

Mobility in the Enterprise: Trends and Directions with an IoT Focus

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Mobile Business Processes, Methods and Moments

Business Process



Improve process efficiency/effectiveness with mobility

Business moments suggest new models and processes



Extend and evolve processes using business moments



Business Moment

Evolve processes into new business models using business moments



Extend and evolve models using business moments

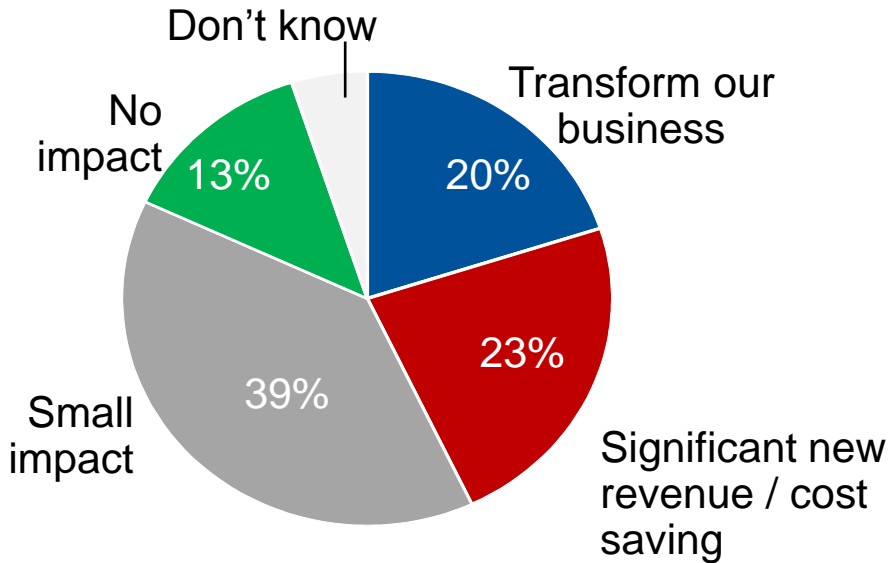
Business Model



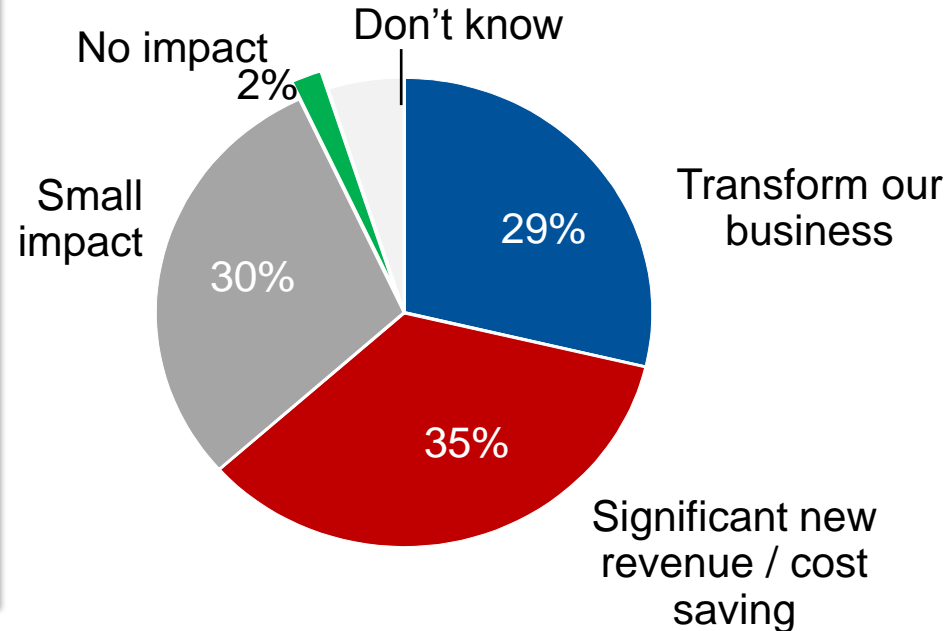
Implement new business models relying on mobility

How & When Will IoT Impact You?

Short Term (over next 3 years)



Long Term (more than 5 years)



October 2014 Gartner Research Circle Survey, n=463

Key Issues

What will be the key mobile and wireless technology, and market trends through 2019?

How will corporations choose and use mobile technology, services, and tools to support customers and employees?

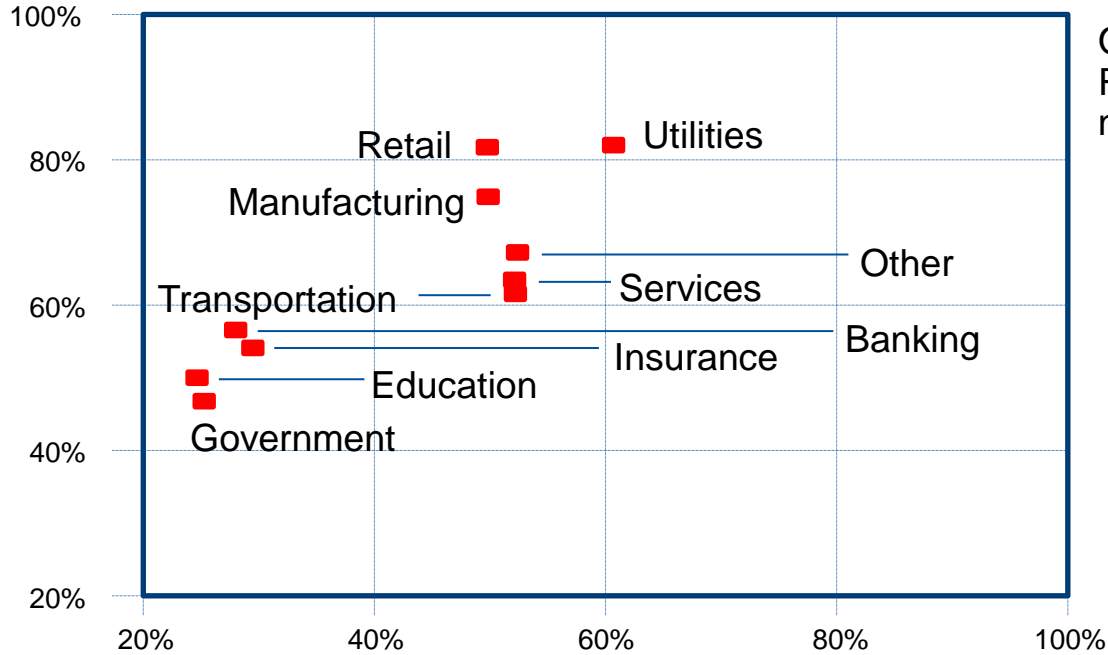
Key Issues

What will be the key mobile and wireless technology, and market trends through 2019?

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Industry Impact (selected industries only)

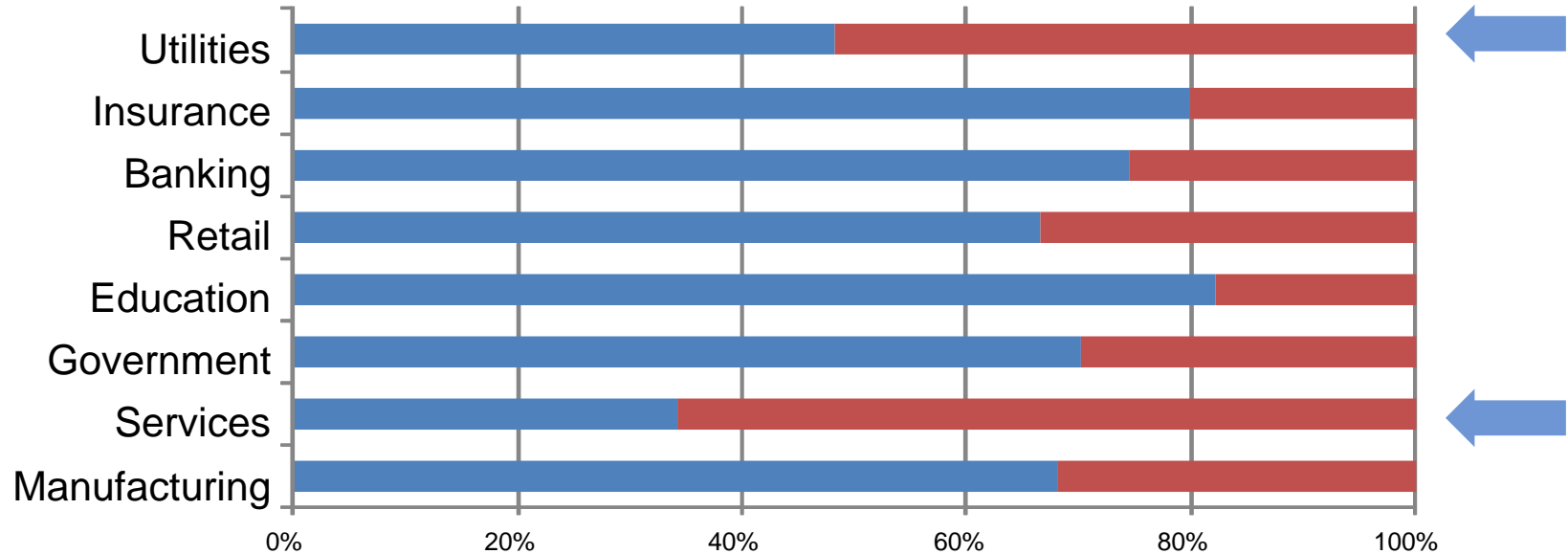
Percentage of respondents expecting
the IoT to have a major impact in the
long term – 5 years or more



October 2014 Gartner
Research Circle Survey,
n=463

Percentage of respondents expecting the IoT to have a major impact
in the **short** term – 3 years or less

Executive understanding Is Vision The Limiting Factor?



Respondents were asked to assess how well they felt their senior executives and business unit leaders understood the potential of IoT

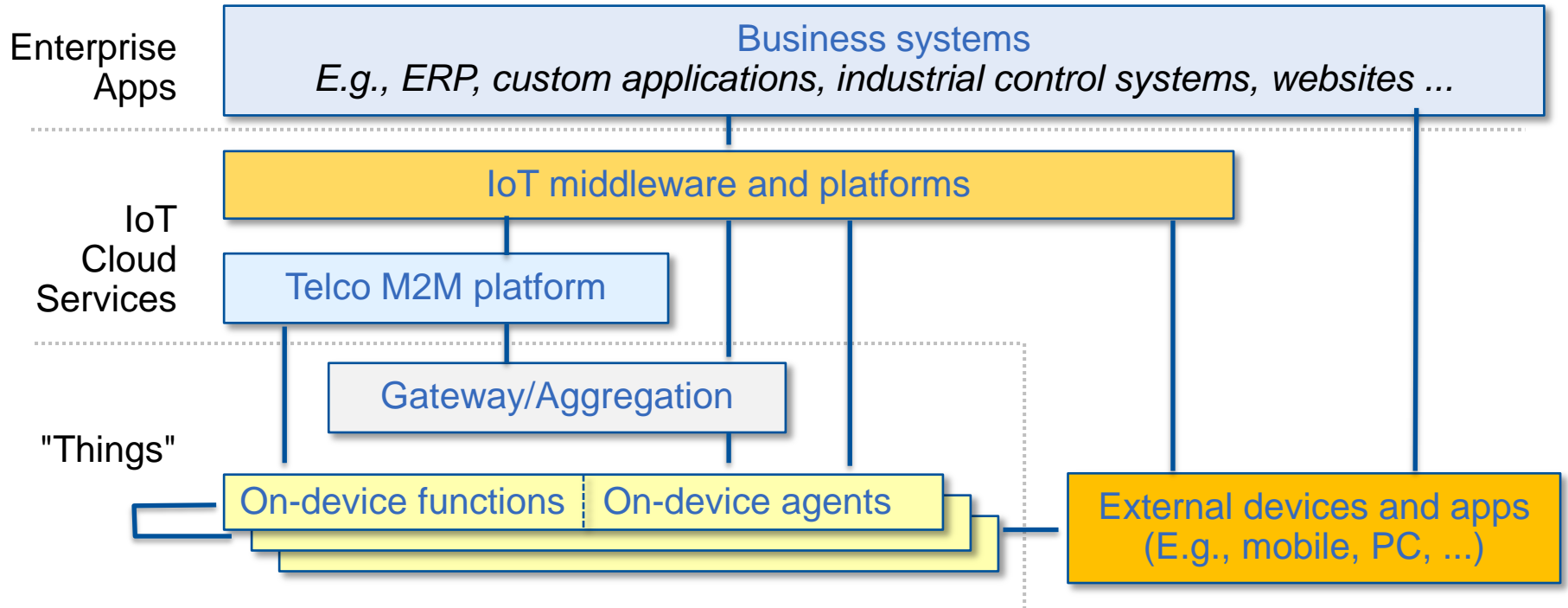
■ Little or none
■ Good or excellent

October 2014 Gartner Research Circle Survey

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IoT Demands New Architectures



Wireless Networks for the IoT

No Technology or Architecture Wins

	Good	Poor
Endpoint HW cost	Bluetooth < \$1	LTE ≈ \$50
Bandwidth	Wi-Fi = 1Gbps	Sigfox ≈ 10s bps
Range	Cellular ≈ Nationwide	Bluetooth ≈ 10M
Capacity/Scalability	Weightless ≈ 1,000s per AP	Wi-Fi ≈ 50 per AP
Battery life	ZigBee ≈ Years	LTE ≈ Days / weeks
Operational cost	Wi-Fi = \$0	3G >≈ \$5 per month

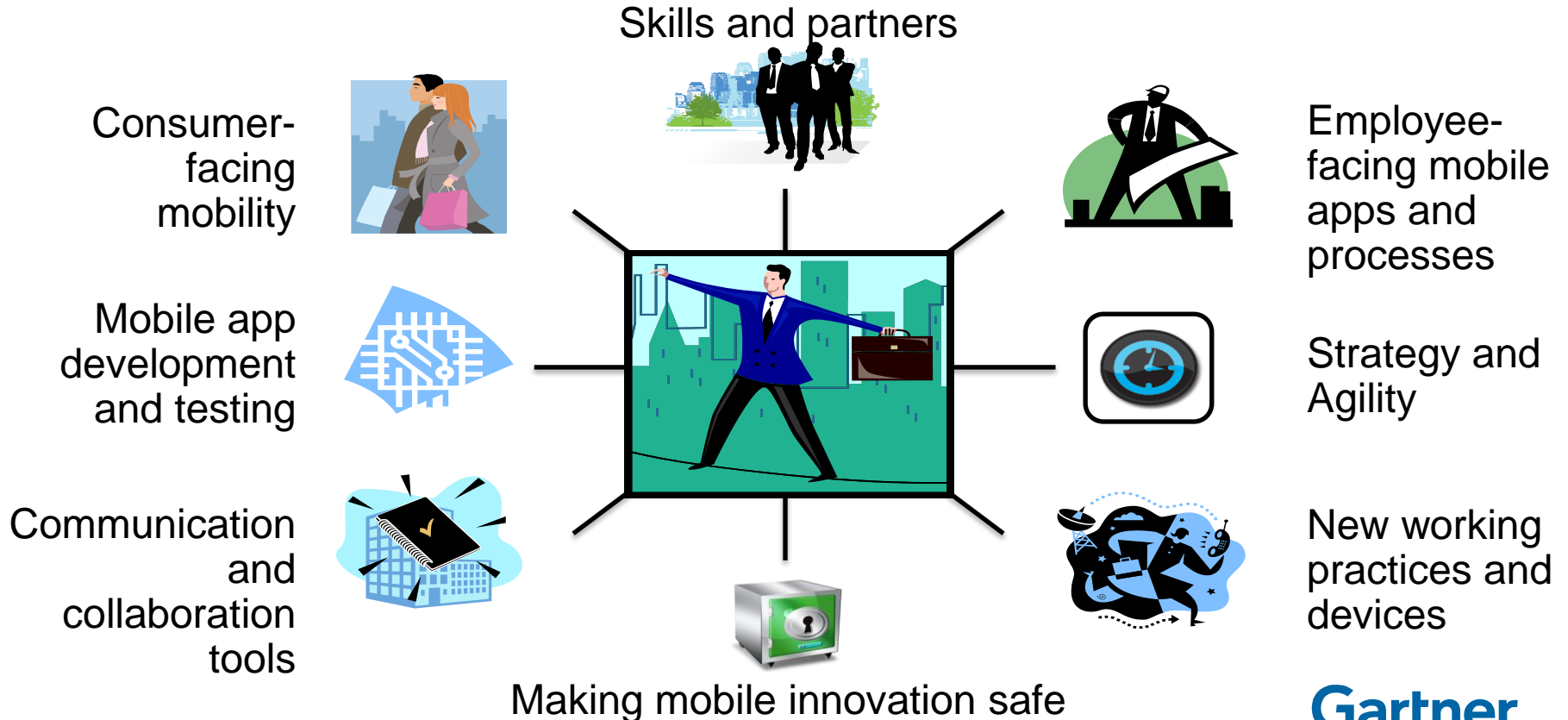
High level network technology characteristics, costs are illustrative and will depend on the application

Key Issues

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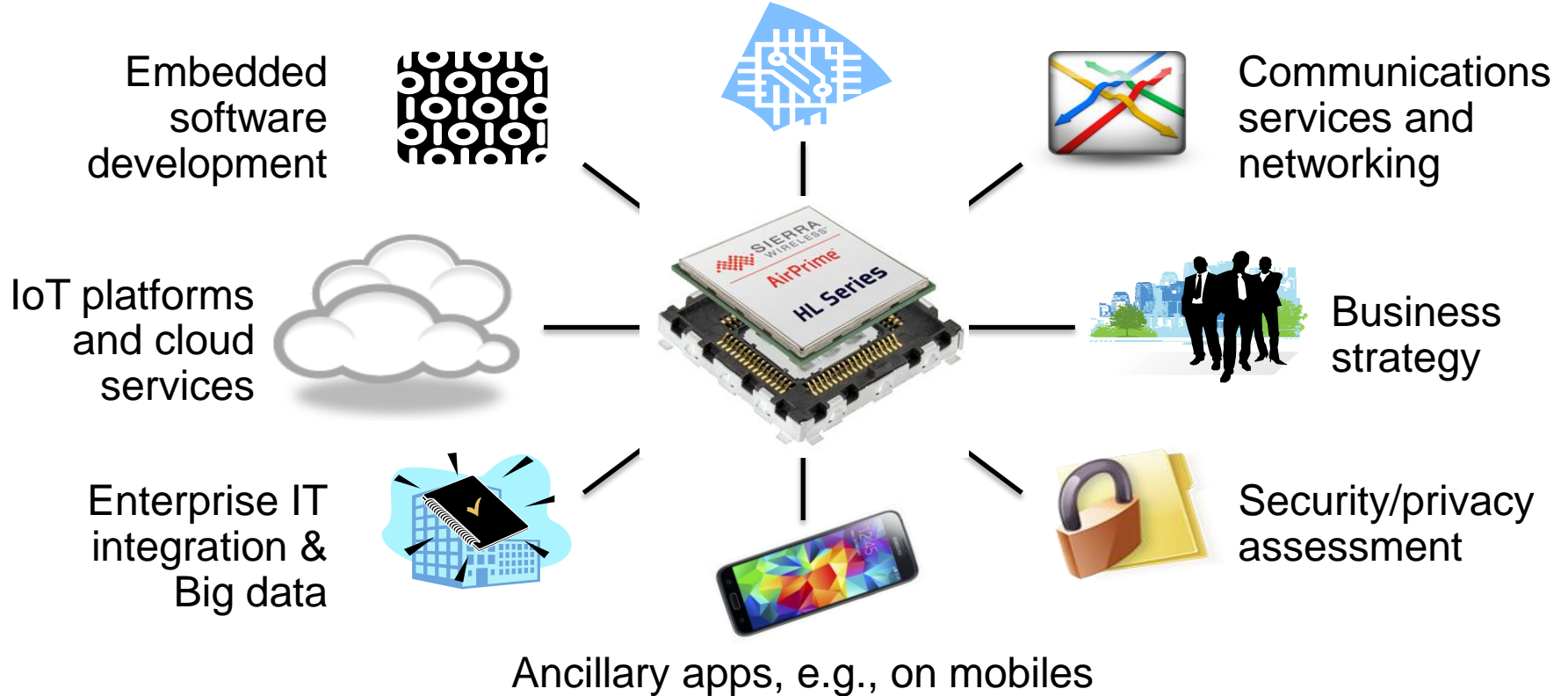
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The CIOs Mobile Challenges



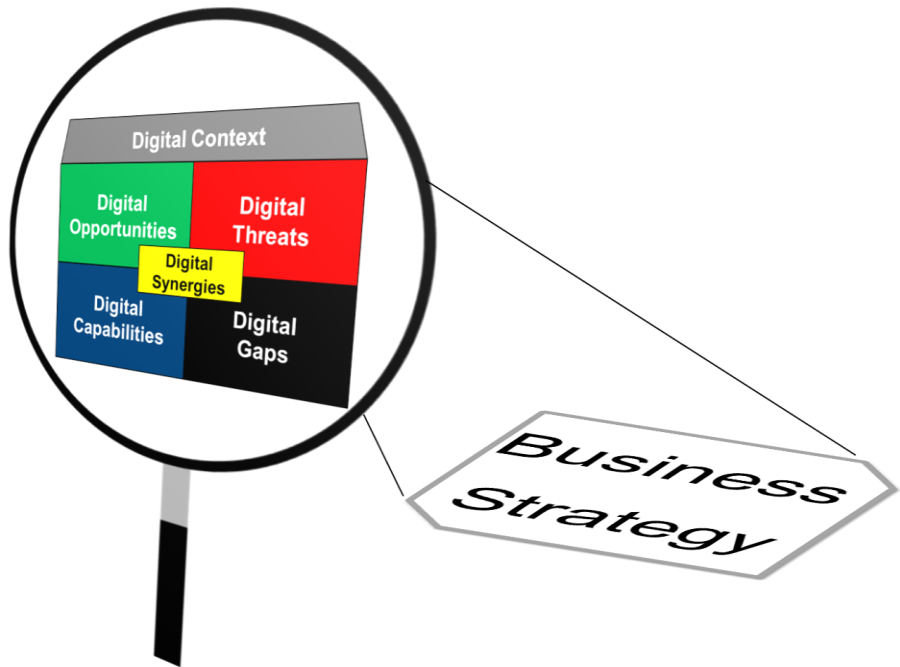
What Do You Need to Master the IoT?

Hardware design and integration



Create an IoT Vision as part of a Digital Business Strategy Using Gartner's IoT FW

IoT as part of a Digital Business Strategy



Assess your Starting Points

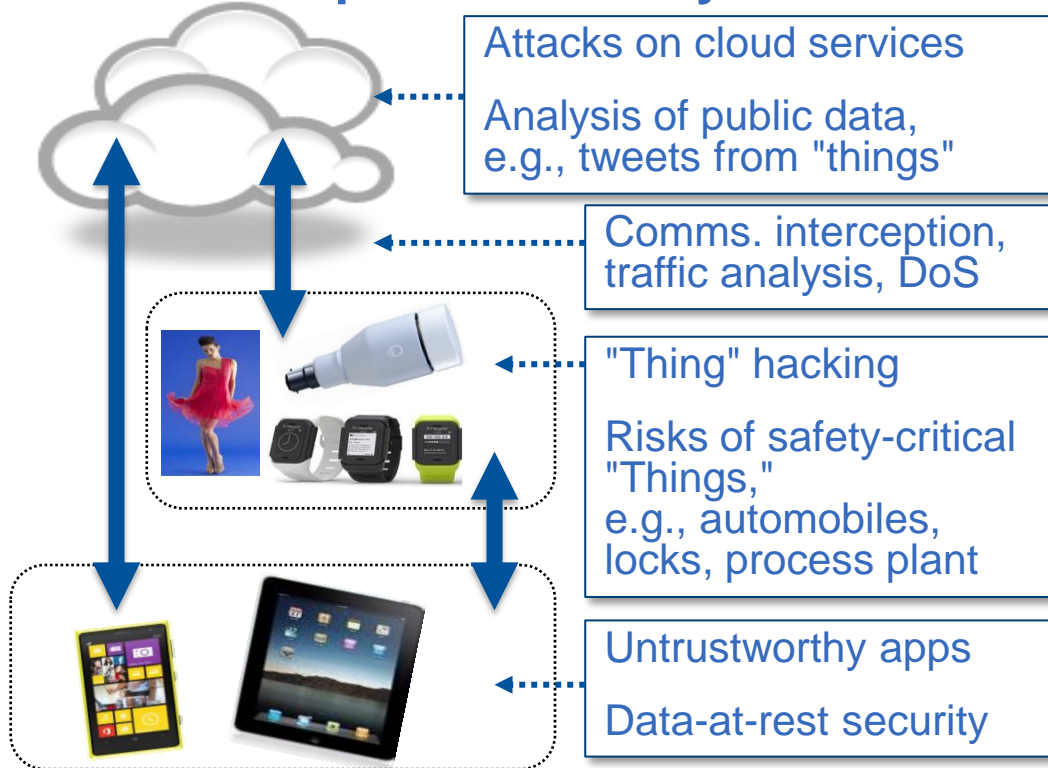
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AB	AI	AA Equipment company with long time telemetry experience
IB	II Manufacturing company with Telemetry experience	IA Vending Machine Company with Evolved Vision
BB Typical Company getting started	BI Company in PoC mode	BA
Basic	Intermediary	Advanced

Vision **Gartner**

Think About Privacy and Security From Day 1

Examples of security risks



- "Things" know sensitive information, e.g., is your house occupied? Are you sick?
- "Things" use platforms that can't be secured and can't perform complex computation.
- Hijacking "things" has value, e.g., door locks.
- Wireless connectivity is ubiquitous but unsecure.
- Many "things" and apps will be developed by innovators with weak security understanding.
- Ancillary platforms and services pose security risks.

Action Plan for IT Leaders and CIOs

Monday Morning:

- *Imagine* ways in which the IoT will transform your business. If you can't find any, then you're probably not trying hard enough.

Next 90 Days:

- *Create* a vision and strategy to communicate the potential of the IoT to your business and the role that the IT organization can play.
- *Seek* opportunities to participate in IoT projects and pilots.
- *Identify* architecture and infrastructure changes that will be required to support the IoT.

Next 12 Months:

- *Familiarize* yourself with key IoT concepts and encourage staff to experiment with low-cost IoT technologies.

Recommended Gartner Research

- [Survey Analysis: The Internet of Things is a Revolution Waiting to Happen](#)
Nick Jones, Leif-Olof Wallin and others (G00272799)
- [Forecast: Internet of Things, Endpoints and Associated Services, Worldwide, 2014](#)
Peter Middleton and others (G00259115)
- [The Internet of Things Will Demand New Application Architectures, Skills and Tools](#)
Nick Jones (G00262905)
- [Top 10 Mobile Technologies and Capabilities for 2015 and 2016](#)
Nick Jones (G00260239)