Scrum Guide 2020



Stefan Wolpers, 2020 | Berlin Product People GmbH

The Scrum Guide 2020—Reordered

By Stefan Wolpers

Based on the 2020 US-Version of the Scrum Guide Version 1.03



Introduction

The Scrum Guide—Reordered series resulted from my preparation to pass Scrum.org's Professional Scrum Master III certification.

This 2020 edition is based on about 95 percent of the Scrum Guide 2020, enhancing its original structure by adding an extended taxonomy. For example, you will find all quotes that can be attributed to the Scrum Master in one place.

The Scrum Guide 2020—Reordered allows you to get a first understanding of Scrum-related questions quickly. For example, it is good at relating specific topics—say "stakeholder"—with Scrum first principles such as Scrum Values, or empiricism.

While the Scrum Guide 2020—Reordered does not answer all questions you might have immediately, I found it very helpful to identify the patterns and principles used throughout the Scrum Guide. Moreover, it is a great tool to start meaningful discussions with your peers.

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Upcoming Training Classes and Events

Check out my upcoming training classes and events—perhaps, we will meet in person or virtually soon:



Link: Upcoming training classes and events.



The Scrum Guide Reordered

Please note that the figure at the beginning on an entry refers to the page number of the print-version of the Scrum Guide 2020.

Part I: Definition, Team, Scrum Master, Product Owner, Developer

Scrum Definition

- 3 Scrum is a lightweight framework that helps people, teams and organizations generate value through adaptive solutions for complex problems.
- 3 Scrum is simple. Try it as is and determine if its philosophy, theory, and structure help to achieve goals and create value.
- The Scrum framework is purposefully incomplete, only defining the parts required to implement Scrum theory.
- 3 Scrum is built upon by the collective intelligence of the people using it.
- Rather than provide people with detailed instructions, the rules of Scrum guide their relationships and interactions.
- 3 Various processes, techniques and methods can be employed within the framework.
- 3 Scrum makes visible the relative efficacy of current management, environment, and work techniques, so that improvements can be made.
- 4 Successful use of Scrum depends on people becoming more proficient in living five values: Commitment, Focus, Openness, Respect, and Courage.
- The decisions that are made, the steps taken, and the way Scrum is used should reinforce these values, not diminish or undermine them.
- How [maximizing the value of the product resulting from the work of the Scrum Team] is done may vary widely across organizations, Scrum Teams, and individuals.
- 7 Sprints are the heartbeat of Scrum, where ideas are turned into value.
- The Scrum framework, as outlined herein, is immutable. While implementing only parts of Scrum is possible, the result is not Scrum. Scrum exists only in its entirety and functions well as a container for other techniques, methodologies, and practices.

Scrum Team

3 [...] Scrum requires a Scrum Master to foster an environment where [...] the Scrum Team turns a selection of the work into an Increment of value during a Sprint.



- 4 A Scrum Team is expected to adapt the moment it learns anything new through inspection.
- 4 The Scrum Team commits to achieving its goals and to supporting each other.
- 4 Scrum Team members respect each other to be capable, independent people, and are respected as such by the people with whom they work.
- 4 These values give direction to the Scrum Team with regard to their work, actions, and behavior.
- The Scrum Team members learn and explore the values as they work with the Scrum events and artifacts.
- 5 The fundamental unit of Scrum is a small team of people, a Scrum Team.
- 5 The Scrum Team consists of one Scrum Master, one Product Owner, and Developers.
- Within a Scrum Team, there are no sub-teams or hierarchies.
- [The Scrum Team] is a cohesive unit of professionals focused on one objective at a time, the Product Goal.
- Scrum Teams are cross-functional, meaning the members have all the skills necessary to create value each Sprint.
- They are also self-managing, meaning they internally decide who does what, when, and how.
- The Scrum Team is small enough to remain nimble and large enough to complete significant work within a Sprint, typically 10 or fewer people.
- In general, we have found that smaller teams communicate better and are more productive.
- If Scrum Teams become too large, they should consider reorganizing into multiple cohesive Scrum Teams, each focused on the same product.
- Therefore, [multiple cohesive Scrum Teams] should share the same Product Goal, Product Backlog, and Product Owner.
- The Scrum Team is responsible for all product-related activities from stakeholder collaboration, verification, maintenance, operation, experimentation, research and development, and anything else that might be required.
- 5 They are structured and empowered by the organization to manage their own work.
- Working in Sprints at a sustainable pace improves the Scrum Team's focus and consistency.
- The entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint.
- Scrum defines three specific accountabilities within the Scrum Team: the Developers, the Product Owner, and the Scrum Master.



- The Product Owner is accountable for maximizing the value of the product resulting from the work of the Scrum Team. How this is done may vary widely across organizations, Scrum Teams, and individuals.
- 6 [Scrum Master] do this by helping everyone understand Scrum theory and practice, both within the Scrum Team and the organization.
- 6 Scrum Masters are true leaders who serve the Scrum Team and the larger organization.
- The Scrum Master serves the Scrum Team in several ways, including coaching the team members in self-management and cross-functionality.
- The Scrum Master serves the Scrum Team in several ways, including helping the Scrum Team focus on creating high-value Increments that meet the Definition of Done.
- The Scrum Master serves the Scrum Team in several ways, including causing the removal of impediments to the Scrum Team's progress.
- The Scrum Master serves the Scrum Team in several ways, including ensuring that all Scrum events take place and are positive, productive, and kept within the timebox.
- 8 [Sprint Planning] This resulting plan is created by the collaborative work of the entire Scrum Team.
- 8 [Sprint Planning: Why is this Sprint valuable?] The whole Scrum Team then collaborates to define a Sprint Goal that communicates why the Sprint is valuable to stakeholders.
- 9 The Scrum Team presents the results of their work to key stakeholders and progress toward the Product Goal is discussed.
- 9 During the event, the Scrum Team and stakeholders review what was accomplished in the Sprint and what has changed in their environment. Based on this information, attendees collaborate on what to do next.
- 9 The Sprint Review is a working session and the Scrum Team should avoid limiting it to a presentation.
- The Scrum Team discusses what went well during the Sprint, what problems it encountered, and how those problems were (or were not) solved.
- These [Artifact] commitments exist to reinforce empiricism and the Scrum values for the Scrum Team and their stakeholders.
- 10 [The Product Backlog] is the single source of work undertaken by the Scrum Team.
- 10 Product Backlog items that can be Done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.
- 11 The Product Goal describes a future state of the product which can serve as a target for the Scrum Team to plan against.
- The Product Goal is the long-term objective for the Scrum Team. They must fulfill (or abandon) one objective before taking on the next.



- 11 The Sprint Goal also creates coherence and focus, encouraging the Scrum Team to work together rather than on separate initiatives.
- 12 The Definition of Done creates transparency by providing everyone a shared understanding of what work was completed as part of the Increment.
- 12 If the Definition of Done for an increment is part of the standards of the organization, all Scrum Teams must follow it as a minimum.
- 12 If it is not an organizational standard, the Scrum Team must create a Definition of Done appropriate for the product.
- 12 If there are multiple Scrum Teams working together on a product, they must mutually define and comply with the same Definition of Done.

Product Owner

- 3 [...] Scrum requires a Scrum Master to foster an environment where [...] a Product Owner orders the work for a complex problem into a Product Backlog.
- 5 The Scrum Team consists of one Scrum Master, one Product Owner, and Developers.
- Therefore, [multiple cohesive Scrum Teams] should share the same Product Goal, Product Backlog, and Product Owner.
- Scrum defines three specific accountabilities within the Scrum Team: the Developers, the Product Owner, and the Scrum Master.
- The Product Owner is accountable for maximizing the value of the product resulting from the work of the Scrum Team. How this is done may vary widely across organizations, Scrum Teams, and individuals.
- The Product Owner is also accountable for effective Product Backlog management, which includes developing and explicitly communicating the Product Goal.
- The Product Owner is also accountable for effective Product Backlog management, which includes creating and clearly communicating Product Backlog items.
- The Product Owner is also accountable for effective Product Backlog management, which includes ordering Product Backlog items.
- The Product Owner is also accountable for effective Product Backlog management, which includes ensuring that the Product Backlog is transparent, visible and understood.
- The Product Owner may do the above work or may delegate the responsibility to others. Regardless, the Product Owner remains accountable.
- 6 For Product Owners to succeed, the entire organization must respect their decisions.
- 6 [Product Owner] decisions are visible in the content and ordering of the Product Backlog, and through the inspectable Increment at the Sprint Review.
- 6 The Product Owner is one person, not a committee.



- The Product Owner may represent the needs of many stakeholders in the Product Backlog.
- Those wanting to change the Product Backlog can do so by trying to convince the Product Owner.
- 7 The Scrum Master serves the Product Owner in several ways, including helping find techniques for effective Product Goal definition and Product Backlog management.
- 7 The Scrum Master serves the Product Owner in several ways, including helping the Scrum Team understand the need for clear and concise Product Backlog items.
- 7 The Scrum Master serves the Product Owner in several ways, including helping establish empirical product planning for a complex environment.
- 7 The Scrum Master serves the Product Owner in several ways, including facilitating stakeholder collaboration as requested or needed.
- 7 During the Sprint, scope may be clarified and renegotiated with the Product Owner as more is learned.
- 8 Only the Product Owner has the authority to cancel the Sprint.
- The Product Owner ensures that attendees are prepared to discuss the most important Product Backlog items and how they map to the Product Goal.
- 8 [Sprint Planning: What can be Done this Sprint?] Through discussion with the Product Owner, the Developers select items from the Product Backlog to include in the current Sprint.
- 9 If the Product Owner or Scrum Master are actively working on items in the Sprint Backlog, they participate as Developers.
- 11 The Product Owner may influence the Developers by helping them understand and select trade-offs.
- As the Developers work during the Sprint, they keep the Sprint Goal in mind. If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.

Developers

- 5 The Scrum Team consists of one Scrum Master, one Product Owner, and Developers.
- Scrum defines three specific accountabilities within the Scrum Team: the Developers, the Product Owner, and the Scrum Master.
- Developers are the people in the Scrum Team that are committed to creating any aspect of a usable Increment each Sprint.
- The specific skills needed by the Developers are often broad and will vary with the domain of work.



- However, the Developers are always accountable for creating a plan for the Sprint, the Sprint Backlog.
- However, the Developers are always accountable for instilling quality by adhering to a Definition of Done.
- However, the Developers are always accountable for adapting their plan each day toward the Sprint Goal.
- However, the Developers are always accountable for holding each other accountable as professionals.
- 8 [Sprint Planning: What can be Done this Sprint?] Through discussion with the Product Owner, the Developers select items from the Product Backlog to include in the current Sprint.
- 8 [Sprint Planning: How will the chosen work get done?] For each selected Product Backlog item, the Developers plan the work necessary to create an Increment that meets the Definition of Done.
- 8 [Sprint Planning: How will the chosen work get done?] How this is done is at the sole discretion of the Developers. No one else tells them how to turn Product Backlog items into Increments of value.
- 9 The Daily Scrum is a 15-minute event for the Developers of the Scrum Team.
- 9 If the Product Owner or Scrum Master are actively working on items in the Sprint Backlog, they participate as Developers.
- 9 The Daily Scrum is not the only time Developers are allowed to adjust their plan.
- 9 [Developers] often meet throughout the day for more detailed discussions about adapting or re-planning the rest of the Sprint's work.
- 11 The Developers who will be doing the work are responsible for the sizing.
- 11 The Product Owner may influence the Developers by helping them understand and select trade-offs.
- 11 The Sprint Backlog is a plan by and for the Developers.
- 11 [The Sprint Backlog] is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal.
- Although the Sprint Goal is a commitment by the Developers, it provides flexibility in terms of the exact work needed to achieve it.
- As the Developers work during the Sprint, they keep the Sprint Goal in mind. If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.
- 12 The Developers are required to conform to the Definition of Done.



Scrum Master

- 3 [...] Scrum requires a Scrum Master to foster an environment where [...] a Product Owner orders the work for a complex problem into a Product Backlog.
- 3 [...] Scrum requires a Scrum Master to foster an environment where [...] the Scrum Team turns a selection of the work into an Increment of value during a Sprint.
- 3 [...] Scrum requires a Scrum Master to foster an environment where [...] the Scrum Team and its stakeholders inspect the results and adjust for the next Sprint.
- 5 The Scrum Team consists of one Scrum Master, one Product Owner, and Developers.
- Scrum defines three specific accountabilities within the Scrum Team: the Developers, the Product Owner, and the Scrum Master.
- The Scrum Master is accountable for establishing Scrum as defined in the Scrum Guide.
- 6 [Scrum Master] do this by helping everyone understand Scrum theory and practice, both within the Scrum Team and the organization.
- 6 The Scrum Master is accountable for the Scrum Team's effectiveness.
- 6 [Scrum Masters] do this by enabling the Scrum Team to improve its practices, within the Scrum framework.
- 6 Scrum Masters are true leaders who serve the Scrum Team and the larger organization.
- The Scrum Master serves the Scrum Team in several ways, including coaching the team members in self-management and cross-functionality.
- The Scrum Master serves the Scrum Team in several ways, including helping the Scrum Team focus on creating high-value Increments that meet the Definition of Done.
- The Scrum Master serves the Scrum Team in several ways, including causing the removal of impediments to the Scrum Team's progress.
- The Scrum Master serves the Scrum Team in several ways, including ensuring that all Scrum events take place and are positive, productive, and kept within the timebox.
- 7 The Scrum Master serves the Product Owner in several ways, including helping find techniques for effective Product Goal definition and Product Backlog management.
- 7 The Scrum Master serves the Product Owner in several ways, including helping the Scrum Team understand the need for clear and concise Product Backlog items.
- 7 The Scrum Master serves the Product Owner in several ways, including helping establish empirical product planning for a complex environment.
- 7 The Scrum Master serves the Product Owner in several ways, including facilitating stakeholder collaboration as requested or needed.



- 7 The Scrum Master serves the organization in several ways, including leading, training, and coaching the organization in its Scrum adoption.
- 7 The Scrum Master serves the organization in several ways, including planning and advising Scrum implementations within the organization.
- 7 The Scrum Master serves the organization in several ways, including helping employees and stakeholders understand and enact an empirical approach for complex work.
- 7 The Scrum Master serves the organization in several ways, including removing barriers between stakeholders and Scrum Teams.
- 9 If the Product Owner or Scrum Master are actively working on items in the Sprint Backlog, they participate as Developers.



Part II: Events

Events in General

- 3 Scrum combines four formal events for inspection and adaptation within a containing event, the Sprint.
- These events work because they implement the empirical Scrum pillars of transparency, inspection, and adaptation.
- 4 To help with inspection, Scrum provides cadence in the form of its five events.
- The Scrum Team members learn and explore the values as they work with the Scrum events and artifacts.
- The Scrum Master serves the Scrum Team in several ways, including ensuring that all Scrum events take place and are positive, productive, and kept within the timebox.
- 7 The Sprint is a container for all other events.
- 7 Each event in Scrum is a formal opportunity to inspect and adapt Scrum artifacts.
- 7 [Scrum] events are specifically designed to enable the transparency required.
- 7 Failure to operate any events as prescribed results in lost opportunities to inspect and adapt.
- 7 Events are used in Scrum to create regularity and to minimize the need for meetings not defined in Scrum.
- 7 Optimally, all events are held at the same time and place to reduce complexity.

Sprint

- 3 [...] Scrum requires a Scrum Master to foster an environment where [...] the Scrum Team turns a selection of the work into an Increment of value during a Sprint.
- 3 Scrum combines four formal events for inspection and adaptation within a containing event, the Sprint.
- Working in Sprints at a sustainable pace improves the Scrum Team's focus and consistency.
- The entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint.
- 7 The Sprint is a container for all other events.
- 7 Sprints are the heartbeat of Scrum, where ideas are turned into value.
- 7 [Sprints] are fixed length events of one month or less to create consistency.
- 7 A new Sprint starts immediately after the conclusion of the previous Sprint.



- All the work necessary to achieve the Product Goal, including Sprint Planning, Daily Scrums, Sprint Review, and Sprint Retrospective, happen within Sprints.
- 7 During the Sprint, no changes are made that would endanger the Sprint Goal.
- 7 During the Sprint, quality does not decrease.
- 7 During the Sprint, the Product Backlog is refined as needed.
- During the Sprint, scope may be clarified and renegotiated with the Product Owner as more is learned.
- 7 Sprints enable predictability by ensuring inspection and adaptation of progress toward a Product Goal at least every calendar month
- When a Sprint's horizon is too long the Sprint Goal may become invalid, complexity may rise, and risk may increase.
- 7 Shorter Sprints can be employed to generate more learning cycles and limit risk of cost and effort to a smaller time frame.
- 8 Each Sprint may be considered a short project.
- Various practices exist to forecast progress, like burn-downs, burn-ups, or cumulative flows. While proven useful, these do not replace the importance of empiricism.
- 8 In complex environments, what will happen is unknown. Only what has already happened may be used for forward-looking decision making.
- 8 A Sprint could be cancelled if the Sprint Goal becomes obsolete.
- 8 Only the Product Owner has the authority to cancel the Sprint.
- 8 Sprint Planning initiates the Sprint by laying out the work to be performed for the Sprint.
- 9 To reduce complexity, [the Daily Scrum] is held at the same time and place every working day of the Sprint.
- 9 The Sprint Review is the second to last event of the Sprint and is timeboxed to a maximum of four hours for a one-month Sprint. For shorter Sprints, the event is usually shorter.
- The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.
- The Scrum Team discusses what went well during the Sprint, what problems it encountered, and how those problems were (or were not) solved.
- The most impactful improvements are addressed as soon as possible. They may even be added to the Sprint Backlog for the next Sprint.
- 10 The Sprint Retrospective concludes the Sprint.
- 10 Product Backlog items that can be Done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.



- The Sprint Backlog is composed of the Sprint Goal (why), the set of Product Backlog items selected for the Sprint (what), as well as an actionable plan for delivering the Increment (how).
- 11 [The Sprint Backlog] is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal.
- 11 The Sprint Goal is the single objective for the Sprint.
- As the Developers work during the Sprint, they keep the Sprint Goal in mind. If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.
- 12 Multiple Increments may be created within a Sprint.
- However, an Increment may be delivered to stakeholders prior to the end of the Sprint.

Sprint Planning

- 8 Sprint Planning initiates the Sprint by laying out the work to be performed for the Sprint.
- 8 This resulting plan is created by the collaborative work of the entire Scrum Team.
- The Product Owner ensures that attendees are prepared to discuss the most important Product Backlog items and how they map to the Product Goal.
- The Scrum Team may also invite other people to attend Sprint Planning to provide advice.
- 8 [Sprint Planning: Why is this Sprint valuable?] The Product Owner proposes how the product could increase its value and utility in the current Sprint.
- 8 [Sprint Planning: Why is this Sprint valuable?] The whole Scrum Team then collaborates to define a Sprint Goal that communicates why the Sprint is valuable to stakeholders.
- 8 [Sprint Planning: Why is this Sprint valuable?] The Sprint Goal must be finalized prior to the end of Sprint Planning.
- 8 [Sprint Planning: What can be Done this Sprint?] Through discussion with the Product Owner, the Developers select items from the Product Backlog to include in the current Sprint.
- 8 [Sprint Planning: What can be Done this Sprint?] The Scrum Team may refine these items during this process, which increases understanding and confidence.
- [Sprint Planning: What can be Done this Sprint?] Selecting how much can be completed within a Sprint may be challenging. However, the more the Developers know about their past performance, their upcoming capacity, and their Definition of Done, the more confident they will be in their Sprint forecasts.



- 8 [Sprint Planning: How will the chosen work get done?] For each selected Product Backlog item, the Developers plan the work necessary to create an Increment that meets the Definition of Done.
- 8 [Sprint Planning: How will the chosen work get done?] This is often done by decomposing Product Backlog items into smaller work items of one day or less.
- 8 [Sprint Planning: How will the chosen work get done?] How this is done is at the sole discretion of the Developers. No one else tells them how to turn Product Backlog items into Increments of value.
- 9 The Sprint Goal, the Product Backlog items selected for the Sprint, plus the plan for delivering them are together referred to as the Sprint Backlog.
- 9 Sprint Planning is timeboxed to a maximum of eight hours for a one-month Sprint. For shorter Sprints, the event is usually shorter.
- 10 Product Backlog items that can be Done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.
- 11 The Sprint Goal is created during the Sprint Planning event and then added to the Sprint Backlog.

Daily Scrum

- 9 The purpose of the Daily Scrum is to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary, adjusting the upcoming planned work.
- 9 The Daily Scrum is a 15-minute event for the Developers of the Scrum Team.
- 9 To reduce complexity, [the Daily Scrum] is held at the same time and place every working day of the Sprint.
- 9 If the Product Owner or Scrum Master are actively working on items in the Sprint Backlog, they participate as Developers.
- 9 The Developers can select whatever structure and techniques they want, as long as their Daily Scrum focuses on progress toward the Sprint Goal and produces an actionable plan for the next day of work. This creates focus and improves selfmanagement.
- 9 Daily Scrums improve communications, identify impediments, promote quick decision-making, and consequently eliminate the need for other meetings.
- 9 The Daily Scrum is not the only time Developers are allowed to adjust their plan.
- 9 [Developers] often meet throughout the day for more detailed discussions about adapting or re-planning the rest of the Sprint's work.
- 11 [The Sprint Backlog] should have enough detail that they can inspect their progress in the Daily Scrum.



Sprint Review

- [Product Owner] decisions are visible in the content and ordering of the Product Backlog, and through the inspectable Increment at the Sprint Review.
- 9 The purpose of the Sprint Review is to inspect the outcome of the Sprint and determine future adaptations.
- 9 The Scrum Team presents the results of their work to key stakeholders and progress toward the Product Goal is discussed.
- 9 During the event, the Scrum Team and stakeholders review what was accomplished in the Sprint and what has changed in their environment. Based on this information, attendees collaborate on what to do next.
- 9 The Product Backlog may also be adjusted to meet new opportunities.
- 9 The Sprint Review is a working session and the Scrum Team should avoid limiting it to a presentation.
- 9 The Sprint Review is the second to last event of the Sprint and is timeboxed to a maximum of four hours for a one-month Sprint. For shorter Sprints, the event is usually shorter.
- 12 The sum of the Increments is presented at the Sprint Review thus supporting empiricism.
- 12 The Sprint Review should never be considered a gate to releasing value.
- 12 If a Product Backlog item does not meet the Definition of Done, it cannot be released or even presented at the Sprint Review.

Sprint Retrospective

- However, the Developers are always accountable for holding each other accountable as professionals.
- The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness.
- The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.
- 10 [During the Sprint Retrospective,] assumptions that led [inspected elements] astray are identified and their origins explored.
- The Scrum Team discusses what went well during the Sprint, what problems it encountered, and how those problems were (or were not) solved.
- 10 The Scrum Team identifies the most helpful changes to improve its effectiveness.
- The most impactful improvements are addressed as soon as possible. They may even be added to the Sprint Backlog for the next Sprint.



- 10 The Sprint Retrospective concludes the Sprint.
- 10 [The Sprint Retrospective] is timeboxed to a maximum of three hours for a onemonth Sprint. For shorter Sprints, the event is usually shorter.



Part III: Artifacts

Artifacts in General

- With Scrum, important decisions are based on the perceived state of its three formal artifacts. Artifacts that have low transparency can lead to decisions that diminish value and increase risk.
- The Scrum artifacts and the progress toward agreed goals must be inspected frequently and diligently to detect potentially undesirable variances or problems.
- The Scrum Team members learn and explore the values as they work with the Scrum events and artifacts.
- 7 Each event in Scrum is a formal opportunity to inspect and adapt Scrum artifacts.
- 10 Scrum's artifacts represent work or value.
- 10 [Artifacts] are designed to maximize transparency of key information. Thus, everyone inspecting them has the same basis for adaptation.
- Each artifact contains a commitment to ensure it provides information that enhances transparency and focus against which progress can be measured.
- 10 [Artifact commitment:] For the Product Backlog it is the Product Goal.
- 10 [Artifact commitment:] For the Sprint Backlog it is the Sprint Goal.
- 10 [Artifact commitment:] For the Increment it is the Definition of Done.
- These [Artifact] commitments exist to reinforce empiricism and the Scrum values for the Scrum Team and their stakeholders.

Product Backlog

- 3 [...] Scrum requires a Scrum Master to foster an environment where [...] a Product Owner orders the work for a complex problem into a Product Backlog.
- Therefore, [multiple cohesive Scrum Teams] should share the same Product Goal, Product Backlog, and Product Owner.
- The Product Owner is also accountable for effective Product Backlog management, which includes developing and explicitly communicating the Product Goal.
- The Product Owner is also accountable for effective Product Backlog management, which includes creating and clearly communicating Product Backlog items.
- The Product Owner is also accountable for effective Product Backlog management, which includes ordering Product Backlog items.



- The Product Owner is also accountable for effective Product Backlog management, which includes ensuring that the Product Backlog is transparent, visible and understood.
- [Product Owner] decisions are visible in the content and ordering of the Product Backlog, and through the inspectable Increment at the Sprint Review.
- 7 The Scrum Master serves the Product Owner in several ways, including helping find techniques for effective Product Goal definition and Product Backlog management.
- 8 [Sprint Planning: What can be Done this Sprint?] Through discussion with the Product Owner, the Developers select items from the Product Backlog to include in the current Sprint.
- 9 The Product Backlog may also be adjusted to meet new opportunities.
- 10 [Artifact commitment:] For the Product Backlog it is the Product Goal.
- The Product Backlog is an emergent, ordered list of what is needed to improve the product.
- 10 [The Product Backlog] is the single source of work undertaken by the Scrum Team.
- 10 Product Backlog items that can be Done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.
- 10 [Product Backlog items] usually acquire this degree of transparency after refining activities. Product Backlog refinement is the act of breaking down and further defining Product Backlog items into smaller more precise items.
- 10 [Product Backlog refinement] is an ongoing activity to add details, such as a description, order, and size. Attributes often vary with the domain of work.
- 11 The Developers who will be doing the work are responsible for the sizing.
- 11 The Product Owner may influence the Developers by helping them understand and select trade-offs.
- 11 The Product Goal is in the Product Backlog. The rest of the Product Backlog emerges to define "what" will fulfill the Product Goal.
- 12 Instead, [an undone Product Backlog item] returns to the Product Backlog for future consideration.

Product Backlog Refinement

- 7 The Scrum Master serves the Product Owner in several ways, including helping find techniques for effective Product Goal definition and Product Backlog management.
- 7 During the Sprint, the Product Backlog is refined as needed.
- 8 [Sprint Planning: What can be Done this Sprint?] The Scrum Team may refine these items during this process, which increases understanding and confidence.



- 10 [Product Backlog items] usually acquire this degree of transparency after refining activities. Product Backlog refinement is the act of breaking down and further defining Product Backlog items into smaller more precise items.
- 10 [Product Backlog refinement] is an ongoing activity to add details, such as a description, order, and size. Attributes often vary with the domain of work.

Product Backlog Item

- The Product Owner is also accountable for effective Product Backlog management, which includes creating and clearly communicating Product Backlog items.
- The Product Owner is also accountable for effective Product Backlog management, which includes ordering Product Backlog items.
- 7 The Scrum Master serves the Product Owner in several ways, including helping the Scrum Team understand the need for clear and concise Product Backlog items.
- The Product Owner ensures that attendees are prepared to discuss the most important Product Backlog items and how they map to the Product Goal.
- 8 [Sprint Planning: How will the chosen work get done?] For each selected Product Backlog item, the Developers plan the work necessary to create an Increment that meets the Definition of Done.
- 8 [Sprint Planning: How will the chosen work get done?] This is often done by decomposing Product Backlog items into smaller work items of one day or less.
- 8 [Sprint Planning: How will the chosen work get done?] How this is done is at the sole discretion of the Developers. No one else tells them how to turn Product Backlog items into Increments of value.
- 9 The Sprint Goal, the Product Backlog items selected for the Sprint, plus the plan for delivering them are together referred to as the Sprint Backlog.
- 10 Product Backlog items that can be Done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.
- 10 [Product Backlog items] usually acquire this degree of transparency after refining activities. Product Backlog refinement is the act of breaking down and further defining Product Backlog items into smaller more precise items.
- The Sprint Backlog is composed of the Sprint Goal (why), the set of Product Backlog items selected for the Sprint (what), as well as an actionable plan for delivering the Increment (how).
- 12 If a Product Backlog item does not meet the Definition of Done, it cannot be released or even presented at the Sprint Review.



Product Goal

- The Scrum artifacts and the progress toward agreed goals must be inspected frequently and diligently to detect potentially undesirable variances or problems.
- 4 The Scrum Team commits to achieving its goals and to supporting each other.
- Their primary focus is on the work of the Sprint to make the best possible progress toward these goals.
- 5 [The Scrum Team] is a cohesive unit of professionals focused on one objective at a time, the Product Goal.
- Therefore, [multiple cohesive Scrum Teams] should share the same Product Goal, Product Backlog, and Product Owner.
- The Product Owner is also accountable for effective Product Backlog management, which includes developing and explicitly communicating the Product Goal.
- 7 The Scrum Master serves the Product Owner in several ways, including helping find techniques for effective Product Goal definition and Product Backlog management.
- 7 Sprints enable predictability by ensuring inspection and adaptation of progress toward a Product Goal at least every calendar month
- The Product Owner ensures that attendees are prepared to discuss the most important Product Backlog items and how they map to the Product Goal."
- 9 The Scrum Team presents the results of their work to key stakeholders and progress toward the Product Goal is discussed.
- 9 The Product Backlog may also be adjusted to meet new opportunities.
- 10 [Artifact commitment:] For the Product Backlog it is the Product Goal.
- 11 The Product Goal describes a future state of the product which can serve as a target for the Scrum Team to plan against.
- 11 The Product Goal is in the Product Backlog. The rest of the Product Backlog emerges to define "what" will fulfill the Product Goal.
- 11 [Definition] A product is a vehicle to deliver value. It has a clear boundary, known stakeholders, well-defined users or customers. A product could be a service, a physical product, or something more abstract
- 11 The Product Goal is the long-term objective for the Scrum Team. They must fulfill (or abandon) one objective before taking on the next.
- An Increment is a concrete stepping stone toward the Product Goal.



Sprint Backlog

- However, the Developers are always accountable for creating a plan for the Sprint, the Sprint Backlog.
- 8 [Sprint Planning: What can be Done this Sprint?] Through discussion with the Product Owner, the Developers select items from the Product Backlog to include in the current Sprint.
- 8 [Sprint Planning: What can be Done this Sprint?] Selecting how much can be completed within a Sprint may be challenging. However, the more the Developers know about their past performance, their upcoming capacity, and their Definition of Done, the more confident they will be in their Sprint forecasts.
- 9 The Sprint Goal, the Product Backlog items selected for the Sprint, plus the plan for delivering them are together referred to as the Sprint Backlog.
- 9 The purpose of the Daily Scrum is to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary, adjusting the upcoming planned work.
- 9 If the Product Owner or Scrum Master are actively working on items in the Sprint Backlog, they participate as Developers.
- The most impactful improvements are addressed as soon as possible. They may even be added to the Sprint Backlog for the next Sprint.
- 10 [Artifact commitment:] For the Sprint Backlog it is the Sprint Goal.
- The Sprint Backlog is composed of the Sprint Goal (why), the set of Product Backlog items selected for the Sprint (what), as well as an actionable plan for delivering the Increment (how).
- 11 The Sprint Backlog is a plan by and for the Developers.
- 11 [The Sprint Backlog] is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal.
- 11 Consequently, the Sprint Backlog is updated throughout the Sprint as more is learned.
- 11 [The Sprint Backlog] should have enough detail that they can inspect their progress in the Daily Scrum.
- The Sprint Goal is created during the Sprint Planning event and then added to the Sprint Backlog.
- As the Developers work during the Sprint, they keep the Sprint Goal in mind. If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.



Sprint Goal

- The Scrum artifacts and the progress toward agreed goals must be inspected frequently and diligently to detect potentially undesirable variances or problems.
- 4 The Scrum Team commits to achieving its goals and to supporting each other.
- Their primary focus is on the work of the Sprint to make the best possible progress toward these goals.
- However, the Developers are always accountable for adapting their plan each day toward the Sprint Goal.
- 7 During the Sprint, no changes are made that would endanger the Sprint Goal.
- 7 During the Sprint, scope may be clarified and renegotiated with the Product Owner as more is learned.
- When a Sprint's horizon is too long the Sprint Goal may become invalid, complexity may rise, and risk may increase.
- 8 A Sprint could be cancelled if the Sprint Goal becomes obsolete.
- 8 [Sprint Planning: Why is this Sprint valuable?] The whole Scrum Team then collaborates to define a Sprint Goal that communicates why the Sprint is valuable to stakeholders.
- 8 [Sprint Planning: Why is this Sprint valuable?] The Sprint Goal must be finalized prior to the end of Sprint Planning.
- 9 The Sprint Goal, the Product Backlog items selected for the Sprint, plus the plan for delivering them are together referred to as the Sprint Backlog.
- The purpose of the Daily Scrum is to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary, adjusting the upcoming planned work.
- 9 The Developers can select whatever structure and techniques they want, as long as their Daily Scrum focuses on progress toward the Sprint Goal and produces an actionable plan for the next day of work. This creates focus and improves selfmanagement.
- 10 [Artifact commitment:] For the Sprint Backlog it is the Sprint Goal.
- The Sprint Backlog is composed of the Sprint Goal (why), the set of Product Backlog items selected for the Sprint (what), as well as an actionable plan for delivering the Increment (how).
- 11 [The Sprint Backlog] is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal.
- 11 The Sprint Goal is the single objective for the Sprint.
- Although the Sprint Goal is a commitment by the Developers, it provides flexibility in terms of the exact work needed to achieve it.



- 11 The Sprint Goal also creates coherence and focus, encouraging the Scrum Team to work together rather than on separate initiatives.
- The Sprint Goal is created during the Sprint Planning event and then added to the Sprint Backlog.
- As the Developers work during the Sprint, they keep the Sprint Goal in mind. If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.

Product Increment

- 3 [...] Scrum requires a Scrum Master to foster an environment where [...] the Scrum Team turns a selection of the work into an Increment of value during a Sprint.
- The entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint.
- [Product Owner] decisions are visible in the content and ordering of the Product Backlog, and through the inspectable Increment at the Sprint Review.
- The Scrum Master serves the Scrum Team in several ways, including helping the Scrum Team focus on creating high-value Increments that meet the Definition of Done.
- 8 [Sprint Planning: How will the chosen work get done?] For each selected Product Backlog item, the Developers plan the work necessary to create an Increment that meets the Definition of Done.
- 8 [Sprint Planning: How will the chosen work get done?] How this is done is at the sole discretion of the Developers. No one else tells them how to turn Product Backlog items into Increments of value.
- 9 The purpose of the Sprint Review is to inspect the outcome of the Sprint and determine future adaptations.
- 9 The Scrum Team presents the results of their work to key stakeholders and progress toward the Product Goal is discussed.
- 9 During the event, the Scrum Team and stakeholders review what was accomplished in the Sprint and what has changed in their environment. Based on this information, attendees collaborate on what to do next.
- 10 [Artifact commitment:] For the Increment it is the Definition of Done.
- The Sprint Backlog is composed of the Sprint Goal (why), the set of Product Backlog items selected for the Sprint (what), as well as an actionable plan for delivering the Increment (how).
- An Increment is a concrete stepping stone toward the Product Goal.



- 11 Each Increment is additive to all prior Increments and thoroughly verified, ensuring that all Increments work together.
- 11 In order to provide value, the Increment must be usable.
- 12 Multiple Increments may be created within a Sprint.
- The sum of the Increments is presented at the Sprint Review thus supporting empiricism.
- However, an Increment may be delivered to stakeholders prior to the end of the Sprint.
- 12 The Sprint Review should never be considered a gate to releasing value.
- Work cannot be considered part of an Increment unless it meets the Definition of Done.
- The Definition of Done is a formal description of the state of the Increment when it meets the quality measures required for the product.
- 12 The moment a Product Backlog item meets the Definition of Done, an Increment is born.
- The Definition of Done creates transparency by providing everyone a shared understanding of what work was completed as part of the Increment.
- 12 If the Definition of Done for an increment is part of the standards of the organization, all Scrum Teams must follow it as a minimum.

Definition of Done

- However, the Developers are always accountable for instilling quality by adhering to a Definition of Done.
- The Scrum Master serves the Scrum Team in several ways, including helping the Scrum Team focus on creating high-value Increments that meet the Definition of Done.
- 7 During the Sprint, quality does not decrease.
- [Sprint Planning: What can be Done this Sprint?] Selecting how much can be completed within a Sprint may be challenging. However, the more the Developers know about their past performance, their upcoming capacity, and their Definition of Done, the more confident they will be in their Sprint forecasts.
- 8 [Sprint Planning: How will the chosen work get done?] For each selected Product Backlog item, the Developers plan the work necessary to create an Increment that meets the Definition of Done.
- The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.
- 10 [Artifact commitment:] For the Increment it is the Definition of Done.



- 10 Product Backlog items that can be Done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.
- Work cannot be considered part of an Increment unless it meets the Definition of Done.
- The Definition of Done is a formal description of the state of the Increment when it meets the quality measures required for the product.
- 12 The moment a Product Backlog item meets the Definition of Done, an Increment is born.
- The Definition of Done creates transparency by providing everyone a shared understanding of what work was completed as part of the Increment.
- 12 If a Product Backlog item does not meet the Definition of Done, it cannot be released or even presented at the Sprint Review.
- 12 Instead, [an undone Product Backlog item] returns to the Product Backlog for future consideration.
- 12 If the Definition of Done for an increment is part of the standards of the organization, all Scrum Teams must follow it as a minimum.
- 12 If it is not an organizational standard, the Scrum Team must create a Definition of Done appropriate for the product.
- 12 The Developers are required to conform to the Definition of Done.
- 12 If there are multiple Scrum Teams working together on a product, they must mutually define and comply with the same Definition of Done.



Part IV: Other Key Elements

Accountability, Responsibility

- The entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint.
- Scrum defines three specific accountabilities within the Scrum Team: the Developers, the Product Owner, and the Scrum Master.
- However, the Developers are always accountable for creating a plan for the Sprint, the Sprint Backlog.
- However, the Developers are always accountable for instilling quality by adhering to a Definition of Done.
- However, the Developers are always accountable for adapting their plan each day toward the Sprint Goal.
- However, the Developers are always accountable for holding each other accountable as professionals.
- The Product Owner is accountable for maximizing the value of the product resulting from the work of the Scrum Team. How this is done may vary widely across organizations, Scrum Teams, and individuals.
- The Product Owner is also accountable for effective Product Backlog management, which includes developing and explicitly communicating the Product Goal.
- The Product Owner is also accountable for effective Product Backlog management, which includes creating and clearly communicating Product Backlog items.
- The Product Owner is also accountable for effective Product Backlog management, which includes ordering Product Backlog items.
- The Product Owner is also accountable for effective Product Backlog management, which includes ensuring that the Product Backlog is transparent, visible and understood.
- The Product Owner may do the above work or may delegate the responsibility to others. Regardless, the Product Owner remains accountable.
- The Scrum Master is accountable for establishing Scrum as defined in the Scrum Guide.
- 6 The Scrum Master is accountable for the Scrum Team's effectiveness.

Adaptation

3 Scrum combines four formal events for inspection and adaptation within a containing event, the Sprint.



- These events work because they implement the empirical Scrum pillars of transparency, inspection, and adaptation.
- 4 Inspection enables adaptation. Inspection without adaptation is considered pointless.
- If any aspects of a process deviate outside acceptable limits or if the resulting product is unacceptable, the process being applied or the materials being produced must be adjusted.
- 4 The adjustment must be made as soon as possible to minimize further deviation.
- 4 Adaptation becomes more difficult when the people involved are not empowered or self-managing.
- 4 A Scrum Team is expected to adapt the moment it learns anything new through inspection.
- When these values are embodied by the Scrum Team and the people they work with, the empirical Scrum pillars of transparency, inspection, and adaptation come to life building trust.
- However, the Developers are always accountable for adapting their plan each day toward the Sprint Goal.
- 7 Each event in Scrum is a formal opportunity to inspect and adapt Scrum artifacts.
- 7 Failure to operate any events as prescribed results in lost opportunities to inspect and adapt.
- 7 Sprints enable predictability by ensuring inspection and adaptation of progress toward a Product Goal at least every calendar month
- 9 The purpose of the Daily Scrum is to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary, adjusting the upcoming planned work.
- 9 The purpose of the Sprint Review is to inspect the outcome of the Sprint and determine future adaptations.
- 9 The Product Backlog may also be adjusted to meet new opportunities.
- The most impactful improvements are addressed as soon as possible. They may even be added to the Sprint Backlog for the next Sprint.
- 10 [Artifacts] are designed to maximize transparency of key information. Thus, everyone inspecting them has the same basis for adaptation.

Capacity

[Sprint Planning: What can be Done this Sprint?] Selecting how much can be completed within a Sprint may be challenging. However, the more the Developers know about their past performance, their upcoming capacity, and their Definition of Done, the more confident they will be in their Sprint forecasts.



Change

- 4 Scrum events are designed to provoke change.
- 4 The adjustment must be made as soon as possible to minimize further deviation.
- 7 During the Sprint, no changes are made that would endanger the Sprint Goal.
- 10 The Scrum Team identifies the most helpful changes to improve its effectiveness.

Coaching, Consulting

- The Scrum Master serves the Scrum Team in several ways, including coaching the team members in self-management and cross-functionality.
- 7 The Scrum Master serves the organization in several ways, including leading, training, and coaching the organization in its Scrum adoption.
- 7 The Scrum Master serves the organization in several ways, including planning and advising Scrum implementations within the organization.
- The Scrum Team may also invite other people to attend Sprint Planning to provide advice.

Collaboration

- 3 Scrum is built upon by the collective intelligence of the people using it.
- Rather than provide people with detailed instructions, the rules of Scrum guide their relationships and interactions.
- 3 Scrum engages groups of people who collectively have all the skills and expertise to do the work and share or acquire such skills as needed.
- 4 Scrum Team members respect each other to be capable, independent people, and are respected as such by the people with whom they work.
- The Product Owner may do the above work or may delegate the responsibility to others. Regardless, the Product Owner remains accountable.
- 6 For Product Owners to succeed, the entire organization must respect their decisions.
- Those wanting to change the Product Backlog can do so by trying to convince the Product Owner.
- 7 The Scrum Master serves the Product Owner in several ways, including facilitating stakeholder collaboration as requested or needed.
- 7 The Scrum Master serves the organization in several ways, including removing barriers between stakeholders and Scrum Teams.



- 8 This resulting plan is created by the collaborative work of the entire Scrum Team.
- 8 [Sprint Planning: Why is this Sprint valuable?] The whole Scrum Team then collaborates to define a Sprint Goal that communicates why the Sprint is valuable to stakeholders.
- 9 During the event, the Scrum Team and stakeholders review what was accomplished in the Sprint and what has changed in their environment. Based on this information, attendees collaborate on what to do next.
- 9 The Sprint Review is a working session and the Scrum Team should avoid limiting it to a presentation.
- The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.
- The Sprint Goal also creates coherence and focus, encouraging the Scrum Team to work together rather than on separate initiatives.
- As the Developers work during the Sprint, they keep the Sprint Goal in mind. If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.

Commitment

- 4 Successful use of Scrum depends on people becoming more proficient in living five values: Commitment, Focus, Openness, Respect, and Courage.
- 4 The Scrum Team commits to achieving its goals and to supporting each other.
- Developers are the people in the Scrum Team that are committed to creating any aspect of a usable Increment each Sprint.
- Each artifact contains a commitment to ensure it provides information that enhances transparency and focus against which progress can be measured.
- 10 [Artifact commitment:] For the Product Backlog it is the Product Goal.
- 10 [Artifact commitment:] For the Sprint Backlog it is the Sprint Goal.
- 10 [Artifact commitment:] For the Increment it is the Definition of Done.
- Although the Sprint Goal is a commitment by the Developers, it provides flexibility in terms of the exact work needed to achieve it.

Communication

In general, we have found that smaller teams communicate better and are more productive.



- The Product Owner is also accountable for effective Product Backlog management, which includes developing and explicitly communicating the Product Goal.
- The Product Owner is also accountable for effective Product Backlog management, which includes creating and clearly communicating Product Backlog items.
- The Product Owner is also accountable for effective Product Backlog management, which includes ensuring that the Product Backlog is transparent, visible and understood.
- 8 [Sprint Planning: Why is this Sprint valuable?] The whole Scrum Team then collaborates to define a Sprint Goal that communicates why the Sprint is valuable to stakeholders.
- 9 Daily Scrums improve communications, identify impediments, promote quick decision-making, and consequently eliminate the need for other meetings.
- The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.

Complexity

- 3 [...] Scrum requires a Scrum Master to foster an environment where [...] a Product Owner orders the work for a complex problem into a Product Backlog.
- 7 The Scrum Master serves the Product Owner in several ways, including helping establish empirical product planning for a complex environment.
- 7 The Scrum Master serves the organization in several ways, including helping employees and stakeholders understand and enact an empirical approach for complex work.
- 7 Optimally, all events are held at the same time and place to reduce complexity.
- When a Sprint's horizon is too long the Sprint Goal may become invalid, complexity may rise, and risk may increase.
- In complex environments, what will happen is unknown. Only what has already happened may be used for forward-looking decision making.
- 9 To reduce complexity, [the Daily Scrum] is held at the same time and place every working day of the Sprint.

Continuous Improvement

- 6 The Scrum Master is accountable for the Scrum Team's effectiveness.
- 6 [Scrum Masters] do this by enabling the Scrum Team to improve its practices, within the Scrum framework.



- The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness.
- The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.

Cross-Functionality

- Scrum Teams are cross-functional, meaning the members have all the skills necessary to create value each Sprint.
- The Scrum Master serves the Scrum Team in several ways, including coaching the team members in self-management and cross-functionality.

Decisions

- 3 Empiricism asserts that knowledge comes from experience and making decisions based on what is observed.
- With Scrum, important decisions are based on the perceived state of its three formal artifacts. Artifacts that have low transparency can lead to decisions that diminish value and increase risk.
- The decisions that are made, the steps taken, and the way Scrum is used should reinforce these values, not diminish or undermine them.
- 6 For Product Owners to succeed, the entire organization must respect their decisions.
- [Product Owner] decisions are visible in the content and ordering of the Product Backlog, and through the inspectable Increment at the Sprint Review.
- 8 In complex environments, what will happen is unknown. Only what has already happened may be used for forward-looking decision making.
- 9 Daily Scrums improve communications, identify impediments, promote quick decision-making, and consequently eliminate the need for other meetings.
- 12 The Sprint Review should never be considered a gate to releasing value.

Definitions

- 3 Scrum is a lightweight framework that helps people, teams and organizations generate value through adaptive solutions for complex problems.
- 5 The Scrum Team consists of one Scrum Master, one Product Owner, and Developers.
- Scrum defines three specific accountabilities within the Scrum Team: the Developers, the Product Owner, and the Scrum Master.



- The Product Owner is accountable for maximizing the value of the product resulting from the work of the Scrum Team. How this is done may vary widely across organizations, Scrum Teams, and individuals.
- Developers are the people in the Scrum Team that are committed to creating any aspect of a usable Increment each Sprint.
- The Scrum Master is accountable for establishing Scrum as defined in the Scrum Guide.
- 6 The Scrum Master is accountable for the Scrum Team's effectiveness.
- 3 Scrum combines four formal events for inspection and adaptation within a containing event, the Sprint.
- 7 The Sprint is a container for all other events.
- 7 Sprints are the heartbeat of Scrum, where ideas are turned into value.
- Sprint Planning initiates the Sprint by laying out the work to be performed for the Sprint.
- 9 The purpose of the Daily Scrum is to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary, adjusting the upcoming planned work.
- 9 The purpose of the Sprint Review is to inspect the outcome of the Sprint and determine future adaptations.
- The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness.
- 7 Each event in Scrum is a formal opportunity to inspect and adapt Scrum artifacts.
- 10 Scrum's artifacts represent work or value.
- The Product Backlog is an emergent, ordered list of what is needed to improve the product.
- 10 [The Product Backlog] is the single source of work undertaken by the Scrum Team.
- 10 [Product Backlog refinement] is an ongoing activity to add details, such as a description, order, and size. Attributes often vary with the domain of work.
- 11 The Product Goal is in the Product Backlog. The rest of the Product Backlog emerges to define "what" will fulfill the Product Goal.
- 11 [Definition] A product is a vehicle to deliver value. It has a clear boundary, known stakeholders, well-defined users or customers. A product could be a service, a physical product, or something more abstract
- 11 The Sprint Backlog is composed of the Sprint Goal (why), the set of Product Backlog items selected for the Sprint (what), as well as an actionable plan for delivering the Increment (how).
- 11 The Sprint Goal is the single objective for the Sprint.
- An Increment is a concrete stepping stone toward the Product Goal.



- 11 Each Increment is additive to all prior Increments and thoroughly verified, ensuring that all Increments work together.
- The Definition of Done is a formal description of the state of the Increment when it meets the quality measures required for the product.

DevOps

The Scrum Team is responsible for all product-related activities from stakeholder collaboration, verification, maintenance, operation, experimentation, research and development, and anything else that might be required.

Effectiveness, Productivity

- The Scrum Master is accountable for the Scrum Team's effectiveness.
- 6 [Scrum Masters] do this by enabling the Scrum Team to improve its practices, within the Scrum framework.
- The Scrum Master serves the Scrum Team in several ways, including ensuring that all Scrum events take place and are positive, productive, and kept within the timebox.
- The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness.
- 10 The Scrum Team identifies the most helpful changes to improve its effectiveness.

Emergence

- 3 The emergent process and work must be visible to those performing the work as well as those receiving the work.
- 10 The Product Backlog is an emergent, ordered list of what is needed to improve the product.
- 11 The Product Goal is in the Product Backlog. The rest of the Product Backlog emerges to define "what" will fulfill the Product Goal.
- 11 Consequently, the Sprint Backlog is updated throughout the Sprint as more is learned.
- 12 The moment a Product Backlog item meets the Definition of Done, an Increment is born.



Empiricism

- 3 Scrum is founded on empiricism and lean thinking.
- 3 Empiricism asserts that knowledge comes from experience and making decisions based on what is observed.
- These events work because they implement the empirical Scrum pillars of transparency, inspection, and adaptation.
- 7 The Scrum Master serves the Product Owner in several ways, including helping establish empirical product planning for a complex environment.
- 7 The Scrum Master serves the organization in several ways, including helping employees and stakeholders understand and enact an empirical approach for complex work.
- Various practices exist to forecast progress, like burn-downs, burn-ups, or cumulative flows. While proven useful, these do not replace the importance of empiricism.
- 10 [Artifacts] are designed to maximize transparency of key information. Thus, everyone inspecting them has the same basis for adaptation.
- These [Artifact] commitments exist to reinforce empiricism and the Scrum values for the Scrum Team and their stakeholders.
- 12 The sum of the Increments is presented at the Sprint Review thus supporting empiricism.

Empowerment

- 4 Adaptation becomes more difficult when the people involved are not empowered or self-managing.
- 5 They are structured and empowered by the organization to manage their own work.
- 6 For Product Owners to succeed, the entire organization must respect their decisions.
- Those wanting to change the Product Backlog can do so by trying to convince the Product Owner.
- The Developers can select whatever structure and techniques they want, as long as their Daily Scrum focuses on progress toward the Sprint Goal and produces an actionable plan for the next day of work. This creates focus and improves selfmanagement.

Estimating, Sizing

11 The Developers who will be doing the work are responsible for the sizing.



11 The Product Owner may influence the Developers by helping them understand and select trade-offs.

Ethics

- The Scrum Team members have the courage to do the right thing, to work on tough problems.
- These values give direction to the Scrum Team with regard to their work, actions, and behavior.

Failure

- 7 Failure to operate any events as prescribed results in lost opportunities to inspect and adapt.
- 7 During the Sprint, no changes are made that would endanger the Sprint Goal.
- 7 During the Sprint, quality does not decrease.

Forecast, Projection, Tracking

- Various practices exist to forecast progress, like burn-downs, burn-ups, or cumulative flows. While proven useful, these do not replace the importance of empiricism.
- [Sprint Planning: What can be Done this Sprint?] Selecting how much can be completed within a Sprint may be challenging. However, the more the Developers know about their past performance, their upcoming capacity, and their Definition of Done, the more confident they will be in their Sprint forecasts.
- Each artifact contains a commitment to ensure it provides information that enhances transparency and focus against which progress can be measured.

Frameworks

3 Various processes, techniques and methods can be employed within the framework.

Impediments

The Scrum Master serves the Scrum Team in several ways, including causing the removal of impediments to the Scrum Team's progress.



- 7 The Scrum Master serves the organization in several ways, including removing barriers between stakeholders and Scrum Teams.
- 9 Daily Scrums improve communications, identify impediments, promote quick decision-making, and consequently eliminate the need for other meetings.
- The Scrum Team discusses what went well during the Sprint, what problems it encountered, and how those problems were (or were not) solved.

Inspection

- 3 Scrum combines four formal events for inspection and adaptation within a containing event, the Sprint.
- These events work because they implement the empirical Scrum pillars of transparency, inspection, and adaptation.
- 4 Transparency enables inspection. Inspection without transparency is misleading and wasteful.
- The Scrum artifacts and the progress toward agreed goals must be inspected frequently and diligently to detect potentially undesirable variances or problems.
- 4 To help with inspection, Scrum provides cadence in the form of its five events.
- 4 Inspection enables adaptation. Inspection without adaptation is considered pointless.
- 4 Scrum events are designed to provoke change.
- 4 A Scrum Team is expected to adapt the moment it learns anything new through inspection.
- When these values are embodied by the Scrum Team and the people they work with, the empirical Scrum pillars of transparency, inspection, and adaptation come to life building trust.
- [Product Owner] decisions are visible in the content and ordering of the Product Backlog, and through the inspectable Increment at the Sprint Review.
- 7 Each event in Scrum is a formal opportunity to inspect and adapt Scrum artifacts.
- Failure to operate any events as prescribed results in lost opportunities to inspect and adapt.
- 7 Sprints enable predictability by ensuring inspection and adaptation of progress toward a Product Goal at least every calendar month
- The purpose of the Daily Scrum is to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary, adjusting the upcoming planned work.
- 9 The purpose of the Sprint Review is to inspect the outcome of the Sprint and determine future adaptations.



- The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.
- 10 [During the Sprint Retrospective,] assumptions that led [inspected elements] astray are identified and their origins explored.
- 10 [Artifacts] are designed to maximize transparency of key information. Thus, everyone inspecting them has the same basis for adaptation.
- 11 [The Sprint Backlog] should have enough detail that they can inspect their progress in the Daily Scrum.

Leadership

- 6 Scrum Masters are true leaders who serve the Scrum Team and the larger organization.
- 7 The Scrum Master serves the organization in several ways, including leading, training, and coaching the organization in its Scrum adoption.

Lean

- 3 Lean thinking reduces waste and focuses on the essentials.
- If any aspects of a process deviate outside acceptable limits or if the resulting product is unacceptable, the process being applied or the materials being produced must be adjusted.

Learning

- 4 A Scrum Team is expected to adapt the moment it learns anything new through inspection.
- The Scrum Team members learn and explore the values as they work with the Scrum events and artifacts.
- During the Sprint, scope may be clarified and renegotiated with the Product Owner as more is learned.
- 7 Shorter Sprints can be employed to generate more learning cycles and limit risk of cost and effort to a smaller time frame.
- 11 Consequently, the Sprint Backlog is updated throughout the Sprint as more is learned.



Management

- 3 Scrum makes visible the relative efficacy of current management, environment, and work techniques, so that improvements can be made.
- 4 Adaptation becomes more difficult when the people involved are not empowered or self-managing.
- The decisions that are made, the steps taken, and the way Scrum is used should reinforce these values, not diminish or undermine them.

Meetings

- 7 Events are used in Scrum to create regularity and to minimize the need for meetings not defined in Scrum.
- 9 Daily Scrums improve communications, identify impediments, promote quick decision-making, and consequently eliminate the need for other meetings.

Negotiation

- 7 During the Sprint, scope may be clarified and renegotiated with the Product Owner as more is learned.
- 8 [Sprint Planning: What can be Done this Sprint?] Through discussion with the Product Owner, the Developers select items from the Product Backlog to include in the current Sprint.
- 11 The Product Owner may influence the Developers by helping them understand and select trade-offs.
- As the Developers work during the Sprint, they keep the Sprint Goal in mind. If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.

Ordering, Priority, Prioritization

- The Product Owner is also accountable for effective Product Backlog management, which includes ordering Product Backlog items.
- 6 [Product Owner] decisions are visible in the content and ordering of the Product Backlog, and through the inspectable Increment at the Sprint Review.



Organizations

- They are structured and empowered by the organization to manage their own work. Working in Sprints at a sustainable pace improves the Scrum Team's focus and consistency.
- 6 For Product Owners to succeed, the entire organization must respect their decisions.
- 6 The Product Owner is one person, not a committee.
- 6 [Scrum Master] do this by helping everyone understand Scrum theory and practice, both within the Scrum Team and the organization.
- 6 Scrum Masters are true leaders who serve the Scrum Team and the larger organization.
- 7 The Scrum Master serves the organization in several ways, including leading, training, and coaching the organization in its Scrum adoption.
- 7 The Scrum Master serves the organization in several ways, including planning and advising Scrum implementations within the organization.
- 7 The Scrum Master serves the organization in several ways, including helping employees and stakeholders understand and enact an empirical approach for complex work.
- 7 The Scrum Master serves the organization in several ways, including removing barriers between stakeholders and Scrum Teams.
- 12 If the Definition of Done for an increment is part of the standards of the organization, all Scrum Teams must follow it as a minimum.

Plan, Planning

- However, the Developers are always accountable for creating a plan for the Sprint, the Sprint Backlog.
- However, the Developers are always accountable for adapting their plan each day toward the Sprint Goal.
- 7 The Scrum Master serves the Product Owner in several ways, including helping establish empirical product planning for a complex environment.
- 7 The Scrum Master serves the organization in several ways, including planning and advising Scrum implementations within the organization.
- 7 Sprints enable predictability by ensuring inspection and adaptation of progress toward a Product Goal at least every calendar month
- 9 The Sprint Goal, the Product Backlog items selected for the Sprint, plus the plan for delivering them are together referred to as the Sprint Backlog.



- 9 The Developers can select whatever structure and techniques they want, as long as their Daily Scrum focuses on progress toward the Sprint Goal and produces an actionable plan for the next day of work. This creates focus and improves selfmanagement.
- 9 The Daily Scrum is not the only time Developers are allowed to adjust their plan.
- 9 [Developers] often meet throughout the day for more detailed discussions about adapting or re-planning the rest of the Sprint's work.
- 9 During the event, the Scrum Team and stakeholders review what was accomplished in the Sprint and what has changed in their environment. Based on this information, attendees collaborate on what to do next.
- The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness.
- 11 The Product Goal describes a future state of the product which can serve as a target for the Scrum Team to plan against.
- 11 The Product Goal is the long-term objective for the Scrum Team. They must fulfill (or abandon) one objective before taking on the next.
- The Sprint Backlog is composed of the Sprint Goal (why), the set of Product Backlog items selected for the Sprint (what), as well as an actionable plan for delivering the Increment (how).
- 11 The Sprint Backlog is a plan by and for the Developers.
- 11 [The Sprint Backlog] is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal.
- 11 [The Sprint Backlog] should have enough detail that they can inspect their progress in the Daily Scrum.

Predictability

- 3 Scrum employs an iterative, incremental approach to optimize predictability and to control risk.
- 7 Sprints enable predictability by ensuring inspection and adaptation of progress toward a Product Goal at least every calendar month

Problems, Challenges

- 3 Scrum is a lightweight framework that helps people, teams and organizations generate value through adaptive solutions for complex problems.
- The Scrum artifacts and the progress toward agreed goals must be inspected frequently and diligently to detect potentially undesirable variances or problems.



- 4 The Scrum Team and its stakeholders are open about the work and the challenges.
- The Scrum Team members have the courage to do the right thing, to work on tough problems.
- [Sprint Planning: What can be Done this Sprint?] Selecting how much can be completed within a Sprint may be challenging. However, the more the Developers know about their past performance, their upcoming capacity, and their Definition of Done, the more confident they will be in their Sprint forecasts.

Product

- The Scrum Team is responsible for all product-related activities from stakeholder collaboration, verification, maintenance, operation, experimentation, research and development, and anything else that might be required.
- 8 [Sprint Planning: Why is this Sprint valuable?] The Product Owner proposes how the product could increase its value and utility in the current Sprint.
- The Product Goal describes a future state of the product which can serve as a target for the Scrum Team to plan against.
- 11 [Definition] A product is a vehicle to deliver value. It has a clear boundary, known stakeholders, well-defined users or customers. A product could be a service, a physical product, or something more abstract
- The Definition of Done is a formal description of the state of the Increment when it meets the quality measures required for the product.

Product Discovery

The Scrum Team is responsible for all product-related activities from stakeholder collaboration, verification, maintenance, operation, experimentation, research and development, and anything else that might be required.

Project

8 Each Sprint may be considered a short project.



Progress, Trends, Tracking

- 3 Scrum makes visible the relative efficacy of current management, environment, and work techniques, so that improvements can be made.
- The Scrum artifacts and the progress toward agreed goals must be inspected frequently and diligently to detect potentially undesirable variances or problems.
- However, the Developers are always accountable for adapting their plan each day toward the Sprint Goal.
- The Scrum Master serves the Scrum Team in several ways, including causing the removal of impediments to the Scrum Team's progress.
- Various practices exist to forecast progress, like burn-downs, burn-ups, or cumulative flows. While proven useful, these do not replace the importance of empiricism.
- 9 The purpose of the Daily Scrum is to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary, adjusting the upcoming planned work.
- 9 The Developers can select whatever structure and techniques they want, as long as their Daily Scrum focuses on progress toward the Sprint Goal and produces an actionable plan for the next day of work. This creates focus and improves selfmanagement.
- 9 The Scrum Team presents the results of their work to key stakeholders and progress toward the Product Goal is discussed.
- Each artifact contains a commitment to ensure it provides information that enhances transparency and focus against which progress can be measured.
- 11 [The Sprint Backlog] should have enough detail that they can inspect their progress in the Daily Scrum.
- An Increment is a concrete stepping stone toward the Product Goal.

Quality

- However, the Developers are always accountable for instilling quality by adhering to a Definition of Done.
- 7 During the Sprint, quality does not decrease.
- The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness.
- 11 Each Increment is additive to all prior Increments and thoroughly verified, ensuring that all Increments work together.
- 11 In order to provide value, the Increment must be usable.
- The Definition of Done is a formal description of the state of the Increment when it meets the quality measures required for the product.



- 12 If a Product Backlog item does not meet the Definition of Done, it cannot be released or even presented at the Sprint Review.
- 12 If the Definition of Done for an increment is part of the standards of the organization, all Scrum Teams must follow it as a minimum.
- 12 If it is not an organizational standard, the Scrum Team must create a Definition of Done appropriate for the product.
- 12 The Developers are required to conform to the Definition of Done.
- 12 If there are multiple Scrum Teams working together on a product, they must mutually define and comply with the same Definition of Done.

Risk

- 3 Scrum employs an iterative, incremental approach to optimize predictability and to control risk.
- With Scrum, important decisions are based on the perceived state of its three formal artifacts. Artifacts that have low transparency can lead to decisions that diminish value and increase risk.
- When a Sprint's horizon is too long the Sprint Goal may become invalid, complexity may rise, and risk may increase.
- 7 Shorter Sprints can be employed to generate more learning cycles and limit risk of cost and effort to a smaller time frame.

Scaling Scrum

12 If there are multiple Scrum Teams working together on a product, they must mutually define and comply with the same Definition of Done.

Scope

As the Developers work during the Sprint, they keep the Sprint Goal in mind. If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.



Scrum Adoption

- 7 The Scrum Master serves the organization in several ways, including leading, training, and coaching the organization in its Scrum adoption.
- 7 The Scrum Master serves the organization in several ways, including planning and advising Scrum implementations within the organization.

Scrum Theory

- 3 Scrum is founded on empiricism and lean thinking.
- 3 Empiricism asserts that knowledge comes from experience and making decisions based on what is observed.
- 3 Lean thinking reduces waste and focuses on the essentials.
- 3 Scrum employs an iterative, incremental approach to optimize predictability and to control risk.
- 3 Scrum engages groups of people who collectively have all the skills and expertise to do the work and share or acquire such skills as needed.
- 3 Scrum combines four formal events for inspection and adaptation within a containing event, the Sprint.
- 6 [Scrum Master] do this by helping everyone understand Scrum theory and practice, both within the Scrum Team and the organization.

Scrum Values

- Successful use of Scrum depends on people becoming more proficient in living five values: Commitment, Focus, Openness, Respect, and Courage.
- 4 The Scrum Team commits to achieving its goals and to supporting each other.
- Their primary focus is on the work of the Sprint to make the best possible progress toward these goals.
- 4 The Scrum Team and its stakeholders are open about the work and the challenges.
- 4 Scrum Team members respect each other to be capable, independent people, and are respected as such by the people with whom they work.
- The Scrum Team members have the courage to do the right thing, to work on tough problems.
- These values give direction to the Scrum Team with regard to their work, actions, and behavior.



- The decisions that are made, the steps taken, and the way Scrum is used should reinforce these values, not diminish or undermine them.
- The Scrum Team members learn and explore the values as they work with the Scrum events and artifacts.
- When these values are embodied by the Scrum Team and the people they work with, the empirical Scrum pillars of transparency, inspection, and adaptation come to life building trust.
- These [Artifact] commitments exist to reinforce empiricism and the Scrum values for the Scrum Team and their stakeholders.

Self-Management

- 4 Adaptation becomes more difficult when the people involved are not empowered or self-managing.
- The decisions that are made, the steps taken, and the way Scrum is used should reinforce these values, not diminish or undermine them.
- Within a Scrum Team, there are no sub-teams or hierarchies.
- They are also self-managing, meaning they internally decide who does what, when, and how.
- 5 They are structured and empowered by the organization to manage their own work.
- The Product Owner may do the above work or may delegate the responsibility to others. Regardless, the Product Owner remains accountable.
- The Scrum Master serves the Scrum Team in several ways, including coaching the team members in self-management and cross-functionality.
- 8 In complex environments, what will happen is unknown. Only what has already happened may be used for forward-looking decision making.
- 8 [Sprint Planning: How will the chosen work get done?] How this is done is at the sole discretion of the Developers. No one else tells them how to turn Product Backlog items into Increments of value.
- 9 The Developers can select whatever structure and techniques they want, as long as their Daily Scrum focuses on progress toward the Sprint Goal and produces an actionable plan for the next day of work. This creates focus and improves selfmanagement.
- 11 The Sprint Backlog is a plan by and for the Developers.



Skills, Capability

- The specific skills needed by the Developers are often broad and will vary with the domain of work.
- Scrum Team members respect each other to be capable, independent people, and are respected as such by the people with whom they work.
- Scrum Teams are cross-functional, meaning the members have all the skills necessary to create value each Sprint.
- The specific skills needed by the Developers are often broad and will vary with the domain of work.
- However, the Developers are always accountable for holding each other accountable as professionals.

Stakeholders

- 4 The Scrum Team and its stakeholders are open about the work and the challenges.
- The Scrum Team is responsible for all product-related activities from stakeholder collaboration, verification, maintenance, operation, experimentation, research and development, and anything else that might be required.
- 6 The Product Owner is one person, not a committee.
- The Product Owner may represent the needs of many stakeholders in the Product Backlog.
- Those wanting to change the Product Backlog can do so by trying to convince the Product Owner.
- 7 The Scrum Master serves the Product Owner in several ways, including facilitating stakeholder collaboration as requested or needed.
- 7 The Scrum Master serves the organization in several ways, including helping employees and stakeholders understand and enact an empirical approach for complex work.
- 7 The Scrum Master serves the organization in several ways, including removing barriers between stakeholders and Scrum Teams.
- The Scrum Team may also invite other people to attend Sprint Planning to provide advice.
- 8 [Sprint Planning: Why is this Sprint valuable?] The whole Scrum Team then collaborates to define a Sprint Goal that communicates why the Sprint is valuable to stakeholders.
- 9 The Scrum Team presents the results of their work to key stakeholders and progress toward the Product Goal is discussed.



- 9 During the event, the Scrum Team and stakeholders review what was accomplished in the Sprint and what has changed in their environment. Based on this information, attendees collaborate on what to do next.
- The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.
- These [Artifact] commitments exist to reinforce empiricism and the Scrum values for the Scrum Team and their stakeholders.
- However, an Increment may be delivered to stakeholders prior to the end of the Sprint.
- The Definition of Done creates transparency by providing everyone a shared understanding of what work was completed as part of the Increment.

Timeboxes, Time frames

- The Scrum Master serves the Scrum Team in several ways, including ensuring that all Scrum events take place and are positive, productive, and kept within the timebox.
- When a Sprint's horizon is too long the Sprint Goal may become invalid, complexity may rise, and risk may increase.
- 7 Shorter Sprints can be employed to generate more learning cycles and limit risk of cost and effort to a smaller time frame.
- 9 Sprint Planning is timeboxed to a maximum of eight hours for a one-month Sprint. For shorter Sprints, the event is usually shorter.
- 9 The Daily Scrum is a 15-minute event for the Developers of the Scrum Team.
- 9 The Sprint Review is the second to last event of the Sprint and is timeboxed to a maximum of four hours for a one-month Sprint. For shorter Sprints, the event is usually shorter.
- 10 [The Sprint Retrospective] is timeboxed to a maximum of three hours for a onemonth Sprint. For shorter Sprints, the event is usually shorter.

Training

7 The Scrum Master serves the organization in several ways, including leading, training, and coaching the organization in its Scrum adoption.

Transparency

3 Scrum makes visible the relative efficacy of current management, environment, and work techniques, so that improvements can be made.



- These events work because they implement the empirical Scrum pillars of transparency, inspection, and adaptation.
- The emergent process and work must be visible to those performing the work as well as those receiving the work.
- With Scrum, important decisions are based on the perceived state of its three formal artifacts. Artifacts that have low transparency can lead to decisions that diminish value and increase risk.
- 4 Transparency enables inspection. Inspection without transparency is misleading and wasteful.
- When these values are embodied by the Scrum Team and the people they work with, the empirical Scrum pillars of transparency, inspection, and adaptation come to life building trust.
- The Product Owner is also accountable for effective Product Backlog management, which includes developing and explicitly communicating the Product Goal.
- The Product Owner is also accountable for effective Product Backlog management, which includes ensuring that the Product Backlog is transparent, visible and understood.
- 7 [Scrum] events are specifically designed to enable the transparency required.
- 10 [Artifacts] are designed to maximize transparency of key information. Thus, everyone inspecting them has the same basis for adaptation.
- Each artifact contains a commitment to ensure it provides information that enhances transparency and focus against which progress can be measured.
- 10 [Product Backlog items] usually acquire this degree of transparency after refining activities. Product Backlog refinement is the act of breaking down and further defining Product Backlog items into smaller more precise items.
- 11 [The Sprint Backlog] is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal.
- The Definition of Done creates transparency by providing everyone a shared understanding of what work was completed as part of the Increment.

Value

- With Scrum, important decisions are based on the perceived state of its three formal artifacts. Artifacts that have low transparency can lead to decisions that diminish value and increase risk.
- The entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint.



- The Product Owner is accountable for maximizing the value of the product resulting from the work of the Scrum Team. How this is done may vary widely across organizations, Scrum Teams, and individuals.
- The Scrum Master serves the Scrum Team in several ways, including helping the Scrum Team focus on creating high-value Increments that meet the Definition of Done.
- 7 Sprints are the heartbeat of Scrum, where ideas are turned into value.
- 8 [Sprint Planning: Why is this Sprint valuable?] The Product Owner proposes how the product could increase its value and utility in the current Sprint.
- 8 [Sprint Planning: Why is this Sprint valuable?] The whole Scrum Team then collaborates to define a Sprint Goal that communicates why the Sprint is valuable to stakeholders.
- 10 Scrum's artifacts represent work or value.
- The Product Backlog is an emergent, ordered list of what is needed to improve the product.
- 11 [Definition] A product is a vehicle to deliver value. It has a clear boundary, known stakeholders, well-defined users or customers. A product could be a service, a physical product, or something more abstract
- 11 In order to provide value, the Increment must be usable.
- 12 The Sprint Review should never be considered a gate to releasing value.

Velocity

- Working in Sprints at a sustainable pace improves the Scrum Team's focus and consistency.
- 8 [Sprint Planning: What can be Done this Sprint?] Selecting how much can be completed within a Sprint may be challenging. However, the more the Developers know about their past performance, their upcoming capacity, and their Definition of Done, the more confident they will be in their Sprint forecasts.

Waste

3 Lean thinking reduces waste and focuses on the essentials.

Work

3 [...] Scrum requires a Scrum Master to foster an environment where [...] the Scrum Team turns a selection of the work into an Increment of value during a Sprint.



- These values give direction to the Scrum Team with regard to their work, actions, and behavior.
- 4 The Scrum Team and its stakeholders are open about the work and the challenges.
- Working in Sprints at a sustainable pace improves the Scrum Team's focus and consistency.
- The Scrum Team is small enough to remain nimble and large enough to complete significant work within a Sprint, typically 10 or fewer people.
- The Product Owner is accountable for maximizing the value of the product resulting from the work of the Scrum Team. How this is done may vary widely across organizations, Scrum Teams, and individuals.
- How [maximizing the value of the product resulting from the work of the Scrum Team] is done may vary widely across organizations, Scrum Teams, and individuals.
- 7 The Scrum Master serves the organization in several ways, including helping employees and stakeholders understand and enact an empirical approach for complex work.
- All the work necessary to achieve the Product Goal, including Sprint Planning, Daily Scrums, Sprint Review, and Sprint Retrospective, happen within Sprints.
- Sprint Planning initiates the Sprint by laying out the work to be performed for the Sprint.
- 8 [Sprint Planning: How will the chosen work get done?] For each selected Product Backlog item, the Developers plan the work necessary to create an Increment that meets the Definition of Done.
- 8 [Sprint Planning: How will the chosen work get done?] This is often done by decomposing Product Backlog items into smaller work items of one day or less.
- 8 [Sprint Planning: How will the chosen work get done?] How this is done is at the sole discretion of the Developers. No one else tells them how to turn Product Backlog items into Increments of value.
- The purpose of the Daily Scrum is to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary, adjusting the upcoming planned work.
- 9 [Developers] often meet throughout the day for more detailed discussions about adapting or re-planning the rest of the Sprint's work.
- 9 The Scrum Team presents the results of their work to key stakeholders and progress toward the Product Goal is discussed.
- 10 Scrum's artifacts represent work or value.
- 10 [The Product Backlog] is the single source of work undertaken by the Scrum Team.
- 11 The Developers who will be doing the work are responsible for the sizing.
- 11 [The Sprint Backlog] is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal.



- Although the Sprint Goal is a commitment by the Developers, it provides flexibility in terms of the exact work needed to achieve it.
- As the Developers work during the Sprint, they keep the Sprint Goal in mind. If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.
- Work cannot be considered part of an Increment unless it meets the Definition of Done.
- 12 The Definition of Done creates transparency by providing everyone a shared understanding of what work was completed as part of the Increment.



About the Curator



Stefan is a Professional Scrum Trainer with Scrum.org, an agile Coach, and Scrum Master.



He is specializing in coaching agile practices for change, for example, agile software development with Scrum, LeSS, Kanban, and Lean Startup, as well as product management.

He also serves as one of the XSCALE Alliance stewards and coaches organizations in business agility. Additionally, he is a licensed facilitator of the Agile Fluency™ Team Diagnostic.

He has served in senior leadership positions several times throughout his career. His agile coaching expertise focuses on scaling product delivery organizations of fast-growing, venture-capital funded startups, and transitioning existing product teams in established enterprise organizations.

Stefan is also curating the popular <u>'Food for Agile Thought' newsletter</u> for the global Agile community with 28,000-plus subscribers. He blogs about his experiences on <u>Age-of-Product.com</u> and hosts the most significant global Slack community of agile practitioners with more than 8,600 members.

His ebooks on agile topics have been downloaded more than 55,000 times. Lastly, Stefan is the organizer of the Agile Camp Berlin, a Barcamp for 200-plus agile practitioners.

Read more about Stefan at <u>Scrum.org</u>, and connect with him via <u>LinkedIn</u>, or <u>Twitter</u>, or privately via <u>email.</u>