### How Scrum works

Pashun Consulting Limited

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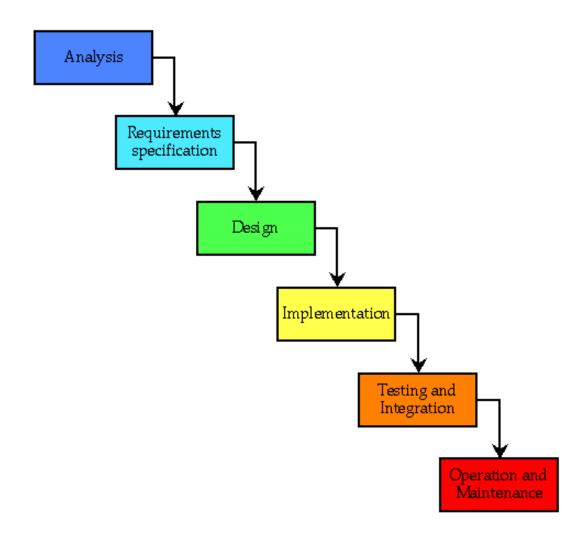
#### Chapters:

- 1. Introducing Scrum
  - What is Scrum
  - Theory
  - Roles, Artifacts, Rules and Practices

#### 2. Overview

- Root Cause analysis
- Stakeholders
- Scrum Master, Product Owner and Team
- Product Backlog
- Release Planning Meeting
- Sprint
  - Sprint Planning Meeting
  - Daily Scrum
  - Deliver Working Increment
  - Sprint Review
  - Sprint Retrospective
  - Sprint and Release Burndown

### Waterfall Model



### Common Issues

- Vague requirements not tied down
- Unrealistic expectations (deadlines, estimates, scope)
- Changing requirements too often / Scope creep
- Defects/Issues hamper progress
- Disappearing Resources ('people pinching')
- Support issues impact project work

## Introducing Scrum

### Founders of Scrum

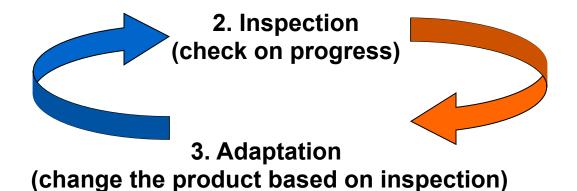
Developed by Ken Schwaber and Jeff Sutherland

### What is Scrum

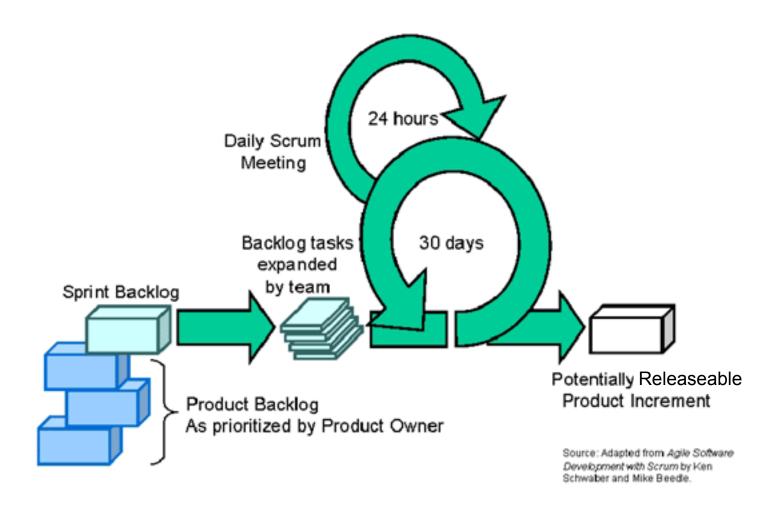
- "an Agile process that can be used to manage and control complex software and product development using iterative, incremental practices"
- Self organizing cross functional teams
- Working in Iterations:
  - Allows business flexibility to change requirements
  - Gives development team certainty within iteration

## Scrum Theory

- Based on Empirical Process Control Theory
  - iterative
  - incremental
- Consists of 3 principles
  - 1. Transparency (done means done)



#### The Scrum Skeleton



# Scrum Roles, Rules, Timeboxes and Artifacts

#### Roles

- Scrum Master
- Product Owner
- Development Team

#### Scrum Events

- Sprint
- Sprint Planning Meeting
- Sprint Review
- Sprint Retrospective
- Daily Scrum

#### **Artifacts**

- Product Backlog
- Sprint Backlog
- Increment of Releasable Product

# Establish Scrum Master, Product Owner and Team

#### Scrum Master

- Understands scrum rules and practices.
- Responsible for removing impediments to delivery and
- Helps team understand how to self organize and work in a Scrum manner.

#### **Product Owner**

- Creates requirements on behalf of business
- Prioritizes as per business needs
- Responsible for managing product backlog

#### Team

- Create each increment of shippable product
- Self organizing
- Collaborative
- Optimum size of between 3 and 9
- Skilled in whatever is needed for project eg. design, Java, sql, information architecture

### **Build Initial Product Backlog**

Feature from a User's perspective

As a User

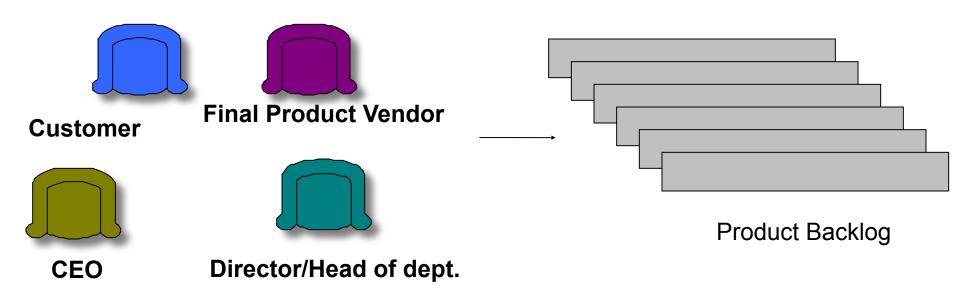
I want a News Page

**So that** I can see the top 10 news stories

**User Story** 

### **Build Initial Product Backlog**

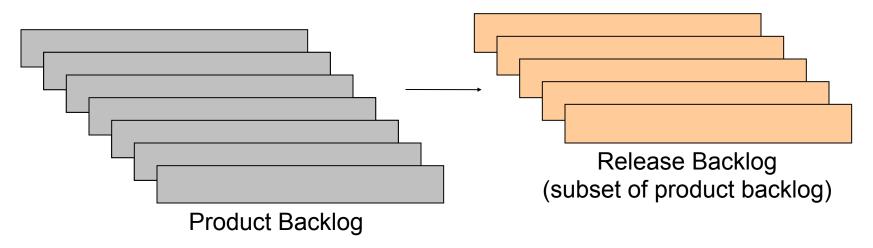
- Organise Stakeholder meetings
- Negotiate between stakeholders
- Find common ground
- Manage Changing requirements as needed



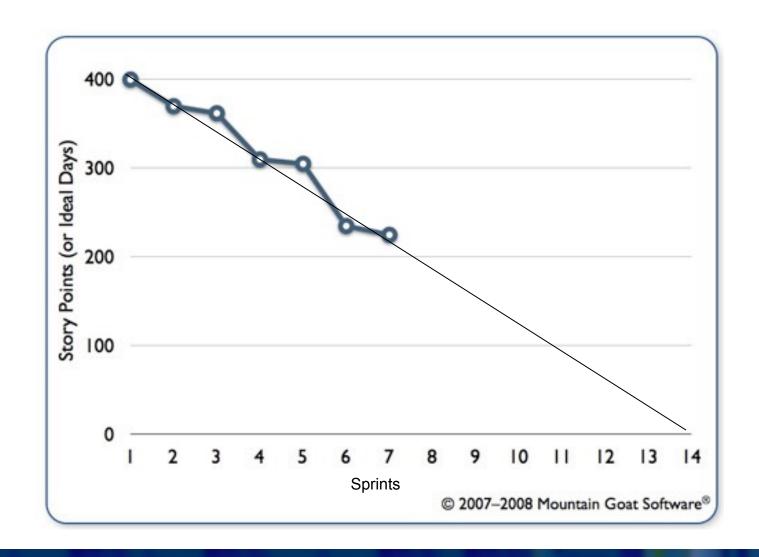
# Release Planning Meeting

Note: Release Planning is not an official event in scrum but still recommended for complex projects.

- select items from product backlog prioritised for first release
- give high level estimates for each item (eg. story points or ideal days)
- Release backlog is created

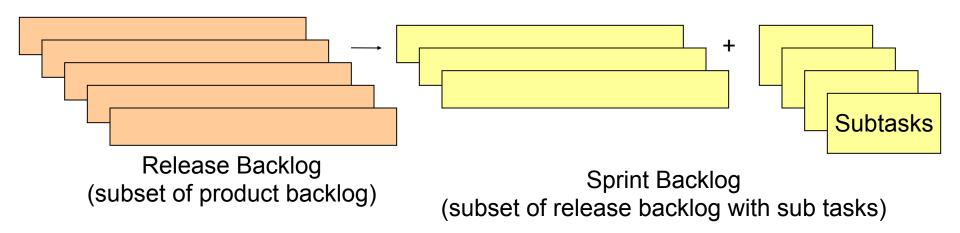


### Release Burn Down



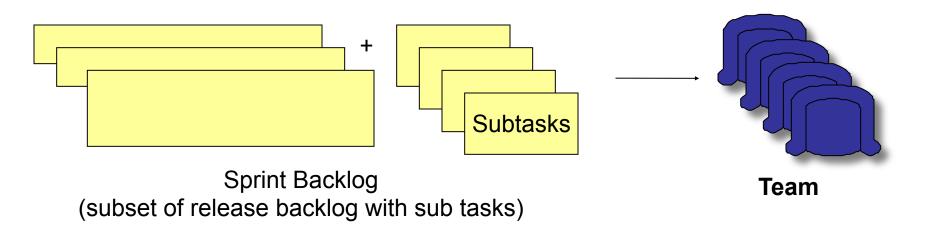
# **Sprint Planning Meeting**

- Prioritised selection of items chosen from release backlog
- The team break the items (stories) into sub tasks
- Sub tasks are given estimates (hours) and stories also given estimates (complexity points/ideal days)
- Agree velocity
- Pick stories that fit into velocity
- Estimates and stories form Sprint backlog



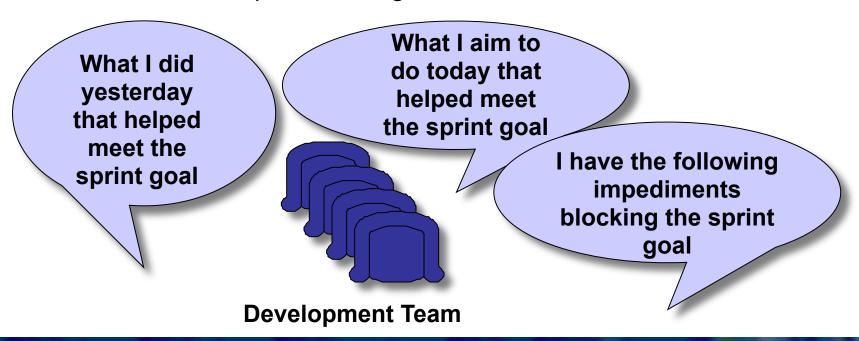
# **Sprint**

- less than a calendar month
- Cannot change items in sprint backlog
- Team works on tasks from Sprint Planning meeting
- Aim to complete all tasks (and therefore items in backlog)
- Any items not completed are rolled over to next sprint

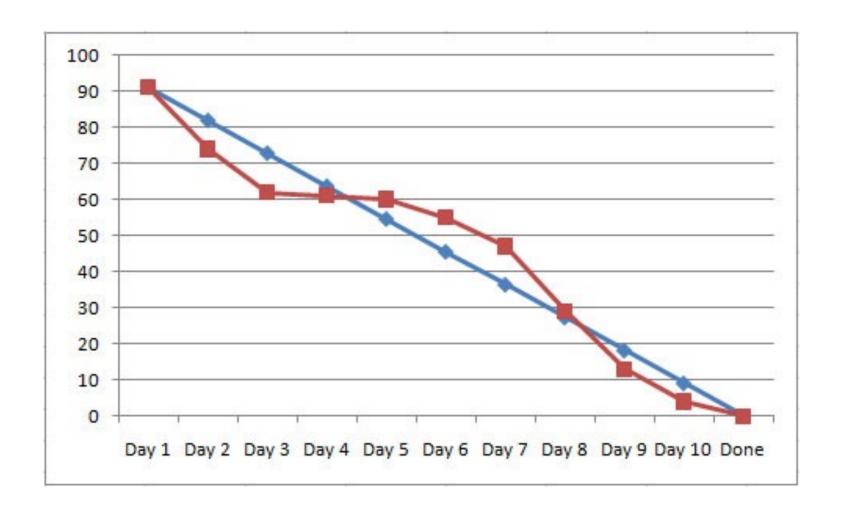


### Daily Scrum

- Whole development team attends
- Meeting held in same spot daily
- Scrum master facilitates but does not have to be present
- One person speaks at a time
- Burndown and sprint backlog are visible

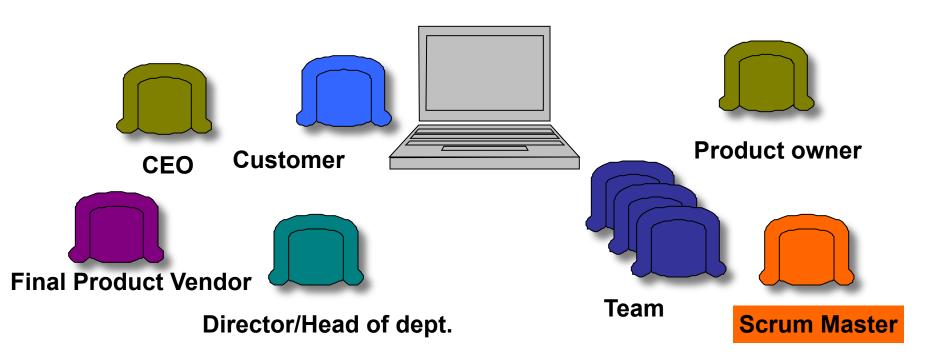


# Sprint Burn Down



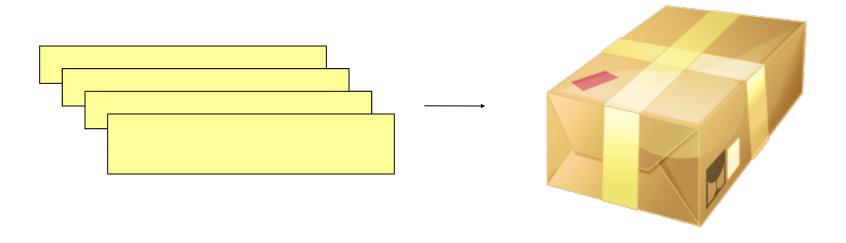
# **Sprint Review**

- Demo of the sprint's functionality
- Stakeholders present
- Product owner and Stakeholders discuss backlog
- Stakeholders ask questions and suggest product backlog items



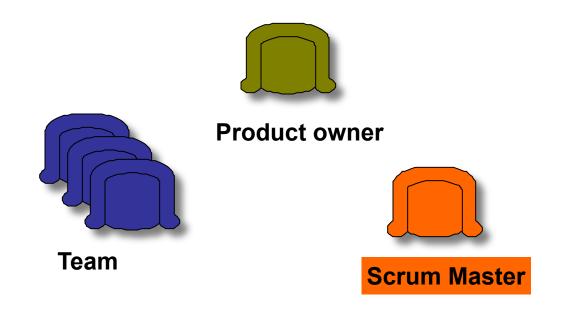
### Increment

- Deployable to the live system (potentially releasable)
- Collection of all features in the sprint



### **Sprint Retrospective**

- What went well this sprint?
- What could we improve next sprint?
- E.g. Dev Environment, working practices, communication



### How Scrum works

Thanks for your time

# **Any Questions?**