

# **Innovate or Die**

Scrum as a Foundation for Delivering Success



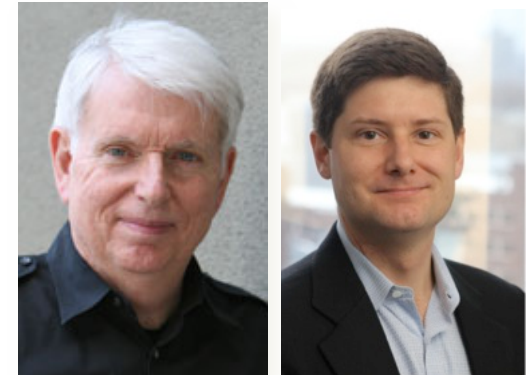
Hosts: Jeff Sutherland  
Alex Brown  
Arlen Bankston

# scruminc.: Who We Are

Scrum Inc. is the Agile leadership company of Dr. Jeff Sutherland, co-creator of Scrum. We are based in Cambridge, MA.

We maintain the Scrum methodology by:

- Capturing and codifying evolving best practices,
- Conducting original research on organizational behavior
- Adapting the methodology to an ever-expanding set of industries, processes and business challenges



We also help companies achieve the full benefits of Scrum through our full suite of support services:

- Training (Scrum Master, Product Owner, Agile Leadership, webinars, etc.)
- Consulting (linking Scrum and business strategy, customizing Scrum)
- Coaching (hands-on support to Scrum teams)
- Publishing and new content development

We run our services company using Scrum as the primary management framework, making us a living laboratory on the cutting edge of “Enterprise Scrum”

Find out more at [www.scruminc.com](http://www.scruminc.com).



## Who We Are

LitheSpeed is a cadre of leading scrum trainers, lean and agile team coaches, and enterprise agile consultants on a mission to transform workplaces into environments that promote self-management, continuous improvement, and high morale. We believe in learning cultures over ultimatums, custom solutions over a one-size-fits-all approach, and community over competition.



### **Our offerings:**

- Training (Certified Scrum Developer, ScrumMaster and Product Owner, Lean Innovation Bootcamps, kanban and more)
- Organizational Consulting
- Team Coaching

# Agenda

- Do not suffer the fate of Nokia!
- Macro Trends driving the imperative to innovate
- What this imperative means for companies
- Scrum as a tool for delivering regular and predictable innovation



# What Do We Mean by “Successful Innovation?”

1. Something new from a **Product, Process, or Business Model** standpoint...
2. ...Actually delivered to the end customer...
3. ...That addresses a real customer need...
  - Need may be known or unknown before the innovation is delivered
4. ...And that can be delivered in a way that is attractive to the provider
  - Provides sufficient margin and Return on Investment (ROI)

Innovation comes from two primary sources, and in two different types

|                 |                            |              |
|-----------------|----------------------------|--------------|
| E.g. Penicillin | E.g. Toyota Prius          | Breakthrough |
| E.g. Powerbar   | E.g. Facebook              | Sustaining   |
| Happy Accident  | Structured Experimentation |              |

# Avoid the Fate of Nokia!

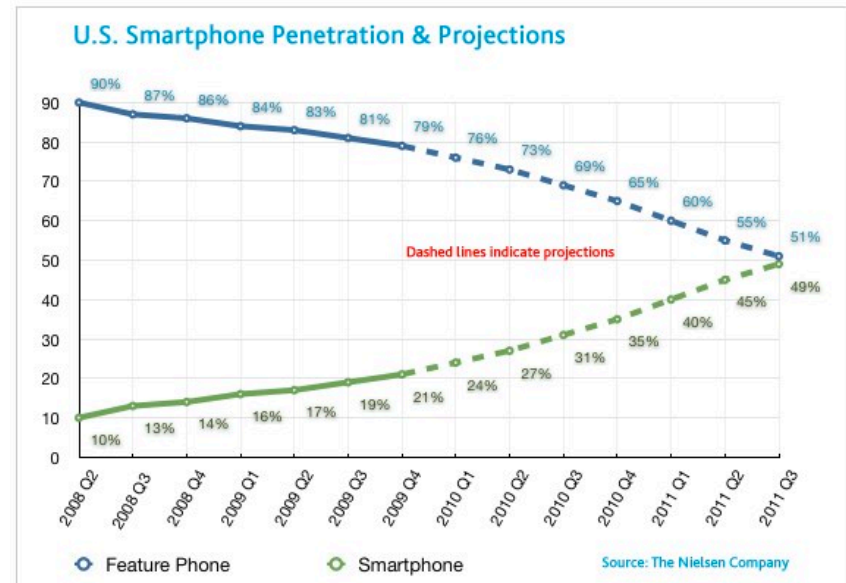
Failure to Innovate or Even Respond Rapidly Killed their Market Dominance



Customers loved this...



...Until they tried this...



“While Nokia phones used to be prized in Asia and other developing economies for their durability and value, the company was late to introduce innovations like touch screens. That left the high end of the market to brands like Apple and Samsung.”

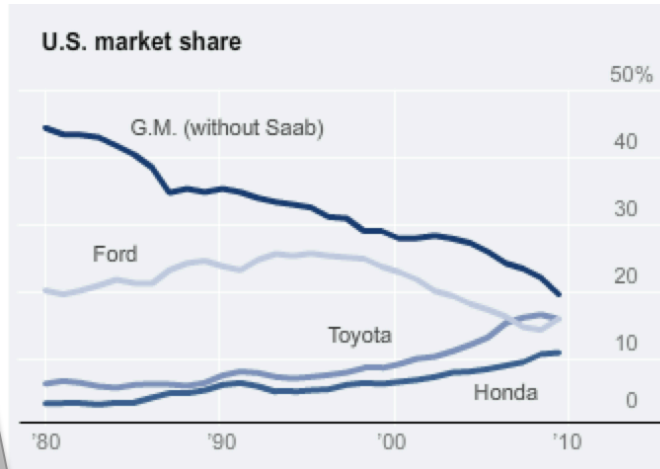
– New York Times, Sept. 2013

# General Motors

After Years of Changing Fins, GM Must Now Innovate Just to Catch Up



'67 Oldsmobile  
(minor aesthetic updates)



Source: NY Times, 13 Jun 2009

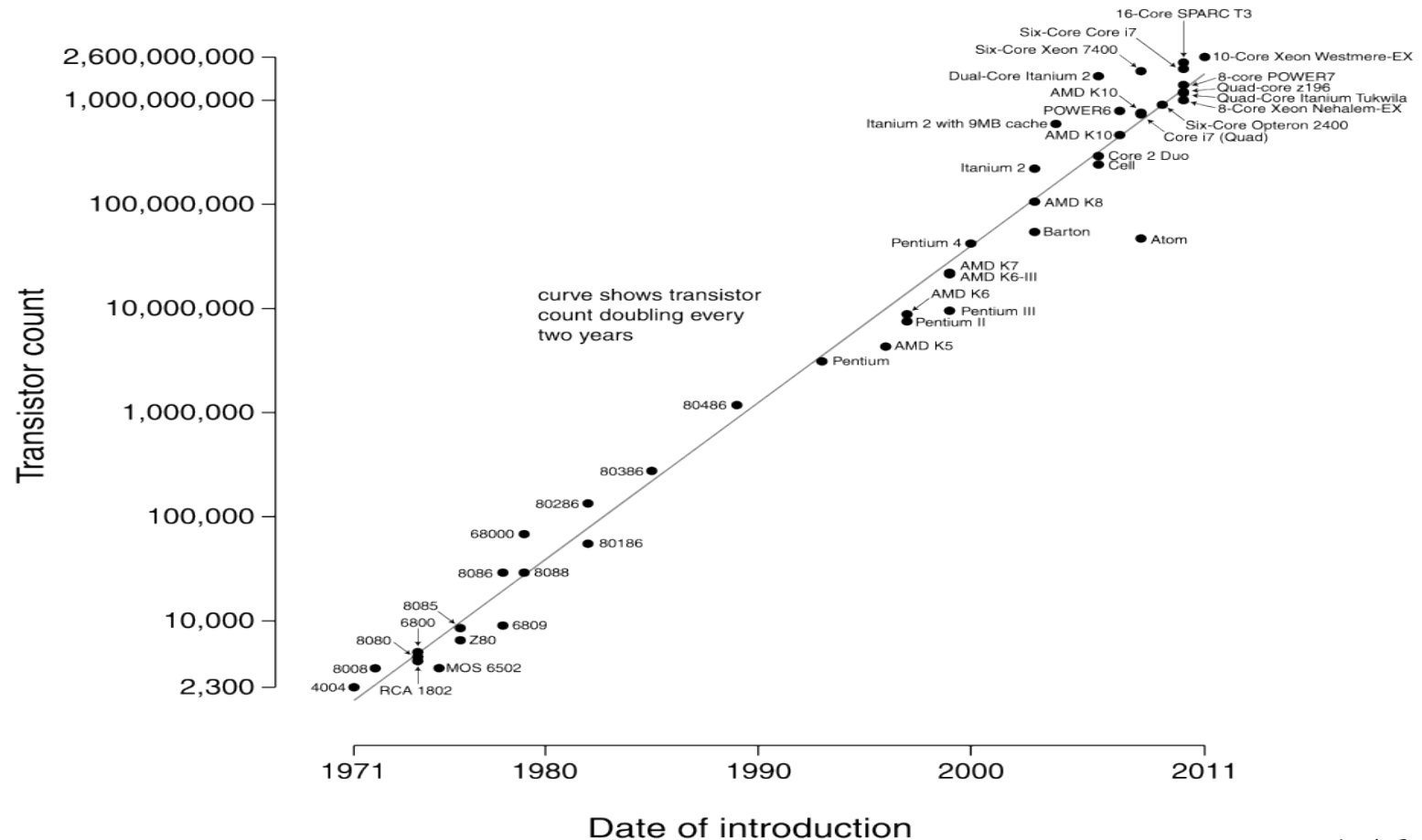


Chevy Volt  
(new propulsion system)

# Moore's Law:

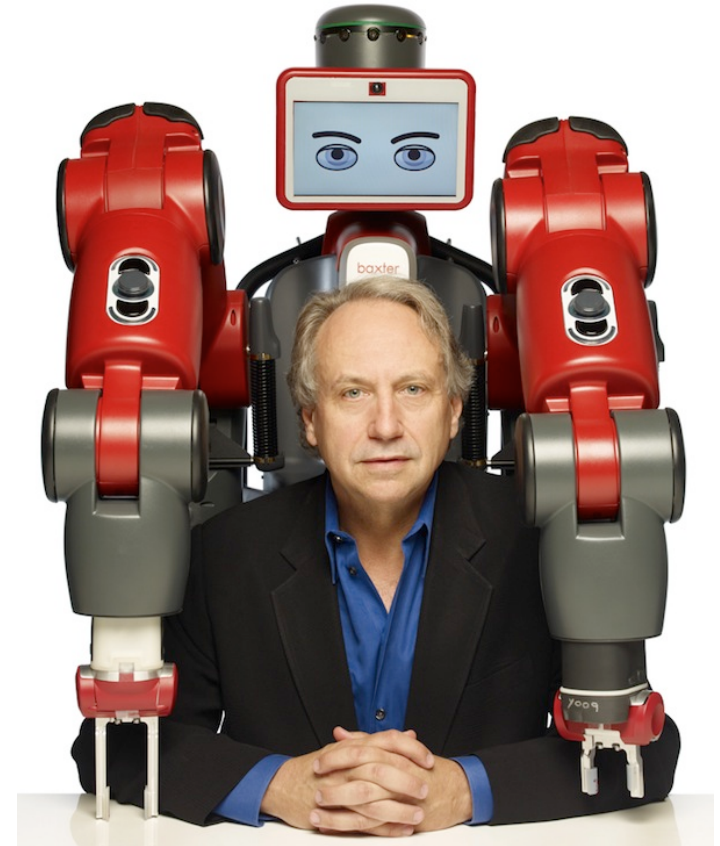
"The number of transistors incorporated in a chip will double approximately every 24 months"

Microprocessor Transistor Counts 1971-2011 & Moore's Law



# Moore's Law and Today's Consumer Market

- Software pushing deeper into traditional consumer markets:
  - ✓ Smart Phone Revolution
  - ✓ Automobile OS – *Tens of millions of lines of code*
  - ✓ Mobile Banking – *590 million users world wide*
  - ✓ Mobile Payment – *20% of Kenya's GDP flows through mobile payment services*
  - ✓ Interactive Coffee Machines – *automated baristas*
  - ✓ 3D Printers
  - ✓ Baxter Robot
  - ✓ Hardware of all types – from jet fighters to disk drives

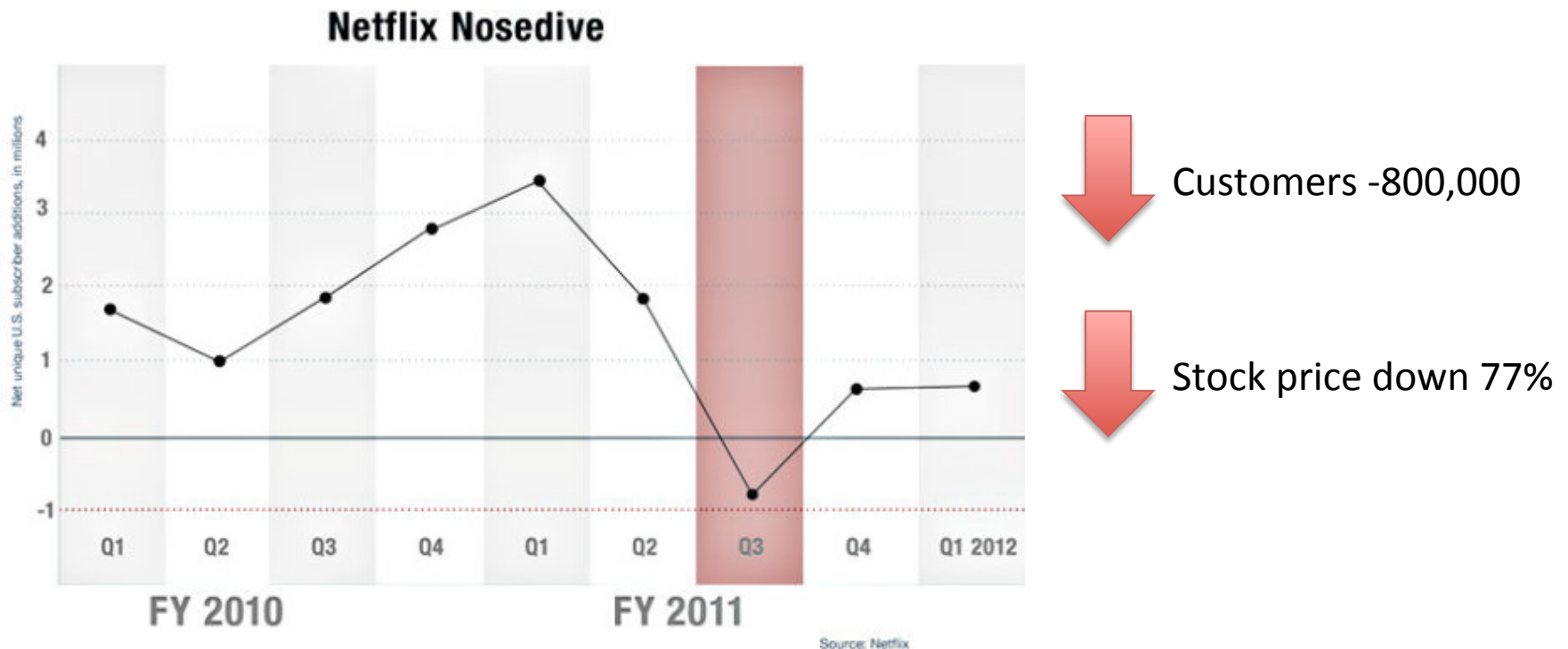


Rodney Brooks Baxter Robot  
Millionth Monkey Effect

# The Consumer is Increasingly King

## Customers Know What They Want, and are Quick to Punish Shortfalls from Product and Service Providers

- Example: Netflix announces Qwikster July 2011 and raises prices 60%.



[http://news.cnet.com/8301-1023\\_3-57468798-93/netflixs-lost-year-the-inside-story-of-the-price-hike-train-wreck/](http://news.cnet.com/8301-1023_3-57468798-93/netflixs-lost-year-the-inside-story-of-the-price-hike-train-wreck/)



# Scale as Competitive Advantage is Declining

If You Aren't Making Millions of the Exact Same Product,  
Speed of Changeover is More Important



Major Auto Company's CNC Machine:  
**\$100,000,000**

Capacity: One dye per day



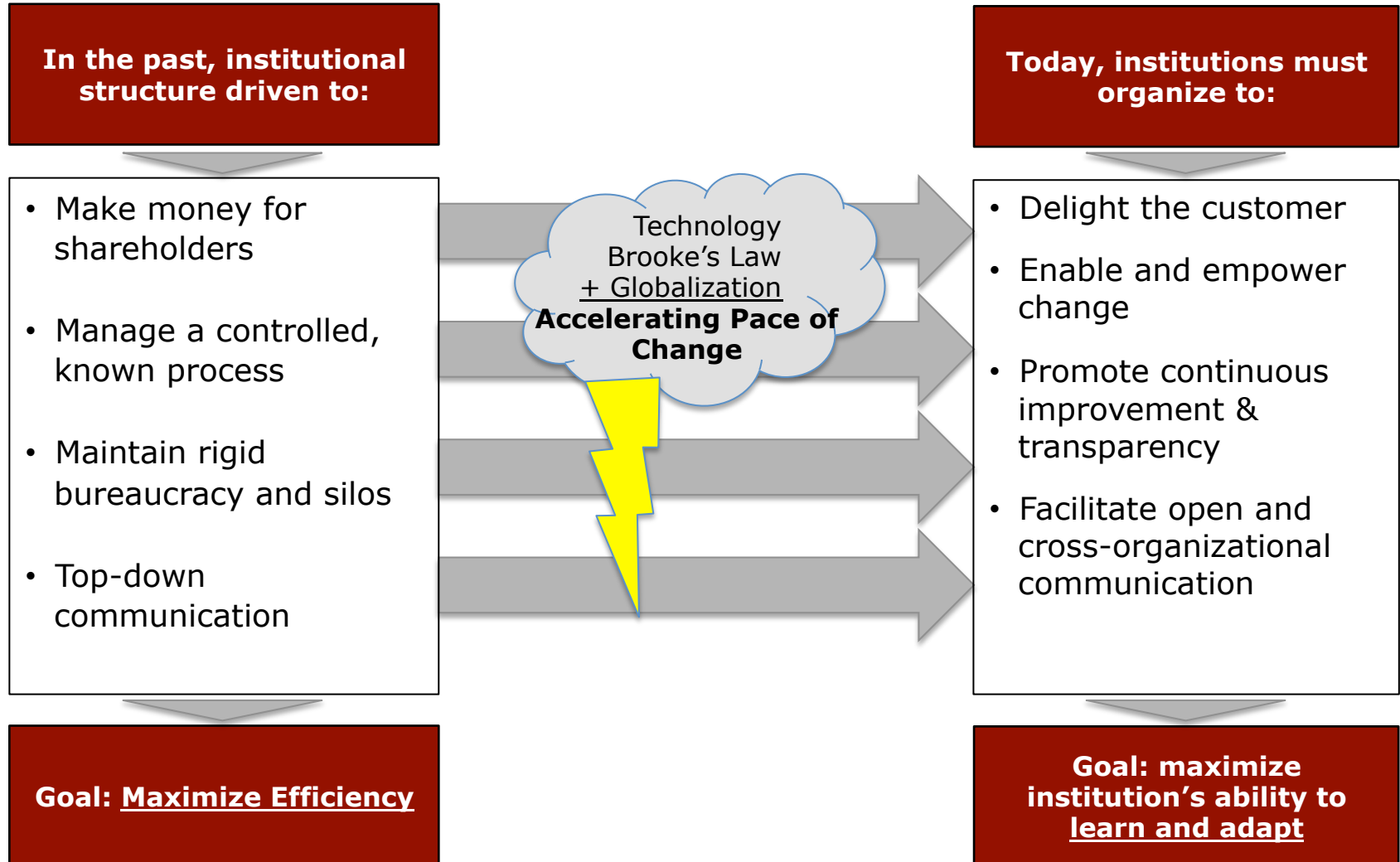
Startup Auto Company's CNC Machine:  
**\$2,000**

Capacity: One dye per day

**That's 1/50,000<sup>th</sup> the cost**

# We Are Entering a Third Era of Capitalism

## From Shareholder Capitalism to Consumer Capitalism



Source: Deloitte Institute for the Edge



# What This Means for Companies

- Aspiring market leaders must develop a reliable pipeline of product innovation rather than relying on scale
- Innovation comes from two primary sources:
  - Happy Accidents
  - Structured Experimentation
- Waterfall project management processes are not equipped to take advantage of either source of innovation
  - Can't recognize and capitalize on happy accidents when they occur
  - Not set up to incorporate learning from structured experiments
- As Gartner Group has said - waterfall project management is dead in the software industry!



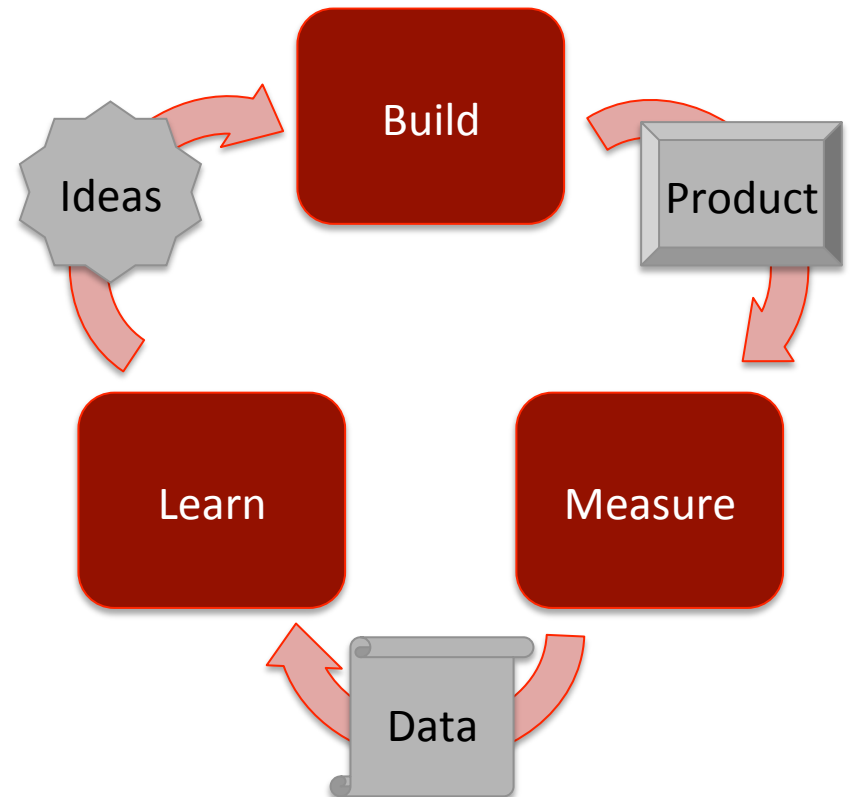
Gartner Technical Advice: **GET AGILE**

Source: 2012 Planning Guide: Application Delivery Strategies

# Lean Startup in a Nutshell



- Cast your business case as a set of **assumptions**
- Rapidly build prototypes for early adopters to **validate those assumptions**
  - *"Get out of the building."*
- "Pivot" releases based on both **qualitative & quantitative feedback**
- Deliver quickly, often & with high quality using **agile methods**



# Most Initial Business Models are Wrong

- **PDA encryption software** led to...

*PayPal*<sup>TM</sup>

- The **Game NeverEnding** (a web-based MMORPG) led to...

flickr

# We Learn Fastest by Iterating



**Iterating** allows you to move from vague idea to realization.

1



2



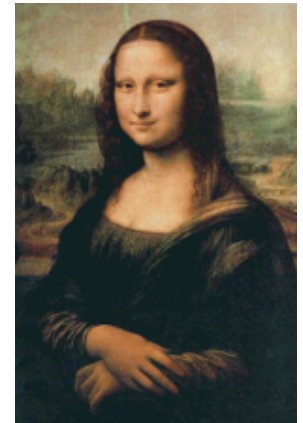
3



4



5



# Two Central Lean Startup Concepts

## The Minimum Viable Product (MVP)

A “Minimum Viable Product” might be:

- **Learning:** Onsite observation, fake menus, ads
- **Pitching:** Preorders, comparisons, joint design
- **Experiencing:** Concierge, prototypes



**Early releases** focus on quickly & cheaply **testing ideas**

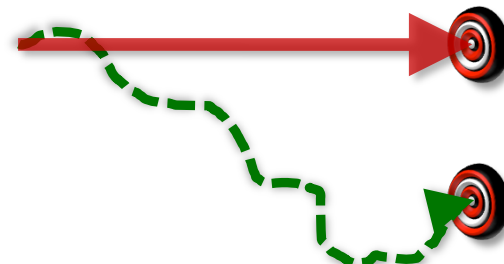
**Later releases** focus on **scaling**



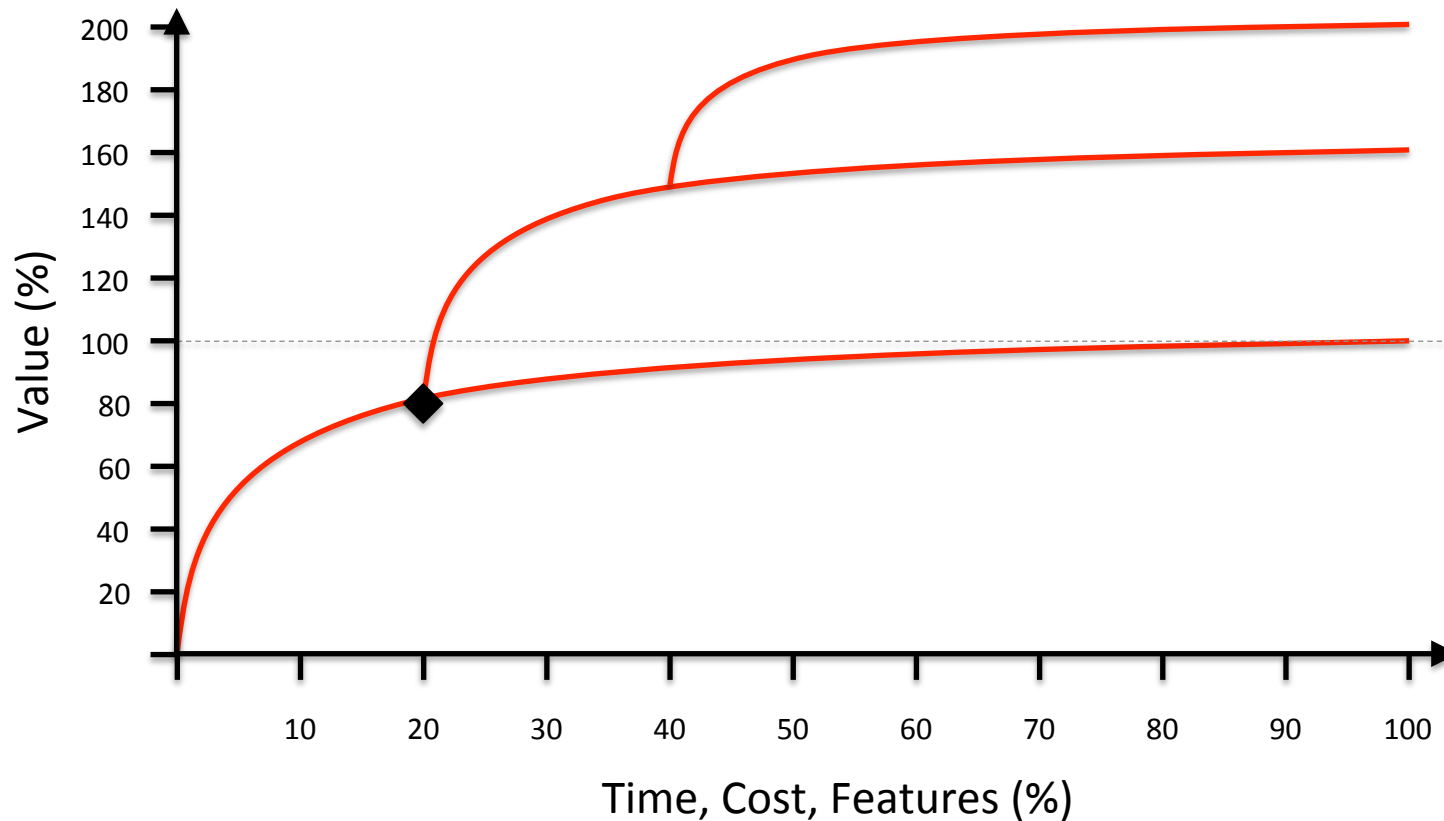
## The Pivot

Based on what you learn, you might:

- Target another customer group
- Target a different need
- Expand or contract feature focus
- Change platforms or architecture
- Change channels



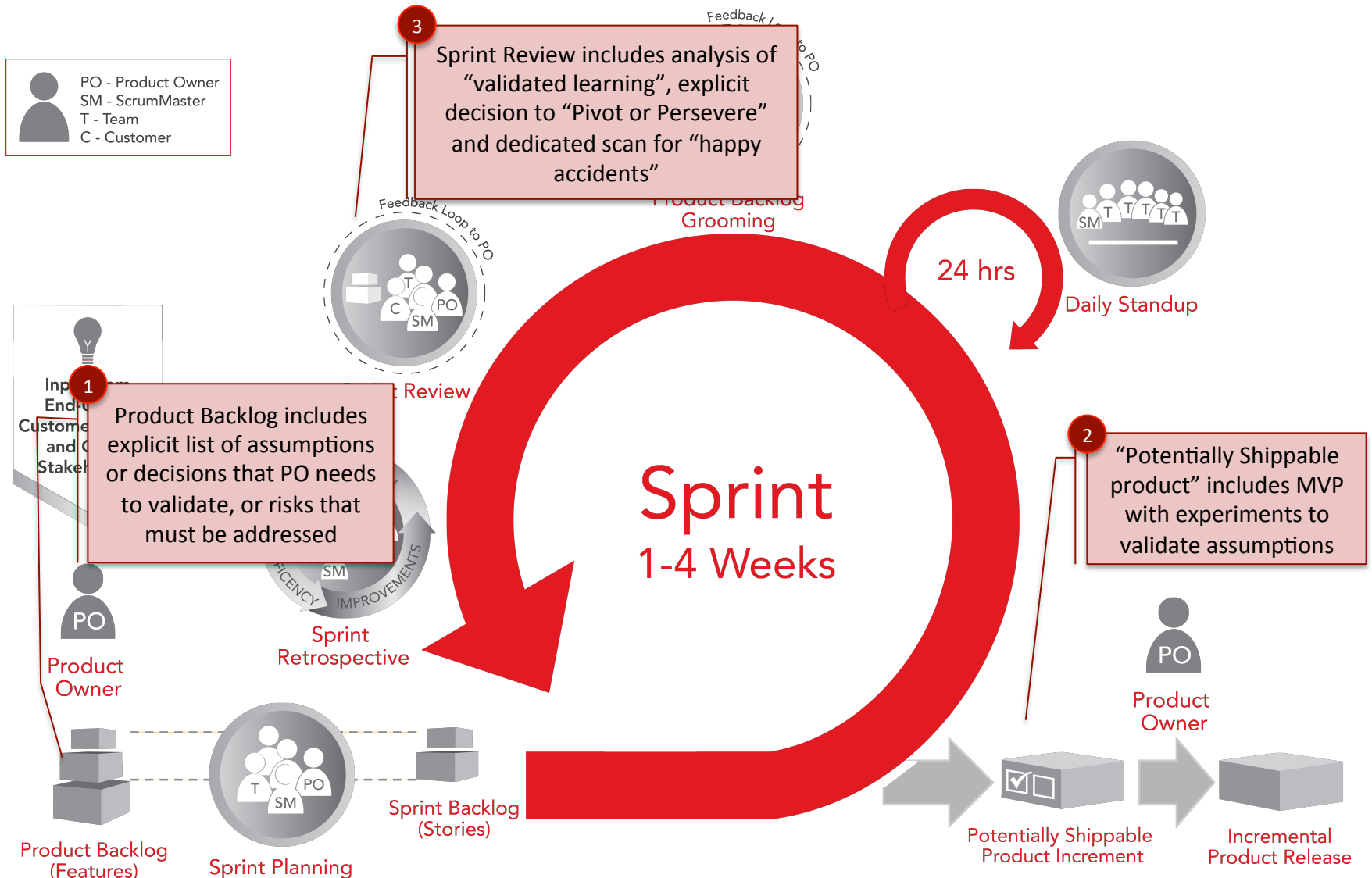
# Leverage Experiments and “Pivot or Persevere” Decisions to Deliver Radically Better Value



# Iterative Risk Management



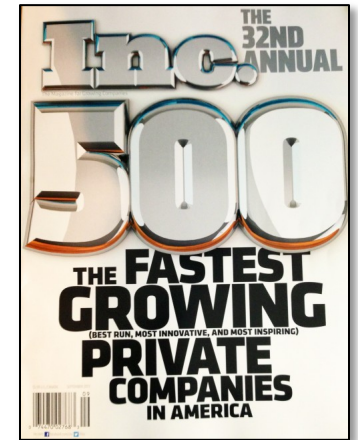
# Scrum in an R&D Context





# Parting Thought 1: Scrum Enables “Smart Followership”

- **Myth:** It Pays to Be First
- **Fact:** Better to Be a Smart Follower
- The average span between introduction of an innovation and follow-on competition has fallen from 33 years to just 3.4 years in the past century.
  - Erik Darner and Justin Petit. *The Myth of the First Mover Advantage*. IHS Feb 2013.
- “It turns out that first-to market pioneers suffer from higher costs that eventually overwhelm their profit advantage. As a result, over the long term they are less profitable than second- or third-generation followers.
  - Adam Bluestein. *You’re Not That Innovative (and That’s OK)*. Inc. 5 Sep 2013.



# Parting Thought 2:

## Scrum Delivers Twice the Innovation in Half the Time

- **Myth:** Innovation is Costly
- **Fact:** Spending Has Little to Do with Results
- The top 10 R&D spenders actually underperformed their industry peers in terms of both market capitalization and revenue growth. Booz 2012.
- Apple, ranked as the most innovative company for the past three years by Inc. Magazine, spends 2.2% of sales on R&D.



**“De-innovate:** At some point, consumers get exhausted by complexity, giving the upper hand to businesses that can simplify an existing model. See Mint.com in the personal accounting space or the Wii controller in gaming.”

- Adam Bluestein, Inc. Sep 2013.

# Conclusion

- Increasingly, companies must maintain a robust, consistent, and responsive innovation pipeline or risk becoming irrelevant
- “Innovation” is only as successful as your ability to get viable products into your customer’s hands
- Scrum works extremely well as a way to structure a deliberate “Lean Startup” process

# Questions?



# Stay Connected

## Our Website

- check in for announcements, new content and services, book releases, and more!
- [www.scruminc.com](http://www.scruminc.com)

## ScrumLab

- join the conversations on our forums with the scrum community and your class.
- coming soon: articles, videos, papers on all things scrum
- [scrumlab.scruminc.com](http://scrumlab.scruminc.com)

## Blog

- [scrum.jeffsutherland.com](http://scrum.jeffsutherland.com)

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