



Agile Business Consortium

Scrum Master[®] Course

Trainer Introduction

- Trainer name and title
- Contact details
- Company name
- Twitter handle
- Linkedin handle



The APMG International Swirl Device logo is a trademark of The APM Group Limited, used under permission of The APM Group Limited. All rights reserved.



Scrum Master Examination

A • W • E • S • O • M • E

LOGO

At the end of the course there is an exam!

- 50 simple, multiple choice questions
- 40 minutes
- Closed book
- Pass mark: 37 marks out of 50 (74%)



What does Agile mean to you?

- What does Agile mean to you?
- Write on a post-it 3 things you understand about Scrum
- On another write a question you have about Scrum and put your name in the corner
- When you have finished, discuss your post-its with someone else who has finished, try and answer each other's question

(You may need to move around for this bit)



Course Overview

Day 1

- Scrum Overview
- Self Organization
- Agile Principles
- Empirical Product Development
- Scrum Events
- The Development Team
- Scrum Roles

Day 2

- The Product Backlog
- Sprint Planning & Done
- Sprint Progress
- Scrum Simulation
- Growing as a Scrum Master
- Scrum Master Exam

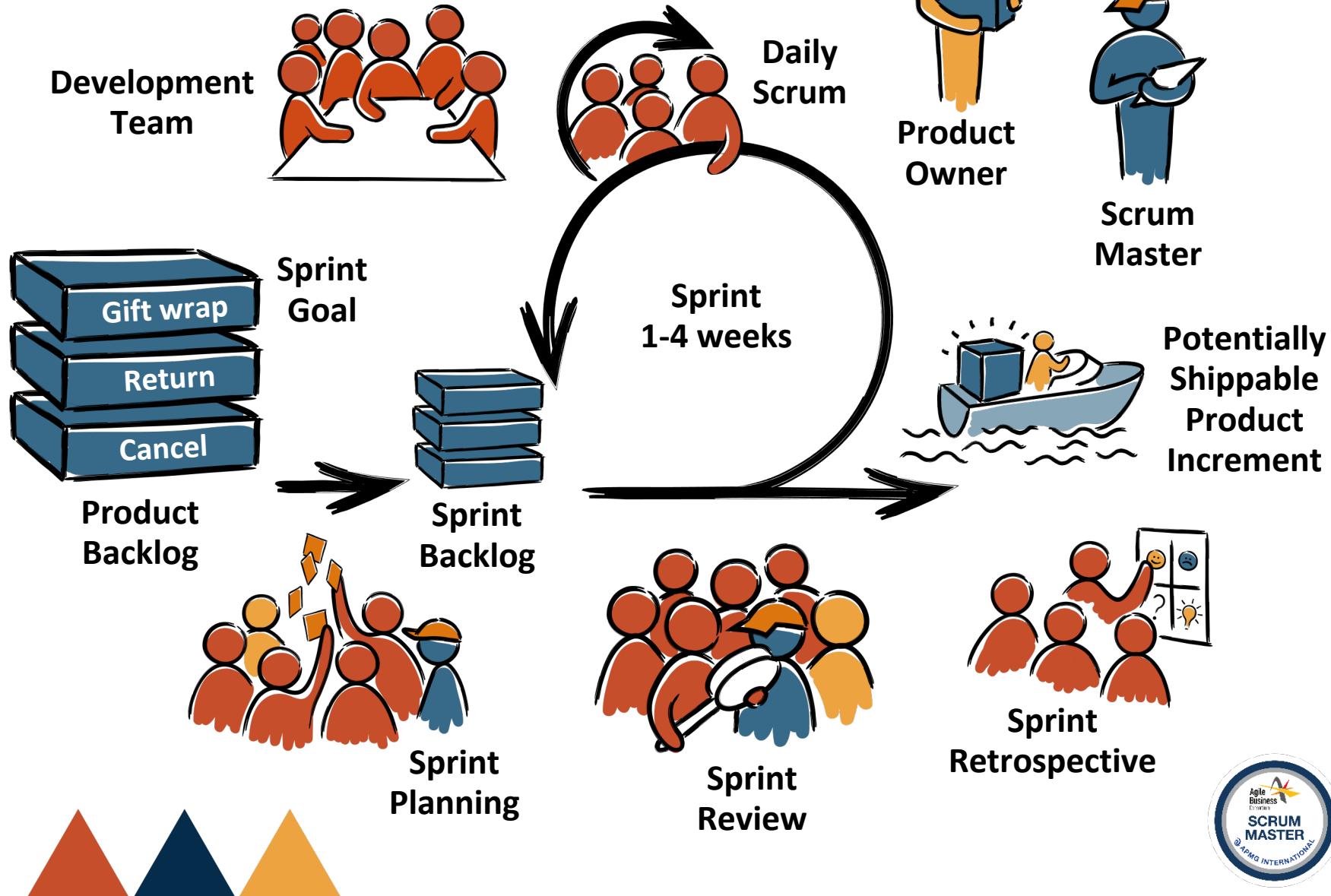


Take a moment to jot down your learning outcomes so that we can check that all our expectations are aligned



Day 1

Scrum



Scrum Master Responsibilities

- Promote and support Scrum as defined in the Scrum Guide
 - Help everyone understand the Scrum theory, practices, rules and values
- Service to the Product Owner
 - Ensuring that goals, scope, and product domain are understood by everyone on the Scrum Team
 - Finding techniques for effective Product Backlog management
 - Support the PO in understanding and practicing agility
- Service to the Development Team
 - Coaching the Development Team in self-organization and cross-functionality
 - Removing impediments to the Development Team's progress
- Service to the organization
 - Leading and coaching the organization in its Scrum adoption
 - Causing change that increases the productivity of the Scrum Team
 - Working with other Scrum Masters to increase the effectiveness of Scrum in the organization



Self organization

“Serving the Development Team”

“Serving the organization”

Discuss in pairs

A • W • E • S • O • M • E

LOGO

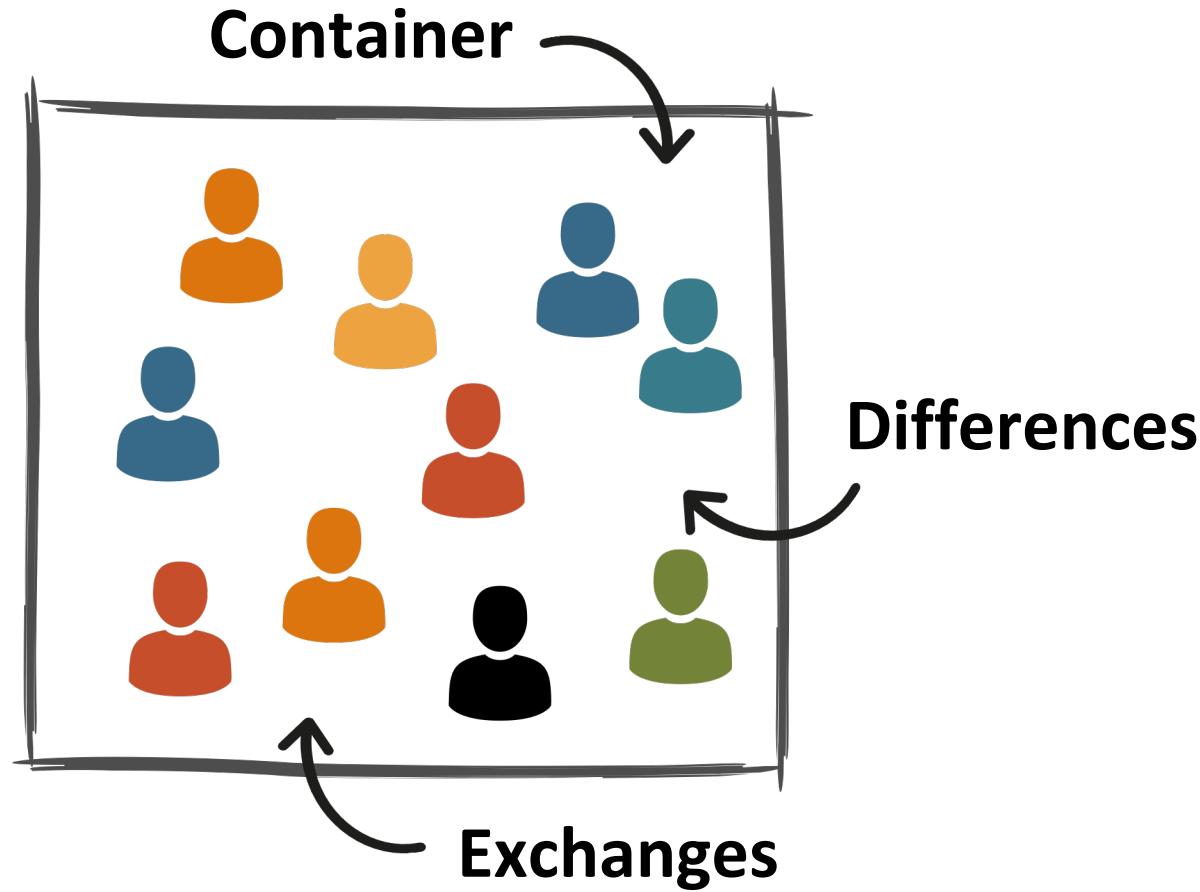
What does self organization
mean in the context of Self
Organizing Teams?



Self Organization Model

A • W • E • S • O • M • E

LOGO



Based on: Glenda Eoyang – Self organization in Human Systems



Self organization in human systems

Discuss on your table how Scrum complements the three aspects of the model: **Container, Difference and Exchanges**

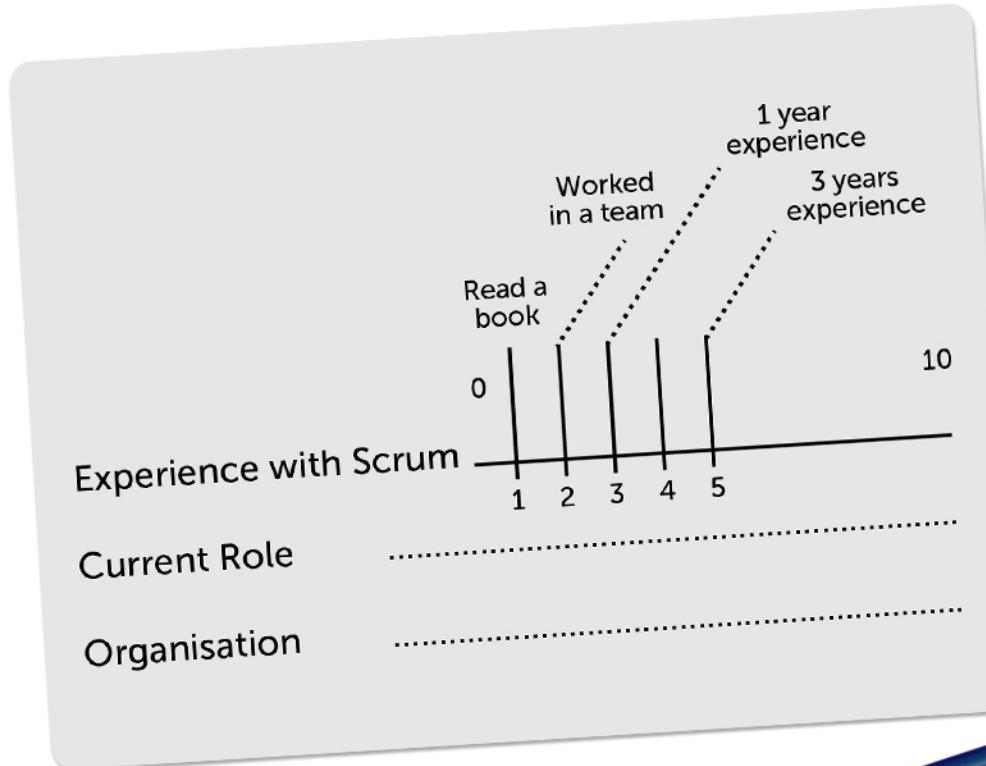
Explore the three aspects:

- **Container**
 - What makes up the container, what are the boundaries of the system.
e.g. (process, time, behaviors, authority)
- **Differences**
 - What differences in agents in the systems are there, how does that affect how the team interacts. What would happen if we add or take away differences, i.e. Have less diversity?
- **Exchanges**
 - What are the exchanges of information in the system, what meetings or information sources would they come from? What would happen if they were less infrequent or more frequent?



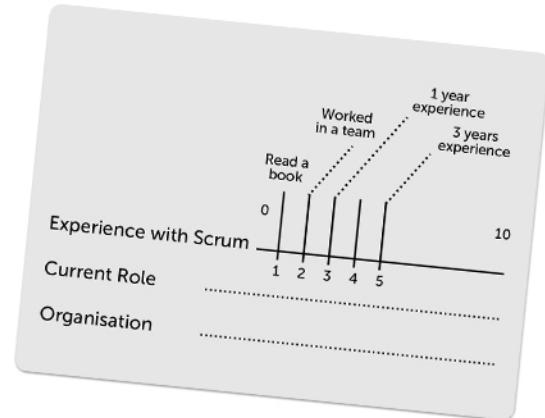
Uncovering differences

Fill in your card



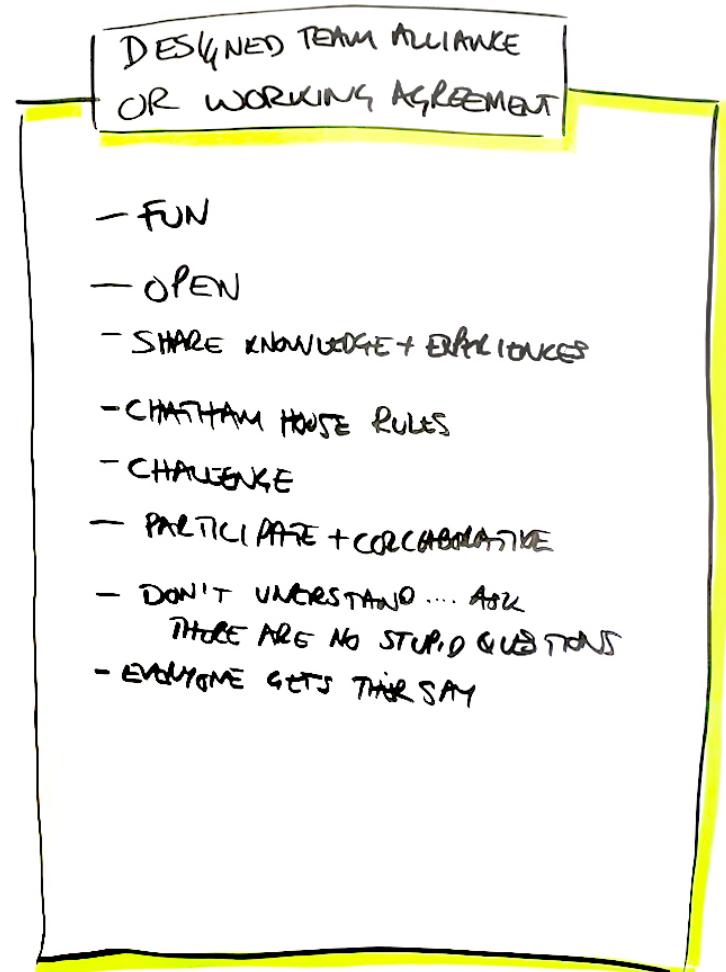
Form a “Good Team”

- At least one experience “Level 1” in the team... ideally a level 2 or greater
- A good spread of experience across the teams
- Different roles on the teams
- Mix of organizations
- People you haven’t worked with before



Designed Alliance or Working Agreement

- A “container” that sets the context for expected team behaviors
- The whole teams creates and inputs into
- The team commits to holding each other accountable to it
- Sets the foundation for healthy conflict



Activity: Towers Of Hanoi

- In this activity you will explore the benefits of using an Agile approach to running projects
- The activity is based on the well known children's puzzle, designed by French mathematician, Edouard Lucas

Problem: What is the **shortest** number of moves it takes to reproduce the pyramid in exactly the same form but on a different tower?



The Rules

- Only move one disk at a time
- Cannot place larger disk on top of smaller disk
- Each disk must be moved on to a tower
- No Google!!

What would your team or organization be like if you lived up to that Designed Team Alliance or working agreement every day?



Agile Principles

“Serving the organization”

Difficult to master?

A • W • E • S • O • M • E

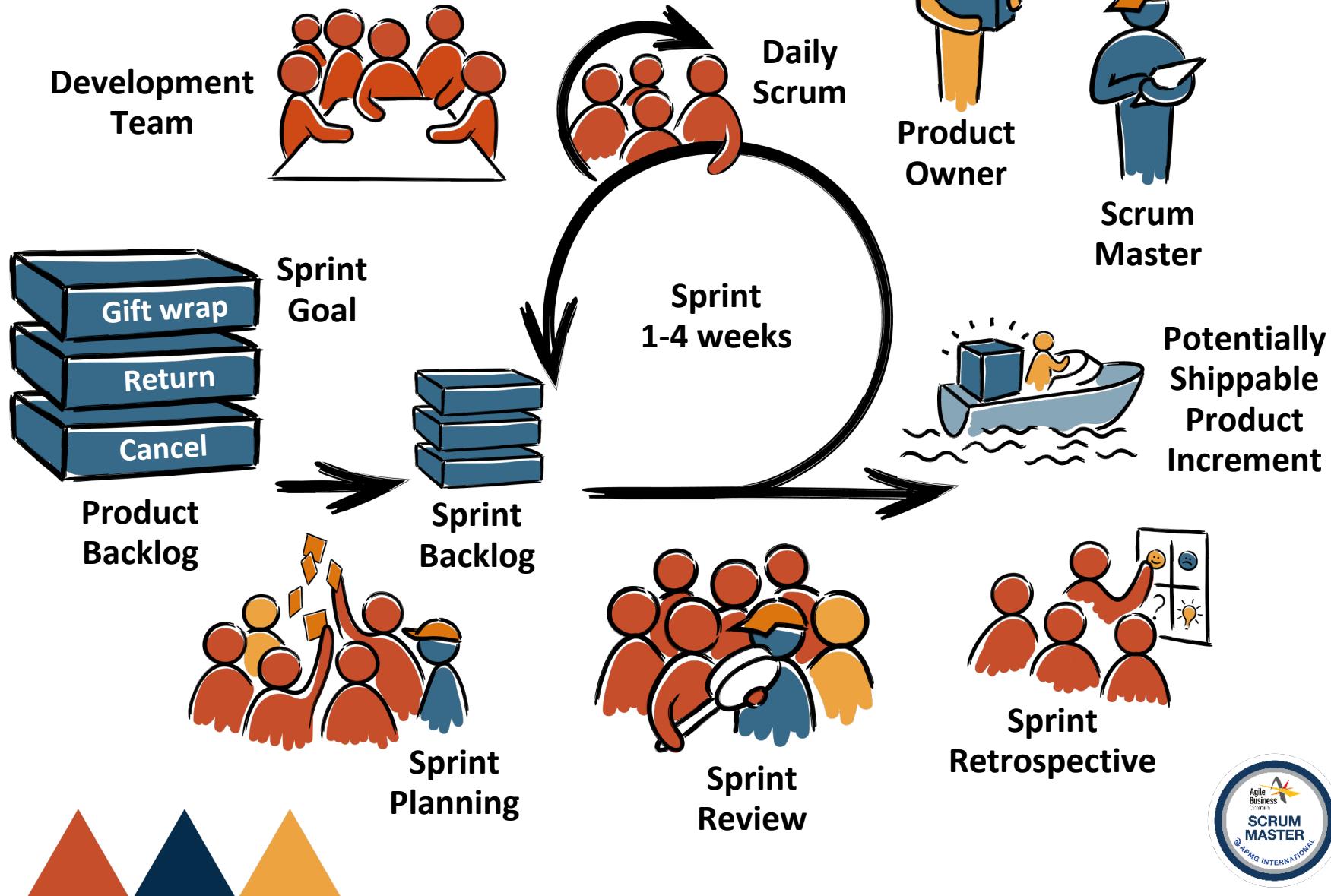
LOGO

It is said Scrum is simple to understand yet difficult to master, what else fits that definition?

(1 minute to jot thoughts in your workbook)



Scrum



That sounds simple, what's difficult?



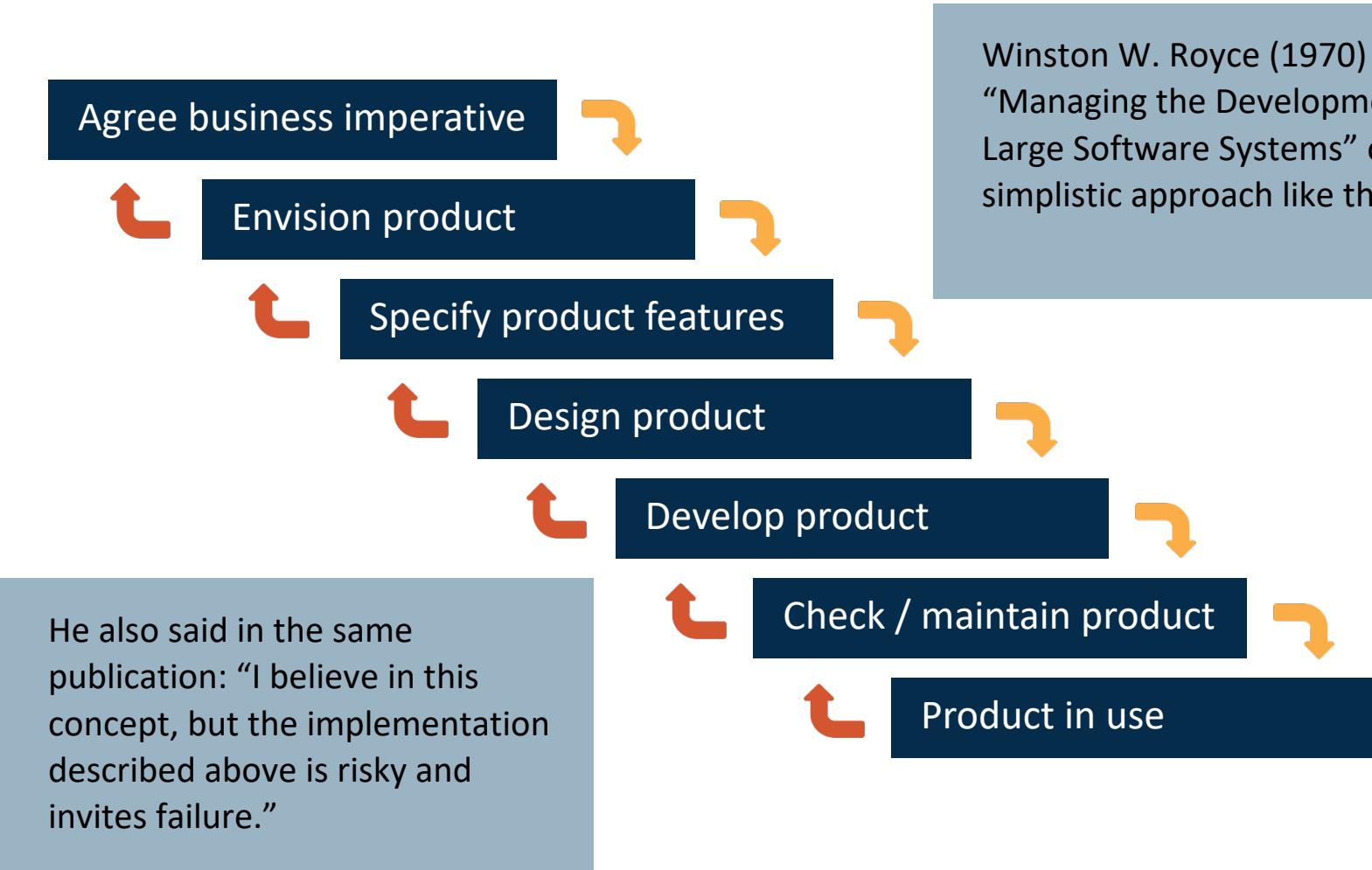
Exercise

A • W • E • S • O • M • E

LOGO



Origins of traditional product development

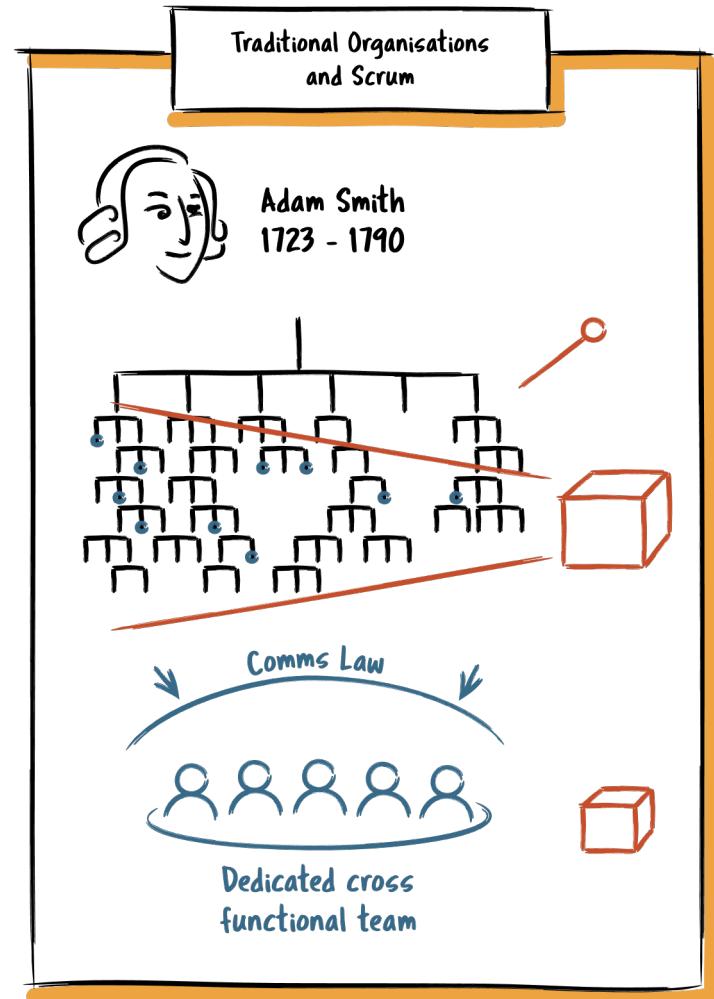


From: "Managing the Development of Large Software Systems"
by Winston W. Royce (1970)



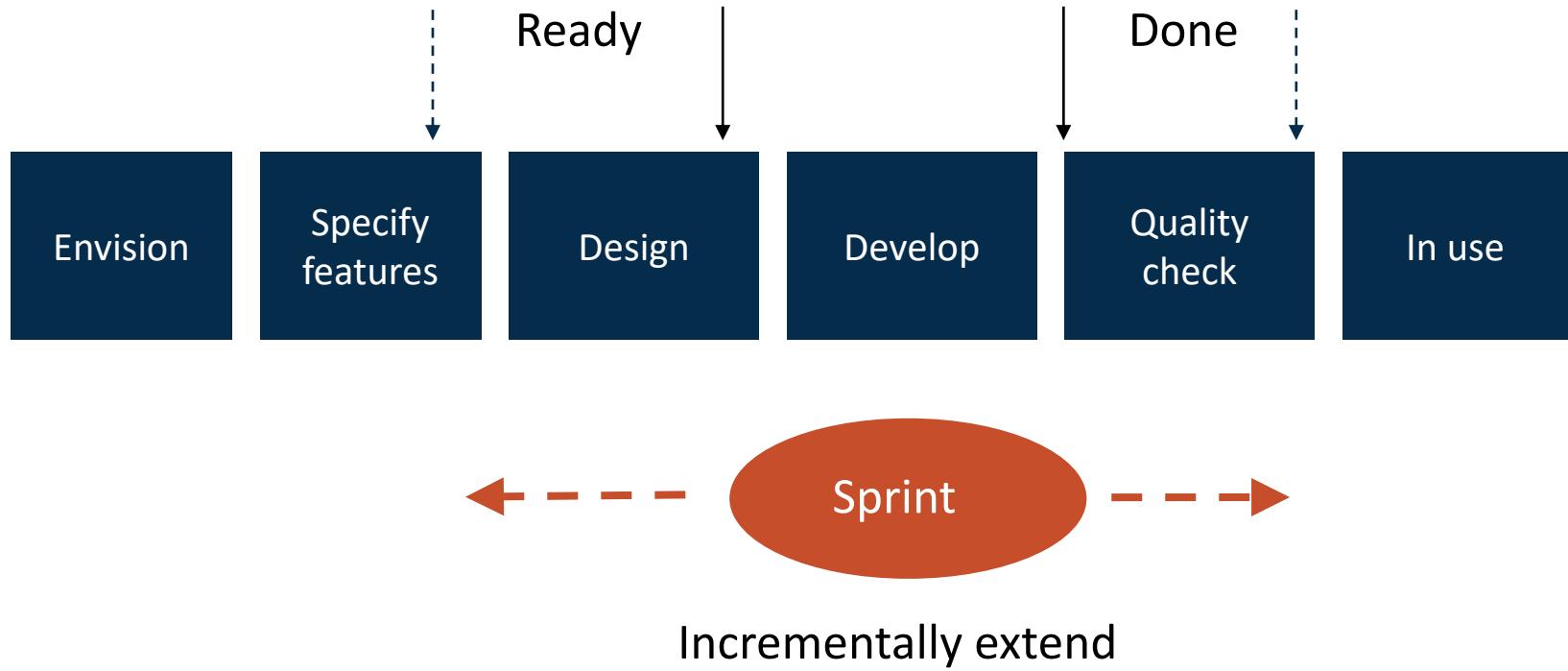
Scaling the principles

- Small, dedicated cross functional teams, with all the skills required to develop a potentially shippable solution
- Working off a product development list ordered by value
- Developing a potentially shippable solution every 1 to 4 weeks
- Smaller batch sizes, more frequent review on output and outcomes



How Scrum fits with traditional project cycles

Example Gated Process



Exercise

Stand up and find another person you would like to talk to, then get into pairs to discuss:

- Where you would start with Scrum in your organization
- What stakeholder behaviors support a Scrum team's success
- What stakeholder behaviors will not support a Scrum Team's success
- What benefits the organization would see from this approach
- What organizational impediments can affect the effectiveness of a Scrum team
- What you could change short term, what would need longer term change



Scrum Timeline

1986	Harvard Business Review article
1993	Scrum first used at Easel Corporation
1996	SCRUM techniques published at conferences
2001	Agile Manifesto
2001	Agile Software Development with SCRUM book
2003	SCRUM certification
2004	Agile Project Management with SCRUM book
2004	SCRUM Alliance formed



Exercise

A • W • E • S • O • M • E

LOGO

Think of a successful project you have worked on.

What were the key things that made it successful?



Agile Manifesto

The Agile Business Consortium are uncovering better ways of developing solutions to business problems and opportunities by doing it and helping others do it. Through this work we have come to value:

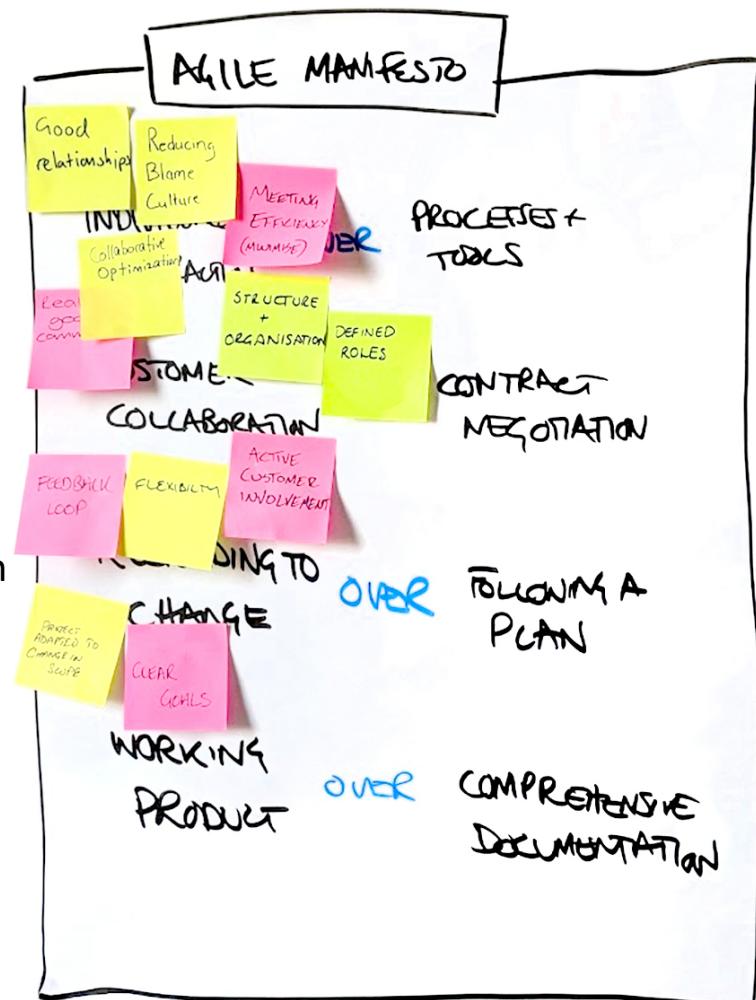
Individuals and interactions over processes and tools

Working solutions over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

That is, while we value the items on the right, we value the items on the left more.



Exercise

A • W • E • S • O • M • E

LOGO

- Discuss the Agile Principles
- Agree in your table group the 3 most important and the 3 least important



PAGE 12



Agile Manifesto Principles 1 of 2

1. Our highest priority is to satisfy the customer through early and continuous delivery of value.
2. Welcome change, even late in the evolution of a solution. Agile processes harness change to deliver competitive advantage.
3. Deliver working solutions frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. All parties involved in evolving valuable solutions must work together daily throughout the project.
5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
6. The most efficient and effective method of conveying information to and within any team is face-to-face conversation.



Agile Manifesto Principles 2 of 2

7. Working solutions are the primary measure of progress.
8. Agile processes promote sustainable delivery. Everybody involved in an endeavour should be able to maintain a constant pace indefinitely.
9. Continuous attention to technical excellence and good design enhances agility.
10. Simplicity -- the art of maximizing the amount of work not done -- is essential.
11. The best understanding of problems and opportunities and the best business outcomes emerge from self-organizing teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

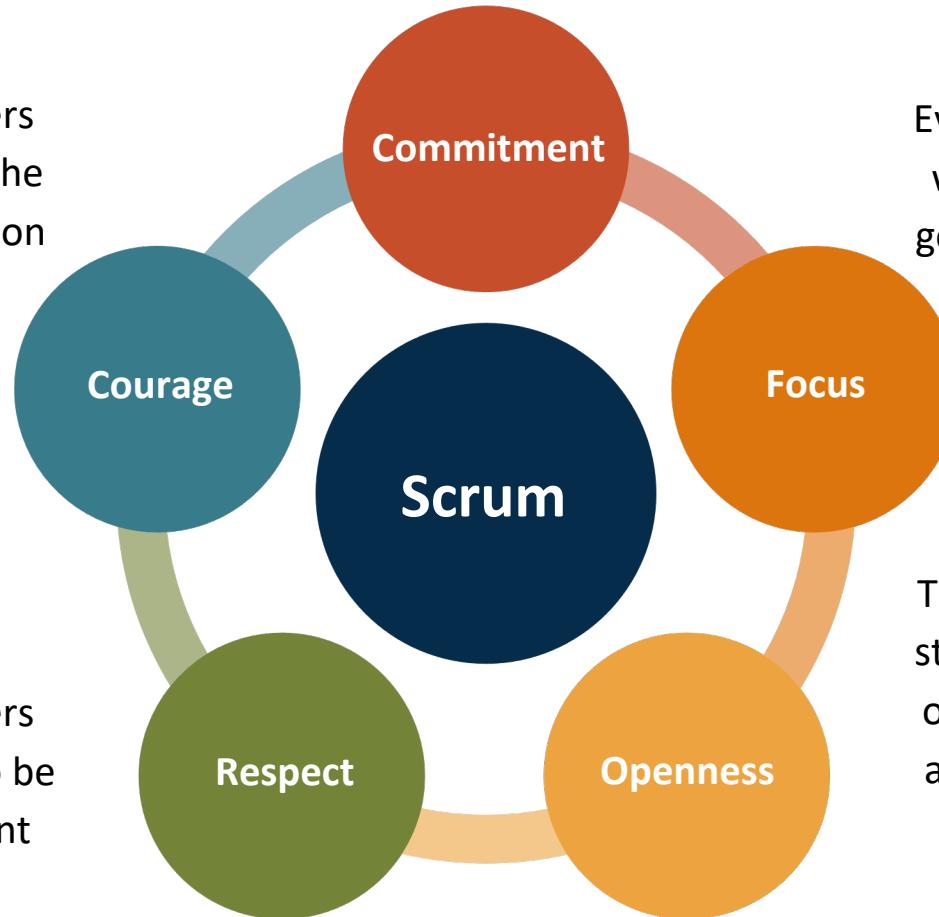


Scrum Values

Scrum team members have courage to do the right thing and work on tough problems

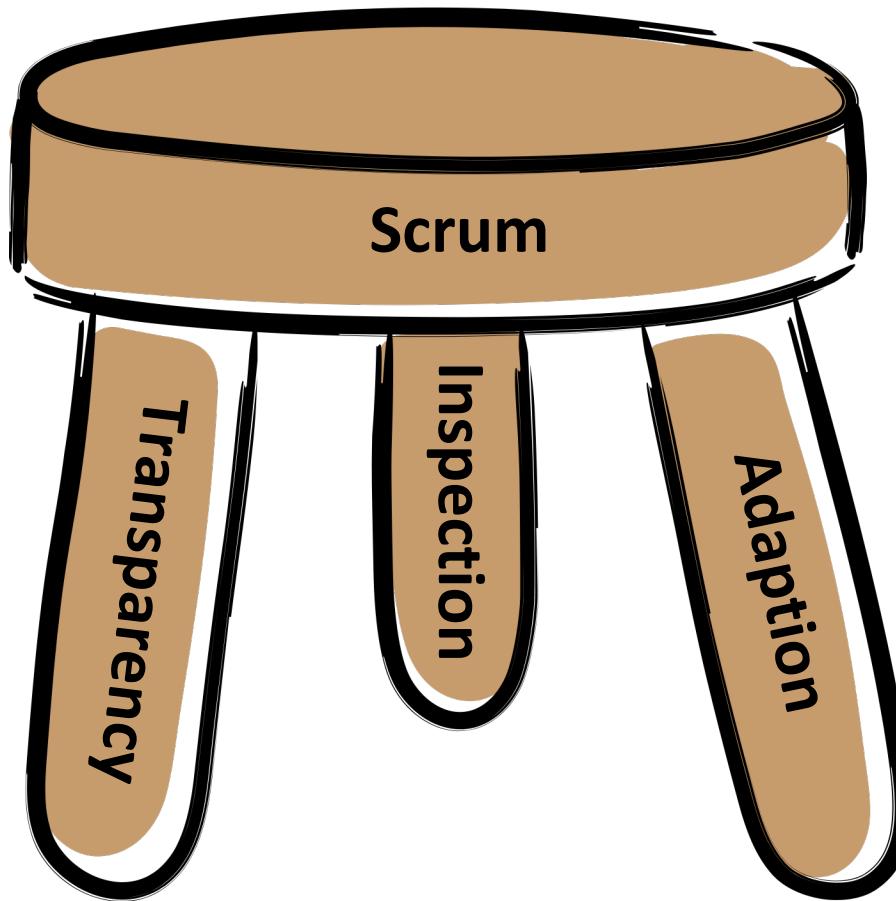
Scrum team members respect each other to be capable, independent people

People personally commit to achieving the goals of the Scrum team



Empirical Process Theory

Three legs uphold every implementation of empirical process control



Based on: www.scrum.org/resources/blog/readingscrum-guide-empirical-process-itself

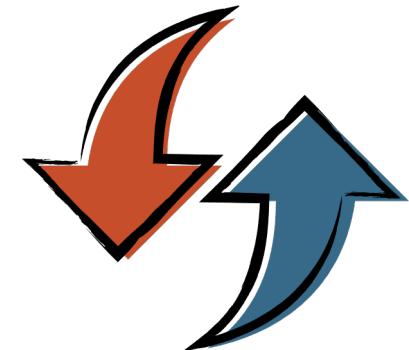


Empirical Product Development

“Service to the Product Owner”

Incremental and iterative

- **Incremental**
 - Build up the solution piece by piece
- **Iterative**
 - Revisit previously worked-on process
- **Neither is all good alone**
 - Building an online auction site
 - Incrementally: We'd perfect creating accounts before starting on listing auction items and so on
 - Iteratively: We'd build a little bit of all parts and then a little more of all parts and so on
- **But together iterative and incremental are fantastic**



Brainstorming Features

Follow general brainstorming rules:

- One feature per post-it
- Use Sharpies
- Shout out the feature you have in mind
- If you say it – you have to write it

Write as many features as you can for an auction solution

Include functional, non-functional and operational aspects



Story Mapping: Jeff Patton

A • W • E • S • O • M • E

LOGO



Incremental

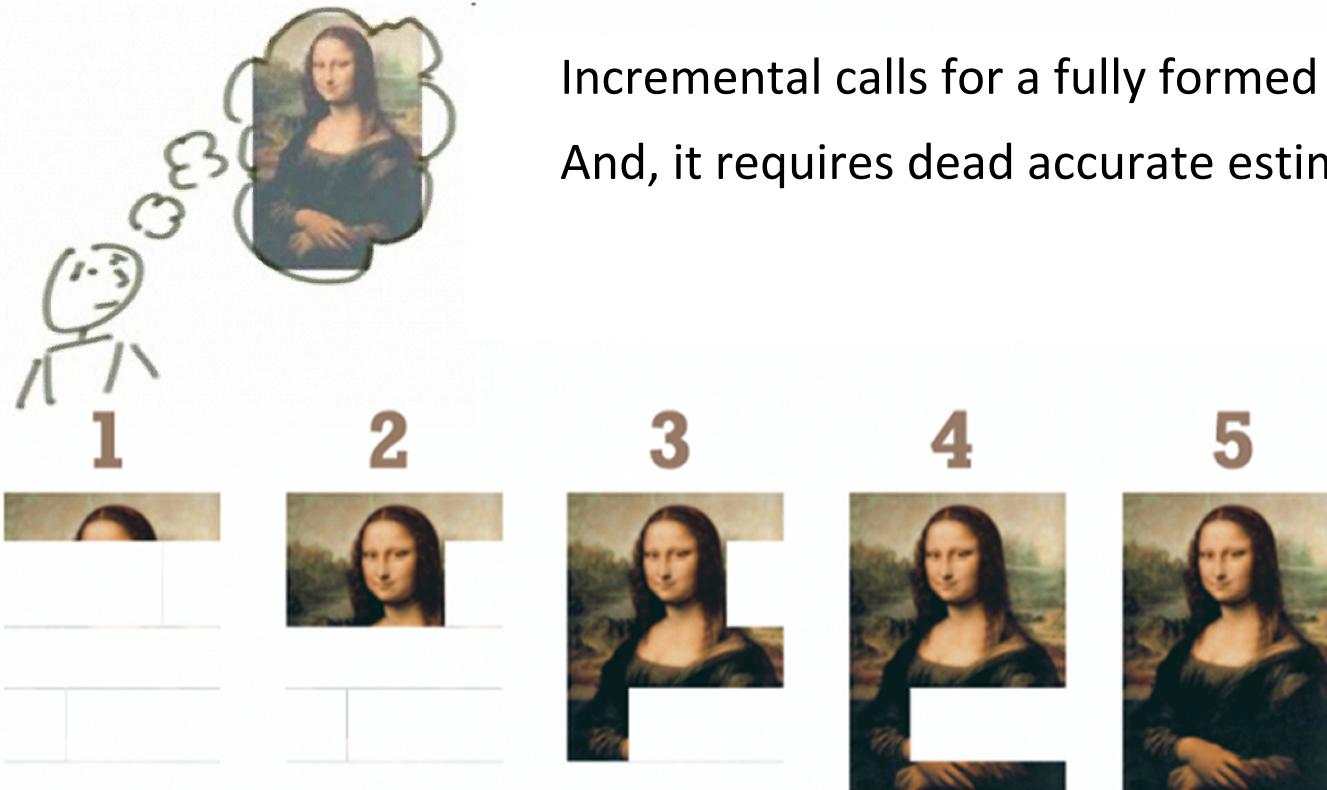


Image source: Jeff Patton



Iterative

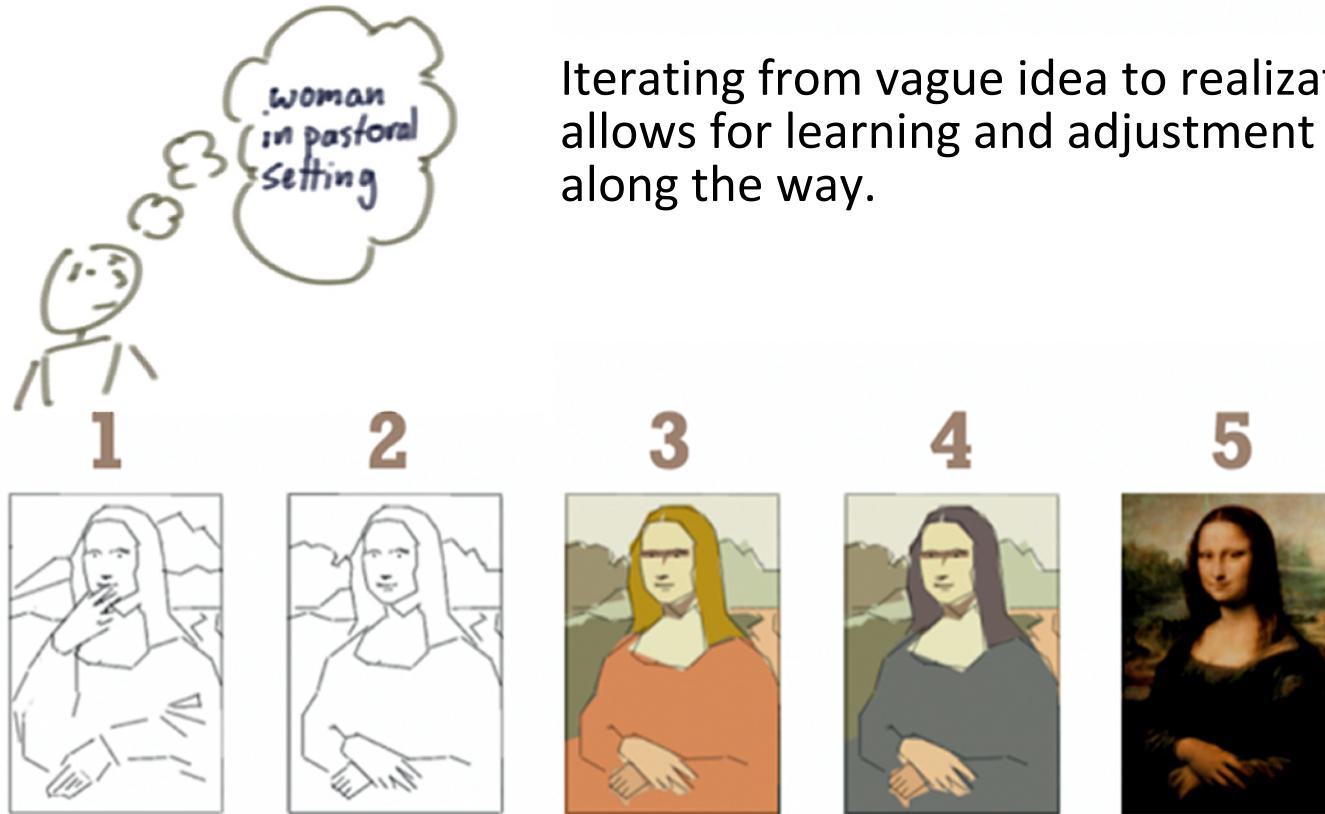
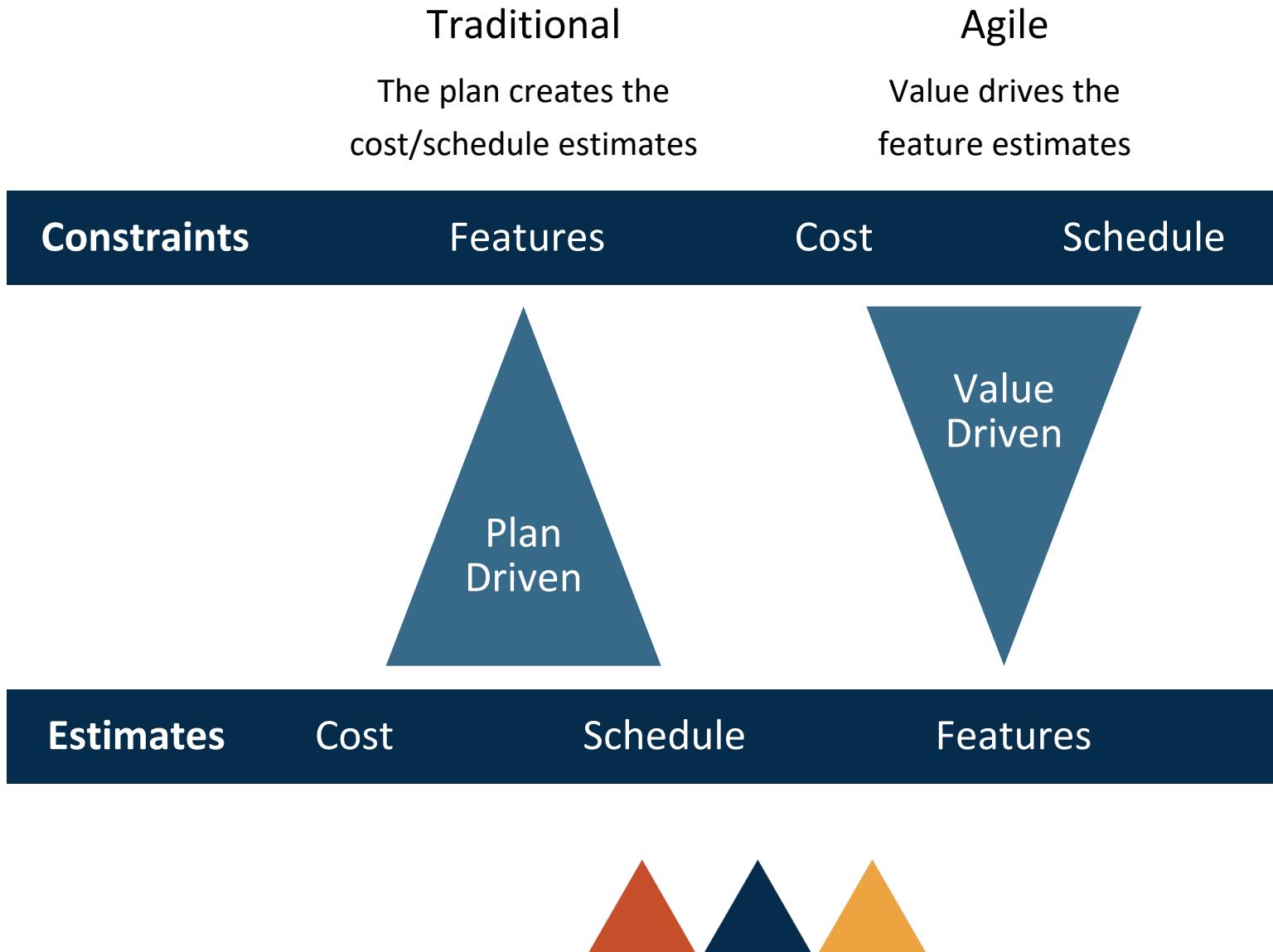


Image source: Jeff Patton



Shifting the focus on product management



Challenges to Empirical Product Development

- What are the benefits of this approach?
- Where could you apply an incremental and iterative approach to developing products in your organization. Are there any challenges, how would you address them?
- Explain how evolutionary product planning in an empirical environment differs from traditional fixed planning, and give an example of when each may be appropriate.



Scrum Events

“Promote and support Scrum as defined in the Scrum Guide”

Timeboxes for Scrum Events

A • W • E • S • O • M • E

LOGO



All Scrum Events are timeboxed (a defined period of time within which the activity must take place)

The timebox duration depends on the sprint length ... Rule of thumb is 10% of overall Sprint length

Scrum Event	Two week sprint (1 day) for Plan, Review & Retro	One month sprint (2 days) for Plan, Review & Retro
Sprint Planning	4 hours	1 day
Daily Scrum	15 mins	15 mins
Sprint Review	1 hour	4 hours
Sprint Retrospective	1 to 2 hours	3 hours



Backlog Refinement



Backlog refinement is the activity of getting Product Backlog Items Ready for the team to take into Sprint Planning. This involves Clarifying, Splitting and Estimating backlog items.

It is the Product Owner's responsibility to ensure Backlog Items are Ready, however they will need support from the Development Team to work ahead and refine the backlog items.

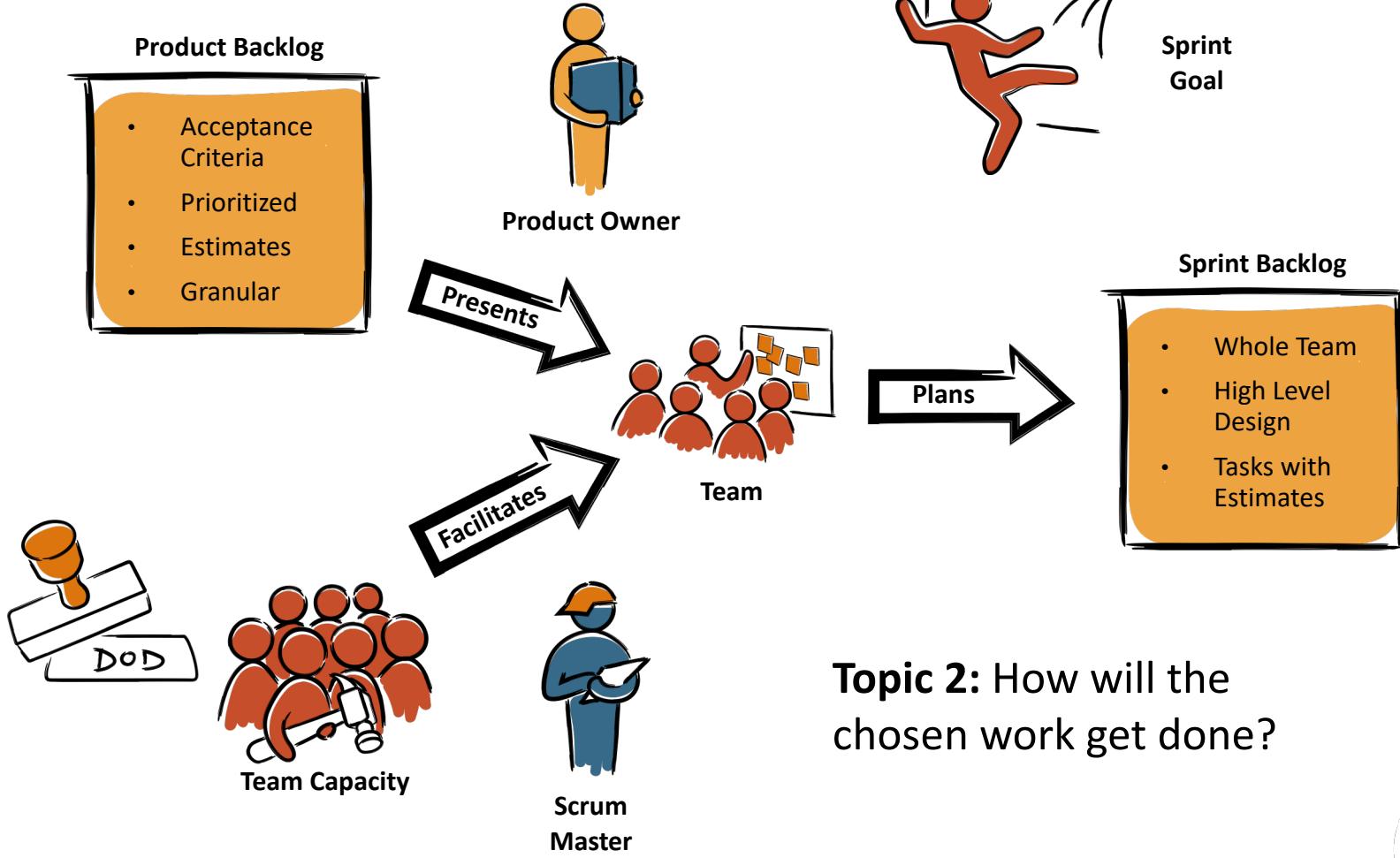
Refinement usually consumes no more than 10% of the capacity of the Development Team. However, Product Backlog items can be updated at any time by the Product Owner or at the Product Owner's discretion.

For teams to be highly productive, backlog refinement is essential, Scrum Masters should encourage teams to adopt this approach.



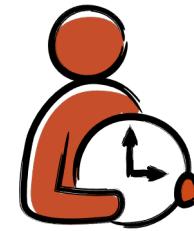
Sprint Planning

Topic 1: What can be done this Sprint?

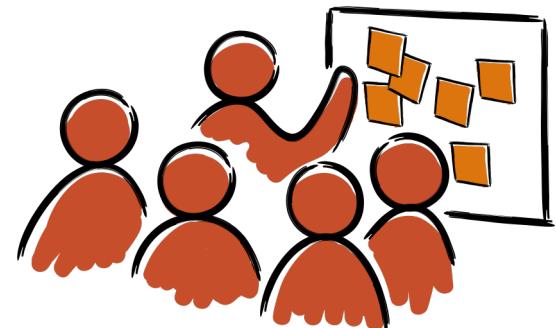


Daily Scrum

- Daily timeboxed 15 minute meeting for the Team
- Each team member answers 3 questions:
 - What have you done since the last Scrum?
 - What will you do between now and the next Scrum?
 - What is in your way?
- For synchronization not problem solving!
- Not a Scrum Master status meeting, commitments between peers
- Only the Team and Scrum Master talk during the meeting
- The Product Owner's participation is defined by the team



Same Time



Same Place

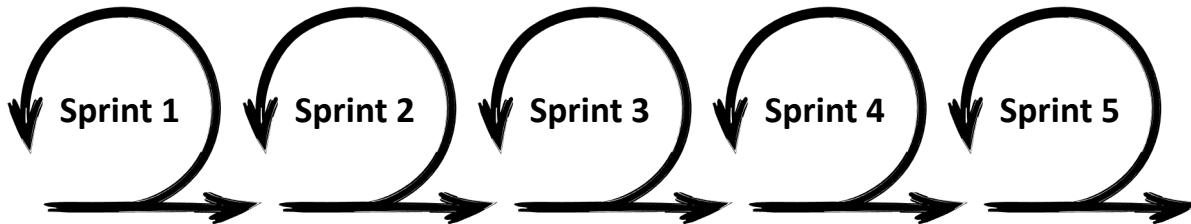


Daily Scrum Discussion

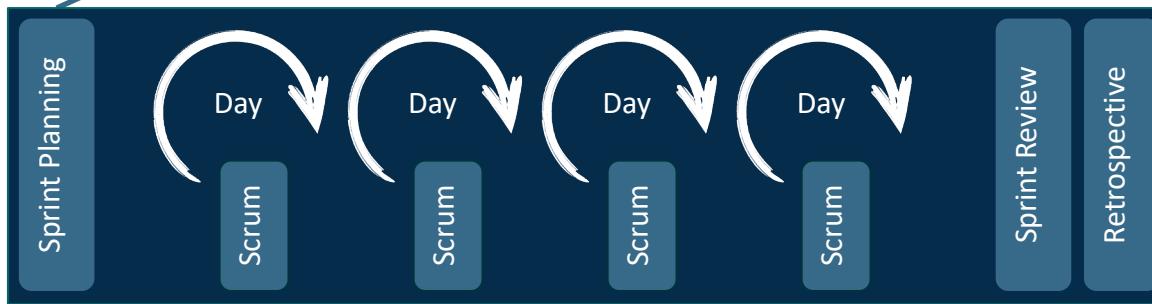
- What is an example of a good and bad Daily Scrum update?
- Discuss at least 3 ways the Daily Scrum differs from a status meeting
- How do the constraints of the Daily Scrum support the Development team?
- How could the Team run the Daily Scrum within the timebox?
- Share any tips on Daily Scrums



Sprints



Priority
Product
Backlog



Sprint length
1 – 4 weeks
(or 1 month)

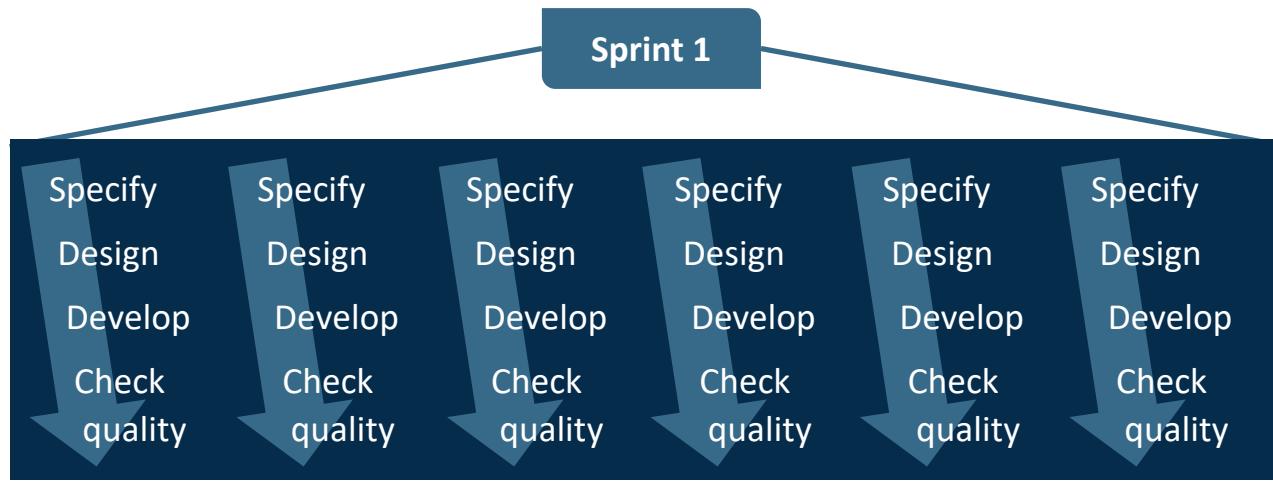
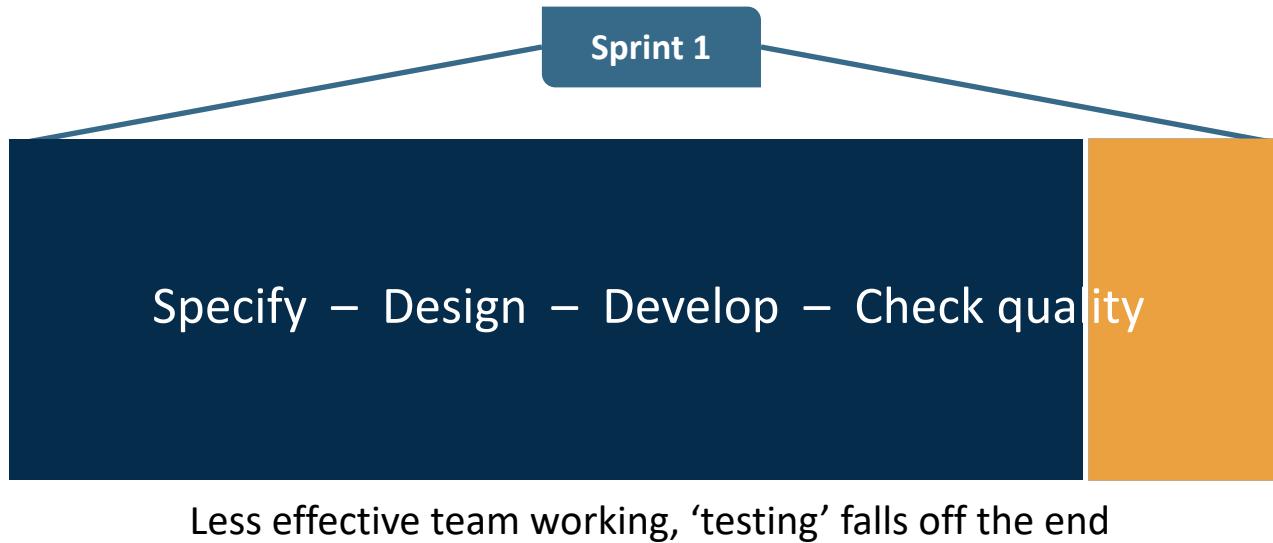
Sprints are
protected



Potentially Shippable
Product Increment



Working in the Sprint



Rapid delivery of completed Product Backlog items in the Sprint



Sprint Review

Held at the end of the Sprint to inspect the Increment and adapt the Product Backlog if needed.

This is an informal meeting, not a status meeting, and the presentation of the Increment is intended to elicit feedback and foster collaboration.

An inspection point for the Product Increment!

- The Team presents, not the Scrum Master
 - Demonstration of Product Backlog Items completed
 - DO NOT Demonstrate Product Backlog Items not **DONE**
- Informal
 - No more than 2 hours prep
 - Avoid slides
- Whole Scrum team participates
- PO invites **key stakeholders!**



Sprint Review Sample Agenda

- Intro – The purpose of the meeting;
- Product Owner explains what Product Backlog items have been “Done” and what has not been “Done”;
- Development Team discusses what went well during the Sprint, what problems it ran into, and how those problems were solved;
- The Development Team demonstrates the work that it has “Done” and answers questions about the Increment;
- Product Owner discusses the Product Backlog as it stands. He or she projects likely target and delivery dates based on progress to date (if needed);
- The entire group collaborates on what to do next, so that the Sprint Review provides valuable input to subsequent Sprint Planning;
- Possible review of the timeline, budget, potential capabilities, and marketplace for the next anticipated releases of functionality or capability of the product.



Sprint Review: Review

A • W • E • S • O • M • E

LOGO

What activities in the Sprint Review pertain to work beyond that covered in the Sprint?

What are the potential outcomes of the Sprint Review?



Sprint Retrospective

An opportunity for the Scrum Team to inspect itself and create a plan for improvements to be enacted during the next Sprint.

Purpose:

- Inspect how the last Sprint went with regards to people, relationships, process, and tools;
- Identify and order the major items that went well and potential improvements; and,
- Create a plan for implementing improvements to the way the Scrum Team does its work.

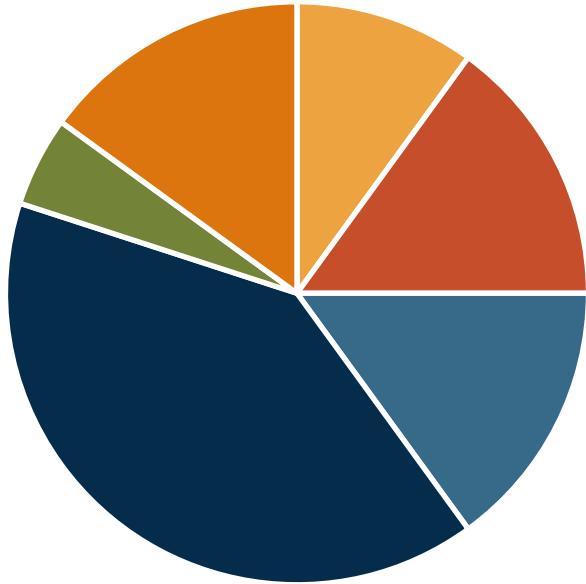


- Development Team and Product Owner participate
- Usually facilitated by the Scrum Master or an external facilitator

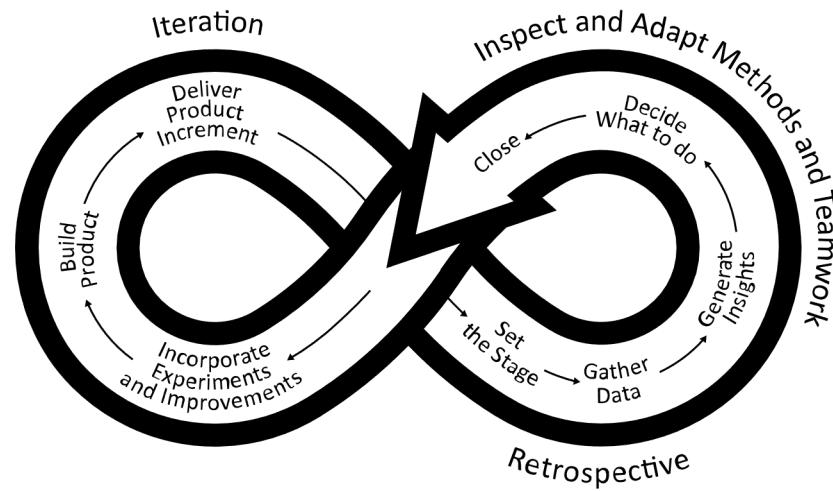


Sprint Retrospective

A good structure



- Set the stage
- Gather data
- Generate insight
- Decide what to do
- Close
- Breaks



Meetings: Fact or Fiction?

A • W • E • S • O • M • E

LOGO

Sprint Planning

Sprint Review

FICTION

Daily Scrum

FACT

Sprint Retrospective



The Development Team

“Serving the Development Team”

What disciplines would you expect to find in a self-organising, cross-functional team within your organization?



The Development Team

- Ideally the Development Team should be 6 ± 3 (excluding the PO and SM)
- Members **should** be on the same team full time
- Teams should be long lived, members only change between sprints and rarely



Team Skills

A • W • E • S • O • M • E

LOGO

- Fuselage
- Wing Person
- Wing Test
- Décor
- Plane Test
- Test Pilot

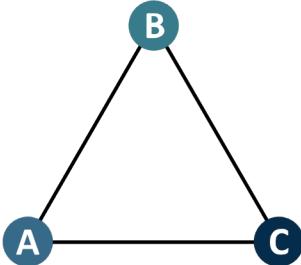
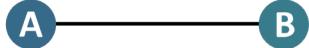


Cross Functional Development Teams

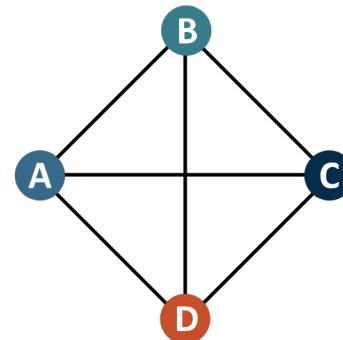
- Development Teams must have all the skills required to take a backlog item to potentially shippable
- The Development Team work as a team to complete backlog items
- Share knowledge of specialist skills; rotate common tasks
- Egos are put aside



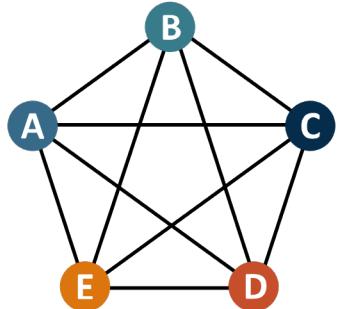
Ideal Team Size



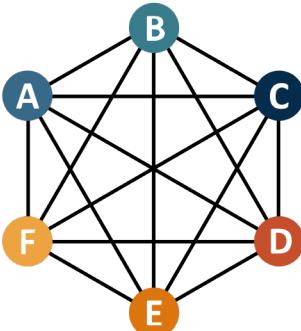
Group size: 2
Only one interaction possible



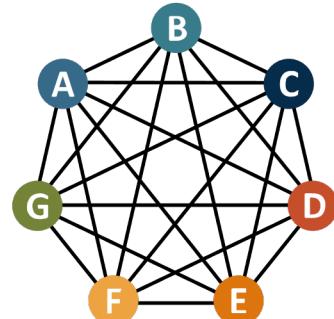
Group size: 4
Six interactions possible



Group size: 5
Ten interactions possible



Group size: 6
Fifteen interactions possible



Group size: 7
Twenty-one interactions possible

**Formula is
 $N(N-1)/2$**

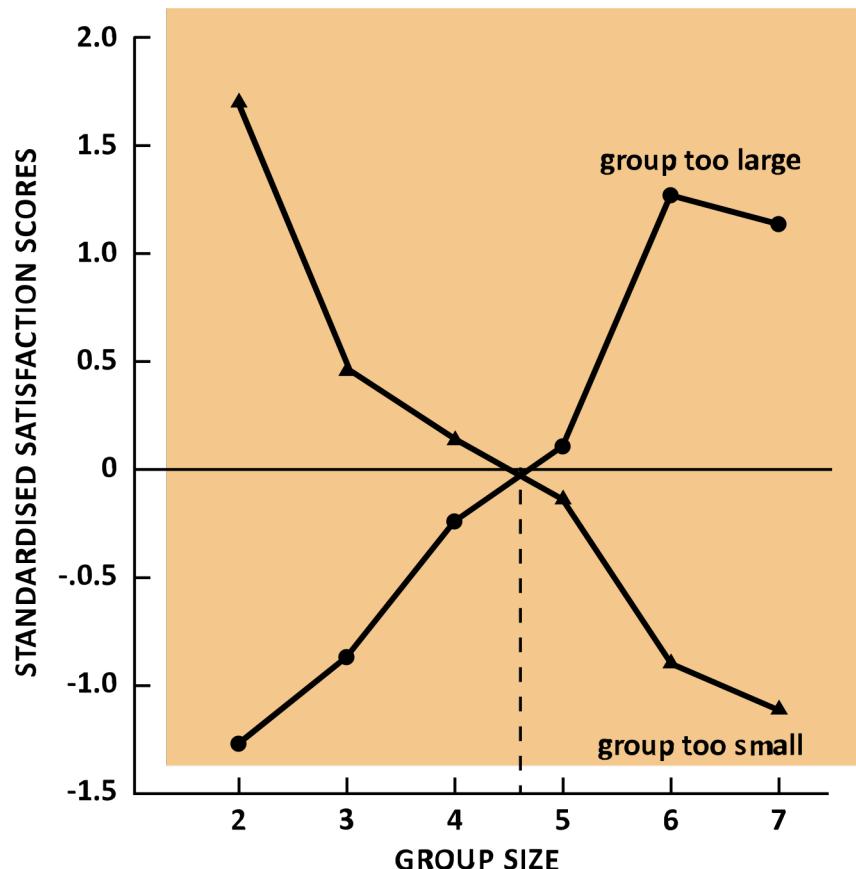
This affects: Communication overhead, group decision making, relationships are key, maintaining relationships takes time

The highest performing teams need to have strong relationships



Team Satisfaction Survey

- Hackman and Vidmar study on working group size, a mixture of:
 - Production (writing)
 - Discussion
 - Problem Solving
- Two key questions:
 - Was your group too small
 - Was your group too large
- By the time Hackman wrote the book “Leading Teams” his rule of thumb for team size was 6



Scrum Roles

“Promote and support Scrum as defined in the Scrum Guide”

Scrum Roles



Product Owner

The Product Owner is responsible for maximizing the value of the product resulting from the work of the Development Team



Scrum Master

A servant-leader that does whatever it takes to make the Scrum Team successful, such as removing organizational impediments, facilitating Scrum events, protecting the team



Development Team

The Development Team consists of professionals who do the work of delivering a potentially releasable Increment of “Done” product at the end of each Sprint



Scrum Master

- Helps the Team become self-organized and cross-functional
- Maximises the sustained output and quality of the team
- Assists the team to continually improve
- Maintains team's motivation
- Coaches the Product Owner and Team in the Scrum values, practices, and rules
- Educates others outside the team about how the Team is working
- Removes impediments to the teams progress
- Organizational change agent
- Facilitates team's meetings
- Servant leader rather than manager



Scrum Master Responsibilities

- Promote and support Scrum as defined in the Scrum Guide
 - Help everyone understand the Scrum theory, practices, rules and values
- Service to the Product Owner
 - Ensuring that goals, scope, and product domain are understood by everyone on the Scrum Team
 - Finding techniques for effective Product Backlog management
 - Support the PO in understanding and practicing agility
- Service to the Development Team
 - Coaching the Development Team in self-organization and cross-functionality
 - Removing impediments to the Development Team's progress
- Service to the Organization
 - Leading and coaching the organization in its Scrum adoption
 - Causing change that increases the productivity of the Scrum Team
 - Working with other Scrum Masters to increase the effectiveness of Scrum in the organization



Servant Leadership

- As a servant leader, you're a "servant first" – you focus on the needs of others, especially team members, before you consider your own. You acknowledge other people's perspectives, give them the support they need to meet their work and personal goals, involve them in decisions where appropriate, and build a sense of community within your team. This leads to higher engagement, more trust, and stronger relationships with team members and other stakeholders.
- Servant leadership is not a leadership style or technique as such. Rather it's a way of behaving that you adopt over the longer term. It complements other leadership styles.

Source: "Robert K Greenleaf. Center of Servant Leadership"



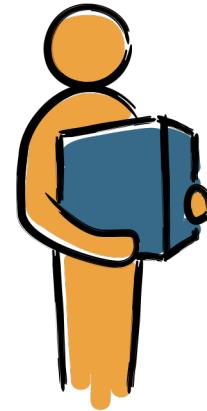
Servant Leadership Characteristics

1. Listening
2. Empathy
3. Healing
4. Awareness
5. Persuasion
6. Conceptualization
7. Foresight
8. Stewardship
9. Commitment to the growth of people
10. Building community

From "Character and Servant Leadership: 10 Characteristics of Effective, Caring Leaders" by Larry C. Spears, published in "The Journal of Virtues and Leadership," Vol. 1, Issue 1.



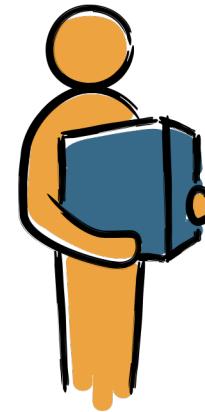
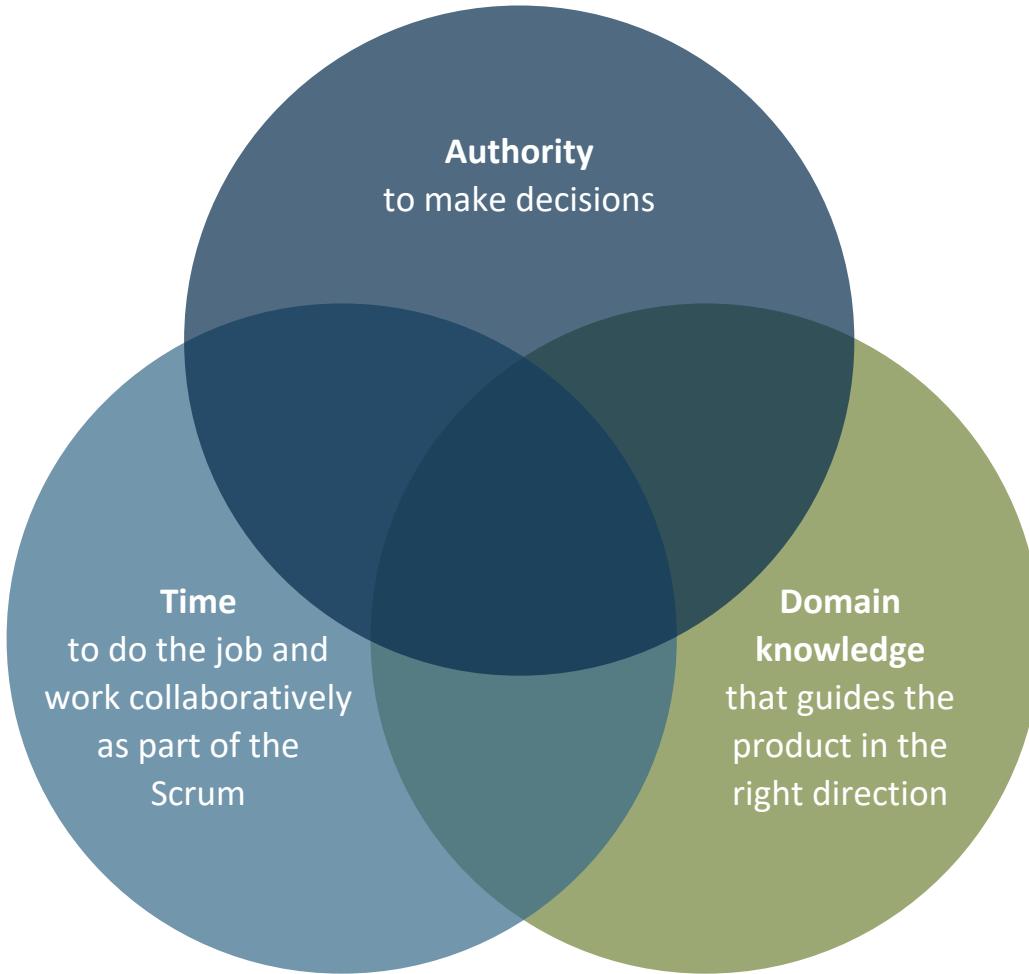
Product Owner



- Responsible for the Vision
- Responsible for the Product success
- Responsible for Return on Investment
- Decides on release date and content
- Manages stakeholders and interests proactively
- Defines customer value-added and the key features of the product
- Clearly articulates the value of Product Backlog Items
- Sets development schedule by prioritising and ordering the Product Backlog
- Takes advice from the Development Team on Product Backlog dependencies
- Accepts or rejects work results in the Sprint Review meeting
- Steers and guides the work, answers questions on a daily basis



The Product Owner should have



Cancelling a Sprint

- A Sprint can be cancelled before the Sprint timebox is over. Only the Product Owner has the authority to cancel the Sprint, although they may do so under influence from the stakeholders, the Development Team or the Scrum Master
- A Sprint would be cancelled if the Sprint Goal becomes obsolete
 - For example if the company changes direction or if market or solution conditions change.
- Due to the short duration of Sprints, cancellation rarely makes sense

After abnormally terminating:

- Review what's done
- All incomplete backlog items are re-estimated and put back on the product backlog
- Next step is to get ready for the next Sprint Planning event



Development Team

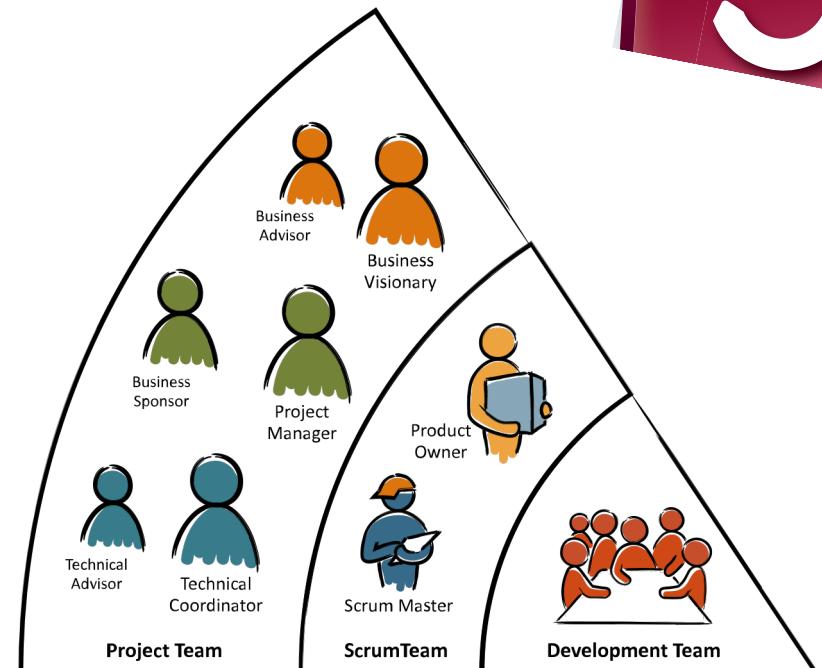
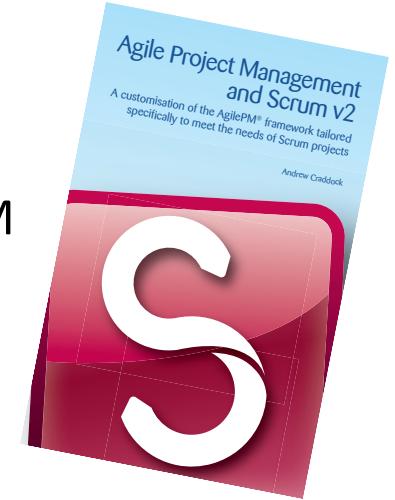
- Responsible for delivering Potentially Shippable Product Increments (meeting the Definition of Done)
- Typically 3 - 9 people
 - Scale through having teams of teams
- Product Owner & Scrum Master are not included in team size
- Members should be dedicated to a team full-time
- Co-located
- Cross-functional
- Self-organizing and empowered
- Add or remove members at Sprint boundaries



What about other roles, like the Project Manager?

Agile Project Management and Scrum Pocket Book

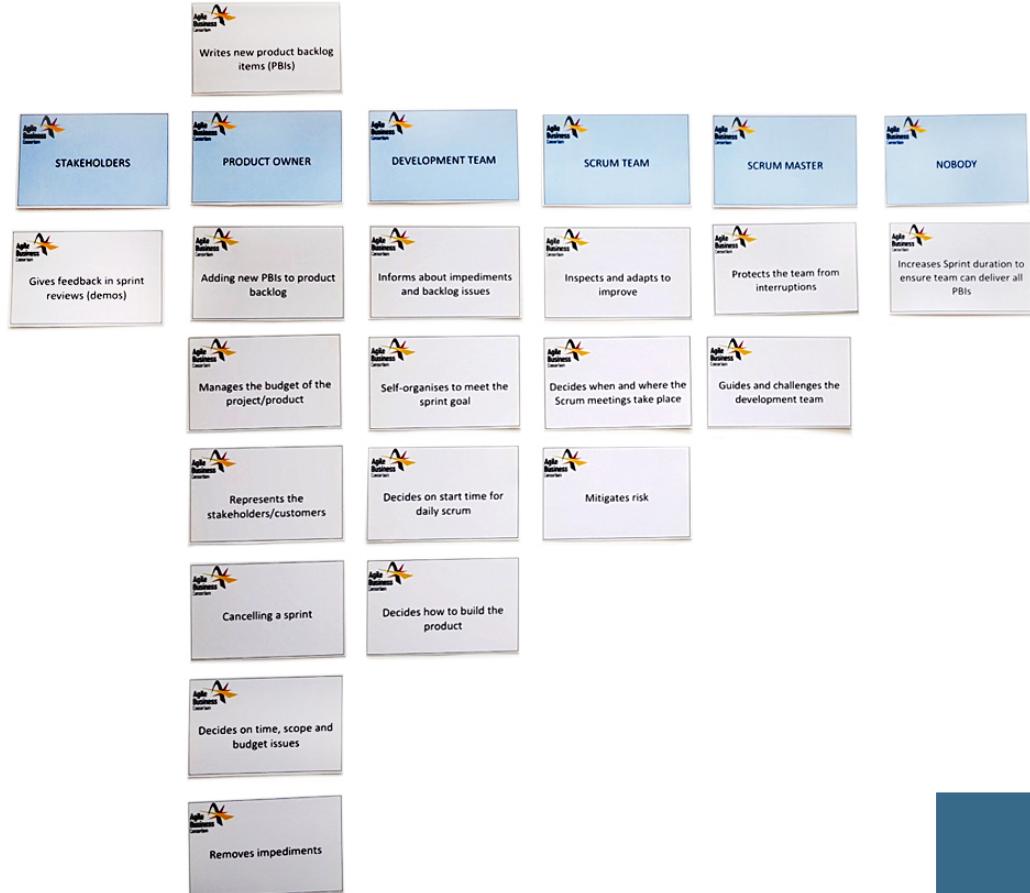
- Describes how Scrum can operate seamlessly with AgilePM
- Leaving Scrum 100% compliant with the Scrum Guide and providing advice and guidance on:
 - A project lifecycle beyond the Scrum process
 - Roles and responsibilities beyond the Scrum roles
 - Supplementary events and techniques to help the Product Owner operate successfully in a corporate project environment



Roles Exercise

Organize the responsibilities under the correct role:

- Stakeholders
- Product Owner
- Development Team
- Scrum Master
- Scrum Team
- Nobody



Day 2

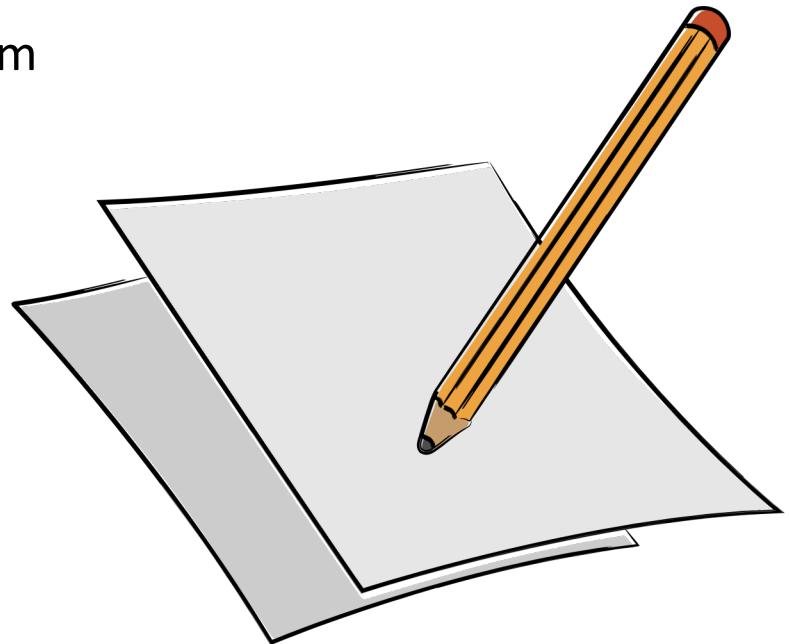
Discuss on your tables

- 3 key takeaways from yesterday
- Is there anything we should change on the working agreement, based on behaviors you observed yesterday?
- Do you want to take the opportunity to learn from others and form a new team, or continue with the team members you have started to build relationships with?



Your Turn

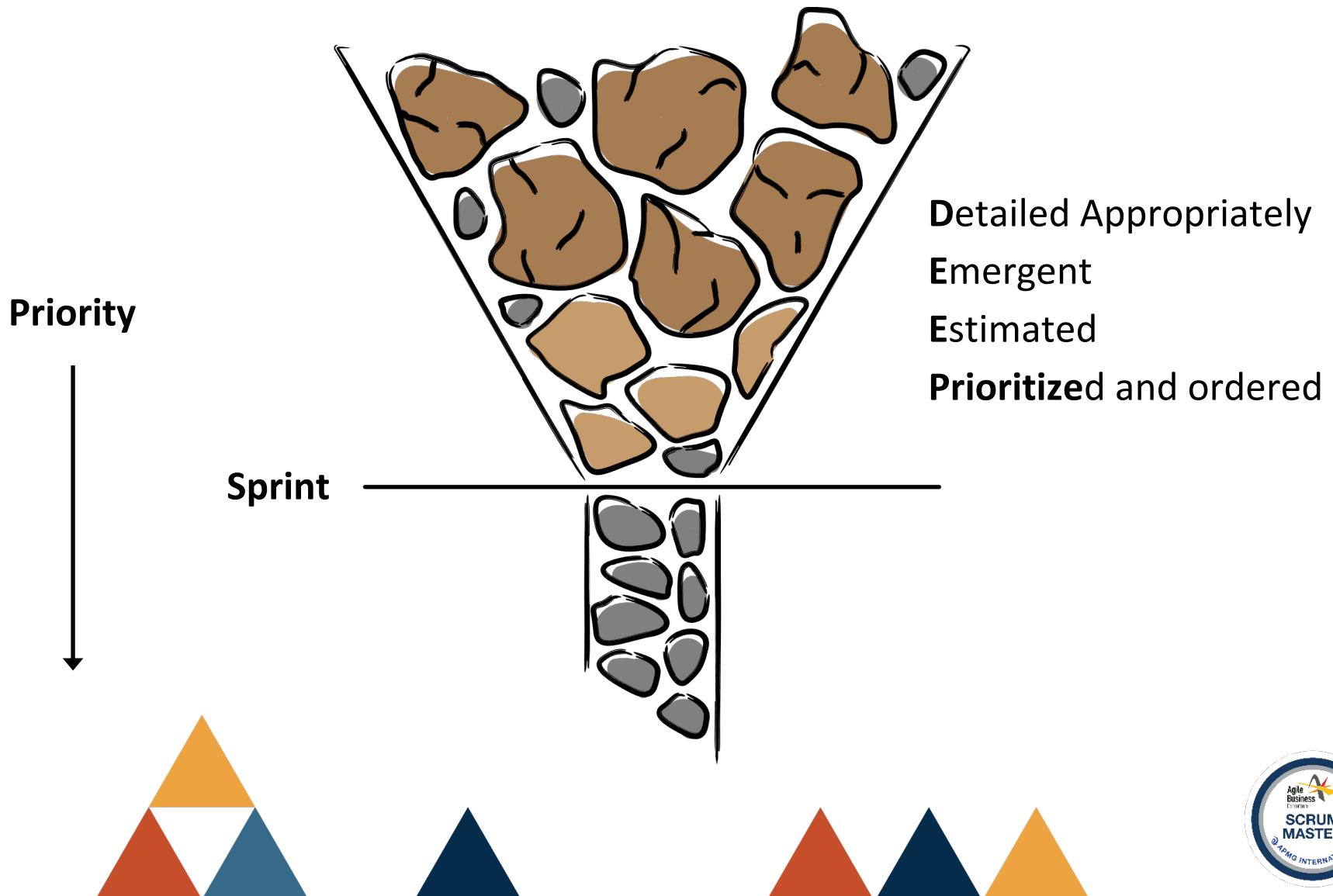
- Each table split into two groups.
- Each Group - draw a poster of Scrum
- Include on this:
 - The three roles
 - All 5 Events
 - All 3 Artefacts & their purpose
 - Scrum Values
- Illustrate:
 - Timeboxing
 - Backlog Refinement
 - Done and Potentially Shippable
 - Why Scrum is a framework
 - The benefits of an iterative and incremental approach
 - Scrum but...



The Product Backlog

“Service to the Product Owner”

The Product Backlog Funnel



Backlog Refinement

Team Work
Ahead &
refine
backlog
items

Backlog item

**Highest
Priority**

Refinement

- Clarifying
- Splitting
- Estimating

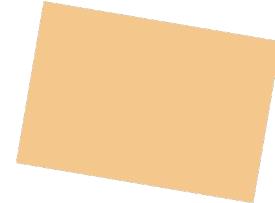
**Lower
Priority**



User Stories

Card

- Typically 6" x 4" (approx. 15cm x 10cm - Restricted space intentionally constrains detail)
- A token for a conversation



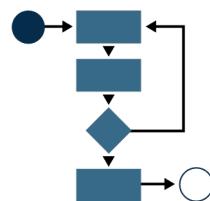
Conversation

- Informal discussion of detail
 - Between Product Owner and Development Team
 - Involving other stakeholders as required to avoid misinterpretation



Confirmation

- Acceptance criteria for the Story
 - Traditionally written on the back of the card
 - Help define what 'done' means for the Story



Context

- Provided by Visual Models
 - E.g. Business Process Models, Customer Journeys, Story Boards, Story Maps etc.



User Story Structure

A • W • E • S • O • M • E

LOGO

**As a <USER ROLE>
I want <SOME GOAL>
so that <BUSINESS REASON>**

This helps to support the demonstration of 'Done'
Increment at the end of a sprint



Example Stories

- A reasonable size story that is scheduled for the next Sprint
- An **Epic** that will be broken into smaller stories later on

*As a: Customer
I need: To cancel
a hotel booking
So that: I can get
a refund*

*As a: Brand Manager
I need: To develop a
new Brand
So that: Our product
will appeal to our
new target market*



Where are the details?

- Details can be added as Acceptance Criteria – essentially tests.

Here is a rules-based example:

As a: *Customer*
I need: *To cancel
a hotel booking*
So that: *I can get
a refund*

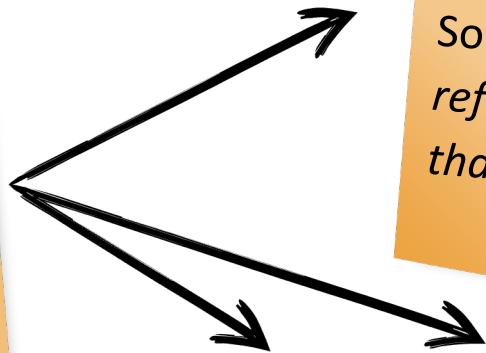


- Can a premium customer cancel the same day without a fee?
- Is a non-premium customer charged 10% for a cancellation?
- Is an email confirmation for the cancelled booking sent?
- Is an email sent to the hotel to cancel the room reservation(s)?



Where are the details?

As a: Customer
I need: To cancel a hotel booking
So that: I can get a refund



These can be added as smaller sub stories

As a: Premium Customer
I need: To cancel my booking free of charge
So that: I can get a full refund of the money that I paid

As a: Customer
I need: A confirmation email to be sent to me
So that: I know my cancellation request has been processed

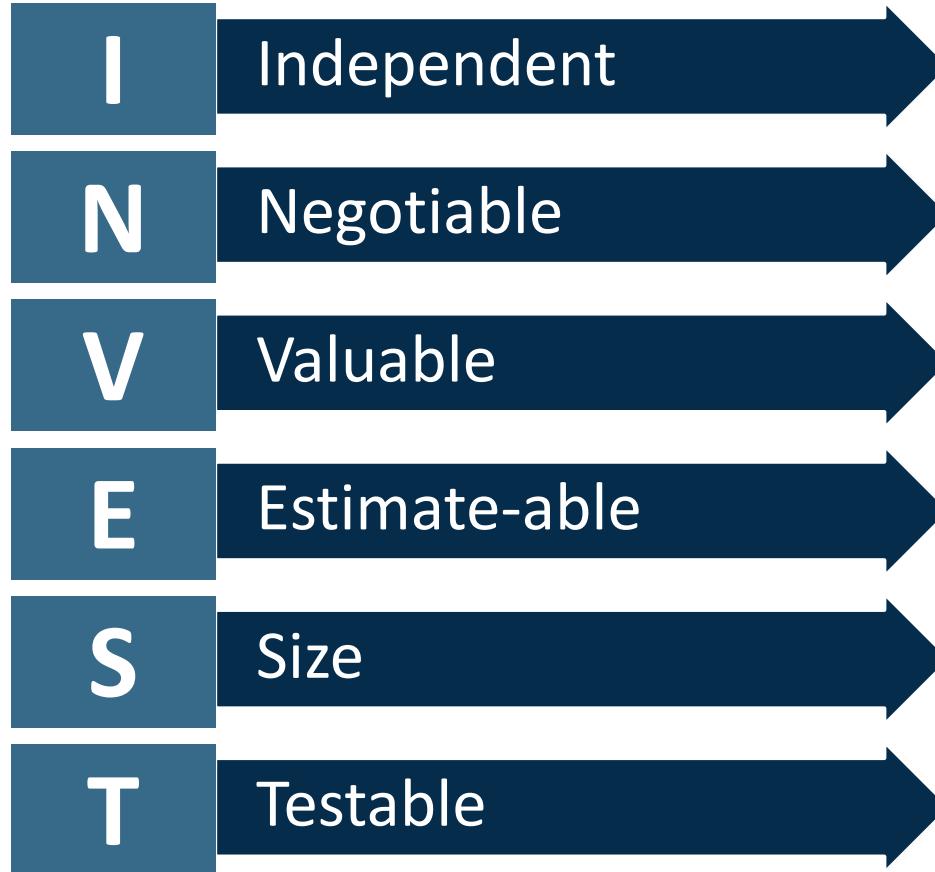
As a: Non-premium customer
I need: The cancellation fee to be deducted from the refund
So that: I get back only the money I am owed



INVEST in good stories

A • W • E • S • O • M • E

LOGO



Ready

- Well understood enough so that the team can estimate
- Small enough for a team to deliver between four and ten in a sprint
- For new technology areas some initial design thoughts have been put together
- Where required enough supporting information



Getting your first backlog

Story Writing Workshops

- Includes solution developers, users, customers and others
- Brainstorm to generate stories
- Goal is to write as many stories as possible
 - Some will be small and ready to implement
 - Others will be epics
- No prioritization at this point



Getting your first backlog

“Story Writing Workshop” Activity List

- Review the Vision
- Generate User Roles
- Group Roles
- Generate Initial Stories
- Generate Features

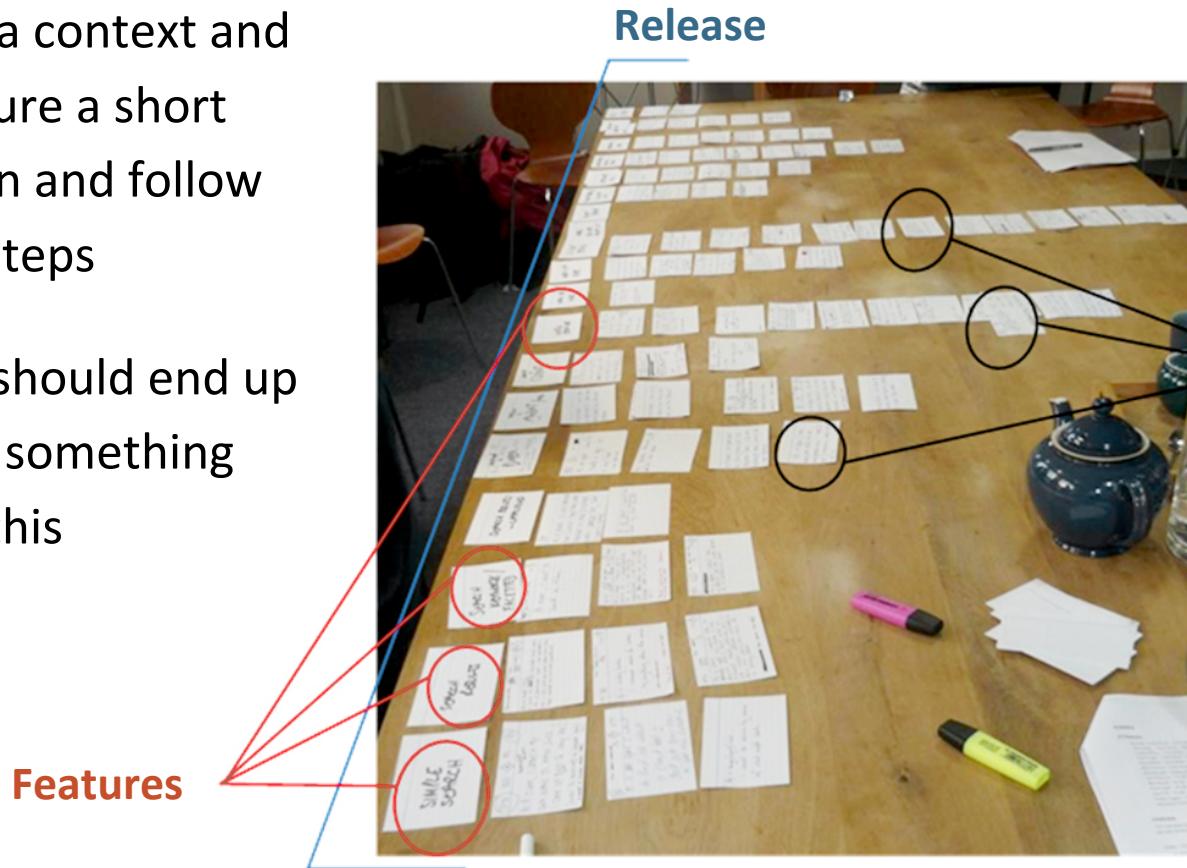
These will also need to be done:

- Identify medium term Goals
- Order User Stories within at least the first releases
- Estimate the whole backlog
- Initially Identify Minimal Marketable Features.... refine over time!



Run your own User Story workshop

- Pick a context and capture a short vision and follow the steps
- You should end up with something like this



Product backlog items expressed as user stories, in feature priority order. Lower priority stories at the bottom



Sprint Planning & Done

“Promote and support Scrum as defined in the Scrum Guide”

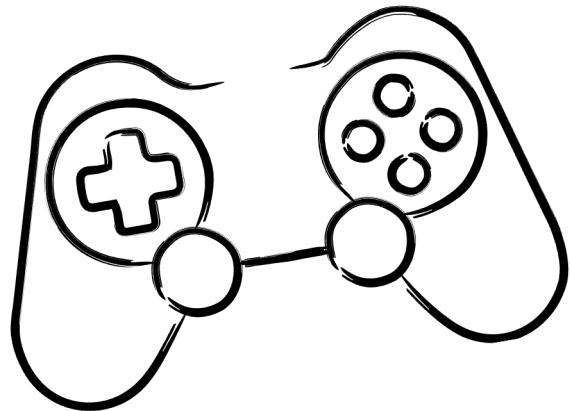
Sprint Planning

Development Team control what they do for the next sprint

Outputs:

- Sprint Goal
- Sprint Backlog

Whole team participates



Goals:

- To know what they are going to do
- Have a rough idea how to do it

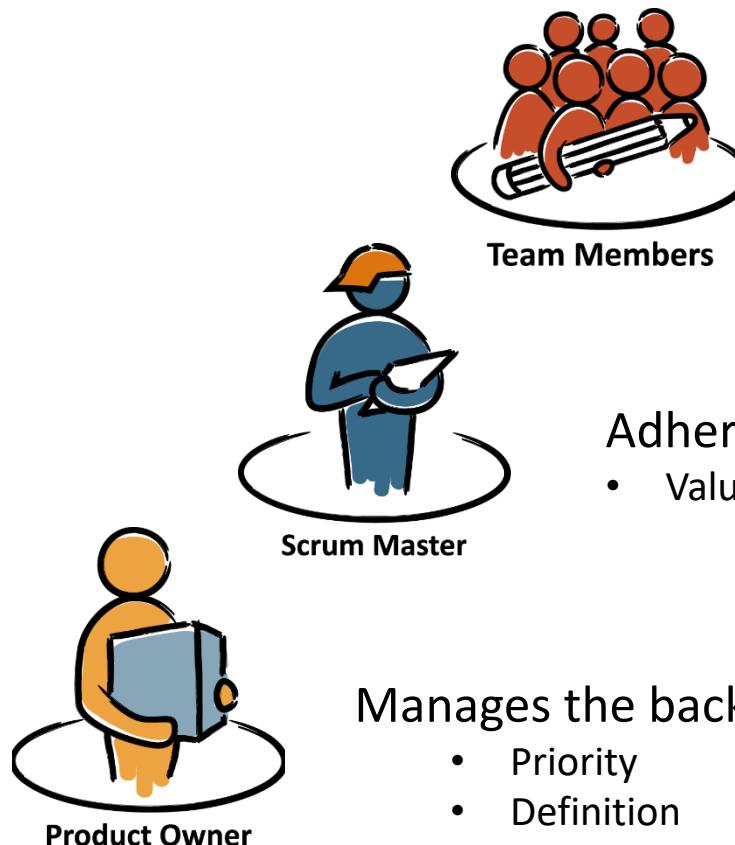
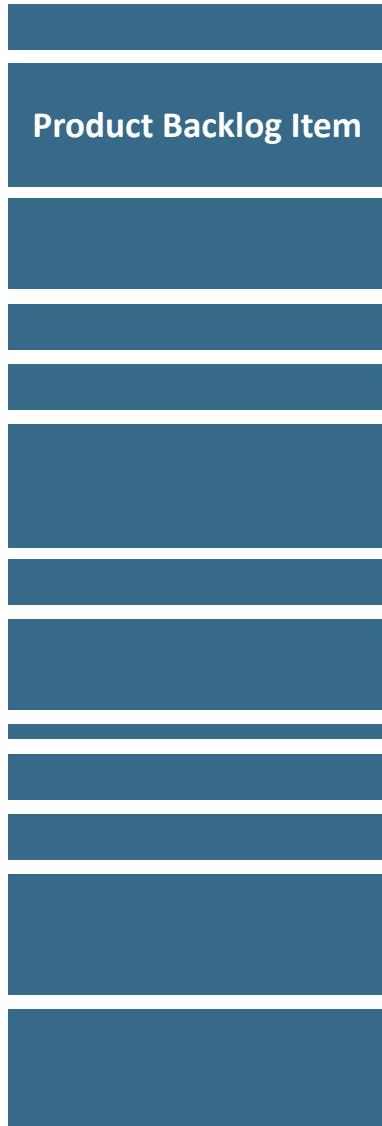
Design discussion and articulate the design through tasks



Sprint Planning Meeting

A • W • E • S • O • M • E

LOGO



Cross Functional
Self Organizing

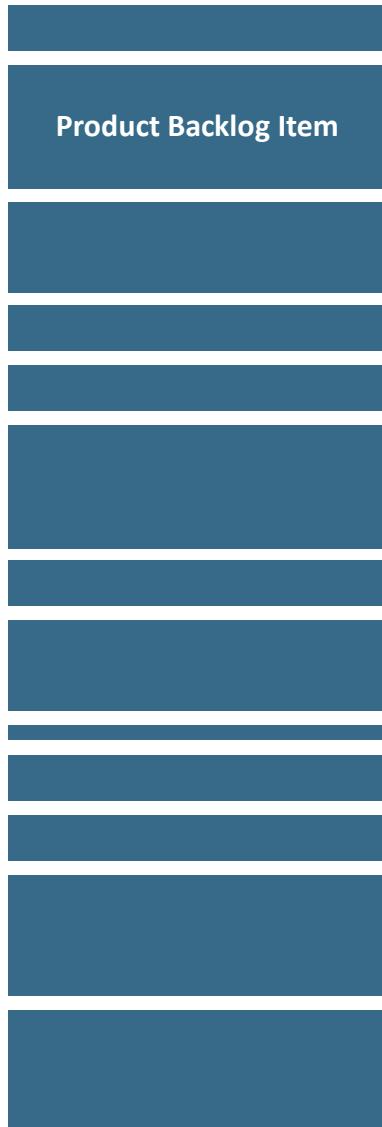
Adherence to Scrum

- Values, Practices, Rules

Manages the backlog

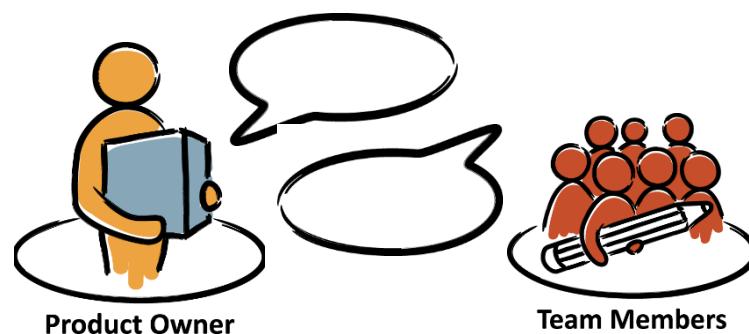
- Priority
- Definition

Sprint Planning Meeting (Pt 1) - WHAT



Sprint Goal

Done
A definition of
“Potentially
Shippable”



Agree a Sprint Goal

Release Goal

Objective Setting

Sprint 5 Goal

Deliver Alternative Reviewer & Email Notifications

Sprint 4 Goal

Deliver User Roles and State Model

Sprint 3 Goal

Create Manager UI, define User roles, create one-off electronic Personal Development Reviews

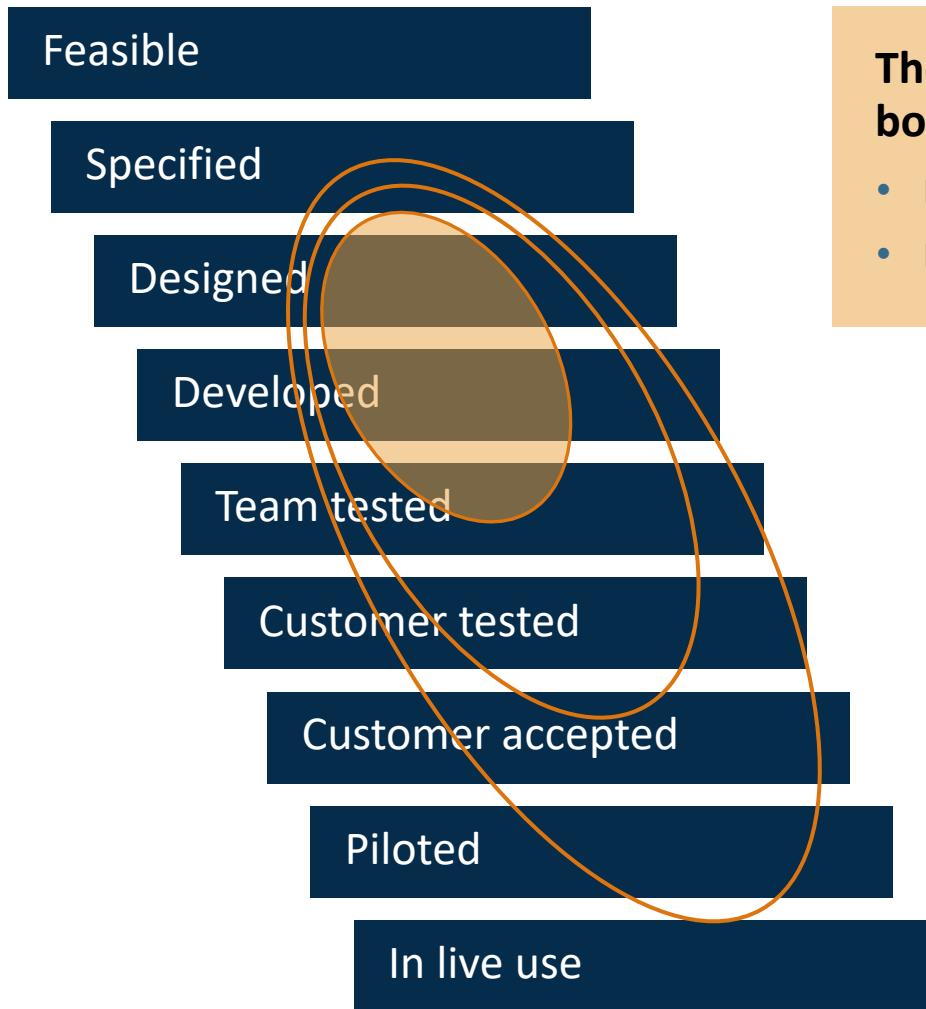
Sprint 2 Goal

Generate electronic Personal Development Reviews,
Complete and Save Form

Sprint 2 Goal

Complete and Save Form





The sprint has strict, well defined boundaries

- Entry Criteria Ready' Product backlog item
- Exit Criteria Definition of Done

This is the minimum baseline, but extend done as far as possible

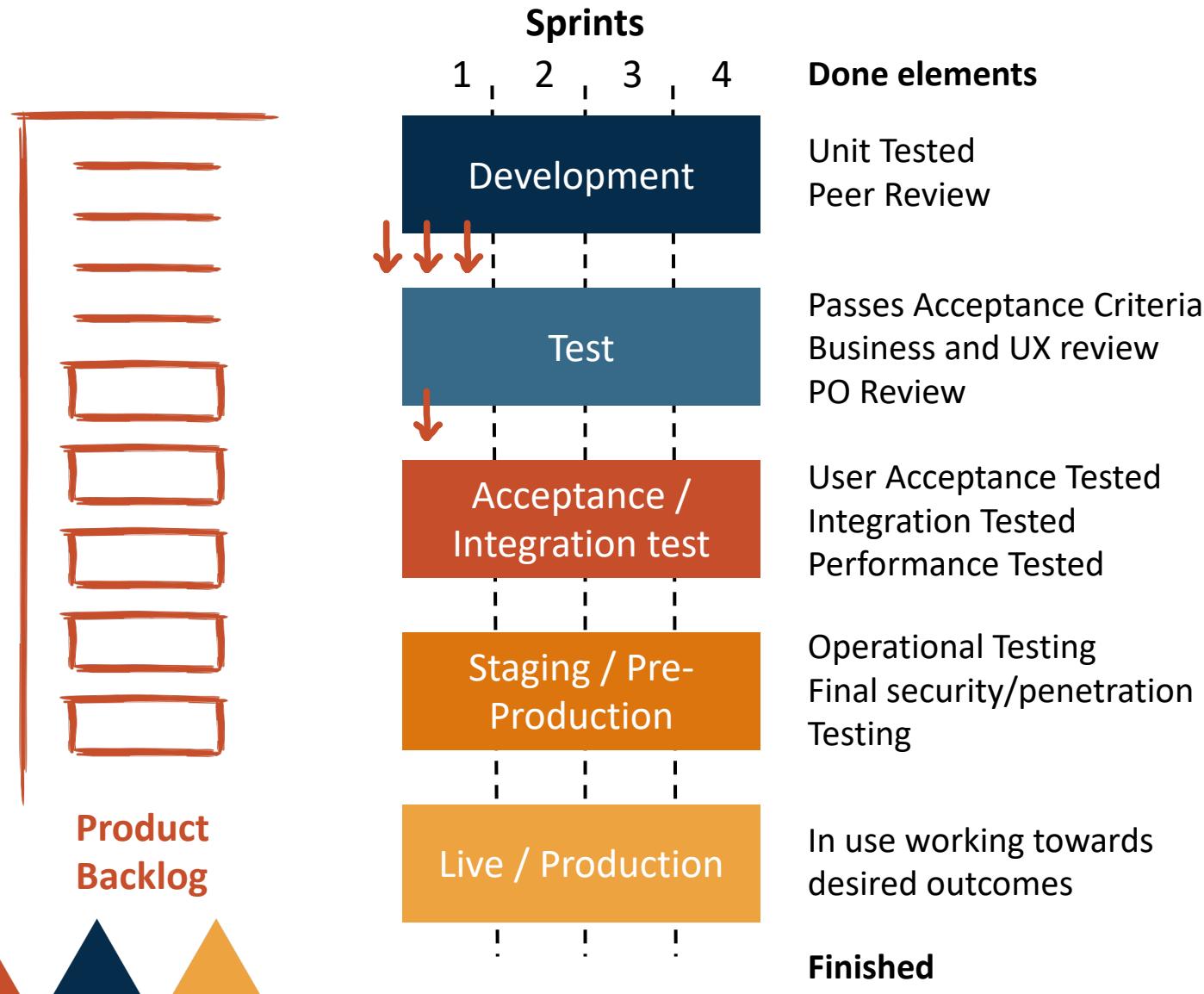


Discuss on your tables

- What is your definition of Done ?
- What challenges do you face, how do you address them ?
- List 3 reasons why the Increment must be brought to the current Definition of Done
- What would need to change to get Done closer to a Released product? What release cadence makes sense for your organization and customer base?



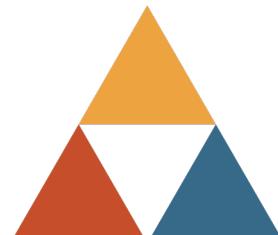
Done in an IT environment



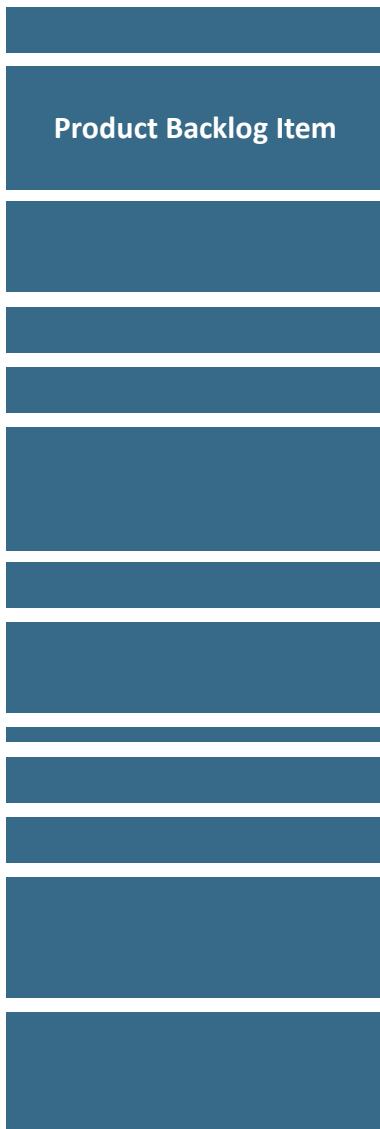
Sprint Part 2: How - Planning Approaches

1. Capacity Based

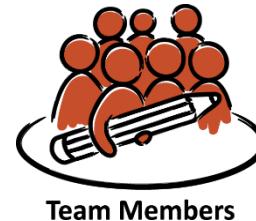
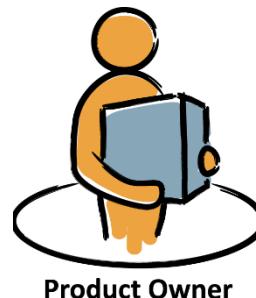
2. Velocity Based



Sprint Planning Meeting (Pt 2) - HOW



	Tu	W	Th	F	M	Tu	W	Th	F	
Plan	1	2	3	4	5	6	7	8	9	Review & Retro



Capacity

5 team members
x sprint length
x available units
(e.g. Hours)

= total team capacity

Discuss the Sprint Planning Capacity Question in your groups.



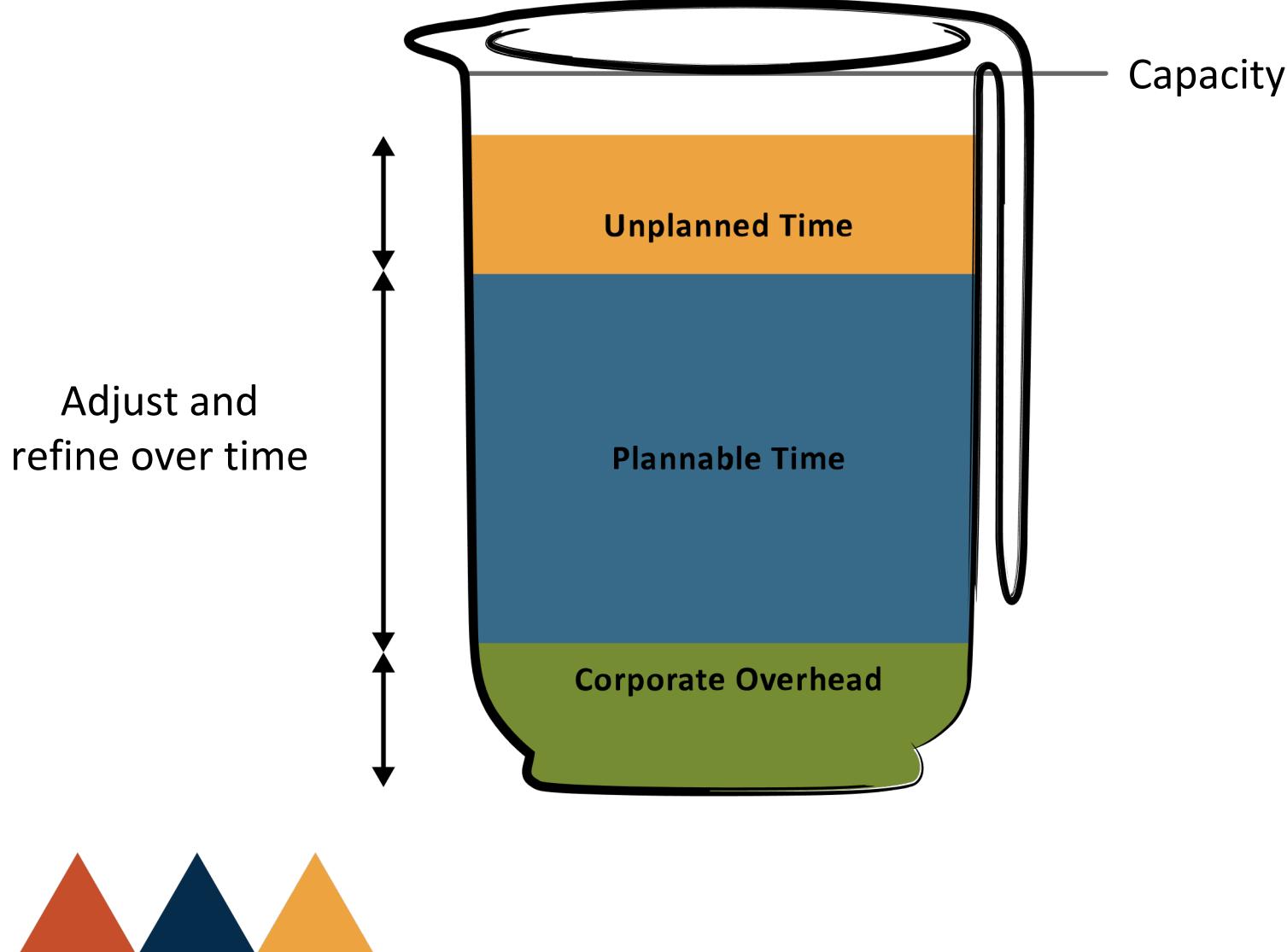
Capacity planning for a sprint

Name	Primary Skillset	Hours / Day	Days available	Work “in sprint”	Work “ahead of sprint”
John	Develops solution	6	7	42	
Amy	Design and solution experience	6	9		54
Mark	Develops solution	6	9	54	
Simon	Develops and assesses acceptance of solution	6	4	24	
Sue	Analysis of solution	6	4		24
Sarah	Develops solution	6	9	54	
				174	78
					252

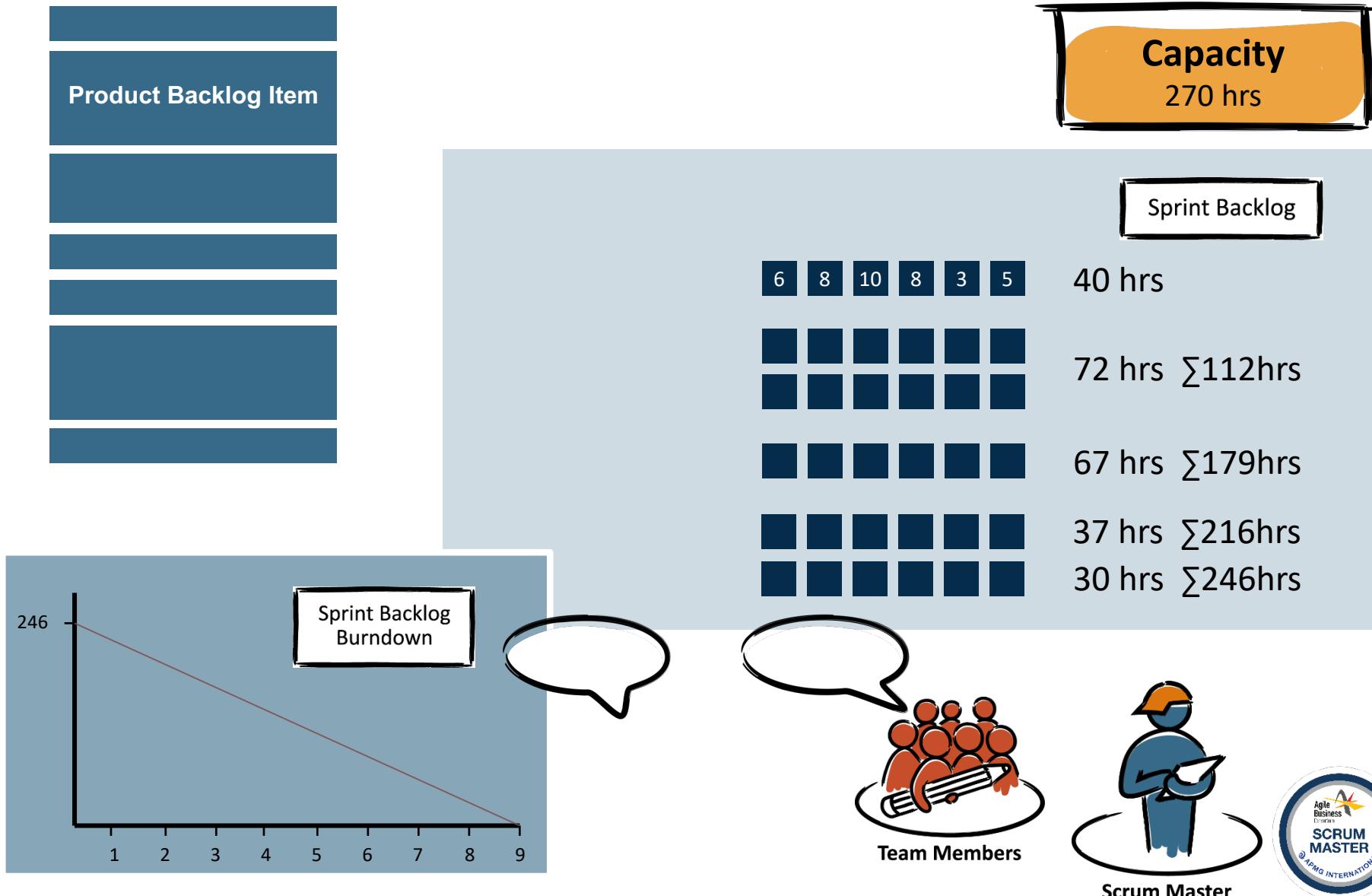
Taking into consideration breadth of “T” shaped team members



Sprint Planning “Jug”



Sprint Planning Meeting (Pt 2)



Sprint Planning

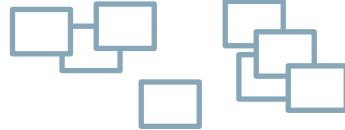
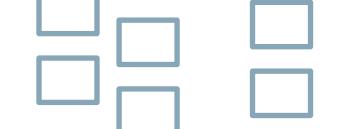
- Consider breaking down user stories to focus on adding very small increments, and get to test earlier
 - Aim for a days worth of work
 - Estimate in hours or days
 - Look for ways of getting everyone working together



- The goal is to know enough to make a team commitment and get started
 - Everyone should understand the scope of all the tasks
 - Not everything needs to be known perfectly and precisely
- Plan Product Backlog Items one by one
 - Stop when the team can't commit to any more
 - Calculate capacity vs demand as a guideline (time available vs time estimated)



The Sprint Backlog (on a task board)

Not started	In progress	Ready for review	Done
<p>As a online customer, I need to be able to login so that I can securely access my account details</p>			
<p>As a online customer, I need the ability to change my password, so that I can be confident my account</p>			
<p>As a site administrator, I need to be able to disable accounts so that I can stop access on the clients request</p>			
<p>As a prospective customer, I want to request an account so that I can become a client and manage my accounts</p>			



Sprint Progress

“Promote and support Scrum as defined in the Scrum Guide”

The Sprint Backlog – PBI Summary view

Not started	In progress	Ready for review	Done
		As a online customer, I need to be able to login so that I can securely access my account details	
	As a online customer, I need the ability to change my password, so that I can be confident my account		
As a site administrator, I need to be able to disable accounts so that I can stop access on the clients request			
As a prospective customer, I want to request an account so that I can become a client and manage my accounts			

The best way to limit work in progress!



Sprint Backlog & Sprint Burndown Chart

- All tasks are estimated, estimates are the amount of **work remaining** and can go up as well as down
- The team update the Sprint Backlog throughout the Sprint, they estimate the time remaining on each task through out the sprint, at least once a day (ideally immediately prior to the daily Scrum)
- A burndown chart shows how much estimated work is remaining
- Sprint Burndown Chart highlights impediments
- Is for the team to judge if they will achieve the Sprint Goal



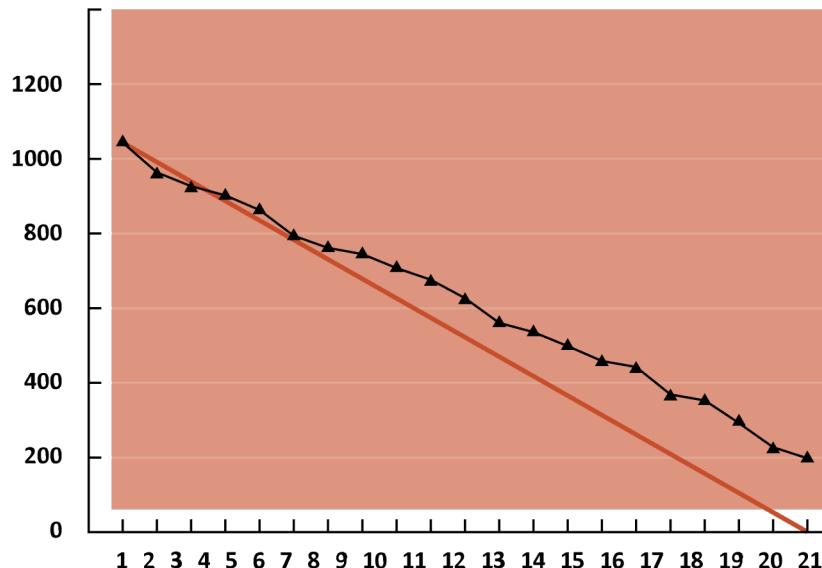
Teams Improve Over Time

A • W • E • S • O • M • E

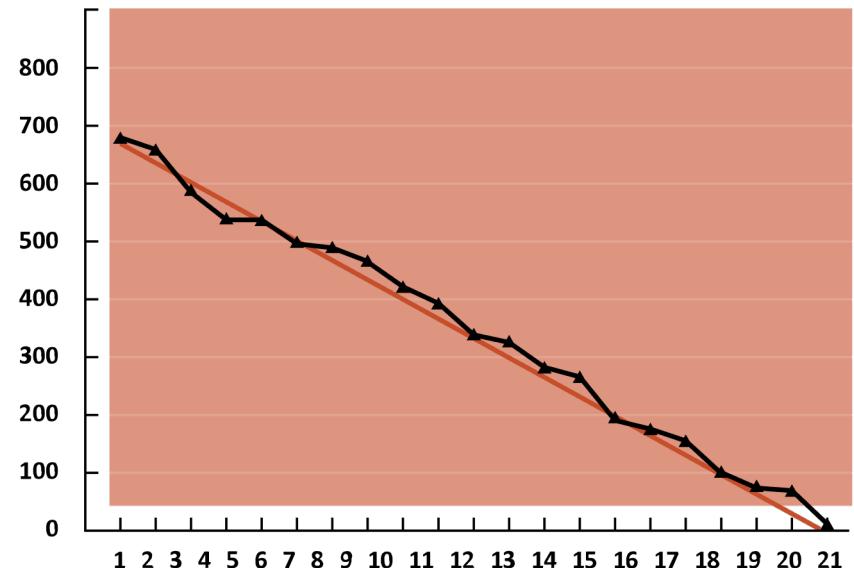
LOGO

This is the same project team over 16 sprints

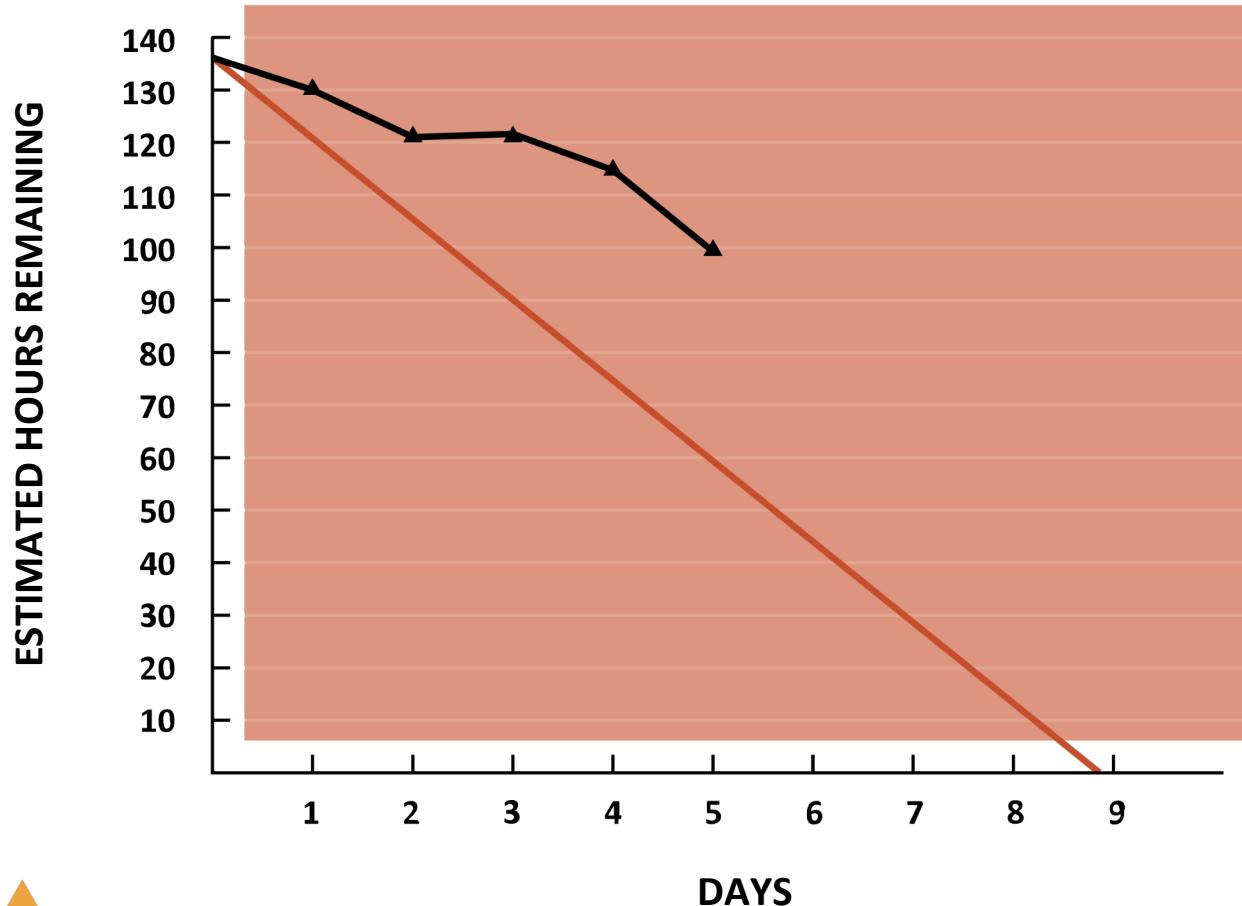
Sprint 5 Burndown



Sprint 21 Burndown



Is the team on target to meet their Sprint Goal?



Scrum Simulation

“Serving the Development Team”

“Serving the Product Owner”

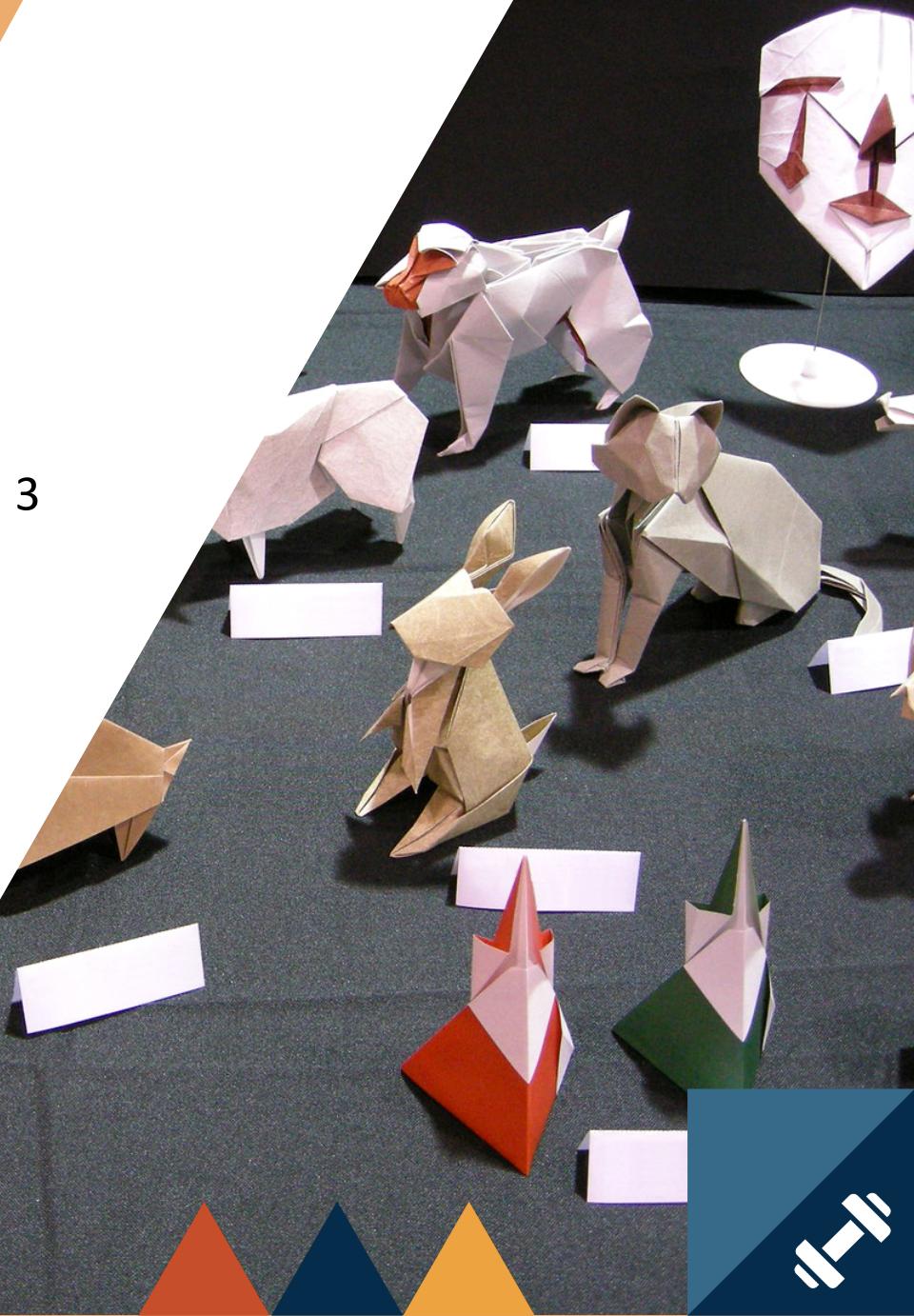
Release Planning

- Look at the prioritized product backlog
- Arrange the backlog items by effort, smallest to largest



Release Planning

- Then place into buckets
- Put the smallest in the “1” Bucket
- 2 will be twice as much effort as 1, 3 will be a bit more than 2, 5 will be just more than twice 2, just less than twice 3 etc.



Get Ready for Sprint Planning

- Order your product backlog for delivery
 - Discuss with the Product Owner the order, they may compromise
 - Look to generate team learning initially
-
- Understand what you need to do to get an item “Ready” for Sprint Planning
 - Think acceptance criteria
 - Dependencies
 - Clarification

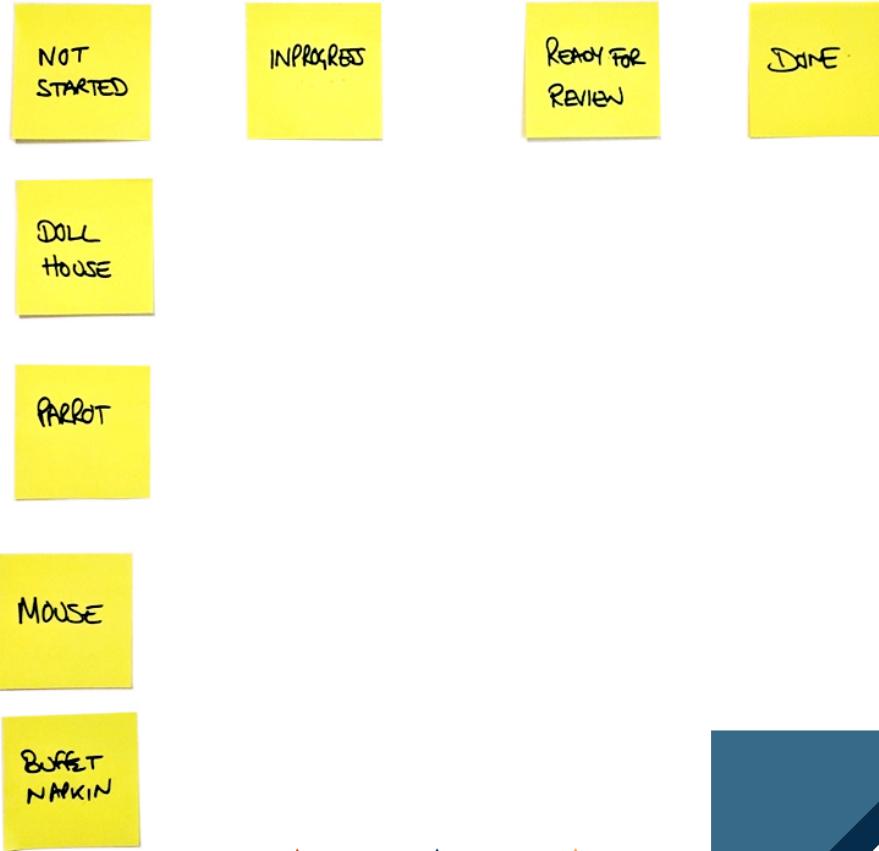


Sprint Planning

- Create a Task Board
- Be clear on what the team will bring into the Sprint
- Agree a Sprint Goal with the Product Owner

-
- The Sprint will consist of Three 2 Minute Days, with a 1 minute Daily Scrum after days 1 and 2

SPRINT 1 GOAL:
AN ANIMAL & A
HOUSE



Cross Functional Development Teams

- Ensure you have a Scrum Master
- Try pairing
- Keep the Task Board up to date
- Keep in mind your sprint Goal
- Don't forget to get your PO to review the backlog items

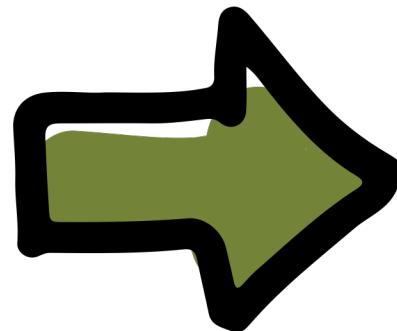


Review & Retrospective

A • W • E • S • O • M • E

LOGO

- Get some feedback in the review
- Retrospective: Reflect and take an improvement action



Initial Scrum Master focus

Scrum Master Initial Focus Areas Pt 1

- Artefacts
 - Are the artefacts being used and kept up to date correctly?
 - Is the Product Backlog prioritized and ordered?
 - Are the Product Backlog and burn down charts being updated and valuable to the Scrum Team?
 - Are the artefacts visible?

- Roles
 - Is the Development Team clear on their goal and focused?
 - Is the Development Team working effectively as a team?
 - Is the Product Owner carrying out their responsibilities and are they showing appropriate attributes?



Scrum Master Initial Focus Areas Pt 2

- Quality
 - Is Done being consistently expanded? Are there frequent deployments?
 - Are tests being automated, is code being refactored?
- Meetings
 - Are the Scrum meetings valuable to the Scrum Team and carried out effectively?
- Collaborative
 - Are you removing barriers to collaboration and effective communication?
 - Is the organization releasing joined up slices of functionality early and frequently?



Scrum Master examination

At the end of the course there is an exam!

- 50 simple, multiple choice questions
- 40 minutes
- Closed book
- Pass mark: 37 marks out of 50 (74%)



After passing the exam

- All candidates will be informed formally of their result by APMG
- Successful candidates will receive an e-certificate and digital badge
- Successful candidates will receive one year's free membership with the Agile Business Consortium





Thank you