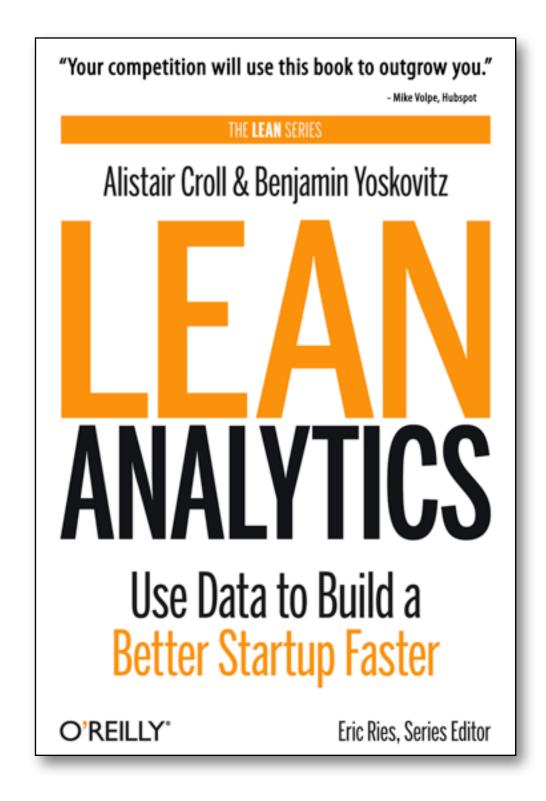
Old dogs, new tricks

Strata Barcelona November 2014

@acroll

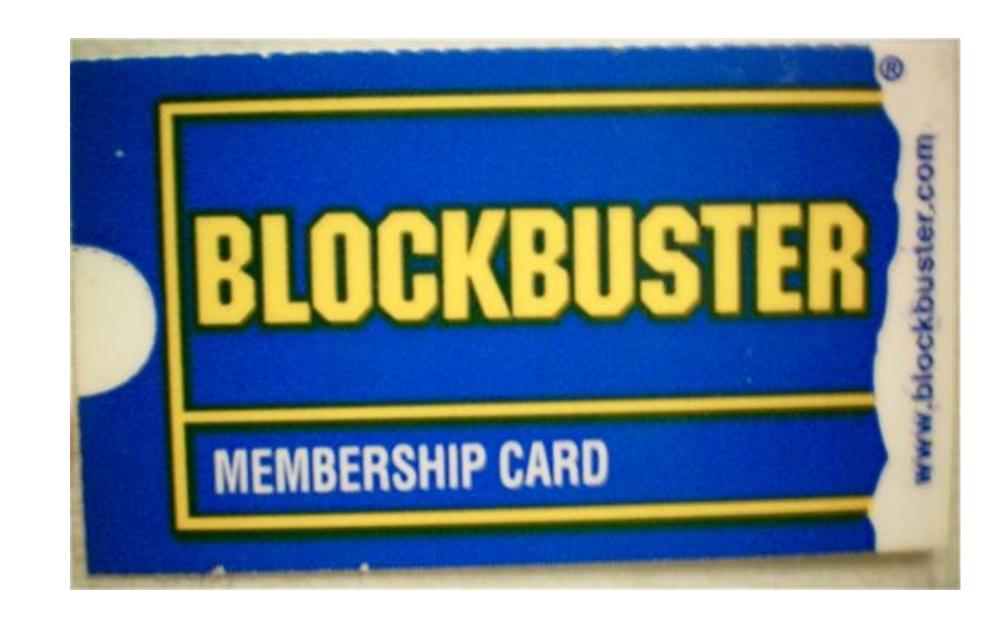




Blockbuster had a lot going for it.

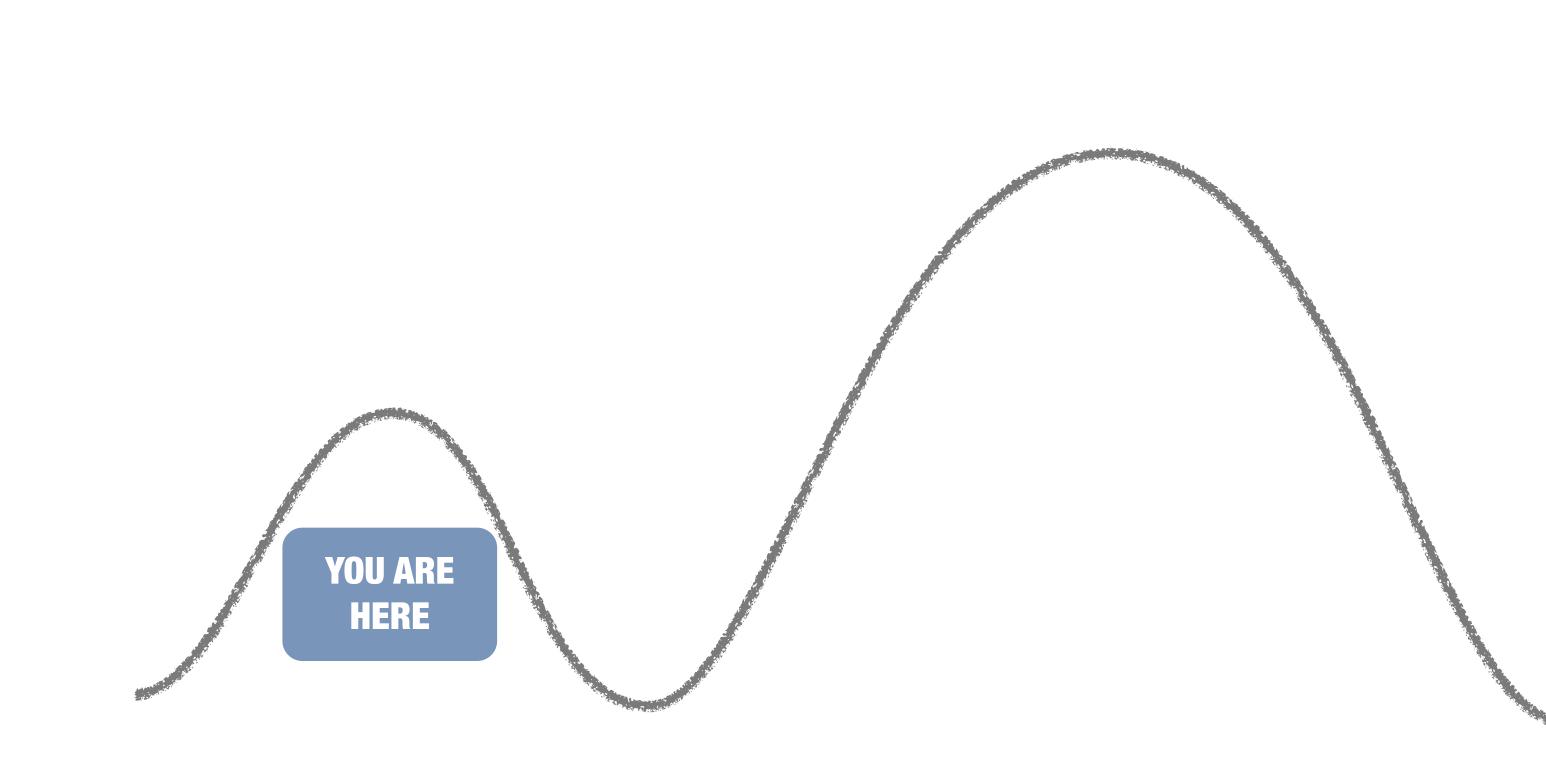


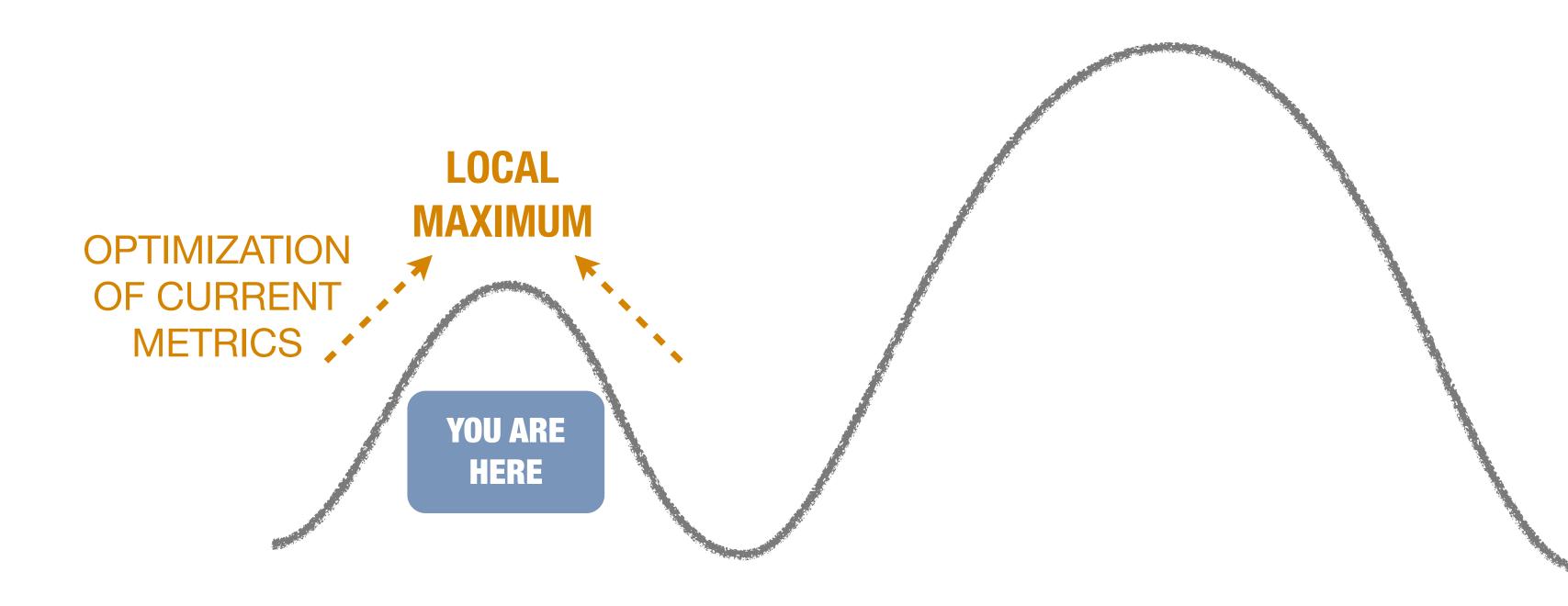
...market intelligence, customers, existing payment approval, and customer history.

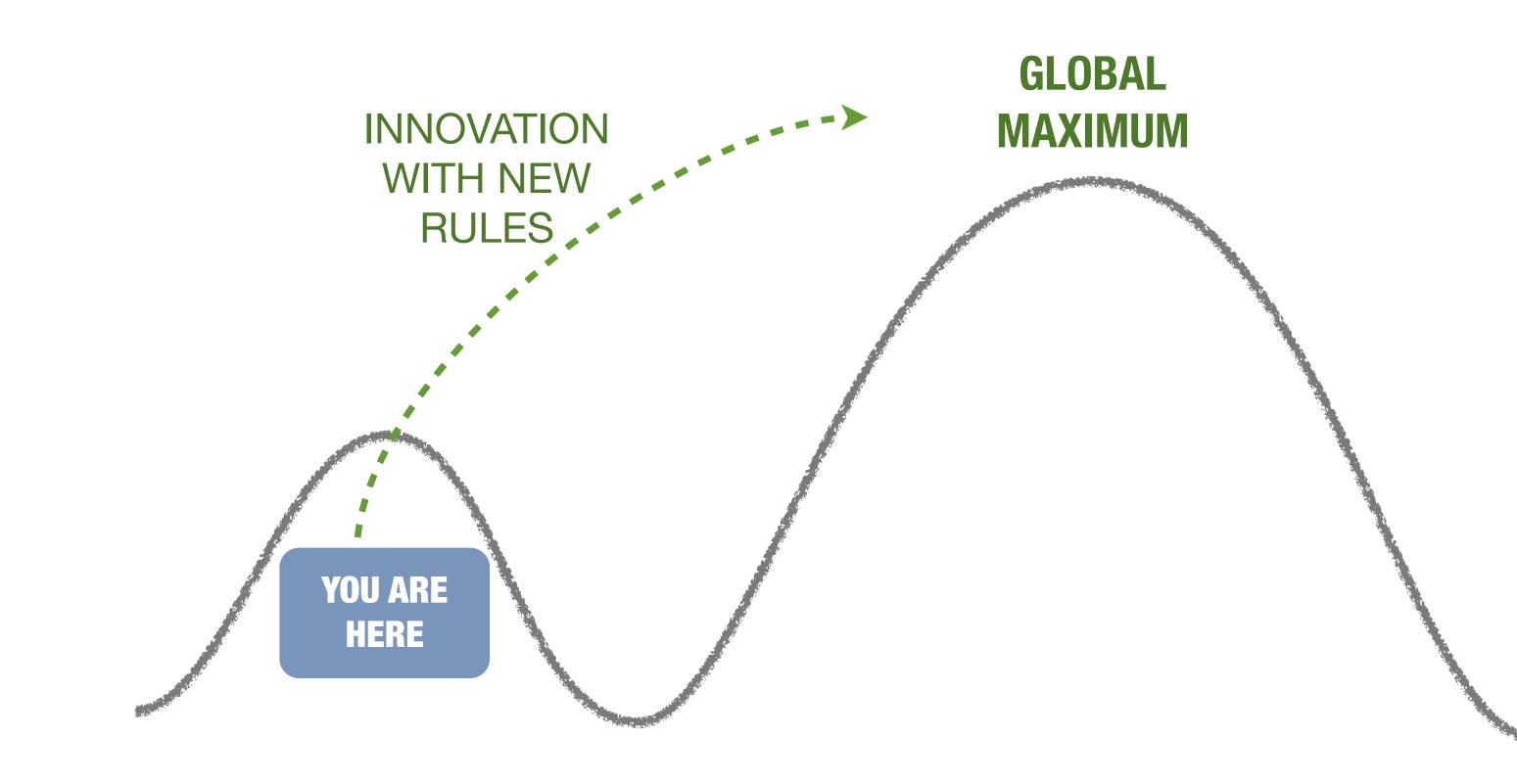


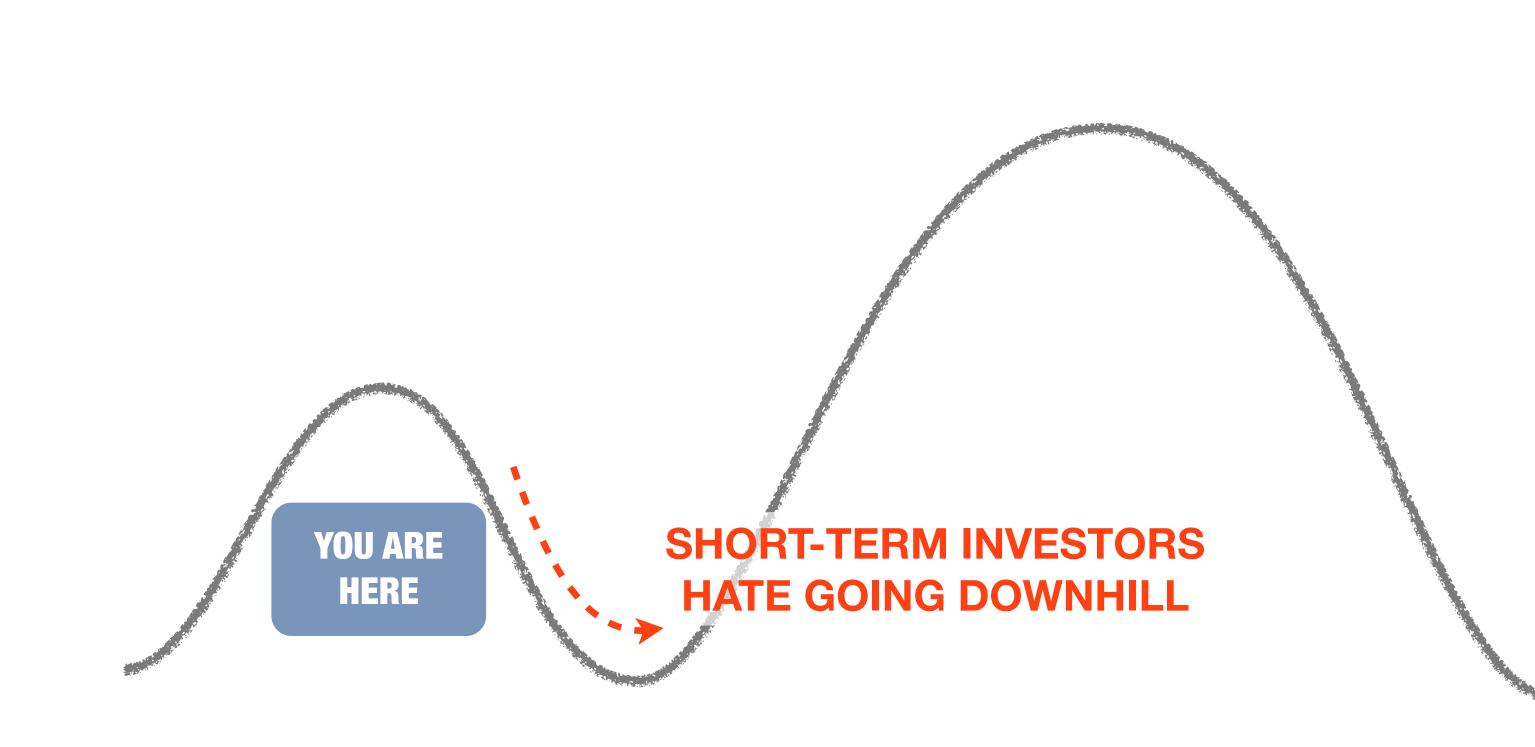
The problem was framing:

Blockbuster thought it was in the video store management business. Netflix realized it was in the entertainment delivery business.

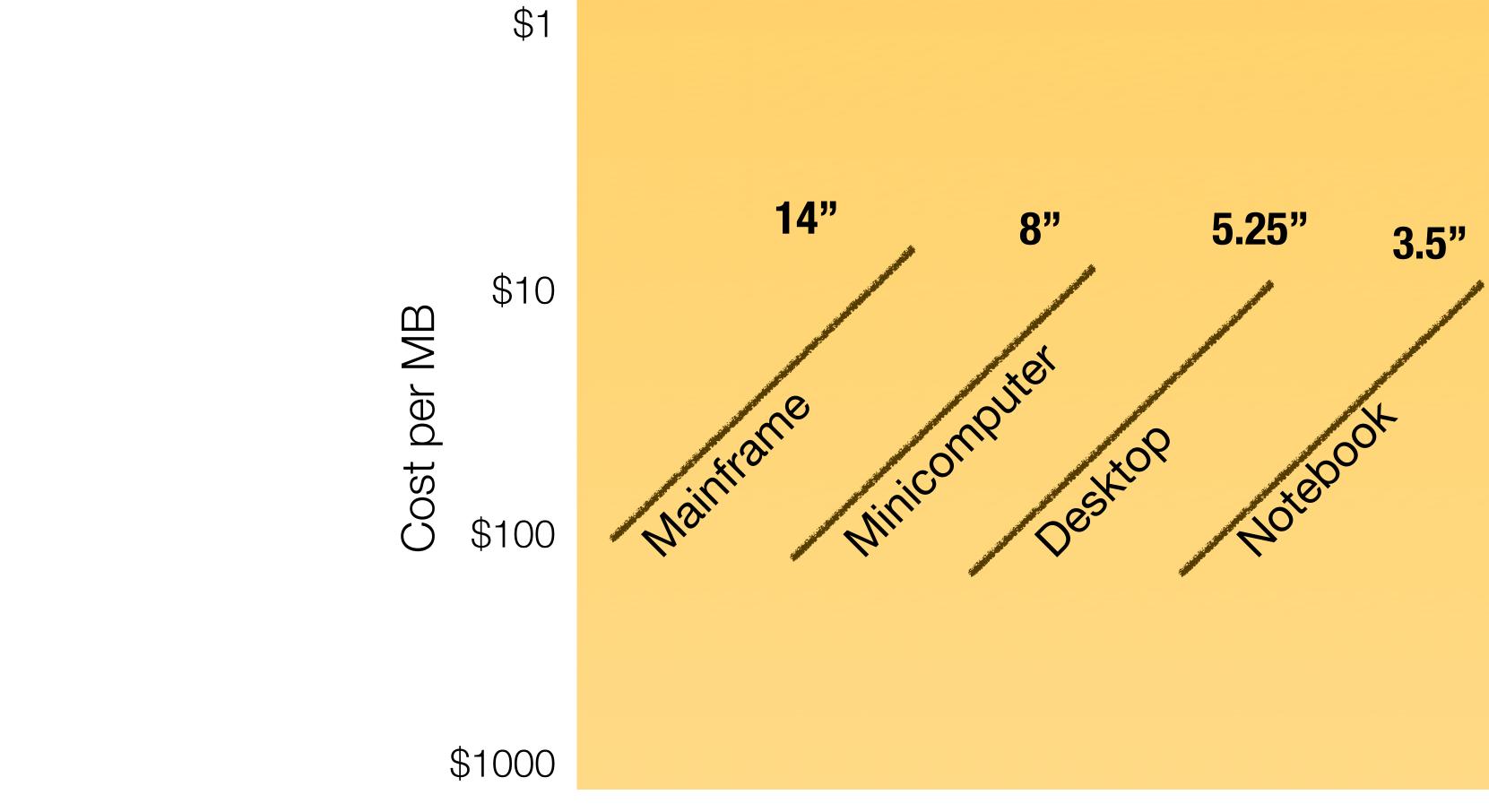








Companies die because they fail to move to new business models.



\$1 Technologies outstrip what the market 8" 5.25" needs, driven \$10 by feedback High end customer from the Low end customer "best" \$100 current customer. \$1000

The new market has different criteria for success, which are uninteresting to incumbents.

\$1 \$10 \$100

Storage Portability capacity

\$1000

Amazon Web Services and the server value network

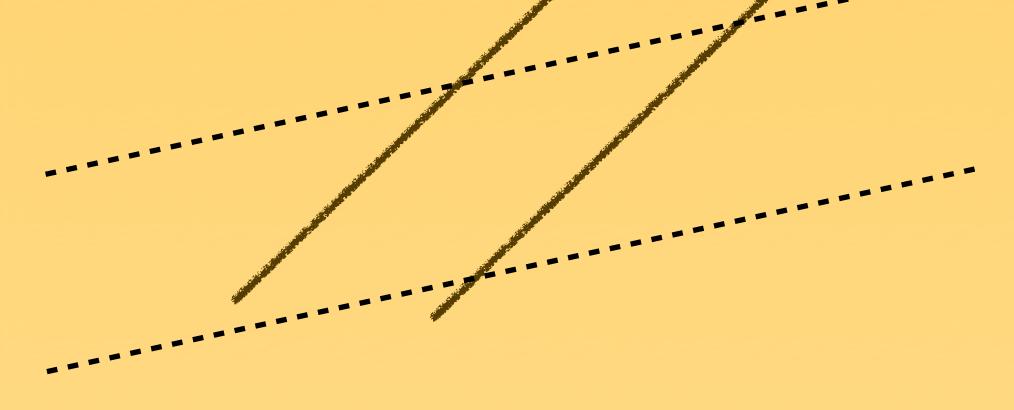


	Server computing		Cloud computing	
Value criteria	DensityHeat	GHzMIPS	InstancesObjects	Spinup timeScaleout
Money	Capex, financing, TCO, ROI		Opex, demand, time to result	
Buyer	CIO, enterprise IT		CTO, coder, app owner, line of business, startup	

Sometimes
this has
unintended
consequences
\$1

Smaller disc size means less vibration impact, leading to greater density, increasing storage capacity

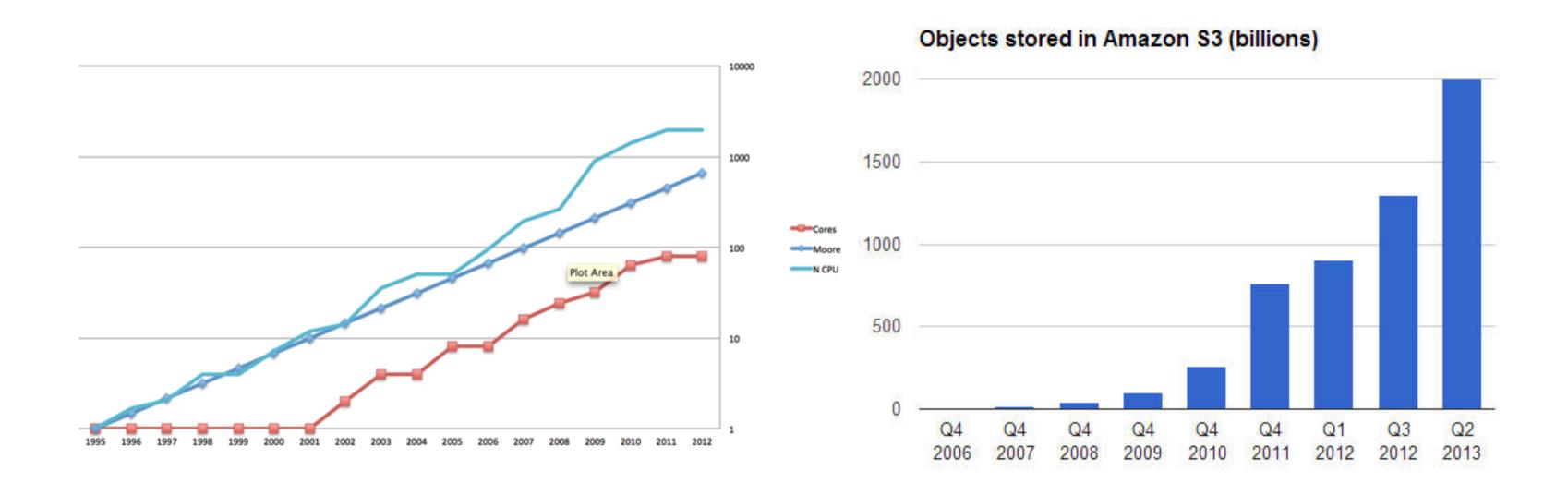
\$100



\$1000

Amazon Web Services and the server value network





HP and Dell missed the disruption and the change in the value network.

Elastic resources mean we can scale up to huge, and shrink costs when not in use.

Physical servers: MIPS, heat, density, cost per cycle.

Sold to CIOs

Cloud computing:

Opex cost, time to spin up, scaleout, objects stored

Sold to developers & marketers

\$1000

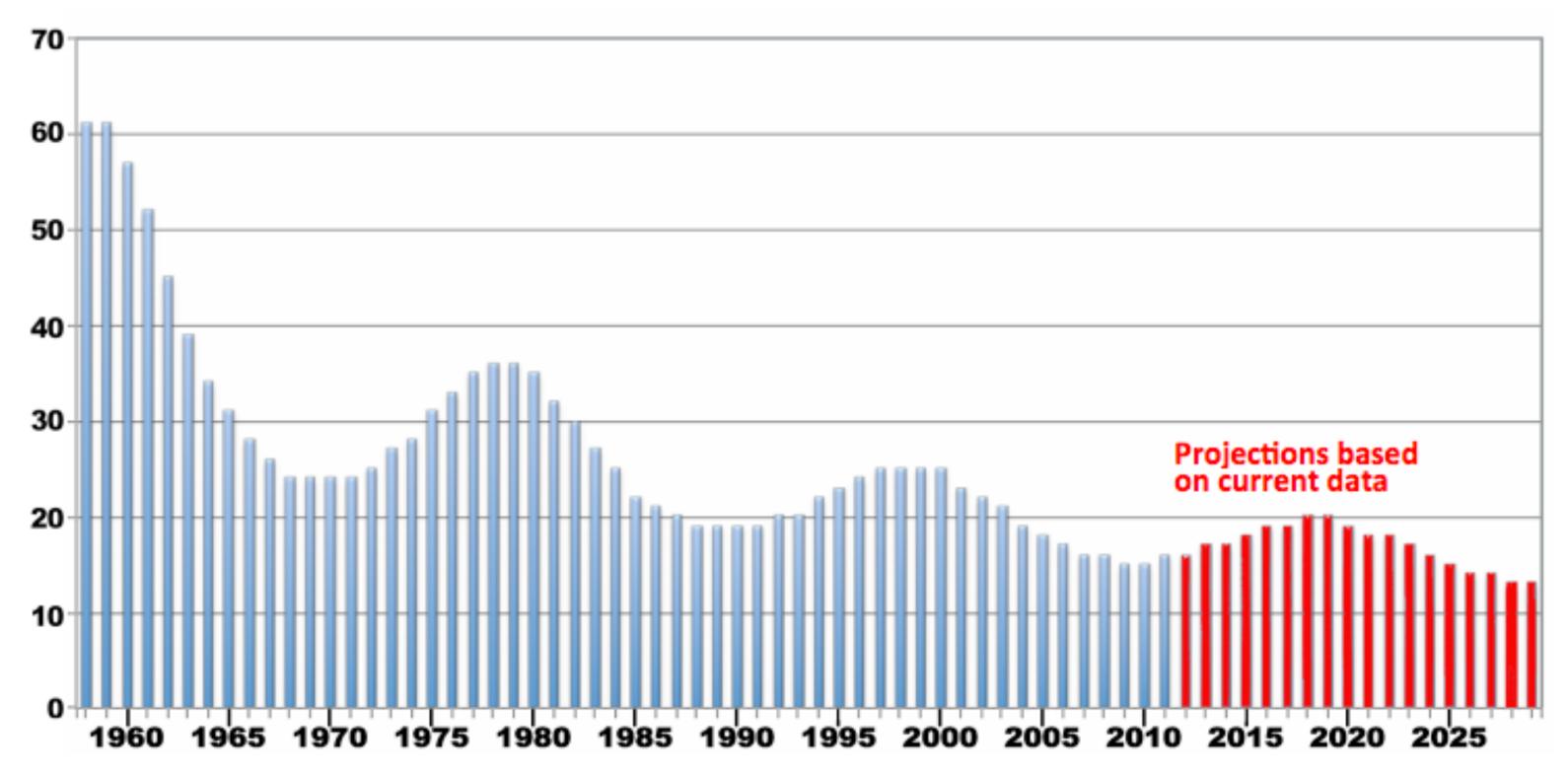
\$100

\$10



Optimizing the probable means discounting the possible.

Average company lifespan on S&P 500 Index (in years)



Year (each data point represents a rolling 7-year average of average lifespan)

DATA: INNOSIGHT/Richard N. Foster/Standard & Poor's

F500 Life Expectancy

(http://csinvesting.org/2012/01/06/fortune-500-extinction/)

75 years

1950

15 years

2010

Growth by entering a new business

95

% fail

Corporate Strategy Board 99

% fail

Clay Christensen

Everything to lose:

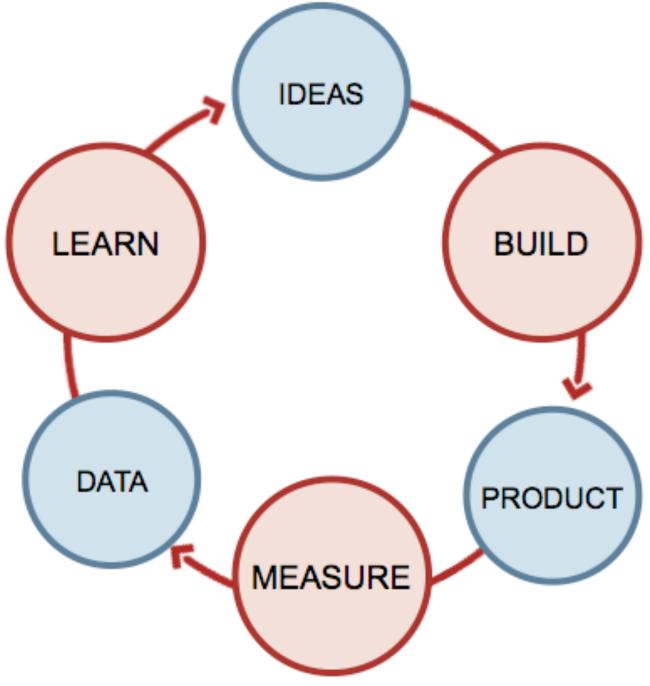
Why big companies need innovation.



Don't sell what you can make. Make what you can sell.

The core of Lean

is iteration.



Constraints slow things down







VS.



Some good news

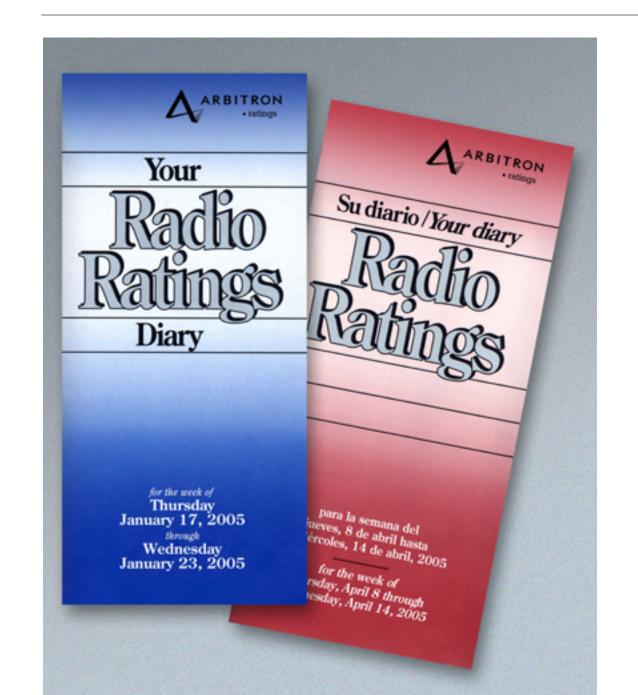
Analytics and data can help.

2011 MIT study of 179 large publicly traded firms

Companies that use data-driven analytics instead of intuition have 5%-6% higher productivity and profits than competitors.



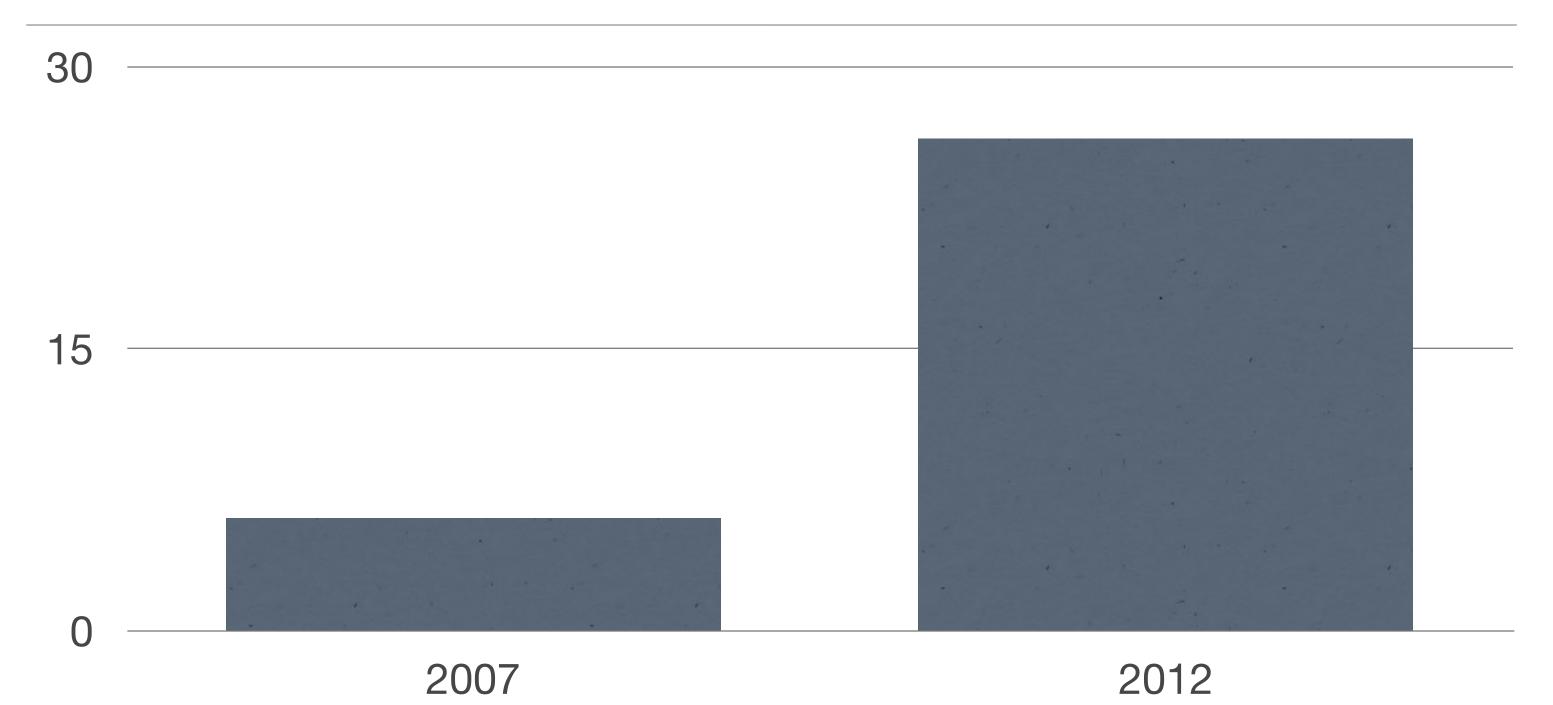
Arbitron and radio data





Times a song in "heavy rotation" is played daily





"Efficiency is tied to analytics. We'll still look for new materials, or for the physics of devices, but the analytics ... is what's really untapped."

A data-driven, three-maxima approach.

Many models for enterprise innovation

Core

Do the same thing better.

Regional optimizations.

- Get there faster
- Smaller batches
- Solution, then testing
- Increased accountability

Adjacent

Nearby product, market, or method.

Innovation, go-tomarket strategies.

- Customer development
- Test similar cases
- Parallel deployment
- Analytics & cycle time

Transformative

Start something entirely new.

Reinvent the business model.

- Fail fast
- Skunkworks/R&D
- Focus on the search
- Ignore the current model & margins

A three-maxima model of enterprise innovation

Business optimization (five mores)

Current state

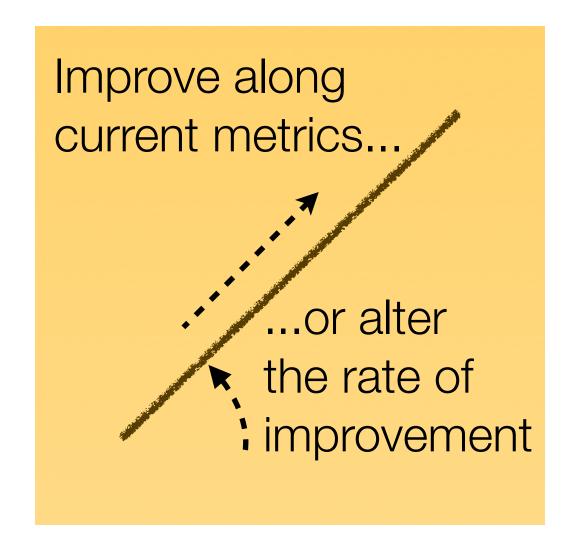
Product, market, method innovation

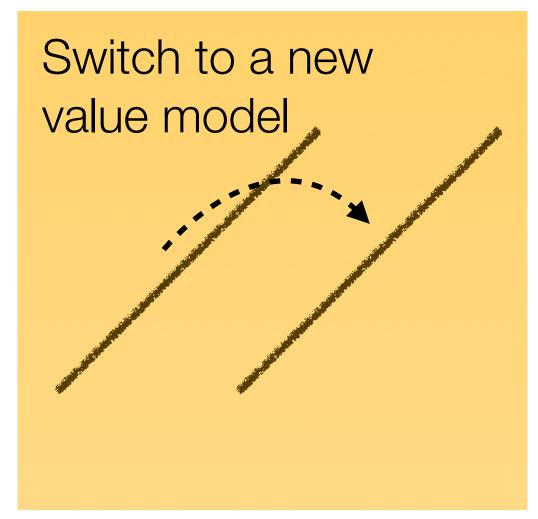
You can convince executives of this because some of it is familiar.

Business model innovation

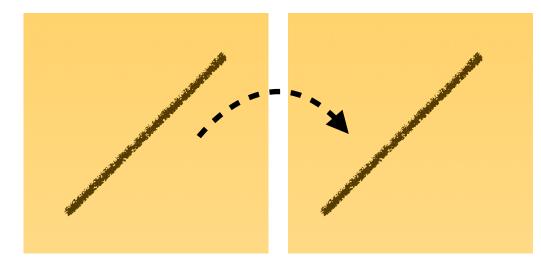
This terrifies them because it eats the current business.

Three kinds of innovation





Change the business model entirely



Sustain/core

(optimizing for more of the same)

Innovate/adjacent

(introduce nearby product, market, or method)

Disrupt/transformative

(Fundamentally changing the business model)

Improvement

Adjacency

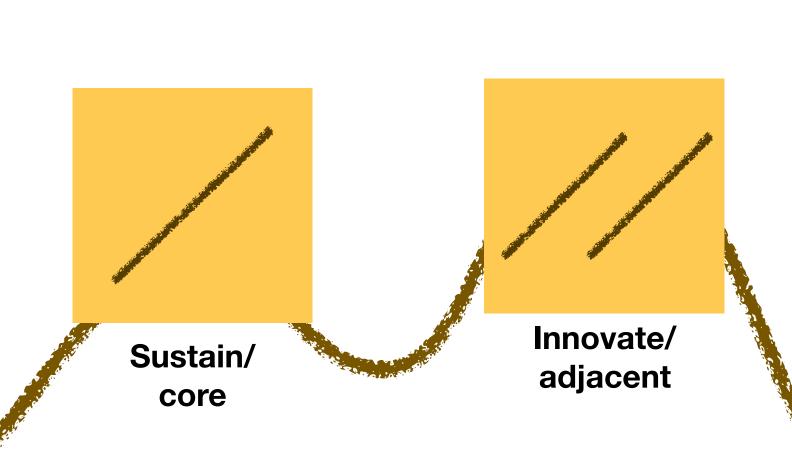
Remodeling

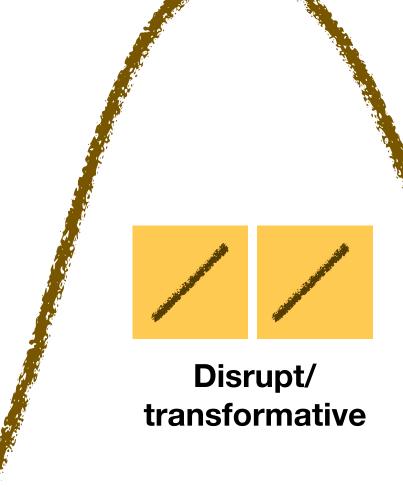
Do the same, only better.

Explore what's nearby quickly

Try out new business models

Lean approaches apply, but the metrics vary widely.





Sustaining

Next year's car

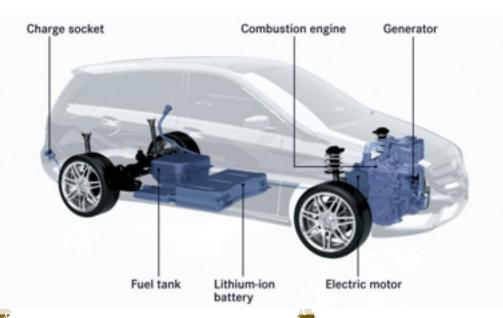
Adjacent

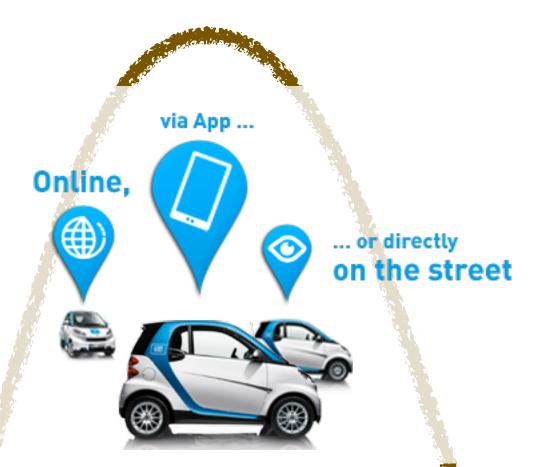
Electric car, same dealer

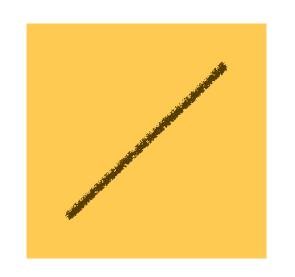
Disruptive

On-demand, app-based car service









More things

- Inventory increase
- Gifting, wish lists

To more people

- Highly viral offering
- Low incremental order costs

Sustaining innovation is about more of the same.

(says Sergio Zyman)

For more money

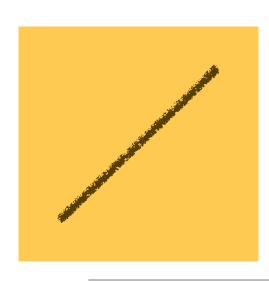
- Maximum shopping cart
- Price skimming/tiering

More often

- Loyal customer base that returns
- Demand prediction, notification

More efficiently

- Supply chain optimization
- Per-transaction cost reduction



Rapid

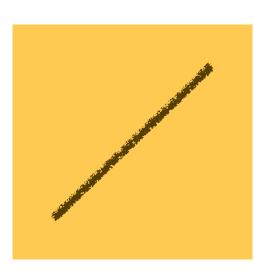


The infamous S-curve

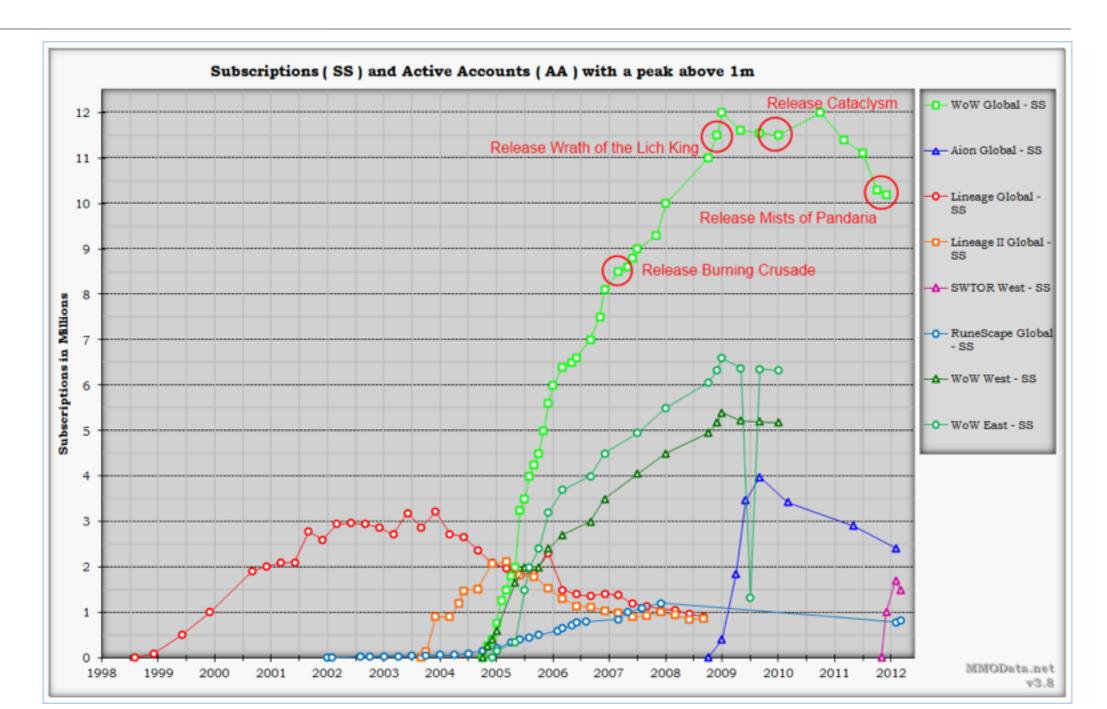
Market saturation

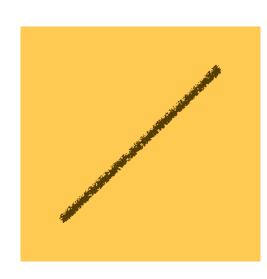
Early adopters

(Product lifecycle, Bass diffusion curve, etc.)



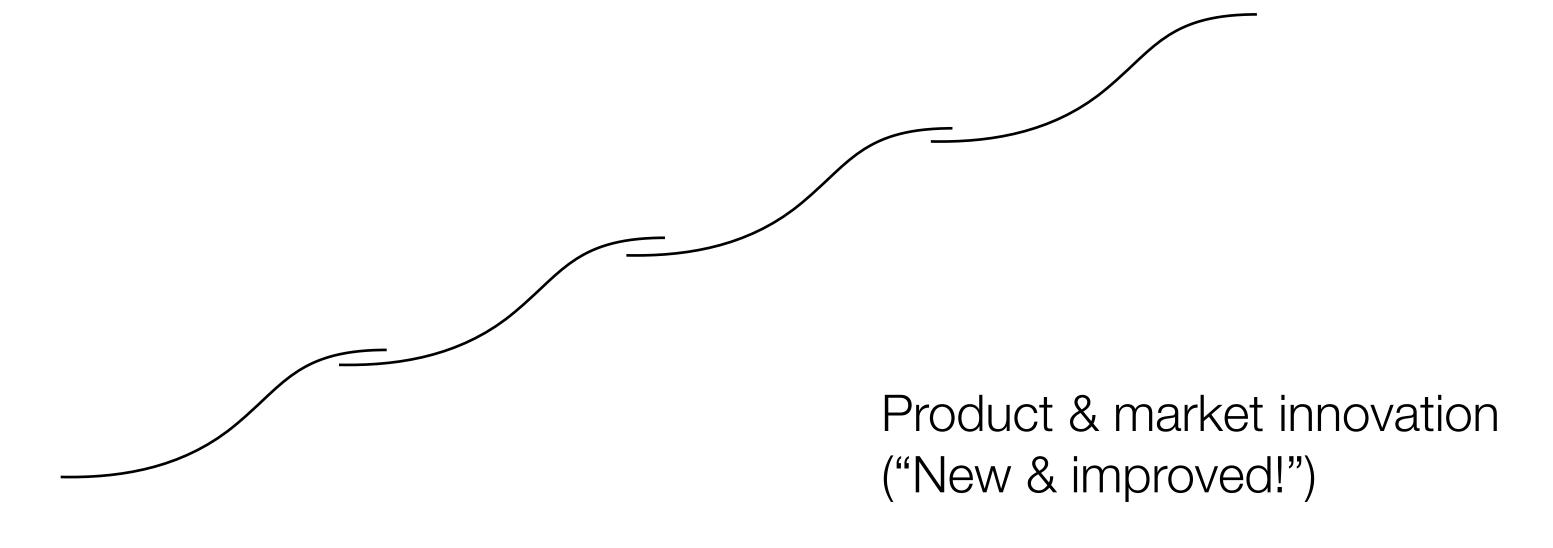


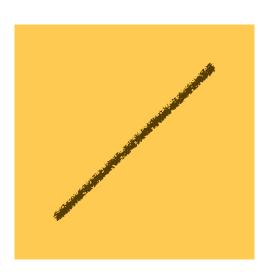




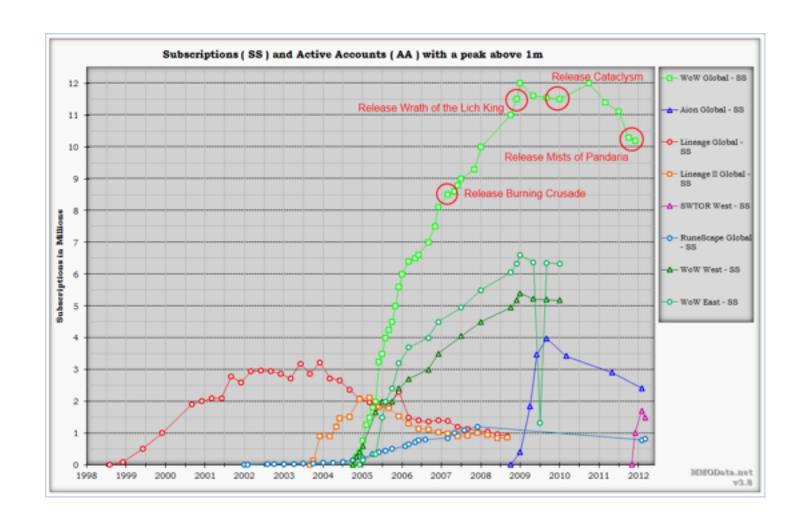


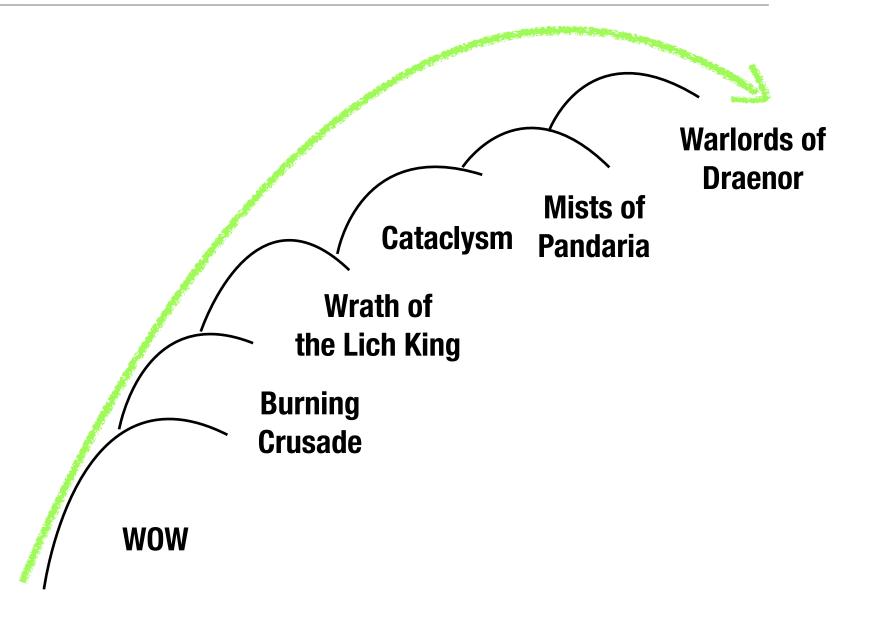
Fixing this: sustaining growth with novelty

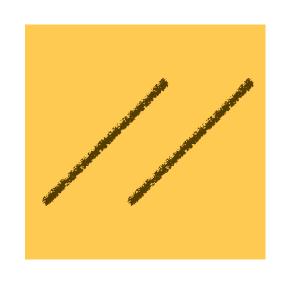












Adjacent innovation is about **changing one part of the model** in a way that **alters the value network.**

3 kinds of innovation

Method (new "how")





Market (new "who")

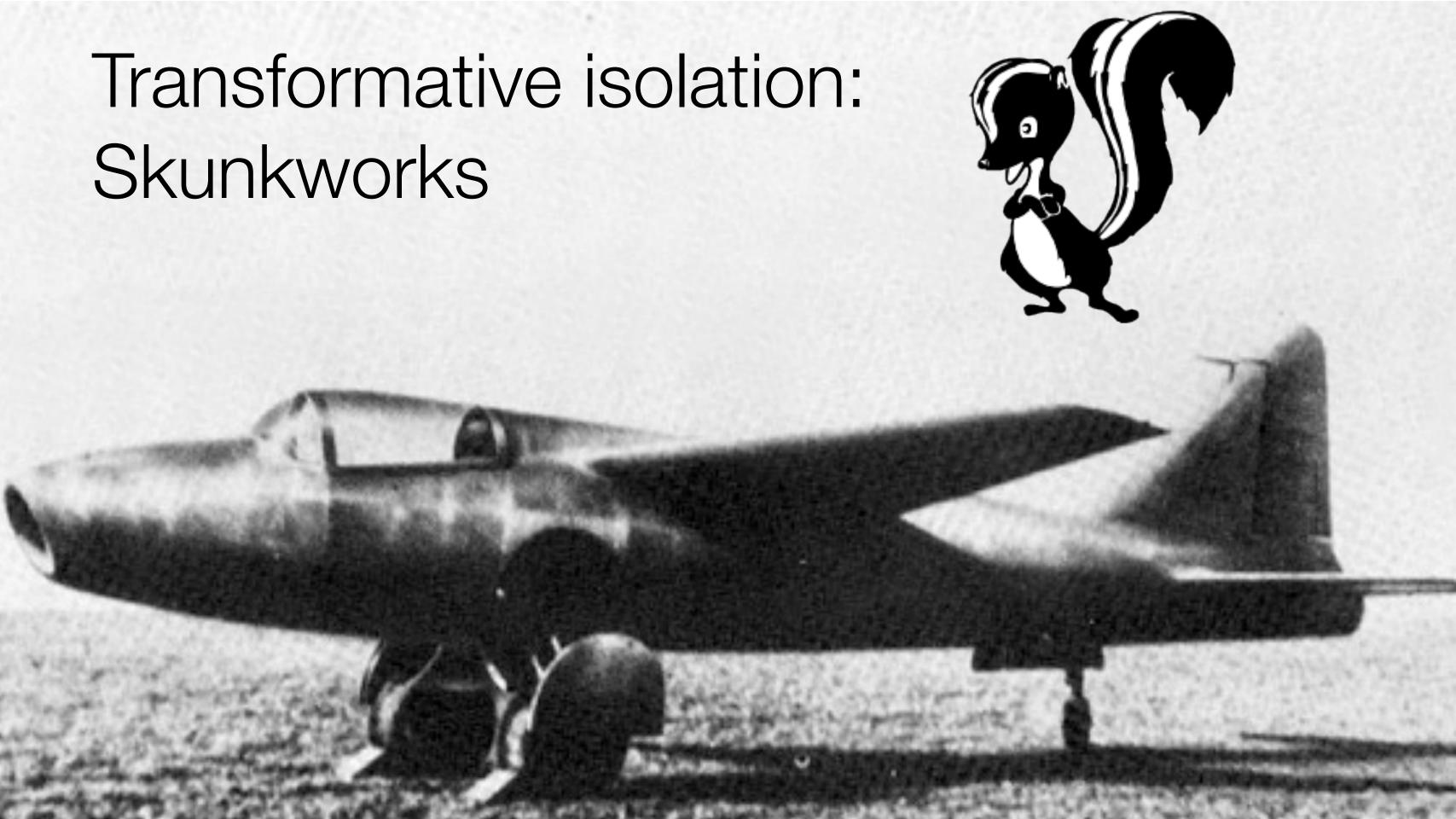
Product (new "what")





Transformative innovation is about taking a leap.

By definition it is destructive and exploits a discontinuity.

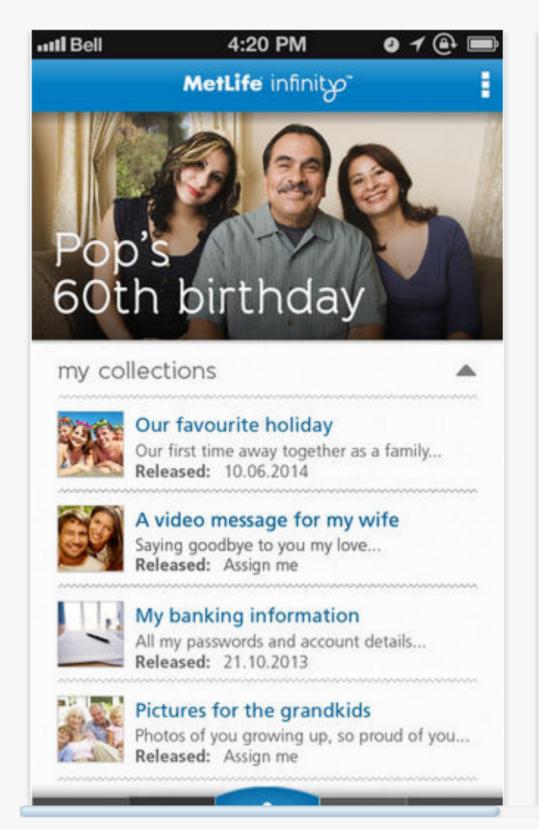


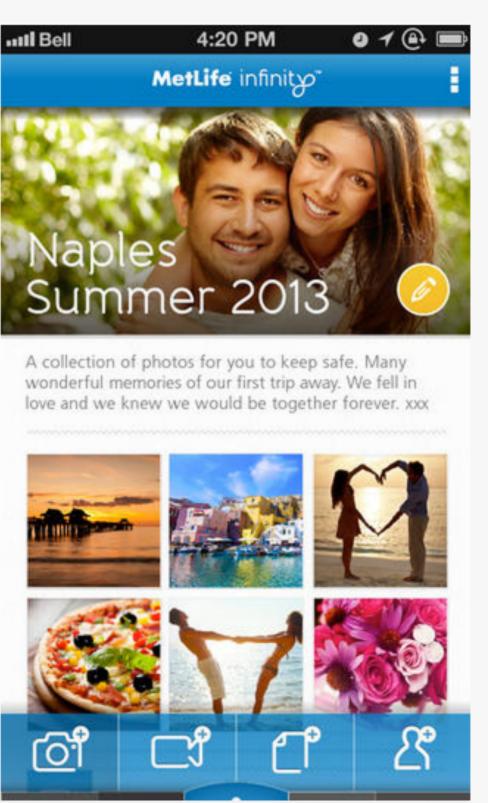
Transformative incubation: Metlife Infinity

MetLife Infinity By MetLife



iPhone Screenshots





Embracing data-driven change

(A bagful of tricks from agitators in companies of all sizes.)

Focus on the risky stuff (which is usually attention.)

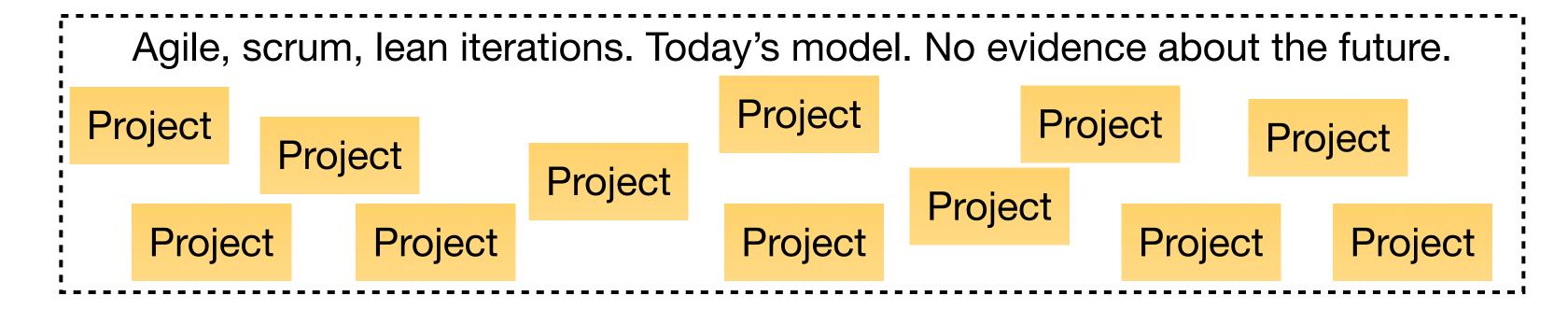


Use different timeframes.

Capital cycles don't fit the short, iterative nature of startup uncertainty

12 month budgeting cycle; annual plan. Future based on past.

(Requires budget insulation)



Is this company growing or stagnating?

	January	February	March	April	May
Rev/customer	\$5.00	\$4.50	\$4.33	\$4.25	\$4.50

How about this one?

	Cohort	1	2	3	4	5
	January	\$5	\$3	\$2	\$1	\$0.5
	February		\$6	\$4	\$2	\$1
	March			\$7	\$6	\$5
	April				\$8	\$7
	May					\$9

Look at the same data in cohorts

Cohort	1	2	3	4	5
January	\$5	\$3	\$2	\$1	\$0.5
February	\$6	\$4	\$2	\$1	
March	\$7	\$6	\$5		
April	\$8	\$7			
May	\$9				
Averages	\$7	\$5	\$3	\$1	\$0.5

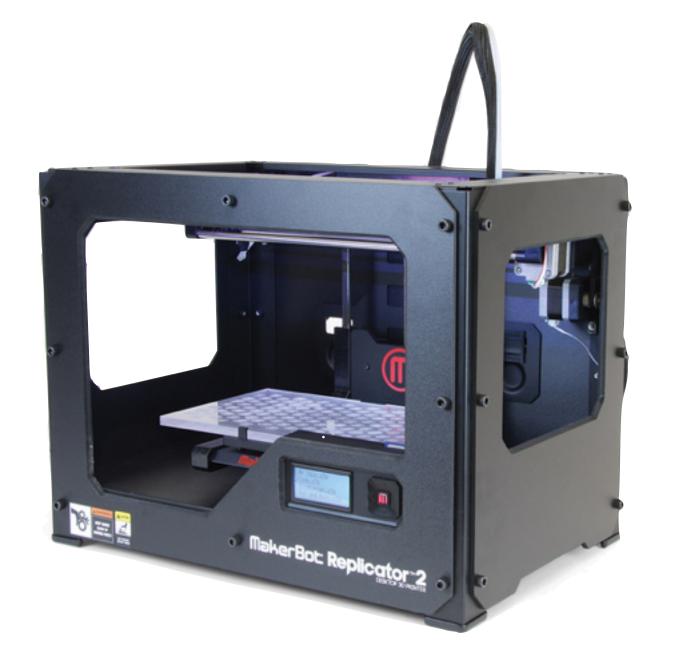
Use outliers and missed searches to hunt for good ideas & adjacencies.

- 1/8 men have an incontinence issue. 1/3 women do.
- When search results show a significant number of men searching, this suggests the adjacent (male) market is underserved.



Frame it like a study

- Product creation is almost accidental.
- Unlike a VC or startup, when the initiative fails the organization still learns.







➤ From tackling the FTA rate to visualizing the criminal justice supply chain.



Use data to create a taste for data



- Sitting on Billions of rows of transactional data
- David Boyle ran 1M online surveys
- Once the value was obvious to management, got license to dig.



Don't just collect data, chase it.











Everything's an excuse to experiment

How it Works



Step 1 of 5
Enter by July 31, 2013. Hear in August if your product progresses to the next round.



Step 2 of 5
In the Audition Round,
online votes show our
merchants products' public
support.



Step 3 of 5
Finalists will have their stories featured in an original web series.



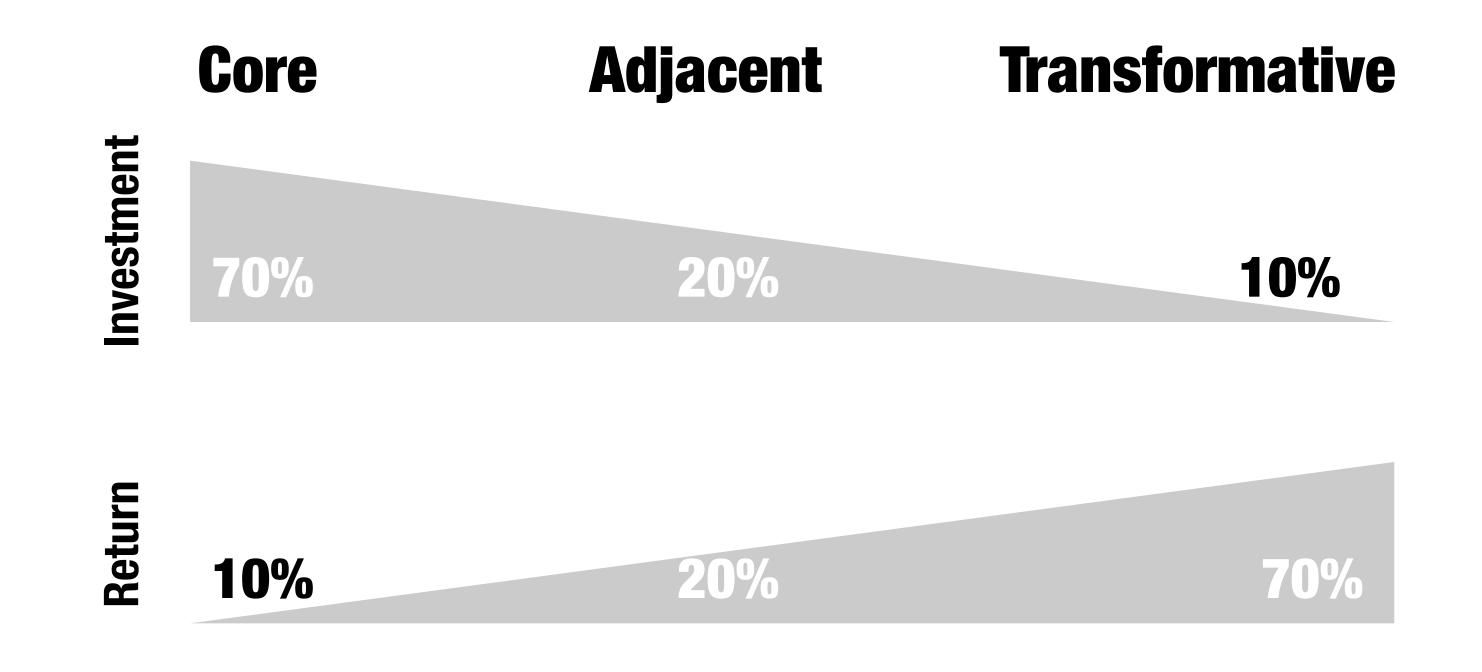
Focus on the desired behavior, not just the information.

26% increase in towel re-use with an appeal to social norms; 33% increase when tied to the specific room.

The effectiveness of energy conservation "nudges" depends on an individual's political ideology ... Conservatives who learn that their consumption is less than their neighbors' "boomerang" whereas liberals reduce their consumption.

What metrics work when?

Innovation portfolios at big companies



Intrapreneurs often have to use proxies

Stage	Startup metrics	Intrapreneur metrics		
Empathy	Customers interviewed (needs & solutions), assumptions quantified, TAM, monetization possibility	Non-customers interviewed; assumptions quantified, constraints identified, TAM, disruption potential		
Stickiness	Churn, engagement	Support tickets, integration time, call center data, delays		
Virality	Viral coefficient, viral cycle time	Net Promoter Score, referrals, case study willingness		
Revenue	Attention, engagement	Billable activity; signed LOIs; pilot programs; after-development profitability		
Scale	Automation	Contribution, training costs, licensing		

The 3 stages of the Emerging Business Office

"A startup could take a year to talk to as many customers as we do in a week."



- Generation makes increasing investments in companies
- Market sizing
- 3 horizons & timeframes
 - Science: 3-5y
 - **■** Development: 1-2y
 - Preparation: <12m</p>

- **Exploration** proves out both the tech and business model
- Challenge assumptions."Am I hitting milestones?""Are assumptions valid?"
- Rapid prototyping. Risk & uncertainty: what don't we know how to do?

- Adoption means customer buying in
- Validate across many external partners to be sure the model scales.
- Use customer base as an advantage—access to C-level.

6-8 Generate projects

What's the value proposition?
Why are we going to make money?
Why Motorola?

4 Explore projects

Number of dangling assumptions Rate at which it's growing/sinking Very deep with small sample size

6-8 Adopt projects

Casting a wider net
Go-to-market metrics
Funnel size and market segments

Core metrics

Business plan.

Assume it will work.

But the market will change by the time you've built it.

Example: Next year's car model

Metrics that matter

- Return on investment
- Total cost of ownership
- Trouble tickets/issues
- Training time
- Comparing to others

Adjacent metrics

Business model.

Assume it will fail.

Your ultimate use case won't be what you think it is today.

Example: Mr. Clean Magic Eraser

Metrics that matter

- Questions answered
- Virality & word of mouth
- Early adopter stickiness
- Regulation
- Total addressable market

Transformative metrics

Business idea.

Assume it is possible.

You hope it will have the consequences you want but aren't sure how.

Example: Netflix, Uber

Metrics that matter

- People I've talked to
- Prototype creation speed
- Assumptions validated
- Problems uncovered
- Technical feasibility
- Hidden constraints

"Do we need to meet more often?" is a metric."



Portfolio metrics

Ideas

Number in the pipeline; is it growing?

Quality

How many are crazy vs. real business ideas?

Funding

Ideas funded; ideas that were a waste; ideas needing iteration

Exploration

of meetings, qualitative feedback, pivots

Solution fit

Have we convinced someone to sign on for something?

Demand

Number of proposals issued; pipeline

Product fit

Satisfied delivery, on budget; trouble tickets; delays; escalation; referenceability

Profitability

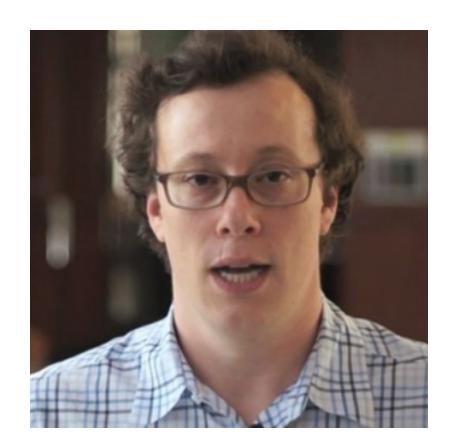
Profitable independent of costs like development?

Cashflow B/E

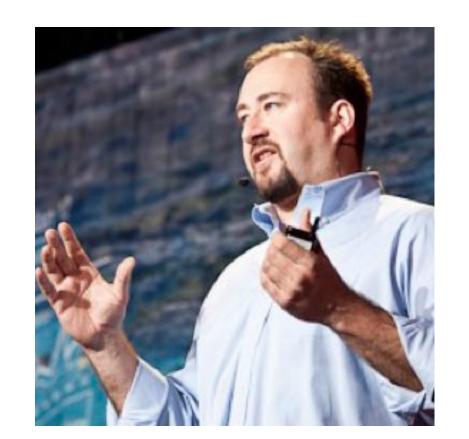
0% overall profitability, beginning to repay initial investment

Graduation

Making money overall



Ben Yoskovitz byosko@gmail.com @byosko



Alistair Croll acroll@gmail.com @acroll "Your competition will use this book to outgrow you."

- Mike Volpe, Hubspot

THE **LEAN** SERIES

Alistair Croll & Benjamin Yoskovitz

L A CS ANALYTICS

Use Data to Build a Better Startup Faster

O'REILLY"

Eric Ries, Series Editor