Commercial Fleet Telematics, Connected Vehicles & Future Mobility

Presented By:
Chandra Sekhar Rout, CEO, Orduino Labs

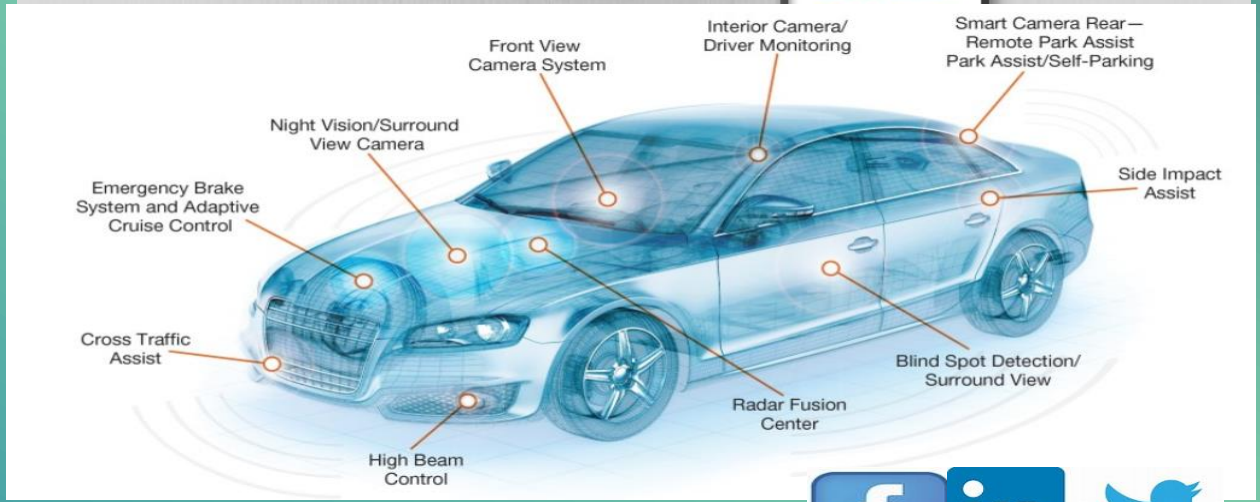
What is a Connected Vehicle?

Autos offering any number of connected technologies, including:

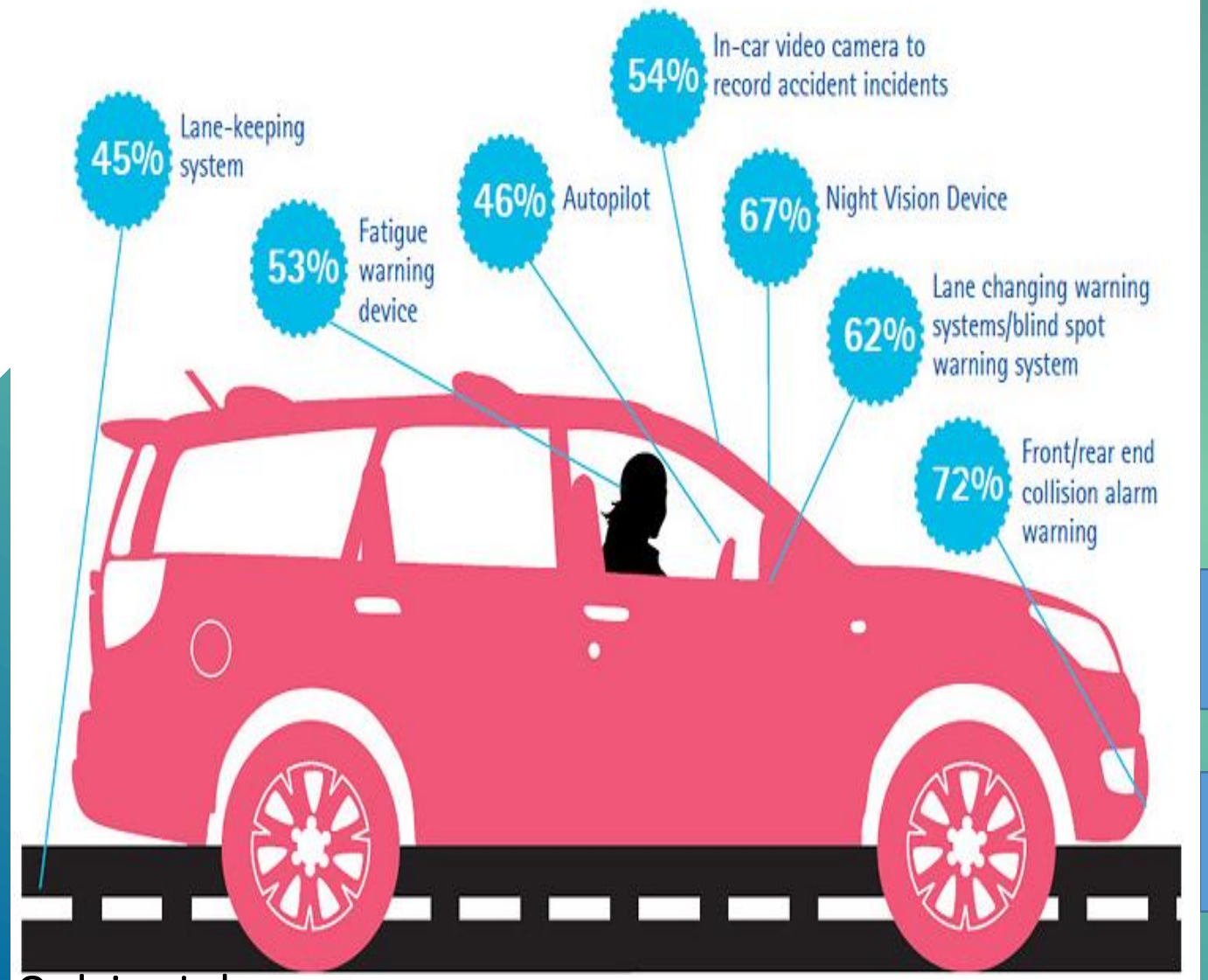
- Telematics systems
- GPS-based navigation services
- Blue-tooth connected mobile devices

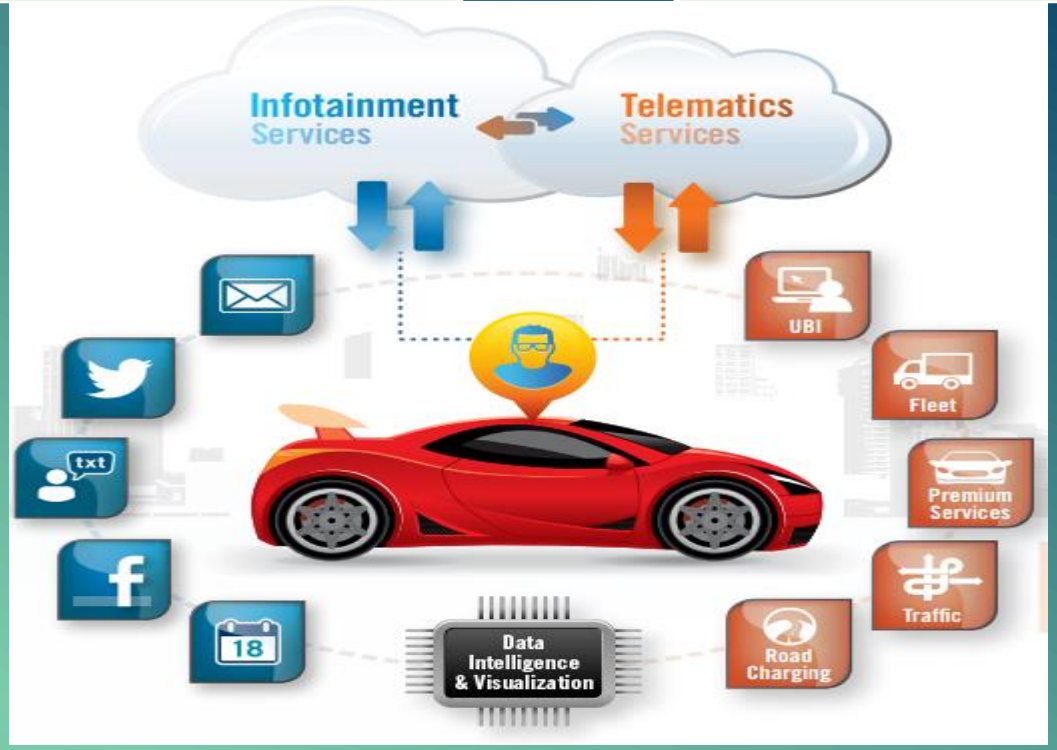
About 1-in-5 new cars sold this year will collect and transmit data outside the vehicle.

250 million connected cars globally by end of the decade.

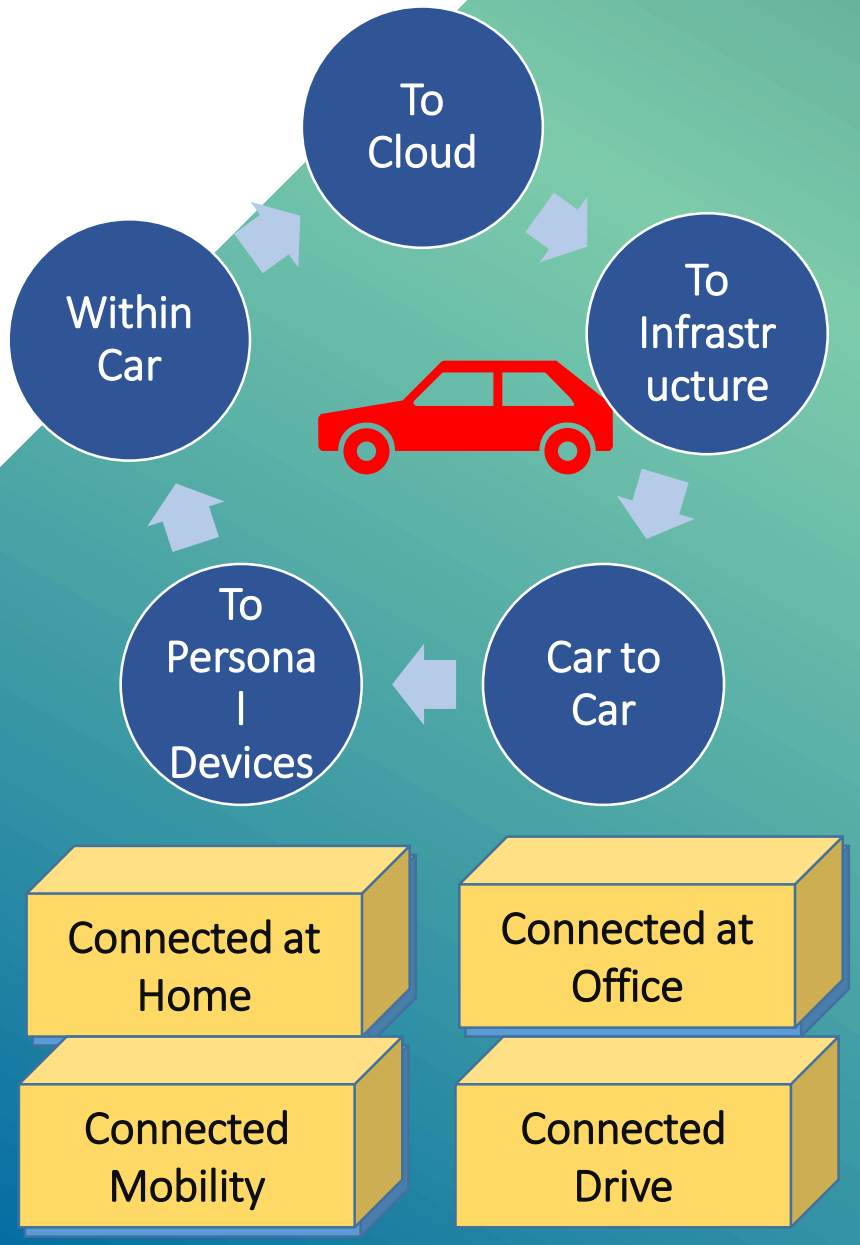


Public Opinion for Car Features- As per Accenture Survey





- Connected Network
- Ease of Operation, Maintenance
- Safety and Insurance
- Single vehicle Application
- Information & Entertainment
- Efficiency and Experience



OEM/Dealers

- Vehicle Connect
- Customer Connect
- Additional Revenue and brand Differentiator

Government

- E call
- Safety and Vehicle Tracking
- Traffic management

Business

- Insurance
- Toll payment, Concierge services
- Fleet management

Device Connectivity

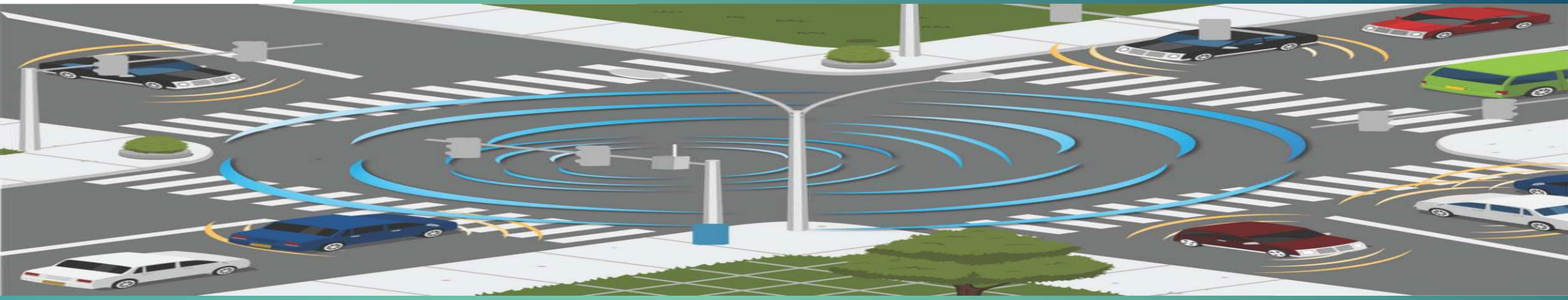
- Mobile Integration
- Android and Apple device features
- Mirror link

Cloud Connectivity

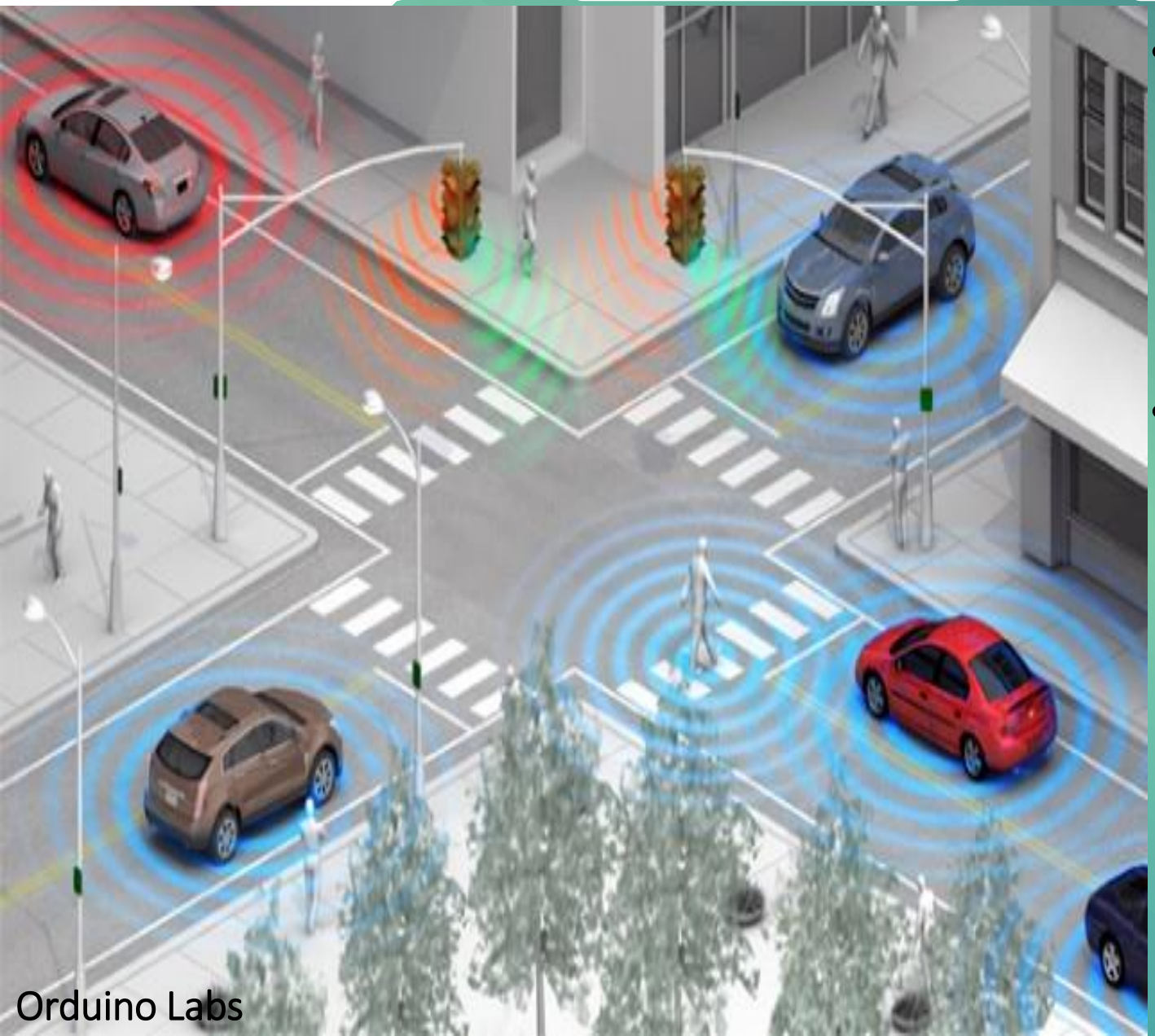
- Via Smartphone
- Embedded Connectivity
- Cloud based SDP

In car and V2V connect

- Ethernet
- CAN
- Wifi



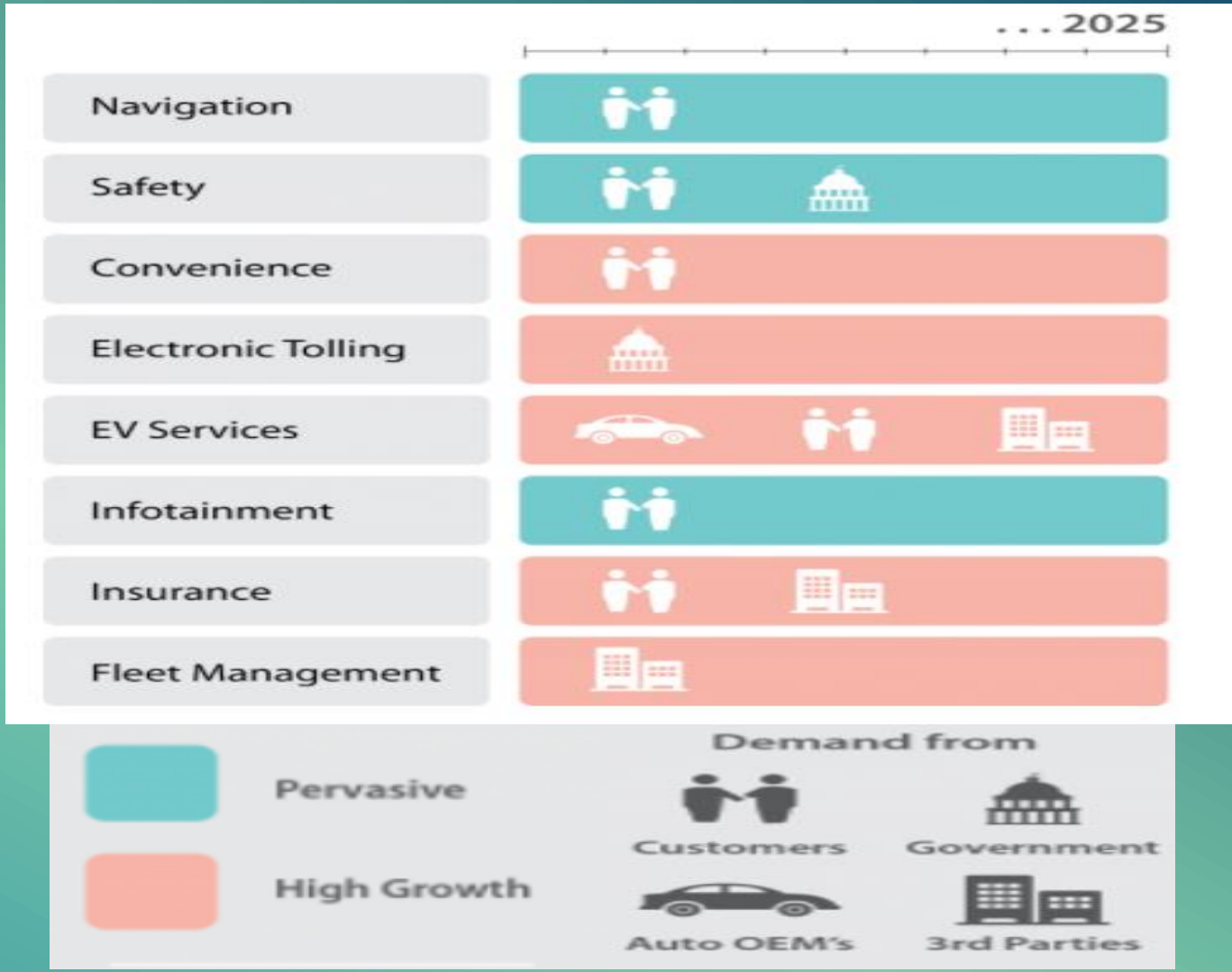
- Auto pilot and smart driving
- Smart Parking and Traffic management, Toll payment
- Condition Monitoring and ease of service
- Tracking the goal of Pollution reduction
- Innovation in Telematics for passenger safety
- Accident Prevention and route tracking, improvement in ambulance service



- **Vehicle-to-Vehicle (V2V):** "the dynamic wireless exchange of data between nearby vehicles that offers the opportunity for significant safety improvements."

- **Vehicle to Infrastructure (V2I):** "The wireless exchange of critical safety and operational data between vehicles and highway infrastructure, intended primarily to avoid or mitigate motor vehicle crashes but also to enable a wide range of other safety, mobility, and environmental benefits."

- Leading industry sources point out that by 2025, we may well expect to see that safety, infotainment and navigation have become ubiquitous to the Car, primarily due to broader demand and legislative mandates. In a sense, every car will be a connected car.
- As governments and third parties such as insurance players across geographies are progressively taking cognizance of this trend, other aspects of the Connected Car such as electronics vehicle services, electronic tolling and PAYD insurance too will become an integral part of the car purchase.



5 Ways to Monetize the connected services

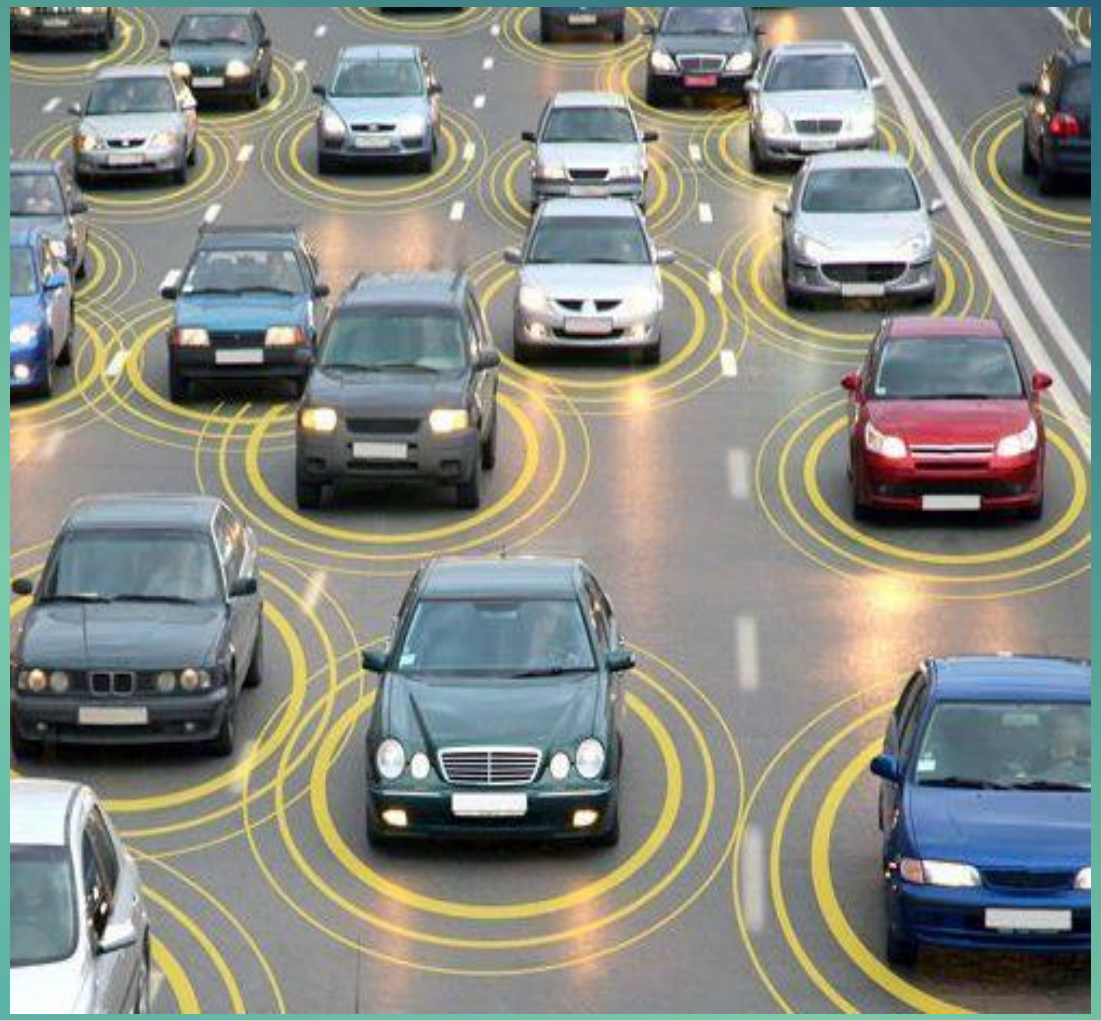
Sales of connected car packages to consumers, mostly bundled with new cars (Audi, Mercedes)

Use of connected car data to increase internal efficiency, quality, and product differentiation

Defense of list price levels through differentiation, using connected services to reinforce customer loyalty

Establishment of a comprehensive ecosystem of consumer services, with revenue sharing

Creation of systems for using customer data, to be monetized through future (and yet unspecified) business models



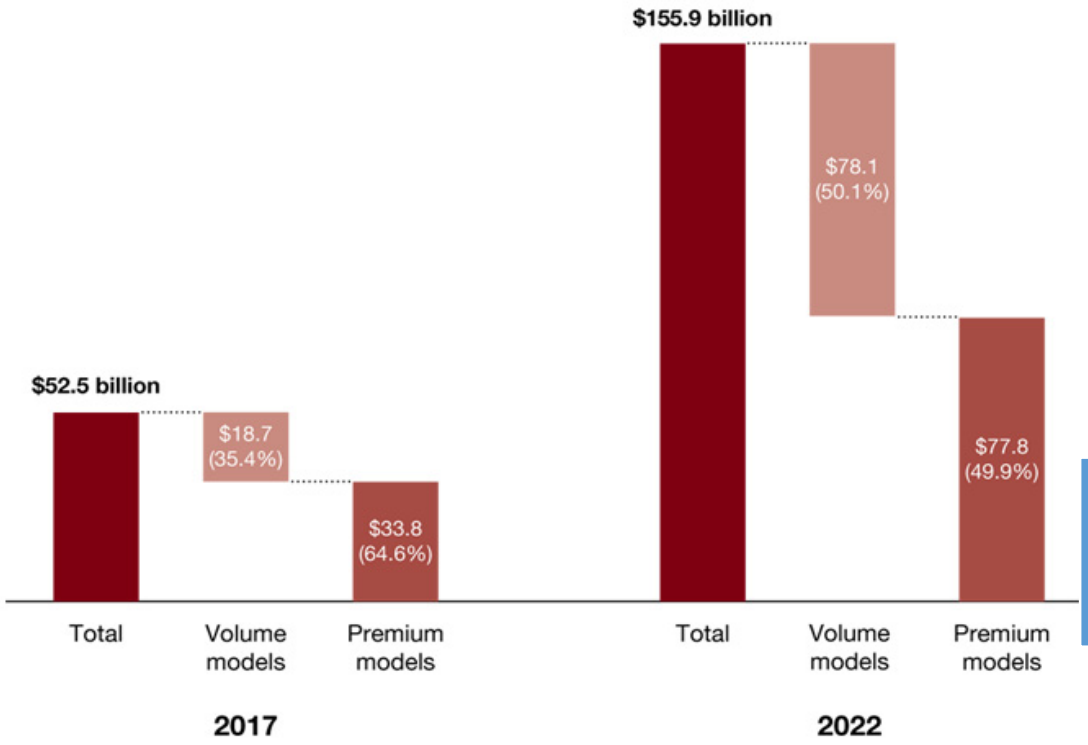
01
Resist diversifying into businesses where capabilities are less

02
Change the mental model as technology

03
Using Autonomous Technology

04
Cannibalize cash cows and build premium experience

05
Set reasonable expectations for your own innovation focus



Acquisition	New entrants:	Investment	Acquisition	Investment	Partnership
Panasonic: Ficosa (2014) Google: FCA (2016) Nvidia: AdasWorks (2016) **New entrants** AdasWorks, Baselabs, Vector, Velodyne, Wind River	Apple, Baidu, Google	Intel: Omek (2013) **New entrants** Atmel, Fujitsu, Kyocera, LG, Toshiba	Cisco/NXP: Cohda Wireless (2013) **New entrants** Cohda Wireless, Kymeta, Veniam	Verizon: Hughes (2012) **Partnership** Airbiquity & Arynga (2016) **New entrants** Airbiquity, Allstate, Fleetmatics, Pivotal, Progressive, SiriusXM, Trimble, Verisk	Daimler Moovel & IBM (2014) Airbiquity & Arynga (2016) **New entrants** Airbiquity, Apple, Contigo, Dash, Google, iTrack, Lyft, MyCarTracks, Uber

Acquisition → Investment → Partnership

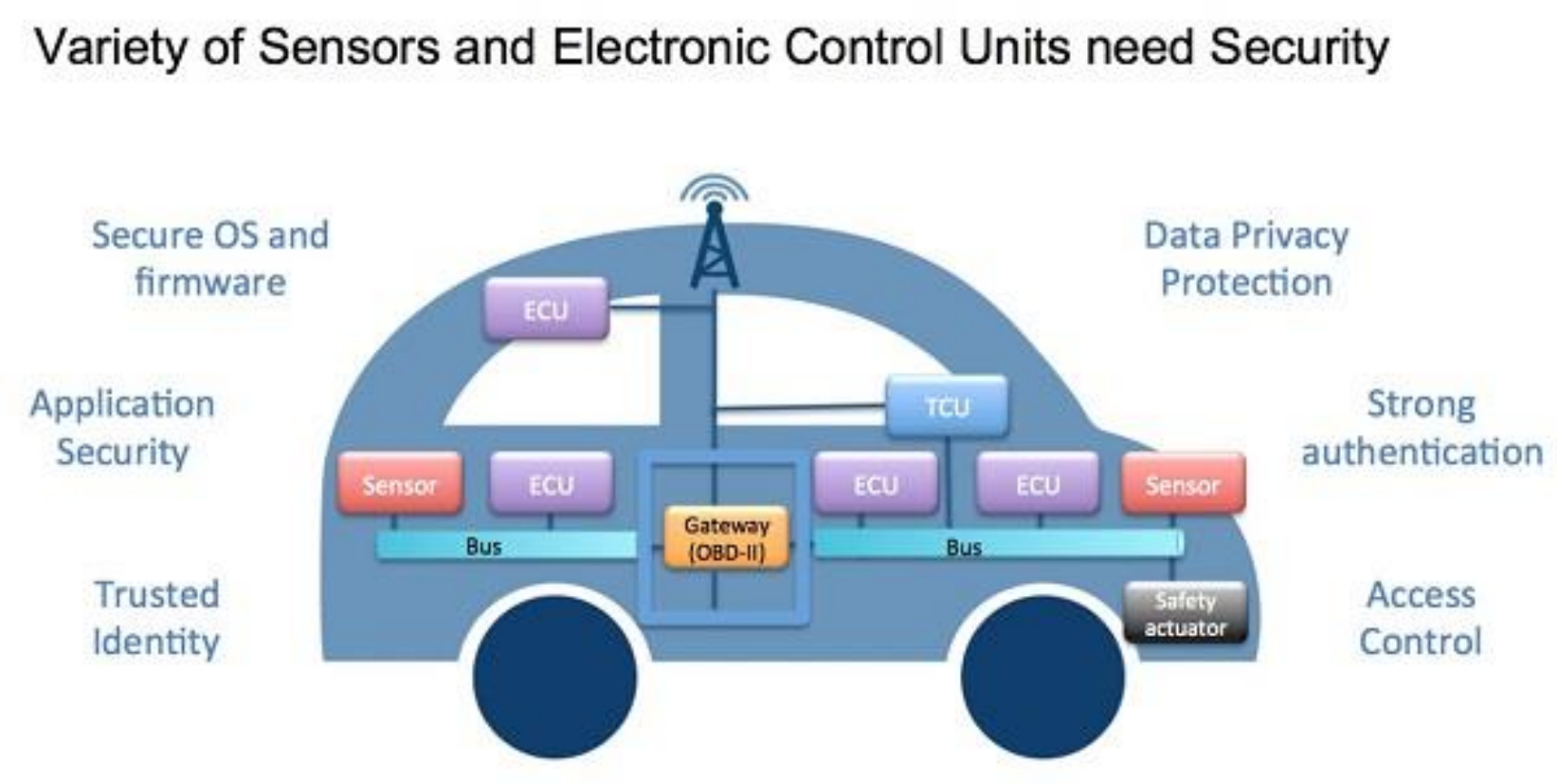
Connected car revenue share between premium and volume shares

Privacy Considerations

- Consumer disclosures: When and How?
- Categories of information that might trigger such disclosures?
- Scope of consumer controls?
- Data retention and de-identification policies?
- Organizational accountability, how demonstrated?

Privacy Considerations

- **No business model has yet resulted in** customer acceptance, sustainability or willingness to pay.
- **A lack of security** in OBD ports and intra-vehicle networks is posing severe challenges to V2V and V2I programs.
- **A plethora of technologies,** including wider proliferation of interoperability and open platforms, is missing.



THANK YOU

Orduino LABS

Room No-214, 2nd Floor,

OCAC Tower, Acharya

Vihar, Bhubaneswar-751013

www.orduino.com

info@orduino.com

+91-7019491096

Toll Free No: 1800 123 0401