SCRUMstudy
Targeting success

A Guide to the

SCRUM BODY OF KNOWLEDGE

(SBOK® Guide)

11. REVIEW AND RETROSPECT

A Comprehensive Guide to Implementing and Scaling Scrum, with Practical Examples

(Includes insights into how Artificial Intelligence can enhance Scrum processes)

11. REVIEW AND RETROSPECT

The Review and Retrospect phase is concerned with reviewing the deliverables and the work that has been done and determining ways to improve the practices and methods used to complete the project work. In large organizations the *Review* and *Retrospect* processes may also include convening Scrum of Scrums Meetings.

Review and Retrospect, as defined in *A Guide to the Scrum Body of Knowledge* (*SBOK® Guide*), is applicable to the following:

- Portfolios, programs, and/or projects in *any* industry
- Products, services, or any other results to be delivered to business stakeholders
- Projects of any size or complexity

The term "product" in the *SBOK® Guide* may refer to a product, service, or other deliverable. Scrum can be applied effectively to any project in any industry—from small projects or teams with as few as six team members to large, complex projects with up to several hundred members in several teams.

To facilitate the best application of the Scrum framework, this chapter identifies inputs, tools, and outputs for each process as either "mandatory" or "optional." Inputs, tools, and outputs denoted by asterisks (*) are mandatory, or considered critical for project success, whereas those with no asterisks are optional.

It is recommended that the Scrum Team and those individuals being introduced to the Scrum framework and processes focus primarily on the mandatory inputs, tools, and outputs; while Product Owners, Scrum Masters, and other more experienced Scrum practitioners strive to attain a more thorough knowledge of the information in this entire chapter.

This chapter is written from the perspective of one Scrum Team working on one Sprint to produce potentially shippable deliverables, which could be part of a larger project, program, or portfolio. Additional information pertaining to Scaling Scrum for Large Projects is available in chapter 13. Additional information pertaining to Scaling Scrum for the Enterprise can be found in chapter 14.

Review and Retrospect is the third and final of the three phases that are repeated in every Sprint.

The Product Owner and relevant business stakeholders review the deliverables the team has created and provide feedback. The Product Owner evaluates each User Story and determines whether it meets its respective Acceptance Criteria and accordingly either accepts or rejects it.

As the final part of a Sprint, the Scrum Team determines ways to continually improve its work.

It is also important to realize that although all phases and processes are defined uniquely in the SBOK® Guide, they are not necessarily performed sequentially or separately. At times, it may be more appropriate to overlap some phases and/or processes, depending on the specific requirements of each project.

Figure 11-1 provides a high-level overview of the "review and retrospect" phase. Summarizes key processes including demonstrating deliverables, validating user stories, conducting retrospectives, and incorporating feedback to improve future sprints.

11.1 Demonstrate and Validate Sprint—In this process, the Scrum Team demonstrates the Sprint Deliverables to the Product Owner in a Sprint Review Meeting. The purpose of this meeting is to secure approval of the Sprint User Stories by the Product Owner.

This process is not only an important quality element in a Scrum project, but it is also a key element to maintain stakeholder engagement. The business stakeholders are encouraged to participate in the Sprint Review Meeting to gain first-hand knowledge of the Product or Service and its progress, and to provide feedback. Stakeholder feedback is an important input to future Sprints.

11.2 Retrospect Sprint—In this process, the Scrum Master and Scrum Team meet to discuss the lessons learned throughout the Sprint. This information is documented as lessons learned which will be applied to future Sprints. As a result, there may be agreed actionable improvements or updated Scrum Guidance Body Recommendations. This process is an essential component of the continuous improvement in Scrum.

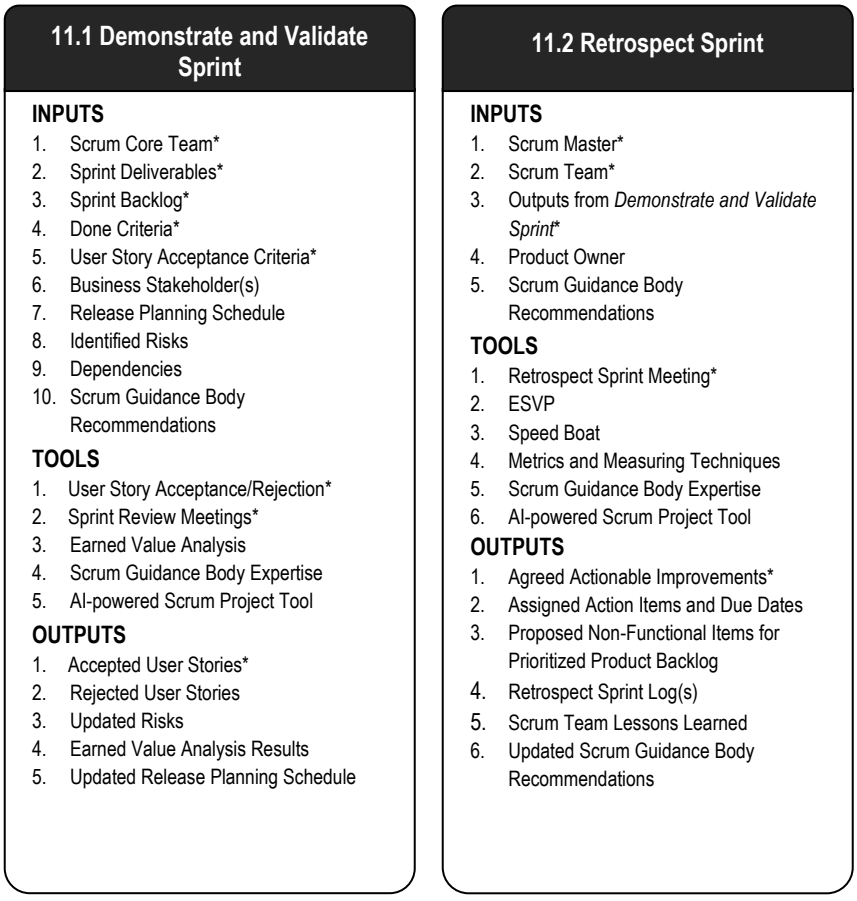

Figure 11-1: Review and Retrospect Overview

Note: Asterisks (*) denote a "mandatory" input, tool, or output for the corresponding process.

Figure 11-2 below shows the mandatory inputs, tools, and outputs for processes in the Review and Retrospect phase.

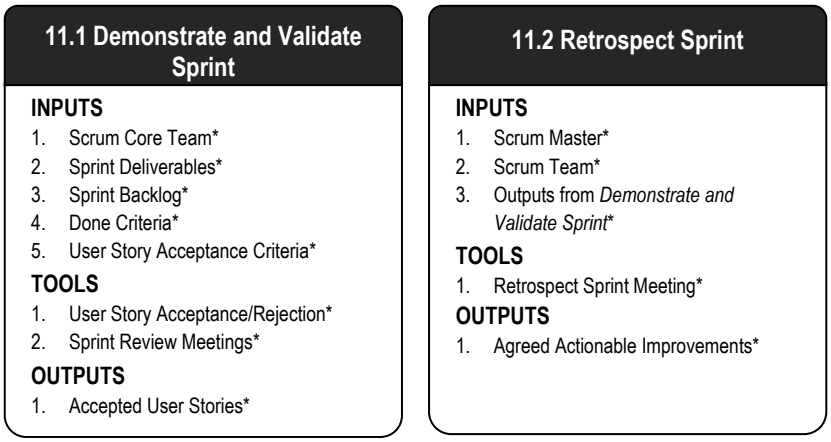

Figure 11-2: Review and Retrospect Overview (Essentials)

Note: Asterisks (*) denote a "mandatory" input, tool, or output for the corresponding process.

11.1 Demonstrate and Validate Sprint

In this process, the Scrum Team demonstrates the Sprint Deliverables to the Product Owner in a Sprint Review Meeting. The purpose of this meeting is to secure approval of the Sprint User Stories by the Product Owner.

This process is not only an important quality element in a Scrum project, but it is also a key element to maintain stakeholder engagement. The business stakeholders are encouraged to participate in the Sprint Review Meeting to gain first-hand knowledge of the Product or Service and its progress, and to provide feedback. Business stakeholder feedback is an important input to future Sprints.

Figure 11-3 shows all the inputs, tools, and outputs for the *Demonstrate and Validate Sprint* process.

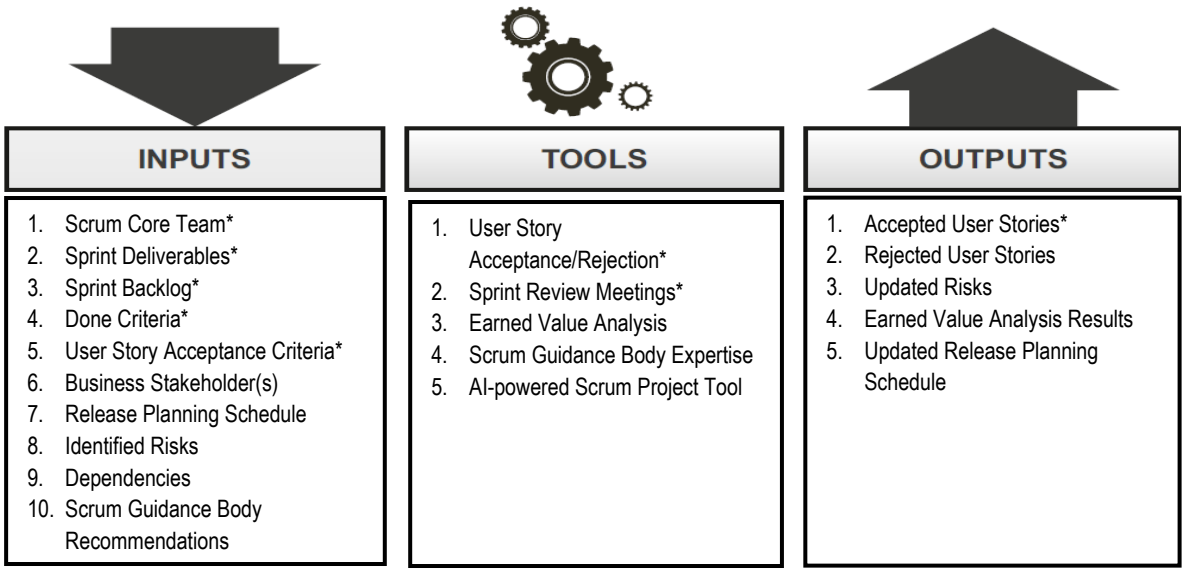

Figure 11-3: Demonstrate and Validate Sprint—Inputs, Tools, and Outputs

Note: Asterisks (*) denote a "mandatory" input, tool, or output for the corresponding process.

Figure 11-4 shows a data flow diagram for the “demonstrate and validate sprint” process. Illustrates how feedback from sprint reviews informs outputs like accepted stories, risk updates, and improved planning.

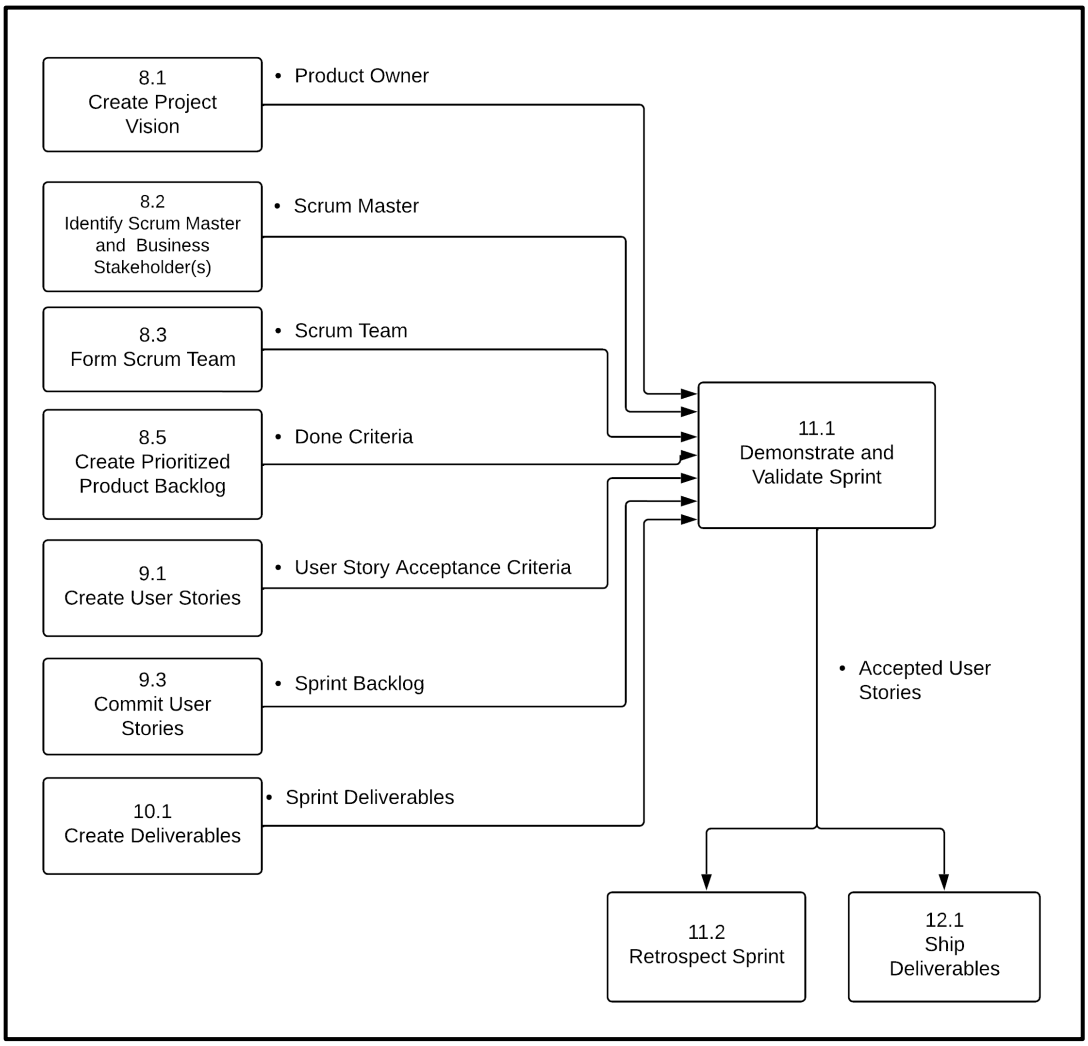

Figure 11-4: Demonstrate and Validate Sprint—Data Flow Diagram

11.1.1 Inputs

11.1.1.1 Scrum Core Team*

Described in section 3.2.1.

11.1.1.2 Sprint Deliverables*

Described in section 10.1.3.1.

11.1.1.3 Sprint Backlog*

Described in sections 9.3.3.2 and 9.6.3.1.

11.1.1.4 Done Criteria*

Described in section 8.5.3.2.

11.1.1.5 User Story Acceptance Criteria*

Described in sections 9.1.3.2 and 9.4.1.3.

11.1.1.6 Business Stakeholder(s)

Described in section to 8.2.3.2.

11.1.1.7 Release Planning Schedule

Described in section 8.6.3.1.

11.1.1.8 Identified Risks

Described in section to 8.4.3.4.

11.1.1.9 Dependencies

Described in section 9.4.3.4.

11.1.1.10 Scrum Guidance Body Recommendations

In the *Demonstrate and Validate Sprint* process, Scrum Guidance Body Recommendations may include best practices about how to conduct Sprint Review Meetings and how to evaluate results from Earned Value Analysis. Also, there may be guidance available on how to share experiences with other people in the Scrum Core Team and with other Scrum Teams in the project. For more information on Scrum Guidance Body Recommendations, see section 8.1.1.7.

11.1.2 Tools

11.1.2.1 User Story Acceptance/Rejection*

After User Stories are completed by the Scrum Team, they are made available to the Product Owner for review. The Product Owner can review the User Stories as soon as each is complete or can review them all in a Sprint Review Meeting convened at the end of the Sprint. The Product Owner accepts the User Stories that satisfy the User Story Acceptance Criteria and the Done Criteria and rejects those that do not meet the criteria, with feedback about why a User Story was rejected. If time is still available in the current Sprint, rejected User Stories are made available to the team to address the reasons for rejection and are provided again to the Product Owner in the same Sprint for an additional review. At the end of a Sprint, any remaining rejected User Stories would remain on the Prioritized Product Backlog to be considered for completion in a future Sprint.

11.1.2.2 Sprint Review Meeting*

Sprint Review Meetings are convened at the end of every Sprint. The Scrum Core Team members and relevant business stakeholders(s) participate in Sprint Review Meetings to present the deliverables. The Scrum Team demonstrates the User Stories and deliverables created as part of the Sprint, including the new functionalities or products created. User Story deliverables that have already been previously approved by the Product Owner prior to the Sprint Review Meeting are also demonstrated by the team during this meeting to ensure that the business stakeholder(s) also review the respective functionality. The Product Owner and business stakeholder(s) to inspect all the deliverables and determine if changes need to be made in a subsequent Sprint. By the end of the Sprint Review Meeting, all User Stories in the Sprint are considered and some are approved, and others are rejected by the Product Owner based on whether they meet the Acceptance Criteria and the Done Criteria.

11.1.2.3 Earned Value Analysis

Described in section 4.6.1.

11.1.2.4 Scrum Guidance Body Expertise

In the *Demonstrate and Validate Sprint* process, Scrum Guidance Body expertise could relate to documented best practices about how to conduct Sprint Review Meetings. There may also be some experts available to help provide guidance on how to better facilitate a Sprint Review Meeting. For more information on Scrum Guidance Body Expertise, see section 8.4.2.7.

11.1.2.5 AI-powered Scrum Project Tool

Described in section 2.4.4

Figure 11-5 is a Vabro interface showing how ai helps manage user story validation and approvals. Includes status indicators, reviewer inputs, and acceptance criteria tracking for each user story.

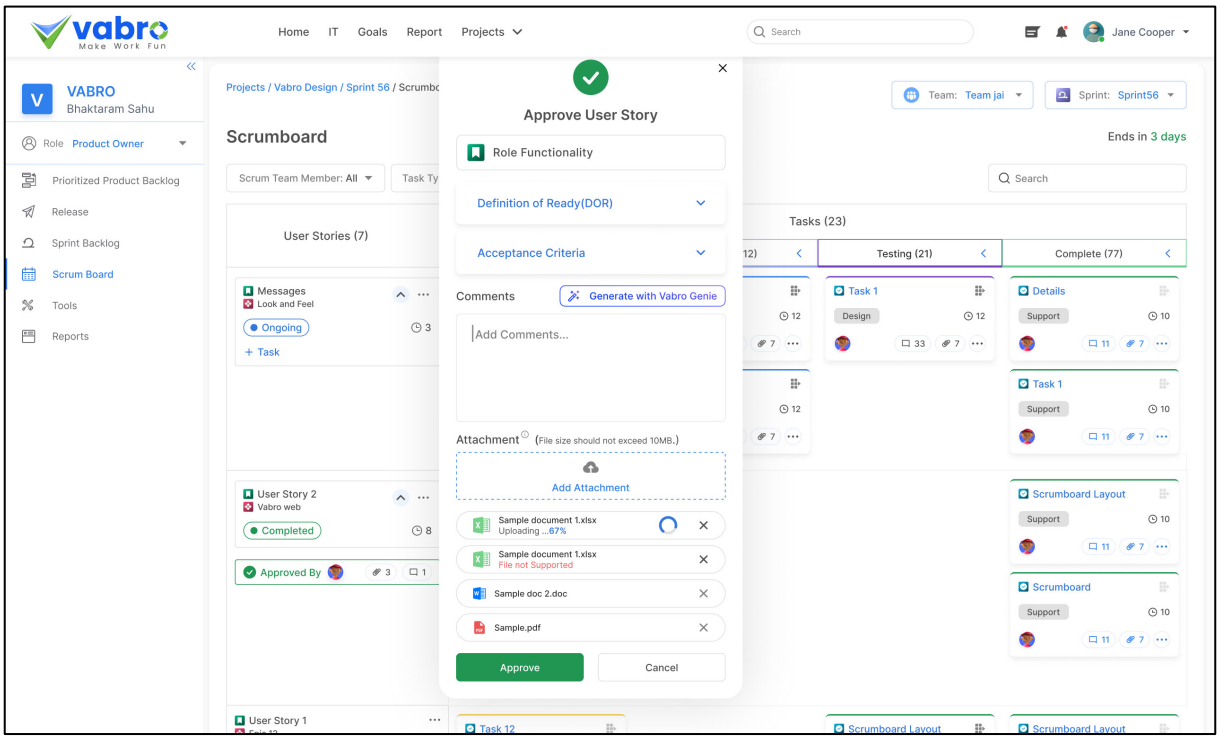

Figure 11-5: User Story Review and Approval (Source: Vabro)

11.1.3 Outputs

11.1.3.1 Accepted User Stories*

The objective of a Sprint is to create potentially shippable deliverables (or product increments) that meet the User Story Acceptance Criteria defined by the customer and Product Owner. User Stories that meet the Acceptance Criteria are formally accepted by the Product Owner. These accepted User Story deliverables may be released to the customer, if desired. A list of the accepted User Stories is maintained and updated after each Sprint Review Meeting.

11.1.3.2 Rejected User Stories

If User Stories do not meet the Acceptance Criteria, they are considered incomplete and are rejected by the Product Owner. Rejected User Stories get added back into the Prioritized Product Backlog so that they can be considered as part of a subsequent Sprint. The work on deliverables associated with rejected User Stories may be done by any Scrum Team to which those User Stories are assigned to in the future.

Since some work might already be done in creating the deliverables of these rejected User Stories, if the partially completed deliverables are assigned for completion in a future Sprint, the future estimate of those User Stories may be lesser than what was estimated for the original User Stories. However, in some cases, Scrum Teams can choose to completely ignore the deliverables associated with the rejected User Stories and consider the upcoming work as new User Stories.

11.1.3.3 Updated Risks

Described in section to 8.4.3.4.

11.1.3.4 Earned Value Analysis Results

Described in section 4.6.1.

11.1.3.5 Updated Release Planning Schedule

Described in section to 8.6.3.1.

11.2 Retrospect Sprint

In this process, the Scrum Master and Scrum Team meet to discuss the lessons learned throughout the Sprint. This information is documented as lessons learned which will be applied to future Sprints. As a result, there may be agreed actionable improvements or updated Scrum Guidance Body Recommendations. This process is an essential component of the continuous improvement in Scrum.

Figure 11-6 shows all the inputs, tools, and outputs for the *Retrospect Sprint* process.

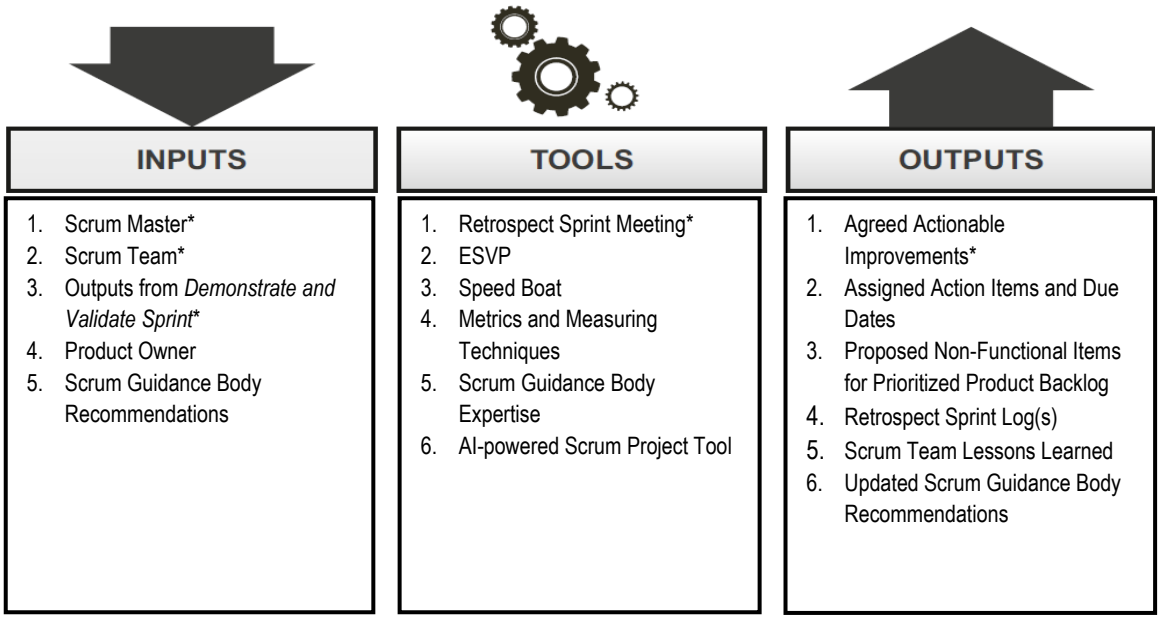

Figure 11-6: Retrospect Sprint—Inputs, Tools, and Outputs

Note: Asterisks (*) denote a "mandatory" input, tool, or output for the corresponding process.

Figure 11-7 is a data flow diagram for the “retrospect sprint” process. Tracks how retrospective inputs result in continuous improvement suggestions, action items, and updates to scrum processes.

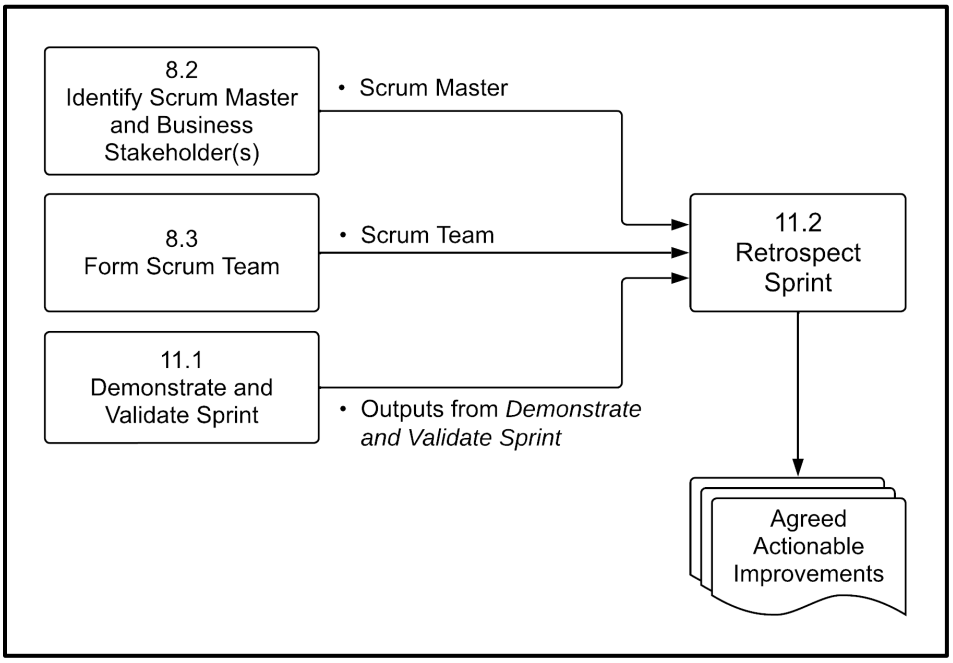

Figure 11-7: Retrospect Sprint—Data Flow Diagram

11.2.1 Inputs

11.2.1.1 Scrum Master*

Described in section 8.2.3.1.

11.2.1.2 Scrum Team*

Described in section 8.3.3.1.

11.2.1.3 Outputs from Demonstrate and Validate Sprint*

The outputs from the *Demonstrate and Validate Sprint* process provide valuable insight while performing the *Retrospect Sprint* process. For more information on the *Demonstrate and Validate Sprint* outputs, see section 11.1.3.

11.2.1.4 Product Owner

Described in section 8.1.3.1.

11.2.1.5 Scrum Guidance Body Recommendations

The Scrum Guidance Body may provide guidelines for conducting Retrospect Sprint Meetings, including suggestions for tools to be utilized and documentation or deliverables expected from the meetings. For more information on Scrum Guidance Body Recommendations, see section 8.1.1.7.

11.2.2 Tools

11.2.2.1 Retrospect Sprint Meeting*

The Retrospect Sprint Meeting is an essential element of the 'inspect-adapt' Scrum framework and it is the last step in a Sprint. All Scrum Team members attend the meeting, which is facilitated or moderated by the Scrum Master. It is recommended but not required for the Product Owner to attend. One team member acts as the scribe and documents discussions and items for future action. It is essential to hold this meeting in an open and relaxed environment to encourage full participation by all team members. Discussions in the Retrospect Sprint Meeting encompass both what went wrong and what went right.

Primary objectives of the meeting are to identify three specific items:

1. Things the team needs to keep doing: best practices
2. Things the team needs to begin doing: process improvements
3. Things the team needs to stop doing: process problems and bottlenecks

These areas are discussed, and a list of agreed actionable improvements is created.

11.2.2.2 Explorer, Shopper, Vacationer, Prisoner (ESVP)

ESVP is an exercise that can be conducted at the start of the Retrospect Sprint Meeting to understand the mindset of the participants and set the tone for the meeting. Attendees are asked to anonymously indicate which best represents how they feel regarding their participation in the meeting.

- Explorer—Wants to participate in and learn everything discussed in the retrospective
- Shopper—Wants to listen to everything and choose what he takes away from the retrospective
- Vacationer—Wants to relax and be a tourist in the retrospective
- Prisoner—Wants to be elsewhere and is attending the retrospective because it is required

The Scrum Master then collates the responses, prepares, and shares the information with the group.

11.2.2.3 Speed Boat

Speed Boat is a technique that can be used to conduct the Retrospect Sprint Meeting. Team members play the role of the crew on a speed boat. The boat must reach an island, which is symbolic of the project vision. The attendees use sticky notes to record engines and anchors. Engines help them reach the island, while anchors hinder them from reaching the island. This exercise is Time-boxed to a few minutes. Once all items are documented, the information is collated, discussed, and prioritized by way of a voting process. Engines are recognized and mitigation actions are planned for the anchors, based on priority.

11.2.2.4 Metrics and Measuring Techniques

Various metrics can be used to measure and contrast the team's performance in the current Sprint to their performance in previous Sprints. Some examples of these metrics include:

- Team velocity—Number of story points done in a given Sprint
- Done success rate—Percentage of story points that are done versus those that are committed
- Estimation effectiveness—Number or percentage of deviations between estimated and actual time spent on tasks and User Stories
- Review feedback ratings—Quantitative or qualitative feedback ratings solicited from team members that provide a measurement of team performance
- Team morale ratings—Results from self-assessments of team member morale
- Peer feedback—360-degree feedback mechanisms, used to solicit constructive criticism and insight into team performance
- Progress to release or launch—Business value provided in each release, as well as value represented by the current progress towards a release; this contributes to team motivation and to the level of work satisfaction

11.2.2.5 Scrum Guidance Body Expertise

In the *Retrospect Sprint* process, Scrum Guidance Body expertise could relate to best practices on how to conduct Retrospect Sprint Meetings. There may also be experts available to provide guidance on how to use the tools in this process to deliver agreed and actionable improvements for future Sprints. For more information on Scrum Guidance Body Expertise, see section 8.4.2.7.

11.2.2.6 AI-powered Scrum Project Tool

Described in section 2.4.4

11.2.3 Outputs

11.2.3.1 Agreed Actionable Improvements*

Agreed actionable improvements are the primary output of the *Retrospect Sprint* process. This is a list of actionable items that the team has come up with to address problems and improve processes in order to enhance team performance in future Sprints.

11.2.3.2 Assigned Action Items and Due Dates

Once the agreed actionable improvements have been elaborated and refined, action items to implement the improvements may be assigned by the Scrum Team and each action item will have a defined due date for completion.

11.2.3.3 Proposed Non-Functional Items for Prioritized Product Backlog

When the initial Prioritized Product Backlog is developed, it is based on User Stories and required functionalities. Often, non-functional requirements may not be fully defined in the initial stages of the project and can surface during the Sprint Review or Retrospect Sprint Meetings. These items should be added to the Prioritized Product Backlog as they are discovered. Some examples of non-functional requirements are response times, capacity limitations, and security-related issues.

11.2.3.4 Retrospect Sprint Log(s)

The Retrospect Sprint Log is a record of the opinions, discussions, and actionable items raised in a Retrospect Sprint Meeting. The Scrum Master usually facilitates creation of this log with input from Scrum Core Team members. The collection of all Retrospective Sprint Logs becomes the project diary, which includes details on project successes, issues, problems, and resolutions. These logs are public documents available to anyone in the organization.

11.2.3.5 Scrum Team Lessons Learned

The self-organizing and empowered Scrum Team is expected to learn from any mistakes made during a Sprint. These lessons learned can help the team to improve their performance in future Sprints. Lessons learned may also be documented as Scrum Guidance Body recommendations to be shared with other Scrum Teams.

There can also be positive lessons learned as part of a Sprint. These positive lessons learned are a key part of the retrospective and should be appropriately shared within the team and with the Scrum Guidance Body, so that all Scrum teams can work towards continuous self-improvement.

Sometimes improvements go beyond the power of the Scrum Team or the Scrum Guidance Body Recommendations. In such cases, help from Senior Management and/or other stakeholders may be required, and the respective items are escalated and followed up by the Scrum Master or Product Owner.

11.2.3.6 Updated Scrum Guidance Body Recommendations

As a result of the Retrospect Sprint Meeting, suggestions may be made to revise or enhance the Scrum Guidance Body recommendations. If suggestions are accepted, these will be incorporated as updates to the applicable Scrum Guidance Body documentation.

11.3 Review and Retrospect Phase Data Flow Diagram

Figure 11-8 shows a data flow diagram summarizing the entire review and retrospect phase. Illustrates how review meetings, validation steps, and retrospectives contribute to feedback loops and enhanced team performance.

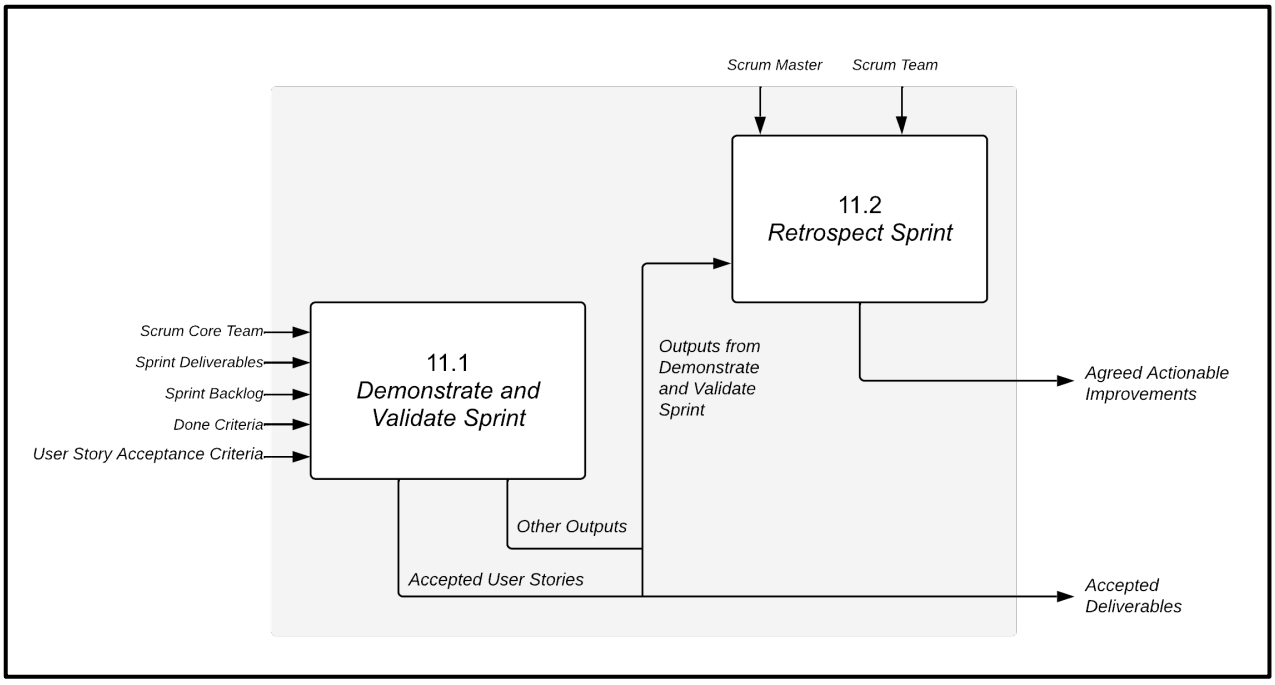

Figure 11-8: Review and Retrospect Phase—Data Flow Diagram

The Essential Guide to Successfully Deliver Projects using Scrum

A Guide to the Scrum Body of Knowledge (SBOK® Guide) provides comprehensive guidelines for the successful implementation of Scrum—the most popular Agile product development and project delivery approach. Defined in the SBOK® Guide as a flexible framework, Scrum can be applied to portfolios, programs, or projects of any size or complexity across industries to deliver products, services, or other results.

This Fifth Edition is based on the collective knowledge gained from thousands of projects across diverse organizations and industries. It reflects contributions from a large number of experts in Scrum and project delivery. Feedback from the global Scrum community played a vital role in shaping improvements and additions, making the SBOK® Guide a truly collaborative effort.

Unlike other Scrum references, the SBOK® Guide is available for free on Scrumstudy.com, along with free certifications, webinars, videos, and study guides. It is ideal for professionals seeking a foundational understanding of Business Analysis or exploring careers in related fields. The Guide addresses real-life challenges faced by Scrum practitioners and explains how to solve them using modern tools and Artificial Intelligence (AI).

Designed to be accessible and engaging, the SBOK® Guide follows the 80-20 rule—80% of key concepts can be learned by reading just 20% of the content, with the remainder available for deeper reference. It is more readable than most Scrum books, which are often either too simplistic or overly detailed.

The SBOK® Guide serves as a reference for both experienced practitioners and those with no prior knowledge of Scrum or project delivery methods. Organized for easy navigation, the SBOK® Guide aims to inform, support, and inspire all readers through its rich, collaborative content.

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