

"Caution: Scaling Ineffective Scrum Can Lead to More Chaos"

Michael S. McCalla Agile Project and Portfolio Summit Harrisburg University of Science and Technology

About Me

- Agile Coach and Owner of Achieving Agility
 - We provide agile and lean coaching, training, and transformation services
- 15 Years in Software Product Management/Development in the Financial Domain
 - Grew up in a number of vendor start-ups
 - Played many different roles along the way
- Agile Practitioner for 8 years
- Agile fits me like a glove and I am very passionate about it
- Spent last 4 years coaching organizations adopt agile principles and practices
 - Coached on the Portfolio, Program, and Team Level
 - Led Transformation Efforts
 - Helped Teams Build Great Quality Products

Agenda

- Rate Your Scrum Team(s)
- Teams within the Scaling Frameworks
- Why Agile?
- Effective vs. Ineffective Scrum
- Scaling Ineffective Scrum Case Study
- Essentials for Effective Scrum
- Revise Scrum Team(s) Score

Rate your Scrum Team's Effectiveness

"If your organization has scrum teams, how would you rate their effectiveness on a scale 1 to 5?"

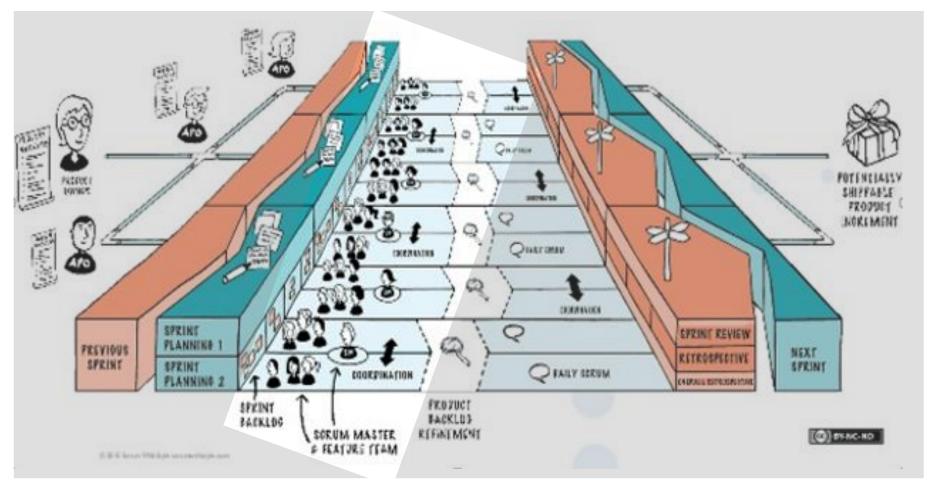
Scrum Report Card
Initial Score (1-5):
Revised Score Categories (1-5)
Cross Functional Teams
High Focus on Quality
Product Owner Selection
Thin Vertical Slices
Swarming
Effective Scrum Masters
Average:

Scaling Agile Frameworks

"A brief look at the role of the **team** within the frameworks"

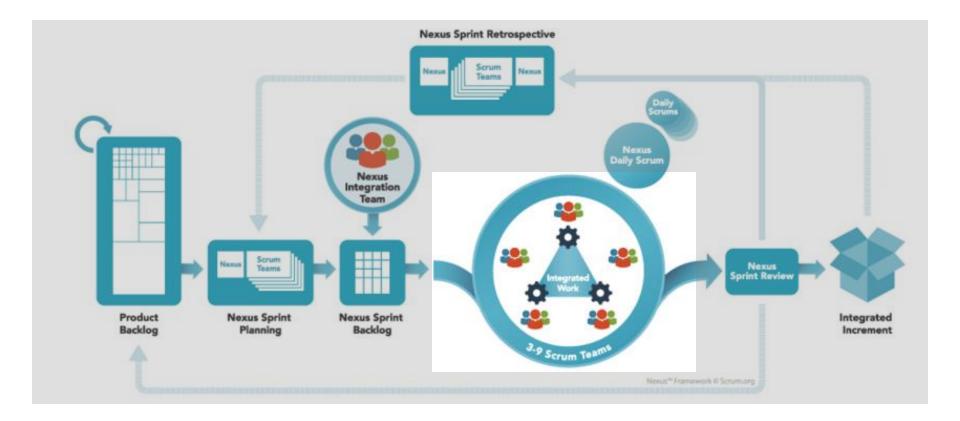


"Feature teams balance specialization and flexibility"

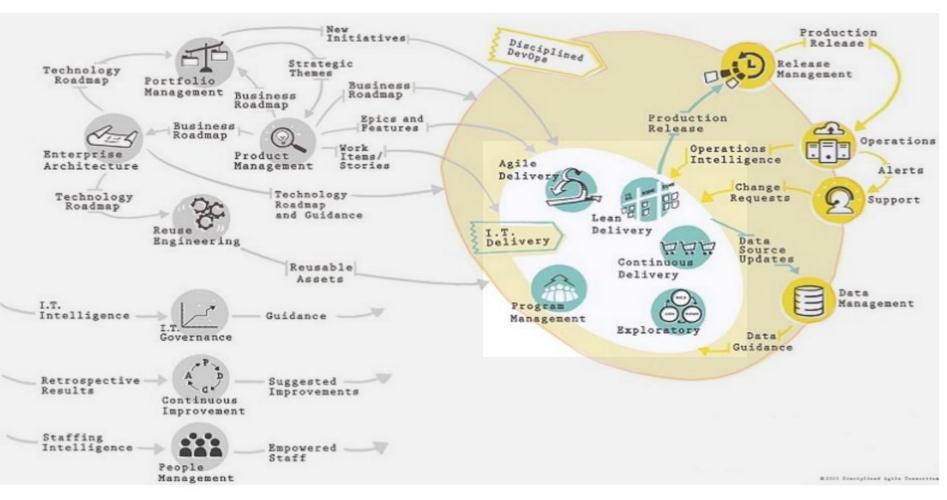


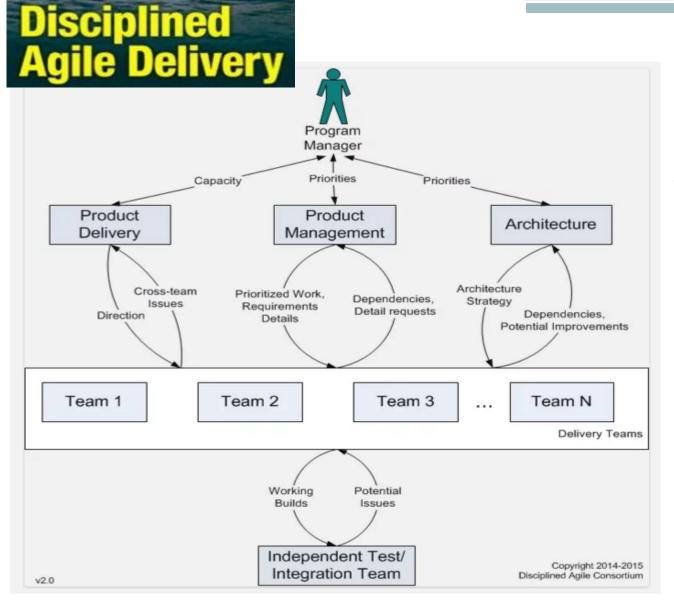
NEXUS™ FRAMEWORK

"The Scrum Teams are responsible for developing increments of potentially releasable software, as prescribed in Scrum"



Disciplined Agile Delivery

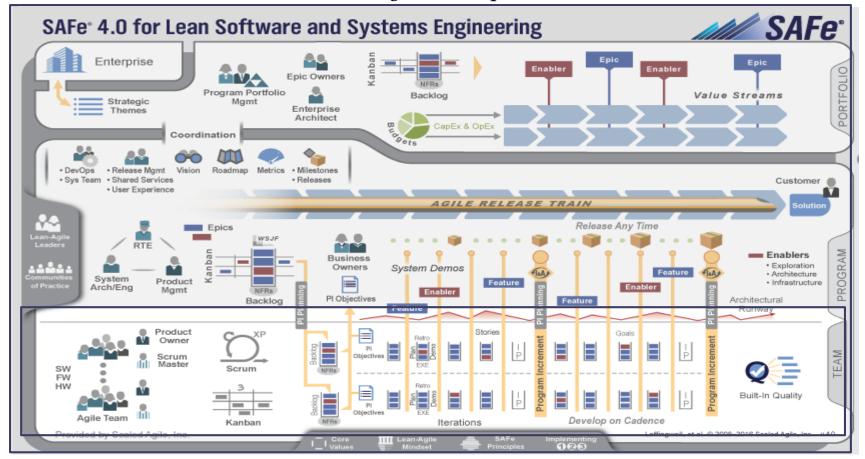




"Agile deemphasizes specialized roles and considers all team members equal – everyone pitches in to deliver a working solution regardless of their job description"

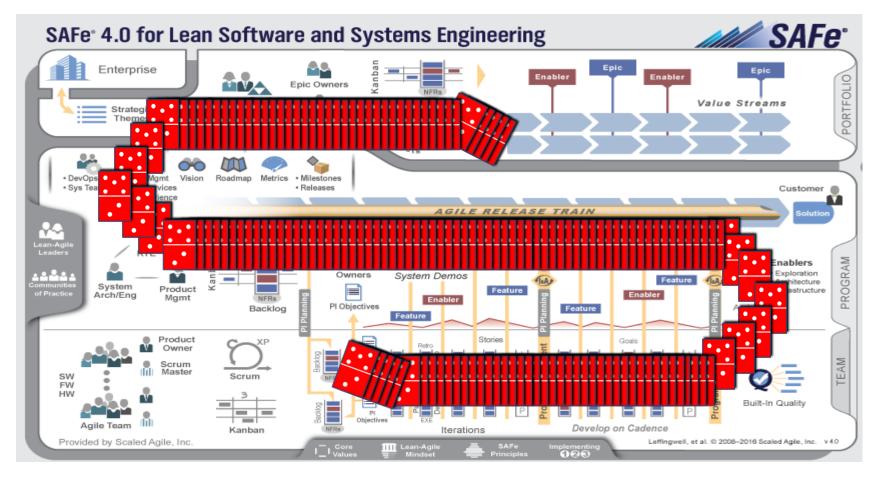


"Without Effective Agile Teams, comprised of empowered and motivated individuals organizations cannot scale Agile to achieve larger business benefits of Enterprise Lean-Agile development"



The Ripple Effect of Ineffective Scrum

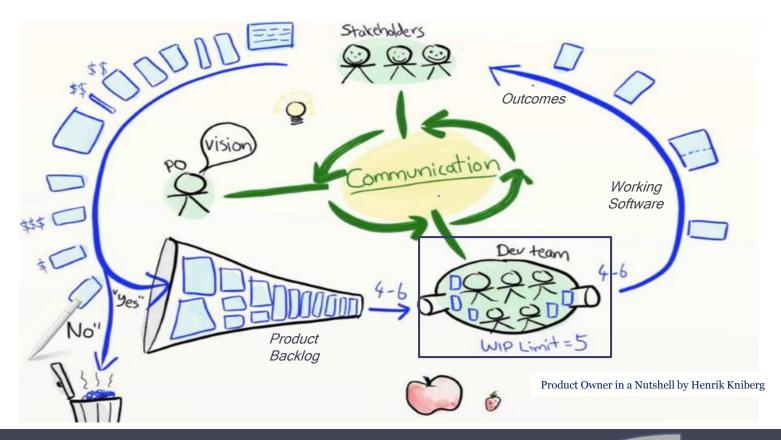
"Ineffective Scrum impacts the whole organization"



Lets Take a Step Back

Why is it that we are doing Scrum anyway?

> To provide a continuous flow of value to the customer



Defining Effective/Ineffective Scrum

Defa	4	Scrum
EHE	CUVE	Scrum

Cross Functional/Generalizing Specialist

High Focus on Quality

Tech Debt Periodically Paid Down

A True Product Owner

Work Units: Thin Vertical Slices

Swarm on Stories

Trained Scrum Master

Continuous Flow

Ineffective Scrum

Component Teams/Specialist

High Focus on Meeting Deadlines

Tech Debt Steadily Accrued

Product Owner Proxy

Work Units: Horizontal Slices

Waterfall The Sprint

Project Manager with the Scrum Master Label

Big Bang Delivery

Case Study: Scaling Ineffective Scrum

Non-Cross Functional Teams

- Maintained Matrix Environment
- Teams were Aligned By Component

No Training

- Outdated Training Document Distributed
- Teams were Stood Up within One Quarter

Lack of Organizational Alignment

- No Priority: "Everything will get done"
- IT Driven Transformation

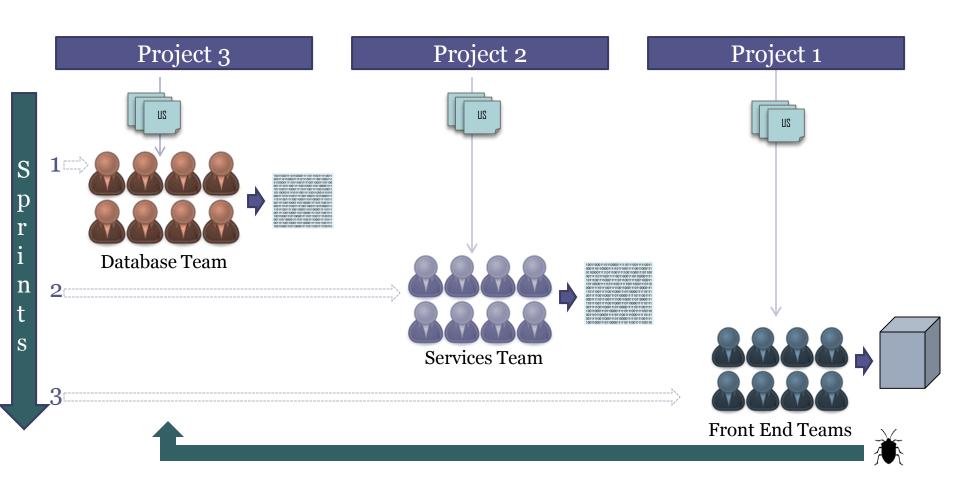
No Project WIP Limits

- PMO Managed Pipeline in Traditional Fashion
- Utilization Focused

No ALM Tool

- Excel Backlogs in SharePoint
- No Visibility

Scaling Ineffective Scrum: Flow of Work



Case Study: Scaling Ineffective Scrum

How did they know that their implementation was failing?

- Time to Market decreased 30%
- Defects Increased
- Project Budgets were Exponentially Exceeded
- Employee Survey Revealed Employee Satisfaction Decreased
- Most Importantly.....

Business Owners and Customers Expressed Dissatisfaction

Scrum Essentials

"Lets look at the Prerequisites and Practices that make Scrum Teams Great"

Cross Functional Teams

Cross Functional Definition:

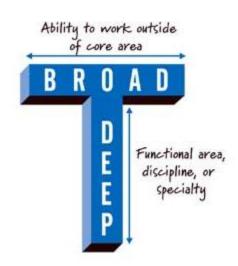
 A group of software professionals that can deliver customer value at the end of an iteration.

Characteristics:

- Focus is Throughput: Useable Features
- Customer Centric
- Shared Team Responsibilities/Accountability

Benefits:

- Eliminates Coordination/Resourcing Needs
- Drives More Effective Communication
- Breeds a Healthy Environment of Trust and Learnin
- Team Members become T Shaped

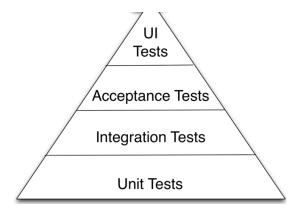


Quality: A First Class Citizen

- Quality is Non-Negotiable in Agile
- Quality is an investment
- Reliability of the product
 - Application Outages
 - Hard Errors
 - Scalable
 - Easily Maintainable

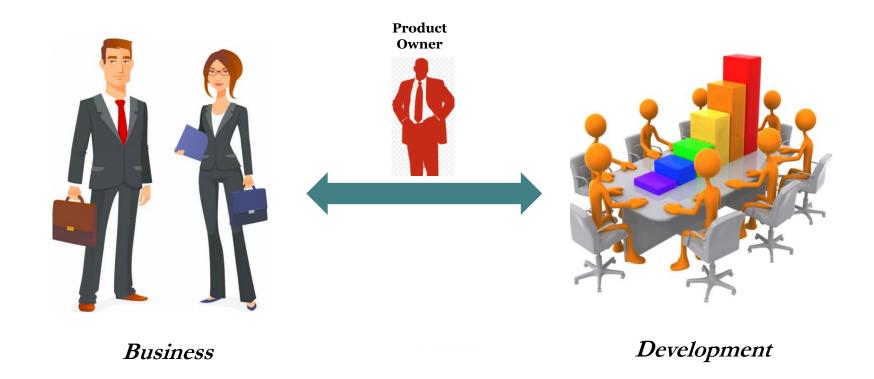


- Managed on the backlog with everything else
- Team educates the Product Owner about possible ramifications
- Testing is inherently built into the team's daily processes
 - Adopt Test Driven Development (TDD)
 - Testing is performed at different levels (unit, acceptance, integration, regression)
 - Invest in test automation and continuous integration



Product Owner: Select the Best Candidate

How Ken and Jeff Envisioned the Role



Product Owner: Select the Best Candidate

- Becoming a Product Owner is not a demotion
 - Should be one of the most powerful positions in an organization
- Empowered to make decisions
- Respected amongst his peers and trusted
- Not a BA who writes stories



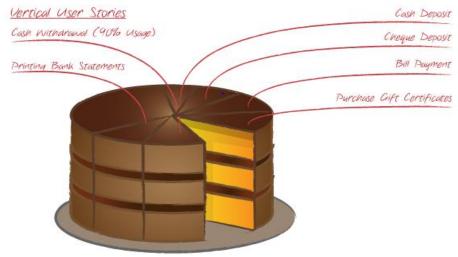
- Manages stakeholder relationships, communication & expectations
- Represents the business and is responsible for value delivery
- Accountable for the vision, scope, and scale of the product
- Clarifies the customer need to the team
- Responsible for "what" we build



Thin Vertical Slices

- Work in Agile projects is organized by Units of Value, rather than by Architectural Layer. This forces early integration between all layers, even before the full set of requirements are known
- User Stories/Features are
 Thin Vertical Slices
 across the Tech Stack delivered
 incrementally
- Requirements are gathered from the users perspective

Automated Teller. Machine (ATM)



Swarming

Swarming is a when a team of people collectively work on an one story to get it finished before moving on to another.

Team Approach:

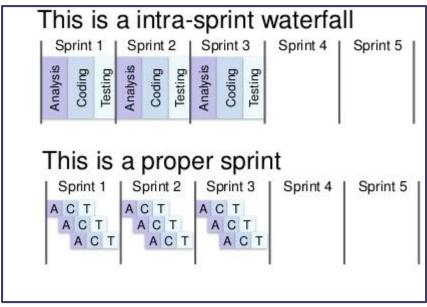
• "There is no such thing as testers and developers on a team. Everybody has to be ready to contribute in any way to get things to done"

WIP Limits:

• Drives Swarming and Continuous Flow

Benefits:

- Quicker Feedback from PO
- Forces Integration Earlier and Often
- Mitigates Risk
- Cross Training
- More Focus on Quality



Swarming Demonstrated



Non-Swarming Team

	TO DO	IN PROGRESS	DONE
PBI 'A'		D D D D D D D D	D
PBI 'B'	T T	D D D DD D D	
PBI 'C'	T	D D D D D D D	D
PBI 'D'	T T	D D D D D T D D D D D D D D D	D

Total Sprint Stories: 10 Stories Started: 10 Stories Finished: 2 (20%)

Swarming Team

	TO DO	IN PROGRESS	DONE
PBI 'A'			D D T T
PBI 'B'	D T	T T D D	
PBI 'C'	D D T D D T	T D	
PBI 'D'	D D D T D D D T		

Total Sprint Stories: 10 Stories Started: 8 Stories Finished: 8 (80%)

Swarming Approach

Traditional Approach

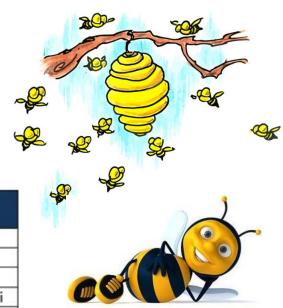
Task	Hours	Person Responsible	Day Worked On
Task 1	8	Renee	Monday
Task 2	4	Renee	Tuesday
Task 3	4	Renee	Tuesday
Task 4	2	Todd	Monday
Task 5*	4	Todd	Wednesday

Developing Team

Task	Person Responsible With Expertise	Person With Capabilities
Task 1	Renee	Renee, Todd, Mick
Task 2	Renee	Renee, Mick, Greg
Task 3	Renee	Renee, Todd, Greg, Marie
Task 4	Todd	Todd, Marie, Renee, Mick, Heidi
Task 5*	Todd	Todd, Marie, Renee, Mick

Swarming

Task	Person Responsible	Person With Capabilities
Task 1	Renee (Marie to watch and learn)	Renee, Todd, Mick
Task 2	Mick	Renee, Mick, Greg
Task 3	Greg	Renee, Todd, Greg, Marie
Task 4	Todd (Heidi to watch and learn)	Todd, Marie, Renee, Mick, Heidi
Task 5*	Todd (Heidi to watch and learn)	Todd, Marie, Renee, Mick



Effective Scrum Masters

Scrum Masters are Servant Leaders and:

- Change Agents: "What is holding us back?"
- Agile Champion: "Does this practice adhere to the principles and values?"
- Facilitators: "How can I put you in a position to succeed?"
- Process Improver: "I think we can do this better"
- A Mediator: "How can we resolve this conflict?"
- Enabler: "How do we get it done?"
- Team Protector: "Our office hours are from 11-12, you can come back with those questions then"
- Motivator: "We can do this"



Words of Wisdom

- Start Small: Standup one or two teams working on a product and master scrum.
 - Involve the business early on and select the right PO
 - Inspect and Adapt along the way
 - Organizational constraints need to be escalated and dealt with
- Train: Provide the education they need to succeed to everyone involved.
- Coach: Bring in a experienced Scrum Master or Agile Coach
- Expand Incrementally
 - Disseminate the original team members to other teams to be champions
- Introduce one agile program across multiple teams
 - Inspect and Adapt
- Scale Up!
- Don't stand for traditional waterfall practices with Agile labels!