Is your favourite stock IoT ready?

How companies should prepare for the next information revolution

July 6 2017

View the full webinar @ http://bit.ly/2uyDxi0

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Insight for Technology Investors

Michael Horne

Deputy GM, IoT, ARM

Francois Meunier

MD Technology Research, Morgan Stanley

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Insight for Technology Investors

Michael Horne

Deputy GM, IoT, ARM

- Started career in EDA and chip design
- Later VP Business Development for ARM Physical IP
- Now leading ARM's entry into IoT cloud services

The Information Profit Margin

IoT gets deployed when:

Value of Data > Cost of Data

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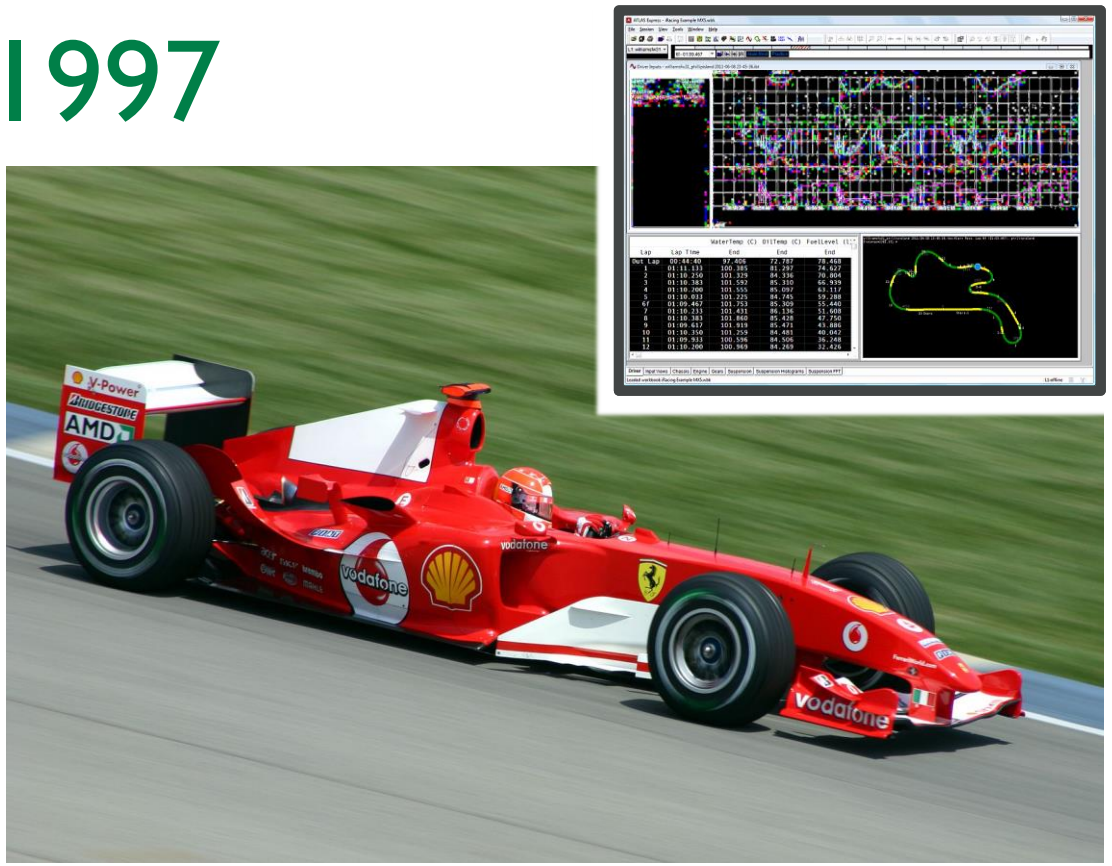
The Information Profit Margin

1997



Early machine-to-machine systems used proprietary technology

- Bespoke and application-specific
- Expensive to design and implement
- Suitable only for high value assets. Does not scale to high volume markets

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The Information Profit Margin

2017

Modern IoT systems are based on open standards and interfaces

- Competition encourages products that are innovative and affordable
- Components from different vendors are simple to integrate into complex systems
- Can scale to millions of low-cost devices

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Preparing for an IoT project

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Two routes to higher profits

Boost revenues

- Transform business model
- Enhance customer loyalty
- Extend order book
- Personalize products
- Monetize data and analytics

Increase efficiency

- Reduce waste
- Improve asset turn
- Eliminate accidents
- Inform investment decisions
- Reduce risk

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Identify the business objective

Create a new product or service

Optimize a process

Analyze customer behaviour

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Identify the data you need to achieve your goal

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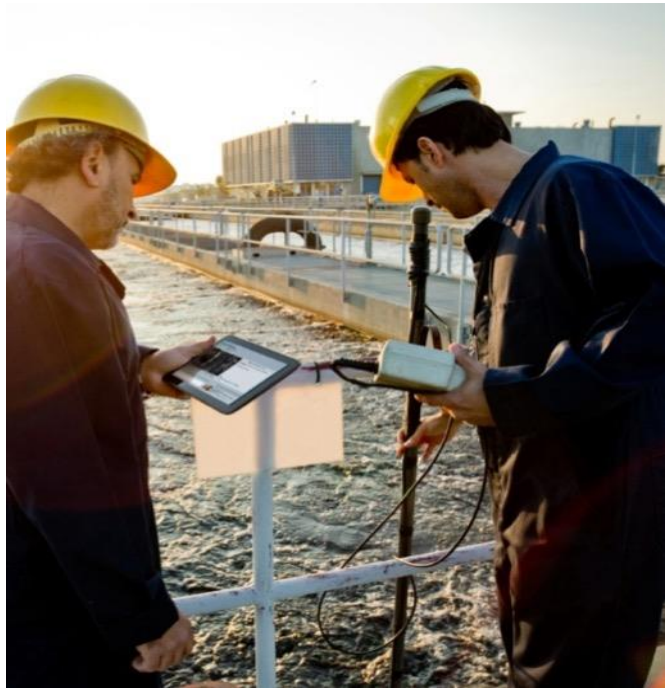
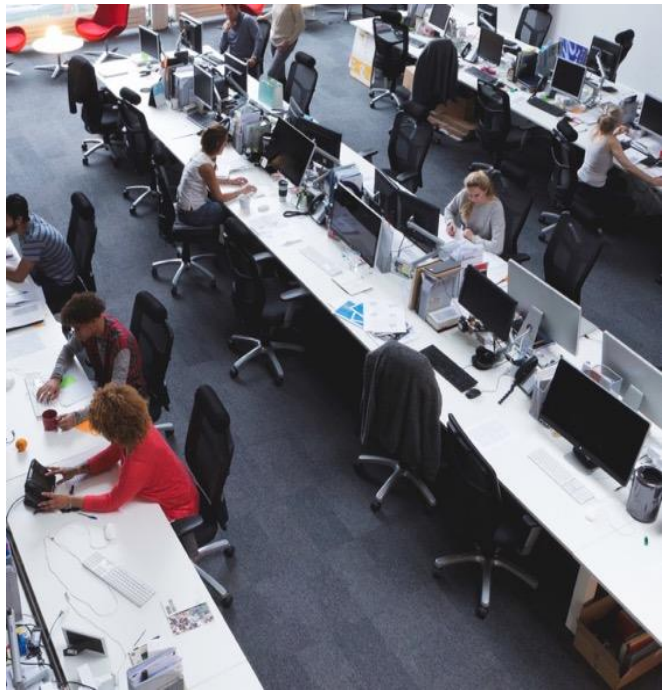
Avoid the pitfalls that will hinder scalability

```
Software:
OEM_OS

Version:
1.0

Release Date:
13 Jan 2013
```

Unconfigurable devices



Proprietary protocols



Data silos

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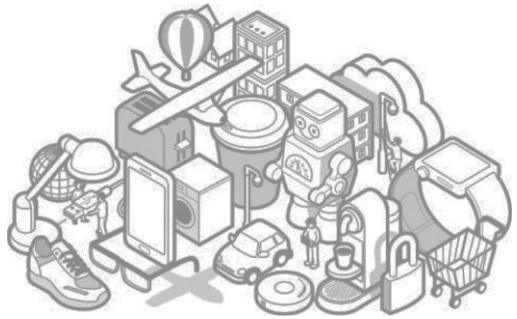
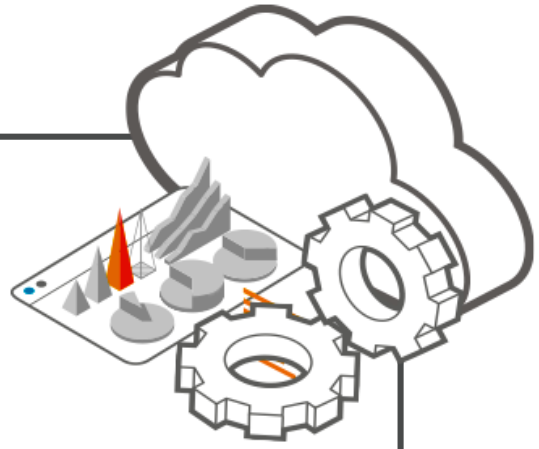
Select your technology partners

Device software



- IoT device application
- Device OS
- Device silicon and hardware

Cloud services



- Update
- Analytics and rules
- App management
- Provision
- Web servers
- Scale-out
- Connect
- Load balancing
- Data storage

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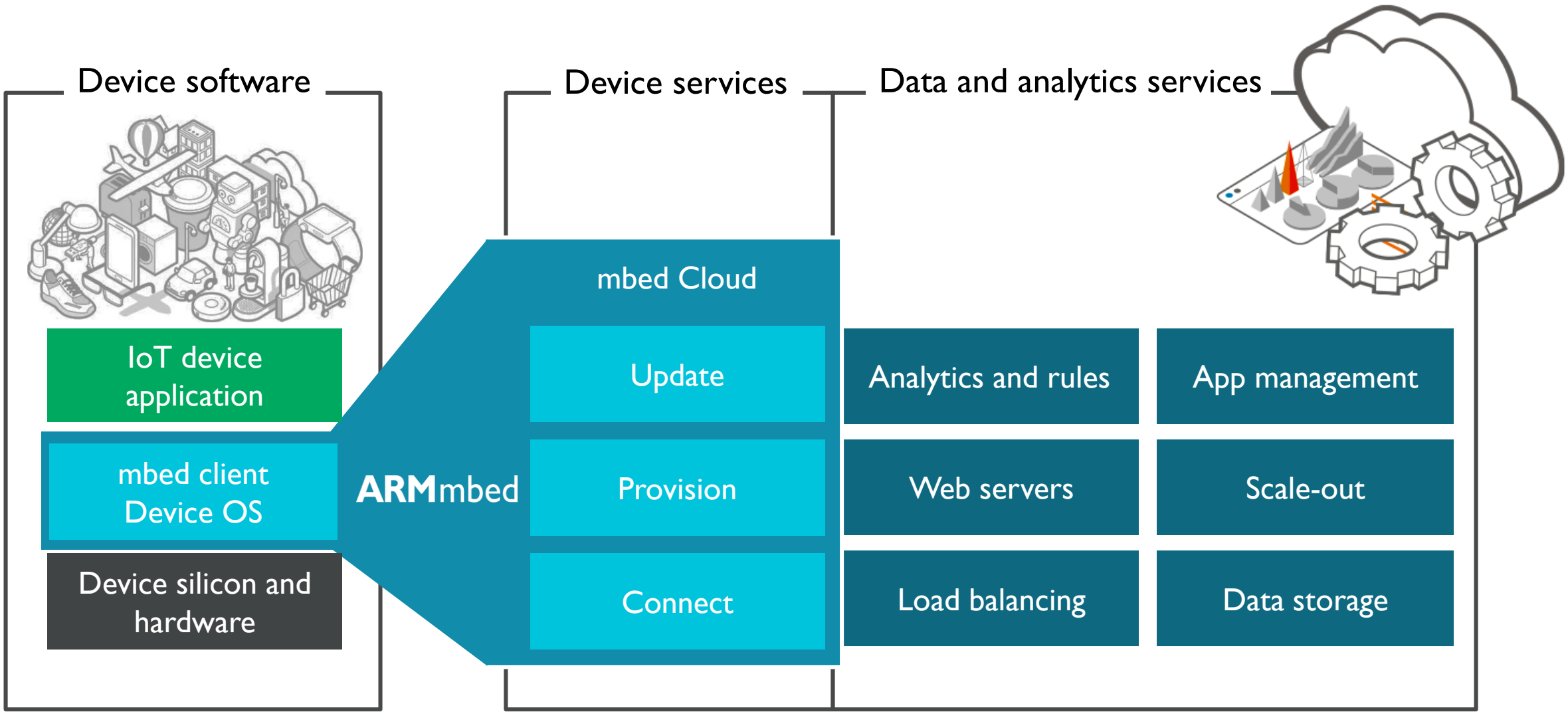
Select your technology partners



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How to identify an ‘IoT-ready’ company

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Questions for the CEO

1. Is IoT as an opportunity or a threat?
2. What new information could increase your profit?
3. What is your company doing to implement IoT?
4. How far is your company prepared to scale IoT?

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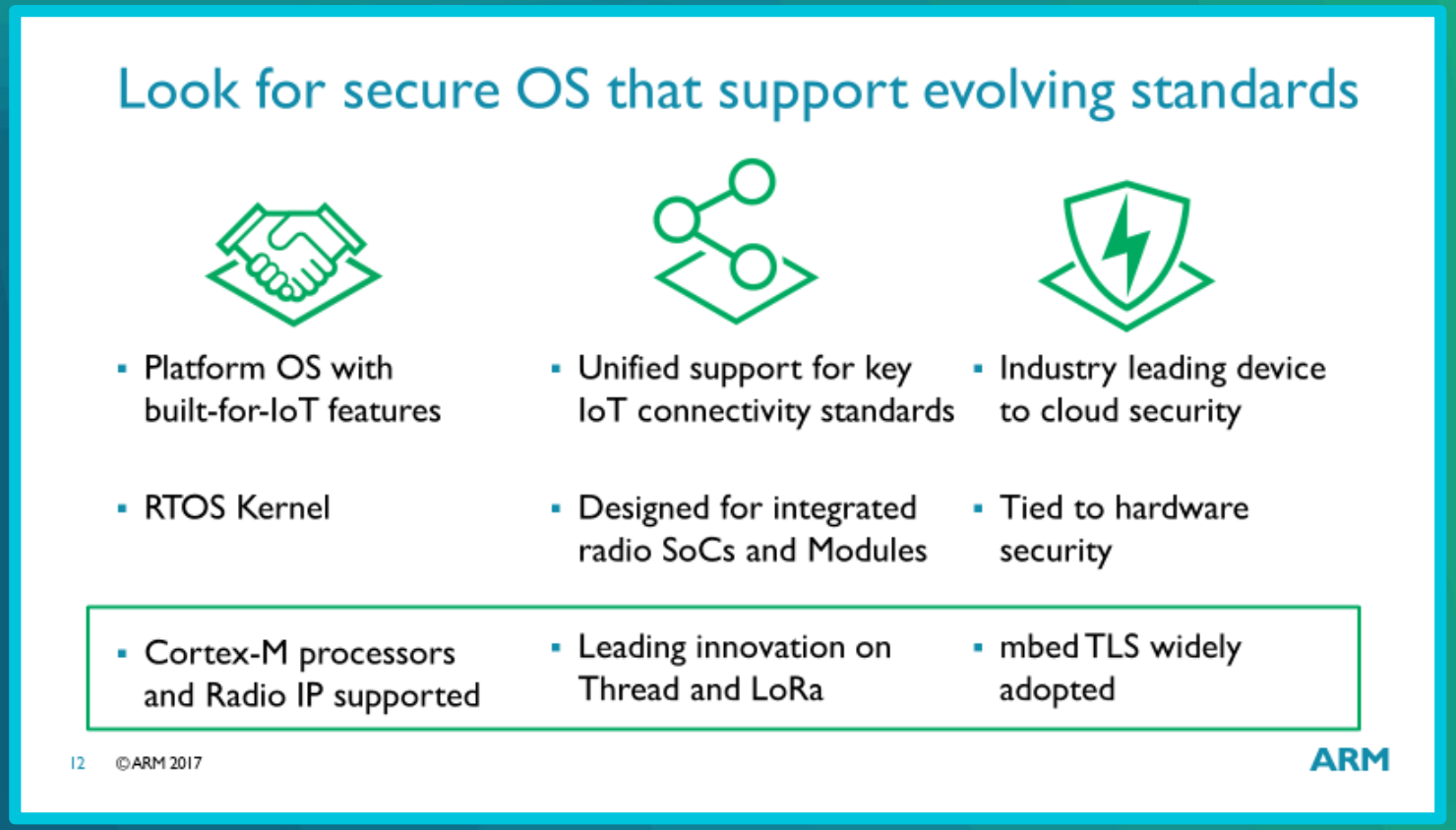

IoT devices can be in the field for up to ten years. Designers should use future-proof software that can evolve over time

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IoT designers can use standard hardware and software components to build unique systems

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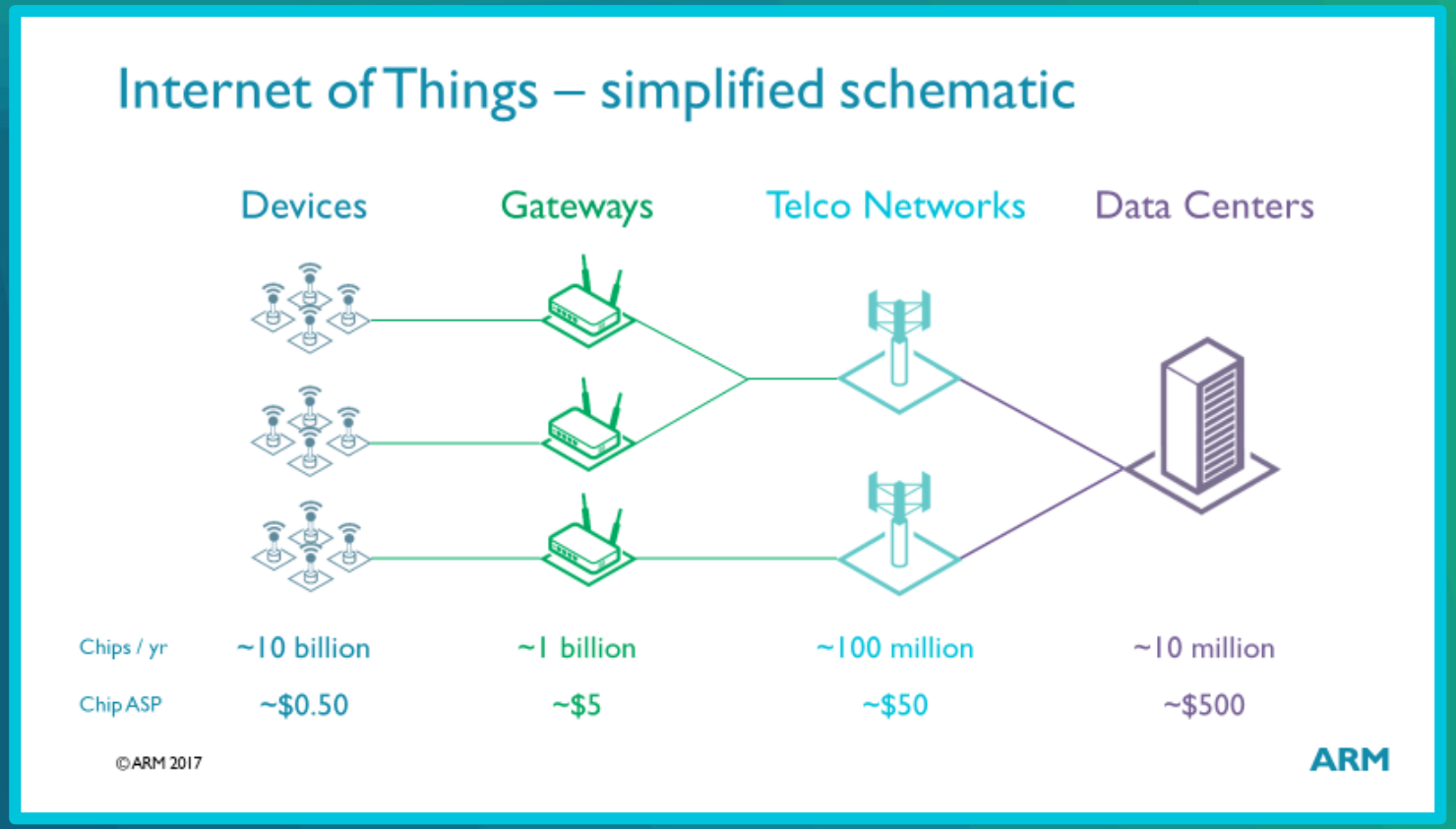

Every IoT system involves data collection by 'things',
data transport via networks and data processing in servers

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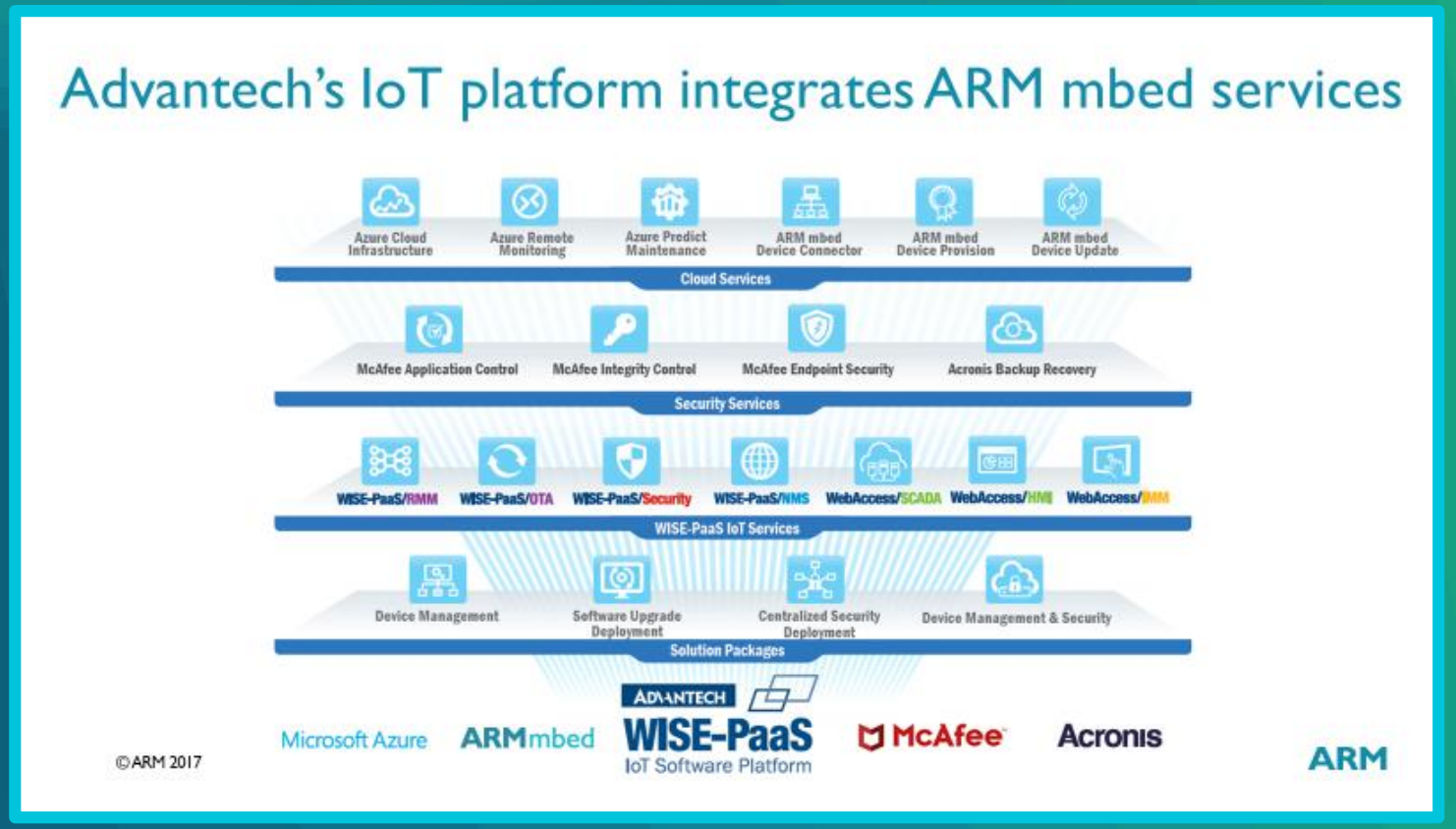

IoT systems integrate multiple software components from multiple vendors

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Two routes to higher profits

Boost revenues	Increase efficiency
▪ Transform business model ▪ Enhance customer loyalty ▪ Extend order book ▪ Personalize products ▪ Monetize data and analytics	▪ Reduce waste ▪ Improve asset turn ▪ Eliminate accidents ▪ Inform investment decisions ▪ Reduce risk

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IoT enables the transformation of business models. This brings opportunities for revenue growth, and the threat of disruption

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Modern executives should understand the value of information

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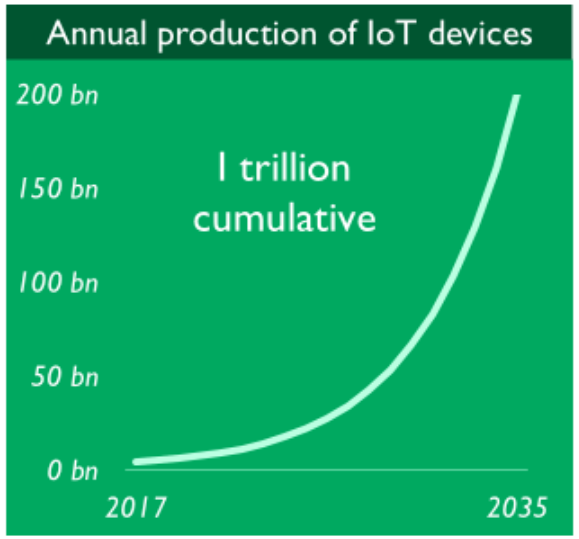
A trillion devices, a trillion dollars per annum by 2035



- Deployment of IoT systems adds **3% to global output by 2035** equivalent to **$5 trillion pa**
- Spending on IoT system technology to reach **$1tn pa** by 2035
- Cumulative spending on IoT modules between 2017 and 2035 surpasses **$750bn**

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The information revolution will redefine all industries

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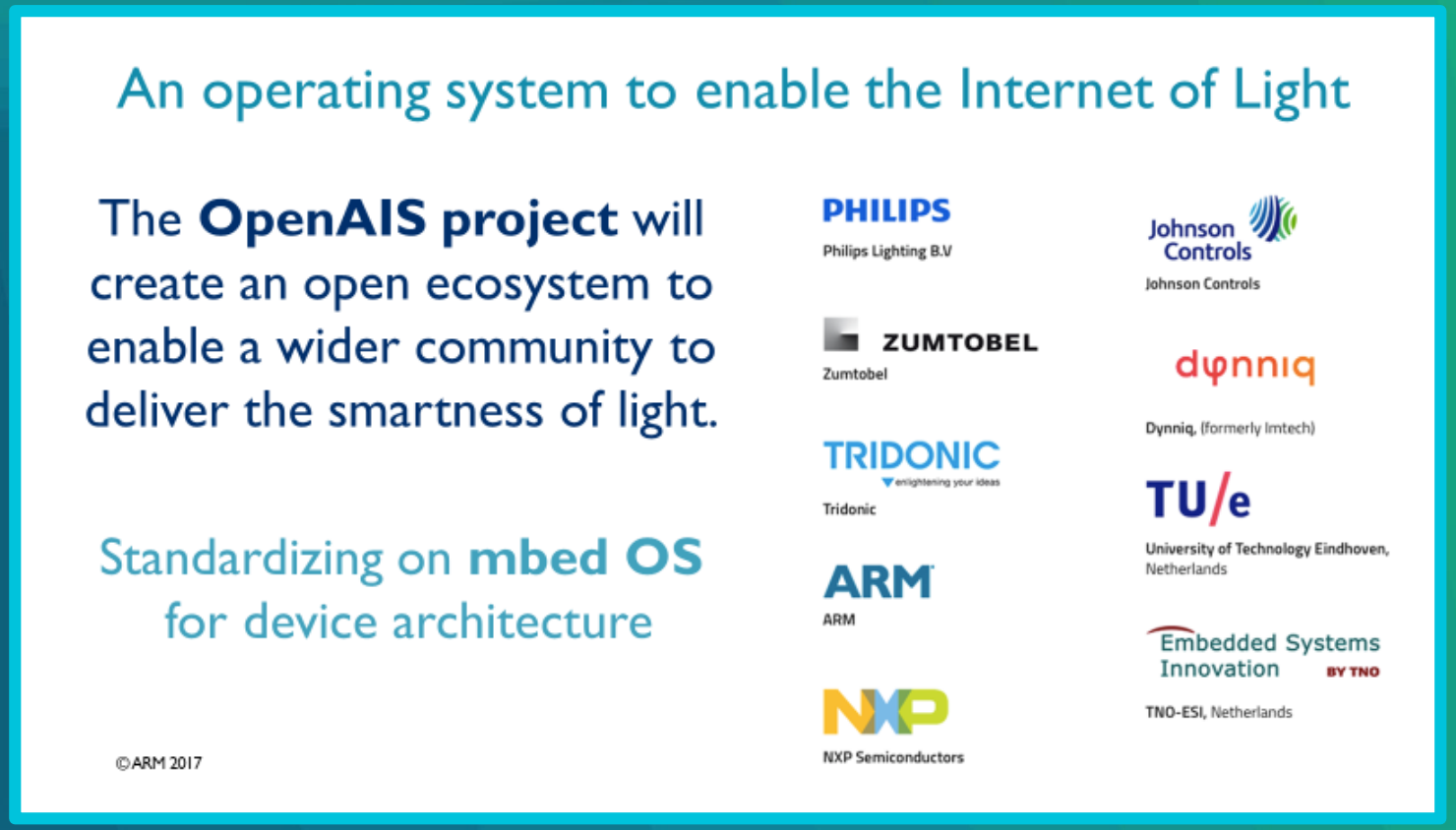

ARM mbed OS helps OEMs design IoT products with low-cost, power-efficient compute and connectivity

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ARM mbed Cloud services helps companies scale out secure and cost-effective IoT systems

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