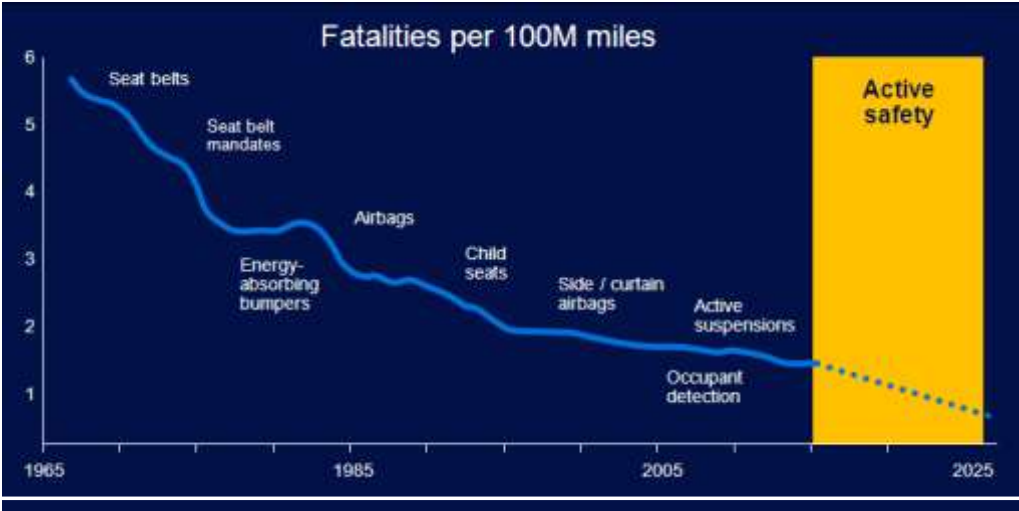
What the World Demands

 Safe	 Green	 Connected
<p>Traffic congestion in major metro areas around the world becomes worse</p> <ul style="list-style-type: none">More accidentsLonger commuteHigher stress levelMore inexperienced driversMore aging drivers	<p>Fast growing economies: more fuel for mobile platforms</p> <p>Demand for electrical energy and related conventional resources far exceeds current capabilities</p>	<p>More productivity demands</p> <p>24/7/365 ubiquitous connectivity</p> <p>Emerging markets will leapfrog to new digital technologies</p> <p>Global demand for broadband access will continue to grow</p>

Vehicle Safety Continues To Be an Area of Focus For OEMs, Regulators and Consumers

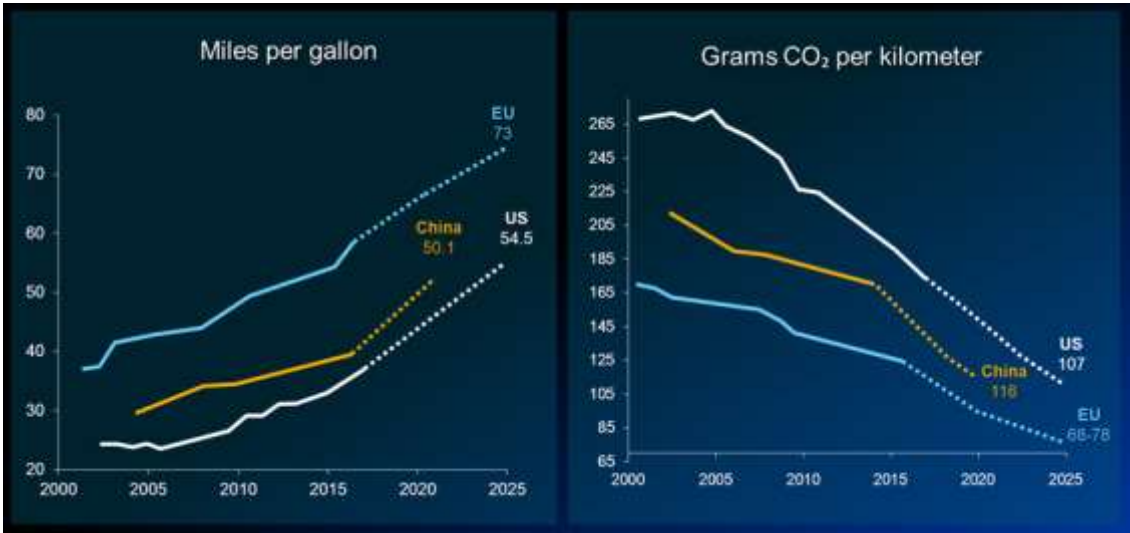
	More miles driven with more small cars
	More new drivers – in emerging markets
	More older drivers – 20% of population in 2030 will be 65+
	More in-vehicle distractions and productivity demands

Active Safety – Key to Connecting Safely



An extra 1/2 second of warning can mitigate 60% of crashes

Government Regulation More Stringent

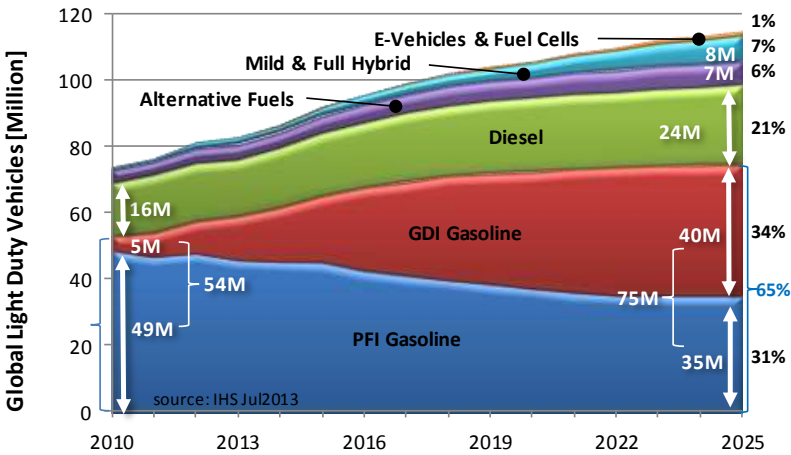


Source: The International Council on Clean Transportation
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Internal Combustion Engine Is Dominant

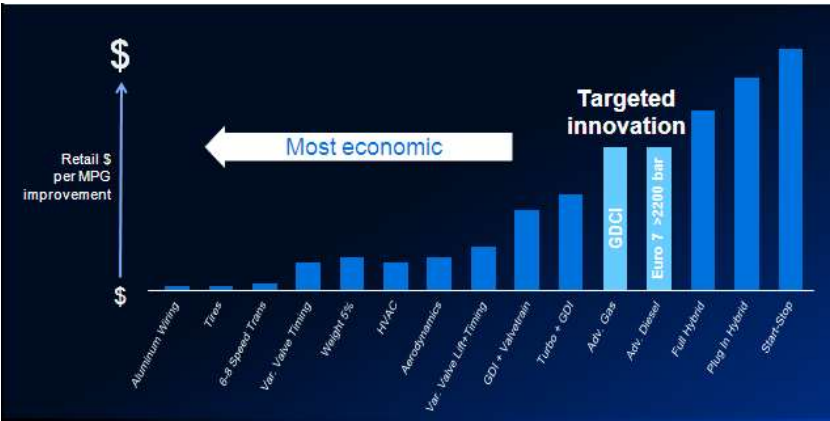
Global total: 2013 74M; 2025 115M; CAGR 3%



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Working to Expand Range of Solutions



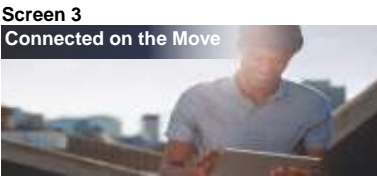
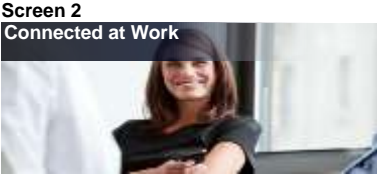
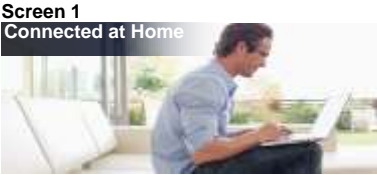
Advanced solutions for internal combustion engines

Source: National Highway Traffic Safety Administration 2011 for 2017 - 2025 rule making. Delphi ITO assessment. Automotive Frontiers.

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Consumer Always Connected



The 4th Screen
is Already in The Vehicle



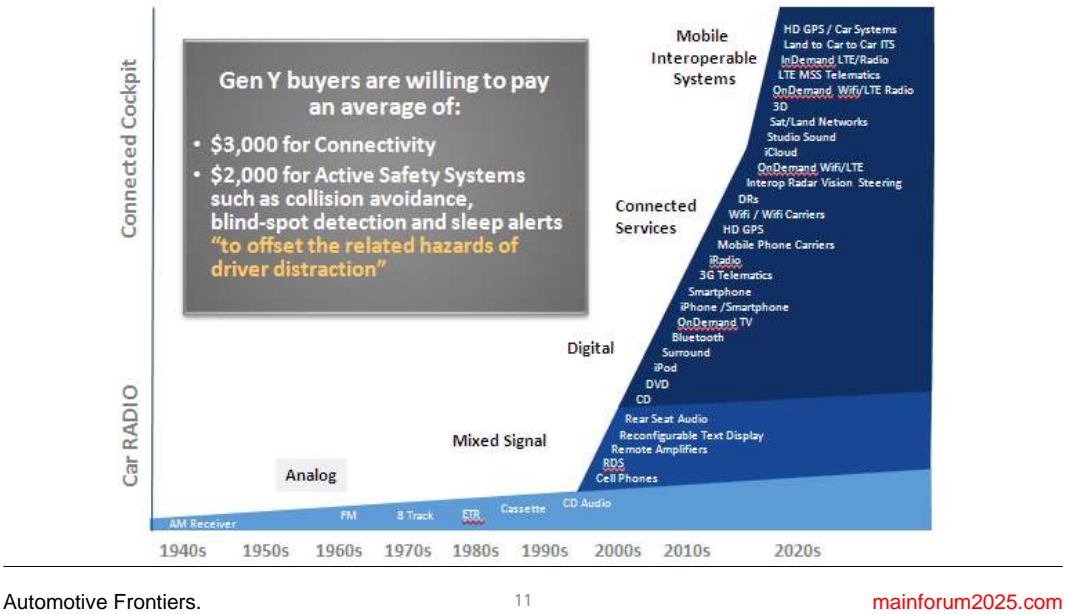
Seamless User Experience For Auto Grade Connectivity

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The Digital Revolution Is Accelerating



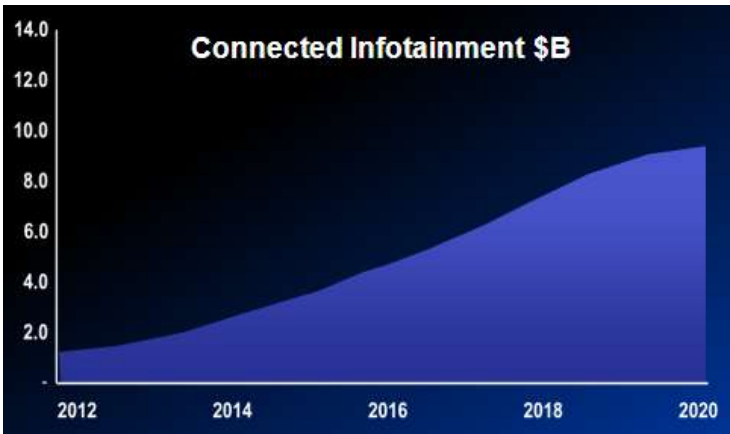
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Connected Infotainment Fueling Explosive Growth

- 1B smartphones sold worldwide in 2013
- Consumers want more connectivity in their vehicles
- Today's infotainment products increasingly designed for internet connection



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Feature Demands Driving Increased Infotainment



Connectivity Creates New Challenges



So, What's Next?



Megatrends: 2014 & Beyond

➡



Automated Lifestyles
Increase in the use of automated technology to simplify tasks of all kinds.



Demographic Shifts
Change in characteristics of the global population



Regionally Based Growth
Growth of all kinds will be regionally based (economic, population, natural resource demands).



Comfort & Convenience
Consumers of all kinds demand increased comfort and convenience in technology and their overall lives.

➡



Safety, Security & Privacy
Consumers' most basic desire is to feel safe and secure, as well as maintain privacy.



Connected World
Technology is making it possible for all things to be connected to all things, all of the time.

➡



Urbanization
On a global basis, populations will converge in urban settings; "mega cities" will significantly increase.



Substitutions, Alternatives & Choices
Alternatives will be sought and made possible by the identification of new resources, new technology and changing lifestyle choices.



Government Intervention
The government will continue to be a dominant force as it pertains to the economy, technology, environment and personal liberties.



Global Dynamics
The global marketplace will change as mature markets join, and in some cases, are surpassed in growth by developing countries.

➡



Managing The Environment
The demand for natural resources will continue to increase, as will associated problems; significant efforts will be required to manage them.

What's Next – Democratization of Society

“Cocoon of Safety” for Everyone – Mobile and Pedestrian

Adaptive Interfaces for all User Demographics

Blending Sensing, Connected, and Cloud Technologies



Augmented Reality

Solutions for What the World Demands!

Urbanization to Be-Redefined in Future and Will Lead to Development of Mega Regions and Mega Corridors



MEGA CITY
City With A Minimum Population Of 5 Million
EXAMPLE: Tokyo, New York



MEGA REGIONS
Cities Combining With Suburbs To Form Regions.
EXAMPLE: Greater London



MEGA CORRIDORS
The Region Covering Two Major Cities, Often Comprising Of Two Or More Large or Mega cities
EXAMPLE: Hong Kong-Shenzhen-Guangzhou, China, home to about 120 million people

What's Next – Propulsion “Greenification”

Innovation in Infrastructure and Fuel Sources

CE Device Apps, Control & Monitoring of your ECO Footprint


Elegant and Sophisticated Integration of New Energy Modes – “Lifestyles”




Euro 8
100 MPG

Solutions for What the World Demands!


Megatrends: 2014 & Beyond




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What's Next – Ubiquitous Connectivity

Seamless - Safe Integration of Personal Devices and User Content





The "Intertwining" and Synergy of All Connectivity Layers



The Internet of Things



Solutions for What the World Demands!

What's Next – Emerging Markets Rule

China, Russia, India and Brazil Lead with Increased Manufacturing and Sales

Emerging Markets Expected to Reach 60% Share of Global Market by 2015

Increasing Wealth for their Population, in Innovation, Production & Sales



Guangzhou Auto Show – CHINA

Solutions for What the World Demands!

Regional and Global Trends Summary – 2014 & Beyond

Trend	North America	Europe	Developed Asia	Developing Asia	South America	Global Trends
Automated Lifestyles						
Demographic Shifts						
Regionally Based Growth						
Comfort and Convenience						
Safety, Security and Privacy						
Connected World						
Urbanization						
Substitutions, Alternatives and Choices						
Government Intervention						
Global Dynamics						
Managing the Environment						

Key		Primary regional trend
		Secondary regional trend
		Global trend

Regional and Global Trends Summary – 2014 & Beyond

- 1)

Increasing number of **electrified vehicles** as EV/HEV vehicles and alternative powertrains emerge
- 2)

Step-change in **fuel efficiency**, energy efficiency, and emissions reduction
- 3)

Consumer electronics integration into cars and advanced **infotainment** systems
- 4)

Growth of **China** and **other developing markets**
- 5)

Next wave of active **safety** features
- 6)

Increase in vehicle **automation** and associated **infrastructure**
- 7)

Growth and emission technology challenges in **commercial vehicles**
- 8)

Increase in **cyber-security** issues and concerns
- 9)

Research, development and use of **alternative material**



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