

The Internet of Things is Fueling the Digital Transformation of Industry

Seven Industrial Internet of Things Predictions for 2017 and Beyond

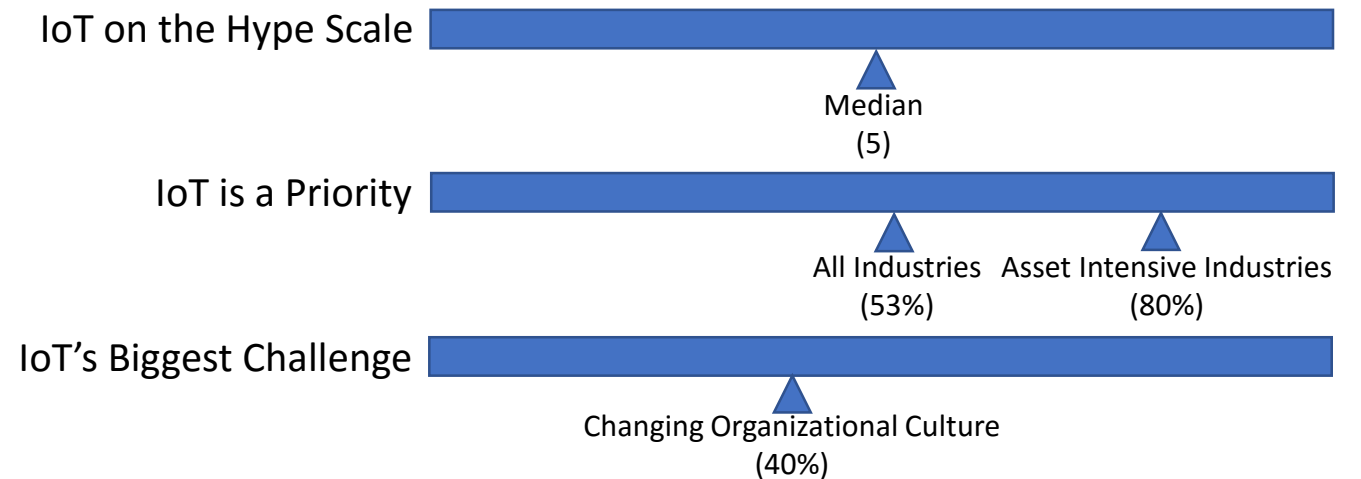
August 3, 2017

Predictions in August?



Rapid Growth in Times of Uncertainty

- High expectations
- Fast growth
- Some reservations
- Uncertainty



Source: BCG



Rapid Growth in Times of Uncertainty

The Industrial Internet of Things (IIoT) is enabling and accelerating the convergence of three key technology and business model shifts that are fueling the digital transformation of every industrial enterprise:

- **Connectivity.** The number of connected devices and mobile devices is growing at an increasingly faster pace emanating massive amounts of real-time information that enables deep insight about themselves and the environment around them.
- **Cloud Computing.** After years of hesitation, cloud technology is finally becoming a mainstream business platform and a growth engine. New information systems and business operation constructs can be deployed and scaled quickly and cost-effectively as connected assets and mobile devices deliver domain master data

2017 and Beyond: Seven Predictions

<http://joebarkai.com/seven-industrial-iiot-predictions>

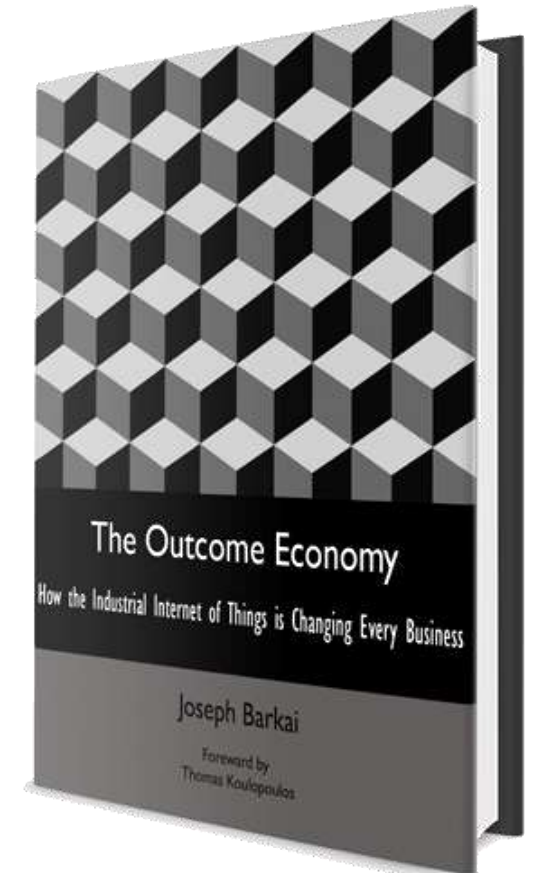


1. From Connectivity to Evidence-Based Business Outcomes

- The Outcome Economy
 - Connected devices, enable ...
 - New business and customer engagement models, drive ...
 - User-defined outcomes
- Artificial intelligence, machine learning and predictive analytics face real-world challenges

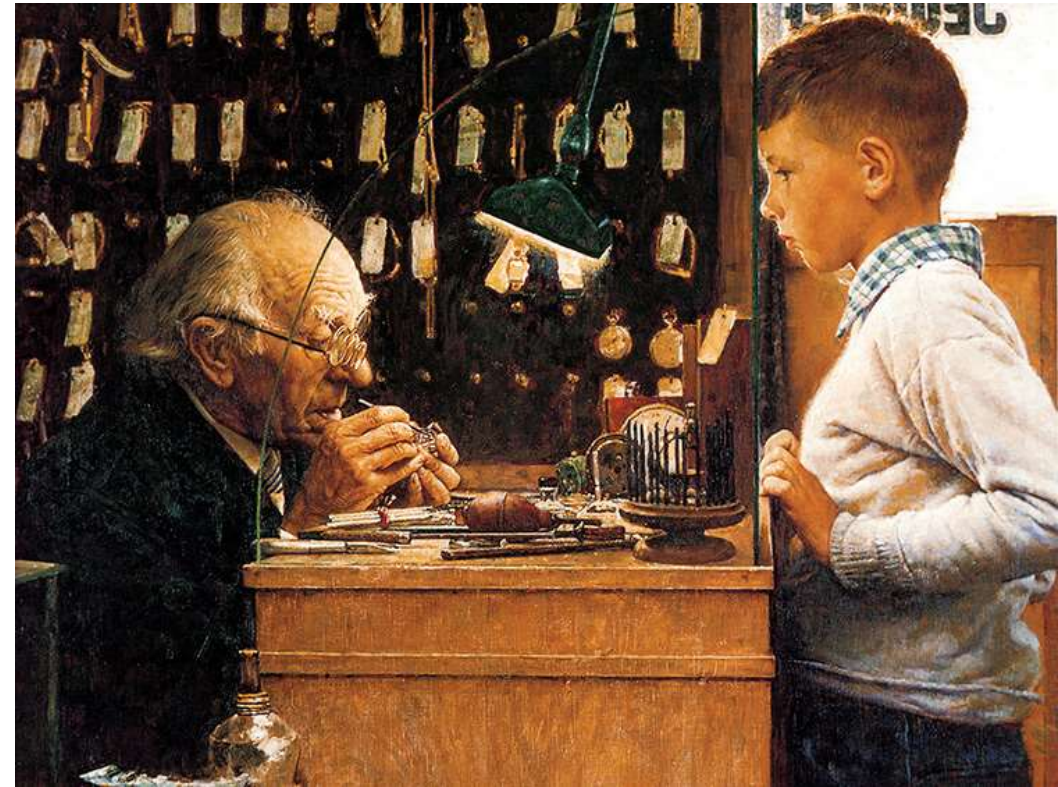
“ People do not want a quarter-inch drill bit; they want quarter-inch holes.

—Theodore Levitt



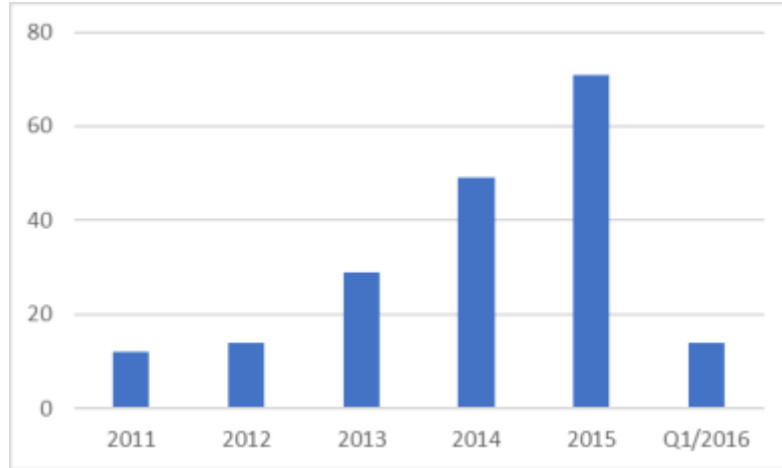
2. Accelerated Growth Leads to Shortage of Critical Skills

- Embedded software development
- Cybersecurity
- Data science
- Supply chain innovation
- Business transformation



3. Software Defects and Vulnerabilities Linger

Recall Campaigns for Software Update

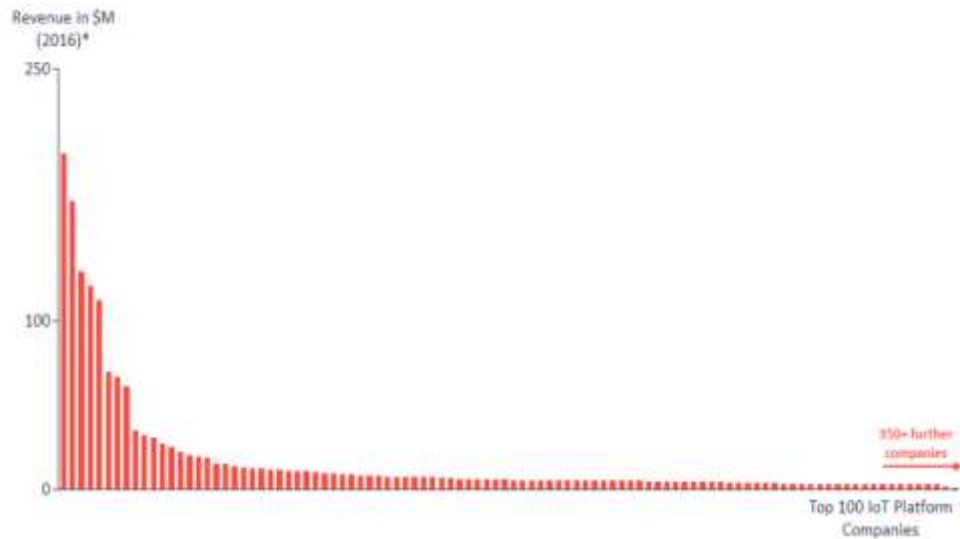


Source: J.D. Power

Transition from ad-hoc implementations to standards-based platforms and secure cloud infrastructure



4. IoT Platform Market Shakeout Begins



Source: IoT Analytics, 2017

- Acquisitions and fallout
- Poorly-vetted investments and partnerships
- Cloud threats, ERP opportunities
- Biggest losers: Telcos

5. IoT Semiconductor Industry: Giants at Play

- Next market expansion opportunity
- New sensor and edge device technologies
- Vertical market penetration
- Further demand for skills



6. Market Leaders Are Members of a Dynamic Ecosystem

- Vertical? Horizontal? Cross-domain!
- Platform:
 - Collaboration
 - Governance
 - Data rights management

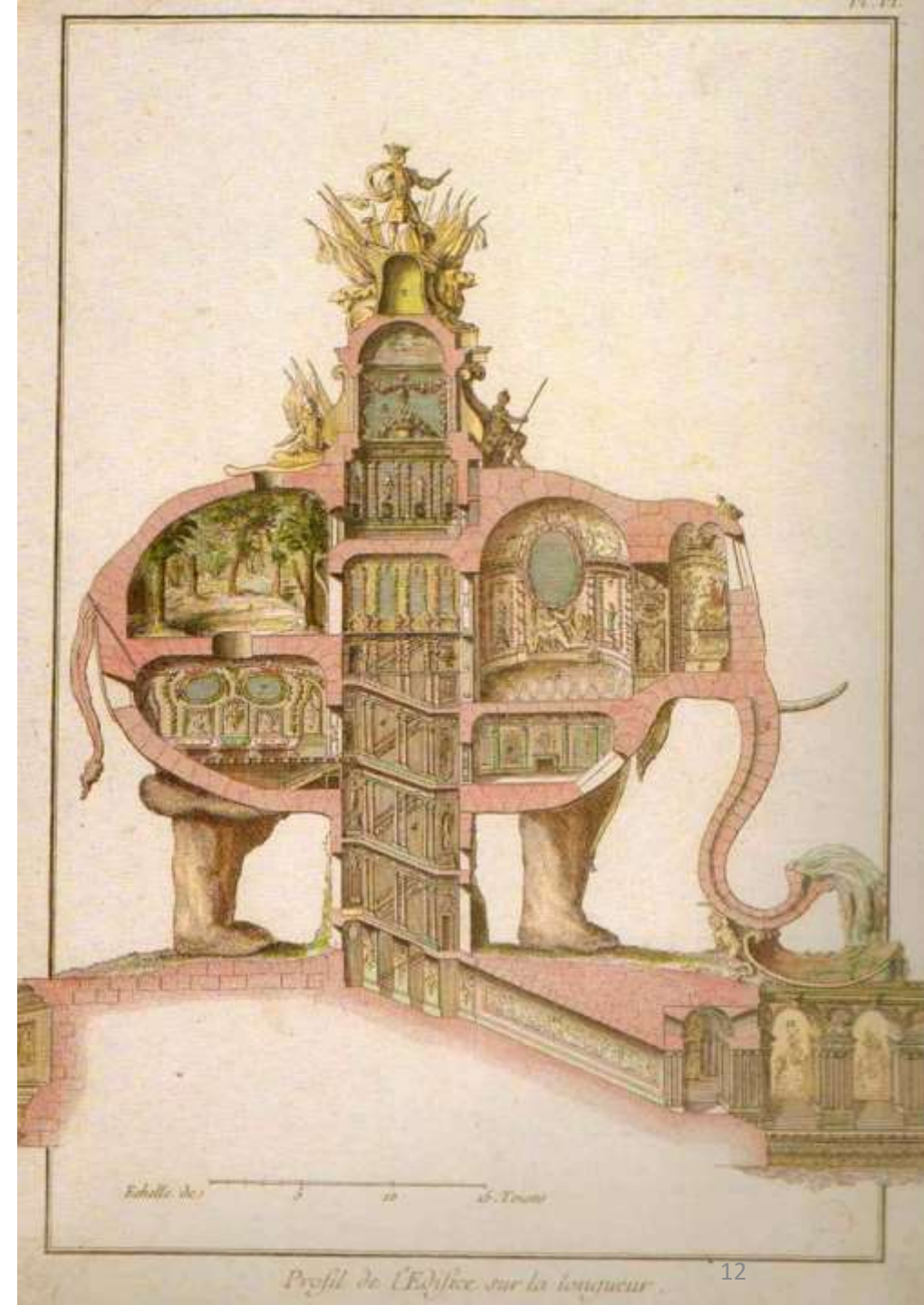


7. 2017 Will Not Be the Year in Which IoT Became Mainstream

- Slow natural cadence of some industries
- Return on investment analyses challenge business planners
- Enterprise transformation is challenging and time consuming
- Practical, scalable artificial intelligence and machine learning technologies are difficult



What Does It Mean for Product Designers?



What Does the IoT Mean for Product Designers?

- Not much...
 - The obvious
 - Sensors
 - Connectivity
 - The little less obvious
 - Security and privacy
 - Mechatronics
 - Embedded software development
 - Everything
 - Align business and product architectures



The opportunity: Always connected products and consumers

Seven Actions to Consider



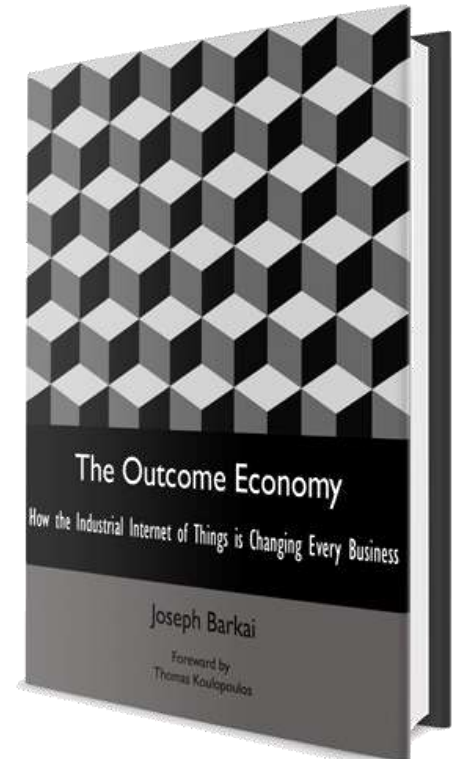
Seven Actions to Consider

- Reimagine Industry Models
- Enable IoT-infused Innovation
- Partner for Success
- Leverage Data
- Prepare for the Future of Work
- Deploy Open Standard-based IoT Platforms
- Align Business and IT Architectures

“ One should not mistake a clear view for a short distance.
—Paul Suffo

To Stay in Touch

(and request the presentation slides)



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By Joe Barkai | July 5, 2017 | Internet of Things, IT Strategy



Rapid Growth in Times of Uncertainty

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