

Scrum In A Nutshell

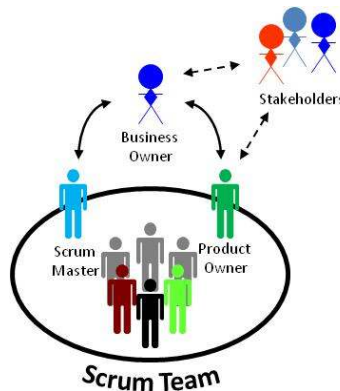
Scrum is about Teams producing Results in an agile way. It is a simple management process, which we describe here

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The Team

The fundamental element of scrum is the Scrum Team (or "Team"), which is a small (usually fewer than ten) group of people that provides useful Results/Products for Stakeholders.



Arguably, the most important role involved in scrum is the Stakeholder, as the Stakeholders are the ones who have desires, wants, and needs, and are the reason the Team is developing the software in the first place. There is usually a special Stakeholder called the Business Owner, who actually controls the budget for the Team.

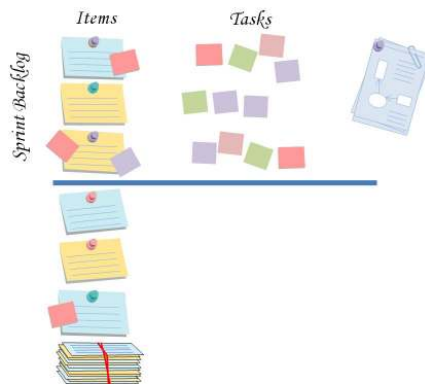
While the Stakeholders are the most important people for the project, the most important person on the Scrum Team is the Product Owner (PO). The Product Owner works with the Stakeholders, represents their interests to the Team, and is held accountable by them for the success of the Team. The Product Owner provides direction and goals for the Team, and prioritizes what will be done.

The Scrum Team Members, including the Product Owner, are the people that actually do the work that satisfies the goals and priorities the Product Owner has set for them. Each Team Member is accountable to the rest of the team for his/her performance, even as the Product Owner is accountable to the Stakeholders for the Team's performance. The Scrum Team is cross-functional; that is, people on the Team (collectively) have all the skills necessary to do the work (analysis, design, code, test, documentation, etc). The Team is self-organizing, self-managing, and constantly trying to improve itself; and the Team Members commit to the amount of work they can do without undue influence from the Product Owner.

In order to aid the Team in doing its work, there is a role on the Team called the Scrum Master (SM). The SM's responsibilities are to be a facilitator and coach, with particular emphasis on helping the Team in its self-organization and management. The Scrum Master manages the relationship between the Product Owner and the rest of the Team, and facilitates removal of impediments for the Team – often working with the Product Owner, the Business Owner, and other Stakeholders to do so. The Scrum Master understands the scrum process and how the Team is using it, recommends process improvements, and assures that the Team is following the process they have agreed to.

The Backlog

A Scrum Team's work is managed with a Product Backlog ("Backlog"), which is a prioritized list of Product Backlog Items ("PBIs", "Backlog Items, or simply "Items").



These items represent the Stakeholder's needs and wants – each of them is a request for something of value from the Scrum Team. These requests can be for anything, including software functionality, non-functional requirements, technical and infrastructure requests, business support, maintenance of existing systems, and so on. It is a rule of scrum that the Team shouldn't do anything for any Stakeholder unless it's on

the Backlog. The Team will be actively working on the top few items of the Backlog during the Sprint; this part of the Backlog is called the Sprint Backlog, which is often thought of as a separate list of its own.

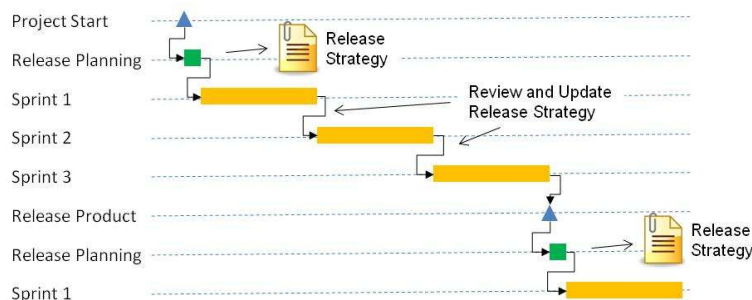
The Backlog contains Items at all levels of fidelity, from vague wishes/wants/needs to finely detailed requirements. The higher the priority of the Item, the more detailed the request should be, so that it will be ready for planning and execution.

When a Scrum Project starts, the Product Owner should initiate the Backlog by working with the Stakeholders and other Team Members and capturing their needs, wants, and requirements as Backlog Items. As the Project progresses, the Product Owner and the Scrum Team should continuously work with the Stakeholders to (re)prioritize the Backlog, identify new Backlog Items, and refine them to get ready for planning. This process is called Backlog Grooming, and is a continuous process throughout the Project.

Now that we have the notion of the Backlog to work with, let's describe the process, which involves discussion of both Releases and Sprints.

The Release

The Goal of a Scrum Team is to produce and release results that meet the goals and priorities that have been set down by the Product Owner (hopefully as a result of working with Stakeholders). This production is done through a series of relatively short, fixed-length iterations, called sprints, in which results are produced by working on Items. The steps of a release are relatively simple, and I'll describe them here.



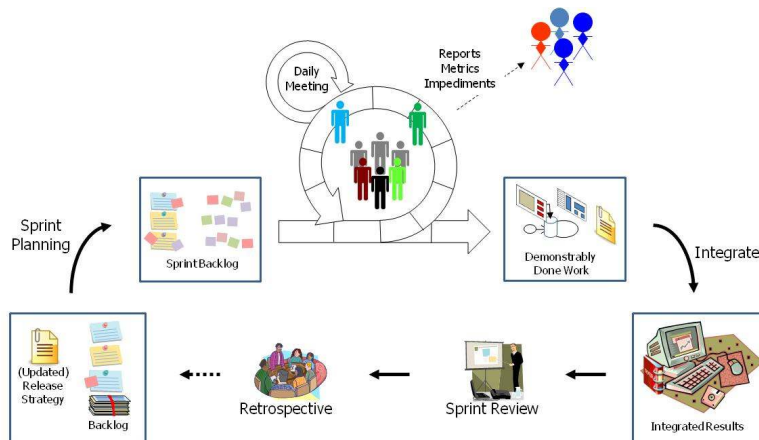
Usually, the first thing that happens in a release is Release Planning. The Stakeholders, the Product Owner, and possibly other members of the Team, get together and negotiate what will be accomplished in the Release. This negotiation involves balancing the needs and wants of the Stakeholders with the abilities of the Scrum Team, and the result is a set of Release Goals and a Release Strategy to achieve them. The Product

Owner and Team must update the Backlog so that there are prioritized Items on the Backlog that support the Release Goals and Strategy and are ready for planning.

Once we have a Backlog that supports the Release Goals and Strategy, the team starts Sprinting. The idea is for the team to do as many Sprints as the Release Strategy calls for, and then Release the Results. Each Sprint looks basically the same, with the Release activities as part of the last one.

The Sprint

The fundamental process flow of scrum is the Sprint, which is a relatively short period of time in which Backlog Items are converted into Results.



The first thing to do in a Sprint is Sprint Planning. In Sprint Planning the Product Owner works with the Team to negotiate what Backlog Items the Team will commit to for the Sprint in order to support the Release Goals and Strategy. Each of these Items has an agreed-upon definition of "Done", and collectively these Items are called the Team's Sprint Backlog. It is the Scrum Master's responsibility to assure that the Team commits to a realistic amount of work, and that the Product Owner does not unduly influence this commitment. Often, the Items on the Sprint Backlog are tasked out in order to give the team confidence that it can do the Item, and thus commit to it.

Once Sprint Planning is over, the team begins work in the Sprint. The team self-organizes to do the work and self-manages as it does the work. While the Sprint is in progress the Team will have Daily Meetings in order that each team member understands what the Team's status is. This allows the Team to re-organize and re-plan in order to be as effective and efficient as possible.

During the Daily Meeting, and continuously throughout the day, the Team Members notify the Scrum Master of any impediments they encounter. It is the Scrum Master's responsibility to facilitate the removal of these impediments. Often, this requires working with Team Members, the PO, the Business Owner, and other Stakeholders.

The Scrum Master must also ensure that the team does enough Backlog Grooming in order to be prepared for the next Sprint's planning meeting.

When the Sprint is over there is a Sprint Review, when the Product Owner and the Team show the team's Results to their Stakeholders. This is done for two reasons: to prove to the Stakeholders that the Team is moving in the right direction, and so that the Team can get feedback on what they've done. If necessary, the Release Goals, Release Strategy, and Backlog are updated as part of the Review (or soon thereafter), taking into account the review and any "business reality" changes the Stakeholders may have.

After the Sprint Review, the Team has an internal retrospective to analyze its performance and process. The team decides what changes, if any, they wish to make to their process as a result of this analysis. These changes will be "enforced" by the Scrum Master in future Sprints.

At this point the Sprint is complete, and the team either begins the next Sprint, the next Release, the next Project, or disbands, as appropriate.