



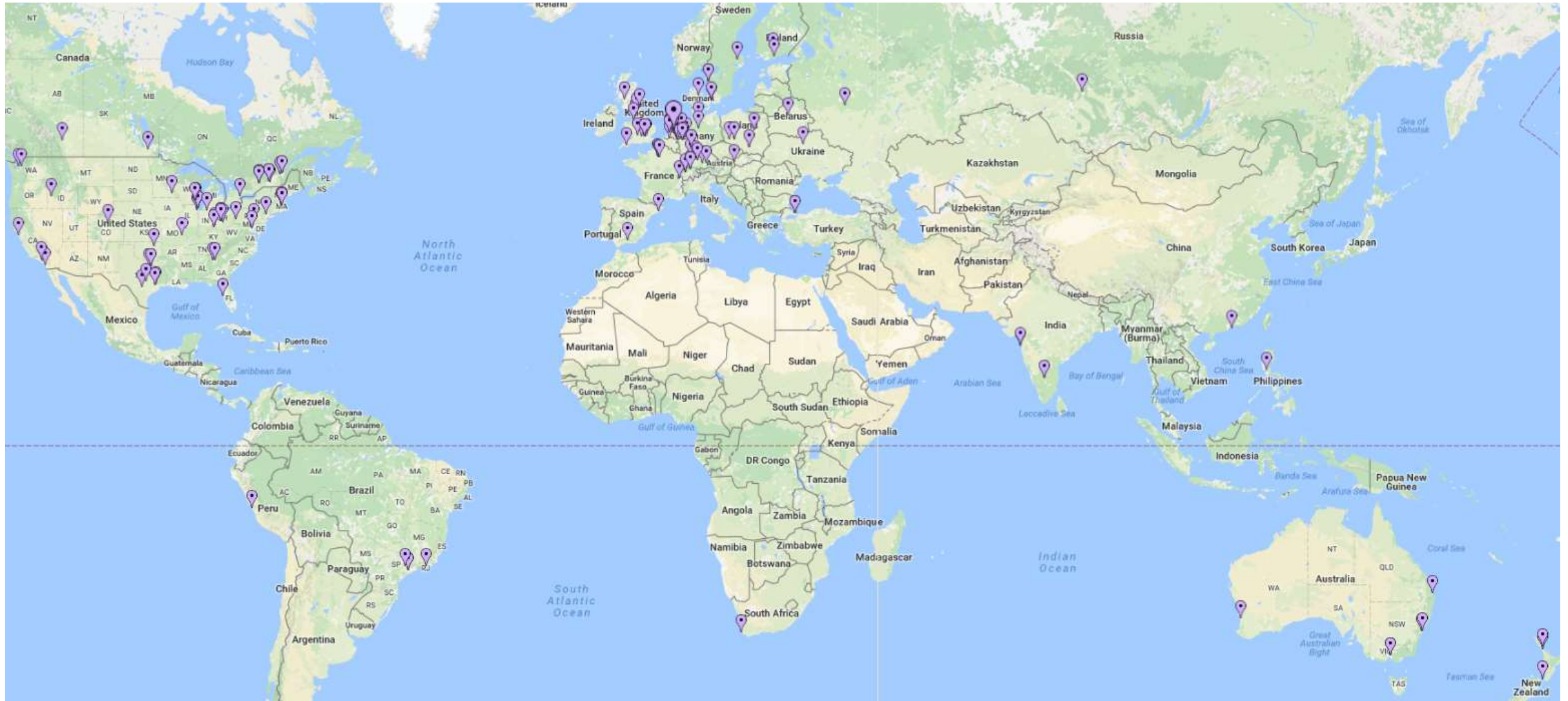
Delivering Value through Evidence-Based Management

Manage the Stampede



Improving the Profession of Software Delivery

Scrum.org Trainers and Consultants



The Home of Scrum

90%

Agile Teams Use Scrum

1,430,000+

Open Assessments
Taken

+12M

Using Scrum Daily

100,000+

Professional Scrum
Certifications



ONE Scrum Guide



182

Professional Scrum Trainers



Practiced
Everywhere



75,000+

Students Taught

For the past decade,
organizations have been rushing to
Agile and Scrum



Inspired by © Tomasz Włodarek.

scrum-pede

/skrʌm'pi:d/

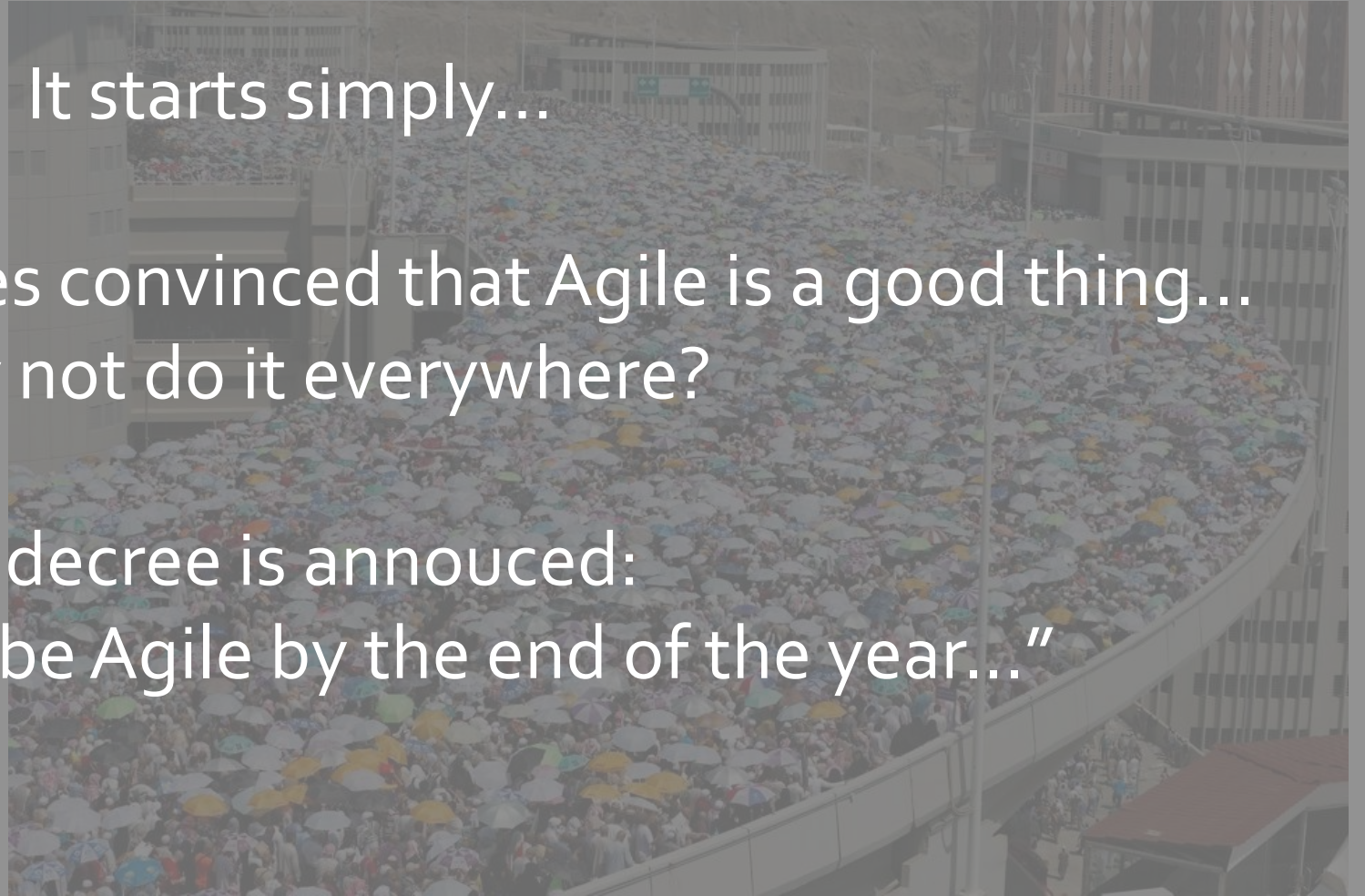
1. Sudden frenzied rush of (panic-stricken) companies to do Scrum because they want to be agile, too.
2. To flee in a headlong rush to scaling Scrum (*or something that looks like it*) because they need more software, now.

"We're going Agile!"

It starts simply...

An executive becomes convinced that Agile is a good thing...
why not do it everywhere?

A decree is annouced:
"Everyone will be Agile by the end of the year..."



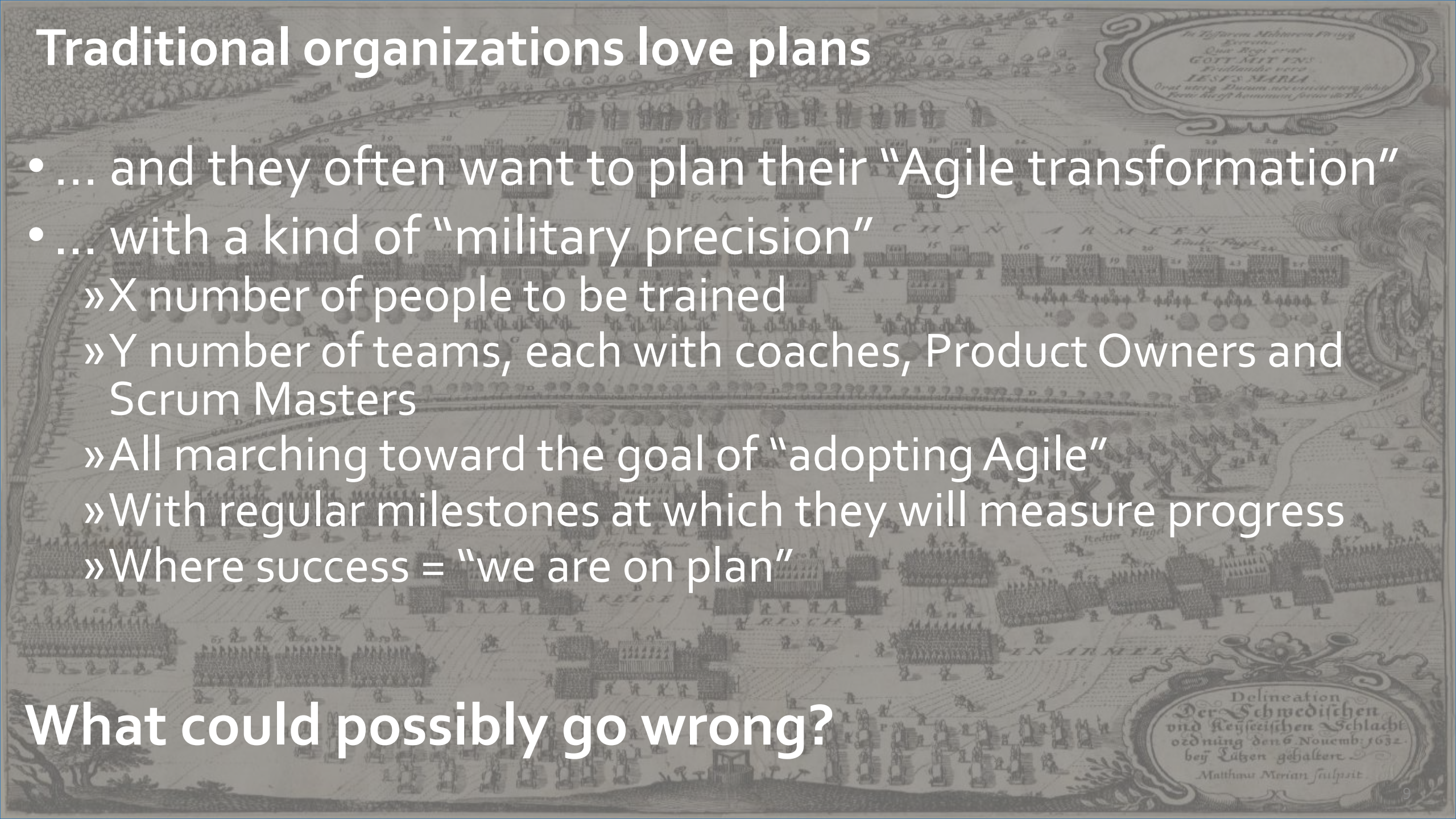


Irony: Adopting Agile Using A Waterfall Approach

Traditional organizations love plans

- ... and they often want to plan their “Agile transformation”
- ... with a kind of “military precision”
 - » X number of people to be trained
 - » Y number of teams, each with coaches, Product Owners and Scrum Masters
 - » All marching toward the goal of “adopting Agile”
 - » With regular milestones at which they will measure progress
 - » Where success = “we are on plan”

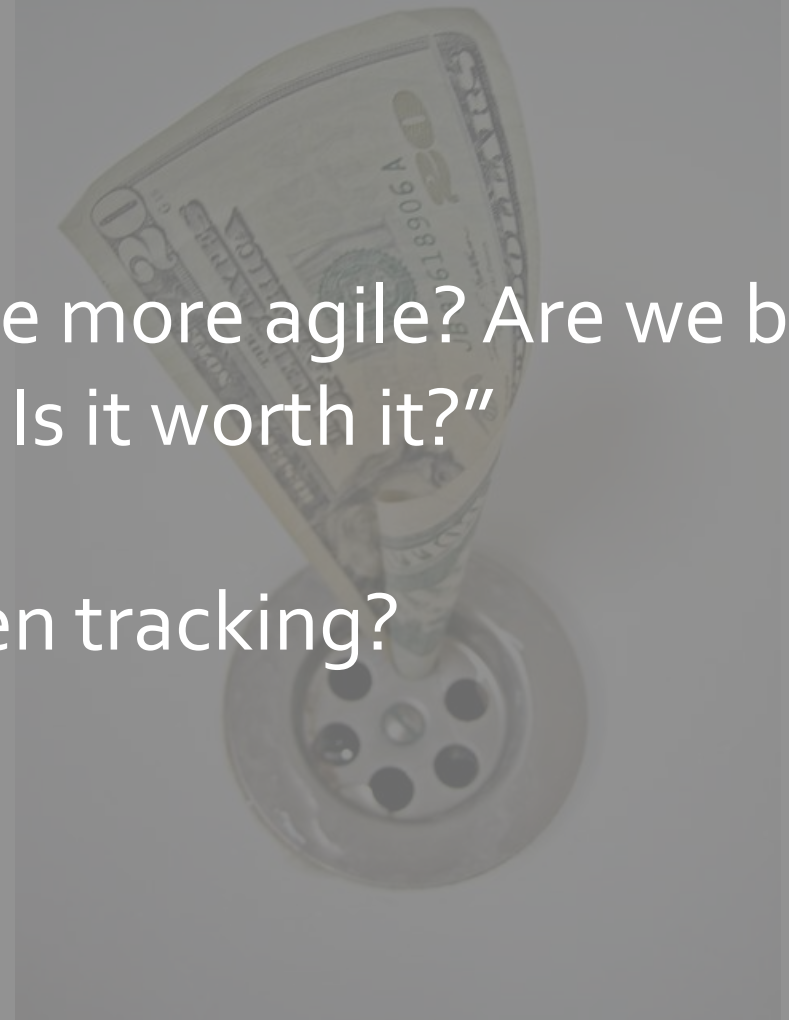
What could possibly go wrong?



"Are we Agile yet?"

The executive comes back and says, "Are we more agile? Are we better?
Has my investment paid off? Is it worth it?"

What results have you been tracking?



What do you currently track as measures of success?

If you tell the truth, you don't have to remember anything. – Mark Twain

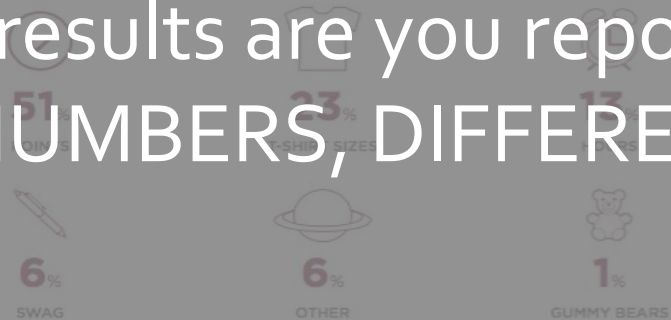
In Water Scrum Fall...

AGILE METHODS AND PRACTICES

Epic Estimation Unit of Measure

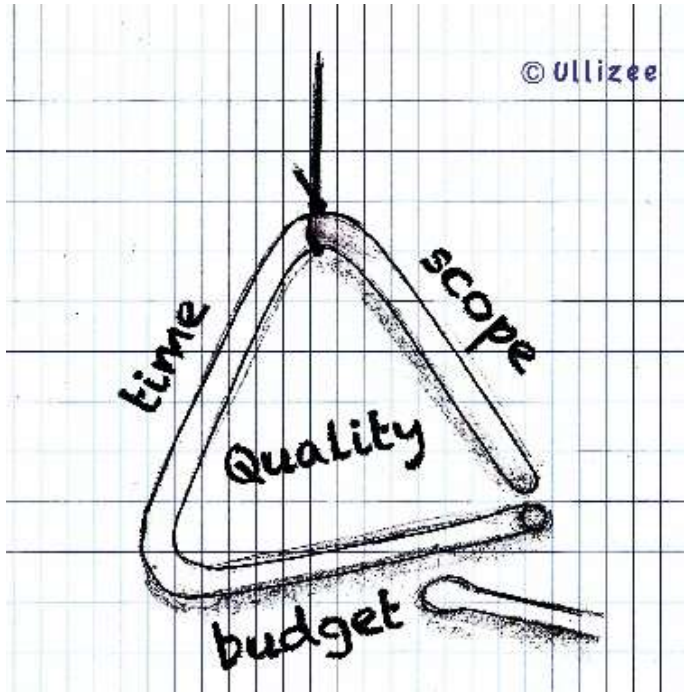
When conducting epic estimation, more than half of respondents said they used a point system.

“What results are you reporting?”
SAME NUMBERS, DIFFERENT DAY



2017 VersionOne State of Agile Survey

IT is typically managed as a cost center



Where $\text{success} = f \{ \text{Planned_Time}, \text{Predicted_Scope}, \text{Allocated_Budget} \}$

Agile stalls when goals aren't aligned

Traditional

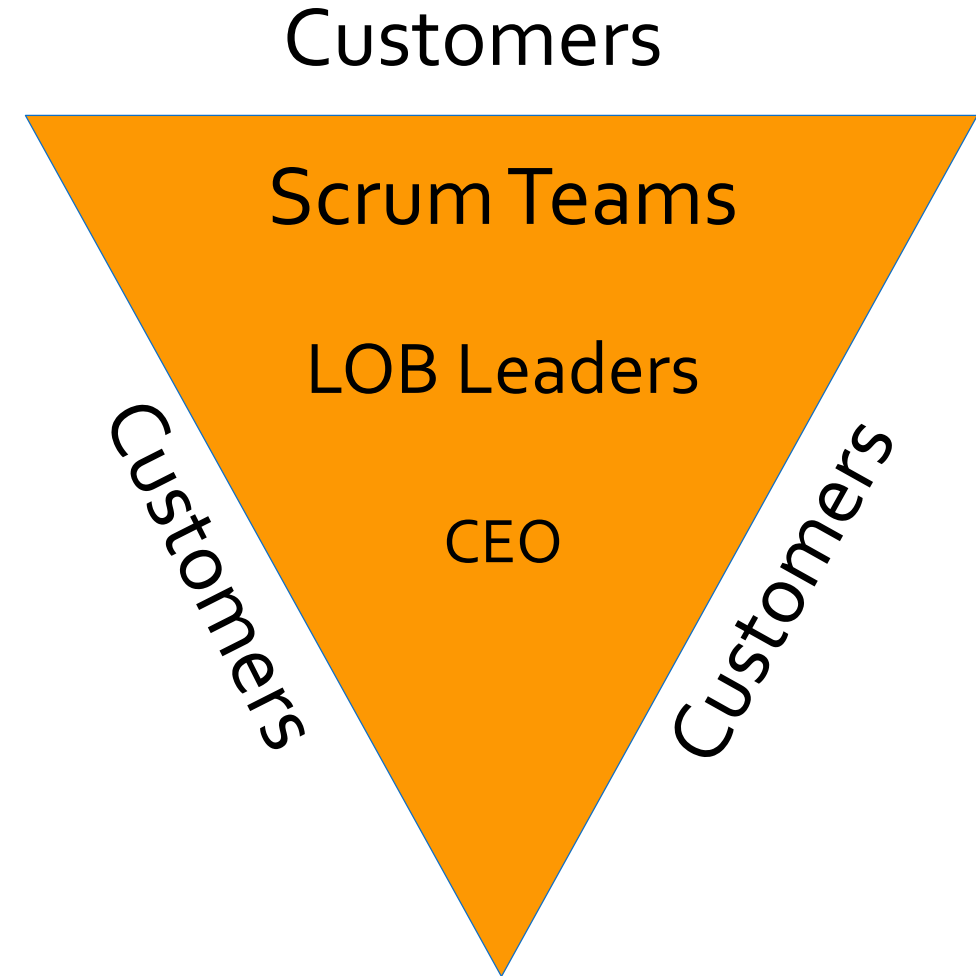
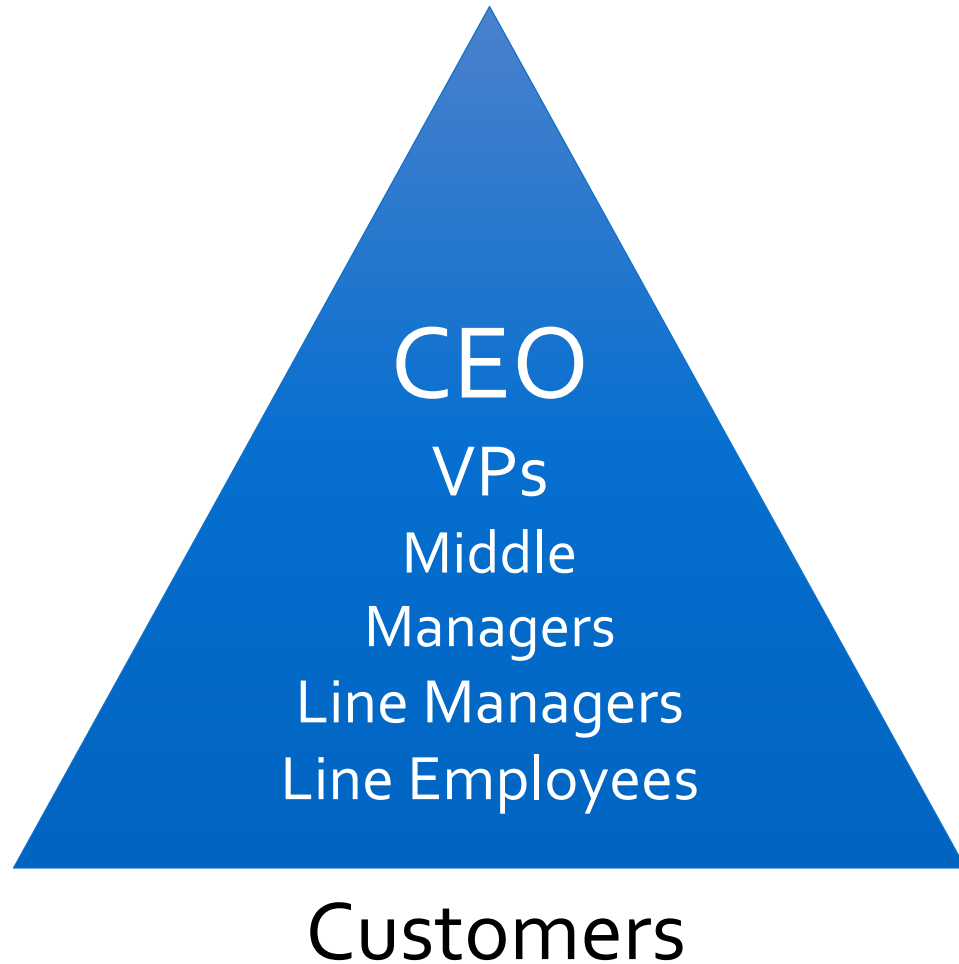
Maximizing
efficiency of
resource
utilization

Agile

Maximizing
learning and
innovation

Agility Isn't About Efficiency; Agility Is About Effectiveness

The Traditional Organization The Modern Digital Organization



The measures that you track and manage.
Are there any incentives around them?

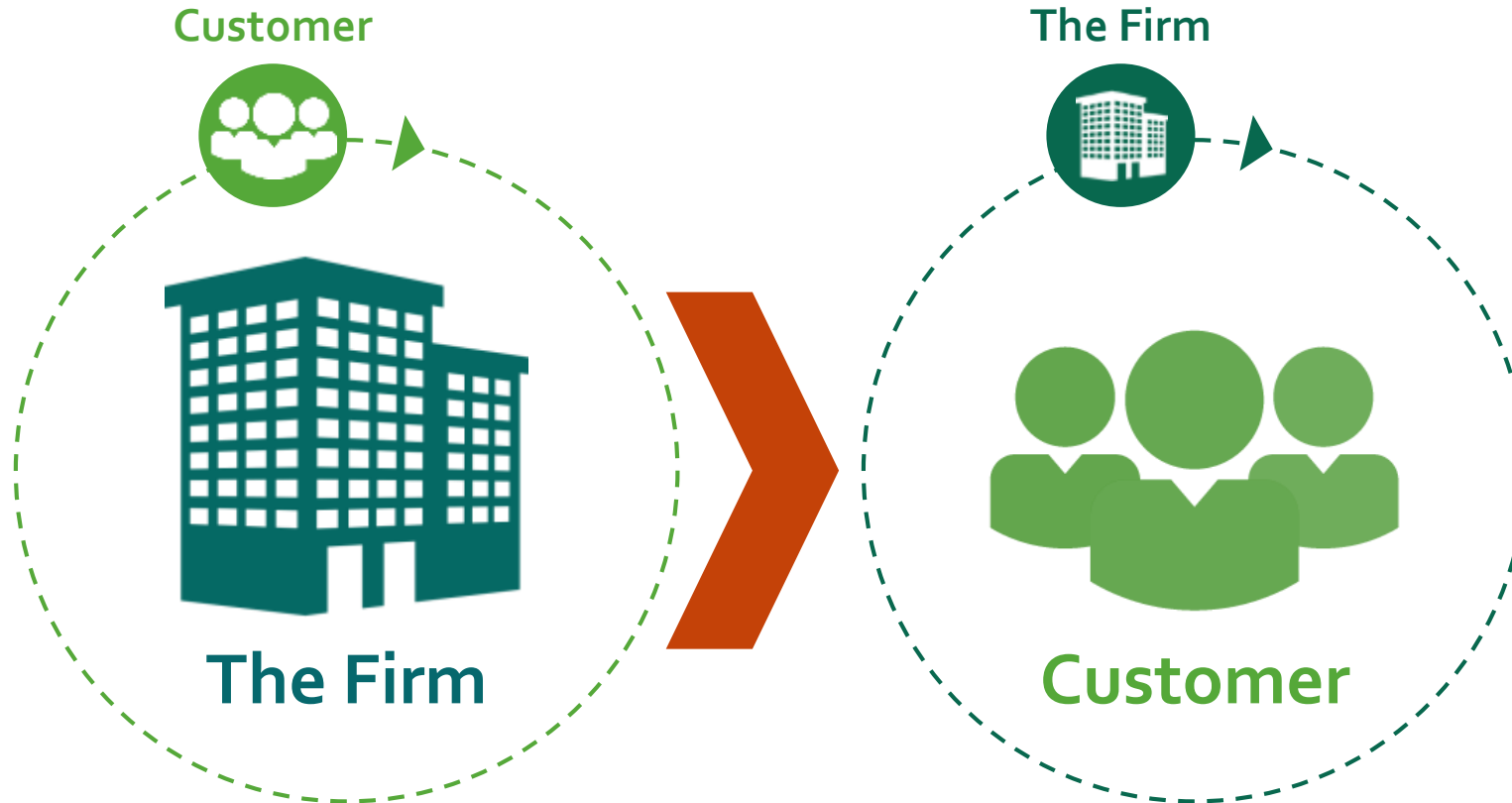
"Companies that reward firefighters breed arsonists."

What's really driving agile adoption?

This radical shift in focus

Customer
needs change

Frequent
adaptation
essential



is leading to vast economic, social and political change

A big risk: some requirements are wrong, but which ones?

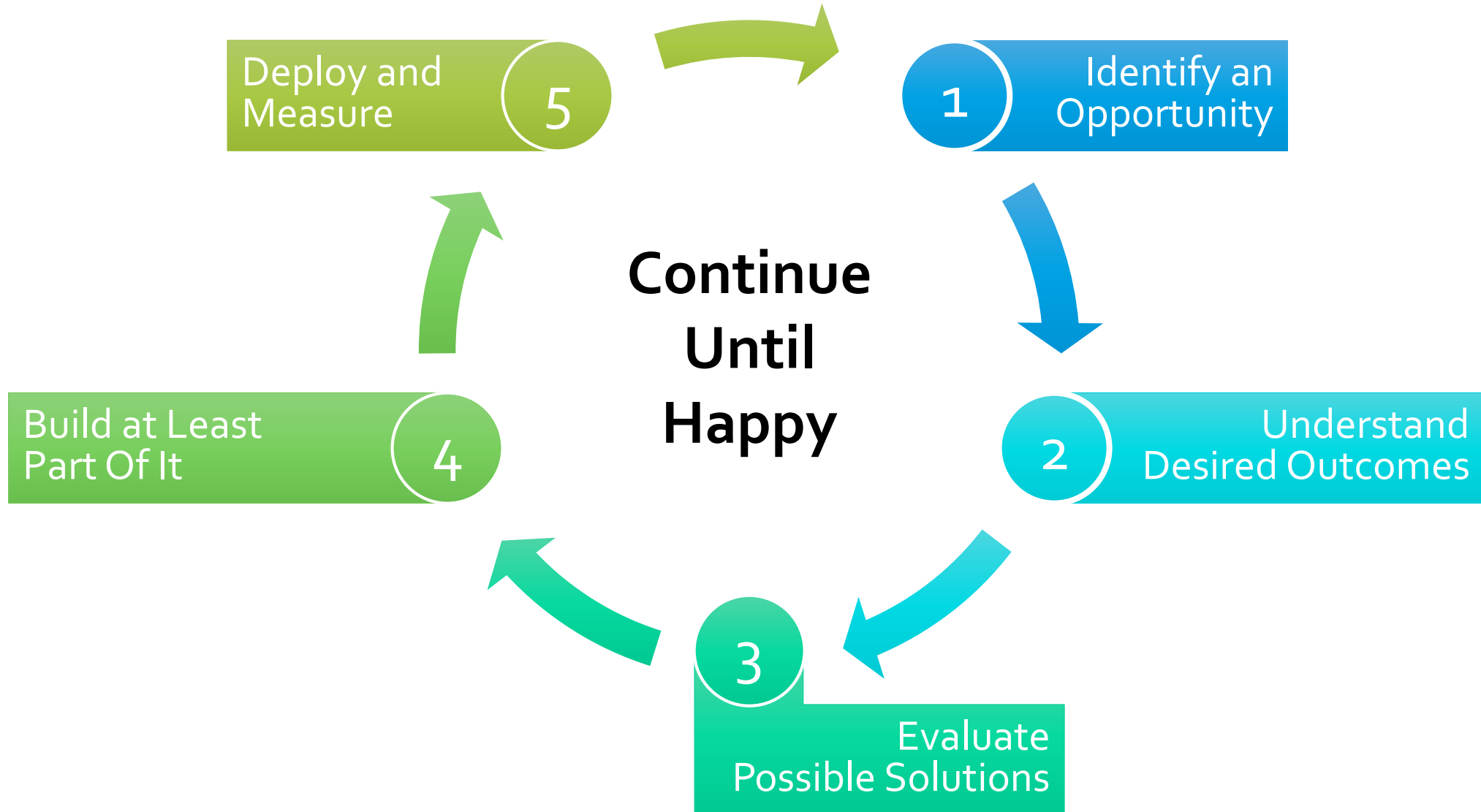
“80% of the time we are wrong about what a customer wants.” (Kaushik 2006)

“It's been humbling to realize how rare it is for [features] to succeed on the first attempt.”
(McKinley 2013)

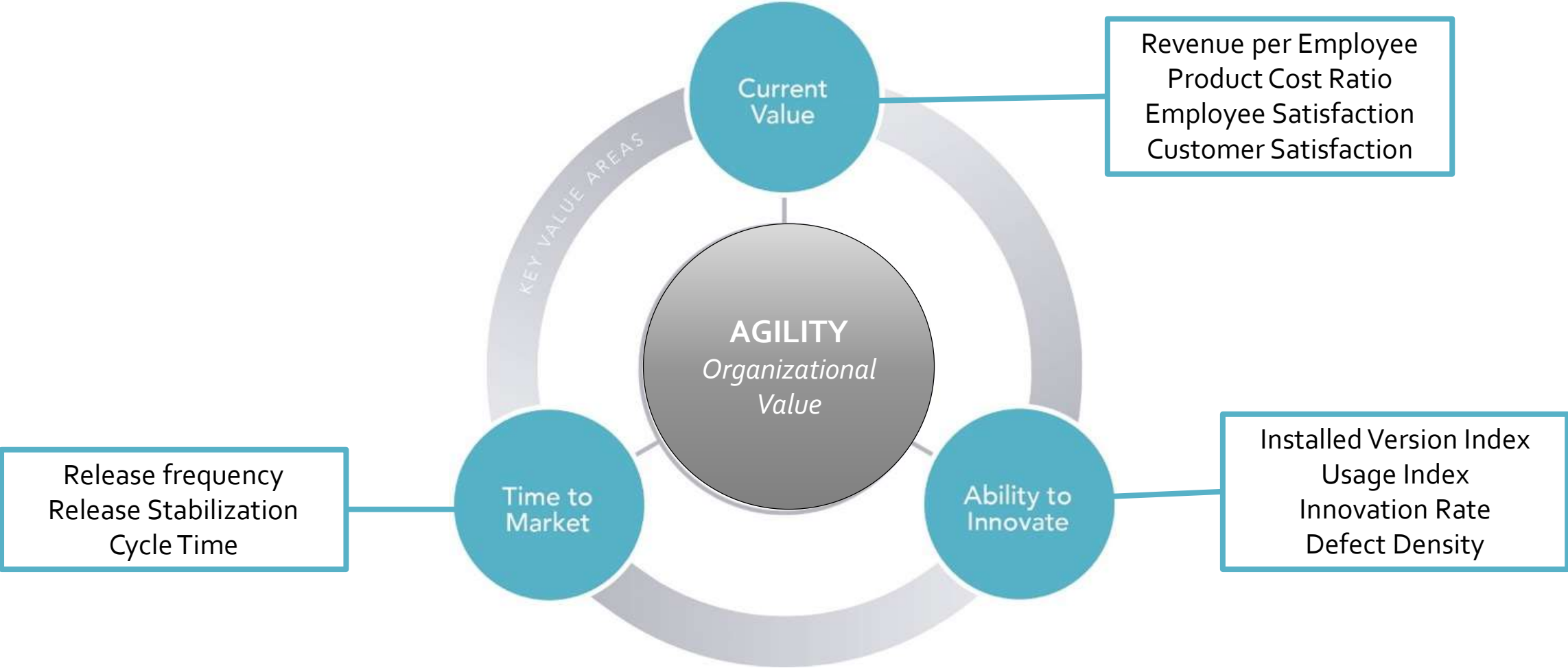
“Only one third of the ideas tested on the Experimentation Platform at Microsoft improved the metric(s) they were designed to improve (Kohavi, Crook and Longbotham 2009).”

“at Google, only about 10 percent of these [controlled experiments, were] leading to business changes.”
(Manzi 2012)

An Empirical Approach - Inspect and Adapt (Transparency)



Measure Outcomes. Measure Direct Evidence.



How do you define value?
What is value?

Price is what you pay. Value is what you get.
- Warren Buffett

Value Is...

FOR-PROFIT ORGANIZATIONS

The benefit to the organization, represented in money terms, that results from the use of a product or service.

NOT-FOR-PROFIT ORGANIZATIONS

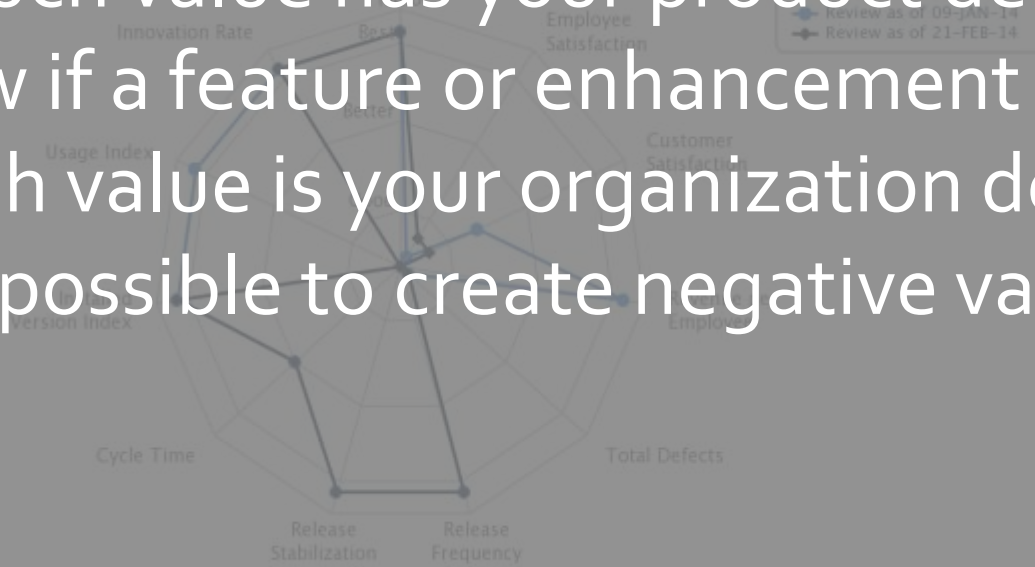
The benefit to society, not necessarily represented in money terms, that results from the use of a product or service.

Case Study: Publicly Trade Media Technology Company

- CEO says, “We need to increase productivity and increase the ability to release innovations to the market more frequently!”
- SVP says, “Let’s try agile. How do I guide our investment?”
- Introducing agile techniques to software development teams.

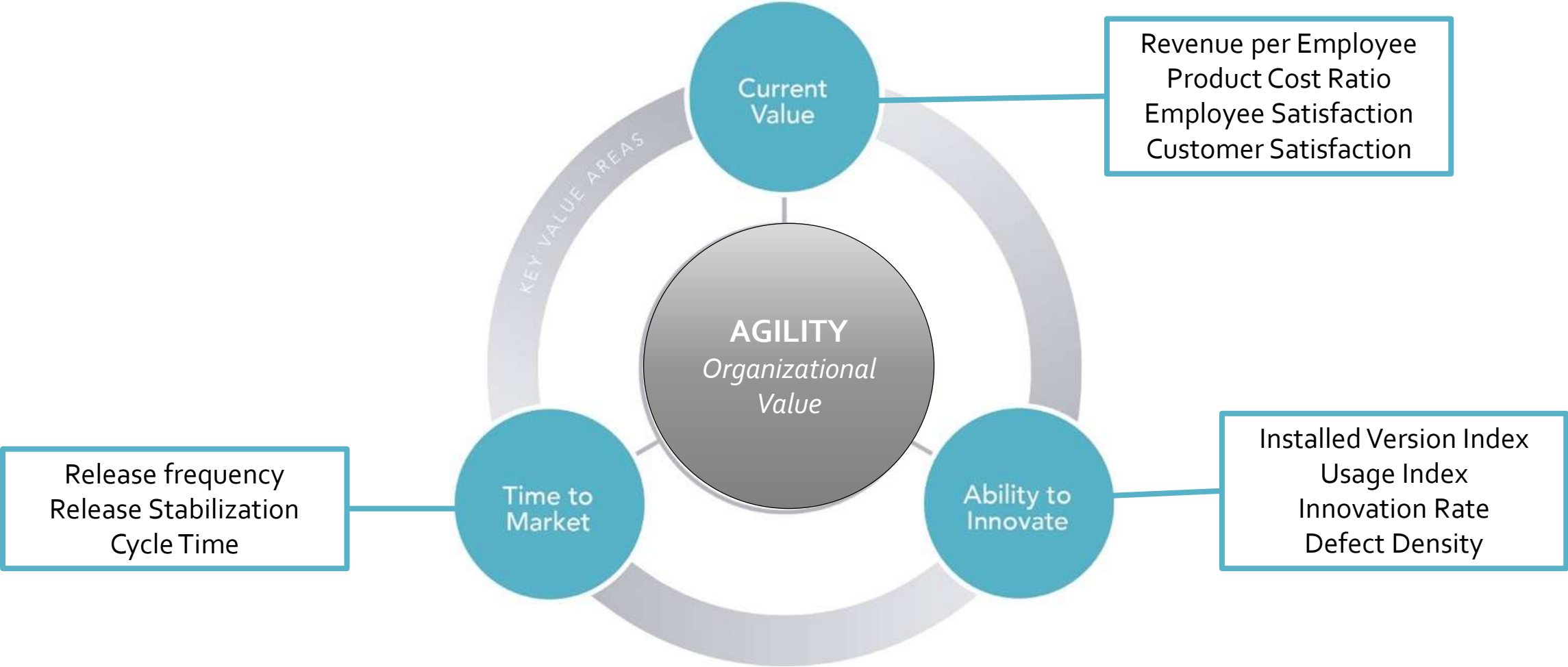
Value is the measure of success.

How much value has your product delivered?
How do you know if a feature or enhancement is creating value?
How much value is your organization delivering?
Is it possible to create negative value?



Enterprise Metrics	
Revenue	
Average Monthly Revenue	
Cost of Product Domains	
Product Cost Ratio	
ROI	
Number of Employees	
Revenue per Employee	
Investment in Agility	
Cumulative Investment in Agility	
Employee Satisfaction	
Customer Satisfaction	
Foundational Metrics	
Release Frequency	
Release Stabilization	
Cycle Time	
Usage Index	
Innovation Rate	
Installed Version Index	
Total Defects	
Agility Index	

Measure Outcomes. Measure Direct Evidence.



Evidence-Based Key Value Metrics (Current Value)

Metric	Definition	Definition, assumptions and source at <client name>
Revenue per Employee	<p>Gross Revenue / #employees</p> <p>This varies significantly by industry. Since software is a one time investment – many time used capability, the ratio is a key competitive indicator within an industry segment.</p>	<p>Revenue: Financial Systems</p> <p>Number of employees.</p>
Product Cost Ratio	<p>Total expenses and costs for the system(s) being measured, including operational costs compared to revenue</p> <p>This reflects all expenses in the organization that develops, sustains, provides services, markets, sells, and administers the product or system.</p>	<p>Cost of product domains: Financial Systems</p>
Employee Satisfaction	<p>% of ratings to the positive side of the middle value of the last survey</p> <p>Engaged employees that know how to maintain, sustain and enhance are one of the most significant assets of an organization.</p>	<p>Gathered through survey amongst all employees</p> <p>Frequency: Ad hoc</p> <p>Targeted: IT employees</p>
Customer Satisfaction	<p>% of ratings to the positive side of the middle value of the last survey</p> <p>Customer satisfaction is a reflection of sound management, solid software, and creative, fulfilled employees. Satisfied customers spread the word, lowering marketing and sales costs and contribute to growth.</p>	<p>Data based on existing research results</p>

Evidence-Based Key Value Metrics (Time to Market)

Metric	Definition	Definition and source at <client name>
Release Frequency	<p>Time between significant functional releases, not including maintenance, or minor, releases.</p> <p>This reflects the time needed to satisfy the customer based with new, competitive products.</p>	Releases into main code branch
Release Stabilization	<p>Time to go from code complete to actual release to customers</p> <p>This reflects the impact of poor development practices and underlying design and code base. Stabilization is a drag on competition that grows with time.</p>	Integration testing after release to main branch
Cycle Time	<p>The number of weeks required to go from conceiving it to delivering one small increment of new functionality (not a bug fix) to customers</p> <p>This reflects the time (including stabilization) to satisfy a key set of customers or to respond to a market opportunity competitively.</p>	Average time of top 20 PBI

Evidence-Based Key Value Metrics (Ability to Innovate)

Metric	Definition	Definition and source at <client name>
Installed Version	<p>% of last 2 versions against total number of versions being maintained</p> <p>This metric can reflect the difficulty customers face installing a new release, the relatively low value of new releases, or even the number of customers that are evaluating alternatives.</p>	Cloud system. Mandatory upgrade for all users.
Usage Index	<p>% of product used less than 50% of time</p> <p>This metrics can reflect a product that is burdensome and difficult to use, as well as excess software that must be sustained even though it is rarely used.</p>	Unable to measure at this time.
Innovation Rate	<p>% of total budget spent on new functionality and new capabilities of the software</p> <p>This reflects the growth of technical debt caused by poorly designed and developed software. The budget is progressively consumed keeping the old software alive.</p>	% of budget spent on system rewrite which will add significant new functionality for customers
Defects Change	<p>% change in defects since last measurement</p> <p>This may reflect increasingly poor quality software, leading to greater resources to maintain it and potential loss of customers.</p>	# detected tracking system

Just Get Started. Start small.

Product Scoreboard v1.2.2 (1)

Home

Insert

Page Layout

Formulas

Data

Review

View

<

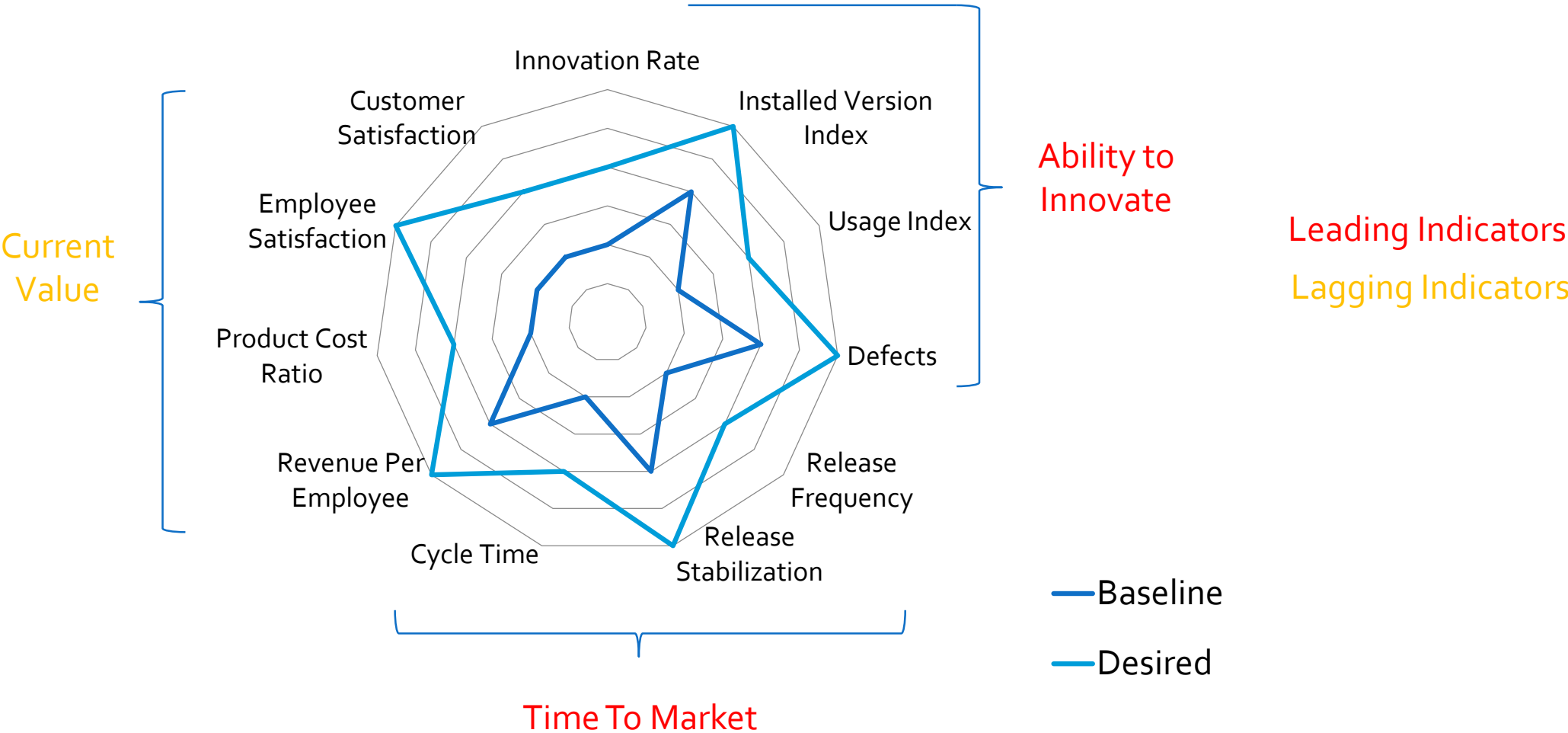
Capture value metrics in addition to other metrics that help to forecast



Which of your measures are value-based?

The main difference between a cat and a lie is that
a cat only has nine lives. – Mark Twain

Use Evidence-Based Management to identify areas for improvement



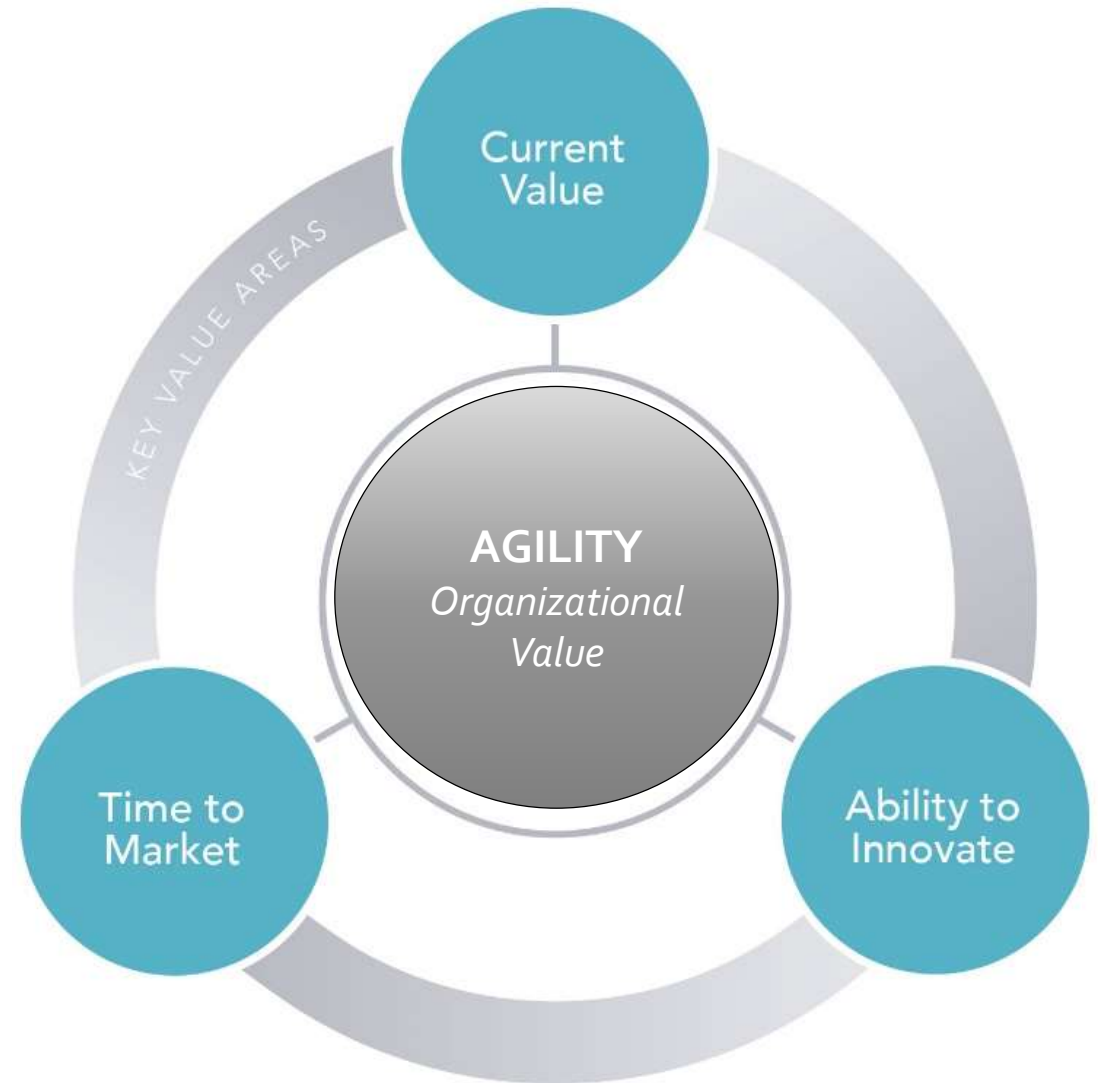
Beware of HiPPOs



<https://s-media-cache-ako.pinimg.com/originals/67/f3/05/67f3053febdf5048ef696e87537c9e55.jpg>

IT is an asset to business.

Use EBM to measure
outcomes to identify value
and areas to improve.



Software has moved far from being a business expense

- Measure outcomes not just activity, and inspect holistically
- Value is THE measure of success, and the baseline is \$/
- The three areas of EBM are current value, time to market and the ability to innovate.
- The customer isn't always right but they are the driving force
- Tracking just cost, time, scope, activity and all requirements upfront is traditional thinking and a flawed model for agile
- Bottom-up intelligence is vital for growing, sustaining and improving agility
- Value based metrics are even more important as an organization scales agile

Who will be accountable in your organization?

Thank You!

Scrum-on

/skrʌm' ɔn/

1. Explore the art of the possible.



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NIGHT CYCLE

The diagram illustrates a highly integrated system architecture with the following components and connections:

- Communication & Banking:** SIAC/DTC, MBSCC, PTC, GSCC, Chase (Chemical), Citibank (PRISM), PZS/PZB.
- Clearing & Settlement:** Clearance, Receipt & Deliver, Open File, Government P & I, Customer Affirmations, Broker Affirmations, Vision, KTEK Interface.
- Trading & Inventory:** Purchases & Sales, Superfile, Firm Inventory, Trade Inventory, Bridge Adabas, Reports, Position & Balances, TES, TOPS, Agency Inventory.
- Compliance & Reporting:** Legal Compliance Reporting, Regulatory Compliance Reporting, FCIR, General Ledger Interface, Monthly Miscellaneous Reports, Audit letters, ACATS, Retail Portfolio.
- Accounting & Finance:** Accounts Payable, General Expense, Project Billing, Sales Credit, BUCS Ldn, BUCS NY, Sales Reports, ODU, HR, GERS.
- Data & Infrastructure:** DATA WAREHOUSE, GM/AS400, NISMAS, FBC TV, BUCS/CLIENT SERVERS, IS GAS, CIB, CPA, CSNY, UNIX, FE MF PF, Subs.
- Other Systems:** MRS, DIR, TREAS, Global Cost of Carry, FedLine, ADJ, SSN File, NYSE, Money Store, Shadow MRS, Capital Impairments, OCC/CBOE, FAME, ADJ, Reports, Daily Statements, BUCS/CLIENT SERVERS, HR, FES, MBS, OTP, HITS, FOTS/Legal, CI, Cust. Tax Rptg, Cust. Accounting, Proxy, Audit Letters, Customer Statements.