The Internet of Things for Insurance:
Demystifying the role of telematics

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2017 Underwriting Collaboration Seminar

At a glance…

- The increased integration of 'smart' devices through internet of things (IoT) technologies are quickly changing the way we travel, the way we work, and way we live – all of which impact insurance decision making for buyers and sellers

- OEMs, technology providers, and data stewards stand to benefit depending on the business model they embrace, but success ultimately hinges on benefits to the policy holder.

- Explosive expansion, portability, agility, and innovation of data and analytics present challenges that are somewhat familiar but never the less crucial to successfully integrate a data-driven IoT insurance strategy

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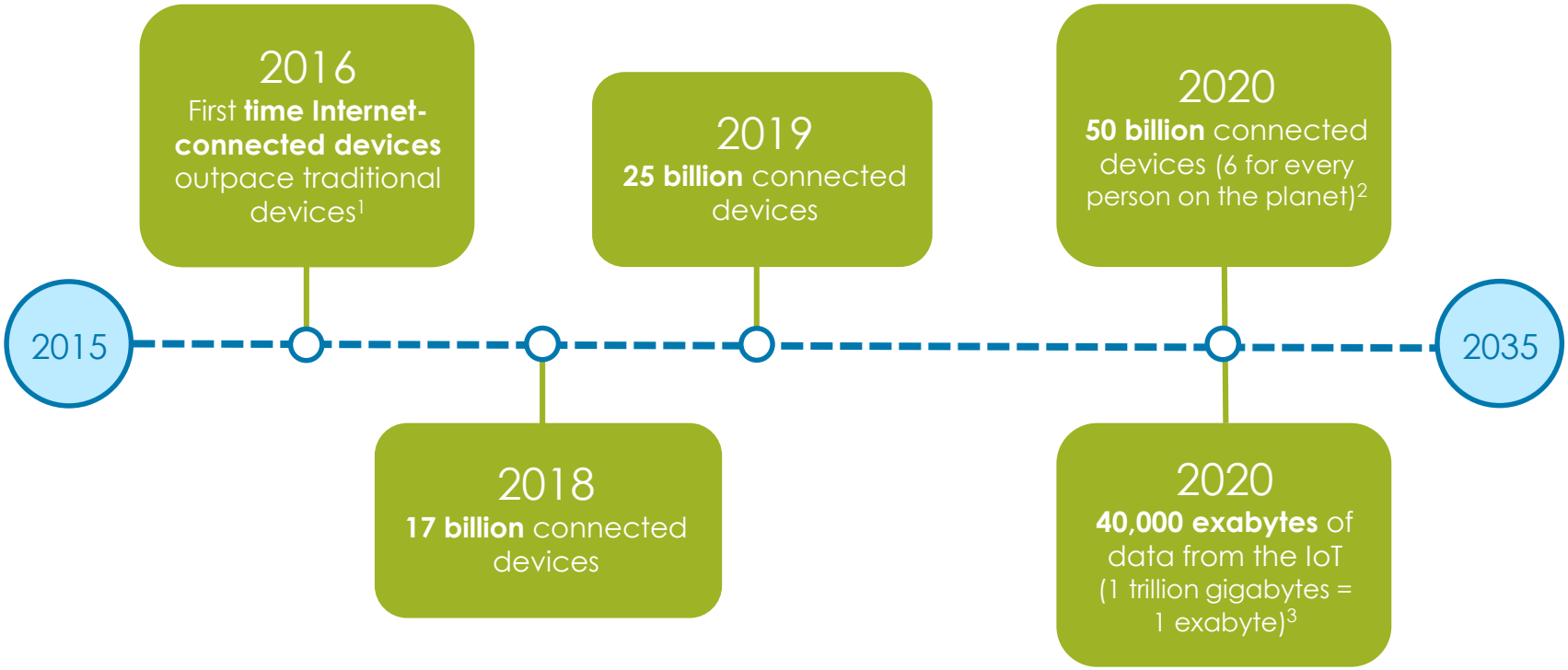
The Internet of Things: Expected to outpace traditional devices



IoT expected to add $10 – 15 trillion to global GDP over the next 20 years[4]

1 Gartner, IDC, Strategy Analytics, Machina Research, company filings, BI Intelligence estimates
2 Cisco Seize New IoT Opportunities with the Cisco IoT System
3 IDC The Digital Universe, BI Intelligence estimates
4 GE Analyze This: The Industrial Internet by the Numbers & Outcomes

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Market Challenges for Insurers:

What keeps Insurers up at night

- Managing profitability
- Regulatory environment
- Evolving Sales Channel
- Competition and retention
- Potential maturing product

Proven Solutions to Insurance Market Challenges

- (Easy) Access to more data
- Accurate, Validated exposure info
- Analysis + Integrated Insight
- Growth Channels
- Operational Efficiency

Insurance Industry Workflows

- **Underwriting**:

  Decision-making support tools and information; analog, or simplified indicators to drive policy decisions

- **Rating:**

  Combines loss experience with underwriting data to create predictive modeling guidance – going deeper into behavior

- **Claims:**

  Answers the 5 w's; point in time and space with unexpected behavior/response; *Loss Control*

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IoT Eco-system

Insurance Eco-System

Personal Lines

- Auto Coverage
- Homeowners Coverage
- Privacy???

Commercial Lines

- Fleet/Auto Coverage
- Property Coverage
- Contents Coverage
- Business Interruption
- General Liability
- Workers Compensation

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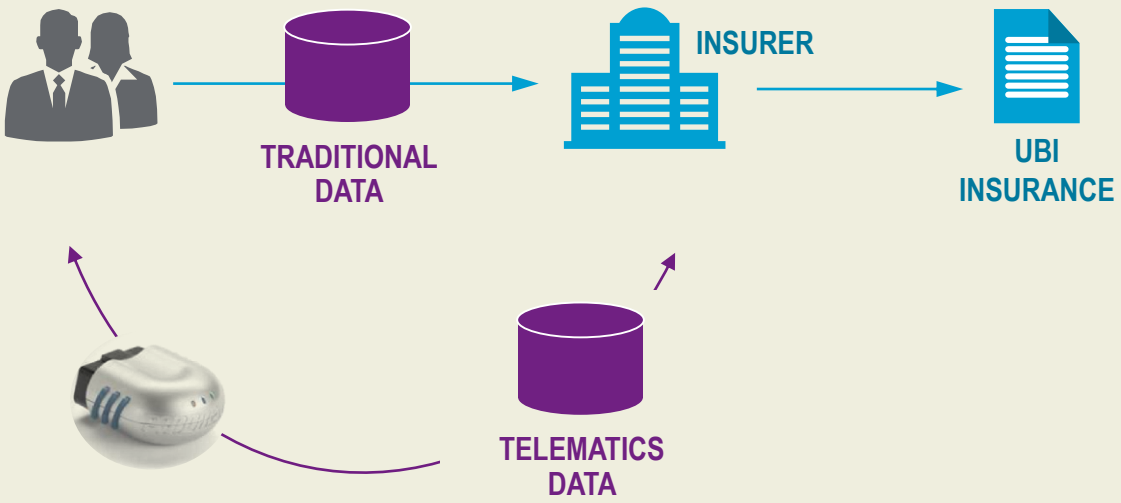
How does UBI work (today)?



1. Consumer opts for UBI in exchange for a teaser discount
2. Insurer provides a sensor to measure driving and provide services
3. Insurer calculates a specific discount for future application

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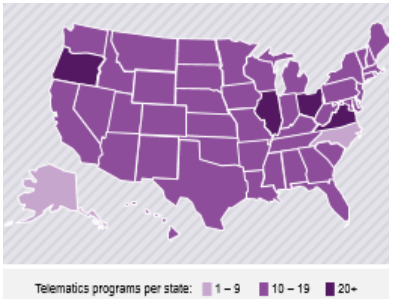
What do the numbers say?

88%
of Millennials would consider a UBI policy

30%+
Improvement in driving behaviors

40 point
increase in satisfaction of UBI policyholders
(JD Power, 1000 point scale)



48 states have 10+ UBI programs today

10-20% in UBI programs today

Why isn't every policy a UBI policy today?

- Technology cost
- Operational friction
- Consumer uncertainty and data portability

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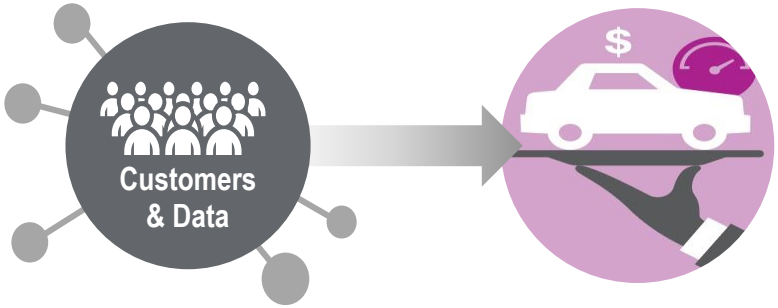
How will the IoT change insurance?

Over **70%** already have smartphones

By 2020 **90%** of new cars will be connected

Could this help solve the "issues"?

"Data suppliers" want to create revenue and increase customer value



1. Own-branded insurance
2. Lead generation
3. Data exchange

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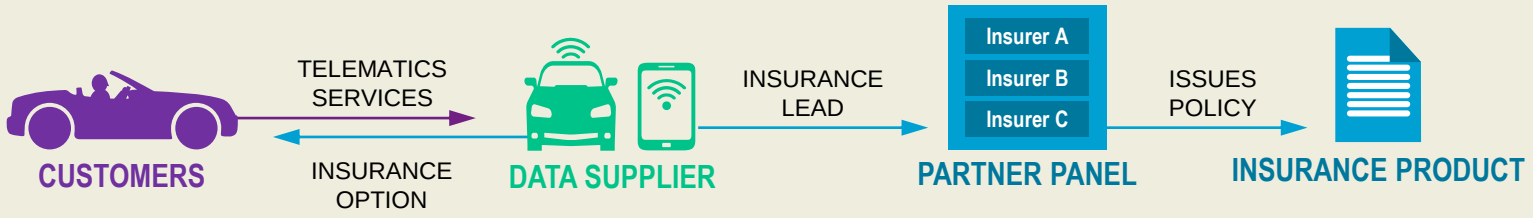
Lead generation (or own-branded insurance) model

Lead generation model



Customer

- Understand driving behavior
- Transparent and controlled access to tailored insurance
- Score is portable (within partner insurers)

Data Supplier

- New revenue stream
- Provides recognizable value for their customers

Insurer

- Reduced cost and friction
- Access to powerful data at time of sale for leads
- New distribution channel
- Potential for higher price competition

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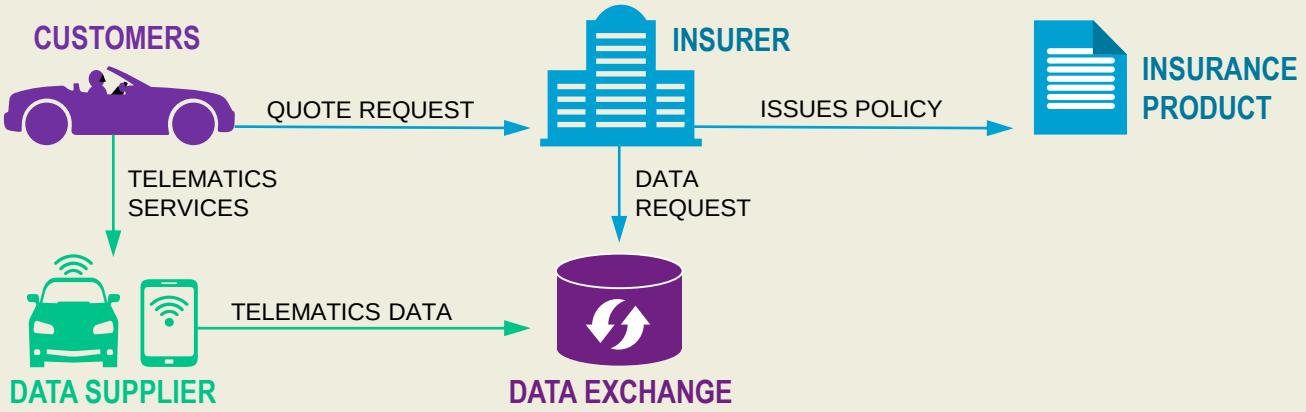
Data exchange model

Data exchange model



Customer

- Understand driving behavior
- Score is portable
- Potential for less control and transparency

Supplier

- New revenue stream
- Value to customer less visible and could be negative impact

Insurer

- Reduced cost and friction
- Access to powerful data at time of sale for entire population
- Most consistent with today's operations

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What are some of the challenges on the road ahead?

- **Business expertise**
- **Analytical challenges**
- **Scalability: the many to many challenge**
- **Consumer concerns**
- **Unforeseen hurdles?**

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Making sense of the data

Predicting market leaders

Venture capital is available for this market, and

start-ups pop up daily.

A complex connected ecosystem

Identifying sources of data can be difficult when multiple players are involved: hardware manufacturers, platform owners, etc.

Variety of devices

Technology is changing the way we live our lives. Analysts estimate

50 billion devices

will be connected to the Internet by 2020.

Source: Cisco

Big data

Depending on the volume, variety, and velocity of data,

insurers could expect over 10MB of data per household per day.

Unwieldy and unstructured

Understanding data from multiple sensors and how it correlates to future loss is

a moving target that requires expertise.

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Building an optimal rating plan

The "winners" will be the insurers who are best able to optimize the combination of traditional and emerging factors

Traditional Proxy Factors	Telematics data
Gender, age and marital status	How much, how, when & where
# vehicles and # drivers	How much
Estimated annual miles	How much
Territory	Where
Accidents and convictions	How
Insurance score	How

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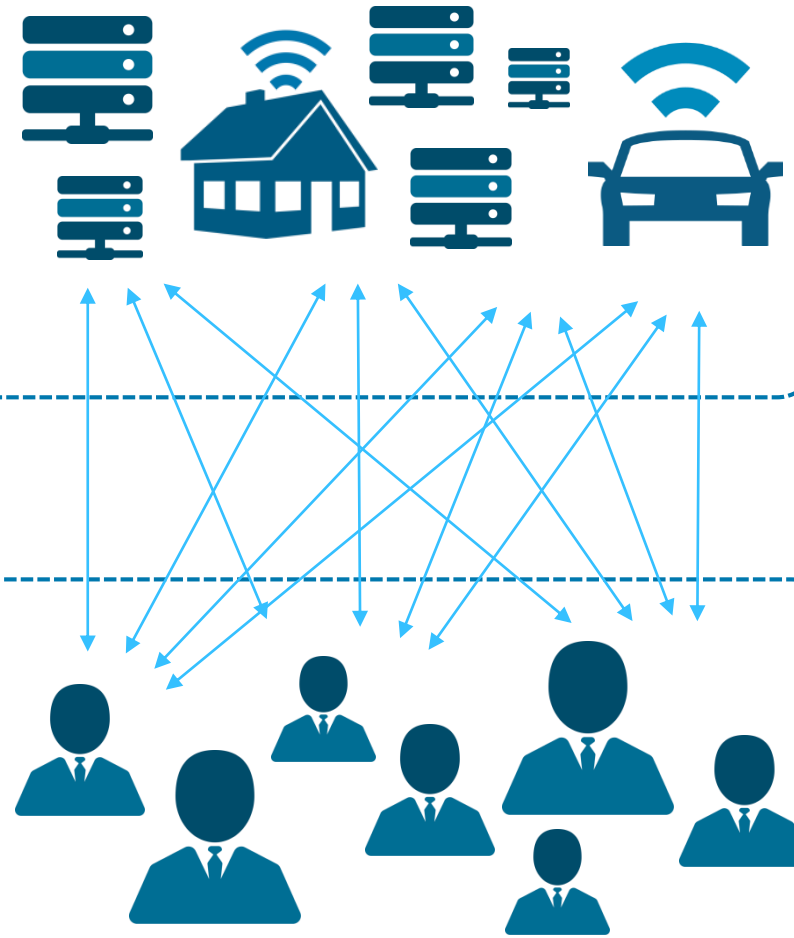
Many-to-Many Problem

Telematics/ IoT Solution Providers:

- Value of insurance industry vertical unknown
- Limited bandwidth to span relationships with multiple insurers
- Only engaged with a fraction of insurance industry, leaving much of the market "untapped", including loss of revenue for not sharing data to inform claims for insurers
- Cost-prohibitive to create integration with numerous individual insurers
- Lacks insurance analytics expertise



Insurers:

- Fragmented market — technology winners TBD
- Data is unfamiliar, unstructured, and inconsistent, making insight creation difficult, lengthy, and costly
- Inability to systematically validate existence of technology and audit discount eligibility
- Inability to use data and insights in workflows
- Cost and time it takes to manage claims and customer satisfaction

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Discussion

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