




IoT: What's Hot, What's Not & What's Next

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2020: IoT in APeJ



8.7B

Connected
“Things”

\$566B

Market Opportunity

2020: IoT in India



948m

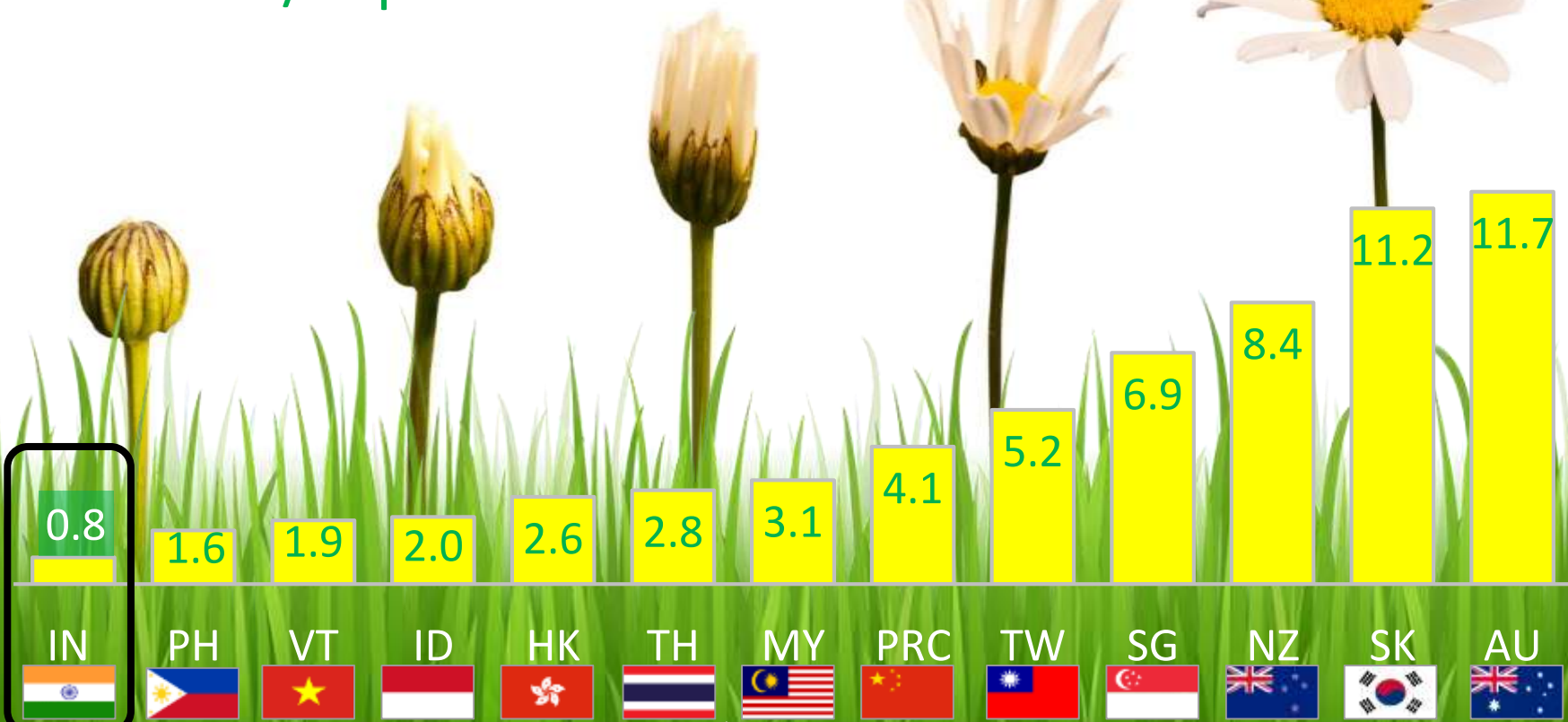
Connected
“Things”

\$44B

Market
Opportunity

IoT Market Maturity in 2020

IoT Units/Capita



Source: IDC Asia/Pacific Internet of Things Practice

2015: The Year in Review





Step 1

The Stakeholders

Funding



Planning



Delivery



Platforms



Steps 3 - ???

The Gap

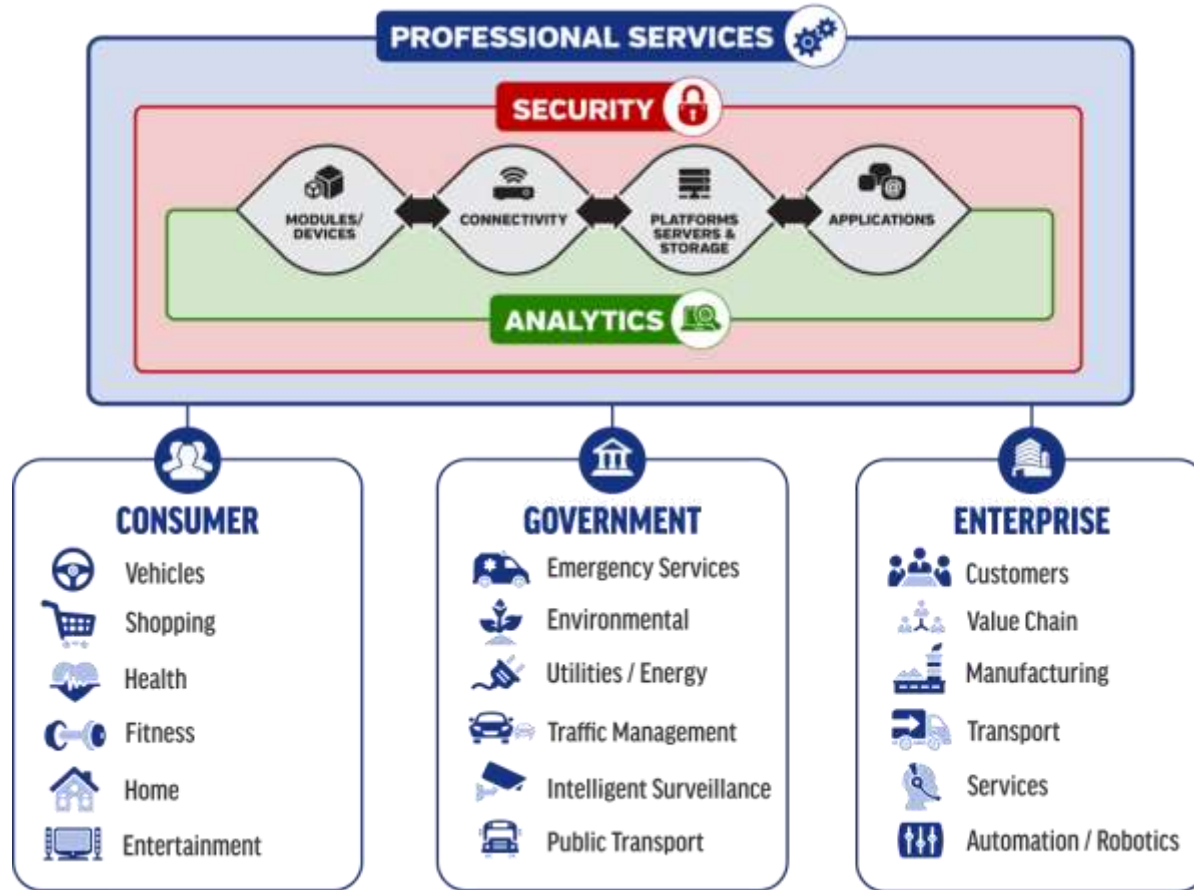
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Step 2

The Future Vision

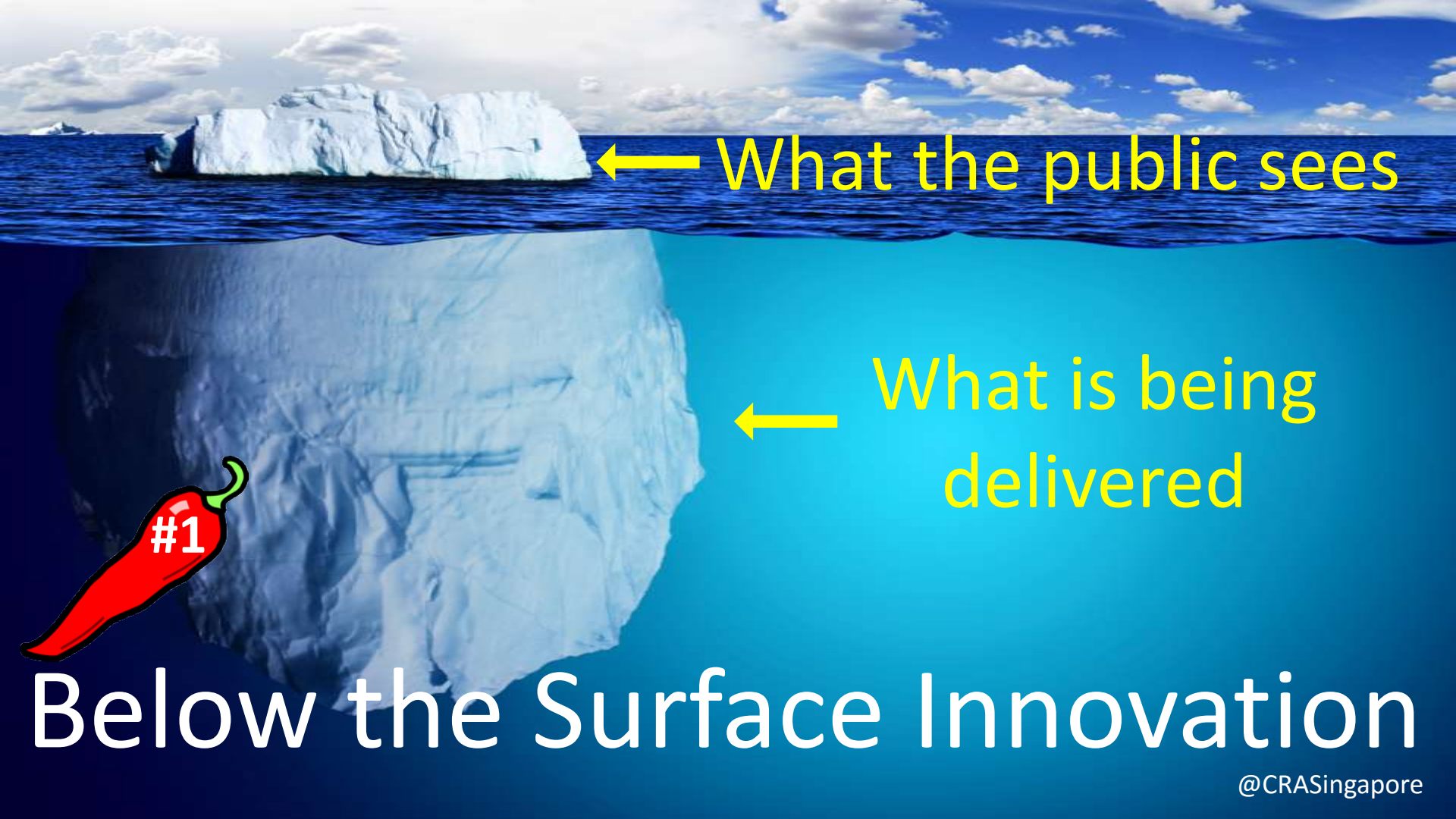
2015: Less Hype, More Practicality



REALITY CHECK

What's **HOT**





← What the public sees

← What is being delivered



Below the Surface Innovation

IoT is Everywhere

Weather & Environmental Sensors

Security

Smart Lighting

Smart Building

Connected Streetlights

Traffic Monitoring

Predictive Analytics

Intelligent Routing

Asset Tracking

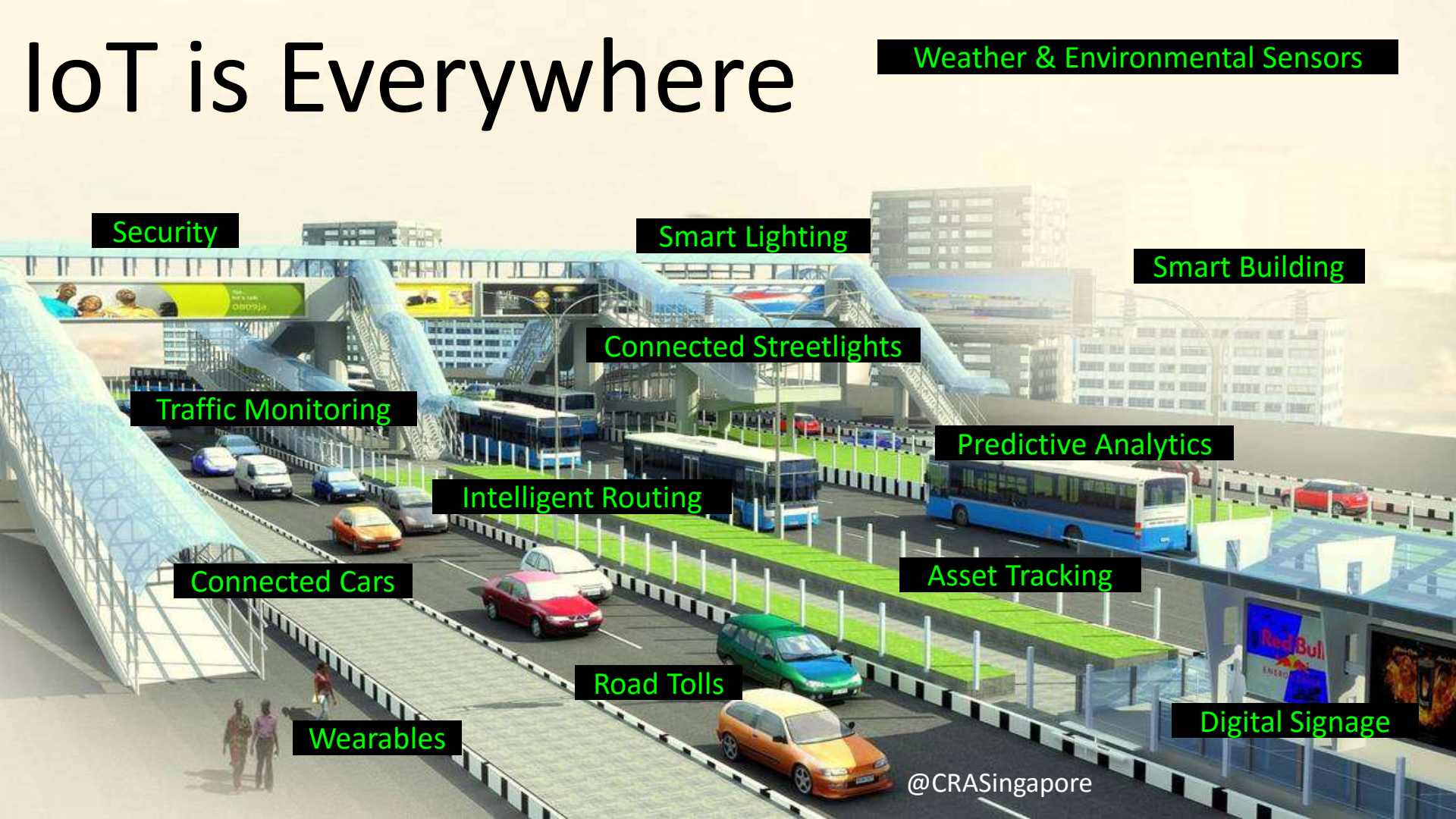
Connected Cars

Road Tolls


Digital Signage

Wearables

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IoT Market Drivers

- 
- 1 Increase productivity
 - 2 Improve product quality/time to market
 - 3 Process automation
 - 4 Reduce costs
 - 5 Faster/better decision making

Operational Excellence



Quality



Speed



Efficiency



12%

of APeJ enterprises will see IoT as an opportunity for revenue generation in 2016

Top Use Cases

Top 5 IoT Use Cases - APeJ

1. Manufacturing Ops
2. Freight Monitoring
3. Production Asset Mgmt
4. Smart Grids
5. Smart Buildings

Top 5 IoT Use Cases - INDIA

1. Manufacturing Ops
2. Omni-channel Operations
3. Smart Homes
4. Smart Buildings
5. Production Asset Mgmt

8% of APeJ IoT initiatives were internationally-focused in 2015



54% plan to take their IoT initiatives international

Bridging the IT/OT Divide



40%

of Asian-based MNC will integrate IT & OT at the technology, process, security and organizational levels by 2018

IT & OT must address the same challenges

What factors will hinder IoT solution in your organization?

	Worldwide	Asia/Pacific	Australia	China	India	Singapore	South Korea
1	Security	Security	Security	Security	Security	Security	CapEx
2	CapEx	OpEx	OpEx	OpEx	Skills	CapEx	OpEx
3	OpEx	ROI	Legacy Infra	ROI	Immature Technology	Skills	Security

Legend: Security concerns (Red), Financial concerns (Green), IT concerns (Blue)

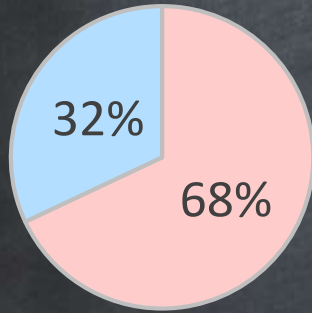
Impact of IT/OT Convergence



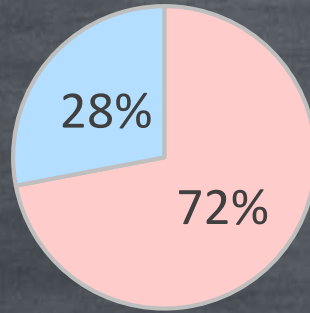
- Less silos
- Cost efficiency
- Increased skills gap
- New roles (e.g. Chief Digital Officer)
- Vendors must partner to bridge the IT/OT divide

Who Holds the IoT Budget?

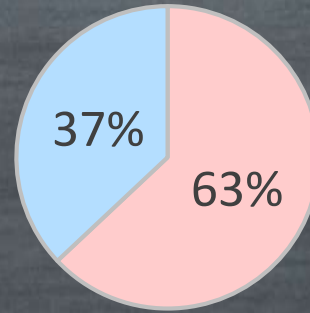
Worldwide



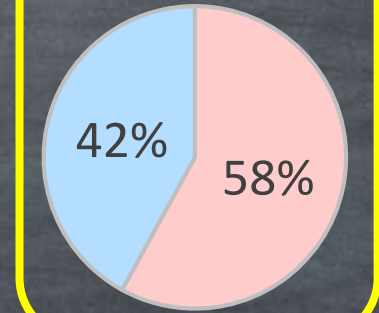
Asia/Pacific



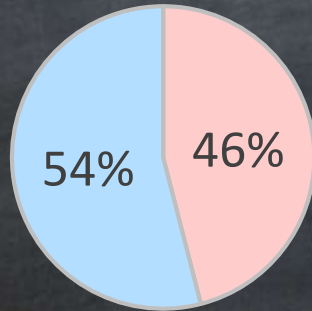
South Korea



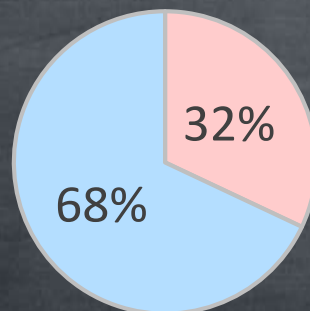
India



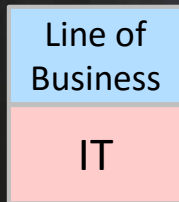
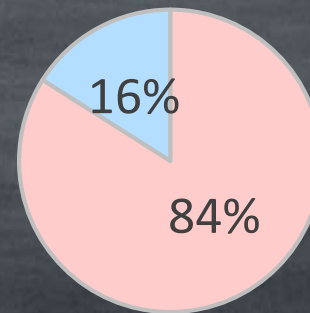
Singapore



Australia



China



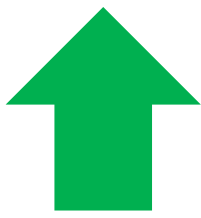
The New Decision Makers

Which group drove the IoT solution decision?

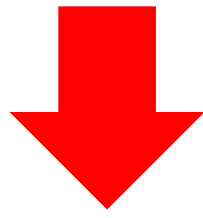


What's NOT





Devices



Value



The Risk of a “Me Too” Solution



Launched Blaze Smartwatch at CES:
shares drop 30%

Missed Earnings Forecast:
shares drop 20%



*The **stock market** demands more...
and the **consumer** demands more*

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China has **4,000+** smart device startups

80%

of these vendors will be eliminated through competition by 2018

The Next Wave of Wearables

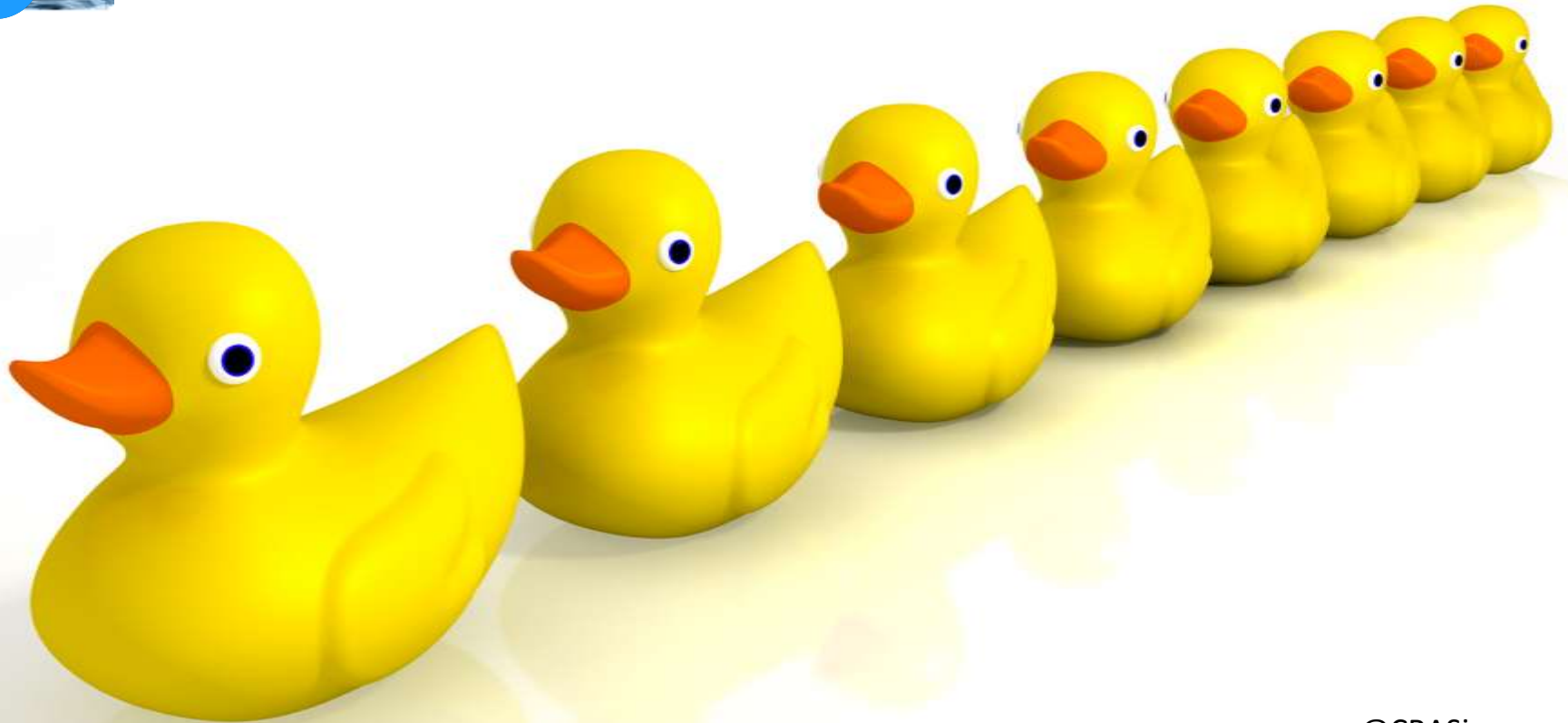
Solutions with the potential to
transform industries

SIMBAND





Conventional Thinking



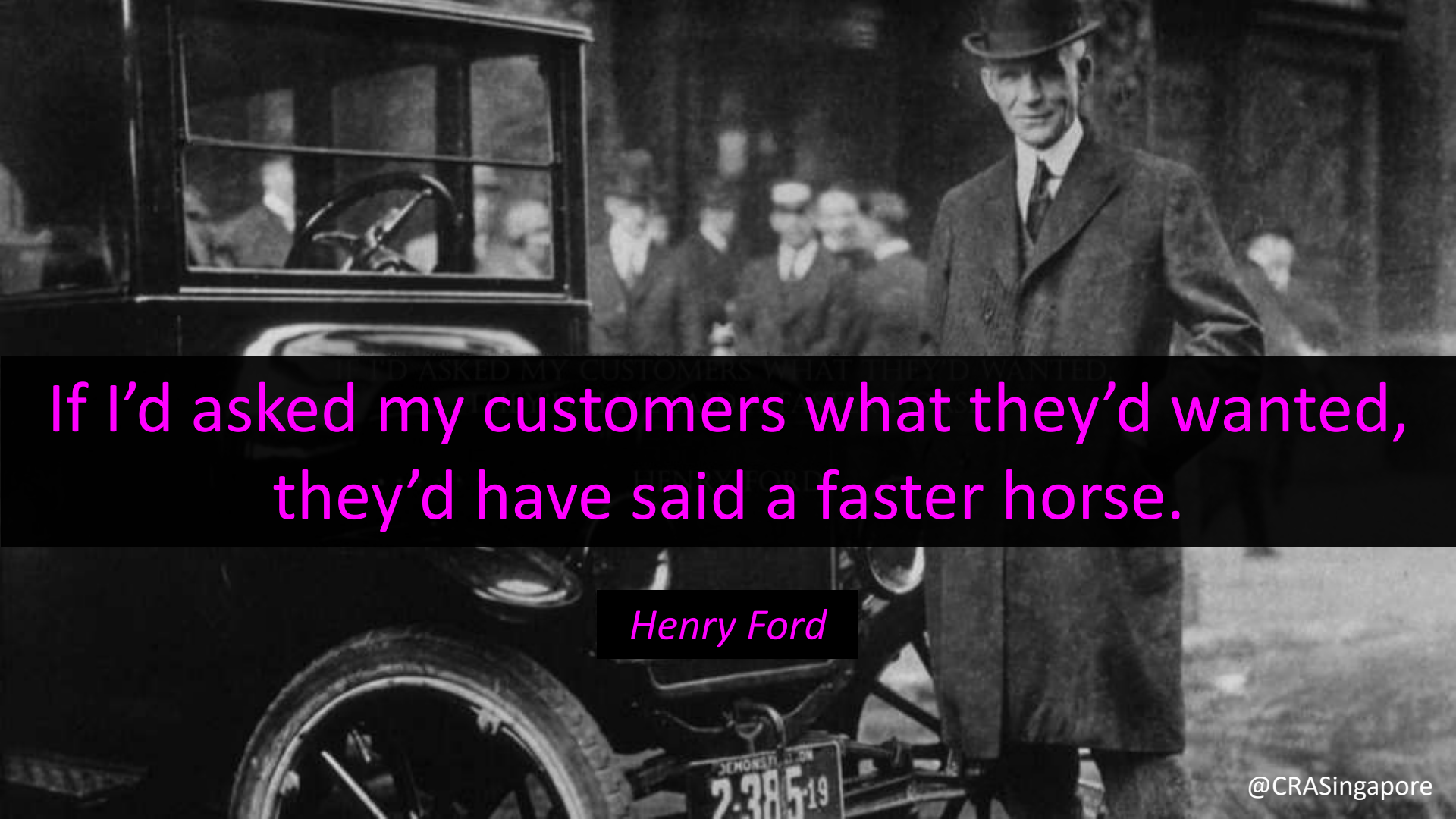
*“We are solving
yesterday’s tasks
with tomorrow’s
technology”*

Scott Jenson, Google





There's too much *Tech for Tech's sake!*

A black and white photograph of Henry Ford standing next to an early 20th-century automobile. He is wearing a dark suit, a white shirt, a dark tie, and a bowler hat. The car is a dark-colored sedan with a visible steering wheel and a license plate that reads "2-385-19". In the background, a group of people in period clothing is watching. A semi-transparent black banner with pink text is overlaid across the middle of the image.

If I'd asked my customers what they'd wanted,
they'd have said a faster horse.

Henry Ford

Technology Transforms the Process



Leverage Wearables for...

- ✓ Predictive Maintenance
- ✓ Time Tracking
- ✓ Health & Safety

Technology Transforms the Bus Model



Technology Transforms the CX



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UNITED COLORS OF BENETTON.

A different approach
changes the discussion



A blurred landscape featuring a road that stretches into the distance. The road is flanked by vibrant green hills and fields. The sky is a deep blue with scattered white clouds. The overall scene conveys a sense of forward motion and progress.

What's **NEXT**



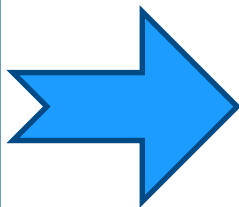
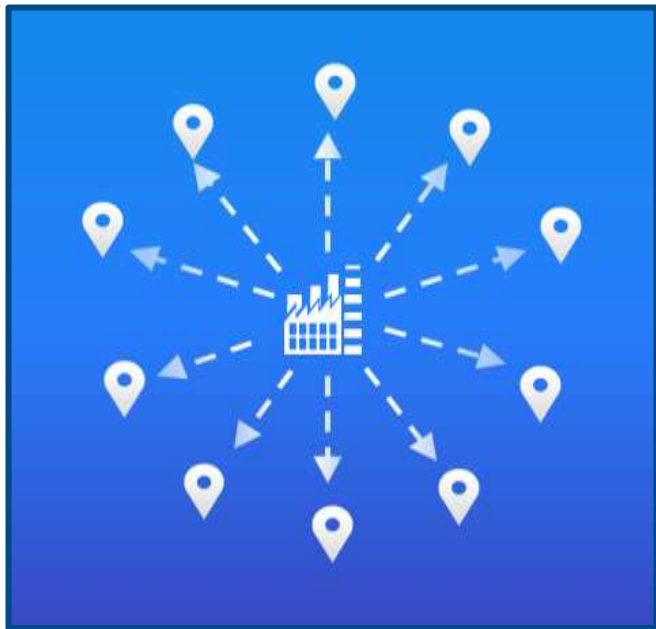
#1

IoT at the Edge

35%

of APeJ IoT-created data will be stored, analyzed & acted upon at the “edge” of the network by 2019

What do you mean by “the edge”?



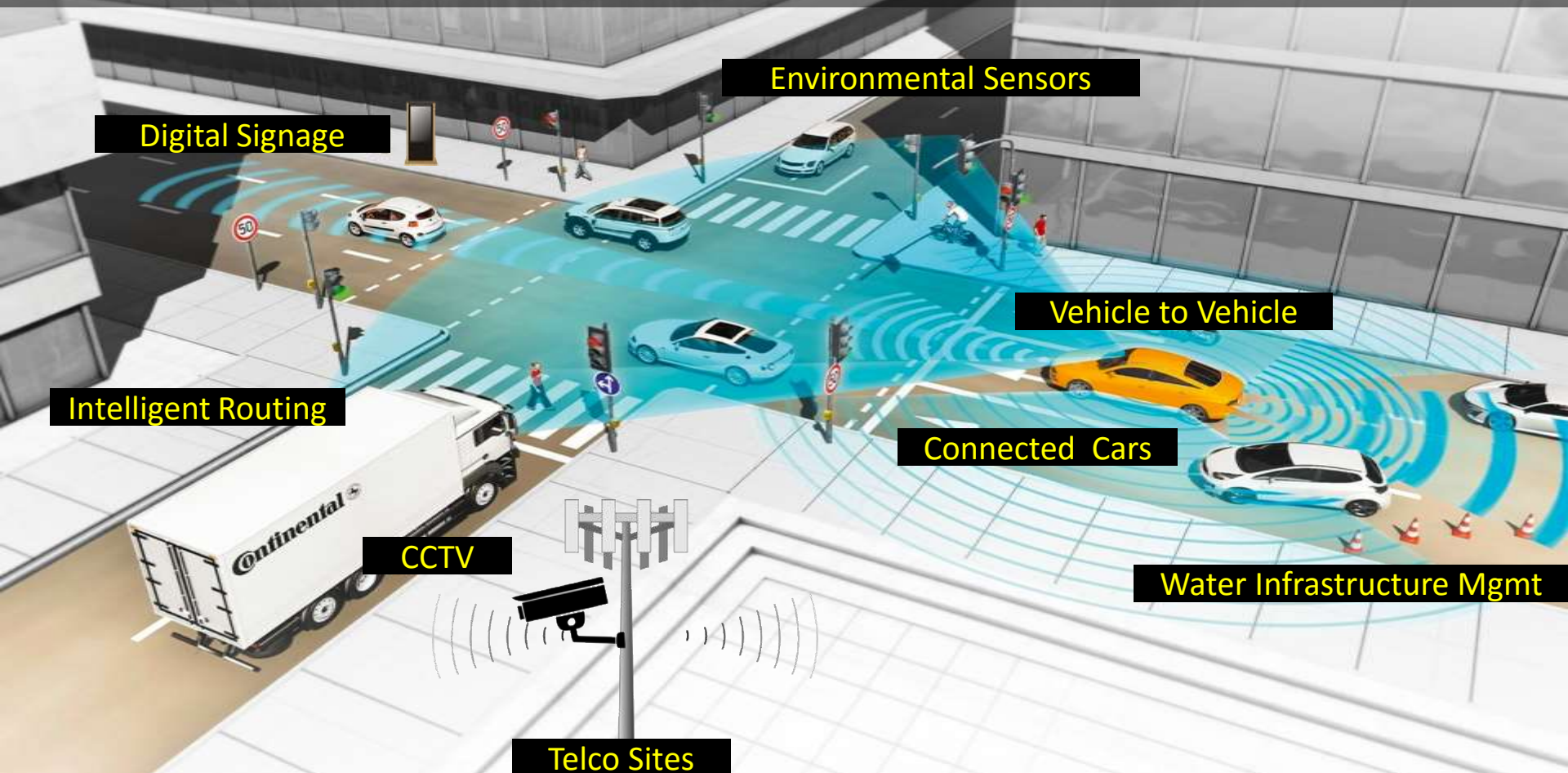
- Higher cost
- Less agile
- Slow process



- Lower cost
- More agile
- Fast process

IoT at the Edge in a City

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Digital Signage

Environmental Sensors

Intelligent Routing

CCTV

Telco Sites

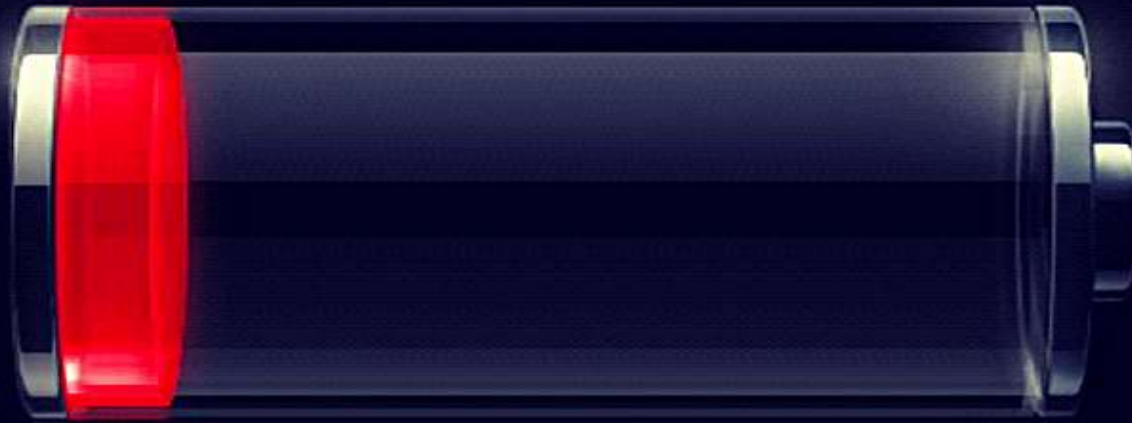
Vehicle to Vehicle

Connected Cars

Water Infrastructure Mgmt

#2

Low Power WANs



The Low Bandwidth Solution-enabler

High Bandwidth Solutions



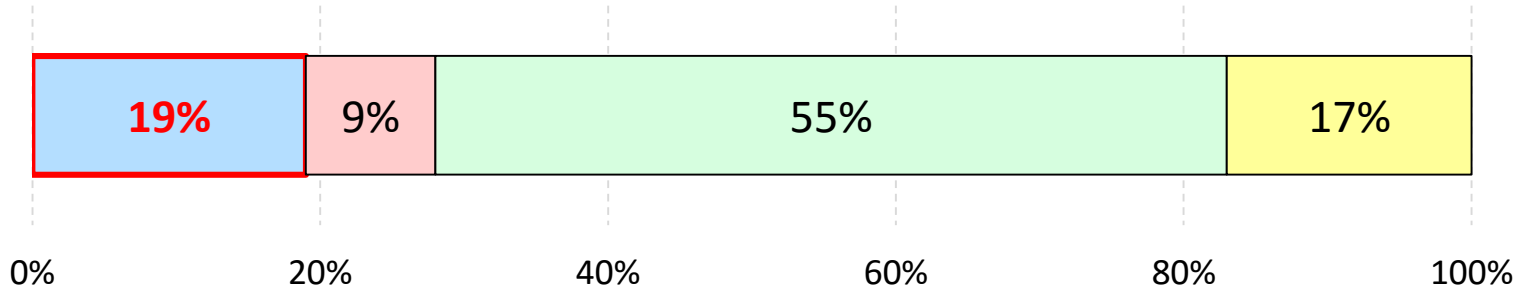
Low Bandwidth Solutions



The Improved Business Case

Smart Meter Costs – SIM-based Solution

- Connectivity
- Hardware
- Software
- Services



2015
SIM-based solutions



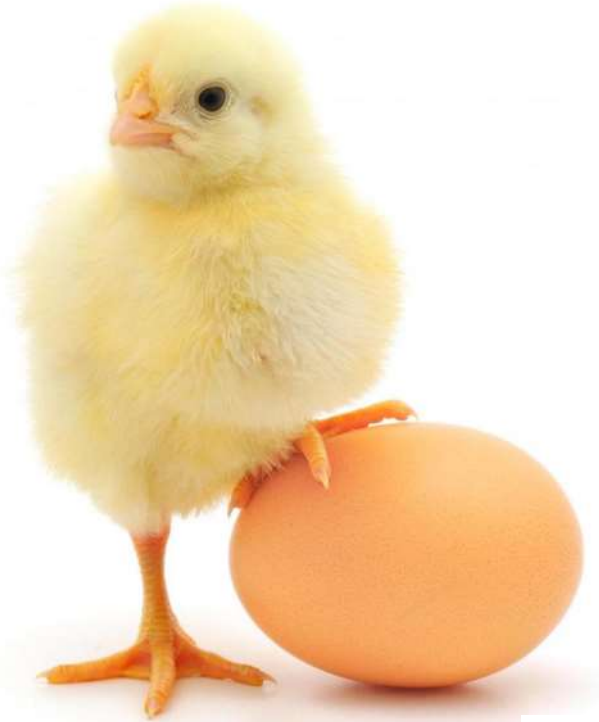
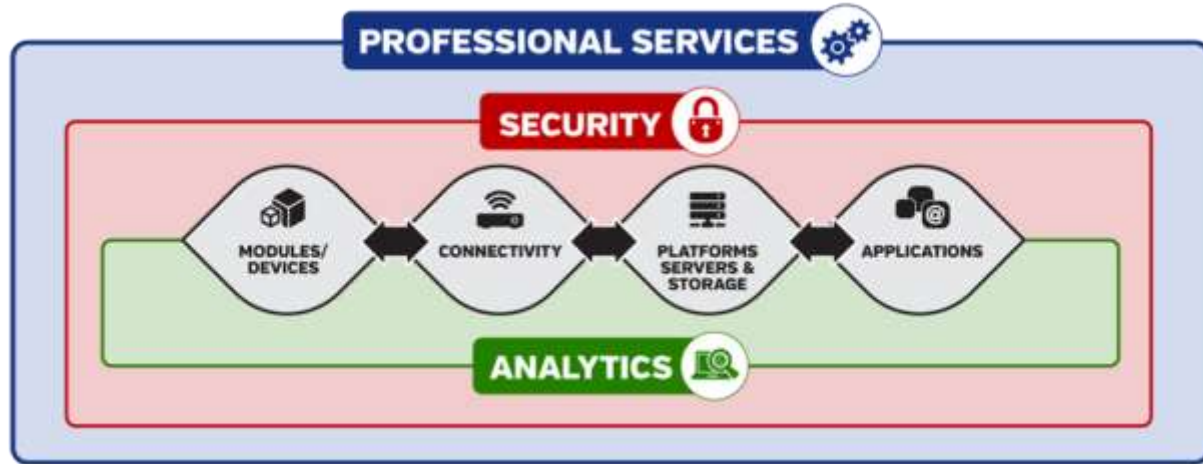
\$12 - \$60
per year

Future
Low Power WAN solutions

\$1 - \$12 per year*
+ potential to reduce hardware,
software & services costs

* Anticipated pricing levels

...but first the **ecosystem** must evolve



SUMMARY



- #1 Below the Surface Innovation
- #2 Bridging the IT/OT Divide



- #1 More Devices, Less Value
- #2 Conventional Thinking



- #1 IoT at the Edge
- #2 Low Power, Wide Area Networks

IoT is a journey...





For **IoT**
to take-off,
we need to
change our
perspective

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