## Sprint Review

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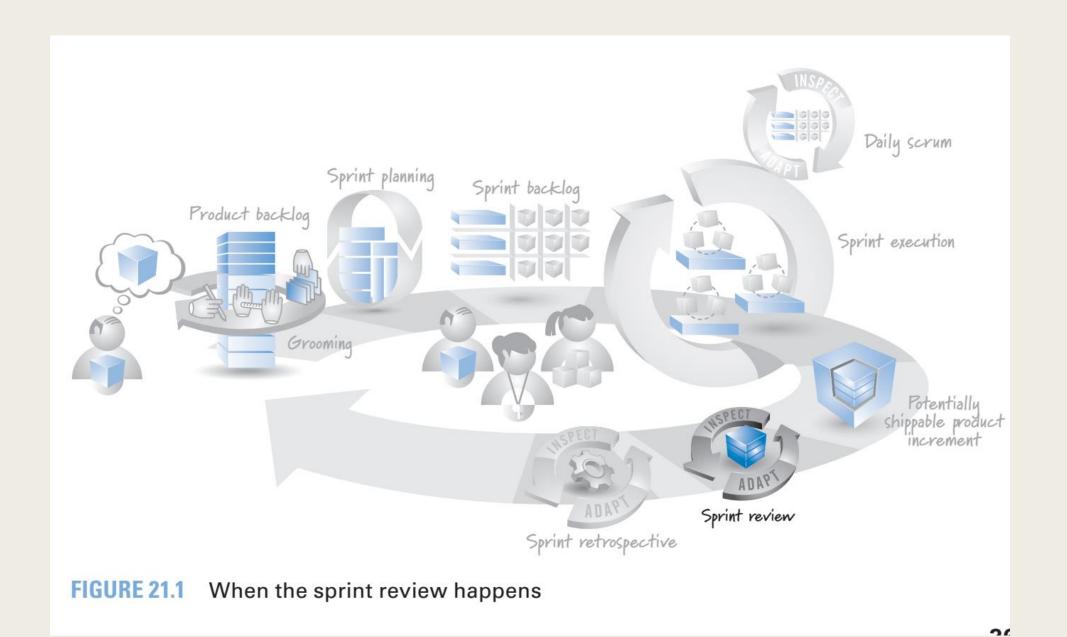
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#### Introduction

- Near the end of the sprint, the team conducts two important inspectand-adapt activities: the sprint review and the sprint retrospective.
- The sprint review focuses on the product itself.
- The sprint retrospective looks at the process the team is using to build the product.

#### Overview

- During sprint planning we plan the work.
- During sprint execution we do the work.
- During sprint review we inspect (and adapt) the result of the work (the potentially shippable product increment).
- The sprint review occurs near the end of each sprint cycle, just after sprint execution and just before (or occasionally after) the sprint retrospective.



#### Overview

- The sprint review gives everyone with input to the product development effort an opportunity to inspect and adapt what has been built so far.
- The sprint review provides a transparent look at the current state of the product, including any inconvenient truths. It is the time to ask questions, make observations or suggestions, and have discussions about how to best move forward given current realities.
- Because it helps ensure that the organization is creating a successful product, the sprint review is **one of the most important learning loops** in the Scrum framework.
- And, because sprints are short, this loop is a quick one, which allows for frequent course corrections to keep the product development moving in the right direction. If, instead, we were to defer this feedback until much later and assume that everything is going according to some baseline plan, we likely would get what many are accustomed to—surprise, disappointment, and frustration.

### Participants

- The sprint review provides an important opportunity for the Scrum team to get feedback from people who typically are not available on a daily basis during sprint execution.
- For these individuals, the sprint review is their first opportunity to see and discuss the work that was produced during the sprint.
- The sprint review, therefore, should be attended by all interested parties, who can come from a number of different sources.

**TABLE 21.1** Sprint Review Attendee Sources

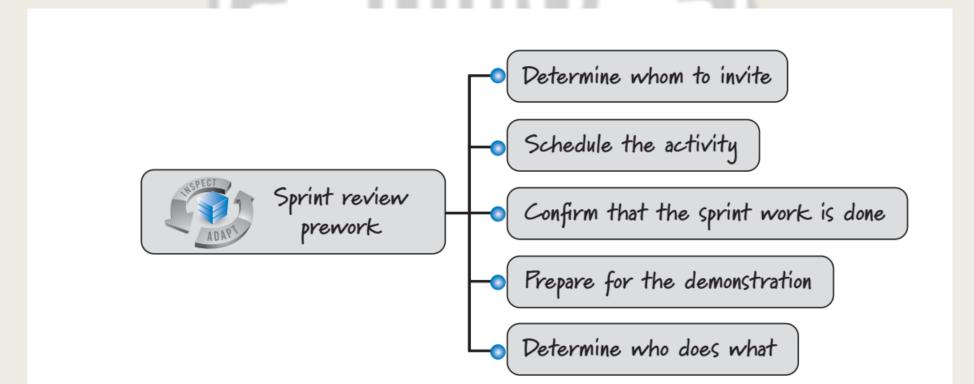
Source	Description
Scrum team	The product owner, ScrumMaster, and development team should all be present so that they can all hear the same feedback and be able to answer questions regarding the sprint and the product increment.
Internal stakeholders	Business owners, executives, and managers should see the progress firsthand so that they can suggest course corrections. For internal product development, internal users, subject matter experts, and the operations manager of the business function to which the product relates should attend.
Other internal teams	Sales, marketing, support, legal, compliance, and other Scrum and non-Scrum development teams might want to attend sprint reviews to provide area-specific feedback or to sync their own groups' work with the Scrum team.
External stakeholders	External customers, users, and partners can provide valuable feedback to the Scrum team and other attendees.

### Participants

- It may not make sense to have external stakeholders at every review, especially if we know that a particular review might involve some intense internal discussions that are best conducted with internal stakeholders only.
- If we do choose to include external stakeholders, unless there is just a single stakeholder, some consideration should be given to which of the potentially many customers or users we should invite.

#### Prework

Although the sprint review is an informal activity, the Scrum team has some minimal prework to complete.



#### **Determine Whom to Invite**

- The Scrum team first needs to determine who should attend the sprint review on a regular basis.
- The goal is to get the right set of people into the room to extract the highest possible value.
- Unless there is a good reason to not invite someone or some group, cast a broad net and let people attend—if they're interested, they'll walk to the room and attend the meeting.
- Occasionally, the team might need to constrain attendance. For instance, the team might need to focus on a certain person or group whose input is essential to reviewing this sprint's work. Or the team might be building a feature for a specific client during this sprint and so cannot invite that client's competitors to the review meeting.
- If you suspect these situations might arise, identify a core group that should be invited to every review and then issue a separate invitation to certain groups or clients on a sprint-by-sprint basis.

## Schedule the Activity

- The sprint review needs to be scheduled (when, where, and how long). Of the four required, recurring Scrum activities (sprint planning, daily scrum, sprint review, and sprint retrospective).
- Sprint review is the hardest to schedule because it includes many people who are outside of the Scrum team. The other three recurring activities involve only people on the Scrum team and therefore can be scheduled at its convenience alone.
- To make scheduling easier, begin by determining when the key stakeholders (the core group) would prefer to hold the sprint review and then schedule the rest of the sprint activities around this fixed time.
- If we use consistent-duration sprints, we can then schedule all, or at least most, of the sprint review meetings using a regular cadence.

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## Schedule the Activity(Cnt'd)

- Sprint reviews vary in duration depending on several factors, including sprint length, team size, and whether multiple teams are participating in the same review.
- Typically, however, the sprint review does not exceed a four-hour timebox.
- Many teams have found the one-hour-per-sprint-week rule helpful. In other words, for a two-week sprint the review should take no more than two hours;

## Confirm That the Sprint Work Is Done

- At the sprint review, the team is allowed to present only completed work—work that meets the agreed-upon definition of done. This implies, then, that sometime before the sprint review, someone has determined whether or not each backlog item is done;
- Ultimately it is the product owner's responsibility to determine if the work is done or not. Product owner should be performing just-in-time reviews of product backlog items as they become available during sprint execution. This way, by the time the sprint review happens, the team knows which items are complete.

# Confirm That the Sprint Work Is Done(Cnt'd)

- Not everyone agrees that the product owner should review the work before the sprint review. Some practitioners contend that the product owner should review and formally accept the work only during the sprint review. They believe that if the product owner is allowed to review the work during the sprint, he might request changes that go beyond clarification.
- This is a potential risk, but the benefits of early product owner reviews (fast feedback) far outweigh any downside. Furthermore, if the product owner sees the team's work for the first time at the sprint review meeting, he has seen it too late.
- The product owner must be available during sprint execution to answer questions and clarify product backlog items. She should also review the ongoing progress the team is making and provide critical, in-flight feedback that can be acted on in a timely, cost-effective manner.

# Confirm That the Sprint Work Is Done(Cnt'd)

- Deferring this feedback until the sprint review would create unnecessary work and likely frustrate the team. It also could potentially irritate the stakeholders. That disconnect could come across to the stakeholders as the old, adversarial, us-versus-them problem.
- The product owner and development team are on the same Scrum team and should come across as one unified team during the review meeting.

## Prepare for the Demonstration

- Because all of the work the team presents at the sprint review is done (potentially shippable), it shouldn't take much preparatory work to demonstrate it. The goal is to provide transparency for inspecting and adapting the product.
- The sprint review is supposed to be an informal meeting with low ceremony and high value.
- Spending a lot of time to create a polished PowerPoint presentation hardly seems justified. Also, I would be concerned if I showed up at a sprint review to see working software and instead was given a PowerPoint presentation.

## Prepare for the Demonstration (Cnt'd)

- Most teams have a rule of not spending more than 30 minutes to an hour per week of sprint duration to prepare for the sprint review.
- In addition, many also agree to show only those artifacts that were produced as a consequence of achieving the sprint goal.

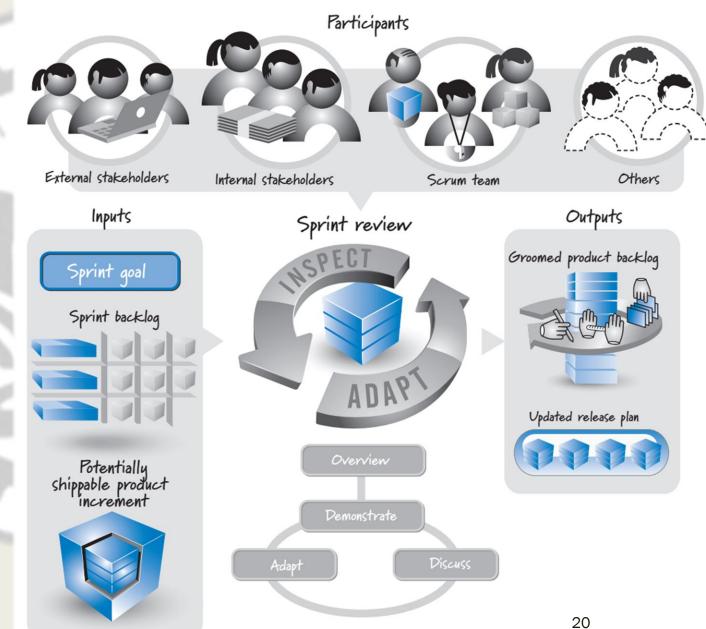
#### **Determine Who Does What**

- Prior to the sprint review, the team needs to decide who on the Scrum team is going to facilitate the review and who will demonstrate the completed work.
- ScrumMaster facilitates, but the product owner might kick things off by welcoming members of the stakeholder community and providing a synopsis of the sprint results.
- As for demoing the completed work, it is prefered that every member of the development team have an opportunity at some sprint review to go hands-on and demonstrate, rather than the same person always dominating the demo every sprint review.

## Approach

- The inputs are the <u>sprint backlog</u> and/or <u>sprint goal</u> and the <u>potentially shippable product increment</u> that the team actually produced.
- The outputs are a groomed product backlog and an updated release plan.
- Activities are providing a summary or synopsis of what has and has not been accomplished with regard to the sprint goal, demonstrating the potentially shippable product increment, discussing the current state of the product, and adapting the future product direction.

## Sprint review activities



## Approach

- The inputs: print backlog and/or sprint goal and the potentially shippable product increment that the team actually produced.
- The outputs: groomed product backlog and an updated release plan.
- Activities: providing a summary or synopsis of what has and has not been accomplished with regard to the sprint goal, demonstrating the potentially shippable product increment, discussing the current state of the product, and adapting the future product direction.

#### Summarize

- The sprint review kicks off with a Scrum team member (frequently the product owner) presenting the sprint goal, the product backlog items associated with the sprint goal, and an overview of the product increment that was actually achieved.
- This information provides a summary of how the sprint results compare with the sprint goal.
  - If the results don't match, the Scrum team provides an explanation. It is important that the sprint review be a blame-free environment. If the goal wasn't met, everyone participating should refrain from trying to assess blame.

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■ The purpose of the review is to describe what was accomplished and then to use the information to determine the best course of action for moving forward.

#### Demonstrate

- The most important aspect of the sprint review is in-depth conversation and collaboration among the participants to enable productive adaptations to surface and be exploited.
- One or more Scrum team members will demonstrate all relevant aspects of the product increment that was built during the sprint.

## Demonstrate(Cnt'd)

- In certain organizations it can be even more effective to let the stakeholders actually give themselves the demo, that was developed during the sprint.
- But what if there is nothing to demo? If the team didn't get anything done and there is truly nothing to show, the sprint review will likely focus on why nothing got done and how the future work will be affected by the lack of progress during this sprint.
- If, on the other hand, what was built can't easily be demoed, we have a different issue. Suppose, for instance, that the team did only architectural development work this sprint (built "glue code"). For the team to work exclusively on "glue code," it would have needed to convince the product owner to allow only technical product backlog items into the sprint. if the product owner allows such items, he must understand

the value of doing the work and also must know how to determine if the work is done.

Also, most teams will include in their definition of ready that the Scrum team understands how to demonstrate the item at the sprint review.

## Demonstrate(Cnt'd)

- At a minimum, the team must have some set of tests to demonstrate that the work is done to the satisfaction of the product owner. Those tests must have passed because the team can show only completed work at the sprint review.
- The fact that something is hard to demo is not a valid excuse to exclude it from the demo.

#### **Discuss**

- Demonstrating the product increment becomes the focal point for having an in depth conversation. Observation, comments, and reasonable discussion regarding the product and direction are strongly encouraged among the participants.
- Vigorous discussion allows participants who aren't on the Scrum team to ask questions, understand the current state of the product, and help guide its direction. At the same time, the Scrum team members gain a deeper appreciation for the business and marketing side of their product by getting feedback on the convergence of the product toward delighted customers or users.

## Adapt

- Through demonstration and discussion, the team is able to ask and answer questions, including the following:
  - Do the stakeholders like what they see?
  - Do they want to see changes?
  - Is what we're building still a good idea in the marketplace or to our internal customers?
  - Are we missing an important feature?
  - Are we overdeveloping/investing in a feature where we don't have to?

## Adapt(Cnt'd)

- Most teams naturally do some grooming as part of the sprint review.
- As everyone involved gains a better understanding of the current development effort and where it is going, new PBIs are often created or existing PBIs are reprioritized or deleted if they are no longer needed.
- This grooming might affect what the team will work on in the next sprint.

## Adapt(Cnt'd)

- Grooming that happens during sprint review might also affect the larger-scope release plans. For example, based on the discussion and conclusions of the sprint review, we might decide to alter one of the key release-planning variables: scope, date, or budget. Perhaps, for instance, by reviewing the current product increment we decide to stop working on a major feature of the product (change the scope).
- This decision will necessarily affect the current release plan.
- The sprint review gives us an opportunity to identify ways to adapt, to respond to change, when it is still affordable to do so—at the end of every single sprint.

#### Reference

1- K. S. Rubin, "Essential Scrum, A Practical guide to the most popular agile process," 2013.