



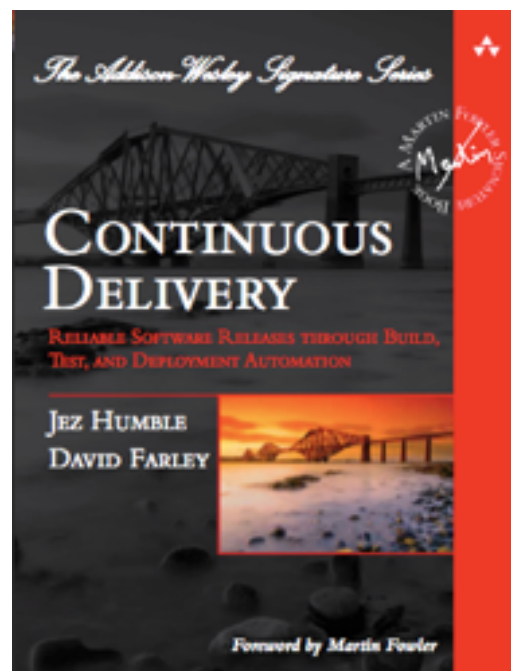
Click 'engage'
to rate sessions
and ask questions

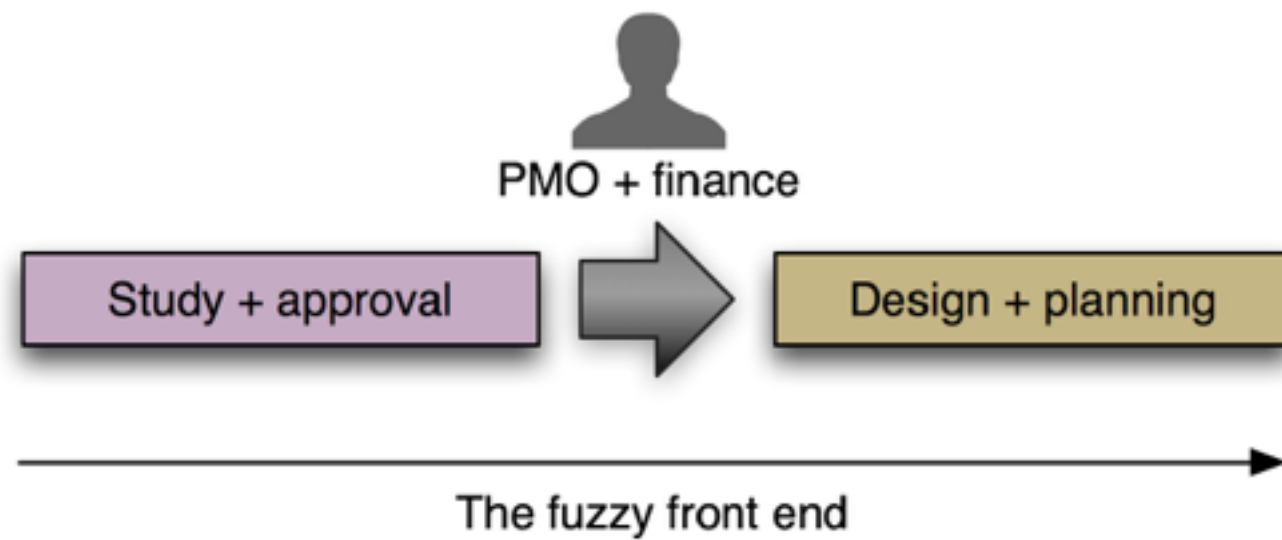


why scaling agile doesn't work (and what to do about it)

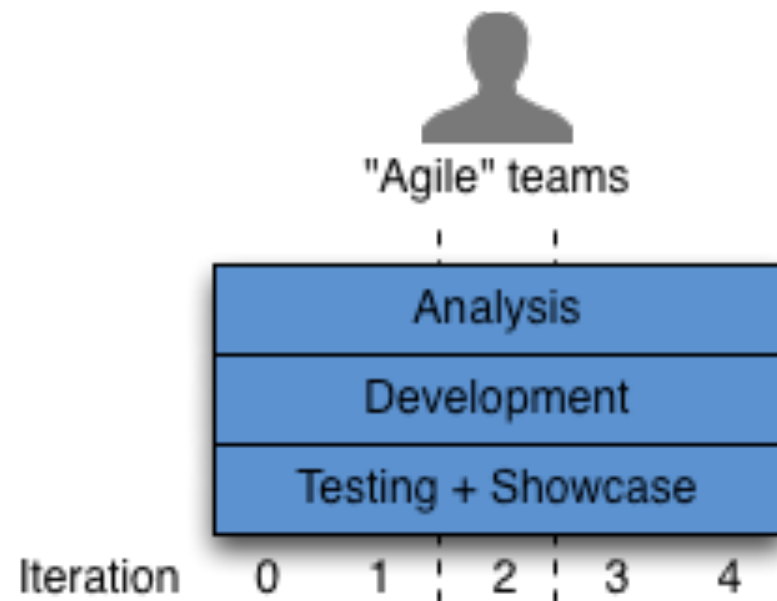
@jezhumble

#gotober | december 4 2015





water-

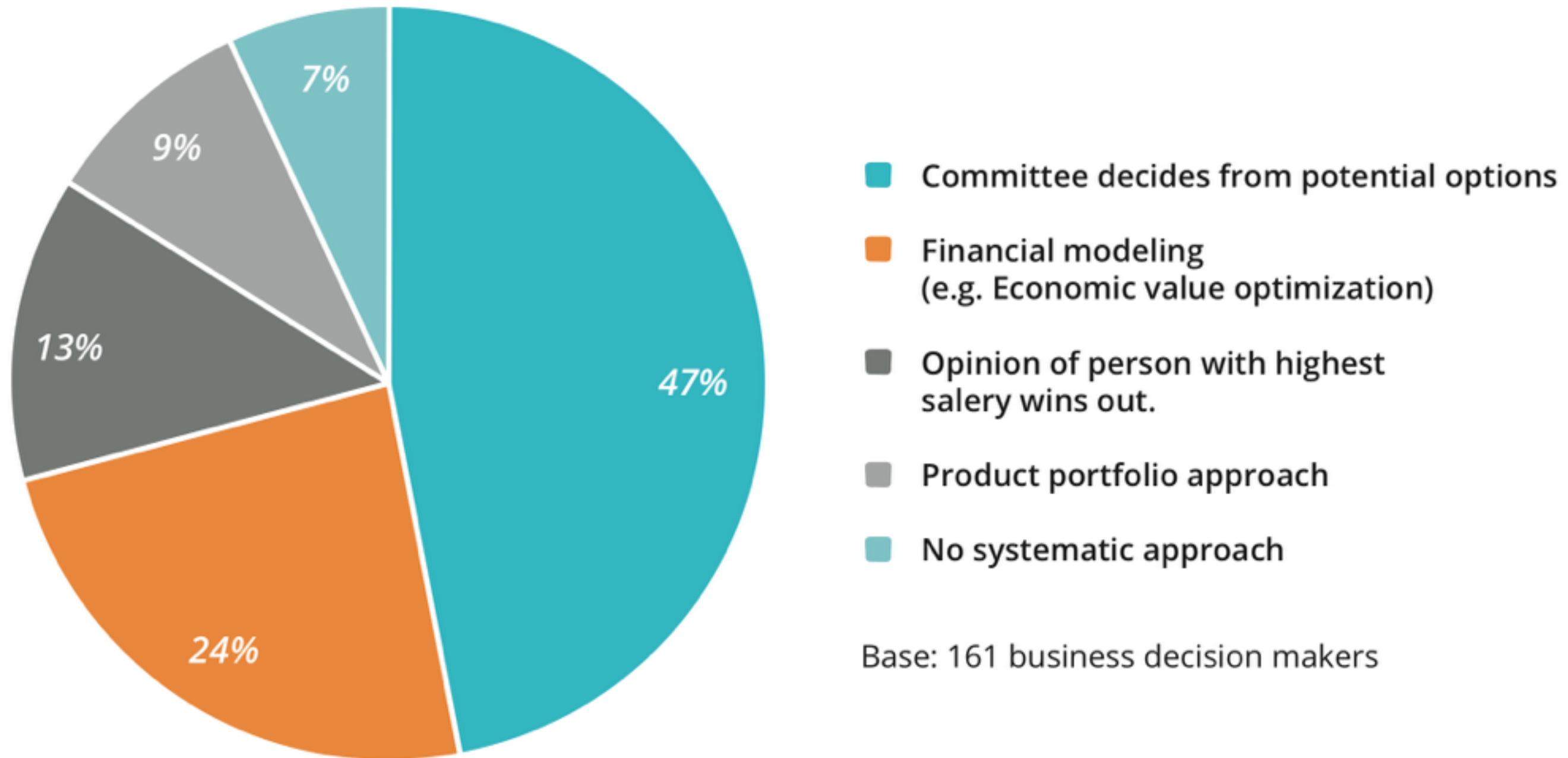


scrum-



fall

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

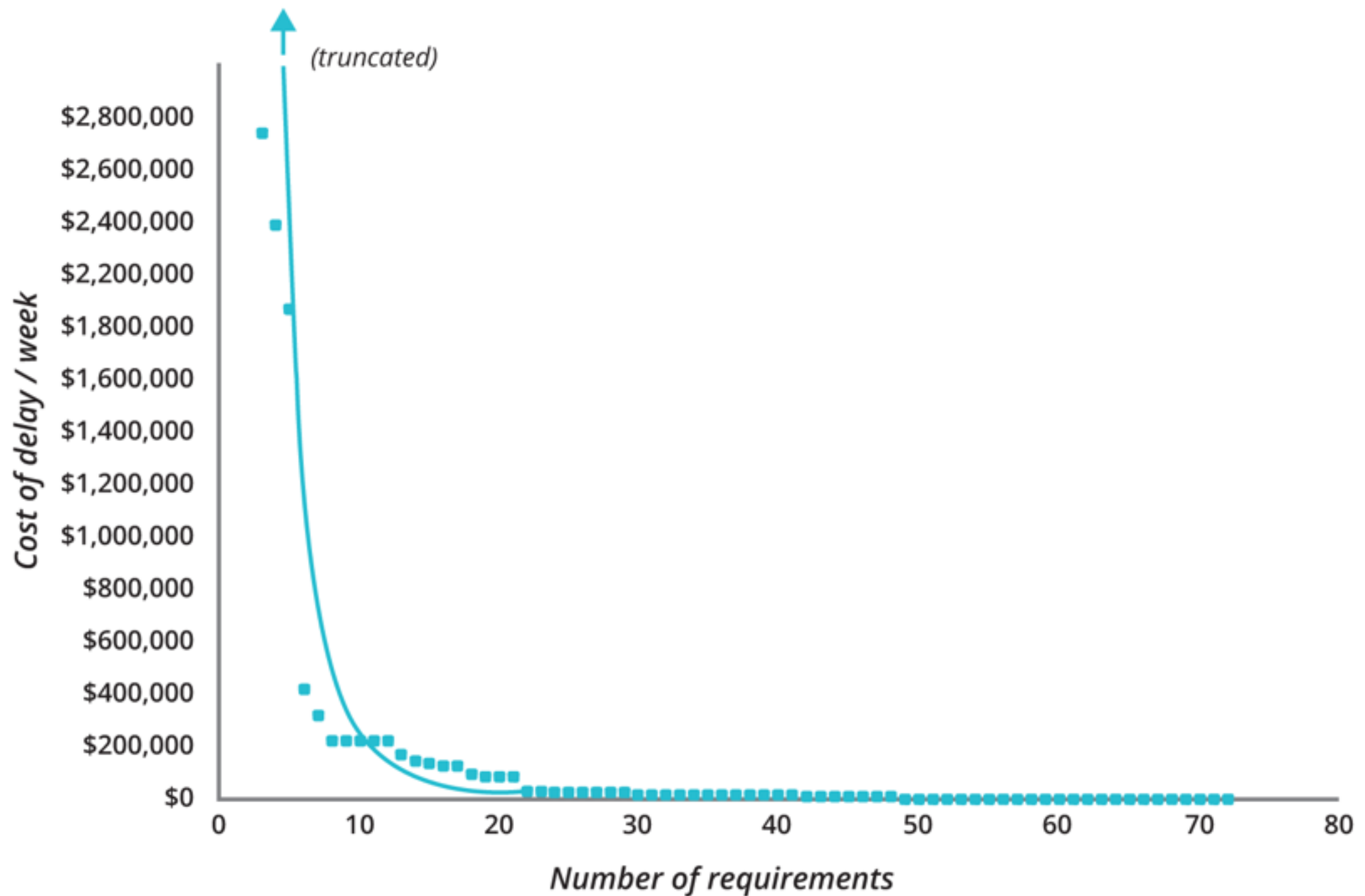


Source: A commissioned study conducted by Forrester Consulting on behalf of ThoughtWorks, September 2012

cost

“Even in projects with very uncertain development costs, we haven't found that those costs have a significant information value for the investment decision... The single most important unknown is whether the project will be canceled. The next most important variable is utilization of the system, including how quickly the system rolls out and whether some people will use it at all.”

batching up work



what should we do

don't optimize for the case where we are right

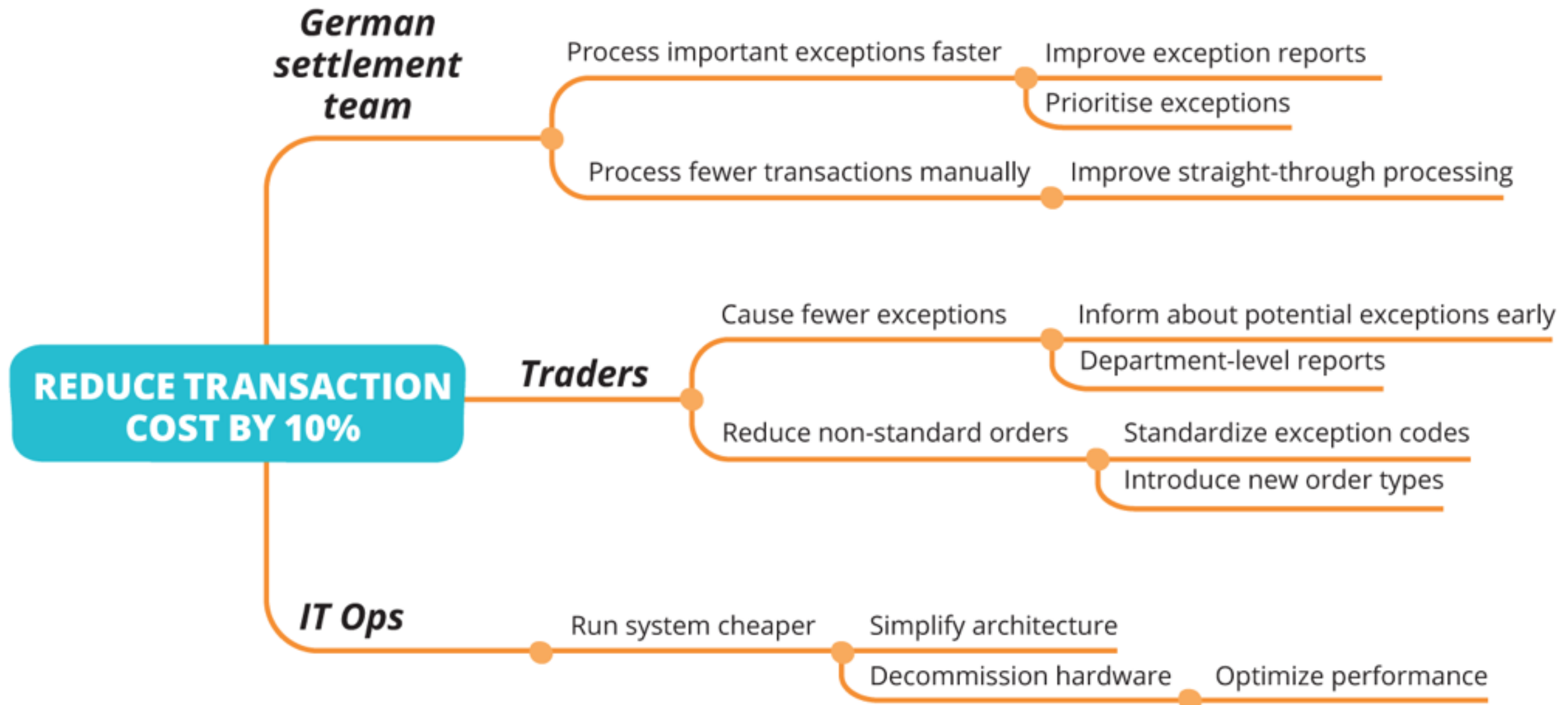
focus on value, not cost

create feedback loops to validate assumptions

make it economic to work in small batches

enable an experimental approach to product dev

impact mapping



hypothesis-driven delivery

We believe that

[building this feature]

[for these people]

will achieve [this outcome].

We will know we are successful when we see
[this signal from the market].

experiments



Different types of user research, courtesy of Janice Fraser

Amazon May Deployment Stats

(production hosts & environments only)

11.6 seconds

Mean time between deployments (weekday)

1,079

Max # of deployments in a single hour

10,000

Mean # of hosts simultaneously receiving a deployment

30,000

Max # of hosts simultaneously receiving a deployment

do less

“Evaluating well-designed and executed experiments that were designed to improve a key metric, **only about 1/3** were successful at improving the key metric!”

“Online Experimentation at Microsoft”, Kohavi *et al* <http://stanford.io/130uW6X>

hp laserjet firmware division

2008

Costs

10% - code integration

20% - detailed planning

25% - porting code

25% - product support

15% - manual testing

~5% - innovation capacity

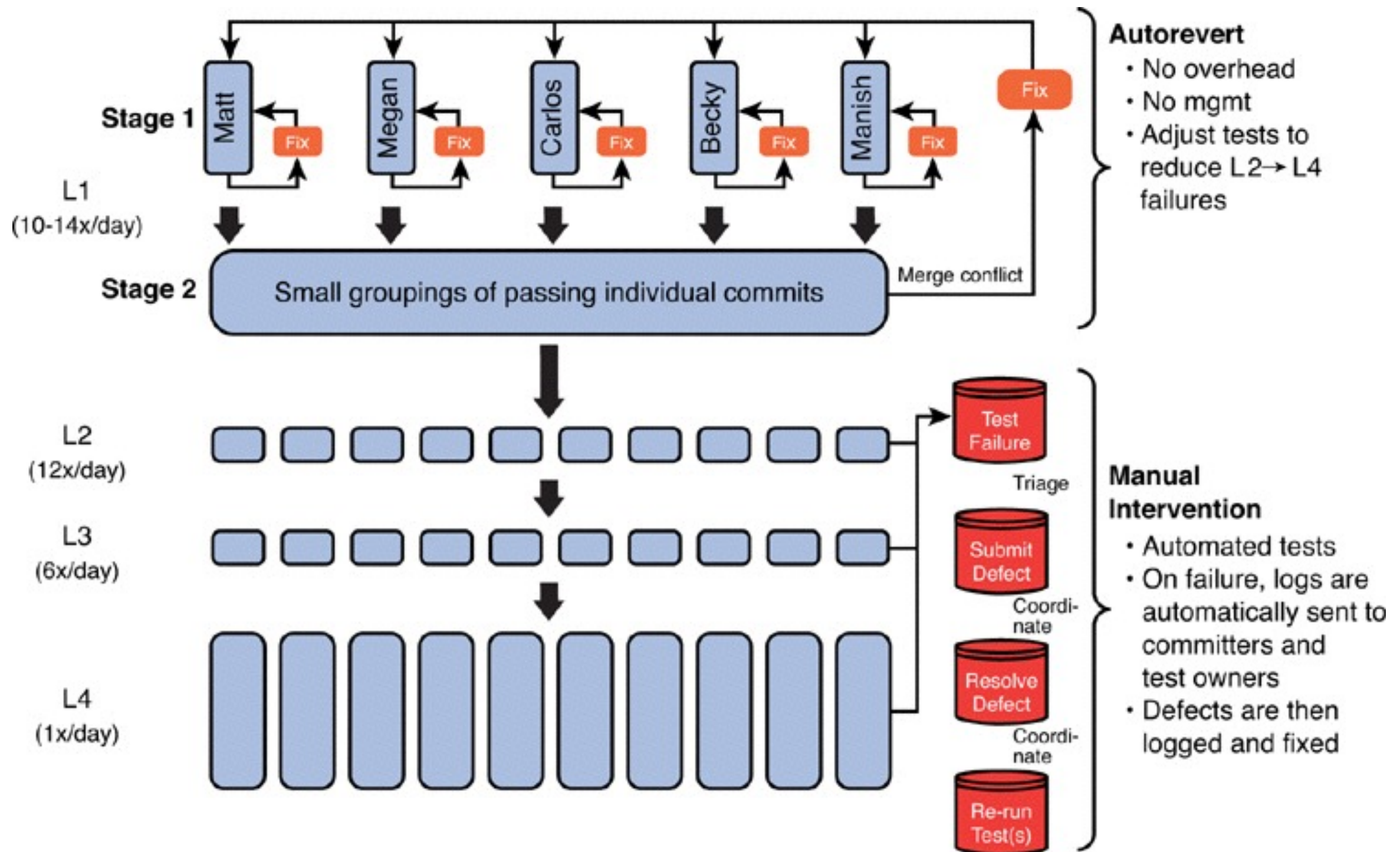
Cycle times

Commit to trunk: 1 week

Builds / day: 1-2

Full manual regression: 6 wks

deployment pipeline



hp laserjet firmware team

2008

10% - code integration

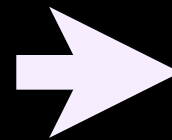
20% - detailed planning

25% - porting code

25% - current product support

15% - manual testing

~5% - innovation



2011

2% - continuous integration

5% - agile planning

15% - one main branch

10% - one branch cpe

5% - most testing automated

~40% - innovation

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

the economics

2008 to 2011

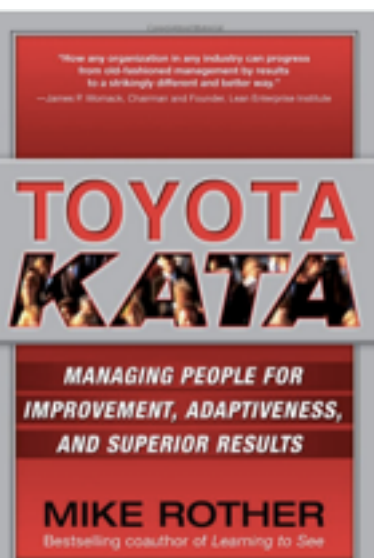
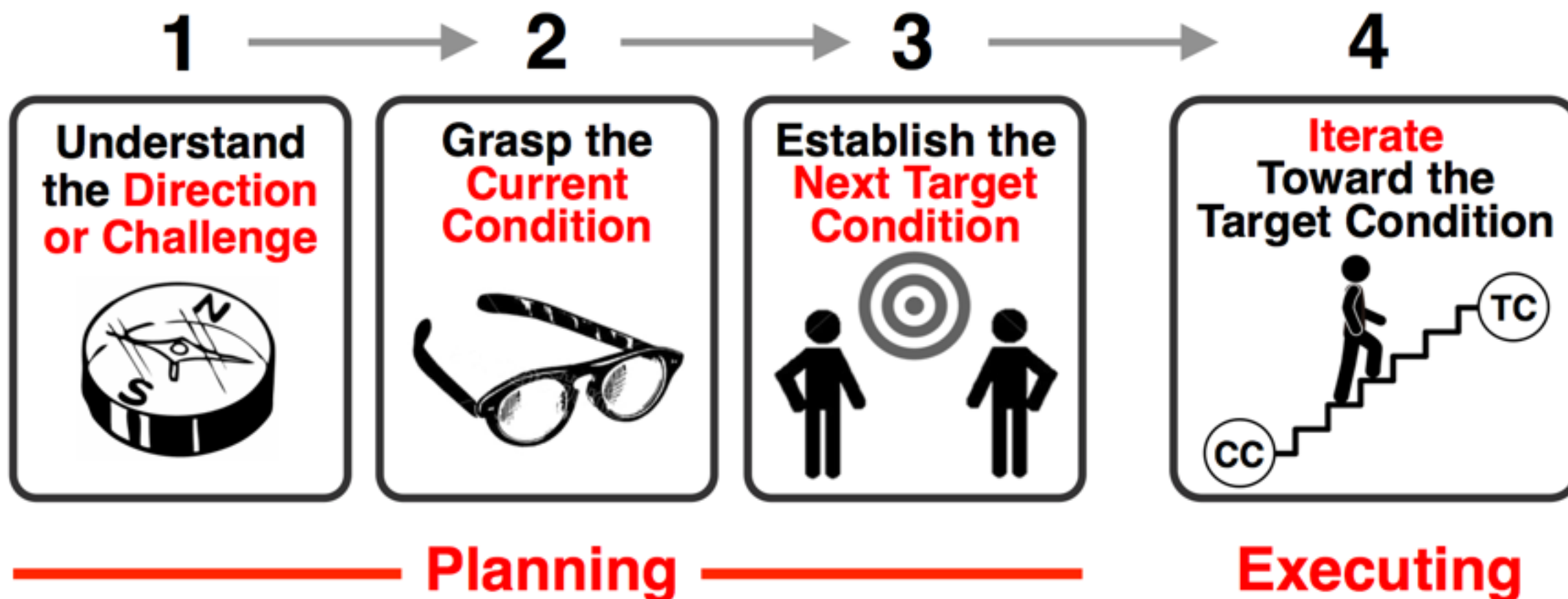
- overall development costs reduced by ~40%
- programs under development increased by ~140%
- development costs per program down 78%
- resources now driving innovation increased by 8X



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

THE FOUR STEPS OF THE IMPROVEMENT KATA MODEL

A systematic, scientific pattern of working



improvement kata

What is the target condition? (*The challenge*)

What is the actual condition now?

What obstacles are preventing you from reaching it? which one are you addressing now?

What is your next step? (*Start of PDCA cycle*)

When can we go and see what we learned from taking that step?

improvement kata

Table 5.1. Sample Mini-Milestone Objectives (MM30 Objectives)		
Rank	Theme	Exit Criteria: Objective Met/ <i>Objective not met</i>
0	Quality threshold	P1 issues open < 1week L2 test failure 24-hour response
1	Quarterly bit release	A) <i>Final P1 change requests fixed</i> B) Reliability error rate at release criteria
2	New platform stability and test coverage	A) Customer Acceptance Test 100% passing B) All L2 test pillars 98% passing C) L4 test pillars in place D) L4 test coverage for all Product Turn On requirements E) 100% execution of L4 tests on new products
3	Product Turn On dependencies and key features	A) Print for an hour at speed to finisher with stapling B) Copy for an hour <i>at speed</i> C) <i>Enable powersave mode</i> D) Manufacturing nightly test suite execution E) Common Test Library support for four-line control panel display
4	Build for next-gen products	A) <i>End-to-end system build on new processor</i> B) <i>High-level performance analysis on new processor</i>
5	Fleet integration plan	Align on content and schedule for “slivers” of end-to-end agile test with system test lab

conclusion

don't optimize for the case where we are right

focus on value, not cost

create feedback loops to validate assumptions

make it economic to work in small batches

enable an experimental approach to product dev

want to learn more?

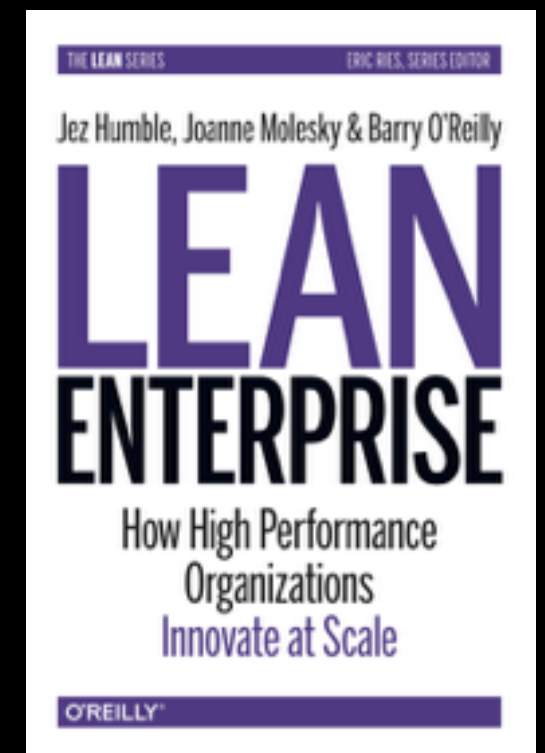
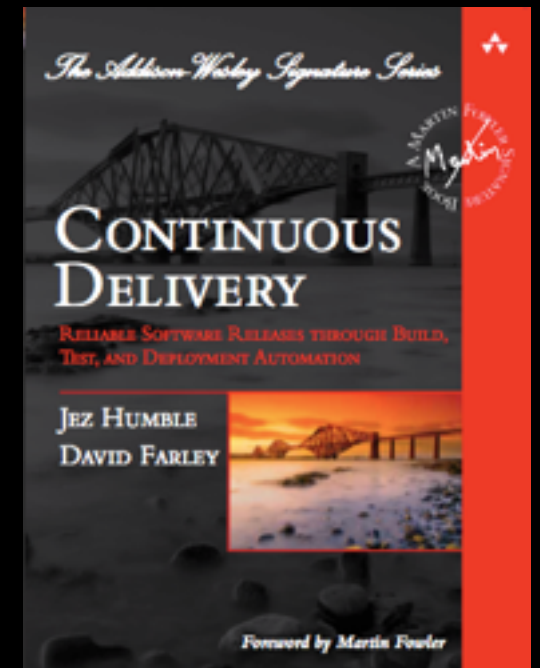
To receive the following:

- **An exclusive invite to our DevOps benchmarking tool**
- A chance to get a personalized analysis of your results
- A copy of this presentation
- A 100 page excerpt from *Lean Enterprise*
- A 20m preview of my Continuous Delivery video workshop
- Discount code for CD video + interviews with Eric Ries & more
- Early drafts of the *DevOps Handbook*

Just pick up your phone and send an email

To: jezhumble@sendyourslides.com

Subject: devops



© 2015 Jez Humble & Associates LLC



Please

**Remember to
rate session**

Thank you!

