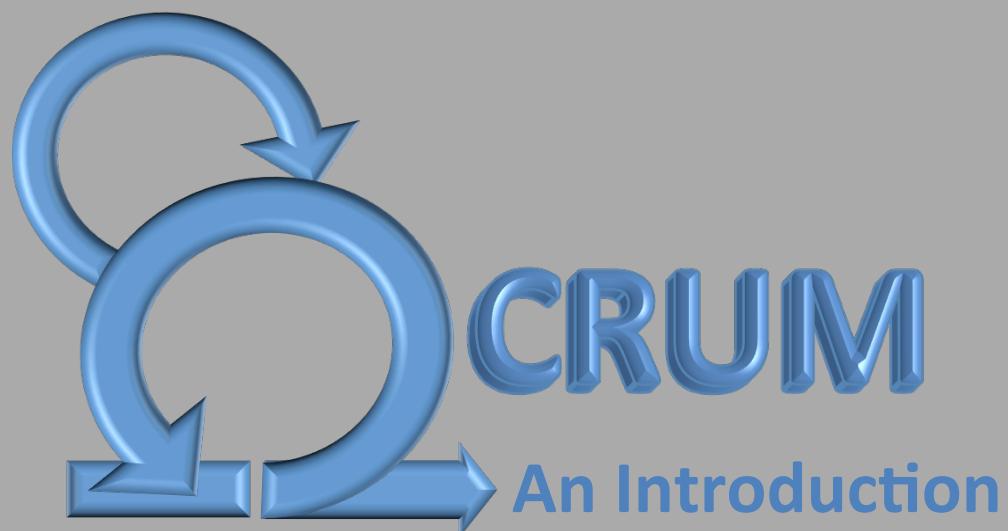


nlighten  
agile transformation & training

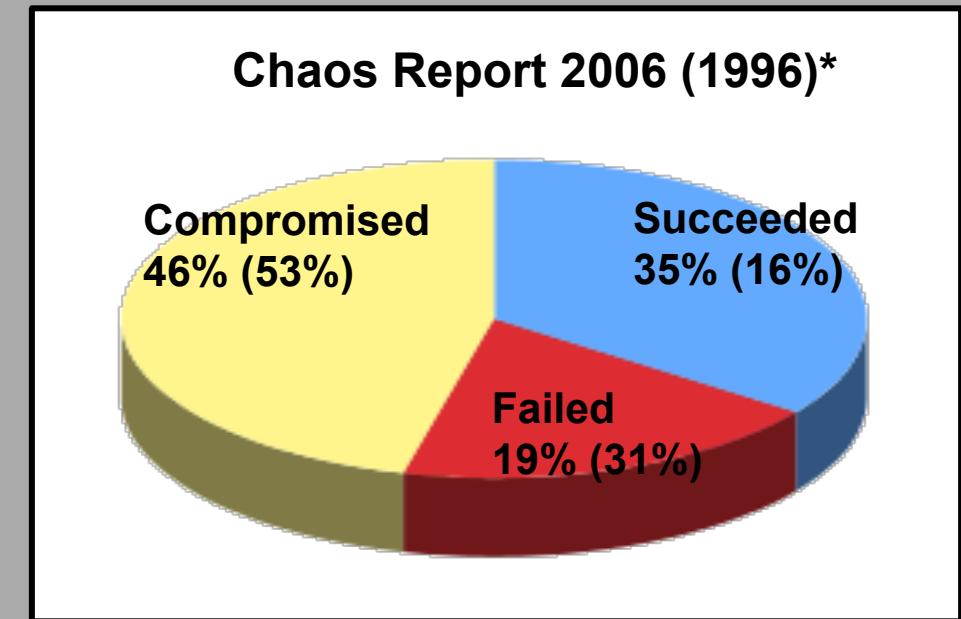


[www.nlightentraining.com](http://www.nlightentraining.com)

- Partner at nlighten – [www.nlightentraining.com](http://www.nlightentraining.com)
- Specialist in Agile Transformation and Training
- 15+ years as an Agile Practitioner
  - DSDM Advanced Practitioner
  - One of the first Certified ScrumMasters in the UK
- 10+ years as an Agile Trainer, Consultant and Coach
  - Working with global brand leaders in many industry sectors:  
Airline, Life and Pensions, Investment and Investment Banking,  
Insurance, Engineering, Media, Mobile Telecoms, Pharmaceuticals

# nlighten The Problem to be addressed...

- Common Project Characteristics
  - Plan Driven
  - Smoke stacked resources
  - Communication via documentation
  - Change always a problem
- Typical Outcomes
  - Late & Over Budget\*
    - \$Average: + 89%
  - Poor Quality
    - Testing Squeezed
  - Not Meeting the need
    - Scope Management with Waterfall Practices. No. 1 cause of failure for 82% of projects§



## Diagnosis

- Poor collective understanding of the need
- Poor collaborative ownership of the problem
- Reliant on second guessing the future

\* Standish Group – Chaos Report 1996 & 2006,

§ Taylor, BCS Bulletin – 2001

## Early attempt at a solution – RAD

- Late 1980s / Early 1990s

- Characteristics of Rapid Application Development

- Iterative
- Collaborative
- Light on planning
- Light on process

- In Reality

- The right idea...
- Poorly implemented...
  - Lack of discipline
  - Awful quality
  - Prohibitive cost of solution ownership



# What is different about Agile?

A positive focus on *people*, not just a negative focus on process

## Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

**People and Interactions** over Processes and Tools

**Working Software** over Comprehensive Documentation

**Customer Collaboration** over Contract Negotiation

**Responding to Change** over Following a Plan

That is; while there is value to the items on the right  
we value the items on the left more.

Kent Beck, Mike Beedle, Arie van Bennekum, Alistair Cockburn, Ward Cunningham, Martin Fowler  
James Grenning, Jim Highsmith, Andrew Hunt, Ron Jeffries, Jon Kern, Brian Marick  
Robert C. Martin, Steve Mellor, Ken Schwaber, Jeff Sutherland, Dave Thomas

# Popular Agile Approaches

## Scrum

- Team focussed
- Light, empirical Agile

## DSDM

- Project focussed
- Robust, scalable, governable Agile

## eXtreme Programming (XP)

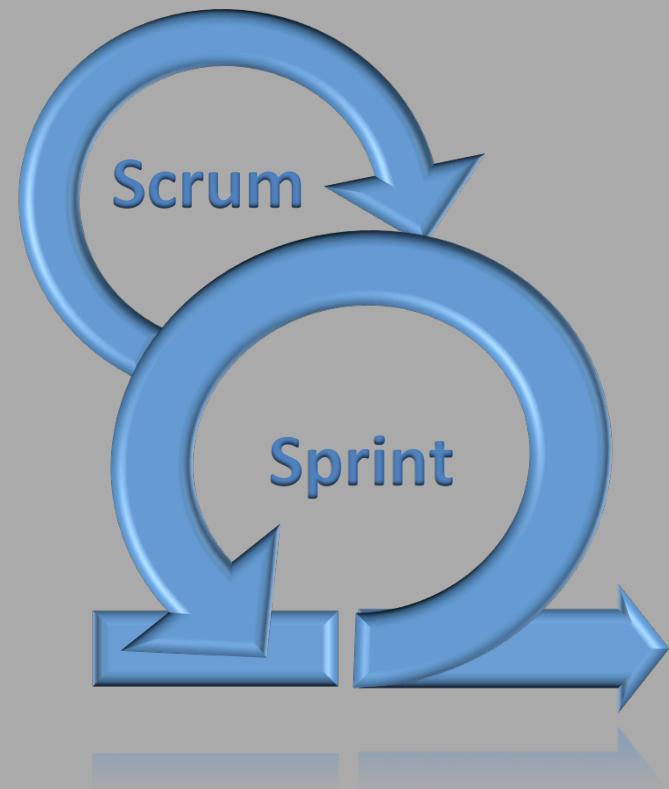
- Engineering focussed
- Technical, disciplined Agile



**Scrum (n):** A framework within which people can address complex adaptive problems, while productively and creatively delivering products of the highest possible value.

Schwaber and Sutherland - Scrum Guide 2011

- An *iterative* approach to software development
- In which a *self-directing Agile team* collaborates
- To deliver *valuable, production quality* software
- In *incremental steps* typically of around 2-4 weeks.



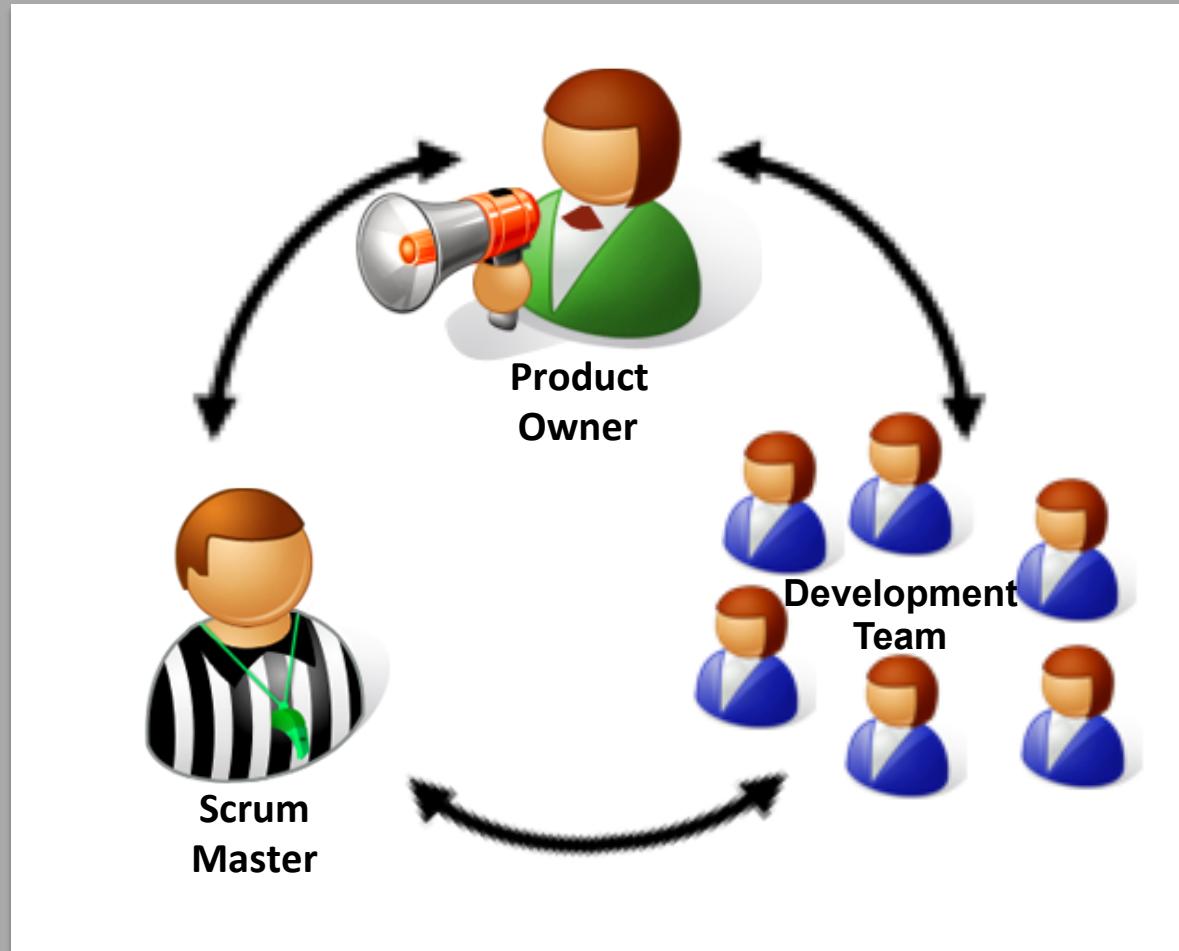
# Scrum Values

Part of the original definition of Scrum  
but dropped from the 2011 guide

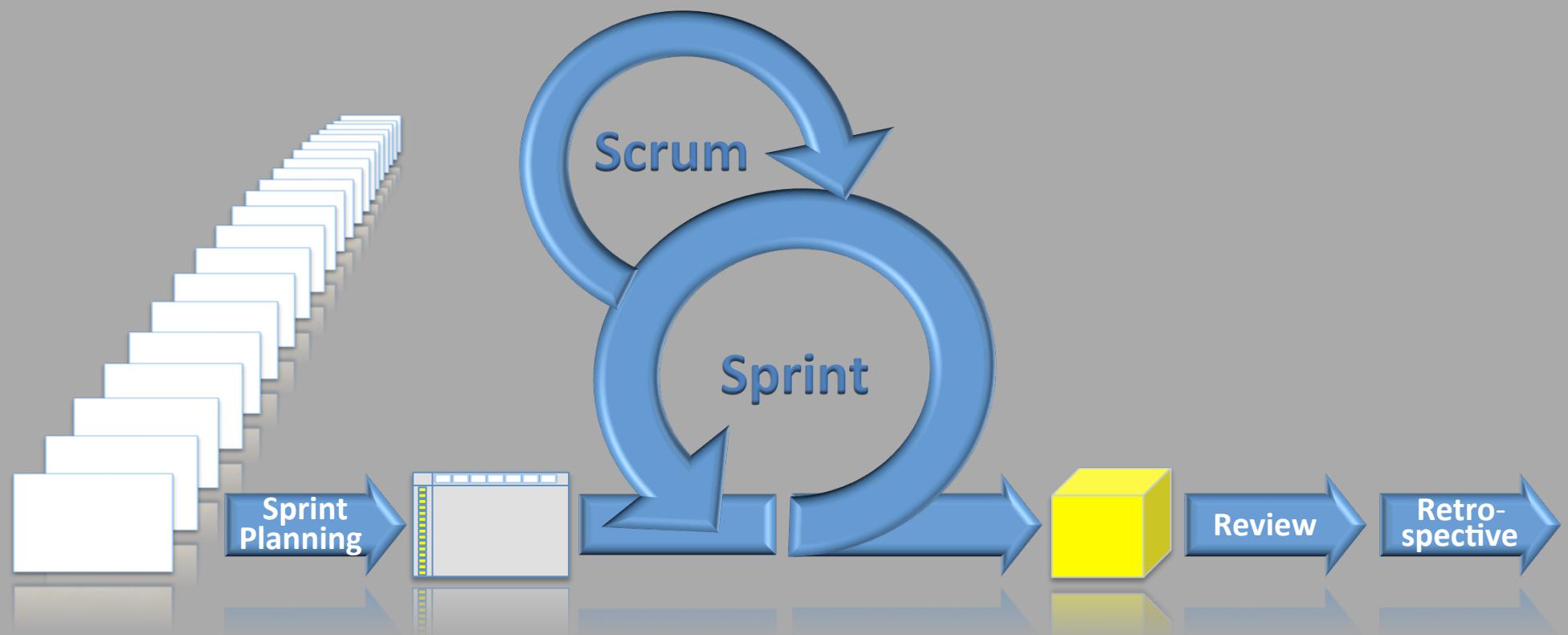
- Commitment
  - Be willing to commit to a goal
  - Believe it and make it a reality
- Focus
  - Focus on the commitment you have made
  - Other issues should be secondary
- Openness
  - Strive for transparency of process and progress
  - Demonstrate control
- Respect
  - We are all unique. Listen, learn and embrace other views
  - Acknowledge that diversity brings innovation.
- Courage
  - The courage to commit, act, be open and expect respect



# The Scrum Team



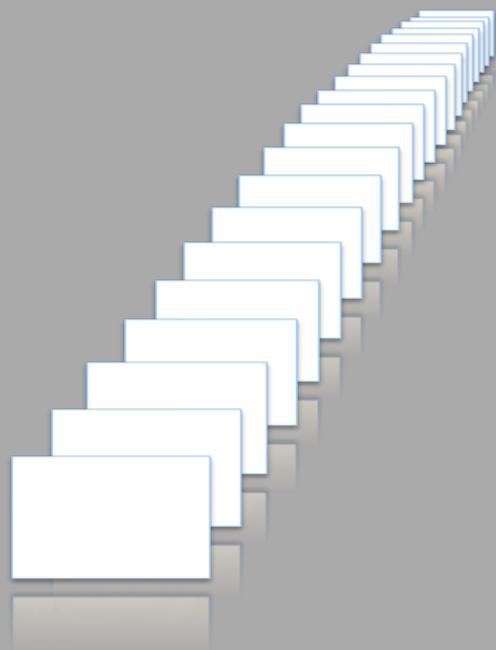
# Process, Events and Artefacts



# Process, Events and Artefacts

The process starts with a **Product Backlog** - a backlog of work to be completed that defines, at a high level, a valuable software product.

The Product Backlog is typically made up of a prioritised set of **Stories** to be implemented in code.



Title		Size	Value	MoSCoW
As a...	PET OWNER			
I want...	To ADJUST EXCESSES AND LEVELS OF COVER			
So that...	I CAN GET A QUOTE THAT I THINK IS GOOD VALUE FOR MONEY			

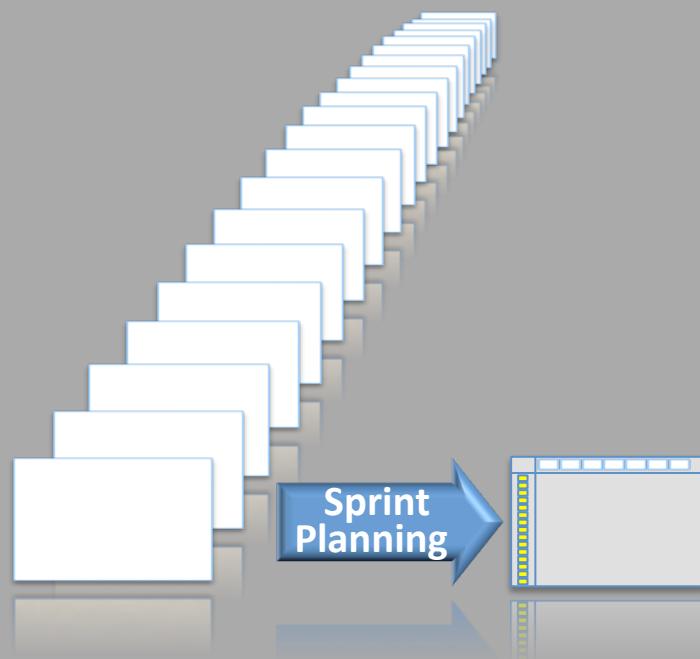
## Essential Information:

- The role that needs the story to be fulfilled
- The statement of what is needed
- The business value that this will have to the requesting role

A User Story for an on-line Pet Health Insurance System

# Process, Events and Artefacts

**Sprint Planning** is an event at which the Scrum Team takes the highest priority Stories from the Product Backlog and work out what they need to do to deliver them by the end of the Sprint. The Stories and the tasks to complete them are captured in the **Sprint Backlog** often in the form of an ‘Information Radiator’ or ‘Big Board’.



# The Information Radiator

- Radiates information at anybody getting close to it
  - Typically Index Cards and/or Post-it notes on a White Board or Pin Board

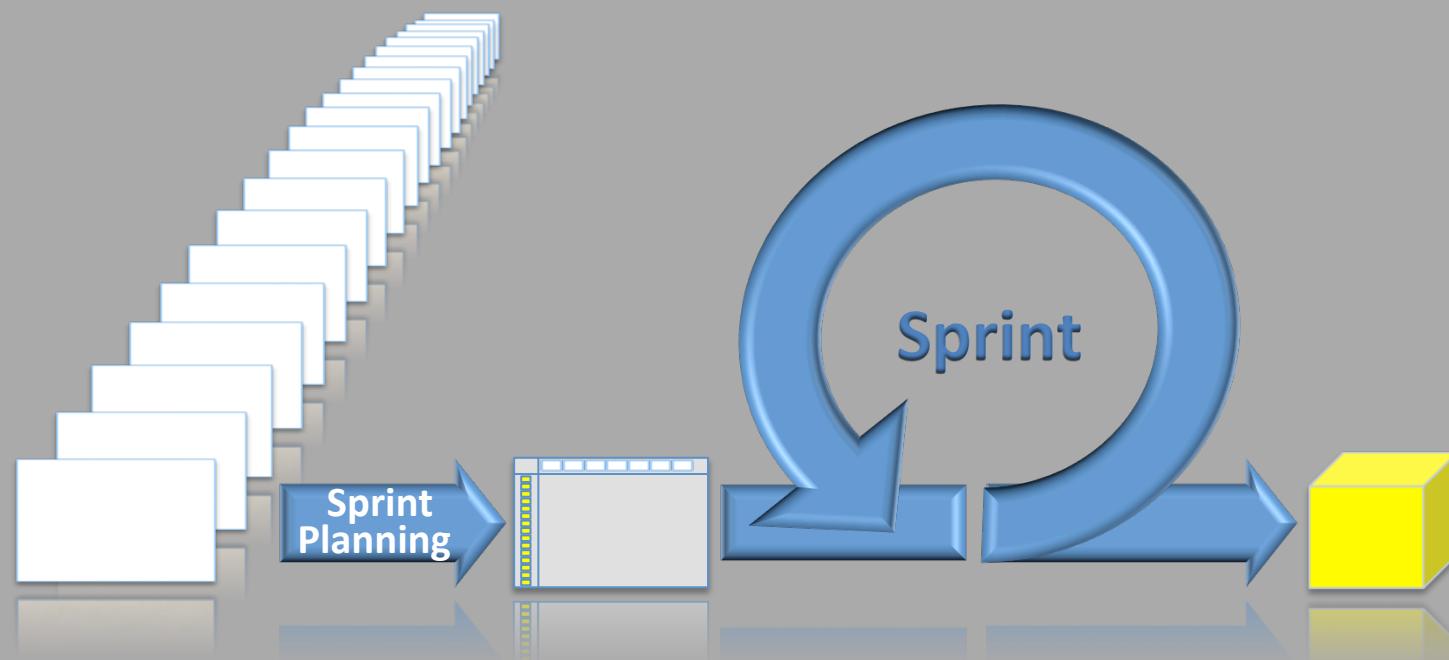


- Shows progress towards realising timebox objectives
  - Status of stories and tasks and who is working on what
  - All work needed to fulfil stories is captured in some way
  - Total estimated time to complete all work (Burndown chart)
  - Issues and blockers

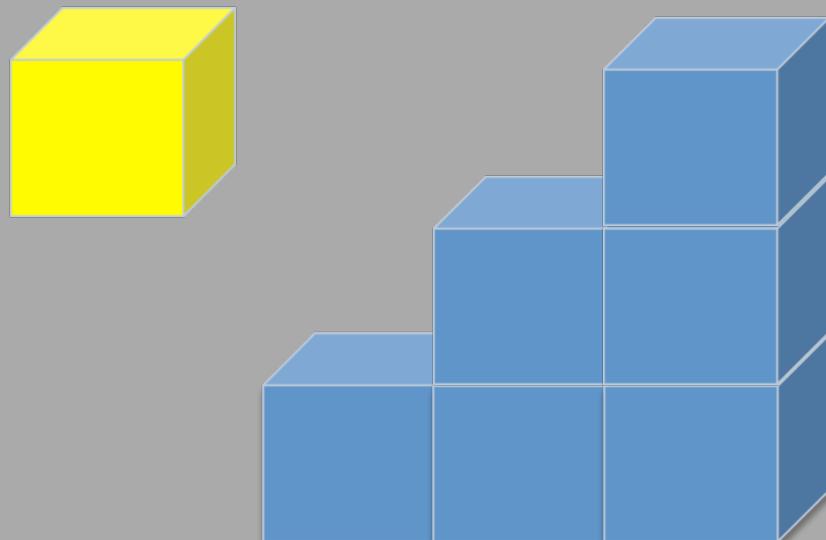
# Process, Events and Artefacts

A Sprint is a period of (typically) two to four weeks in which the Scrum Team collaborates to deliver fully tested, production ready software.

Multiple Sprints may combine to form a **Release** – an increment of the product that is intended to be deployed into live use.

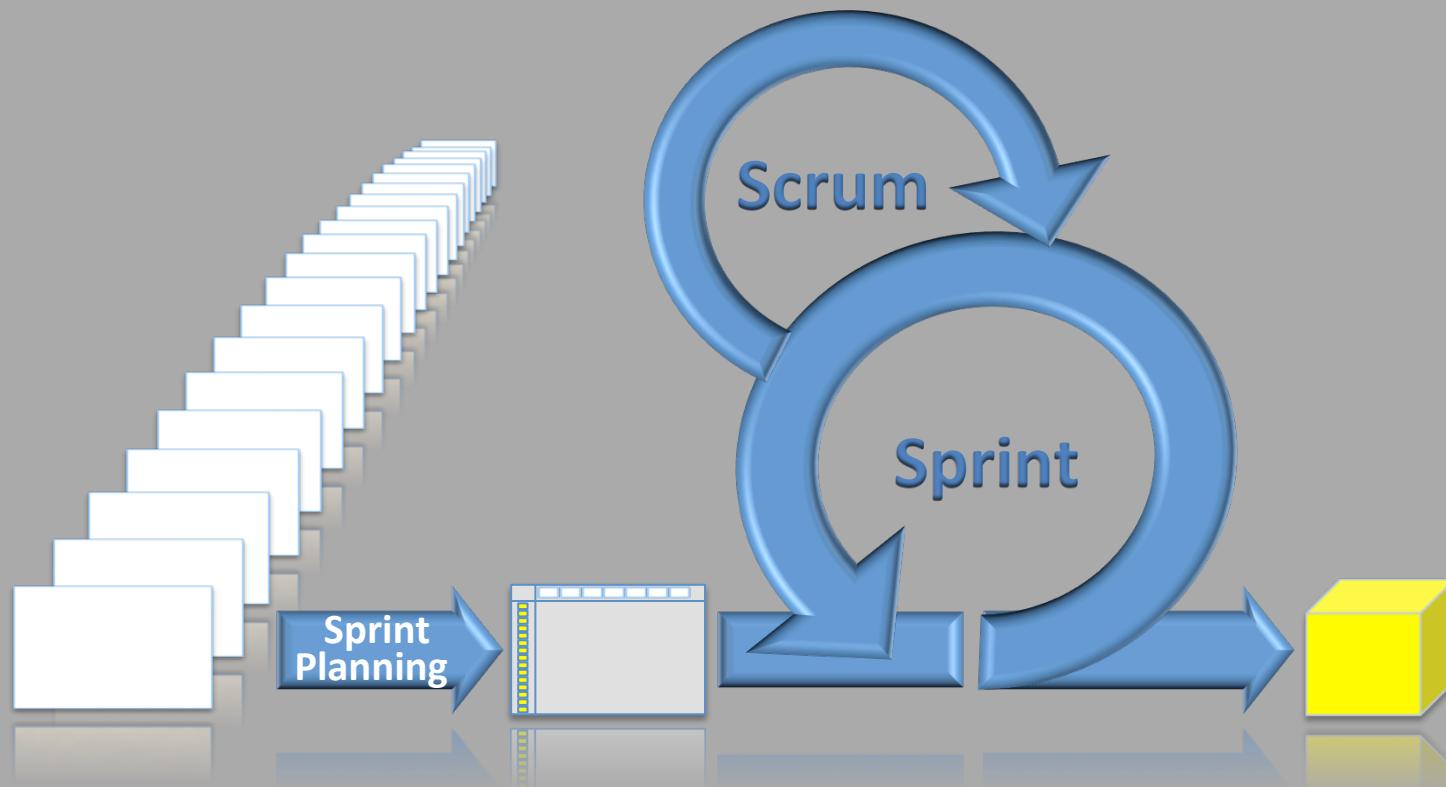


- Fully working, fully tested subset of the product
- Built to full production quality
- All agreed stories “done”
- Ideally integrated with previous Increments
- Could be shipped if it made sense to do so



# Process, Events and Artefacts

Each working day of the Sprint, the Scrum Master facilitates the **Daily Scrum** – a short event during which the team share information on their progress and re-affirm their mutual focus on the product Increment to be delivered at the end of the Sprint. The Scrum takes around 15 minutes and is usually held standing up.

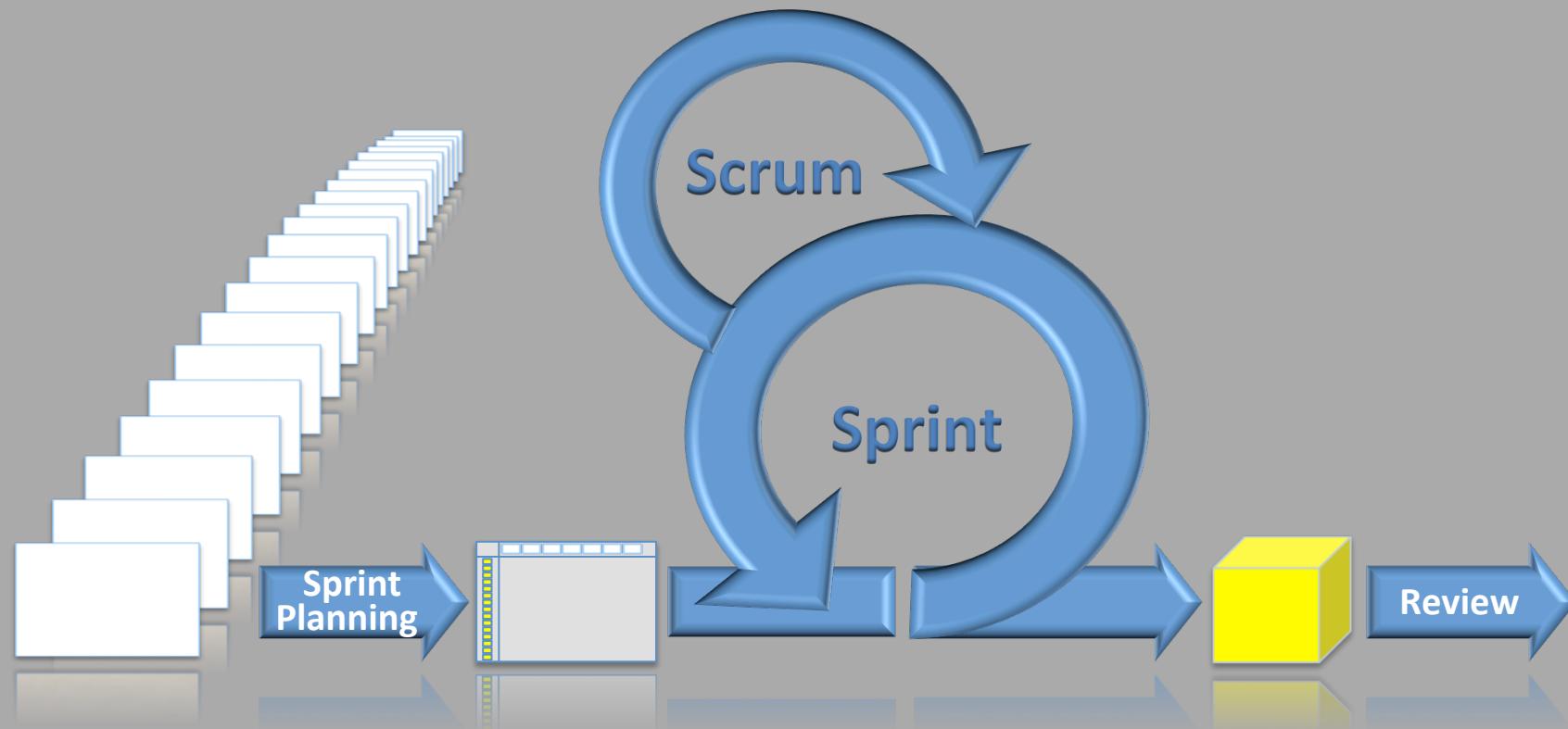


- By the team, for the team
  - Entire Scrum Team
    - including the Product Owner
- Every day, same time, same place
  - Ideally to start or wrap-up the day
- Short
  - 2 minutes per person + 2 minutes
  - Helped by standing up
- Focussed
  - Individual questions
    - What have I done since the last stand-up
    - What will I do before the next stand-up
    - What is blocking my work
  - Team sanity checks commitment to timebox objectives
  - Flagged issues resolved after the stand-up not during



# Process, Events and Artefacts

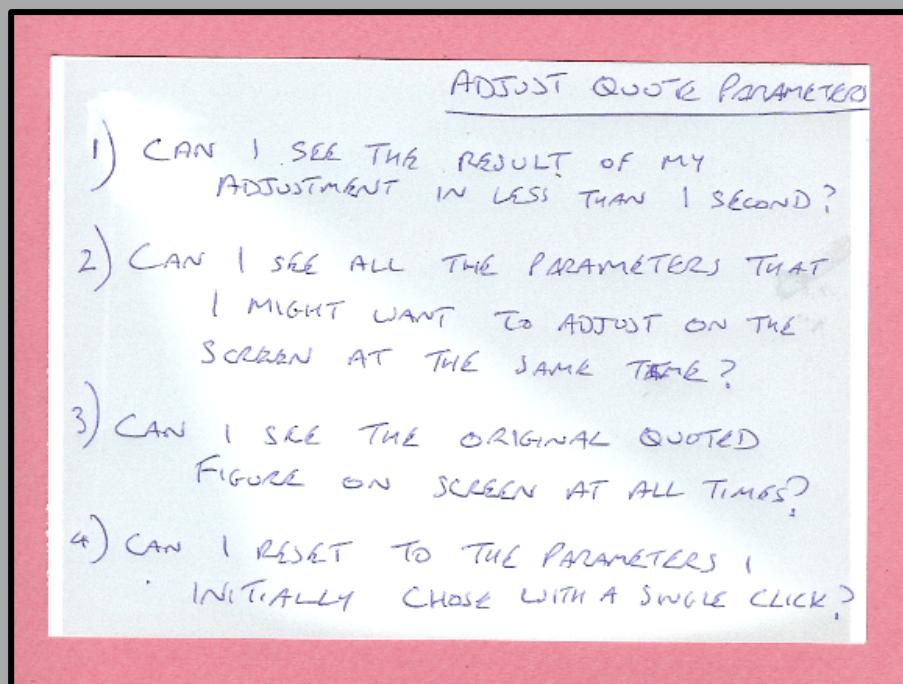
Each Sprint ends with a **Sprint Review**, an event that provides the team with an opportunity to showcase what they have delivered during the Sprint. Wherever possible this is a demonstration of 'working software' fulfilling Stories acknowledged as '**Done**' by the Product Owner



# Definition of 'Done'

- ➊ A common understanding what 'Done' means helps the Scrum Team:

- Estimate the work needed to fulfil a Story and deliver an Increment
- Deliver a solution that meets the business need
- Meet agreed implementation quality standards



Usually written on the back of the story card

Posed as a question (answer should be 'yes')

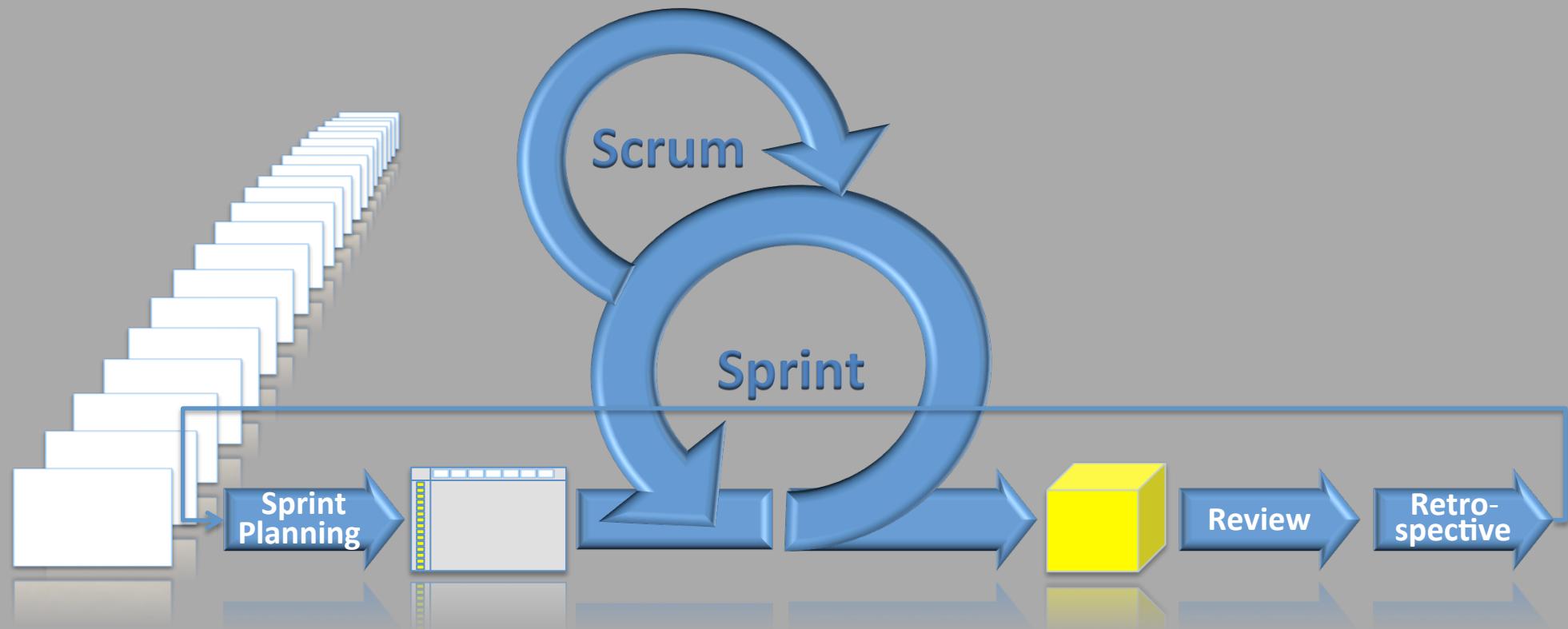
May drive the definition of Tests

Often reflecting non-functional requirements

All criteria must be met for a story to be 'Done'

# Process, Events and Artefacts

The final event in the process is the **Sprint Retrospective**. Scrum is an empirical process and the retrospective provides the team with an opportunity to *Inspect* the effectiveness of the process and where necessary *Adapt* it to better suit the working environment.



# Roles: Product Owner

- A single individual fully empowered by the business they represent to maximise the value of the product and the work of the Team
- Responsibilities. To:
  - Define the items in the Product backlog clearly and concisely
  - Manage the Product Backlog for the Scrum Team, ordering backlog items for their attention
  - Provide depth and detail for backlog items as required
  - Continually verify that the Team are building a valuable product that meets the business need



# Roles: Development Team

- Professionals who do the work to incrementally deliver a potentially releasable Increment of the product by the end of each Sprint
- A single self organising, cross-functional Team of 4-9 individuals
  - No titles within the team – everybody is a ‘Developer’ regardless of the work being performed by the individual
  - Everybody in the team commits to do whatever work is required to deliver the Increment regardless of their specialism



# Roles: Scrum Master

- ➊ Responsible for ensuring Scrum is understood and enacted
  - Champions and Facilitate the Scrum Events
  - Shields the Team from noise and own any blocking Issues
  - Help the Team stay focussed on Delivery and Quality
  - Champions and facilitates a productive working environment for the team in line with the Scrum theory, practices and rules



# Conceptually Simple...

- 4 Events
  - Sprint Planning
  - Daily Scrum
  - Sprint Review
  - Retrospective
- 3 Roles
  - Scrum Team
  - Scrum Master
  - Product Owner
- 3 Artifacts
  - Product Backlog
  - Sprint Backlog
  - Increment



- Often much more difficult
- Requiring
  - a complete change of mindset
    - Formality  $\neq$  Discipline
    - Documentation  $\neq$  Understanding
    - Bureaucracy  $\neq$  Quality
  - A major shift of emphasis from Process to People



# 3 Key Concepts

## ● Collaboration

- A process where two or more people work together to realise a shared goal
- more than the intersection of common or related goals
- a deep, collective, determination to reach an identical objective

## ● Discipline

- behavior in accord with agreed rules of conduct; behavior and order maintained by learning and self-control
- In a Scrum Team context, rules of conduct are defined, agreed, coached and policed from within

## ● Empowerment

- The process of enabling people to do what they are both qualified for and being held accountable to do.
- Scrum teams need to be empowered to self-organise – to have the power to decide who will do what and when to achieve the Sprint Goal

 Product Owner

- Owns and Manages the Product Backlog
  - Liaises with all project stakeholders managing change and expectations as required
  - Reviews and prioritises all items going on to and being removed from the product Backlog
- Agrees Candidate Stories for the Sprint Backlog with the Team for each Sprint
- May *request* changes to Stories for in progress Sprint
- May terminate a Sprint if changes or other issues make the Sprint objectives unachievable or irrelevant

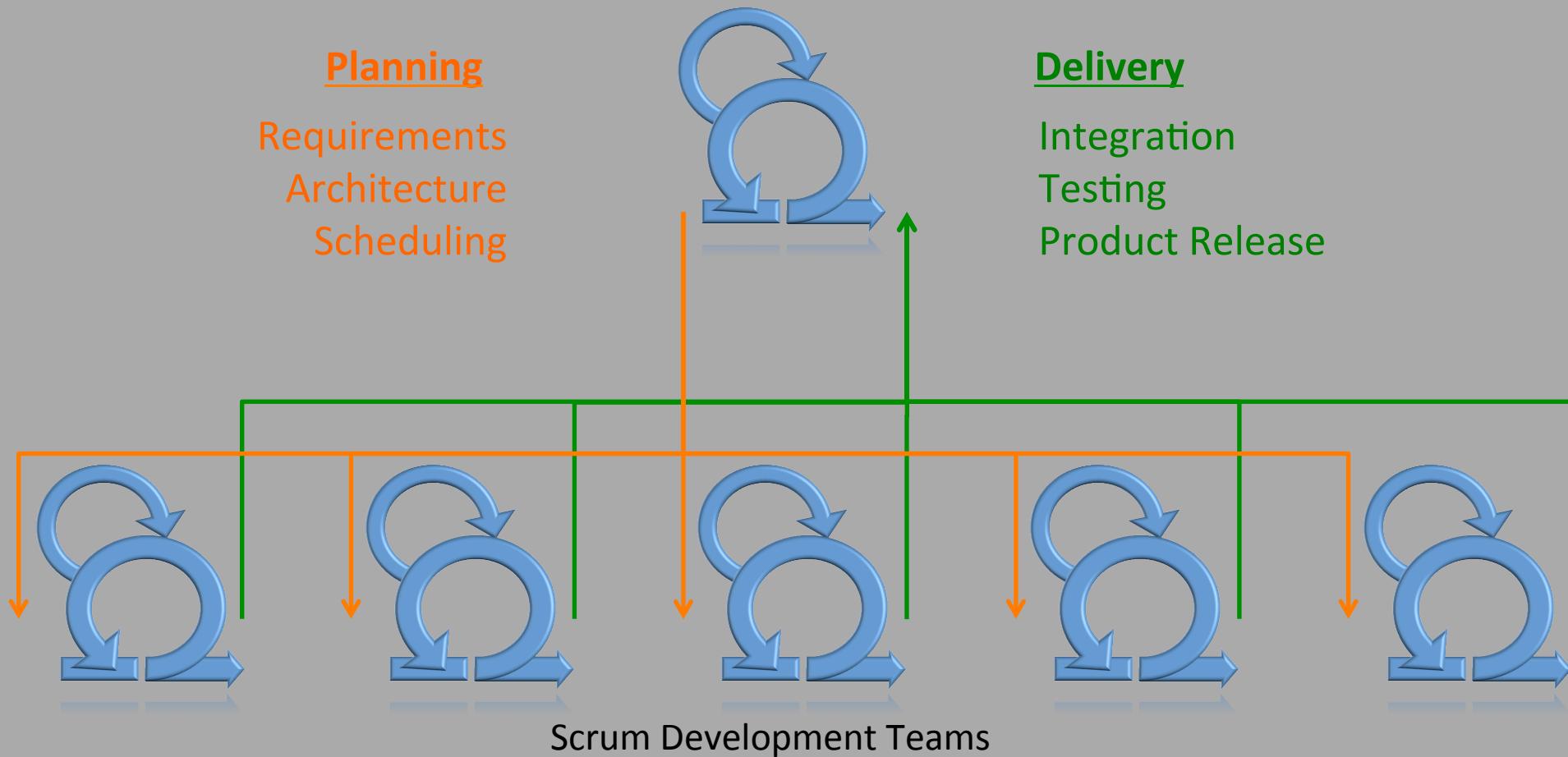
 Team

- Owns and Manages the Sprint Backlog
  - Agrees the Candidate Stories for the Sprint with the Product Owner
  - Defines, estimates and prioritises all work within the Sprint
  - Manages change related to depth and detail of understanding of Stories in the Sprint
- May, *at their sole discretion*, accept changes requested by the Product Owner for an in progress sprint
  - But only if the Sprint objectives and timeframe are not compromised by doing so

**Note:** Strictly 'by the book' no change is allowed once the Sprint has been planned but this hard line is normally 'softened' to allow change if the Team believe they can accommodate it *and/or* if Stories now deemed to be of lower priority can be swapped out in favour of the new higher priority work

## Scrum of Scrums Team

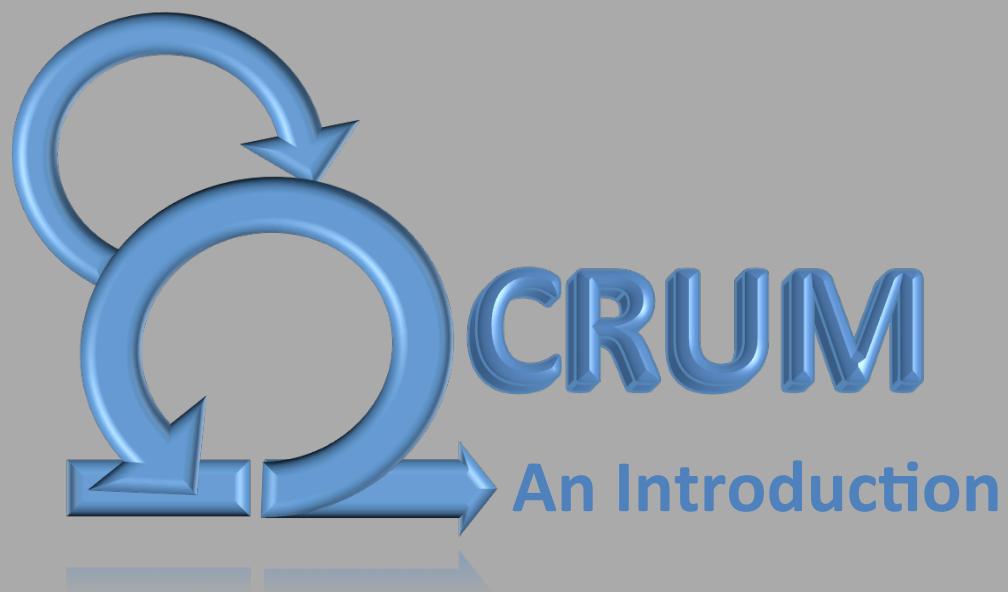
Permanent Team Members plus representative from each Development Team



- The DSDM Agile Project Framework for Scrum
- Come and find out how to blend Scrum's team-focussed approach to Agile with DSDM's project-focussed approach
- Take away your complimentary copy of the recently published White Paper



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Thank you

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