# Enterprise Scrum

#### GETTING BIG WITHOUT GETTING SLOW



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# 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 of Scrum Masters Not necessarily Time Boxed to 15 minutes

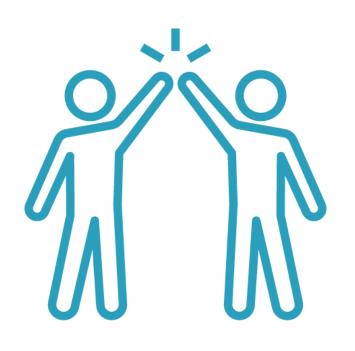
Need not occur daily

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

**Not Time Boxed** 

#### **Each Scrum Master answers:**

- 1. What has your team done since we last met?
- 2. What will your team do before we meet again?
- 3. Is anything slowing your team down or getting in the way?
- 4. Are you about to put something in another team's way?

#### **Discussion**

To remove Impediments

To sync up activities



# Daily Scrum of **Scrum of Scrums** Scrum of Scrums Scrums

## A Real Scrum of Scrums Model

Daily at 10	Scrum of Scrums			
	Scrum Master 1	Scrum Master 2	Scrum Master 3	Scrum Master 4
Daily at 9:30	Team B	Team D	Team F	Team H
Daily at 9:00	Team A	Team C	Team E	Team G



#### The Meta Scum

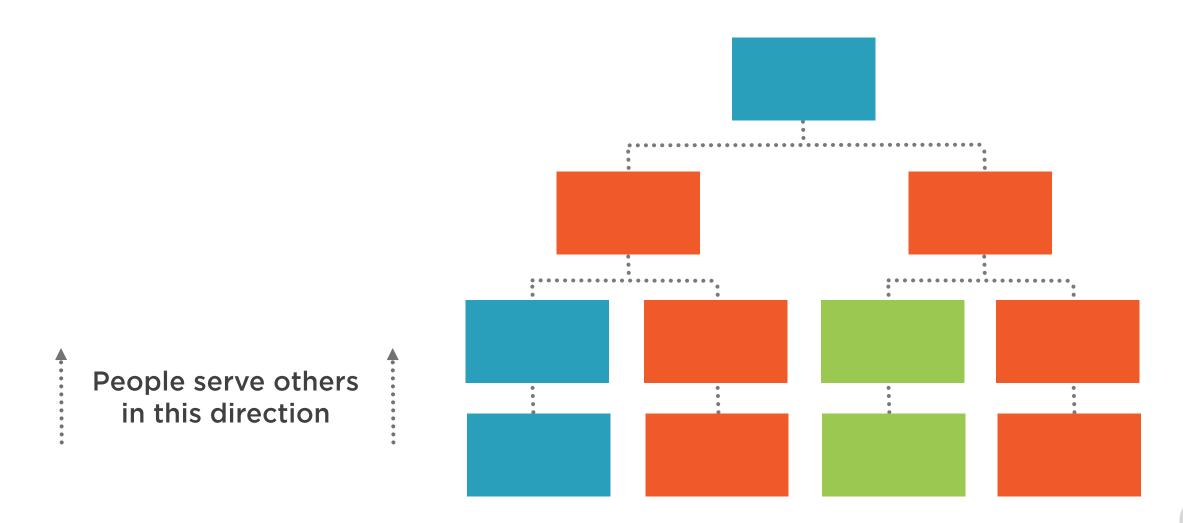


A standing Executive-Level Scrum
Scrum of Scrum reports are heard
Often follows Sprint Review
Executives own Impediments
Less Often than Scrum of Scrum

- Weekly
- Bi-weekly
- Monthly

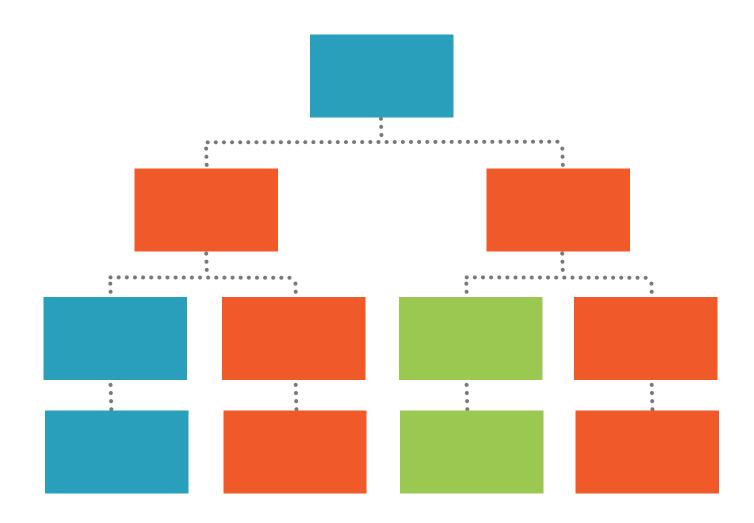


# This Changes the Executive Service Model



# This Changes the Executive Service Model

People serve others in this direction

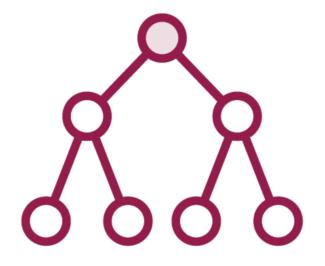




# Multiple or Large Backlogs



# **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 a frequent site user I want to register so that I have an account

As the COO I want to deploy SharePoint so that we can collaborate on office documents

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



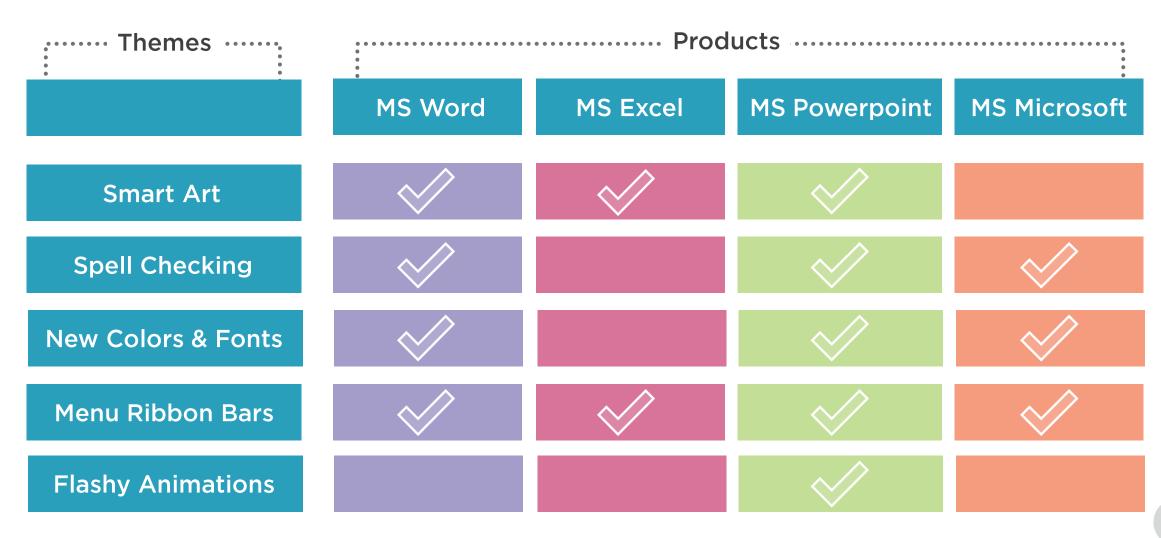
Often take the place of Epics after decomposition



A way to distribute Epics across Scrum Teams



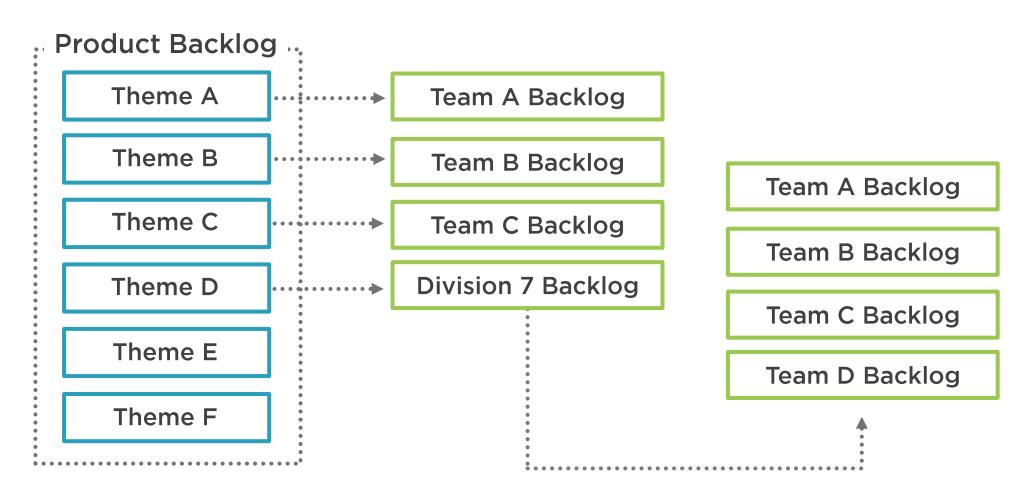
# Many Products Sharing Themes





# Many, Many Teams, One Huge Product

#### This is done successfully today

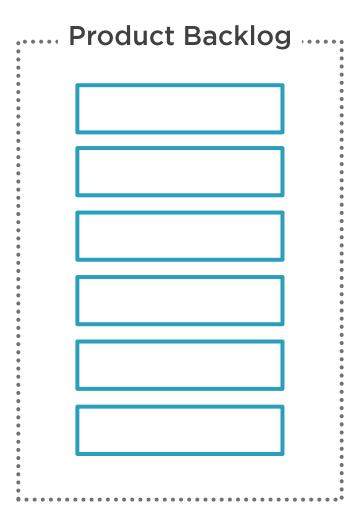


# Which View of the Backlog is Real?

**Team View** 

**Division View** 

**Theme View** 



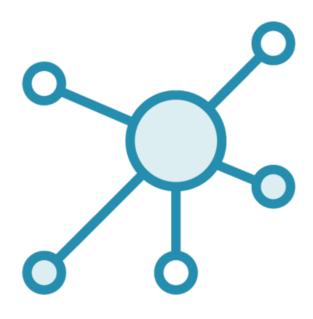
**Product View** 

**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

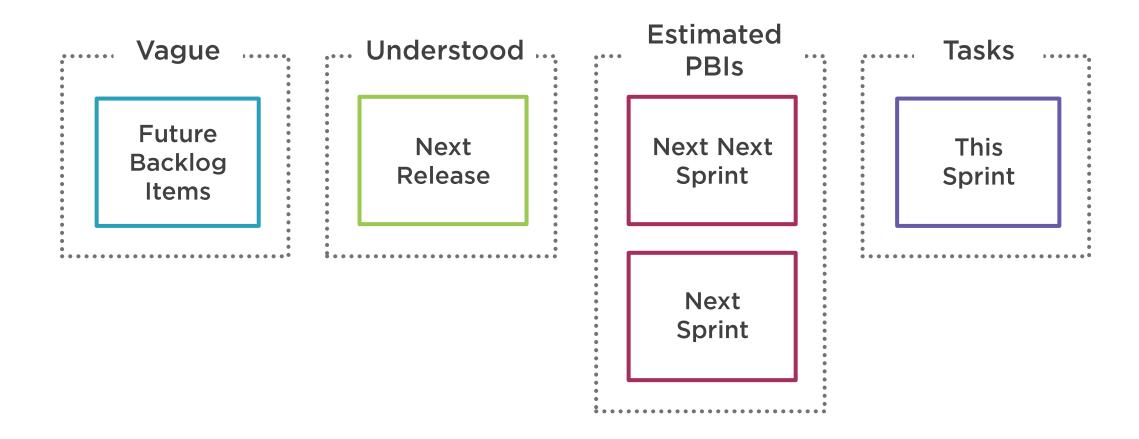
# Product Owner must be current with all items

- 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

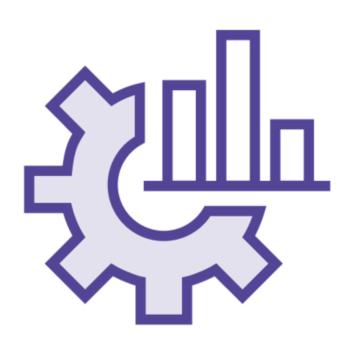
Waterfall Up Front
Painful

Waterfall in Tandem

Deadly



#### Waterfall at the End



Often to Accommodate testing

May be for operational support handoff

Will require more documents

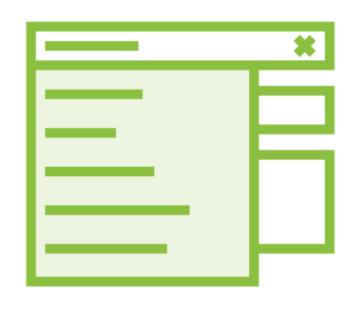
-Schedule a Sprint with a "Release" Goal

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 document needed

- Specification
- Project Plan
- Other

#### Use 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

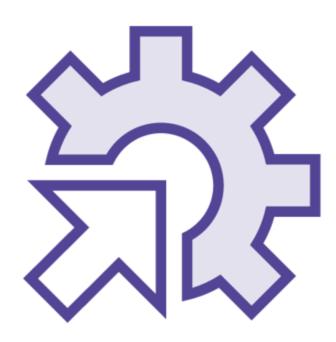
#### **Scrum Team**

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



# If Scrum must co-exist...





#### Do some things anyway

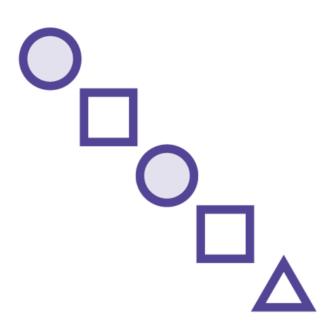
- Engineering practices
- Daily standups
- Frequent Reviews
- Demonstrate progress
- Information Radiators

#### Find small work batches

- Large specifications can be thin-sliced
- Deliver to the specification, incrementally

Try submitting Agile metrics along with other required ones





#### Add BPI's 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



# Measurements



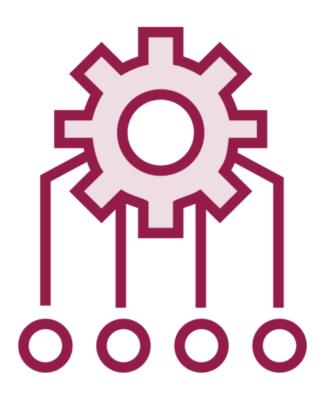
## Standard Scrum

Release Burndown Sprint Burndown Historical Velocity



# Other Agile Metrics





#### **Defect Count**

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

#### **Sprint Cumulative Flow**

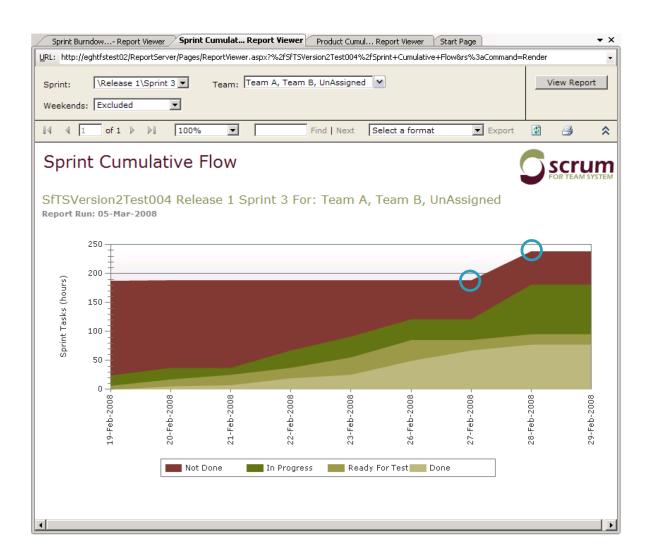
- Total work to deliver a Sprint changing over time
- The rate at which the Team are completing the Sprint Backlog
- The amount of work in Progress at any time

#### **Product Backlog Depth**

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

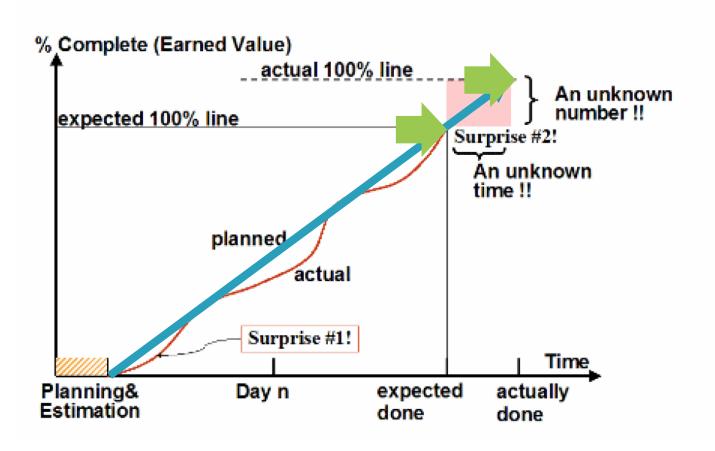


## Cumulative Flow





# % 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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