

Show Me the Money!

Justifying Investments in IoT Technology

(When Traditional ROI Methods Let You Down)

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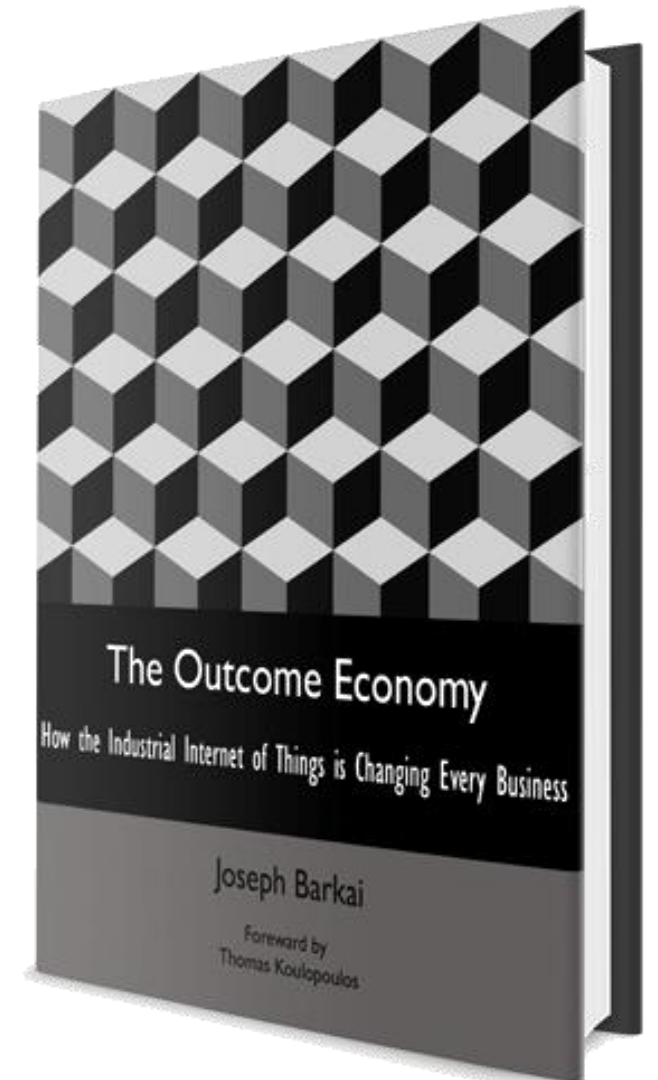
The Outcome Economy: How the Industrial Internet of Things is Transforming Every Business



@JoeBarkai



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KÉRASTASE
PARIS

HAIR COACH

Smart Hairbrush • Brosse connectée • Smart bürste





“Bluetooth-enabled smart toaster controlled by a smartphone app to offer personalized settings for the perfect slice, every time.”

| | |
|--|----------|
| Connected Toaster (available Q2 2017) | \$99.99 |
| Connected Coffee Maker (available Q2 2017) | \$99.99 |
| Connected Mirror (available late 2017) | \$999.99 |

Every time you describe a frivolous IoT application, a fairy dies!



- Connected...
- Watching over your milk
- ... And hackable



In Search of The Killer Application

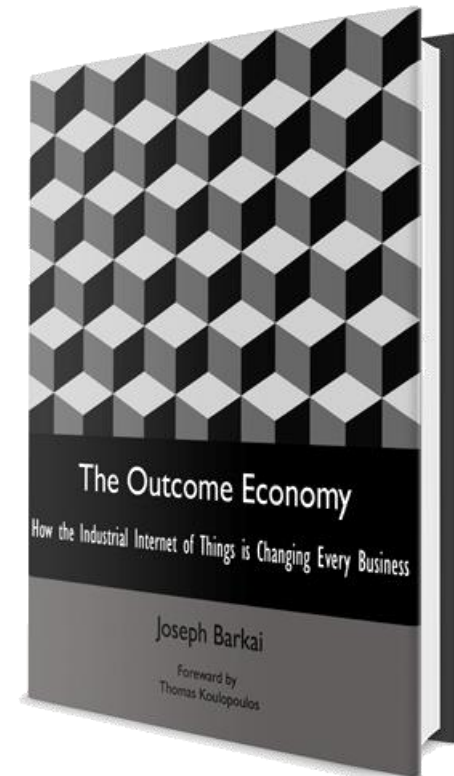




The Outcome Economy

- Connected devices, enable ...
- New business and customer engagement models, drive ...
- User-defined outcomes

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





Value Realization

Levels

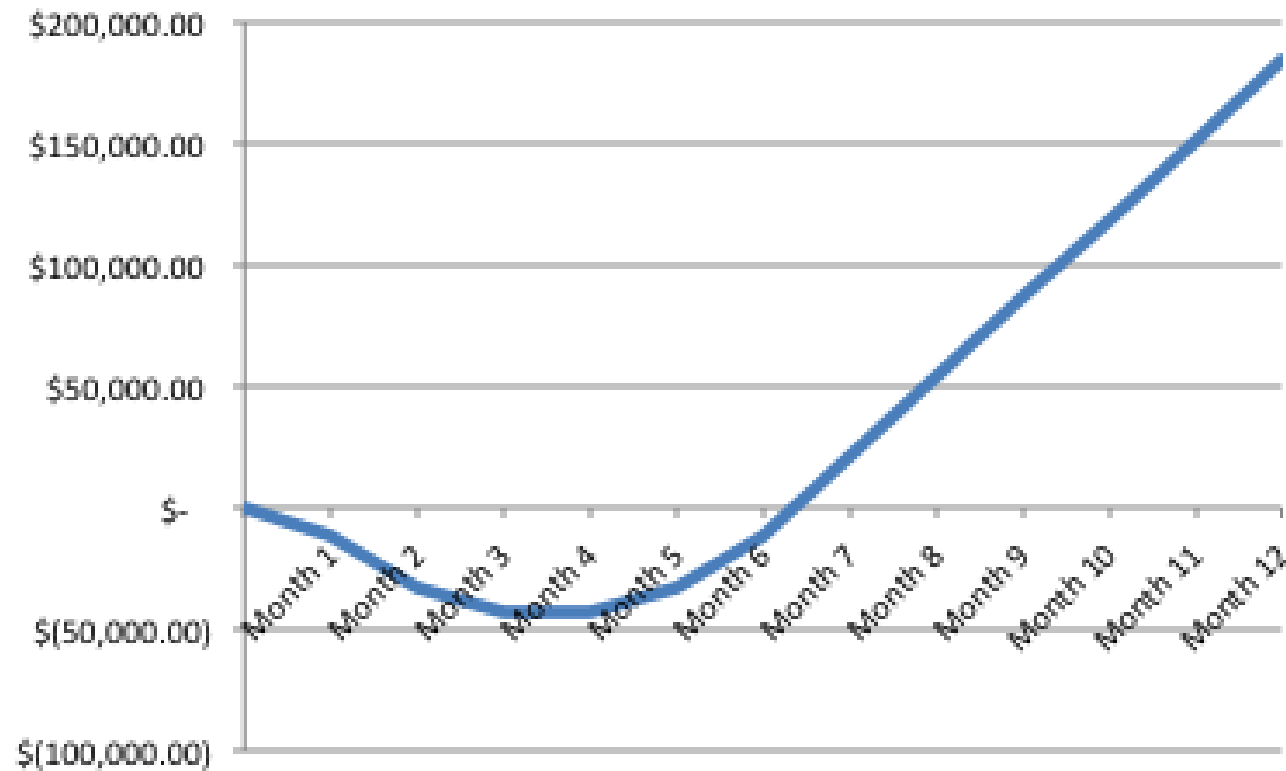
- 7 Collaboration & Processes**
(Involving People & Business Processes)
- 6 Application**
(Reporting, Analytics, Control)
- 5 Data Abstraction**
(Aggregation & Access)
- 4 Data Accumulation**
(Storage)
- 3 Edge Computing**
(Data Element Analysis & Transformation)
- 2 Connectivity**
(Communication & Processing Units)
- 1 Physical Devices & Controllers**
(The "Things" in IoT)



Image: Cisco, IoT World 2014

Assessing the Future Value a Technology Investment

Traditional Return on Investment Methods



To improve ROI:

- Lower R&D cost
- Accelerate time to market
- Improve profitability

But It Isn't Easy...

Product Organization

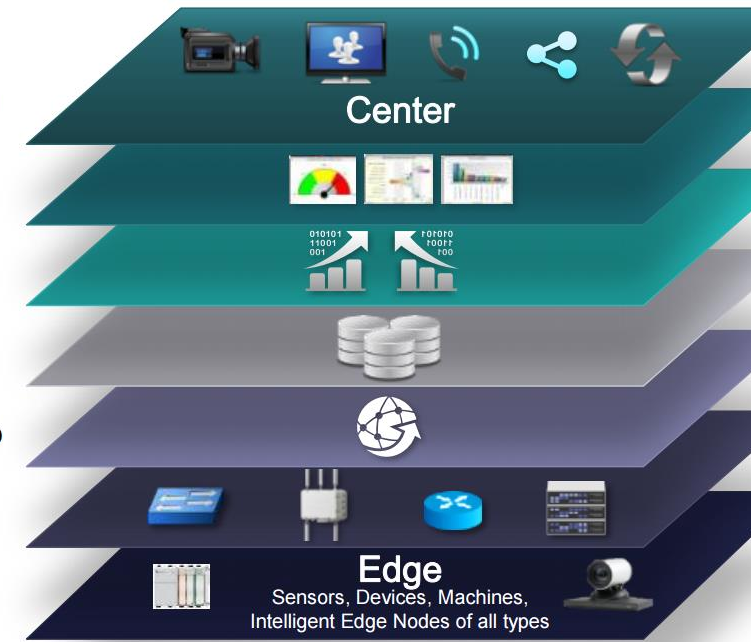
- Design / redesign products
- Field retrofit
- Security and privacy
- ...

Solution Provider

- Stand up an IoT infrastructure
- New customer engagement model
- Analytics, biz process/BPM
- Ecosystem development
- ...

Levels

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IoT is

- A platform, that enables....
- Future opportunities, of yet ...
- Unknown future value

Uncertainty and Volatility: Risk or Opportunity?



If you don't know where you are
going, any road can take you there.

Cheshire Cat

Traditional ROI Methods Are Risk Averse

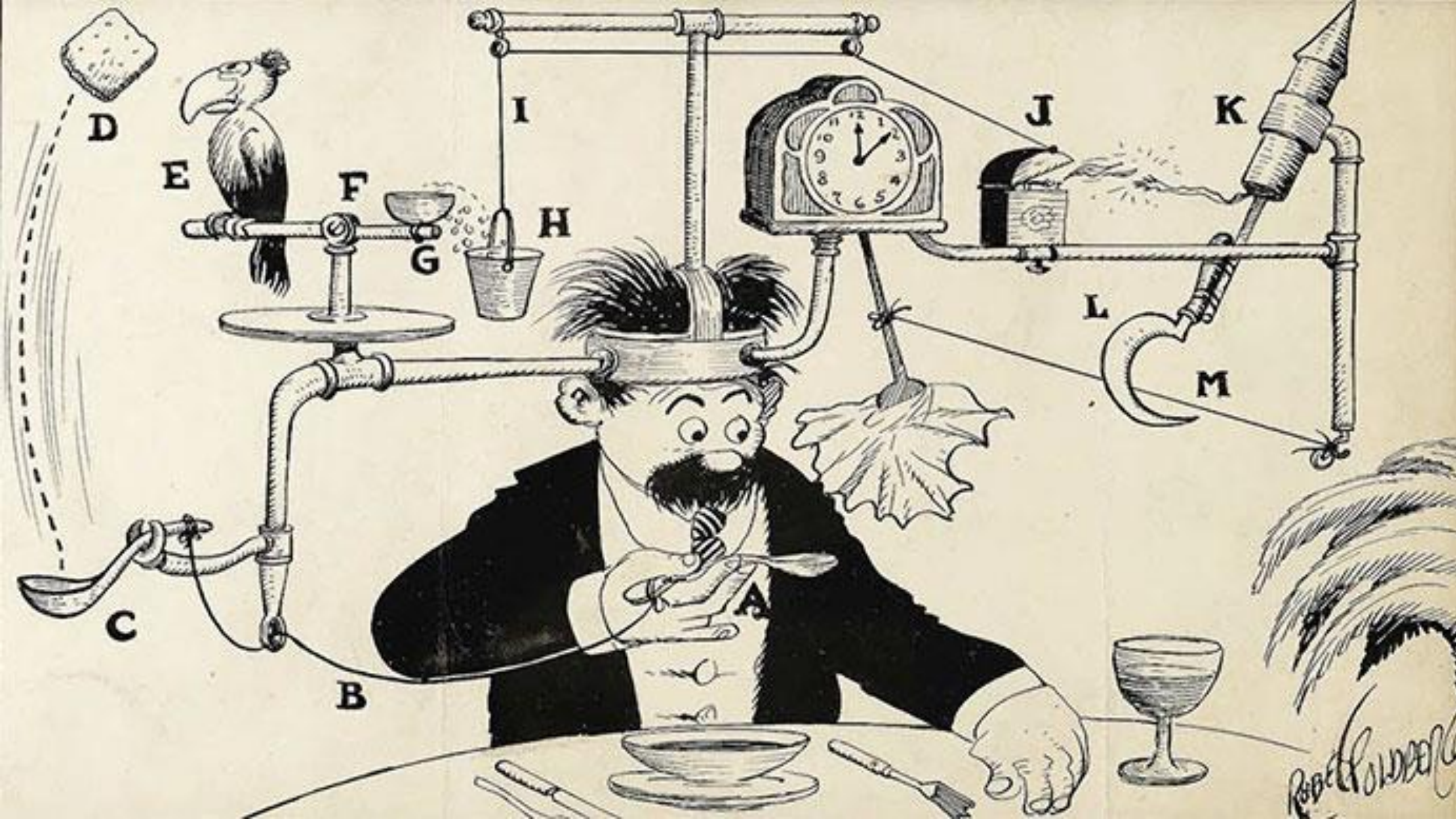
- A single “best guess” scenario
 - Project goes to completion and must be paid off
 - Uncertainties must be resolved at the outset
 - Flexibility to redirect (or terminate) a project does not have future value
-
- Platform-type initiatives tend to be under-valued

Real Options

A real option is the right — but not the obligation — to undertake certain business initiatives, such as deferring, abandoning [or] expanding ... a capital investment project.

Source: Wikipedia





Real Options and IT Platform Adoption: Implications for Theory and Practice

Robert G. Fichman

Boston College

May, 2004

Embracing Uncertainty

- If all goes well — continue to invest in new IoT solutions
- If there's a change — adapt and build a new solution
- If things go poorly — kill the project (but not the platform)

If you don't know where you are going,
any road can take you there.

Cheshire Cat



Guidance

- Forget the forecasts about connected devices – they are not reliable indicators of business potential
- Reimagine industry models
- Redesign business and operating models to support new product-service hybrids and customer engagement models
- Articulate the role of data to generate new insights from “things”, enterprise systems, and humans to drive better, faster decisions
- Prepare for the future of work

Remember

- An IoT platform does not deliver a business outcome – it only enables it
- IoT solutions require investment in new skills, develop an ecosystem, modernize customer engagement models, ...
- IoT is a strategic platform, not a technology project, and must be evaluated accordingly

Stay in Touch



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