goto; conference

the lean enterprise

@jezhumble | @GRUVERGary

CHEF
GETCHEF.COM

INTERNATIONAL
SOFTWARE DEVELOPMENT
CONFERENCE

lean

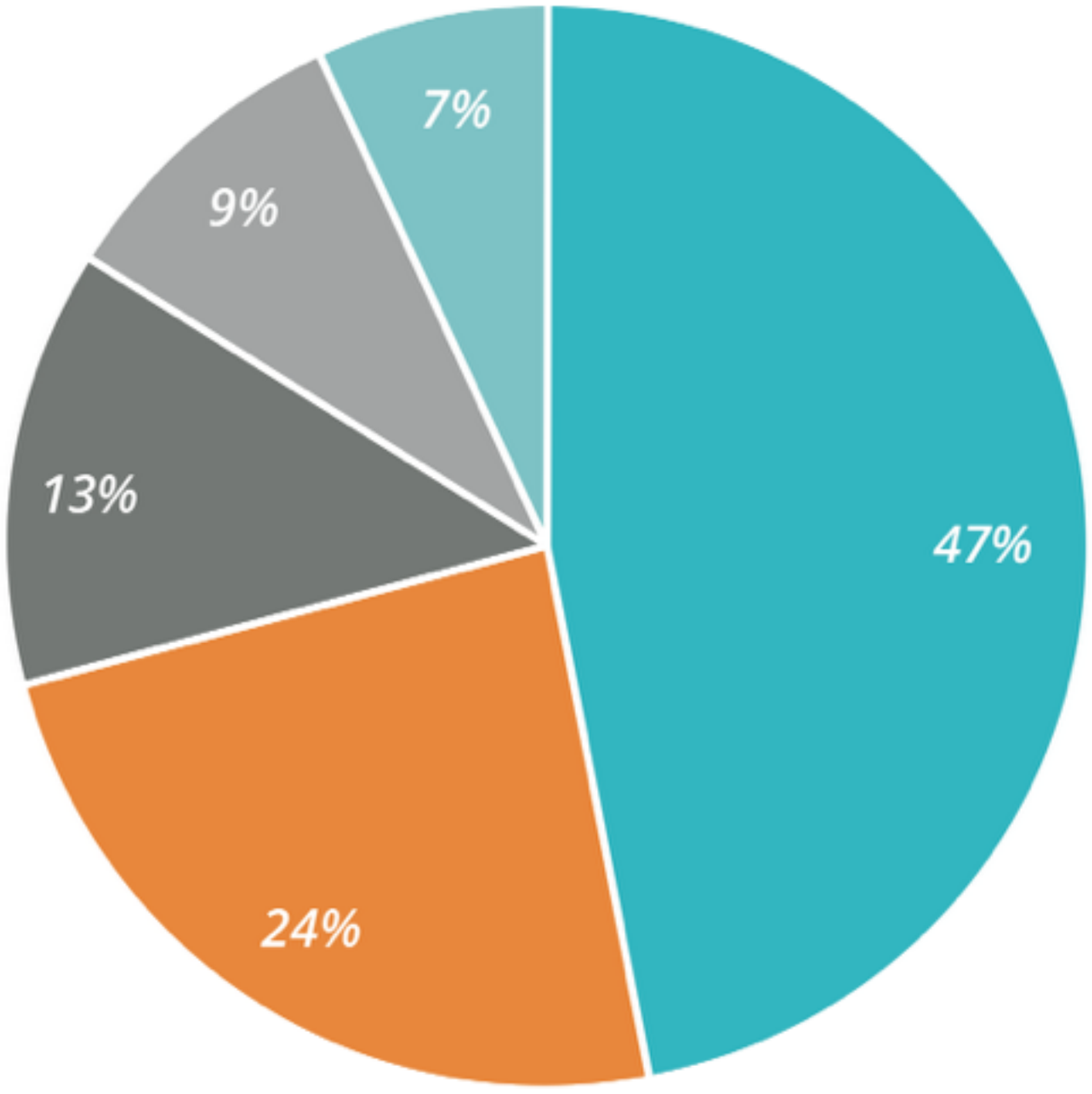
"precisely specify *value* by specific product, identify the *value stream* for each product, make value *flow* without interruptions, let the customer *pull* value from the producer, and pursue *perfection*"

Womack and Jones, *Lean Thinking*

enterprise

a complex, adaptive system

"Please select the statement that most closely aligns with how your company decides which products are built."



- Committee decides from potential options
- Financial modeling (e.g. Economic value optimization)
- Opinion of person with highest salery wins out.
- Product portfolio approach
- No systematic approach

Base: 161 business decision makers

Source: A commissioned study conducted by Forrester Consulting on behalf of ThoughtWorks, September 2012

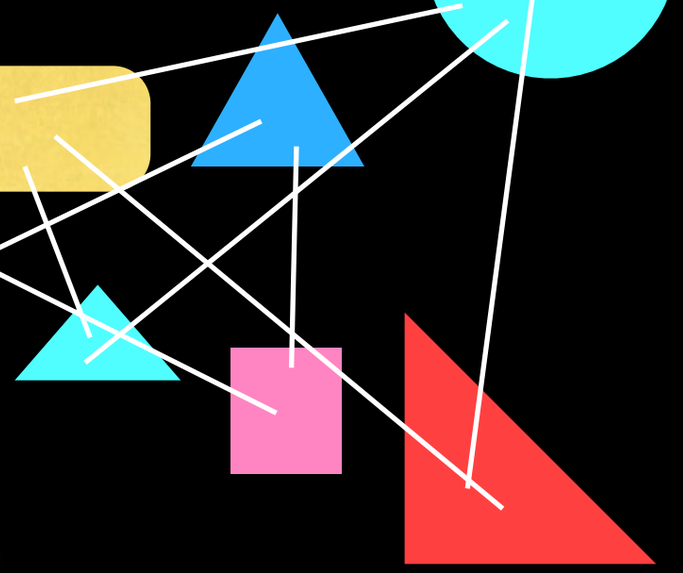
“the enterprise”

Ping!

Business

Engineering

Operations



Project C

Project A

DBAs

Project B

Service desk

Infrastructure team

Value stream

enterprise projects

Ping!

Business

Let's create a new product

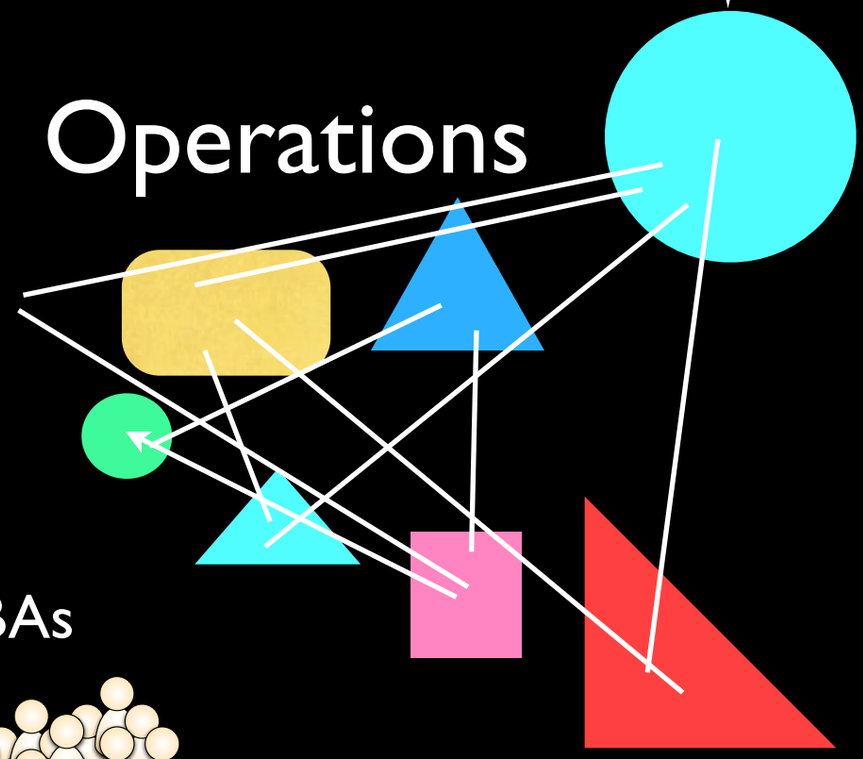
Engineering

Project C
Project D

Project A

Project B

Operations



DBAs

Service desk

Infrastructure team

Value stream

Oh shit!

We're going agile!

Oh shit!

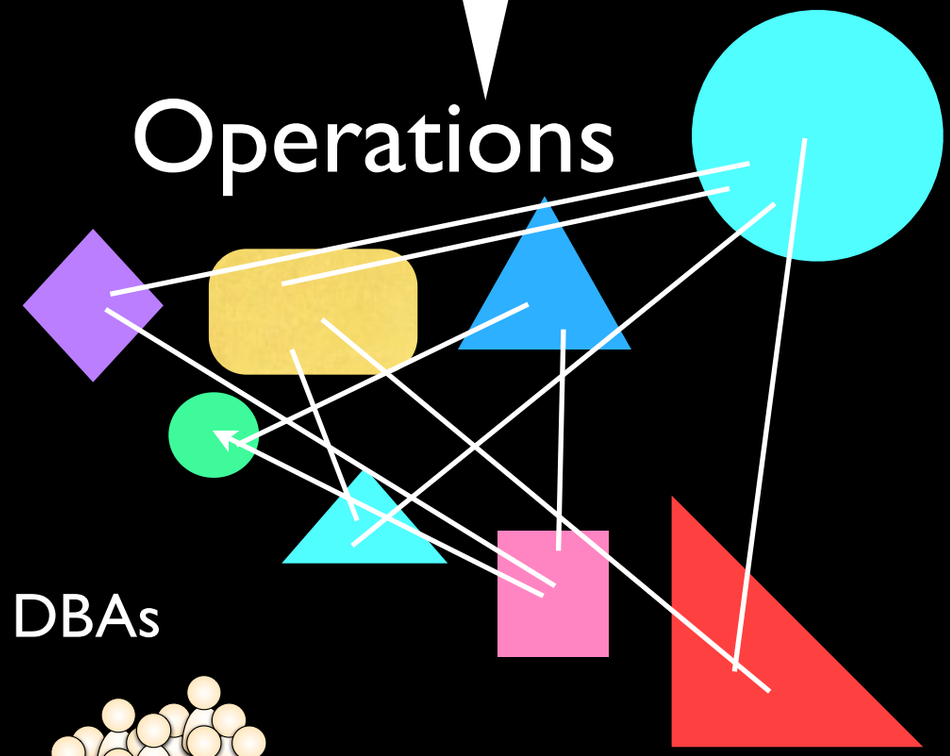
Business

Engineering

Operations

Project D

Project A



DBAs

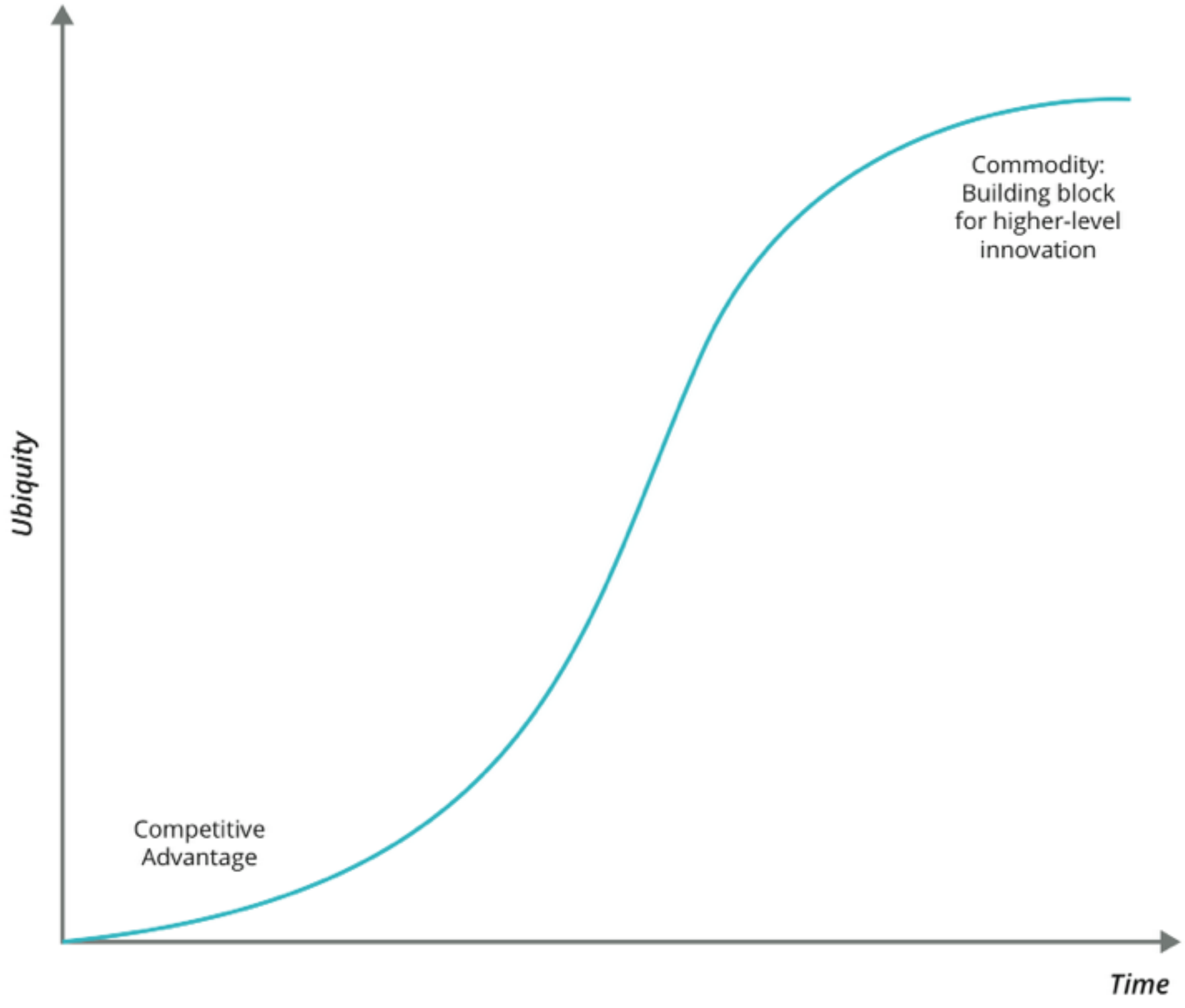
Project B

Service desk

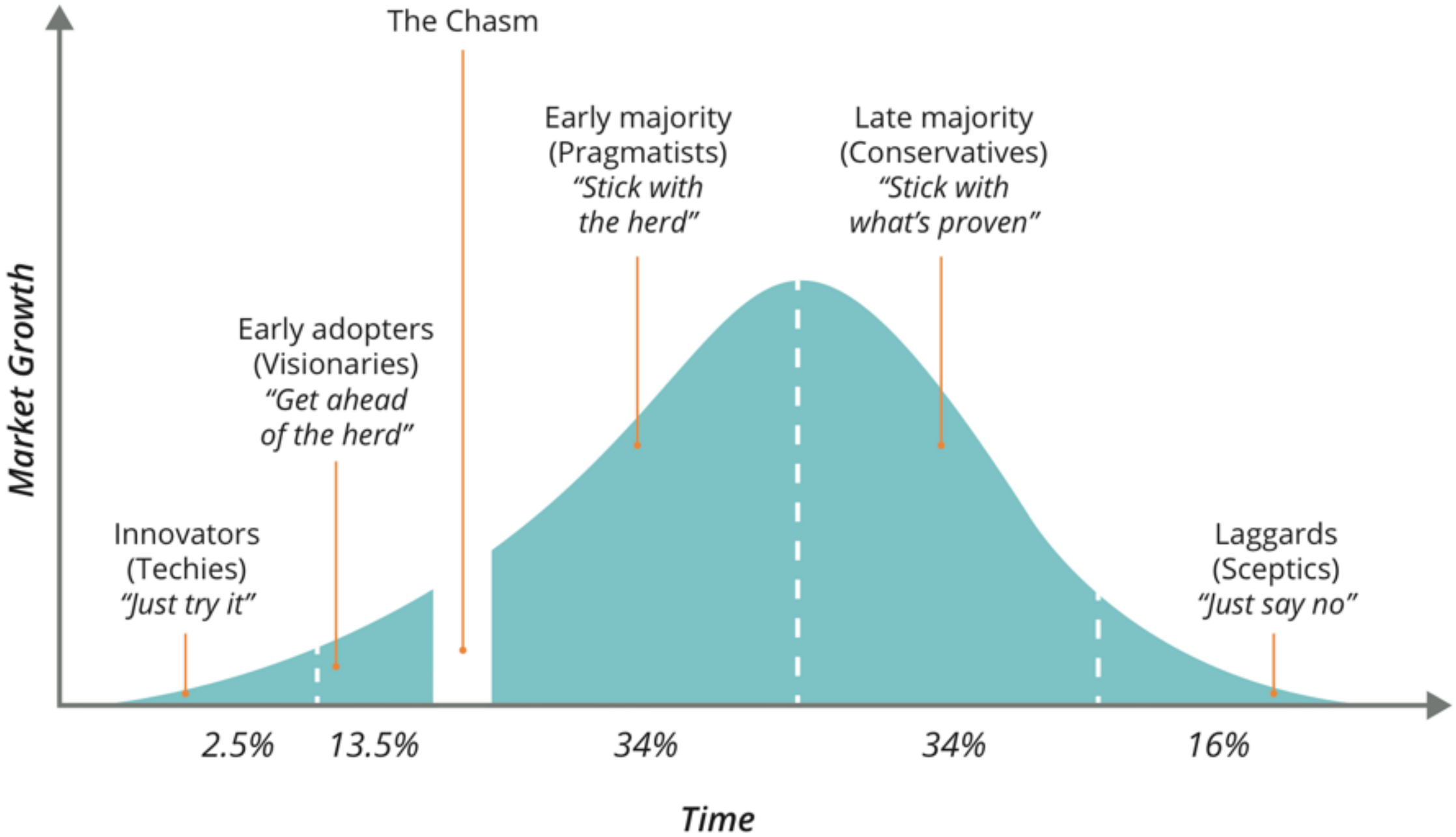
Infrastructure team

Value stream

lifecycle of innovations

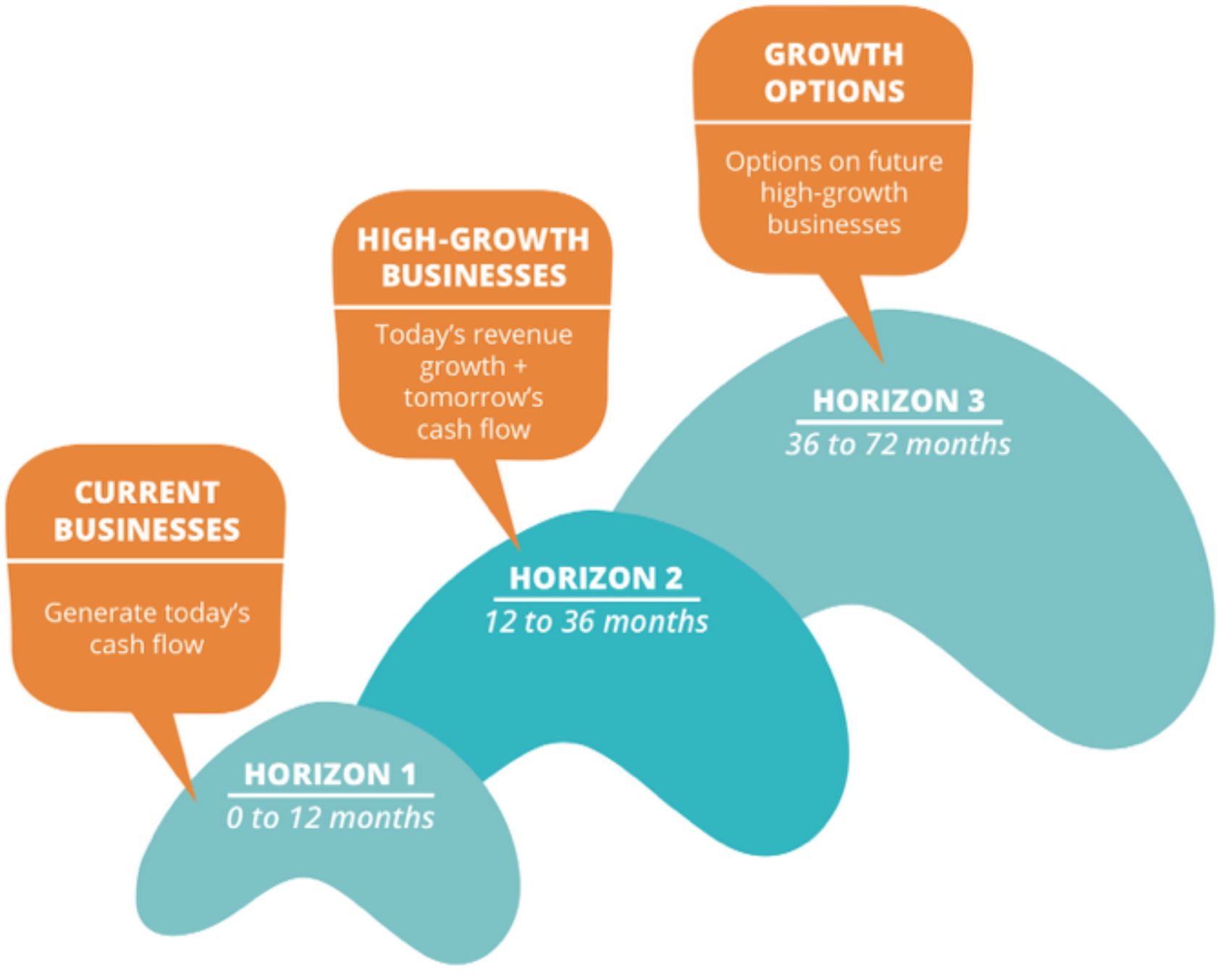


technology adoption lifecycle



Geoffrey Moore, *Crossing the Chasm*

three horizons



Baghai, M., Coley, S. and White, D., *The Alchemy of Growth*

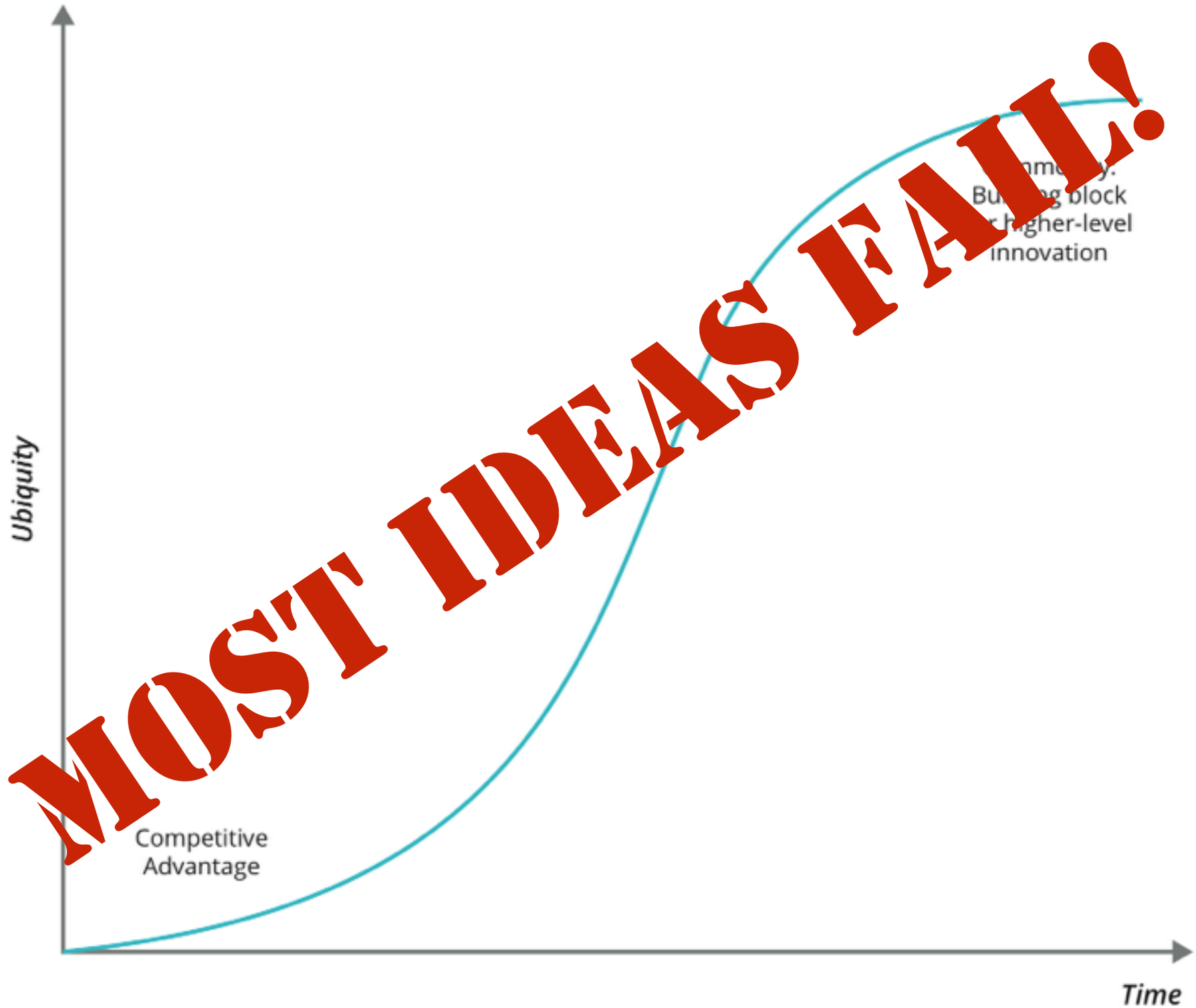
Intuit horizons and metrics

	Existing businesses	Adolescent businesses	Ideas
Investment	60%	30%	10% of operating expenses, funded quarterly based on validated learning
Metrics	Growing category, Share, Net promoter, Revenue	Growth, Increasing efficiency (will lead to profitability)	Love Metrics based on delivering customer benefit, active product usage, proactive word of mouth
Example products	TurboTax, Mint	QuickBooks Online Accounting	SnapTax

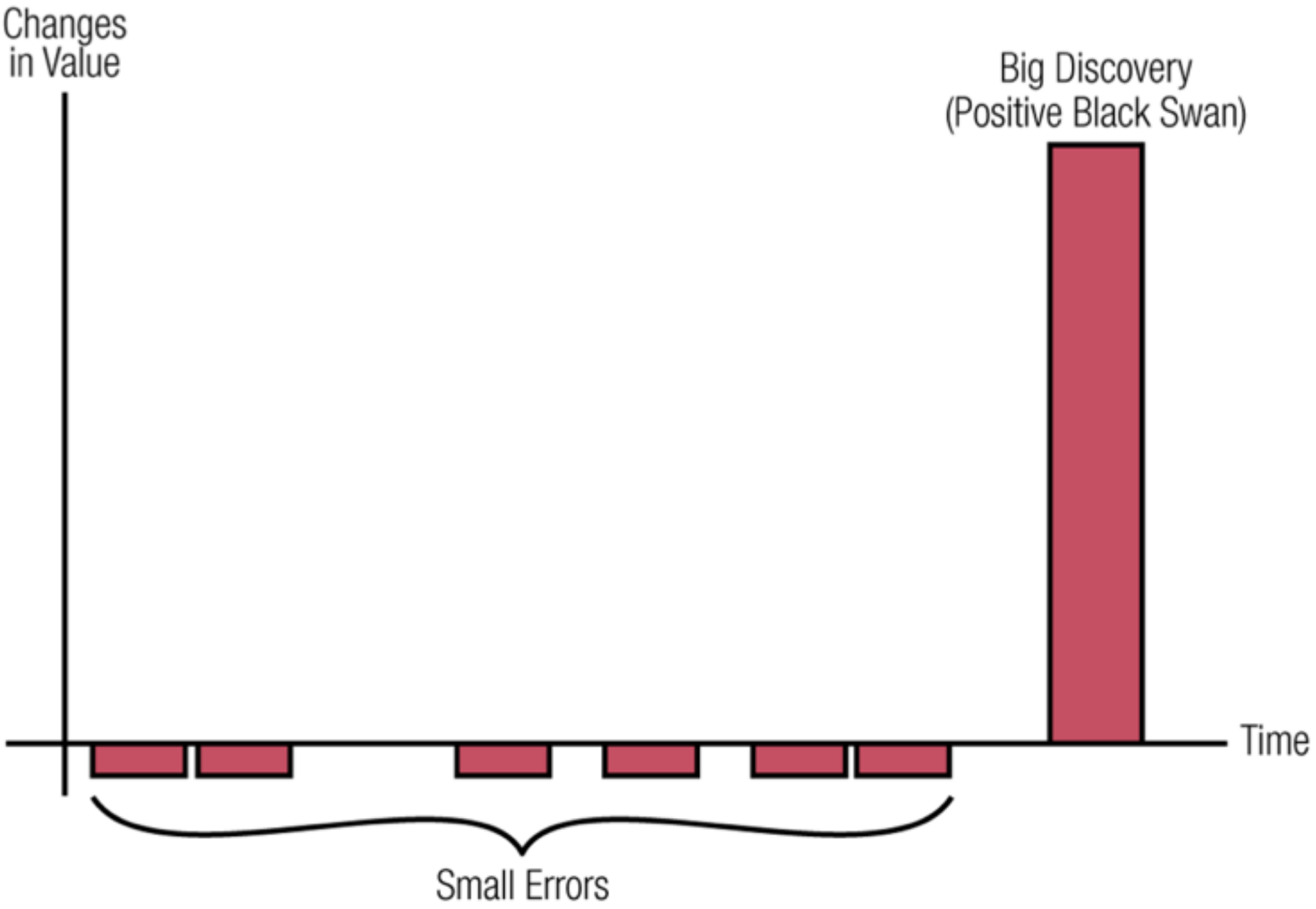
explore vs exploit

	Explore	Exploit
Strategy	Radical or disruptive innovation, new business model innovation	Incremental innovation, existing business model optimization
Structure	Small cross-functional multi-skilled team	Multiple teams aligned using Principle of Mission
Culture	High tolerance for experimentation, risk taking, acceptance of failure, focus on learning	Incrementally improve and optimize, values quality and customer satisfaction
Risk management	Biggest risk is failure to achieve product/market fit	A more complex set of trade-offs specific to each product/service
Goals	Create new markets, discover new opportunities within existing markets	Maximize yield from captured market, outperform competitors
Measure of progress	Achieving product/market fit	Outperform forecasts, achievement of planned milestones and targets

product/market fit

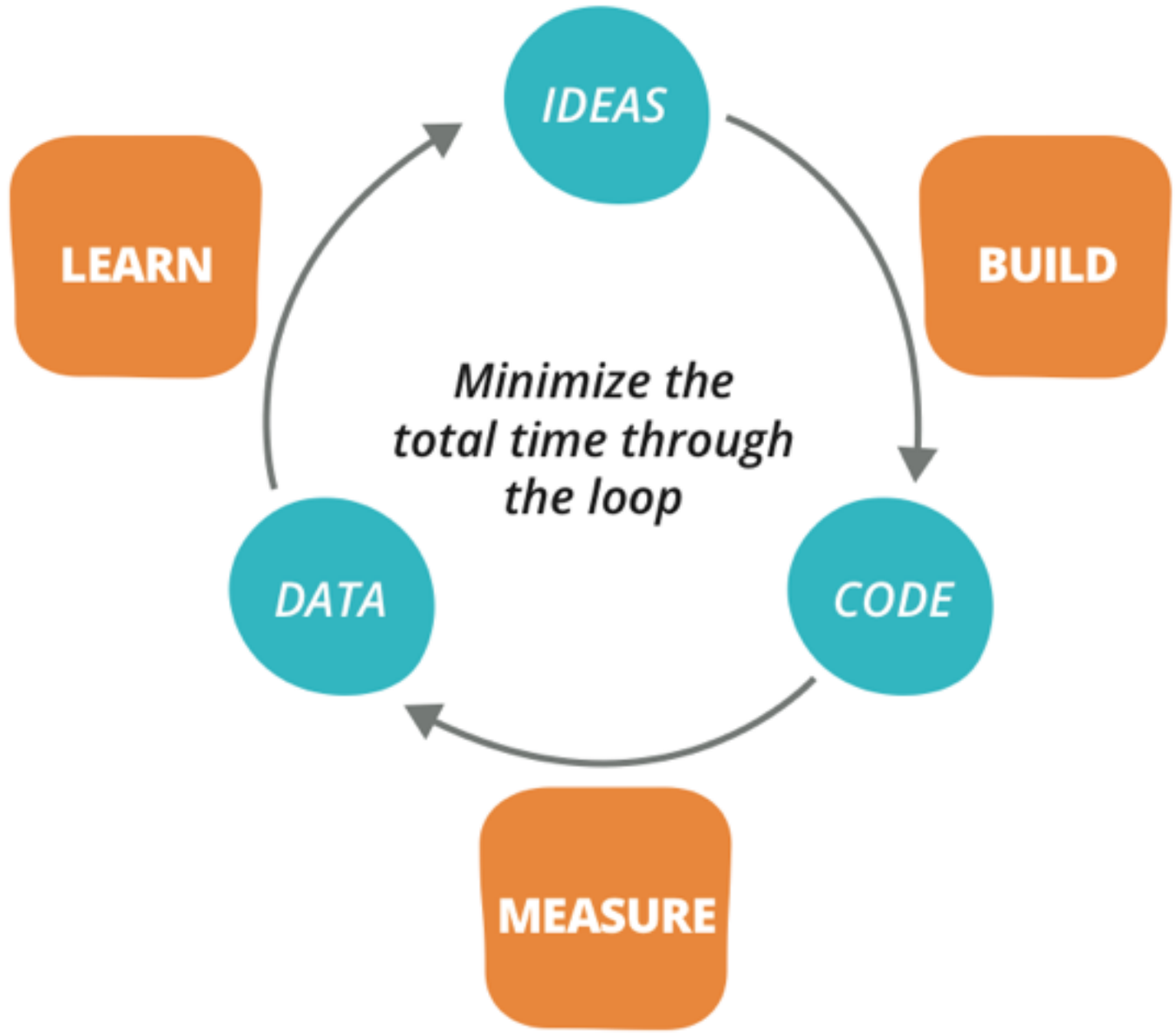


optionality

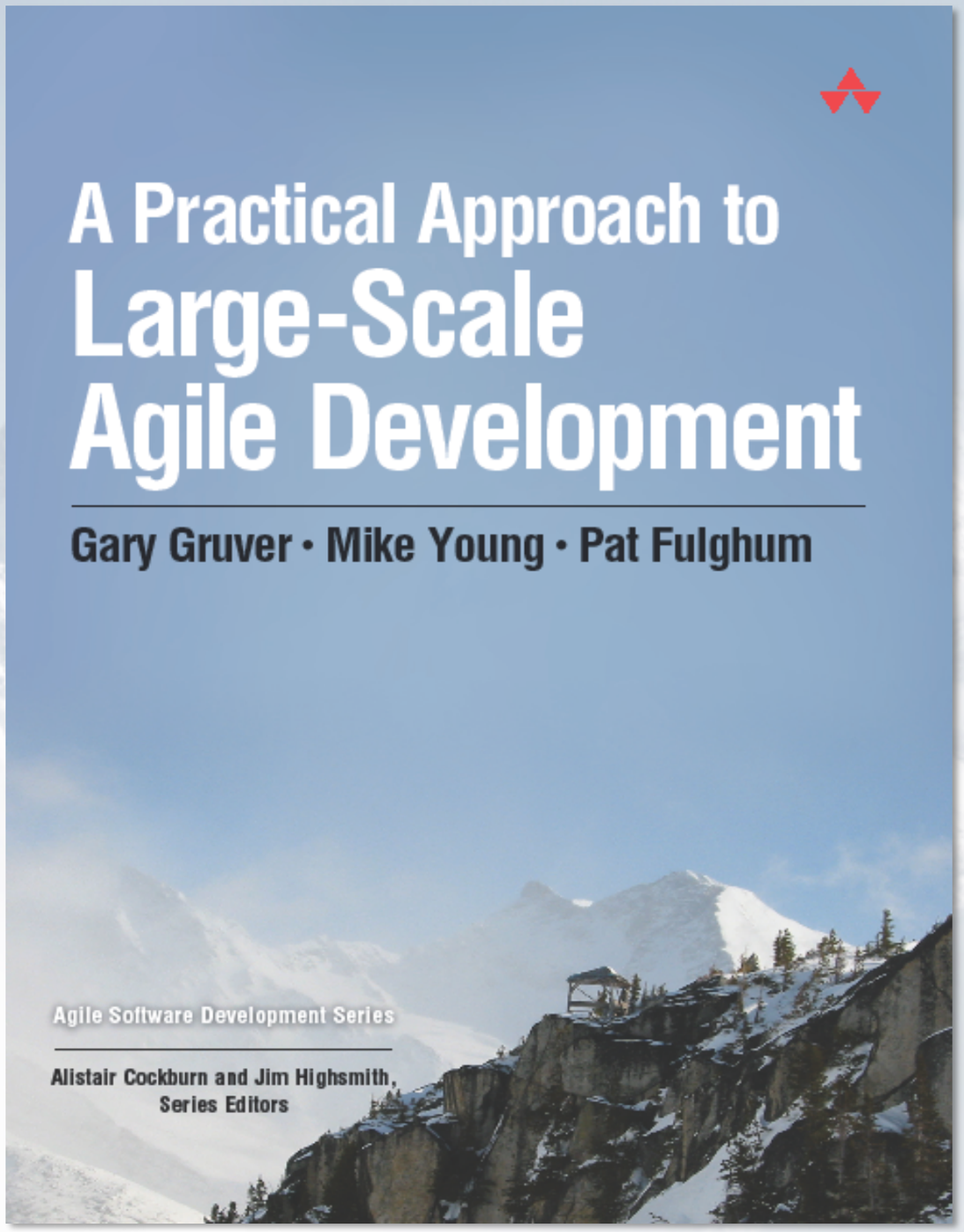


Nassim Taleb, *Antifrafile*

build-measure-learn



gary gruver



- Led HP's 400+ developers on a journey from waterfall to agile development
- VP of QE, Release, and Operations at Macys.com leading journey to CD
- President Large-Scale Agile LLC consulting (trying to to help the Psychopaths)

hp laserjet firmware team

2008

- 10% - code integration
- 20% - detailed planning
- 25% - porting code
- 25% - current product support
- 15% - manual testing
- **~5% - innovation**

firmware development transformation

Consistent Dev Environment

Integrated Tools

Agile Development with Mini Milestones (Sprints)

Organizational Change Management

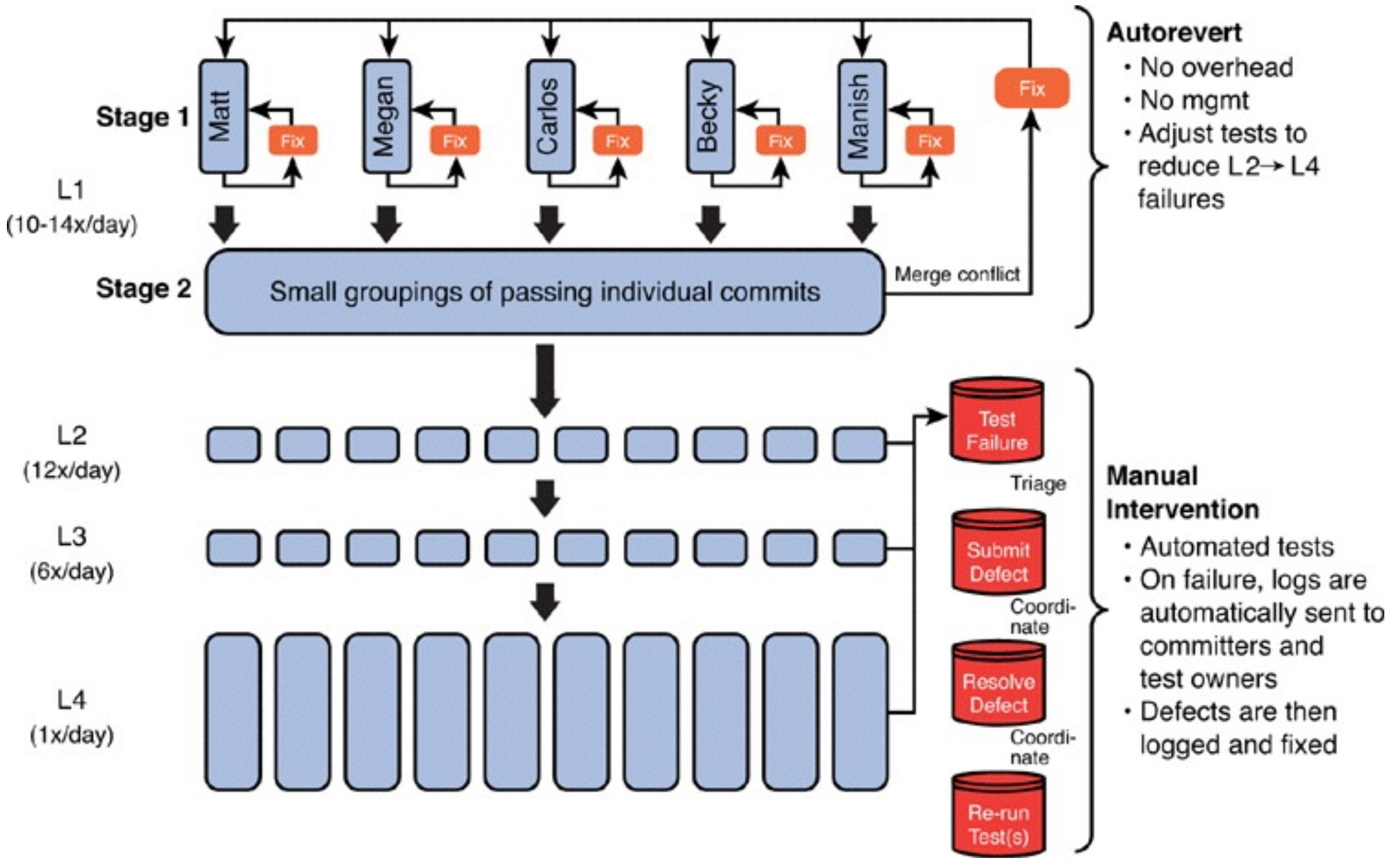
Architected for product variability

Fully automated unit and system test

Continuous integration and test system

One branch for all products including CPE

deployment pipeline



breakthrough capacity for development

New Customer Capabilities

Defect Fixes

FutureSmart FW Large Scale Agile Development Engine

- 400+ developers
- 10+M LOC
- 75,000-100,000 LOC turmoil
- 100-150 Commits
- 10-15 builds /day
- 15,000 hours/day of testing (90% pass rate)

hp laserjet firmware team

2008	2011
10% - code integration	2% - continuous integration
20% - detailed planning	5% - agile planning
25% - porting code	15% - one main branch
25% - current product support	10% - one branch cpe
15% - manual testing	5% - most testing automated
~5% - innovation	**~40% - innovation**

The remaining 23% on RHS is spent on managing automated tests.

the economics

2008 to 2011

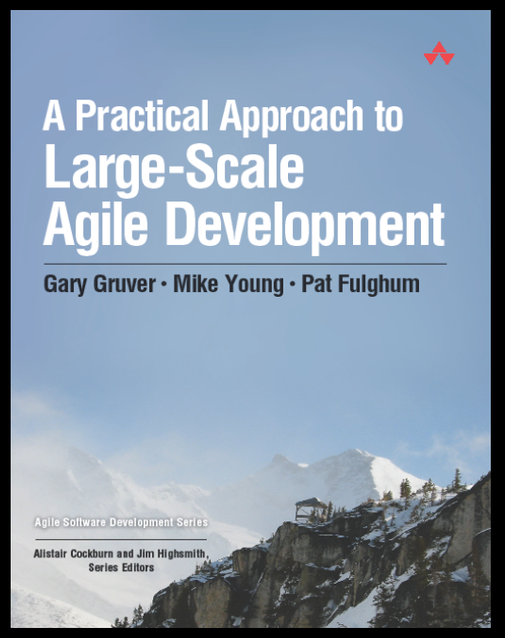
- overall development costs reduced by ~40%
- programs under development increased by ~140%
- development costs per program down 78%
- resources now driving innovation increased by 8X

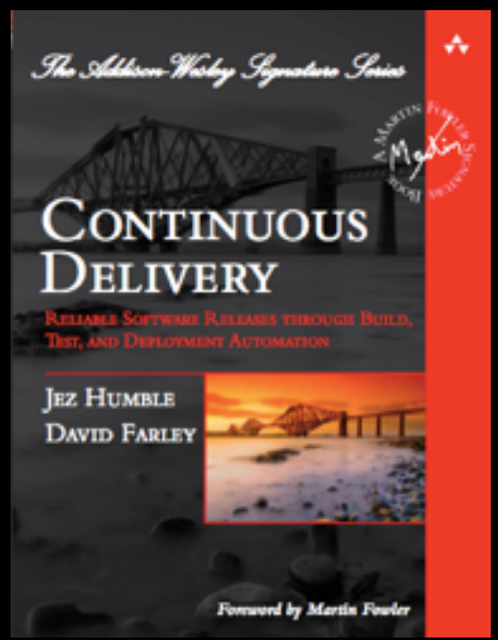
A Practical Approach to Large-Scale Agile Development - Gruver, Young, Fulghum

questions

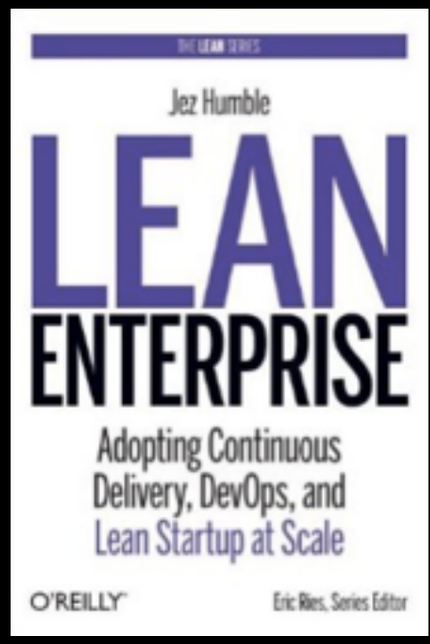
@jezhumble | jez@getchef.com
http://continuousdelivery.com/

@GRUVERgary | gbgruver@gmail.com
http://practicallargescaleagile.com/





PRE-ORDER THE LEAN ENTERPRISE!
http://bit.ly/lean-enterprise-ebook
http://bit.ly/lean-enterprise-paper



CC BY NC SA
© 2014 Chef, Inc., ThoughtWorks, Inc., and Gary Gruver

CHEF
GETCHEF.COM