Scrum Rules

by Ken Schwaber

"I offer you Scrum, a most perplexing and paradoxical process for managing complex projects. On one hand, Scrum is disarmingly simple. The process, its practices, its artifacts, and its rules are few, straightforward, and easy to learn. On the other hand, Scrum's simplicity can be deceptive. Scrum is not a prescriptive process; it doesn't describe what to do in every circumstance. Scrum is used for complex work in which it is impossible to predict everything that will occur. Accordingly, Scrum simply offers a framework and a set of practices that keep everything visible. This allows Scrum's practitioners to know exactly what's going on and to make onthe-spot adjustments to keep the project moving toward desired goals."

Ken Schwaber

The ScrumMaster is responsible for ensuring that everyone related to a project, whether chickens or pigs, follows the rules of Scrum. These rules hold the Scrum process together so that everyone knows how to play. If the rules aren't enforced. people waste time figuring out what to do. If the rules are disputed, time is lost while everyone waits for a resolution. These rules have worked in literally thousands of successful projects. If someone wants to change the rules, use the Sprint retrospective meeting as a forum for discussion. changes should originate from the Team, not management. Rule changes should be entertained if and only if the ScrumMaster is convinced that the Team and everyone involved understands how Scrum works in enough depth that they will be skillful and mindful in changing the rules. No rules can be changed until the ScrumMaster has determined that this state has been reached.

functionality can be demonstrated.

Stakeholder: Someone with an interest in the outcome of a project, either because he or she has funded it, will use it, or will be affected by it.

Team: A cross-functional group of people that is responsible for managing itself to develop software every Sprint.

Time-box: A period of time that cannot be exceeded and within which an event or meeting occurs. For example, a Daily Scrum meeting is time-boxed to 15 minutes and terminates at the end of the 15 minutes, regardless.

Sprint Planning Meeting

The Sprint planning meeting is time-boxed to 8 hours and consists of segments that are time-boxed to 4 hours each. The first segment is for selecting the Product Backlog; the second segment is for preparing a Spring Backlog.

- The attendees are the ScrumMaster, the Product Owner, and the Team. Additional parties can be invited by any of these people to provide additional business domain or technology domain information and advice, but they are dismissed after this information is provided. There are no chickens as observers.
- The Product Owner must prepare the Product Backlog prior to the meeting. In absence of either the Product Owner or the Product Backlog, the ScrumMaster is required to construct an adequate Product Backlog prior to the meeting and to stand in for the Product Owner.
- The goal of the first segment, or first 4 hours, is for the Team to select those Product Backlog items it believes it can commit turning into an increment of potentially shippable product functionality. The Team will demonstrate this functionality to the Product Owner and stakeholders at the Sprint review meeting at the end of the Sprint.
- The Team can make suggestions, but the decision of what Product Backlog can constitute the Sprint is the responsibility of the Product Owner.
- The Team is responsible for determining how much of the Product Backlog that the Product Owner wants worked on the Team will attempt to do during the Sprint.

- Time-boxing the first segment to 4 hours means that this is all of the time that is available for analyzing the Product Backlog. Further analysis must be performed during the Sprint. Large-grained, high-priority Product Backlog with imprecise estimates might not be thoroughly understood during this part of the Sprint planning meeting and might result in the Team not being able to complete all the Product Backlog that it selects.
- The second segment of the Sprint Planning meeting occurs immediately after the first segment and is also timeboxed to 4 hours.
- The Product Owner must be available to the Team during the second segment to answer questions that the Team might have about the Product Backlog.
- It is up to the Team, acting solely on its own and without any direction from outside the Team, to figure out during the second segment how it will turn the selected Product Backlog into an increment of potentially shippable product functionality. No one else is allowed to do anything but observe or answer questions seeking further information.

Daily Scrum Meeting

The Daily Scrum meeting is time-boxed to 15 minutes regardless of the number of Team members.

 Hold the Daily Scrum in the same place at the same time every work day. The Daily Scrum is best held in the day so that the first thing Team members do on arriving at work is think of what they did the day before and what they plan to do today. which a Team works to turn the Product Backlog it has selected into an increment of potentially shippable product functionality.

Sprint Backlog: A list of tasks that define a Team's work for a Sprint. The list emerges during the Sprint. Each task identifies those responsible for doing the work and the estimated amount of work remaining on the task on any given day during the Sprint.

Sprint Backlog tasks: One of the tasks the Team or a Team member defines as required to turn committed Product Backlog items into system functionality.

Sprint planning meeting: A one-day meeting time-boxed to 8 hours that initiates every Sprint. The meeting is divided into two 4-hour segments, each also time-boxed. During the first segment, the Product Owner presents the highest priority Product Backlog to the Team. The Team and the Product Owner collaborate to help the Team determine how much Product Backlog it can turn into functionality during the Sprint. The Team commits to this Product Backlog at the end of the first segment. During the second segment of the meeting, the Team plans how it will meet this commitment by detailing its work as a plan in the Sprint Backlog.

Sprint retrospective meeting: A meeting time-boxed to 3 hours and facilitated by the ScrumMaster at which the Team discusses the just-concluded Sprint and determines what could be changed that might make the next Sprint more enjoyable or productive.

Sprint review meeting: A meeting time-boxed to 4 hours at the end of every Sprint at which the Team demonstrates to the Product Owner and any other interested parties what it was able to accomplish during the Sprint. Only completed product

of a completed product, except for the Product Backlog items that the Team selected for this Sprint.

Iteration: One cycle within a project. In Scrum, this cycle is 30 sequential calendar days, or a Sprint.

Pig: Someone occupying one of the three Scrum roles (Team, Product Owner, ScrumMaster) who has made a commitment and has the authority to fulfill it.

Product Backlog: A prioritized list of project requirements with estimated times to turn them into completed product functionality. Estimates are in days and are more precise the higher an item is in the Product Backlog priority. The list evolves, changing as business conditions or technology changes.

Product Backlog items: Functional requirements, nonfunctional requirements, and issues, which are prioritized in order of importance to the business and dependencies and then estimated. The precision of the estimate depends on the priority and the granularity of the Product Backlog item, with the highest priority items that can be selected in the next Sprint being very granular and precise.

Product Owner: The person responsible for managing the Product Backlog so as to maximize the value of the product. The Product Owner represents all stakeholders in the project.

Scrum: Not an acronym, but mechanisms in the game of rugby for getting an out-of-play ball back into play.

ScrumMaster: The person responsible for the Scrum process, its correct implementation, and maximization of its benefits.

Sprint: A time-box of 30 sequential calendar days during

- All the Team members are required to attend. If for some reason a Team member can't attend in person, the absent member must either attend by telephone or by having another Team member report on the absent member's status.
- Team members must be prompt. The ScrumMaster starts the meeting at the appointed time, regardless of who is present. Any members who are late pay \$1 to the ScrumMaster immediately.
- The ScrumMaster begins the meeting by starting with the person immediately to his or her left and proceeding counterclockwise around the room until everyone has reported.
- Each Team member should respond to three questions only:
 - o What have you done since the last Daily Scrum regarding the project?
 - o What will you do between now and the next Daily Scrum meeting regarding the project?
 - o What impedes you from performing your work as effectively as possible?
- Team members should not digress beyond answering these three questions into issues, designs, discussion of problems, or gossip. The ScrumMaster is responsible for moving the reporting along briskly, from person to person.
- During the Daily Scrum, only one person talks at a time.
 That person is the one who is reporting his or her status.
 Everyone else listens. There are no side conversations.

- When a Team member reports something that is of interest to other Team members or needs the assistance of other Team members, any Team member can immediately arrange for all the interested parties get together after the Daily Scrum to set up a meeting.
- Chickens are not allowed to talk, make observations, make faces, or otherwise make their presence in the Daily Scrum meeting obtrusive.
- Chickens stand on the periphery of the Team so as not to interfere with the meeting.
- If too many chickens attend the meeting, the ScrumMaster can limit attendance so that the meeting can remain orderly and focused.
- Chickens are not allowed to talk with Team members after the meeting for clarification or to provide advice or instruction.
- Pigs or chickens who cannot or will not conform to the above rules can excluded from the meeting (chickens) or removed from the Team (pigs).

Sprint

The Sprint is time-boxed to 30 consecutive calendar days. Aside from other factors, this is the amount of time required for the Team to build something of significant interest to the Product Owner and the stakeholders and bring it to a state where it is potentially shippable. This is also the maximum time that can be allocated without the Team doing so much work it requires artifacts and documentation to support its thought processes. It is also the maximum time that most

Definitions

Burndown graph: The trend of work remaining across time in a Sprint, a release, or a product. The source of raw data is the Sprint Backlog and the Product Backlog, with work remaining tracked on the vertical axis and the time period (days of a Sprint or Sprints) tracked on the horizontal axis.

Chicken: Someone who is interested in the product but does not have formal Scrum responsibilities and accountabilities (is not a Team member, Product Owner, ScrumMaster, or other stakeholder).

Daily Scrum meeting: A short status meeting held daily by each Team during which the Team members synchronize their work and progress and report any impediments to the ScrumMaster for removal.

Done: Complete as mutually agreed by all parties and conforming to an organization's standards, conventions, and guidelines. When something is reported as "done" at the Daily Scrum or demonstrated as "done" at the Sprint review meeting, it must conform to this agreed definition.

Estimated work remaining: The number of hours that a Team member estimates to remain to be worked on any task. This estimate is updated at the end of every day the Sprint Backlog task is worked on. The estimate is the total estimated hours remaining, regardless of the number of people who perform the work.

Increment: Product functionality that is developed by the Team during each Sprint.

Increment of potentially shippable functionality: A completely developed increment that contains all of the parts

- The ScrumMaster should attempt to determine the number of people who expect to attend the Sprint review meeting and set up the meeting to accommodate them.
- At the end of the Sprint review, the ScrumMaster announces the place and date of the next Sprint review to the Product Owner and all stakeholders.

Sprint Retrospective Meeting

The Sprint retrospective meeting is time-boxed to 3 hours.

- It is attended only by the Team, the ScrumMaster and the Product Owner. The Product Owner is optional.
- Start the meeting by having all Team members answer two questions:
 - o What went well during the last Sprint?
 - o What could be improved in the next Sprint?
- The ScrumMaster writes down the Team's answers in summary form.
- The Team prioritizes in which order it wants to talk about the potential improvements.
- The ScrumMaster is not at this meeting to provide answers, but to facilitate the Team's search for better ways for the Scrum to process work for it.
- Actionable items that can be added to the next Sprint should be devised as high-priority nonfunctional Product

Backlog. Retrospectives that don't result in change are sterile and frustrating. stakeholders will wait without losing interest in the Team's

progress and without losing their belief that the Team is doing something meaningful to them.

- The Team can seek outside help, advice, information, and support during the Sprint.
- No one can provide advice, instructions, commentary, or direction to the Team during the Sprint. The Team is utterly self-managing.
- The Team commits to the Product Backlog during the Sprint planning meeting. No one is allowed to change the Product Backlog during the Sprint. The Product Backlog is frozen until the end of the Sprint.
- If the Sprint proves to be not viable, the ScrumMaster can abnormally terminate the Sprint and initiate a new Sprint planning meeting to initiate the next Sprint. The ScrumMaster can make this change of his or her own accord or as requested by the Team or the Product Owner. The Sprint can prove not to be viable if the technology proves unworkable, if the business conditions change so that the Sprint will not be of value to the business, or if the Team is interfered with during the Sprint by anyone outside the Team.
- If the Team feels itself unable to complete all the committed Product Backlog during the Sprint, it can consult with the Product Owner on which items to remove from the current Sprint. If so many items require removal that the Sprint has lost its value and meaning, the ScrumMaster can abnormally terminate the Sprint, as previously stated.

- If the Team determines that is can address more Product Backlog during the Sprint than it selected during the Sprint planning meeting, it can consult with the Product Owner on which additional Product Backlog items can be added to the Sprint.
- The Team members have two administrative responsibilities during the Sprint: they are to attend the Daily Scrum, and they are to keep the Sprint Backlog upto-date and available in a public folder on a public server, visible to all. New tasks must be added to the Sprint Backlog as they are conceived, and the running, day-today estimated hours remaining for each task must be kept up-to-date.

Sprint Review Meeting

The Sprint review meeting is time-boxed to 4 hours.

- The Team should not spend more than 1 hour preparing for the Sprint review.
- The purpose of the Sprint review is for the Team to present to the Product Owner and the stakeholders functionality which is done. Although the meaning of "done" can vary from organization to organization, it usually means that the functionality that is completely engineered and could be potentially shippable or implemented. If "done" has another meaning, make sure the Product Owner and stakeholders understand it.
- Functionality that isn't "done" cannot be presented.

- Artifacts that aren't functionality cannot be presented except when used in support of understanding the demonstrated functionality. Artifacts cannot be shown as work products, and their use must be minimized to avoid confusing stakeholders or requiring them to understand how systems development works.
- Functionality should be presented on the Team members workstations and executed from the server closest to production – usually a quality assurance (QA) environment server.
- The Sprint review starts with a Team member presenting the Sprint goal, the Product Backlog committed to, and the Product Backlog completed. Different Team members can then discuss what went well and what didn't go well in the Sprint.
- The majority of the Sprint review is spent with the Team members presenting functionality, answering stakeholder questions regarding the presentation, and noting changes that are desired.
- At the end of the presentations, the stakeholders are polled, one by one, to get their impressions, any desired changes and the priority of these changes.
- The Product Owner discusses with the stakeholders and the Team potential rearrangement of the Product Backlog based on the feedback.
- Stakeholders are free to voice any comments, observations, or criticisms regarding the increment of potentially shippable functionality between presentations.

• Stakeholders can identify functionality that wasn't delivered or wasn't delivered as expected and request such functionality be placed in the Product Backlog for prioritization.