Scrum Process Framework

The Scrum process framework was originally named and described by Ken Schwaber, Jeff Sutherland, and Mike Beedle in the mid 1990s. It takes its name from the comparison to Rugby made in the 1986 HBR article: "The New New Product Development Game." In 2001 the term "agile" was coined to describe processes that focused on collaborative, iterative and incremental development approaches. Originally Scrum was one of the named processes that called themselves "agile" including processes such as Extreme Programming, Feature Driven Development, Crystal, and others. Today Scrum is the dominant process framework in part because of its simplicity.

Scrum is intentionally incomplete. It's a framework that relies on inspection and adaptation to improve and add to the basic process framework.

Roles

The Scrum Framework uses three "super roles" that satisfy the basic concerns of software

The **Product Owner** is responsible for building the right product,

The **Team** is responsible for building the product right

The Scrum Master is responsible for keeping the process healthy so people can perform at their best

Traditional software development roles are often mapped to one or more of these super roles.

Artifacts

The basic artifacts in Scrum are there to aid with visibility and transparency.



The **Product Backlog** makes the product features and plan visible.



The Sprint Backlog makes the team's delivery plan visible.



Burndown Charts show the pace of work in progress, what's accomplished, and what's

Ceremonies

Scrum ceremonies are working meetings where the team plans, inspects, and adapts.



Sprint Planning is where the team creates their delivery plan for highest priority product backlog items and commits to the amount of work they believe they can complete during a fixed-length Sprint.



The Daily Scrum is for the team to reflect on where they are so far with their sprint commitment and plan their day's work.



The Sprint Review and Retrospective is where the team inspects the product they've produced, the performance relative to their plan, and adapts their process, product, and plan in response.



Product

Backlog ss

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Product Owner

A successful product must be valuable to the business, usable to users, and feasible to build. While a single person may fill the product owner role, it's common for a cross functional team to hold product ownership responsibility.

> is responsible for creating and maintaining a **Prioritized Product** Backloa



The team works together in the Sprint Planning Meeting to create a Sprint Backlog that contains the work tasks they'll need to deliver working software.



The product owner shows up 'ready" with details for high priority backlog items. The team builds their plan and



turn backlog items into working software

Release **Burndown**

Makes progress visible for the the upcoming release. Will me make our date? Or, are we fooling ourselves?



The team is composed of all the roles and skills necessary to build, test, and document software of sufficient quality that it could be released. The team usually includes:

- developers
- architects
- testers
- business analysts
- UI designers
- technical writers

Daily Scrum

Reflect on what was done the prior day Plan what to do today Raise issues stopping progress

Day

The smallest cycle of work - you can't extend this one if you don't finish what you planned

Sprint

A fixed time-box for delivering software usually 1-4 weeks

Repeat

Repeat as necessary -

probably forever



Sprint Burndown

Makes progress visible during this sprint. Are we making progress? Where is work getting bottlenecked?

keep the basis for our decisions, our work, and our progress visible. Feedback: Inspect & Adapt

Transparency & Visibility

Values & Principles

All agile processes, and most effective processes, emphasize core values and principles that guide process tailoring and adaptation. Below is a distillation of core Scrum principles. Use these principles to

assess process health and guide routine process improvement.

We continuously assess the quality of the product we're building, the quality of our plan, and the effectiveness of our process. Then, using that understanding, adapt or make changes to the product design, the plan, or the process.

We're open and transparent about the way we make decisions and work. We

Responsibility: Individual and Team

We take responsibility as a team. We self-organize in a way that helps us keep our commitments. We understands that we collectively share goals. In a healthy Scrum team, you'd never hear the phrase:

I, as an individual, take responsibility for my commitments to the team, I do so by understanding my role, and my work and then take action to keep my commitments. I actively take responsibility for building the skills I need to help me succeed

The Scrum Master keeps a watchful eye on everything, coaching, facilitating, and removing impediments that block progress



Scrum Master

The Scrum Master focuses on making sure the process is working. that everyone understands and fills their role, that collaboration is effective, that visibility is kept high. and that the team keeps focus on the goals of the current sprint and product release.

The Scrum Master is a process facilitator, NOT process policeman.

Potentially Shippable **Software Increment**

It may take more software to be valuable to users, but it had better not require more testing and bug fixing



Sprint Review & Retrospective

Demonstrate and critique the working **Product**

Discuss the **Progress** relative to the plan

Reflect on the way you've been working (your Process) and change it as necessary



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