

The Executive Action Team Leadership in an Agile Paradigm



Host: JJ Sutherland
Presenter: Jeff Sutherland

scruminc. *Who We Are*

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

CEO Jeff Sutherland helps companies achieve the full benefits of Scrum leading our comprehensive suite of support services and leadership training:

- Scaling the methodology to an ever-expanding set of industries, processes and business challenges Training (Scrum Master, Product Owner, Agile Leadership, online courses, etc.)
- Consulting (linking Scrum and business strategy, customizing Scrum)
- Coaching (hands-on support to Scrum teams)

Chief Product Owner JJ Sutherland maintains the Scrum framework by:

- Capturing and codifying evolving best practices (Scrum Guide)
- Conducting original research on organizational behavior
- Publishing (3 books) and productizing ScrumLab

President Scrum@Hardware Joe Justice leads our hardware consulting practice:

- Worldwide consulting at leading hardware companies
- 700-800% performance improvement in hardware development
- Builds 100 mpg cars in his garage with help from 500 people in 32 countries

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



Why is the Saab Gripen the Best Fighter Aircraft in the World?

F-35 "Joint Strike Fighter" – Traditional Design



- \$143 Billion over budget
- At least another 6 years late (final systems integration)
- Cost of Navy F-35C grew from \$273 million in 2014 to \$337 million by 2015

SAAB JAS 39E "Gripen" – Agile Design



- Best aircraft in the world - Aviation Week
- Cumulative program cost of \$15 Billion
- New iteration of all systems released every 6 months
- \$43M cost¹ (20% of F-35)

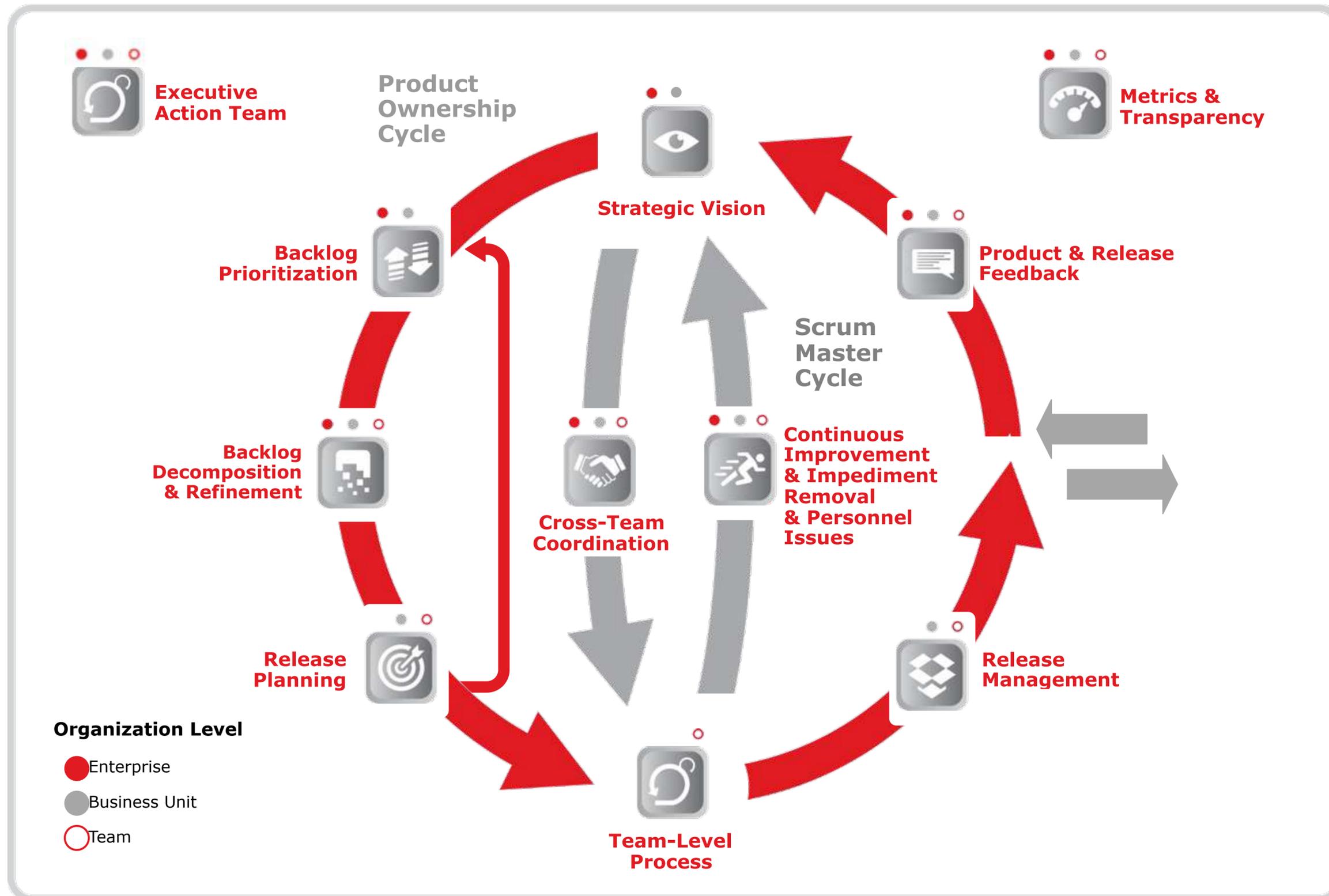
1. According to Jane's Aviation Weekly, the Gripen is the world's most cost-effective military aircraft

Because Their Enterprise Action Team Meets Every Morning at 8:30

- 8:30 Enterprise Action Team (= senior management)
- 8:15 Scrum of Scrum of Scrum of Scrums
- 8:00 Scrum of Scrum of Scrums
- 7:45 Scrum of Scrums
- 7:30 Daily Scrum

- Approximately $8 \times 8 \times 8 \times 8 = 4096$ people

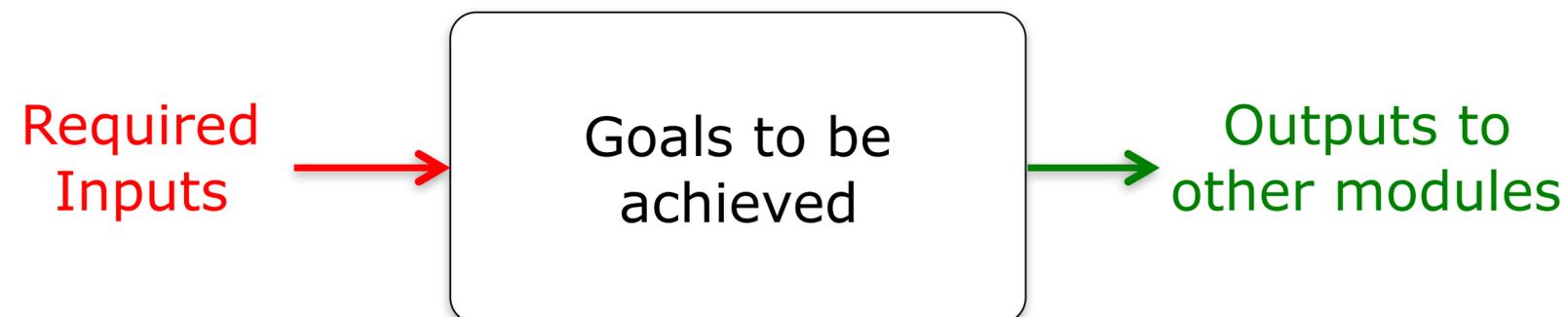
Modular Framework for Scaling Scrum



Scrum at Scale Modules are Defined by their Goals, Inputs and Outputs

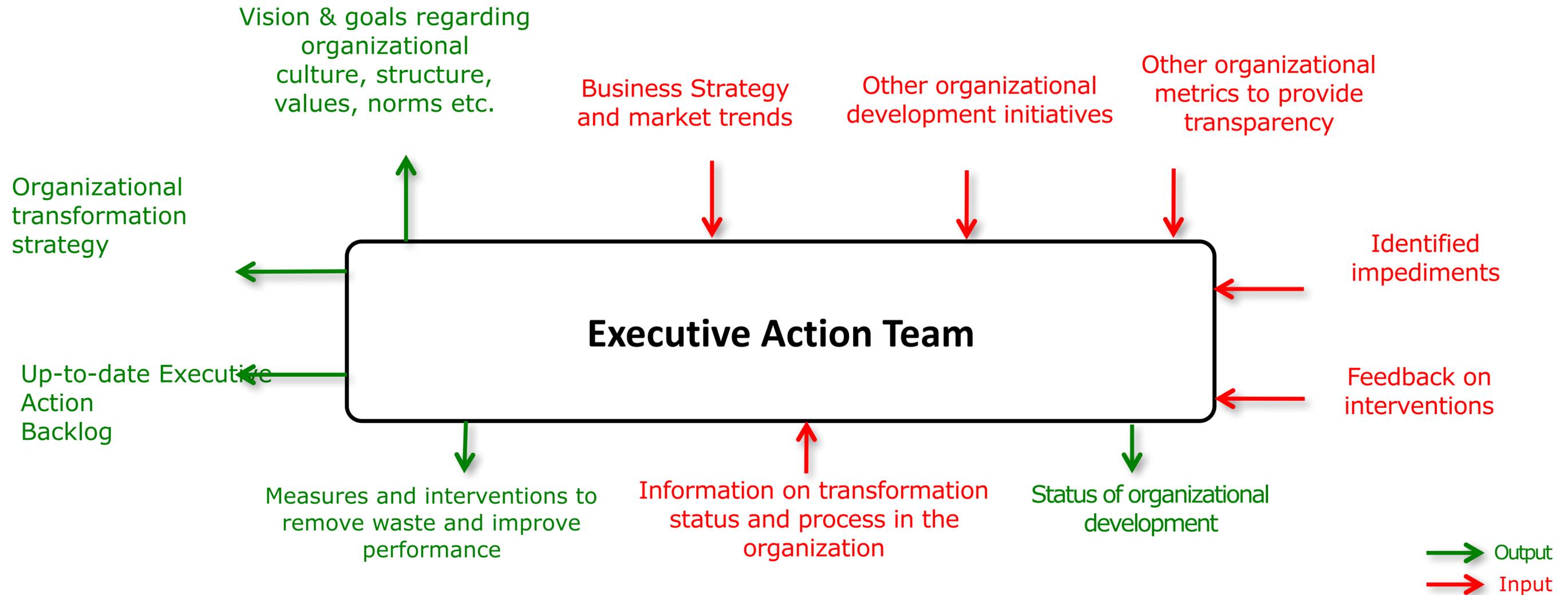
Goals	Define what the module is intended to accomplish
Inputs	Describe the information or resources needed from other modules to accomplish those goals
Outputs	Outline what information or product this module generates that are needed by other modules

ANY specific practice that meets the module's required Goals, Inputs and Outputs will work with all of the other Scrum at Scale modules...This is "Contract-First Design."



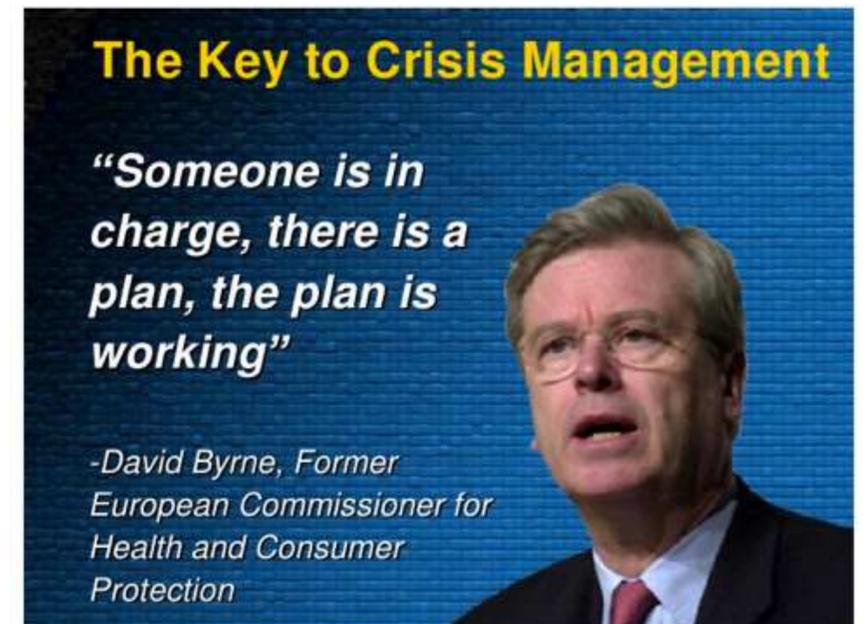


Executive Action Team



What If Senior Management Can't Scrum?

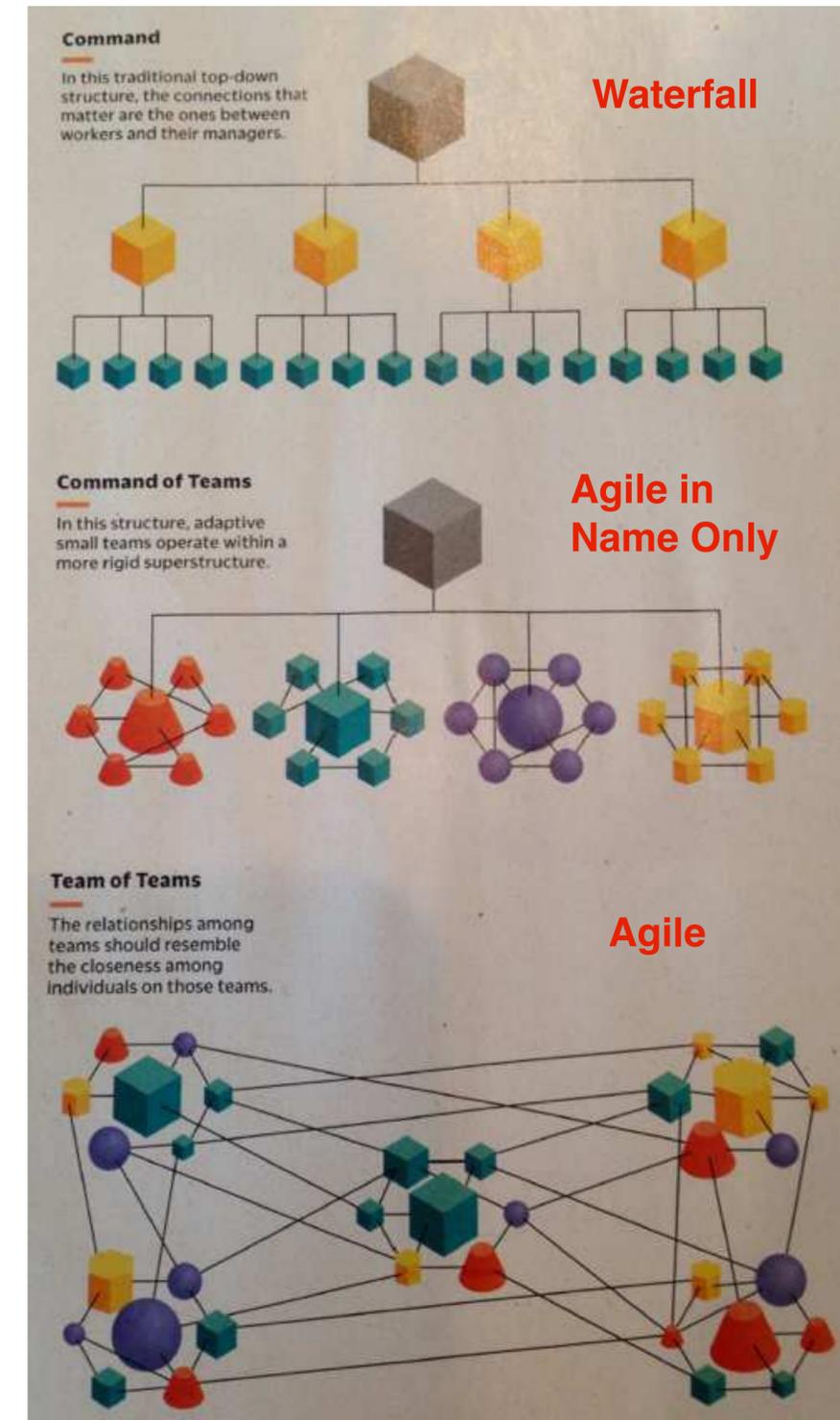
- You need an Enterprise Action Team with Senior Management representation along with knowledgeable people that can Scrum
- Their backlog is the things that need to be done to make the organization more Agile
- They have the authority to change the organization
- They have the authority to delegate lower level stories in their backlog to middle management
- They meet regularly



PDF created with pdfFactory trial version www.pdffactory.com

You Will Not Win the War Without a Team of Teams

- **Executive Action Team needs to be a team of teams** to Scrum company impediments
- Scrum needs executive support for continuous improvement to be sustainable.
- Sometimes called Agile Transition Team or Strategy Scrum Team.
- **Resolves big impediments**
- Assigns impediments to middle managers



What is the Backlog for Agility

- The Enterprise Action Team needs to assure that management takes the responsibility for leading an Agile organization
- Their three top priorities are megaissues
 - Assure all products and projects are prioritized and every team has a clear product backlog
 - Assure all teams can continuously ship product
 - Remove organizational debt that blocks Agility



Assure Management Provides Agile Leadership

- Provide **clear and challenging goals** for the teams
- Eliminate organizational debt - **identify and remove waste**
 - Create a business plan that works
 - Provide all resources the teams need
- Identify and **remove impediments for the teams**
 - Know velocity of teams
 - Eliminate technical debt
- **Hold Product Owners accountable** for value delivered per point
- **Hold Scrum Masters accountable** for measurable process improvement, regular product delivery, and team happiness
- **Hold Managers accountable** for removing waste

Scrum and CMMI Level 5: The Magic Potion for Code Warriors

Sutherland, J. ; Jakobsen, C.R. ; Johnson, K.

Hawaii International Conference on System Sciences, Proceedings of the 41st Annual

DOI: [10.1109/HICSS.2008.384](https://doi.org/10.1109/HICSS.2008.384)

Publication Year: 2008 , Page(s): 466

MegaIssue #1 - Prioritization

- **Every team has a clear, ordered backlog every sprint so they know exactly what they need to do and in what order.**
- **Teams are stable. No teams are raided for people to start new projects. Backlog flows to stable teams.**
- **Bad Symptoms**
 - "We have multiple conflicting priorities."
 - "Our teams are constantly disrupted by changes for new projects"
 - "Everything is number one priority."
 - "We all work on five projects at once."

O	Great No Impediments
△	Some Impediments Team Not Impacted
↑	Some Impediments Team Progress Impacted Situation Improving
↓	Significant Impediments Team Significantly Impacted Situation Deteriorating
X	Major Impediments Team Totally Blocked

Typical “Agile in Name Only” Team



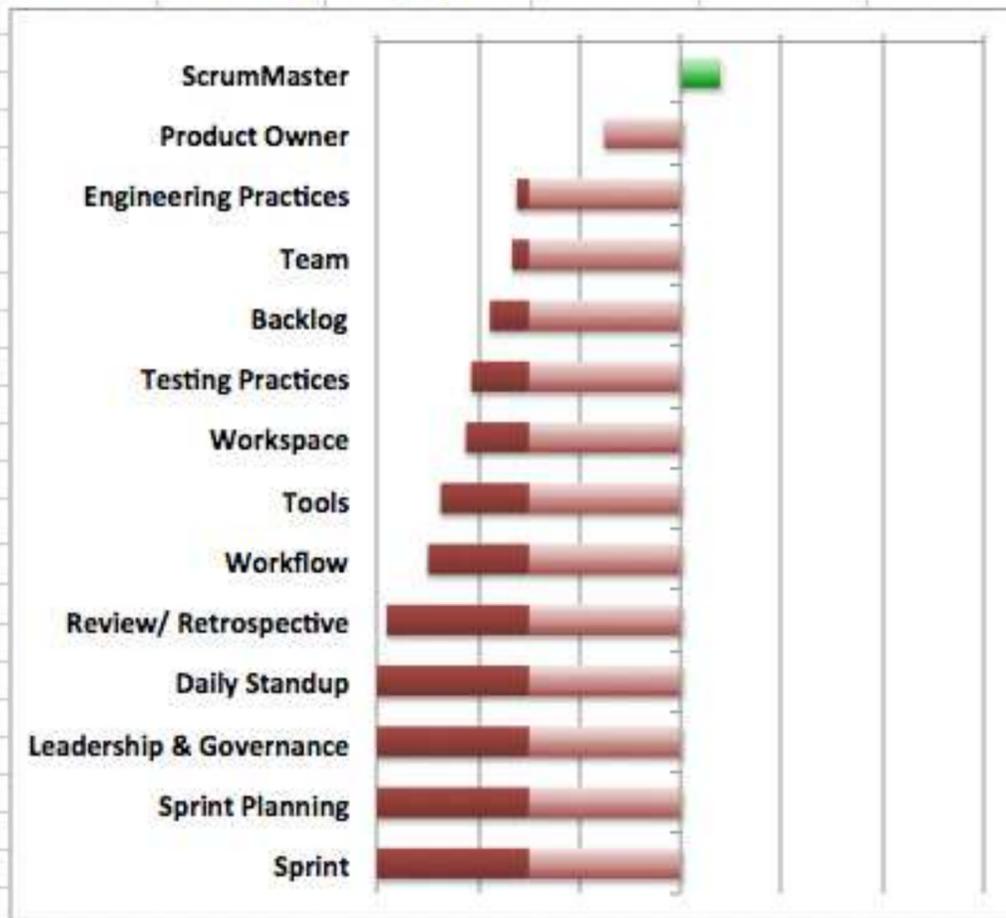
Scrum Inc. Agile Capability Assessment: Summary Report

Summary report for: Fortune 100 Company before 1st visit

Overall Score	24%	F
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Percent of Assessment completed	
Overall	98%
Organization	100%
Team 1	98%

Results Breakdown by Category



Top Levers for Improvement

Category	Lever	Team
1 XII. TESTING PRACTICES	Testing within sprint	Team 1
2 XI. ENGINEERING PRACTICES	Continuous Integration	Team 1
3 XII. TESTING PRACTICES	Automated testing	Team 1
4 XII. TESTING PRACTICES	Regression testing	Team 1
5 VII. DAILY STANDUP MEETING	Impediments addressed	Team 1

Key Strengths to Maintain and Expand

Category	Lever	Team
1 II. SCRUMMASTER	Team empowerment	Team 1
2 XII. TESTING PRACTICES	Performance Optimizatio	Team 1
3 III. PRODUCT OWNER	Non-interupt	Team 1
4 XII. TESTING PRACTICES	Exploratory testing	Team 1
5 II. SCRUMMASTER	Active facilitation	Team 1

Team After One Sprint with Aggressive Coach



Scrum Inc. Agile Capability Assessment: Summary Report

Summary report for: Fortune 100 company after first visit by coach

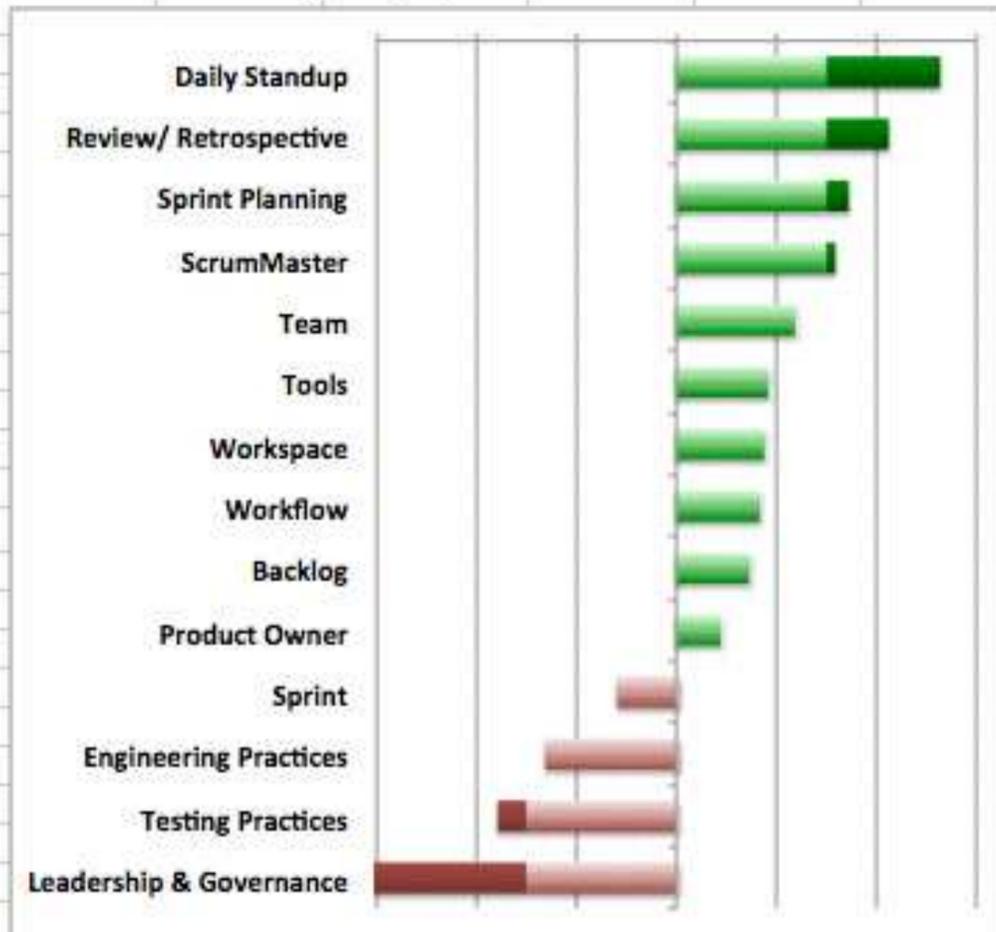
Overall Score

58%	D
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Percent of Assessment completed

Overall		100%
Organization		100%
Team 1	0	100%

Results Breakdown by Category



Top Levers for Improvement

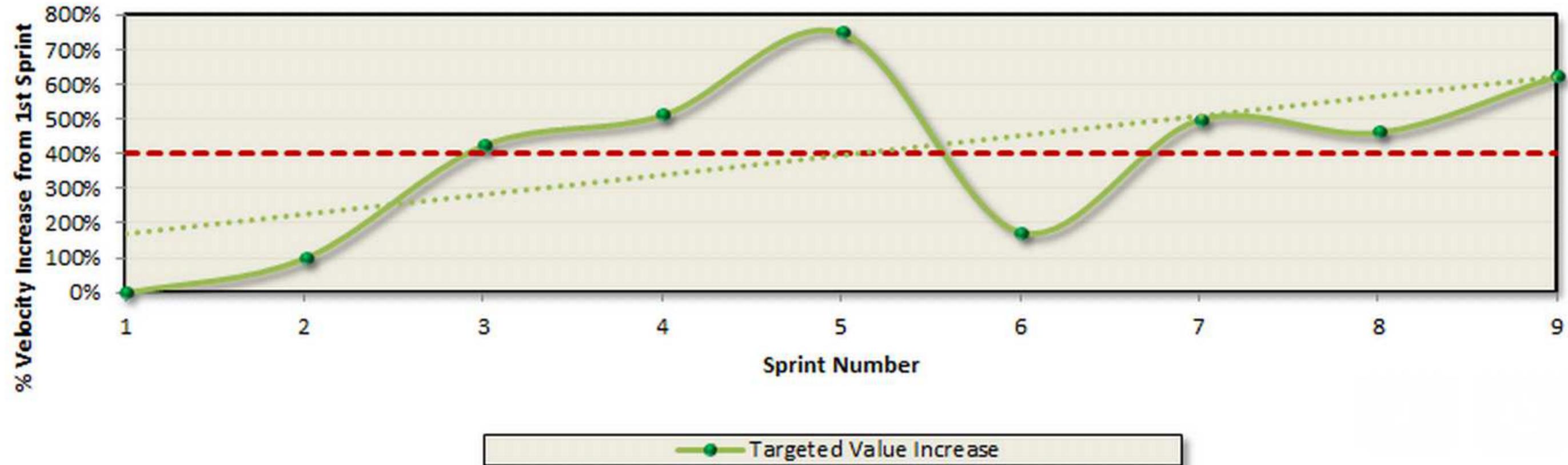
Category	Lever	Team
1 XI. ENGINEERING PRACTICES	Continuous integration	Team 1
2 XII. TESTING PRACTICES	Automated testing	Team 1
3 XII. TESTING PRACTICES	Regression testing	Team 1
4 XII. TESTING PRACTICES	Testing within sprint	Team 1
5 XII. TESTING PRACTICES	Unit testing	Team 1

Key Strengths to Maintain and Expand

Category	Lever	Team
1 VIII. SPRINT REVIEW AND RETROSPECTIV	Kaizen identified	Team 1
2 VI. SPRINT PLANNING MEETING	PO participation	Team 1
3 VI. SPRINT PLANNING MEETING	All stories estimated	Team 1
4 VII. DAILY STANDUP MEETING	Standing at board	Team 1
5 VIII. SPRINT REVIEW AND RETROSPECTIV	Whole team participates	Team 1

Team After a Few Sprints

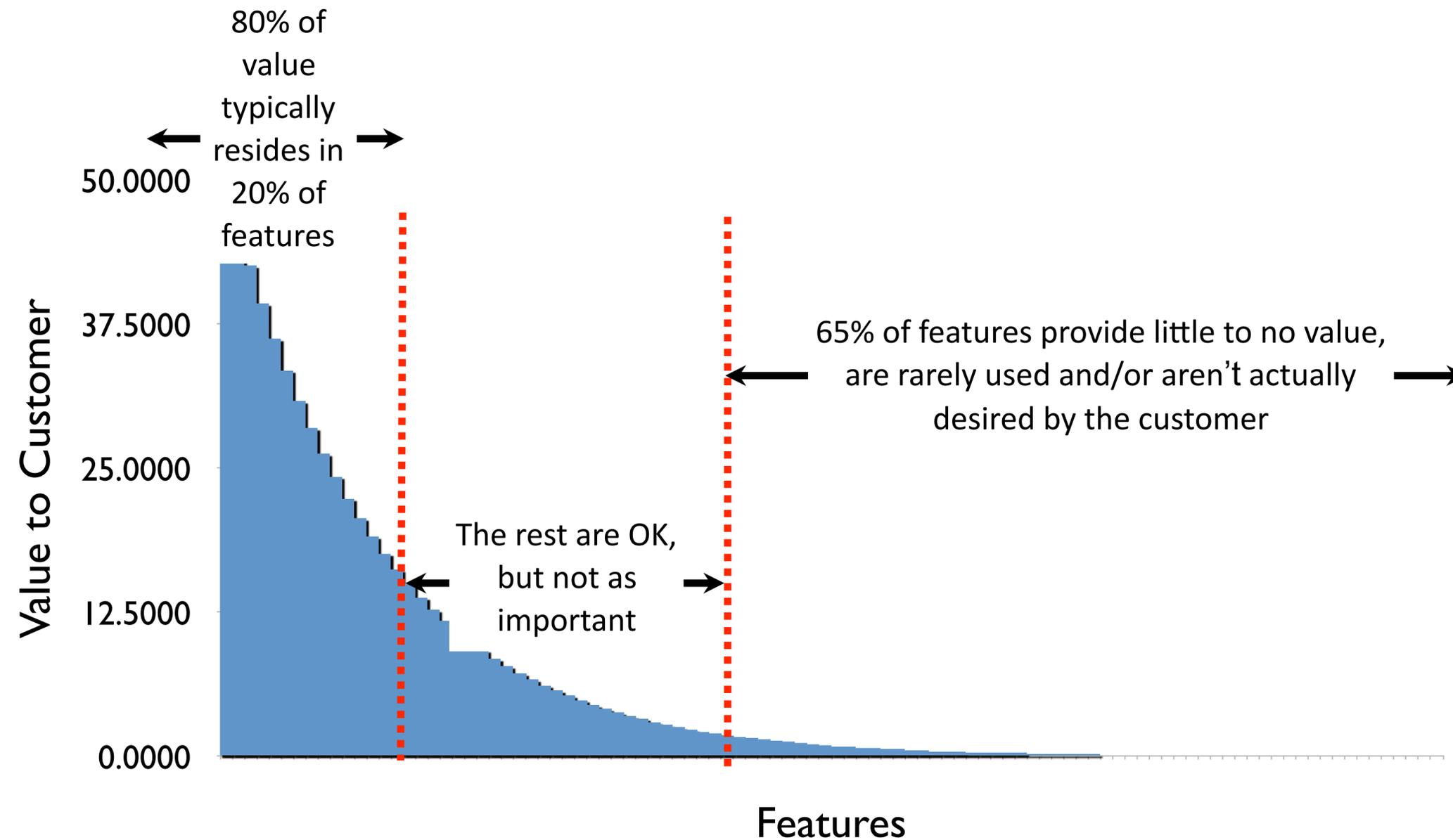
Targeted Value Increase
Each Sprint's Velocity ÷ Initial Sprint's Velocity



Good results from other teams as well

- 209% (The Avengers)
- 275% (The Warriors)
- 367% (The Chargers)

Teams Are Not Building the Right Features



How can you tell ahead of time which features add value and which don't?

Biggest Problem is Still Leadership

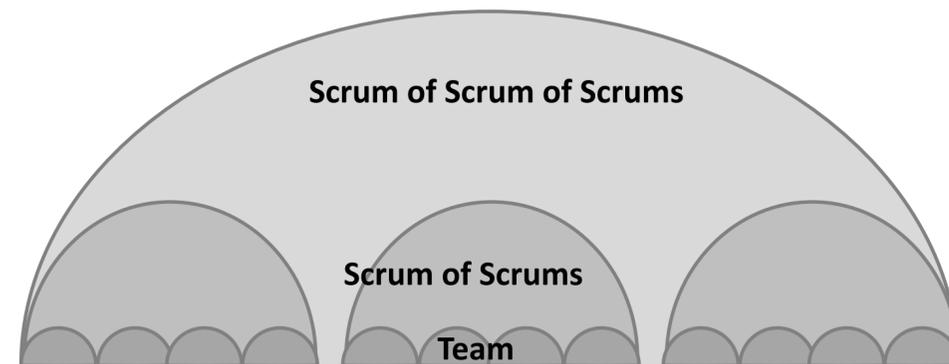
- Leadership has not prioritized the organization
- 1/3 of the people are doing things that are not in the interest of the business
- 65% of the remaining 2/3 is features that the user will never or rarely use
- **Solution:**
 - **Build a Product Owner organization**
 - **Every team has a Product Owner with a clear prioritized backlog every sprint**



Scrum Master and Product Owner Functions Scale Coordination Differently

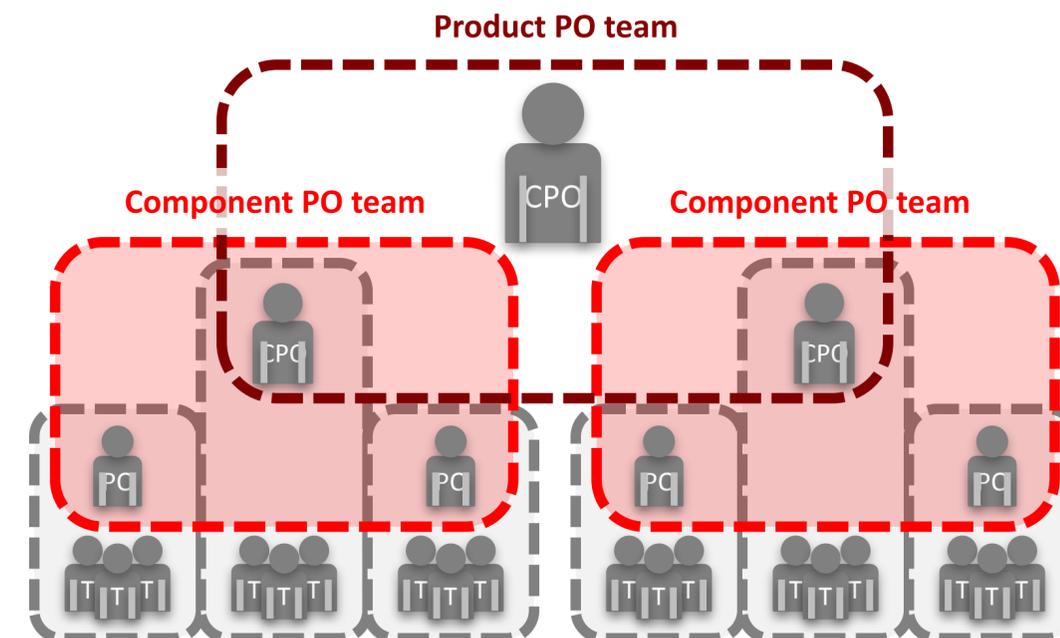
Scrum Master

- Share best practices
- Collectively solve problems & remove impediments
- Deliver early and often



Product Owner

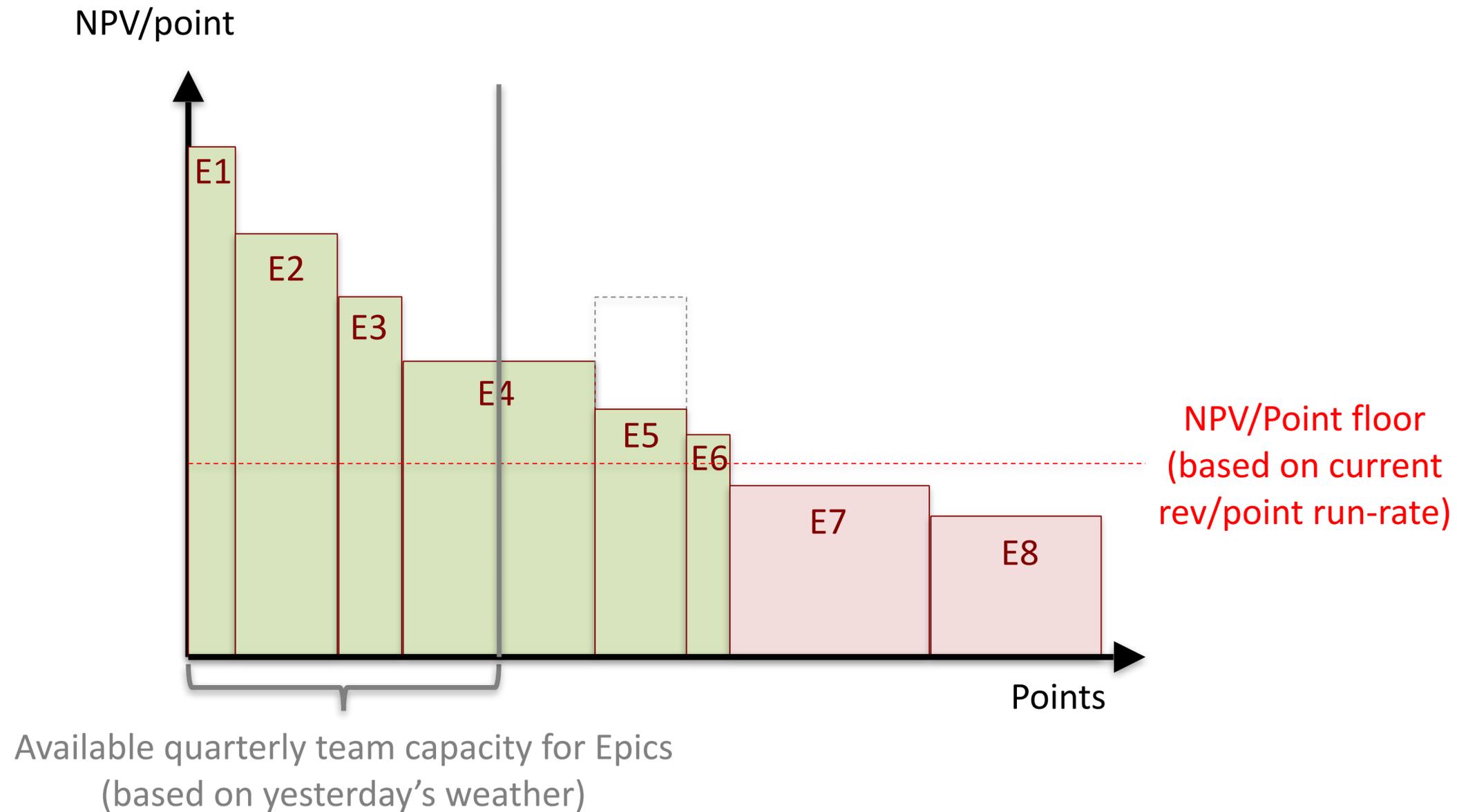
- Maintain clear and consistent product vision
- Optimize business value
- Respond decisively to changing market





Prioritize Possible Epics by NPV/Point

Minimum Level Set by Current Rev/Point Run Rate



Drive Roadmap Priorities With a MetaScrum

Responsibility	Vision	Roadmap	Release Plan	Product Backlog	Sprint Backlog	Daily Plan	Removing Impediments
Executives	A/R	A	C	I	I	I	R
Chief Product Owner	C	R	A	A	I	I	R
Product Owner	C	C	R	R	C	C	R
Über-ScrumMaster	I	I	C	I	I	A	A/R
ScrumMaster	I	I	C	C	C	R	A/R
Team	I	I	C	C	A/R	R	R

Responsible (R) Owns the problem / project

Accountable (A) To whom "R" is **Accountable** - who must sign off (**Approve**) on work before it is effective

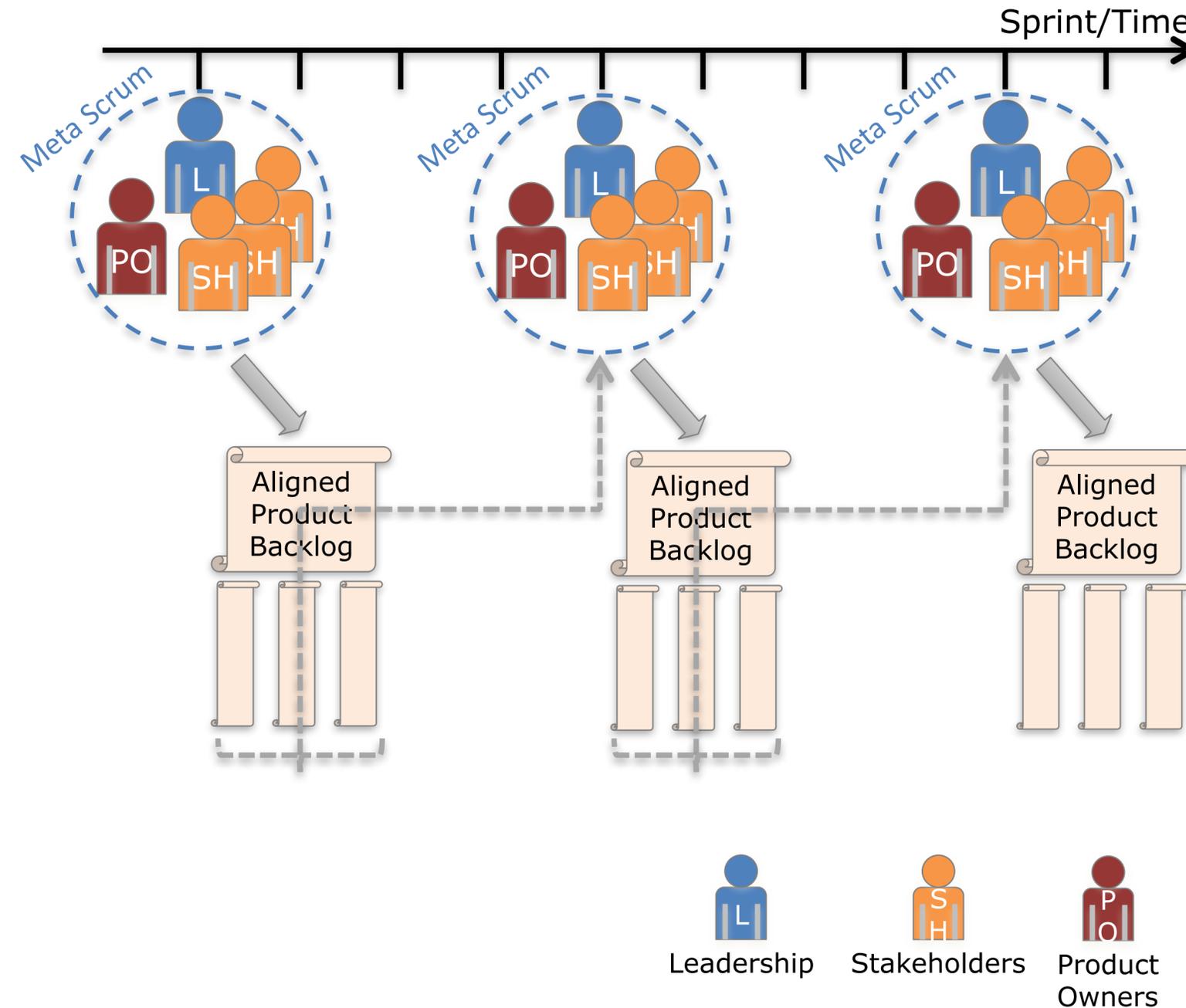
Consulted (C) To be **Consulted** - has information and/or capability necessary to complete the work

Informed (I) To be **Informed** - must be notified of results, but need not be consulted



The Meta Scrum: Scaling Aggressive Scrum

- A gathering of Key Stakeholders, Leadership, and Product Owners
- Run by Chief Product Owner
- Aligns enterprise around roadmap
- The forum for stakeholders to express preferences and remove blocks (they should not try to alter product vision between Meta Scrums)
- Can be held at regular intervals or on an ad-hoc basis
- Allows teams to progress efficiently down a single work path



Megaissue #2 - Continuous Delivery

- Incremental fully integrated builds can be done multiple times per day
- Automated acceptance tests are run with every build
- Teams have a potentially shippable increment of code at the end of a sprint (or more often)
- **Bad Symptoms**
 - We don't know our velocity
 - Our velocity is flatlined
 - Done means coded not tested
 - We can't do integration testing in a sprint

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What to Do If You Are “Agile in Name Only”

Pulling an Elephant Out of a Tarpit

Stas Zvinyatskovsky
@staszv

Ed Kraay
@ekraay

YAHOO!

Let's all agree

We take pride in our work

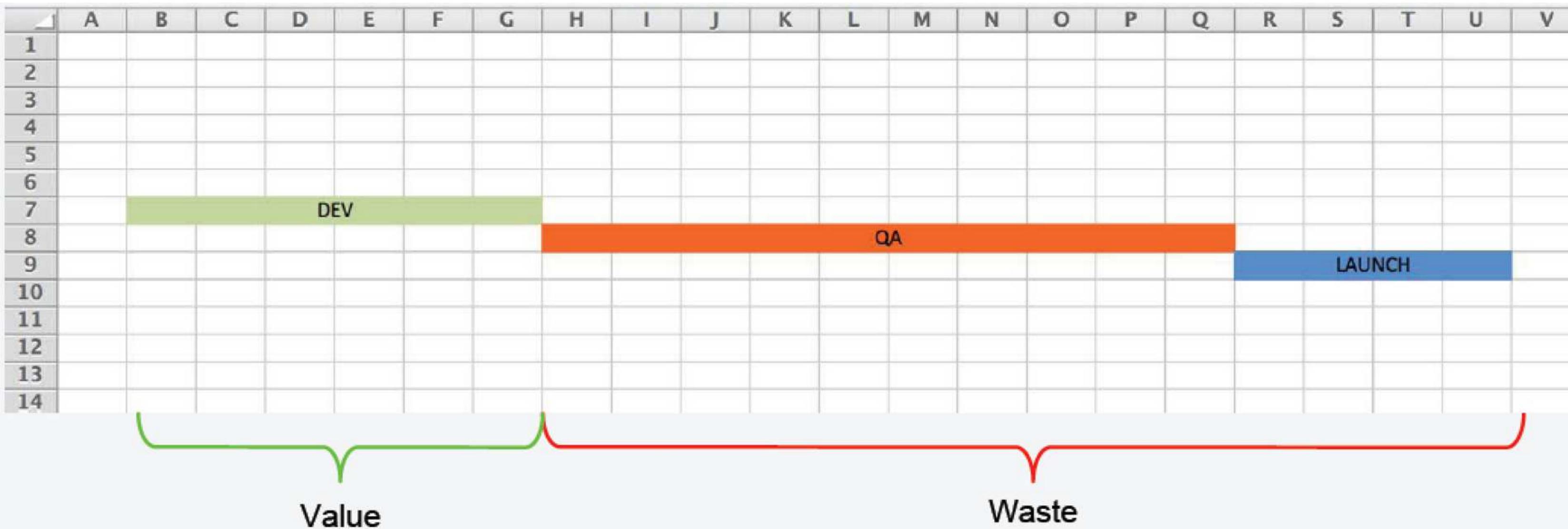
We want to ship often

We want to ship with quality

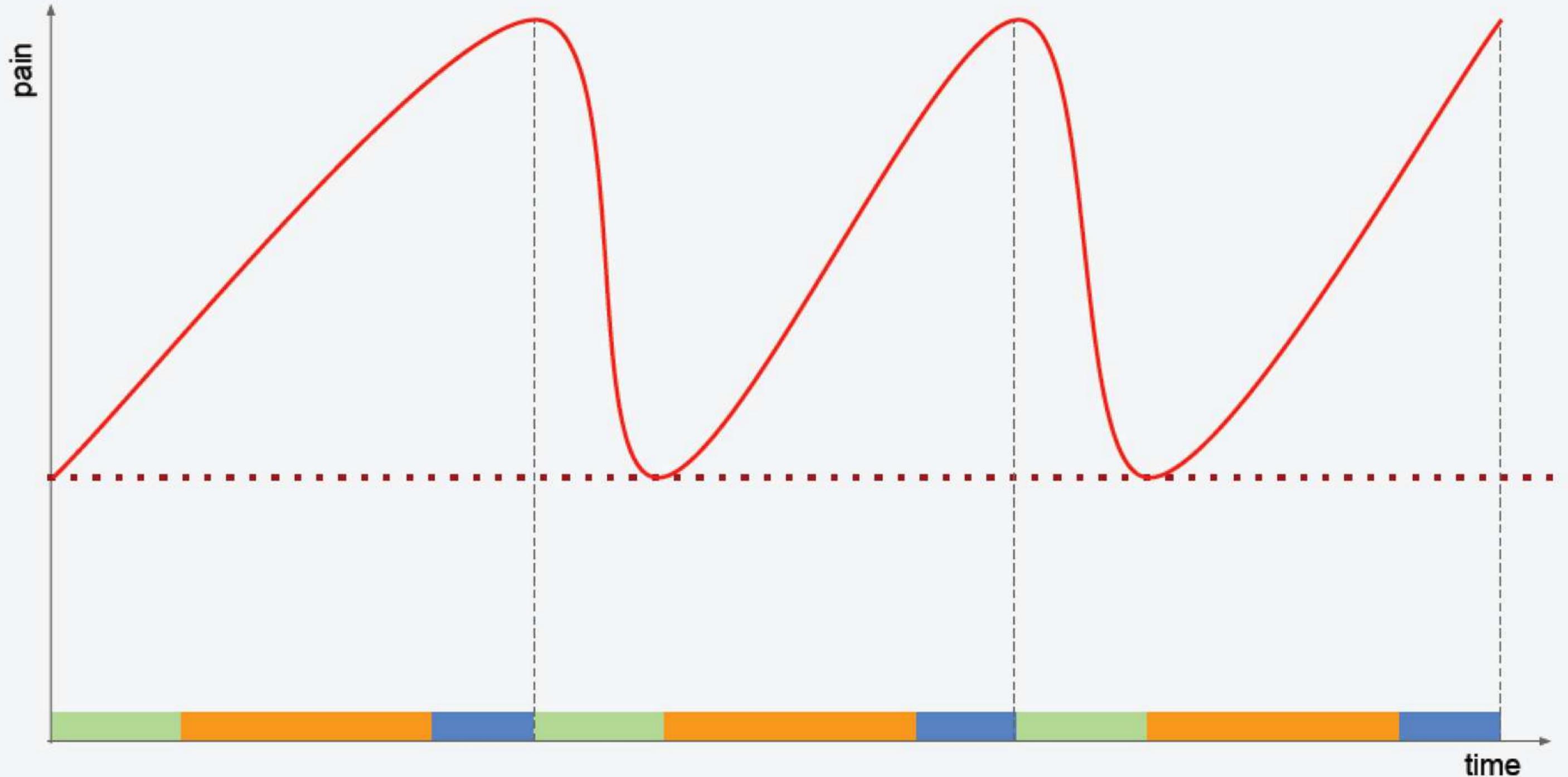
We want to do work that matters

Source: Yahoo

“We Work Hard But We Don’t Know If We Are Making a Difference.”



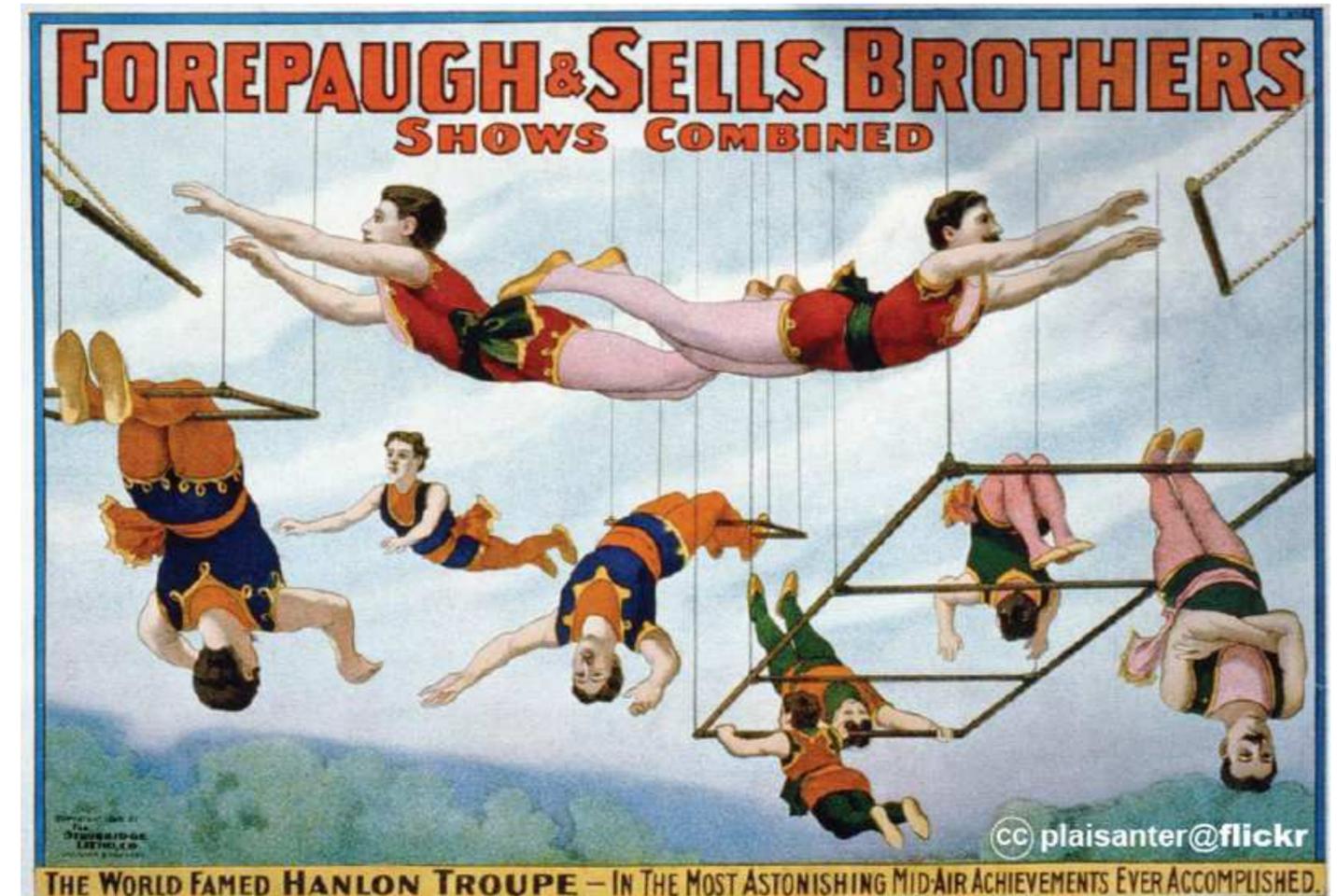
ROLLERCOASTER OF PAIN



Source: Yahoo

Solution Services

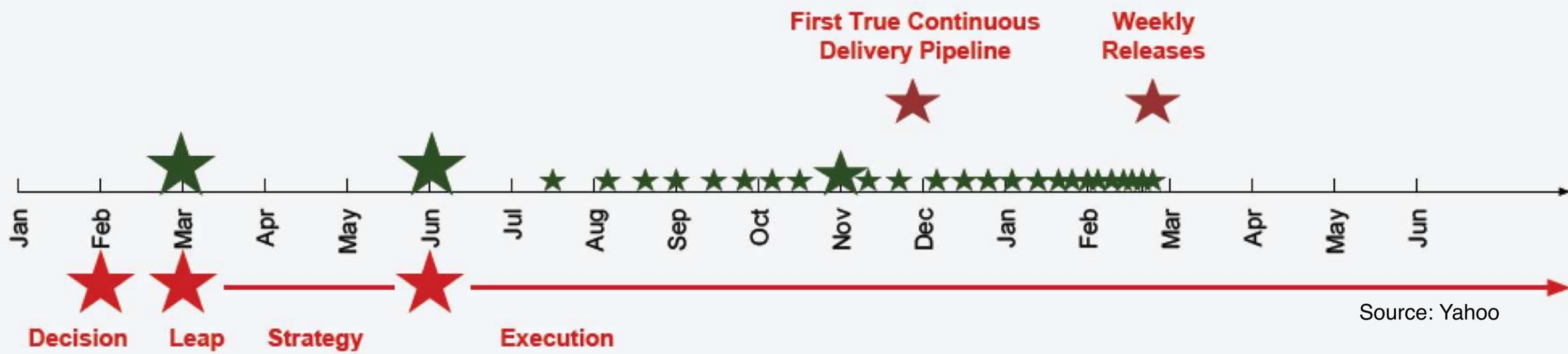
- Mandated continuous integration
- Trained managers and technical leaders
- Communities of practice
- Agile consultants
- Release planning sessions
- Scrum of Scrums
- **Metascrum**
- **Portfolio kanban**
- **Impediments clearing house**
- Agile council
- Agile tools



Source: Yahoo



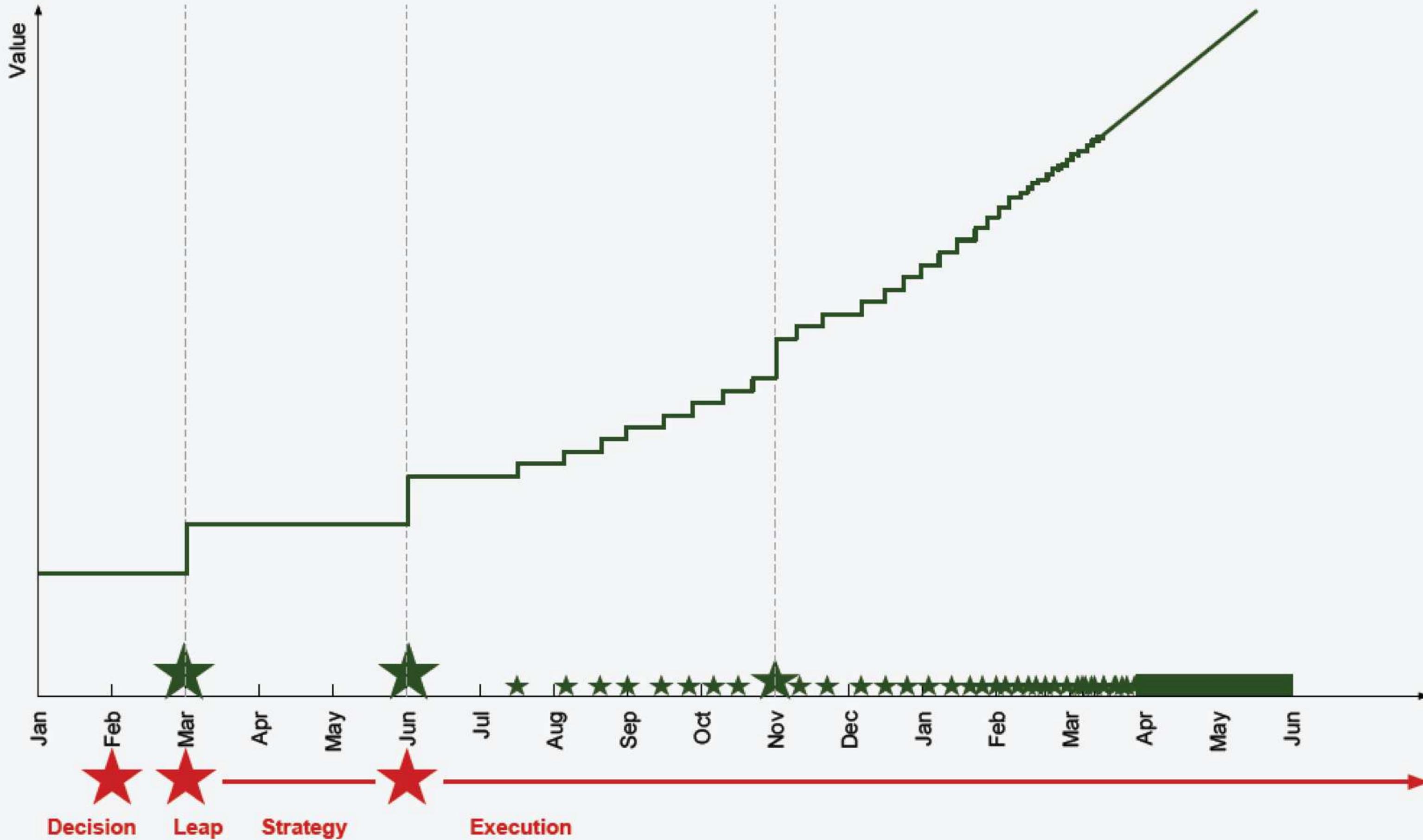
Source: Yahoo

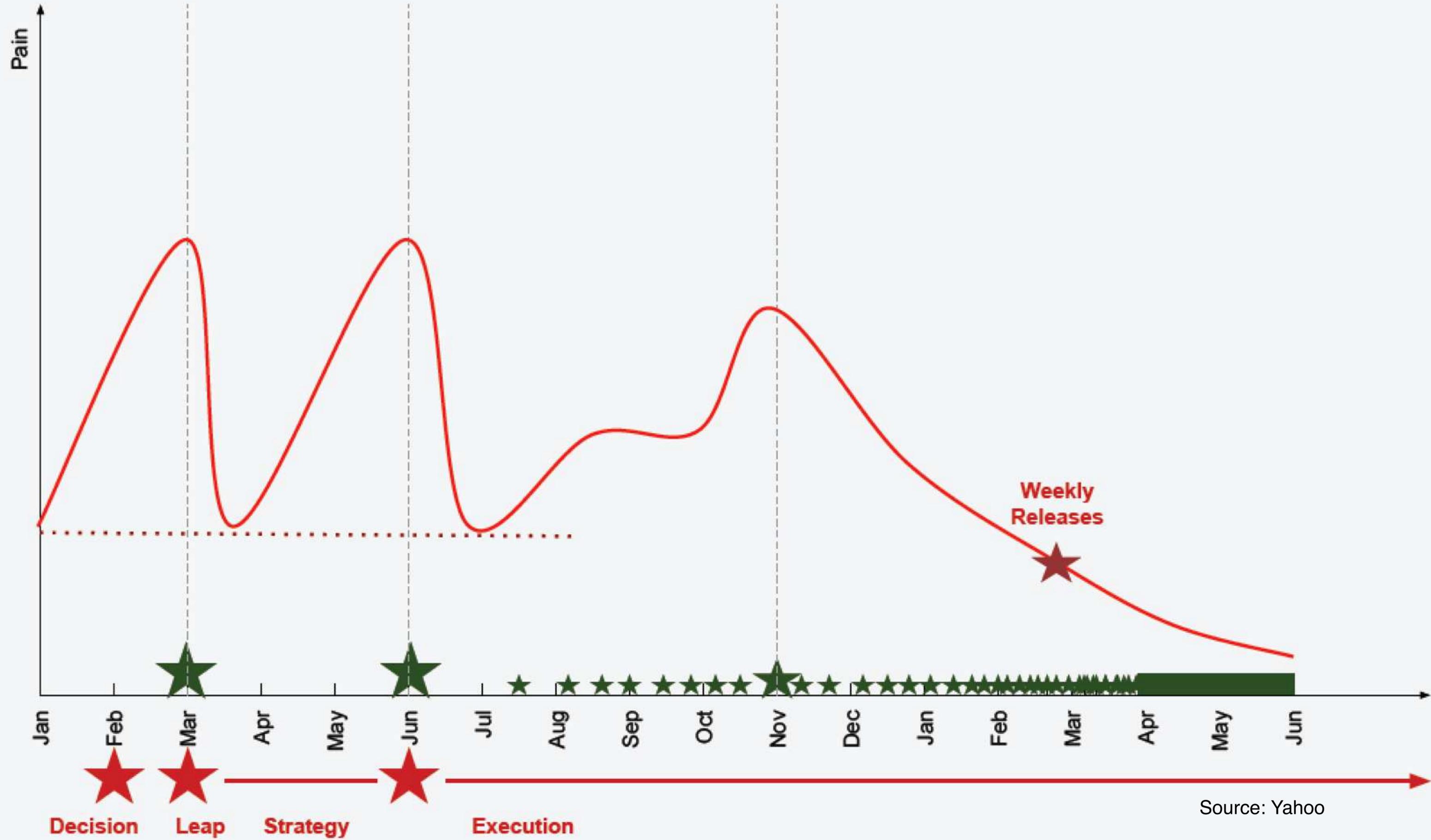


Source: Yahoo



Source: Yahoo





Source: Yahoo



52 weeks of value

Agile Attributes	Mean	Non-Agile			Agile			
		Less often than every 12 weeks	Every 8 to 12 weeks	Every 4 to 8 weeks	Every 3 to 4 weeks	Every 1 to 2 weeks	More often than once a week	
Our Development Team...		7-Point Scale (1)						
Continually improves our development processes.	5.1	4.6	4.6	4.9	5.0	5.2	5.4	
Delivers tested, running, software each cycle.	5.4	4.5	5.0	4.9	5.3	5.5	5.6	
Includes my voice in decision making.	5.4	4.9	5.1	5.2	5.6	5.5	5.5	
Produces clean, high quality code.	5.1	4.4	4.9	5.0	5.2	5.2	5.2	
Makes releasing new features easy.	5.1	4.3	4.6	4.6	5.1	5.3	5.4	
Incorporates user feedback to drive decisions.	5.2	4.6	4.9	5.1	5.2	5.3	5.3	
Maintains a high energy level.	5.2	4.6	4.5	5.0	5.2	5.4	5.5	
Impediments to progress are effectively removed.	5.0	4.5	4.3	4.8	5.0	5.1	5.1	
As a Broader Organization...		7-Point Scale (2)						
Work is informed by effective feedback processes.	5.0	4.4	4.7	4.8	5.0	5.1	4.9	
We insist on "best-possible" user experiences.	5.1	4.5	4.8	4.9	5.2	5.3	5.1	
Product decisions are based on evidence & data.	5.0	4.2	4.8	4.9	5.0	5.1	4.9	
We manage dependencies well with other groups.	4.8	4.1	4.4	4.6	4.9	4.8	4.8	
We work on the highest priority product goals.	5.6	5.0	5.4	5.5	5.6	5.6	5.5	
Products are easy to launch.	4.8	4.2	4.6	4.6	4.8	5.0	4.9	
Unweighted Mean Score		4.5	4.8	4.9	5.1	5.2	5.2	
# of Respondents >		1,267	51	55	120	279	573	189



Notes:

7-Point Scale (1) : 1 = Rarely or Never and 7 = Nearly Always
 7-Point Scale (2) : 1 = Strongly Disagree and 7 = Strongly Agree

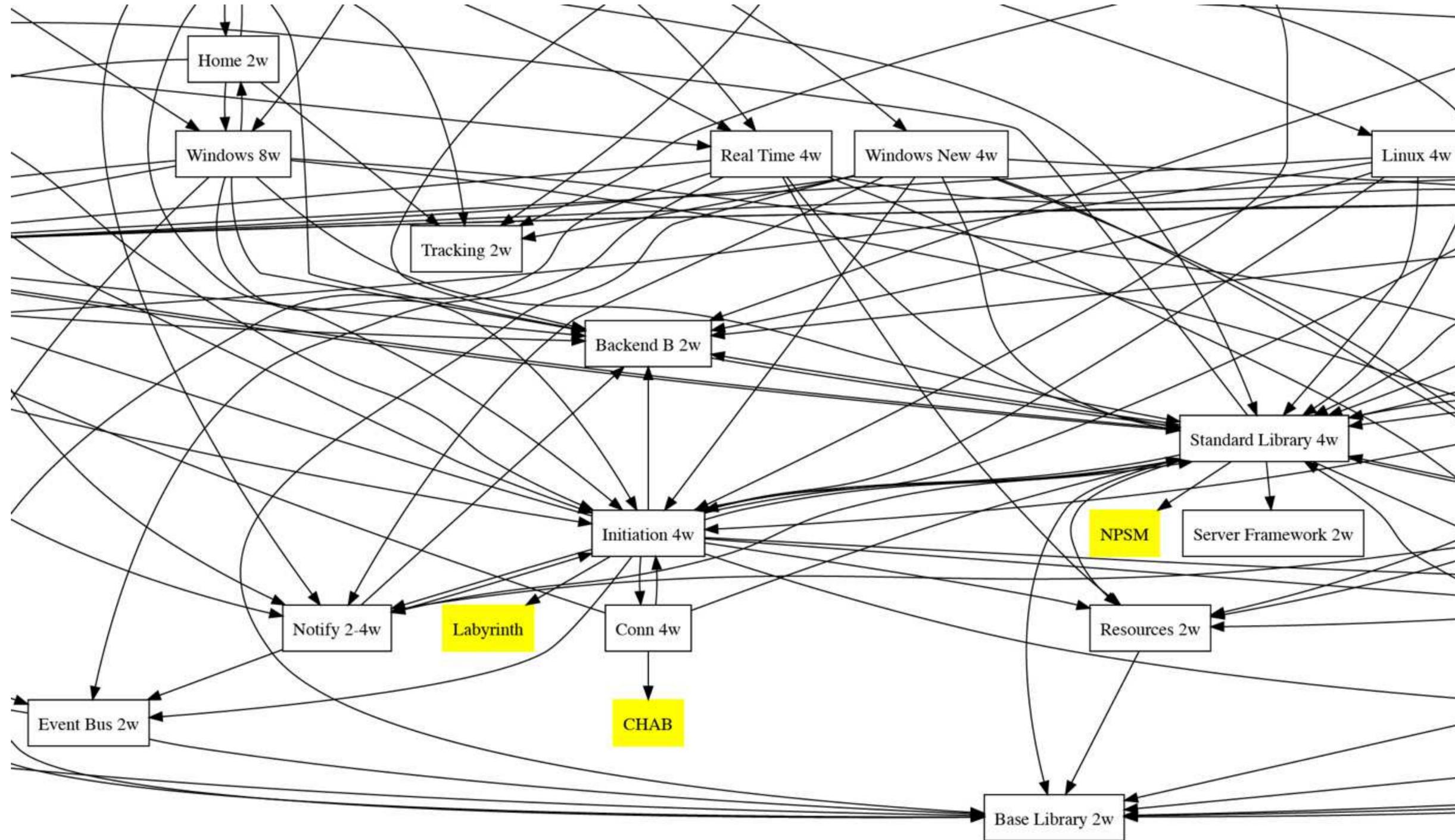
Source: Yahoo

Megaissue #3 - Organization Refactoring

- There is an Enterprise Action Team that is removing organizational impediments on a weekly basis.
- Teams are easily refactored to optimize production.
- **Bad Symptoms**
 - “These people report to me”
 - “I can change their priorities”
 - “I’m bonused to build my empire”
 - I have five management initiatives and I’m working 80 hours a week”

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Organizational Debt



Agile Enterprise Metrics - 2015 48th Hawaii International Conference on System Sciences
Daniel R Greening, Senex Rex
dan@senexrex.com



STATE OF AGILE

Scaling Agile



SCALING METHODS & APPROACHES

The majority of respondents use Scrum/Scrum of Scrums to help scale agile within their organizations.

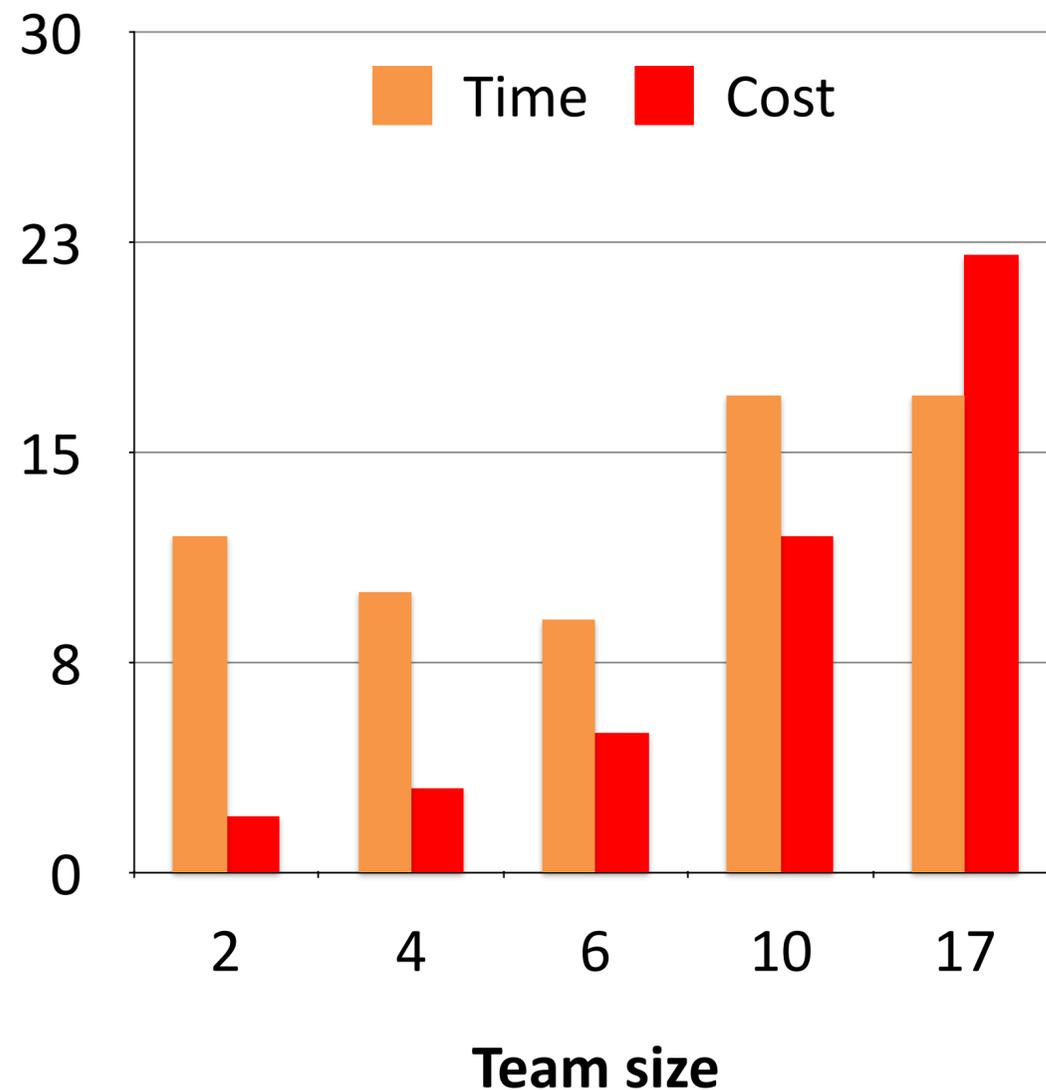
*Respondents were able to make multiple selections.



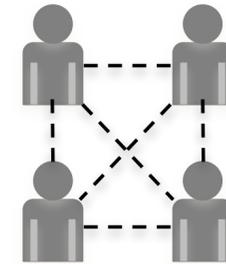
Adding 4 People to a Six Person Team Will Delay the Project for Six Months

This is called "Brook's Law"

Caused by deteriorating team **communication saturation**

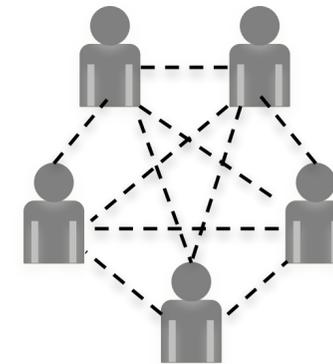


4 people



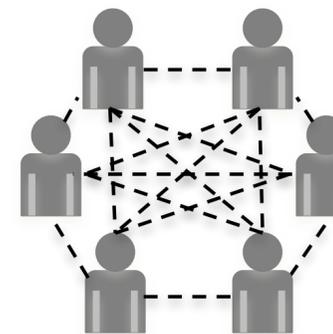
6 direct communication pathways

5 people



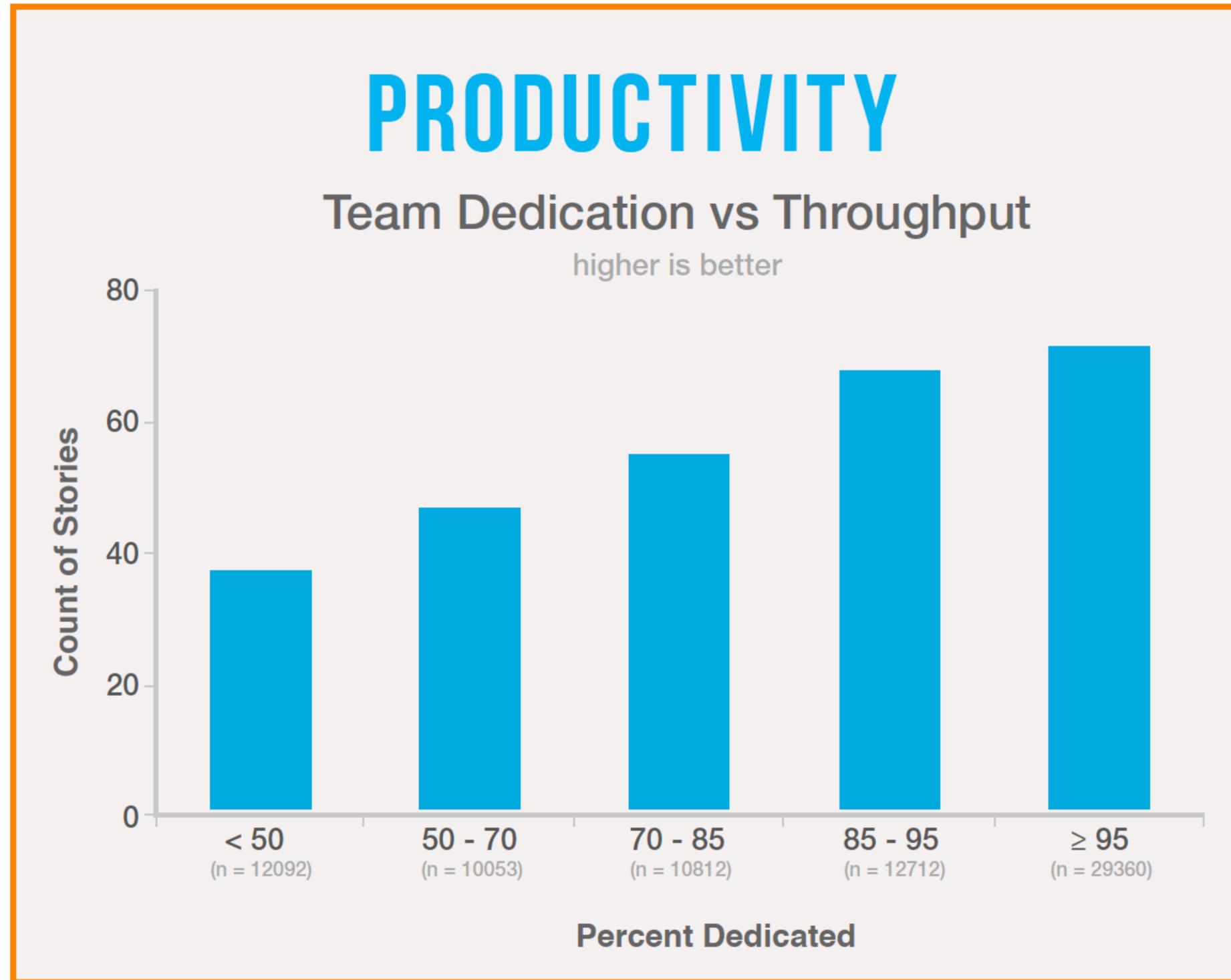
10 direct communication pathways

6 people



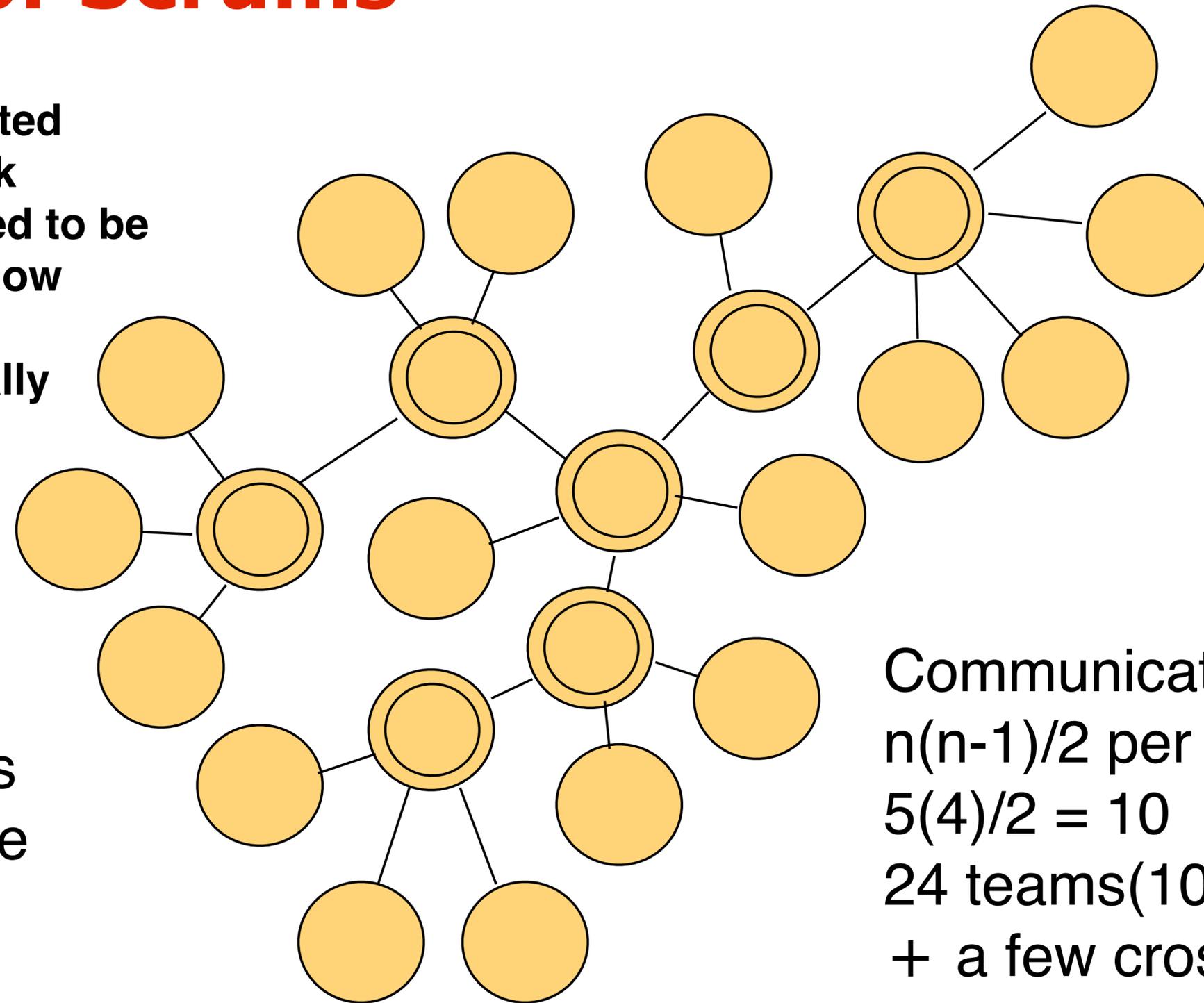
15 direct communication pathways

Dedicated Teams Can Double Productivity



Scrum of Scrums

- Scrum is an object-oriented organizational framework
- The organization will need to be refactored to maximize flow
- Small steps regularly
- Large changes periodically



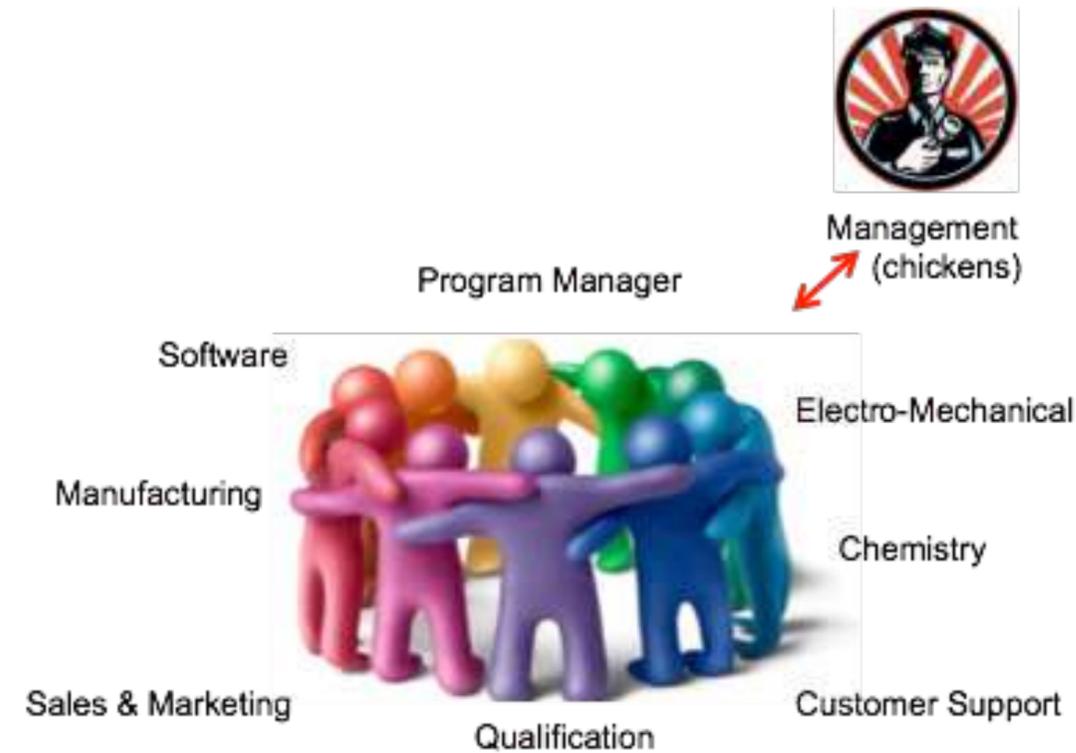
Waterfall Comm Paths
 $n(n-1)/2$ for 120 people
 $120(119)/2 = 7140$

Communication Paths
 $n(n-1)/2$ per team
 $5(4)/2 = 10$
 $24 \text{ teams}(10) = 240$
+ a few cross team
80% less comm

Scrum of Scrums as Release Team

Zero Defect Release

After failed product releases we adopted a program Scrum-Of-Scrums...



- Very uncomfortable for people in the beginning
- Huge impact on communications and problem resolution

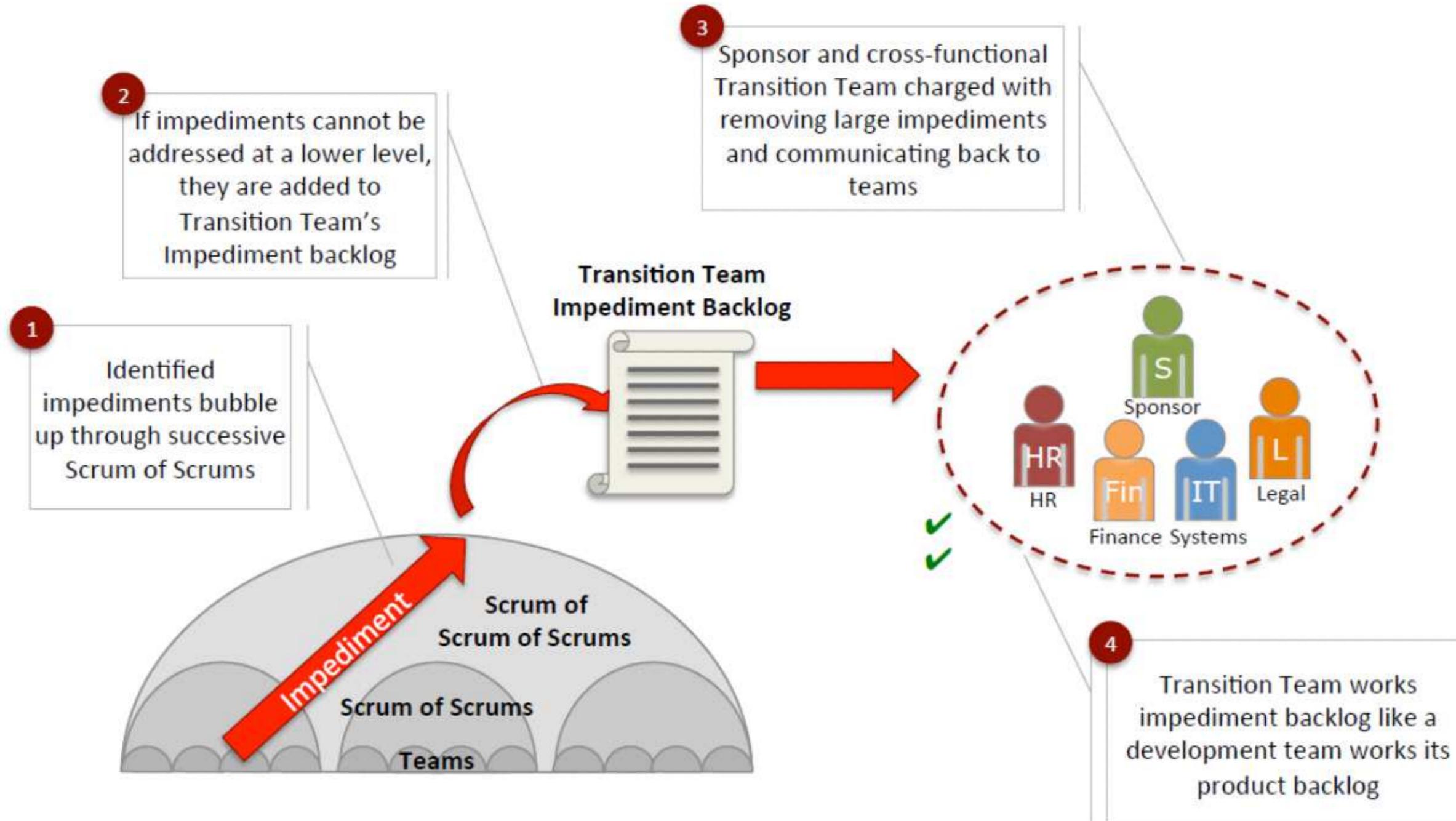
“I was reluctant at first but the Daily Scrum of Scrums was the key reason this is the best launch in our history”

Adapted from Slides By Chris Sullivan

Manufacturing Manager

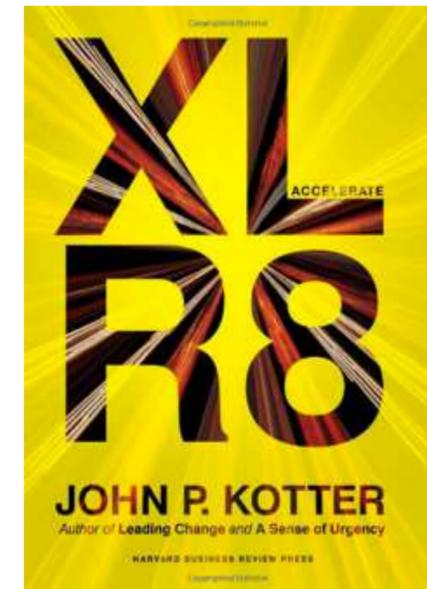
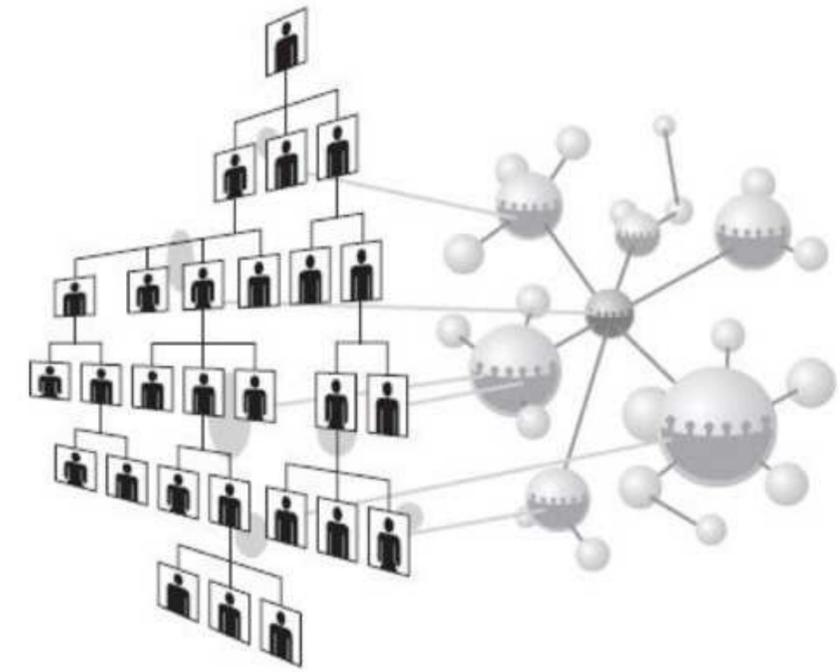


How one type of Executive Action Team Works



Agile Leadership understands:

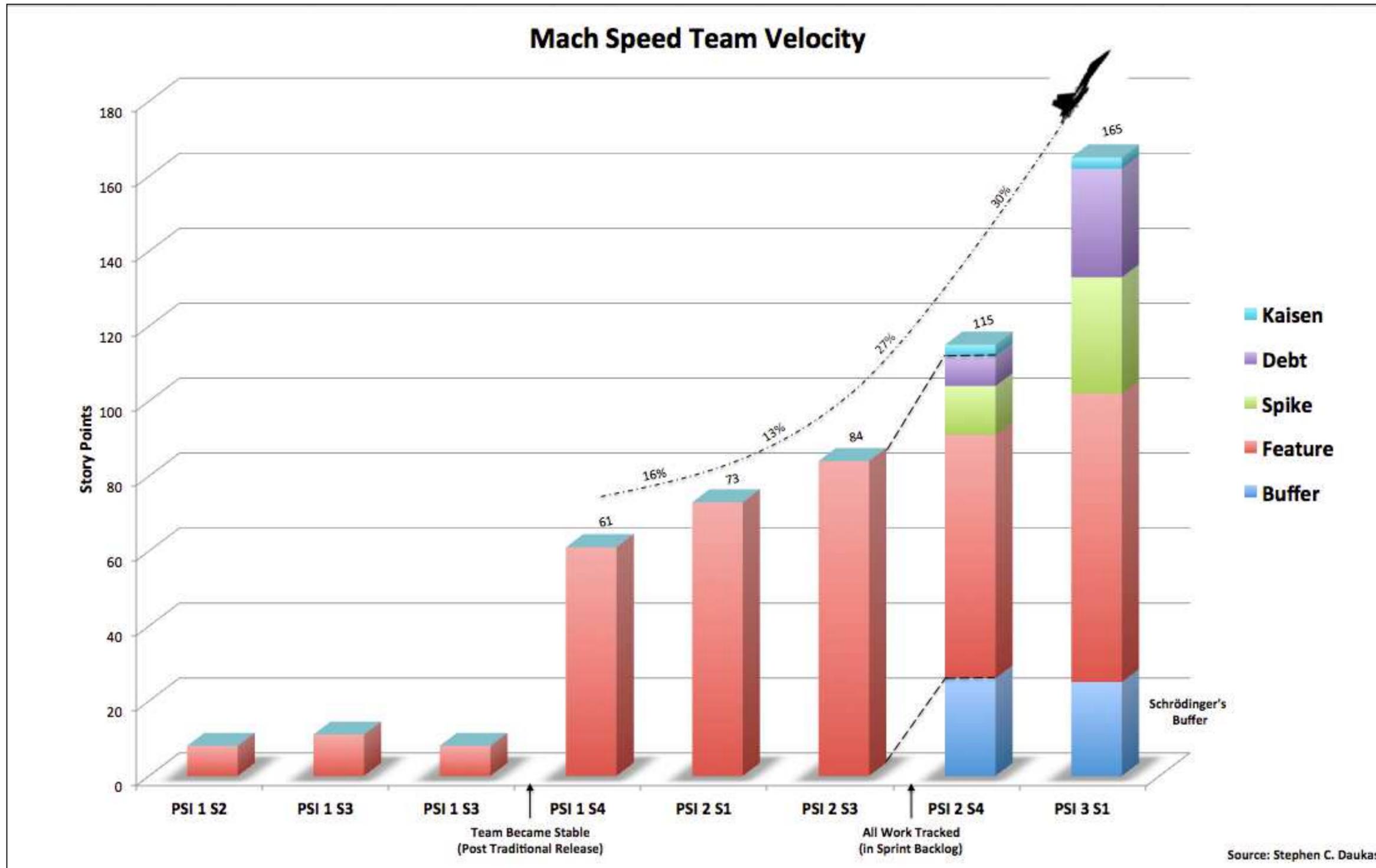
- Product Backlog flows to stable teams
- ***Not people to projects***
- Measure production per sprint (velocity)
- ***Not time to produce product that doesn't work***
- Update plan based on real data (velocity)
- ***Not a GANNT chart***
- Always deliver early
- ***80% of value is in 20% of features***
- Having a problem is the most important thing to have
- ***The Kaizen is always the top priority story***



**Scaling Velocity is
Faster, Cooler and
Cheaper than Scaling
People**



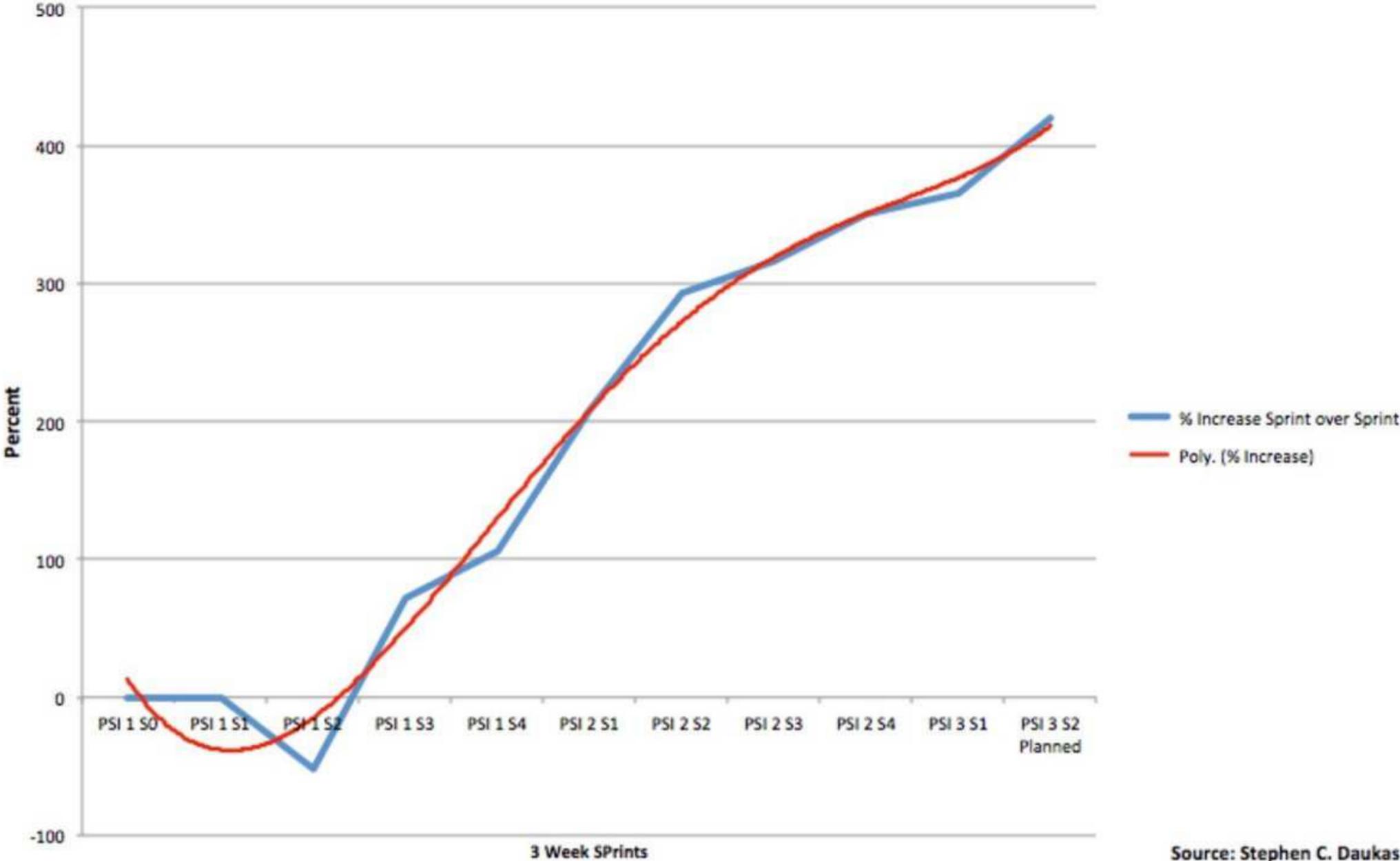
Implementing Aggressive Scrum



Source: Leading IT infrastructure company in Boston area

9 Teams, 10 3-Week Sprints

Engineering Scrum Adoption



Source: Stephen C. Daukas

Faster, Cooler, Cheaper

- **Aggressive Scrum** team is equivalent to 5 Scrum teams
- **Faster** - only takes a few sprints to boot up
- **Cooler**
 - Product Owner is removing technical debt
 - Points are allocated to innovation
 - Teams are more motivated to produce better product
- **Cheaper**
 - Product is produced at 20% of the cost of competitors products.

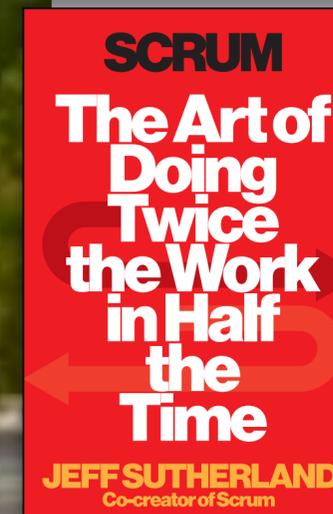
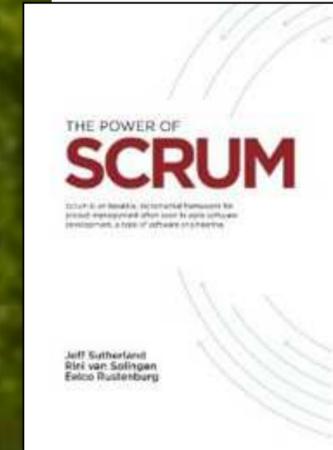


Bottom Line

- **To execute a scaled Scrum you need:**
 - An Executive Action Team that EATs impediments
 - A Meta-Scrum that drives company priorities
 - A Scrum of Scrums that escalates impediments to be EATen continuously
- **These simple mechanisms eliminate:**
 - All non-Scrum meetings
 - Release teams
 - Organizational debt
 - Technical debt
- **They focus the organization on:**
 - Driving value creation
 - Increasing revenue and shareholder value



Questions?



The faster you go, the more resistance you get!

scruminc. @

GROWTH
SUMMIT Presented by:
FORTUNE®