THE Intersect GROUP

WHAT IS SCRUM?

Chances are good that by now, you've heard of Scrum, but what is it and why would anyone use it?

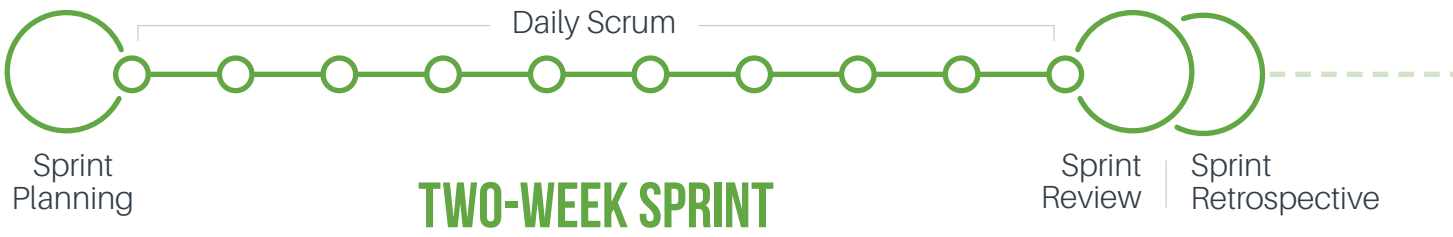
A HIGH-LEVEL OVERVIEW

Scrum is a process framework used for developing, delivering, and maintaining products. You might have noticed that this definition did not mention either Agile or software. While neither Scrum nor any other framework appears in the Agile Manifesto, Scrum may be the most popular Agile methodology in use today. And just as Lean has roots in manufacturing but is now used throughout all parts of the organization, Scrum is now applied across a wide variety of disciplines that go well beyond software development.

Scrum has roots both in manufacturing and in software development. In 1986, Hirotaka Takeuchi and Ikujiro Nonaka wrote a paper for the Harvard Business Review that incorporates concepts from lean manufacturing to describe a hyper productive state containing the initial concepts of Scrum – and even used the term "Scrum" in their paper. In 1993, Jeff Sutherland, John Scumniotales, and Jeff Mckenna fine-tuned and expanded on the initial concepts to describe the Scrum framework. In 1995, Sutherland and Ken Schwaber presented their experiences at an industry conference. Along the way, others have contributed features now incorporated into Scrum.

CORE SCRUM CONCEPTS

A number of core concepts describe both the Scrum processes and ideals. Five Scrum values: Commitment, Focus, Openness, Respect, and` Courage, guide the work and team members' behaviors and actions. Without getting too deep into details, the implementation of Scrum relies on a number of fundamental concepts described by Sutherland and Schwaber pertaining to events, roles, and artifacts (for those who want more detail see The Scrum Guide™).



Events

It's difficult to talk about Scrum events without first describing the Sprint. Of all events, the Sprint is the backbone of Scrum.

The Sprint serves as a "container" for the other Scrum events. Think of the Sprint as a work cycle of no more than one month in duration at the end of which a finished, useable, and "potentially releasable Product Increment" has been produced. In addition to the term "Product Increment", it's also important to understand the term "Product Backlog" as used in describing Scrum events.

The Product Backlog is a prioritized list of all the things that could be done to build or enhance the product. A Product Increment is the sum of backlog items finished during a Sprint with the goal of creating releasable functionality at the end of each Sprint, and it should be "potentially shippable" meaning that it can be deployed without breaking the system and hopefully delivering value in the process.

All Scrum events promote consistency and reduce the need for additional, non-Scrum defined meetings. Scrum events are "time-boxed" and have a maximum, specified duration and each event offers an opportunity to inspect and change something.

Scrum events include:

The Sprint

Sprints are the timebox. When one Sprint ends, the next one begins. After the Sprint starts, its duration doesn't change. The current industry standard is two week Sprints.

Sprint Planning

The entire Scrum Team, including the Product Owner and the Scrum Master, plans the work to be performed during the Sprint.

Daily Scrum

A 15-minute meeting, held every day. It is during this time that the Development Team plans the work for the following business day.

Sprint Review

A meeting held at the end of the Sprint to assess the Product Increment and, if necessary, modify the Product Backlog.

Sprint Retrospective

A meeting held after the Sprint Review and before the next Sprint Planning that allows the Scrum Team to inspect itself, the backlog, and the process and plan for improvements to be implemented during the next Sprint.

Roles

Scrum Teams are cross-functional in that they contain individuals with all the skills and knowledge necessary to accomplish their work without involving others who are not team members. Each Scrum Team has a Product Owner, a Development Team, and a Scrum Master.

Product Owner

The one person responsible for maximizing the value of the product resulting from the efforts of the Development Team. This person prioritizes the Product Backlog based on their continuous knowledge of the current and perceived needs of their customers and accepts work once completed by the Development Team.

Development Team

The professionals performing the work who create the increment of "Done" product by the end of the Sprint. This cross-functional team consists of people who have all the skills needed to create the Product Increment. Team members organize and manage their own work. In general, the optimum team size falls between three and nine members – small enough to move energetically, yet large enough to complete the work.

Scrum Master

Plays the roles of both servant leader and facilitator for the Scrum Team. They help everyone understand the practices, rules, and values embodied by Scrum. They manage the process for the exchange of information within and outside the Scrum Team. In various ways, they serve the Product Owner, the Development Team, and the Organization.

Artifacts

An artifact is a human-made tool designed to solve a problem. The three main artifacts described in Scrum are the Product Backlog, the Sprint Backlog and the Product Increment. These artifacts make key information available and promote a shared understanding of the work undertaken.

Product Backlog

As defined earlier, this is an ordered list of everything known to be needed in the product. Its earliest iteration contains the initially known and best-understood requirements at the time. As it is never complete, it evolves in concert with the product and the environment in which it will be used. It lists all product features, functions, requirements, enhancements, and fixes needed in future releases. The Product Owner is responsible for the Product Backlog, including its content and availability, and constantly tweaks the order of items in the backlog based on the changing priorities of the users.

Sprint Backlog

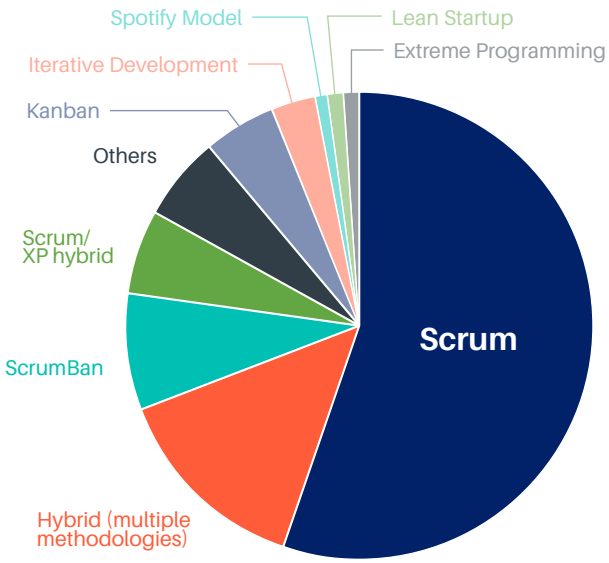
The Product Backlog items selected for the Sprint along with plans for delivering the Product Increment and attaining the Sprint Goal. It is based on a forecast made by the Development Team identifying the functionality in the next increment and the tasks needed to create a "Done" increment. The team does not put more work into the Sprint Backlog than it can be reasonably expected to deliver based on its past performance.

Product Increment

The sum of all Product Backlog items finished during a Sprint and the value of the increments of all of the preceding Sprints. By Sprint's end, the new increment should be "potentially shippable", meaning that it should be in useable condition and ready for release to the customer.

Scrum can be highly effective, but it's not always the best fit. Some organizations apply variations of Scrum that are better suited to the nature of their work.

We'll address a number of these in a future article.



SCRUM IS NOT JUST FOR TECH TEAMS

Although Scrum and Agile were originally created for software development, other business disciplines including marketing, finance, sales, and product development among others have adopted Scrum principles. By focusing on having a prioritized backlog, maintaining transparency, empowering team members, delivering value in smaller increments, integrating customer input and feedback, and reviewing and revising processes to continuously improve performance, productivity can be enhanced regardless of the discipline.

Recent survey results on Scrum usage find that even though the majority of survey respondents work in IT or software development, more than one in five Scrum projects are now run by departments other than IT.

Even with its widespread use in software development and non-tech disciplines, Scrum is not always the right fit. Scrum works well when there is the opportunity and need for planning. There are a number of "quick response" business functions such as call center work, tech support, etc. that cannot predict when work requests will come in. And some teams are so effective that they find the timeboxes and events unnecessary, so the teams agree to remove them because they are wasteful. There are also instances when an Agile culture doesn't really exist to support Scrum. When this is the case, it is unlikely that Scrum is going to live up to expectations.

Examples of non-tech Scrum use abound:

Many organizations are now using Scrum to plan/manage **marketing communications** development. Teams include writers, videographers, designers who collaborate to plan and complete tactics and campaigns.

Financial services firms are finding that adopting Scrum can speed the development of financial products. Capital One realized an average 70% reduction in time-to-market for their offerings.

Given that Scrum concepts are deeply rooted in **lean manufacturing**, it's no surprise that firms such as Intel and Tesla are significantly reducing cycle time through the application of Scrum methods.