



# Monetizing Connected Vehicle

Barry Einsig  
Global Transportation Executive

The Gartner logo is a dark green circle with a lighter green gradient, containing the word "Gartner" in white sans-serif font.

# Gartner

The Internet of Things is the network of physical objects accessed through the Internet that contain embedded technology to sense or interact with their internal states or the external environment.

New experiences, operating efficiencies, and business models .... enhanced value through improved utilization of these physical assets.

# Everything Is Becoming Connected



# Internet of Everything



## Intelligent Connections





**PROCESS MANUFACTURING:**  
Remote operations, workforce optimization, analytics



**TRANSPORTATION + LOGISTICS:** Preventive maintenance, fleet tracking, new customer experiences



**DISCRETE MANUFACTURING:**  
Uptime, better asset utilization, faster reaction times



**UTILITIES:** Grid modernization, automation and workforce optimization



# IoT Drivers



**GOVERNMENT/DEFENSE:**  
Response to security threats, natural disasters, secure operations and safety

**Real-Time**

**Scale**

**Big Data**

**Security**



**HEALTHCARE:** Patient monitoring, tracking equipment, remote health



**RETAIL:** B2C customer experiences, dynamic store management



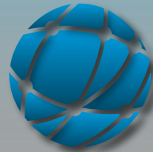
**FINANCE:** New customer experiences and improved asset utilization

# Connectivity Platform



Sensors and  
Devices

- Location
- Identity
- Policy
- Aggregation



Networks and  
Protocols

- Scale
- Complex networks
- Security
- Service Provider M2M



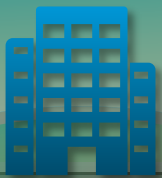
Data  
Analytics

- Data Aggregation
- Distributed Computing
- Video Analytics
- Data in Motion



Control  
Systems

- Determinism
- Safety
- Latency
- Soft Machines



Data Center

## IoT Connectivity Platform



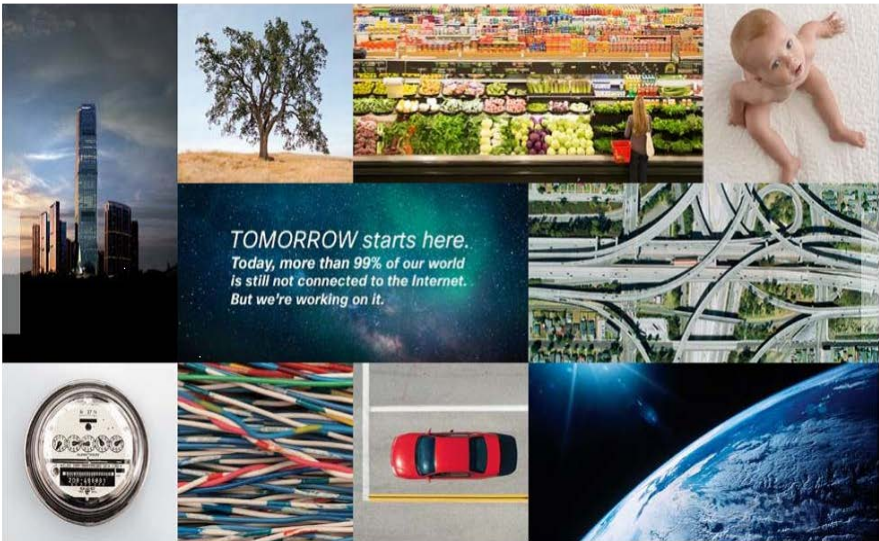
Intelligent Network



Cloud



# Internet of Everything Economy



## Global Private Sector Economic Analysis

January 2013

[cisco.com/tomorrowstartshere](http://cisco.com/tomorrowstartshere)

cles	Lower fuel and maintenance costs due to optimized delivery routes
------	---

# Transportation

Rail



Roadways



Public Safety



Aviation



Ship Transport



Mass Transit



Fleet

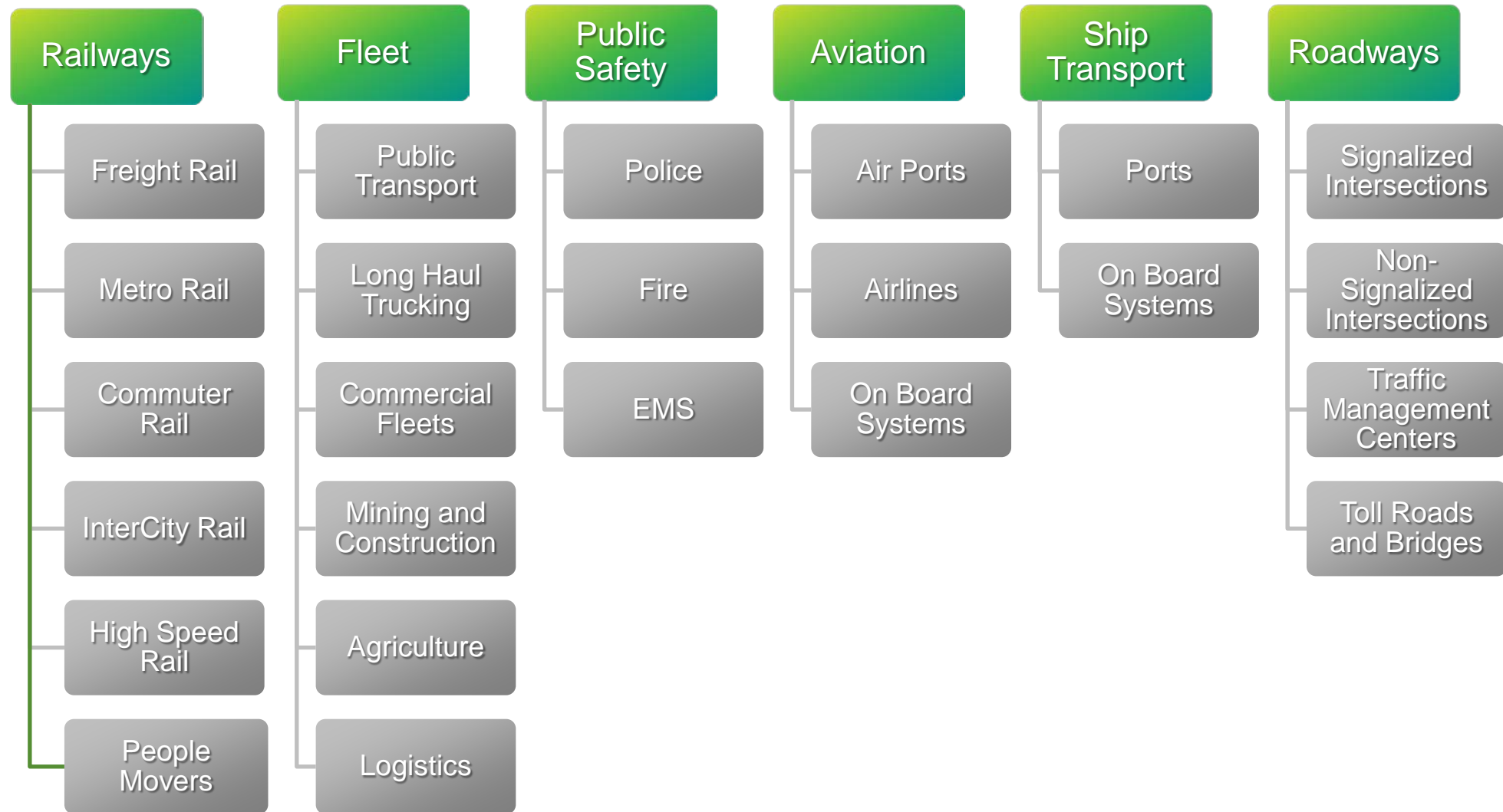


Connected Vehicle





# Transportation Industry-Market Definition



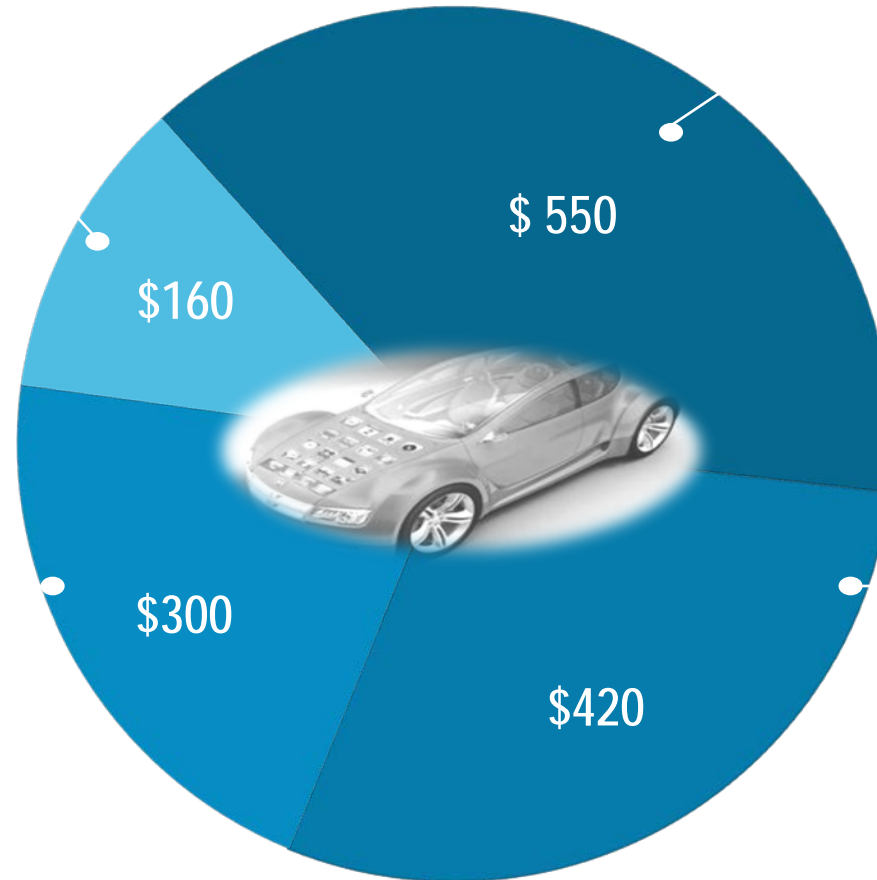
# Internet of Cars: Unlocking \$1,400 in Benefits per Vehicle, per Year

## Internet of Cars Service Providers

- Traffic guidance, navigation, emergency services
- “Google on wheels,” PAYD insurance, location-based services

## Auto OEM/OES

- Lower service/warranty costs
- New profit pools
- Architectural savings



Benefits per vehicle, per year

## Vehicle User

- Lower insurance
- Lower operation cost
- Less time stuck in traffic, more productivity

## Society

- Fewer crashes
- Lower traffic/road/toll operation costs
- CO<sup>2</sup> reduction

Source: Cisco IBSG Automotive and Economics Practices, 2011

# New Battleground: From Building Cars to Selling Travel Time Well Spent

## Connecting the Value Chain



Source: Cisco IBSG Automotive, 2011



# Emergence of New Business Models

## Smart Parking



## Mobility On-Demand



Source: Web Research, 2011

# Internet of Cars = Better Experience = Key Growth Market for Service Providers

## Pervasive Computing



## Ubiquitous Connectivity

### Users

Grow the number of mobile revenue-generating subscriptions



## Artificial Intelligence

### Uses

Find more things users can do with their mobile devices

## M2M Network

### Usage

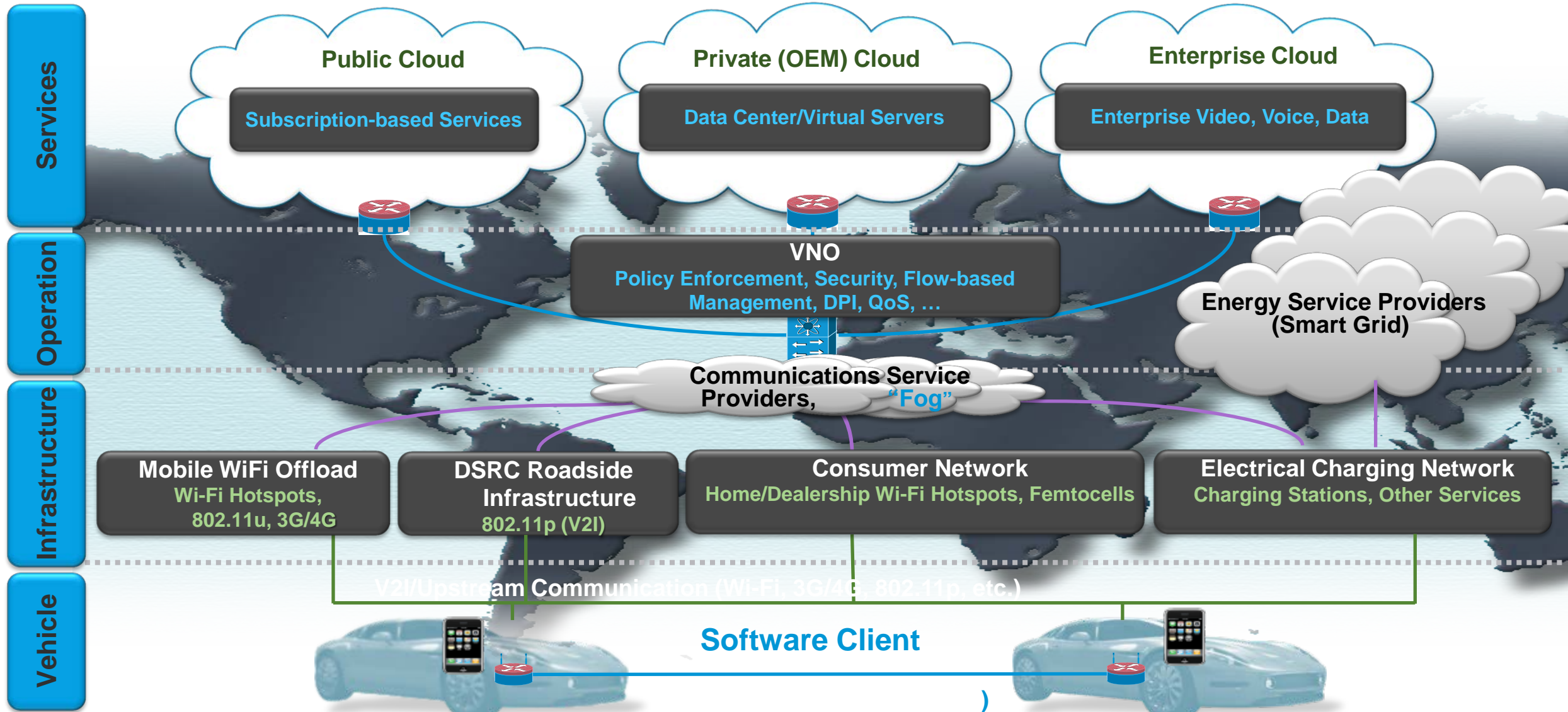
Drive the frequency with which people use mobile data services



Source: Cisco IBSG 2011

# Cisco's Role: End-to-End Architecture is Essential

– Especially for Scaling Globally





# Let's Take The Internet to The Road ...

## The Cisco Vision

changing the way we  
work, live, play, learn... <sup>SM</sup>



... and drive





Together We Can do Amazing Things

Tomorrow Begins Today

New Architectures

The Internet of Things

Optimized Standards

Open Platforms