Enterprise Scrum

Getting big without getting slow



Overview

- Scrum of Scrums
- Multiple or Large Backlogs
- Scrum in the Plan Driven Organization
- Measurements



Scrum of Scrums

Managing Multiple Scrum Teams



Scrum of Scrums

- A Scrum for Scrum Masters
- Not necessarily Time Boxed to 15 minutes
- Need not occur daily
- Attendees must be able to make resource decisions
- May include other organizational leaders





What Happens

- Problems are solved
- Team Impediments are solved
- Coordinate the work of multiple Scrum Teams
 - Dependencies
 - Shared deliveries
 - Integration



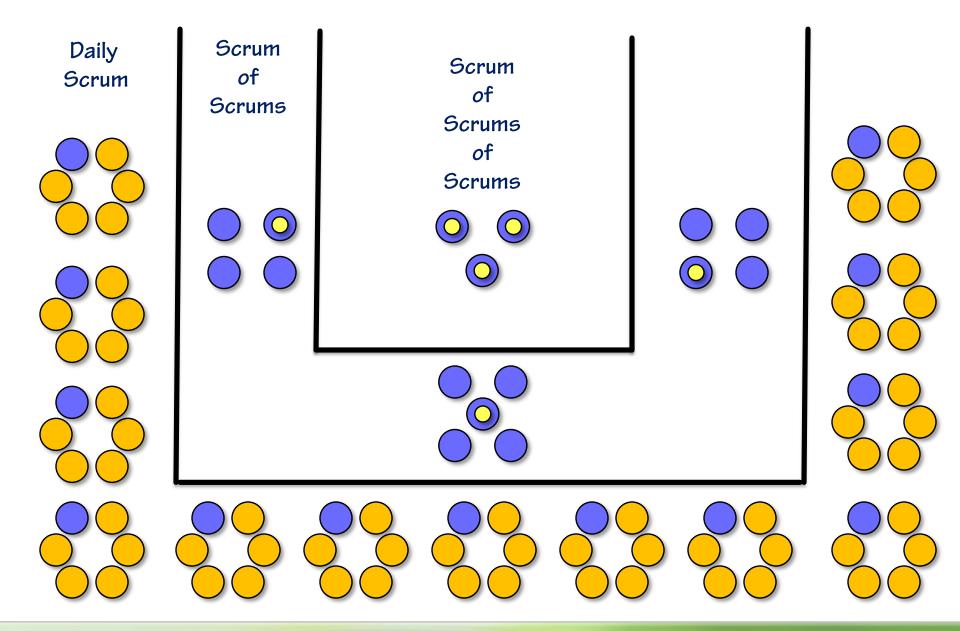


Meeting Agenda

Time Boxed 15m	 Each Scrum Master answers: What has your team done since we last met? What will your team do before we meet again? Is anything slowing your team down or getting in their way? Are you about to put something in another team's way? 	
Not Time Boxed	Ad-hoc discussionTo remove ImpedimentsTo sync up activities	

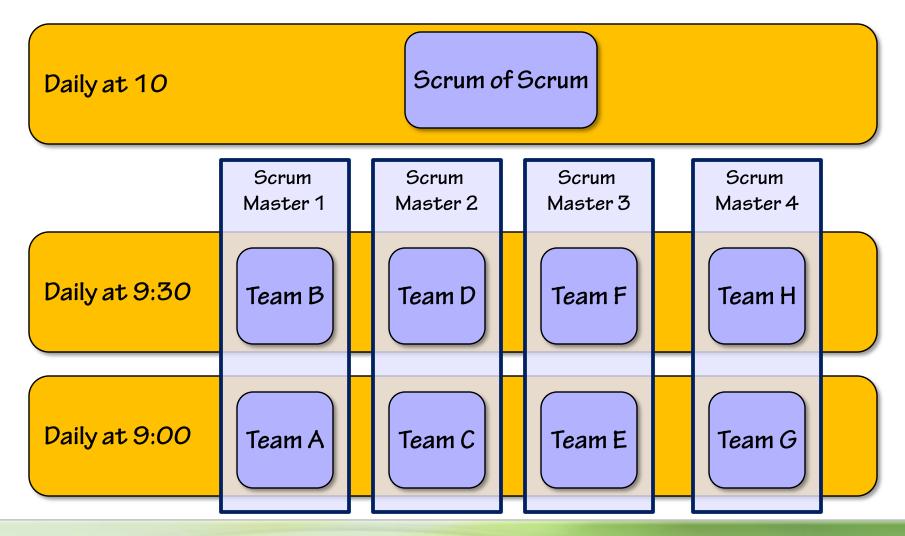








A Real Scrum of Scrums Model



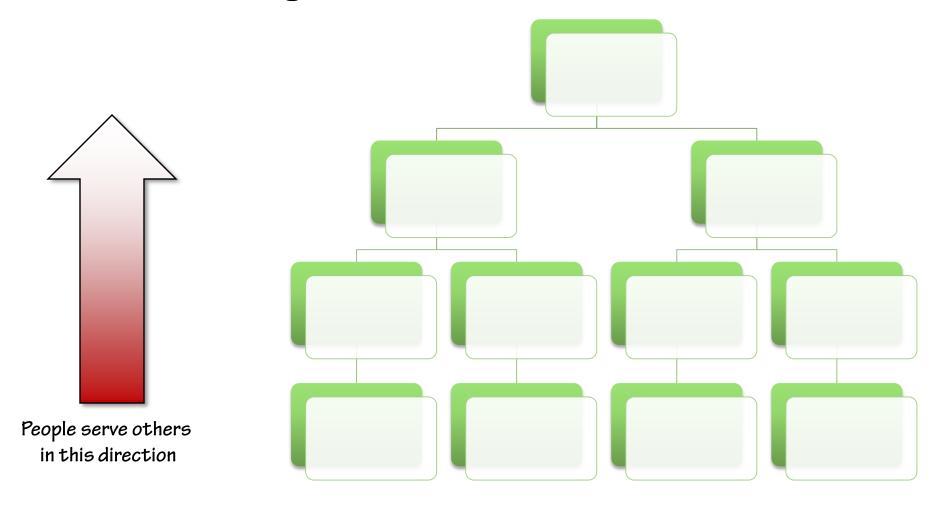


The Meta Scrum

- A standing Executive-Level Scrum
- Scrum of Scrum reports are heard
- Often follows Sprint Review
- Executives own Impediments
- Less often than Scrum of Scrum
 - Weekly
 - Bi-weekly
 - Monthly



This Changes the Executive Service Model





Multiple or Large Backlogs



Epics

- Large (very) Backlog Items
 - Used as place holders until later
 - May be estimated
- Decomposed later into smaller Product Backlog Items
- May still be useful to write as a User Story
- Level of detail is low



Epics

As the HR department
I want a website
So that potential candidates
can submit resumes

As the CEO
I want a SharePoint
dashboard
So that I can pretend to
measure everything

As the COO I want to deploy SharePoint So that we can collaborate on Office documents As a frequent site user I want to register So that I have an account

As a CTO
I want to implement automated builds
So that code quality improves



Themes

- Groups of Product Backlog Items
- A way to organize related Product Backlog Items
- Often take the place of Epics after decomposition
- A way to distribute Epics across Scrum Teams



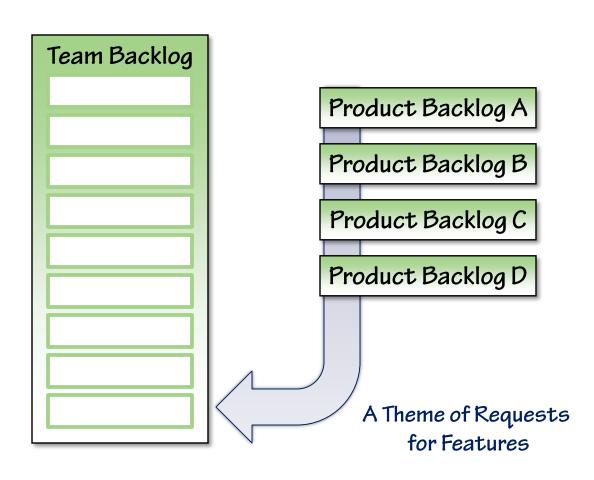
Many Products Sharing Themes

Themes	Products				
	MS Word	MS Excel	MS PowerPoint	MS Outlook	
Smart Art					
Spell Checking					
New Colors and Fonts					
Menu Ribbon Bars					
Flashy Animations					



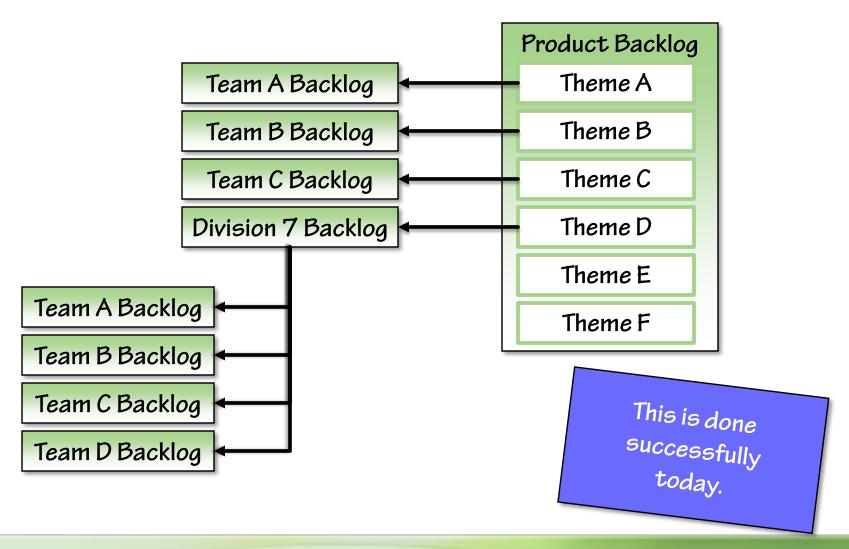
1 Team, Many Products

This requires a Chief Product Owner



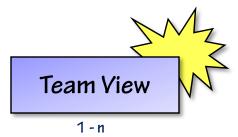


Many, Many Teams, One Huge Product





Which View of the Backlog is Real?



Division View

Theme View



Product View

System View

Release View



These Views Are Special

Team Backlog View

- The team uses this to plan the next Sprint of work
- If you are a theme owner and your work items aren't showing up in the Team View, you're in trouble

Release Backlog View

 The absolute reality of what clients will get in the next release



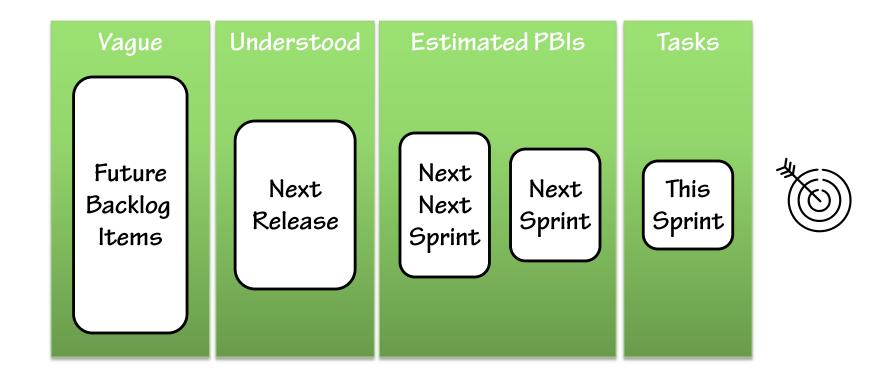


Backlog Size

- Keep Product Backlogs to a reasonable size
 - Requires constant grooming
 - Attention to each view
- Product Owner must be current with all items
 - People can only track 100-150 items
 - Electronic systems can track many more
 - People matter more
- Use Epics and Themes to organize



Rolling Backlog Planning





Scrum in the Plan Driven Organization

Pigs out of mud



Co-Existence Models

- Waterfall at the End
 - Irritating

- Waterfall Up Front
 - Painful

- Waterfall in Tandem
 - Deadly





Waterfall at the End

- Often to accommodate testing
- May be for operational support handoff
- Will require more documents
 - Schedule a Sprint with a "Release" Goal
- Consider inviting the other team in
- May be necessary for regulatory compliance





Waterfall Up Front

- Typically to gain project approval
- Use Scrum to create the documents needed
 - Specification
 - Project Plan
 - Other



- Use the Specification document as the Product Backlog
 - Estimating the whole thing is often wasteful, but necessary
 - Epics and Themes help
 - Translate Story Points into time



Waterfall in Tandem

- 2 Teams must collaborate
- 1 uses Scrum, 1 uses Plan-Driven
- Plan Driven Team
 - Ad-hoc meetings
 - Interface defined boundaries
 - Documents considered contracts

Scrum Team

- Invite the other team
- Be transparent, not pushy
- You may rise from the dead





If Scrum Must Co-Exist

Do some things anyway

- Engineering practices
- Daily standups
- Frequent Reviews
- Demonstrate progress
- Information Radiators



It may feel suffocating.

Find small work batches

- Large specifications can be thin-sliced
- Deliver to the specification, incrementally
- Try submitting Agile metrics along with other required ones



If Scrum Must Co-Exist

Add PBIs for

- Documents
- Analysis activity
- Checklists
- Other Plan-Driven deliverables

Compartmentalize Scrum

Somewhere in the waterfall

Show benefit by embracing ambiguity

- Handle poor specifications with ease
- Great way to spread the value message

... and this is our velocity.



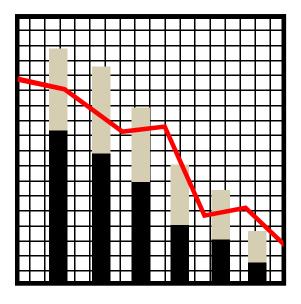


Measurements



Standard Scrum

- Release Burndown
- Sprint Burndown
- Historical Velocity





Other Agile Metrics

Defect Count

- Total active, open defects
- Relative to Acceptable Defect Ceiling

Sprint Cumulative Flow

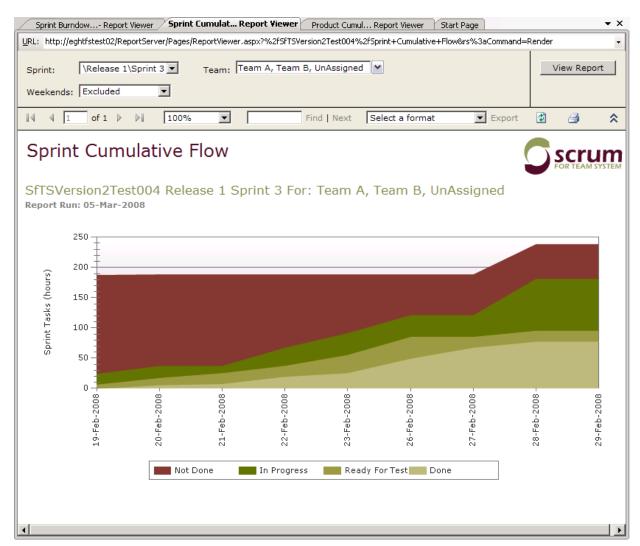
- Total work to deliver a Sprint changing over time
- The rate at which the Team are completing the Sprint Backlog
- The amount of work In Progress at any time

Product Backlog Depth

- Long Product Backlogs are wasted work
- 150 Items is a ceiling
- 3 Sprints of Items is a Floor

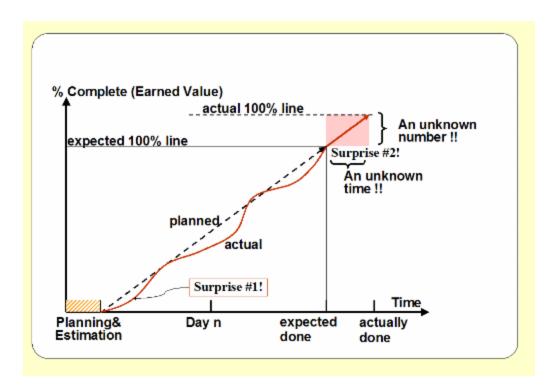


Cumulative Flow





% Earned Value Burn Up



- Shows delivery of Business Value
- Can show ROI
- Great for executive briefs



Code Focused Metrics

Code Coverage

- % of LOC exercised by unit tests
- Indicates exercise, not health

Cyclomatic Complexity

- Used to gauge the complexity of a code base
- Measures the number of independent paths through the code

Defect Density

- Defects per Lines of Code
- Gives an overall sense of code base quality



Summary

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References

