



# Scrum Is an Agile Project Management Process Wrapper with...


## Three Roles...




**PRODUCT OWNER**




- Interface between the Scrum Team and Business Management and the customer
- Owns 'doing the right thing' via transforming business goals into actionable deliverables
- Maximizes ROI by prioritizing deliverables in the Product Backlog
- Manages the work, sets the priority, leads the Scrum Team




**DEVELOPER**



- The people who commit and directly work to implement backlog items
- Cross-functional: Drawn from many functional roles; able and willing to work across roles
- Self-managing: Decides collaboratively who does what in the sprint
- Will do what is needed, never says "It's not my job!"



**SCRUM MASTER**



- Interface between the Scrum Team and Engineering Management
- Owns 'doing the thing right' via enforcement of Scrum, engineering processes/practices
- Manages the process, coaches and supports the Scrum Team and the PO



**BUSINESS MANAGEMENT**

Responsible for understanding customers and their problems, and then devising strategies and solutions that leverage the organization's technical expertise and domain knowledge to create a competitive advantage



**SCRUM TEAM**

Comprised of 5 to 10 Developers (the Development Team), plus a Scrum Master and Product Owner

Provides input to and accepts the product direction as set by the Product Owner

Provides input to and follows the engineering standards, policies, and practices set by Engineering Management and reinforced by the Scrum Master

Utilizes the Scrum process, as established by Engineering Management and coached and reinforced by the Scrum Master

Collaborates to identify, self-assign, and perform the activities required to implement backlog items to fulfill the Definition of Done (DoD)



**IT/ENGINEERING MANAGEMENT**

Responsible for establishing strategies, standards and policies around technology, project management, requirements management, architectural and design approaches, and product quality to create a competitive advantage

## Four Meetings...

**The Deming Cycle**

**PLAN** - Create a testable hypothesis

**Do** - Perform an experiment to validate or disprove your hypothesis

**CHECK** - Inspect the results of your experiment; understand and learn from the results

**Act** - Revise/adapt goal, strategy, process, policy, or practice based upon learning; repeat the cycle

**Refinement Cycles**

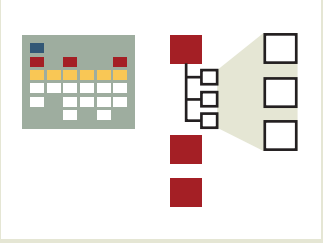
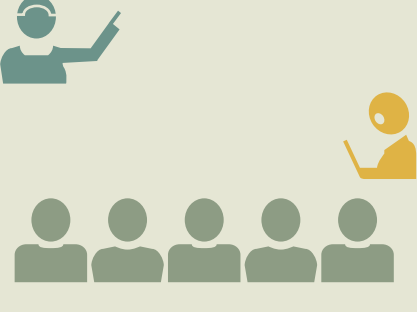
- Refine backlog items to 'ready' in a series of one to two-hour meetings
- Stop refinement when you have about two sprints' worth of refined items

**Sprint Cycles**

- One to four weeks, with a preference for shorter sprints
- Two-week sprints are a best practice

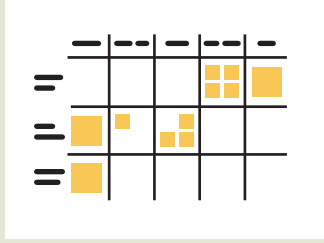

*Each sprint is a Deming Cycle, using inspect and adapt on both product and process to achieve better outcomes.*

**P PLANNING MEETING**



- PO presents refined backlog 'ready' queue items, asks Development Team to commit to as many as they can successfully complete
- Development Team decides on the items in the sprint goal, based upon knowledge, understanding, and capacity
- The committed items move into the sprint as the sprint backlog
- SM facilitates, coaches the meeting

**D DAILY STAND UP**

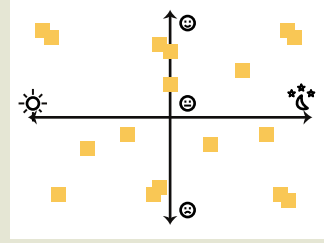

- Held daily except for first and last days of the sprint
- Timeboxed to 15 minutes or less
- The Scrum Team gathers to report, inform, and commit to each other, via the Three Questions
- SM facilitates, coaches the meeting
- PO observes, participates

**C A SPRINT REVIEW**

- At the end of the sprint, the Scrum Team meets to demonstrate completed sprint backlog items for acceptance by the PO
- The PO accepts or rejects items, based on acceptance criteria and DoD compliance
- Stakeholders are invited to share perspectives and provide feedback
- Where we use inspect and adapt to improve the product

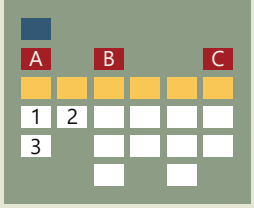
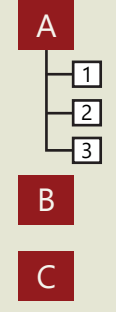
**C A SPRINT RETROSPECTIVE**

- The final meeting of the sprint, where the Scrum Team focuses on successes and failures and devises process and practice changes to improve their ability to deliver
- A closed meeting, for the Scrum Team only, with the option of inviting others
- Previous changes are inspected, future changes with success criteria are proposed
- The Scrum Team agrees on the improvements to implement during the next sprint
- Where we use inspect and adapt to improve the processes and practices used to develop the product

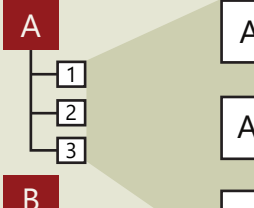
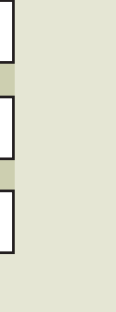
## Four Artifacts...

**PRODUCT BACKLOG**

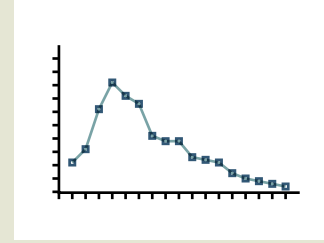
- The prioritized list of deliverables for the product, perhaps spanning several releases
- Managed and ordered by the PO with input, assistance, and feedback from stakeholders
- Contains scope in the form of deliverable increments of the product (Product Backlog Items)

**SPRINT BACKLOG**

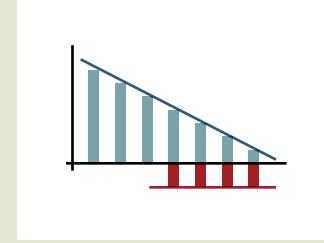
- Chosen during sprint planning
- Comprised of a committed subset of the highest priority Product Backlog Items as proposed by the PO, accepted by the Development Team
- Items and priority are fixed for the duration of the sprint, no modifications happen without replanning and recommitment

**SPRINT BURNDOWN CHART\***



- Tracks progress on remaining task work for the duration of the sprint
- Updated daily, after Developers update individual task status
- Used to verify progress towards the sprint goal and to spur corrective action

**RELEASE BURNDOWN CHART\***



- Tracks progress across sprints on a set of backlog items in a release ('release backlog')
- Updated at the end of each sprint by the SM, shared with the organization
- Used to track progress and forecast completion on releases and to spur corrective action

\*Although not currently in the Scrum Guide, these artifacts have proven essential for effective Scrum implementations.

## And Three Steps to Commitment

Confusing estimates, targets, and commitments for delivering scope is one of the biggest mistakes organizations can make. Invalid commitments result in late or failed projects, lower quality, increased technical debt, dissatisfied customers, decreased staff morale, and continued deleterious impact on the organization's future ability to innovate and deliver.

### TARGETS

- Targets for scope, schedule, and budget are the responsibility of the business owners, typically Product Managers
- Targets do not magically turn into commitments without buy-in and agreement from Developers



### ESTIMATES

- Estimates on the magnitude of scope are the responsibility of the people doing the work; the Development Team or their representatives
- Key estimation rule: estimate effort, derive duration
- Take estimation seriously; never give an estimate that you will not commit to



### COMMITMENTS

- Commitments are the result of a mutual negotiation between the people who do the work and the people who fund it
- Developers should be willing to make reasonable yet aggressive commitments and then work to achieve them
- The business should be willing to accept reasonable commitments, to not force unrealistic commitments, to accept that changes in scope may require changes in commitment, and to expect that teams live up to their commitments



**THE GOLDEN RULE OF COMMITMENTS**  
Commit to what you can deliver, and then work to deliver on your commitment!