



Certified Scrum@Scale Practitioner®

Learning Objectives



Preamble

This document lays out the Certified Scrum@Scale Practitioner course Learning Objectives. The focus of the course is on the application of knowledge and skills within and beyond the context of the course. The learning objectives are designed to offer Scrum@Scale instructors an opportunity for reflection on the course content, to set standards by which the success of the course will be evaluated, and to provide useful methods for assessing students' learning. Instructors should create an interactive and meaningful learning experience that incorporates their own real-world examples and practical knowledge.

1 The Scrum@Scale Framework

1.1 Purpose & Definitions

By the end of this course, students will be able to:

- Recall the core Scrum Framework and explain how it scales across an organization to achieve improved results at an enterprise level.
- Identify the component-based nature of the Scrum@Scale Framework and recognize that each component has inputs and outputs.
- Explain why organizations struggle to be agile and identify the three Mega Issues organizations face when trying to scale.
- Explain that Scrum@Scale is a lightweight framework that can be applied in any industry and domain.
- Discuss why there is not a prescription to scaling agility within an organization but rather principles and patterns that work across functions, domains, and industries.
- Explain the importance of systems-thinking to optimize the whole organization or value stream.
- Relate hands-on experience with iterative development involving multiple teams to their own working context.
- Provide at least one real-world example of Scrum at Scale outside of IT.

1.2 Values-Driven Culture

By the end of this course, students will be able to:

- Explain the importance of organizational culture when implementing and scaling agility.
- Discuss the disruption moving to agile ways of working can cause and how the Scrum Values are required to effectively navigate this disruption.
- Recognize that successful use of Scrum and Scrum@Scale depends on people becoming more proficient in living the five Scrum Values: Commitment, Focus, Openness, Respect, and Courage.

1.3 Getting Started

By the end of this course, students will be able to:

- Complete the Component Assessment Summary for their reference organization based on the self-assessments in each of the component modules.
- Identify the highest priority component to focus on and create a sample scaling backlog for implementing or improving that component within their organizational context.

2 Patterns of High Performing Teams

By the end of this course, students will be able to:

- Describe the benefits of patterns-based Scrum for Scrum@Scale implementations.
- Discuss key challenges of scaling Scrum and the patterns that address them.
- Recognize the relationship between Velocity and overall team effectiveness.
- Explain the advantage of adding the Patterns to Scrum to achieve increased productivity.
- Identify which of the Patterns are generative and promote or enhance the effectiveness of other patterns, and explain how.
- Recognize the evidence-based nature of the Patterns in the Scrum Pattern Language, and how to learn more about other patterns not taught in the context of the course.

2.1 Interrupt Buffer

By the end of this course, students will be able to:

- Determine the amount of interrupts that should be planned for based on Yesterday's Weather.
- Recognize that the Product Owner should still prioritize interrupts that are brought into the interrupt buffer.
- Explain that when the interrupt buffer is full, new interrupts that are higher priority than other PBIs in the Sprint Backlog will cause the Sprint to be aborted and the team must re-plan the remainder of the Sprint.
- Describe how this pattern can help reduce interrupts and lead to Finishing Early, making it a generative pattern.
- Explain how this pattern can be used at scale to help load balance across teams.

2.2 Stable Teams

By the end of this course, students will be able to:

- Illustrate value of Small, Stable and Dedicated teams.
- Recite Brook's law and describe how it relates to the Stable Teams pattern.
- Discuss the cost of context switching and how this impacts unstable teams.
- Explain why team performance and effectiveness improves for Stable teams.

2.3 Swarming

By the end of this course, students will be able to:

- Describe the benefits of the Swarming pattern and how to use it.
- Explain that teams that don't Swarm are less likely to meet their Sprint commitments.
- Describe the cost of context switching and the impact Swarming has on Process Efficiency, throughput and quality.

2.4 Happiness Metric

By the end of this course, students will be able to:

- Explain that happiness is a leading indicator of productivity.
- Apply the Happiness Metric pattern to assess the happiness of their teams.

2.5 Yesterday's Weather

By the end of this course, students will be able to:

- State at least two benefits of using the Yesterday's Weather pattern.
- Apply Yesterday's Weather to determine how much work should be pulled into a Sprint.
- Explain how this Pattern is generative to the Pattern of 'Teams that Finish Early Accelerate Faster.'

2.6 Teams that Finish Early Accelerate Faster

By the end of this course, students will be able to:

- Explain the rationale behind not committing to more work than the team has been able to complete in previous Sprints.
- Describe how the 'Yesterday's Weather' and 'Interrupt Buffer' patterns reinforce the 'Teams that Finish Early Accelerate Faster' pattern.

2.7 Good Housekeeping (formerly Daily Clean Code)

By the end of this course, students will be able to:

- Describe the Toyota Production System's Andon Cord approach to dealing with defects and how this approach and mindset encourages Swarming, making it another generative pattern.
- Recognize the impact and cost of fixing a defect outside of the Sprint.
- Discuss how to deal with defects discovered inside versus outside of the Sprint differently.

2.8 Scrum Emergency Procedure

By the end of this course, students will be able to:

- Explain what to do when it becomes obvious by mid-Sprint that the Sprint will fail.
- Identify the steps in the Scrum Emergency Procedure in the correct order: Innovate > Offload Backlog > Reduce Scope > Abort the Sprint.

3 Scaling the Teams

By the end of this course, students will be able to:

- Shift perspective from a goal of team success to a goal of organizational success.
- Describe the idea of a *reference model* and discuss the importance of having Scrum working well on one team, or one small network of teams, before scaling it throughout an organization.
- Understand how organizational debt, or any structures, cultural characteristics, procedures and policies that limit productivity, will impede the organizations' ability to achieve true business agility.
- Compare and contrast the Toyota Production System, Lean, Scrum and Agile and explain how they are connected.
- Explain the importance of organizational refactoring to improve production and better respond to changes in the market.

3.1 The Team Process

By the end of this course, students will be able to:

- State that the team process in Scrum@Scale is Scrum.
- Describe the Scrum process for a single team.
- Recognize the results Scrum can help a team achieve.
- Explain how cross-functional teams and pairing produce better results than traditional approaches to project management like assembly-line or waterfall.
- Make the point that work in progress is waste because it isn't creating value for customers or the organization.
- Explain key goals, inputs and outputs of the Team Process component.
- Assess the Team Process in their organization.

3.2 Scrum of Scrums (SoS)

By the end of this course, students will be able to:

- Define the Scrum of Scrums as a network of teams that have a need to coordinated in order to achieve a common goal.
- Recognize that the Scrum of Scrums operates as a scaled Scrum Team, and needs to scale the Scrum Events and the teams' corresponding accountabilities.
- Explain that the Scrum of Scrum Master (SoSM) fulfills the Scrum Master role for the Scrum of Scrums.
- Explain the difference between the Scrum of Scrums and the Scaled Daily Scrum.
- Present examples of Scaled Daily Scrum Questions.
- Describe the purpose of the Scaled Daily Scrum as an opportunity for teams within a Scrum of Scrums to re-plan in order to meet the Sprint Goal of the SoS, identify & mitigate cross-team impediments, and share learnings.

4 Scrum Master Cycle: Coordinating the “How”

By the end of this course, students will be able to:

- Describe the components of the Scrum Master Cycle and explain at a high-level how they work together to improve outcomes.

4.1 The Scrum of Scrums Master (SoSM)

By the end of this course, students will be able to:

- Describe the role and accountabilities of the Scrum of Scrums Master, and how it parallels the Scrum Master role.
- Explain how this SoSM scales depending on the size of the organization.

4.2 The Executive Action Team (EAT)

By the end of this course, students will be able to:

- Explain the accountabilities of the Executive Action Team and recognize that the EAT owns the transformational strategy for the organization.
- Describe why the EAT is required for successful scaling of Scrum.
- Discuss who is part of the EAT.
- Contrast The EAT and a typical Project Management Office.
- Identify individuals within their reference organization that might be good members of an EAT.
- Asses their reference organizations with respect to the effectiveness of their Executive Action Team.

4.3 The Agile Practice

By the end of this course, students will be able to:

- Explain when and why an organization might have an Agile Practice.
- Explain hat the Agile Practice is a Pattern, not a framework component.
- Describe the relationship between the EAT and Agile Practice.
- Explain that the Agile Practice is accountable for the quality of Scrum within the organization.
- Asses their reference organizations with respect to the effectiveness of their Agile Practice.

4.4 Continuous Improvement and Impediment Removal

By the end of this course, students will be able to:

- Explain the need for continuous improvement and impediment removal.
- Explain the importance of making impediments visible at the right level(s) in the organization to effect change and continuous improvement.
- Describe how impediments are escalated in a scaled Scrum.
- Asses their reference organizations with respect to the effectiveness of their Impediment Removal.

4.5 Cross-Team Coordination

By the end of this course, students will be able to:

- Express the value of sharing learnings and insights across teams.
- Discuss how communication is the key to higher productivity.
- Explain the value and purpose of cross-team coordination.
- Correctly identify which teams should coordinate via a Scrum of Scrums, and which should not.
- Describe how different aspects (“what” vs “how”) of cross-team coordination are handled through the Scrum of Scrums and MetaScrum, respectively.
- Explain the importance of knowledge sharing and standardizing empirically validated practices.
- Assess their reference organizations with respect to the effectiveness of their Cross-team coordination.

4.6 Delivery

By the end of this course, students will be able to:

- Describe the goals, inputs and outputs of the Delivery component.
- Demonstrate an understanding of different approaches to Delivery.
- Explain the benefits of increasing automation in the delivery process.
- Describe the contextual nature of delivery and how this cadence may differ from company to company or even within the same organization.
- Emphasize the importance of the Scrum of Scrums as a Release Management team.
- Assess their reference organization with respect to the effectiveness of its delivery practices.

5 Product Owner Cycle: Coordinating the “What”

By the end of this course, students will be able to:

- Identify the components of the Product Owner Cycle and explain at a high-level how they work together to value delivery.

5.1 Scaling the Product Owner

By the end of this course, students will be able to:

- Describe how the Product Owner Team is the scaled version of the Product Owner Role.
- Discuss how the Executive MetaScrum Forum functions as a forum where the Product Owner Team meets with Stakeholders, led by a Chief Product Owner responsible for translating a Vision into a single actionable Product Backlog.
- Explain that there are additional MetaScrum events depending on the size of the organization.
- Discuss the MetaScrum Backlog refinement as the forum for stakeholders to express preferences.
- Identify common symptoms of weak product ownership at both the team level and at scale.
- Assess their reference organization with respect to the effectiveness of its Executive MetaScrum.

5.2 Strategic Vision

By the end of this course, students will be able to:

- Explain how the strategic vision relates to product goals.
- Describe inputs and outputs of the strategic vision.
- Explain the importance of being able to measure progress toward goals.
- Explain how product and organizational agility help improve outcomes.
- Assess their reference organization with respect to the effectiveness of its Strategic Vision.

5.3 Backlog Prioritization

By the end of this course, students will be able to:

- Explain how the order of priority reflected in the backlog affects a company's bottom line or relates to a strategic vision.
- Define business value and describe different sources of business value (market value, risk reduction, etc.).
- Identify methods for determining business value.
- Describe in detail at least one way to prioritize challenging a PO to release earlier in the life cycle (e.g., cost of delay).
- Assess their reference organization with respect to the effectiveness of its Backlog Prioritization.

5.4 Backlog Decomposition & Refinement

By the end of this course, students will be able to:

- Identify pitfalls that can occur due to lack of proactive Product Backlog Refinement in single-team Scrum. Emphasize the importance not only of proactive refinement in a Scaled situation but the importance of joint refinement activities.
- Identify the goals, inputs and outputs of Product Backlog Refinement in scaled Scrum.
- Understand the need for an agile architecture in the backlog.
- State at least two effective techniques for joint refinement (story maps, impact mapping, string diagrams, etc.).
- Assess their reference organization with respect to the effectiveness of its Backlog Decomposition and Refinement.

5.5 Release Planning

By the end of this course, students will be able to:

- Describe how Release Planning is a planning horizon and not associated with delivery.
- Explain how Release Planning answers two questions: When does the customer realize value and when does the organization realize value?
- Demonstrate tools for generating a Release Plan.
- Explain how to create a release burndown.
- Describe how un-finished work and emergent work affect Release Planning.
- Assess their reference organization with respect to the effectiveness of its Release Planning.

6 Connecting the Cycles

6.1 Product & Release Feedback

By the end of this course, students will be able to:

- Identify the goals, inputs and outputs of Product & Release Feedback in a scaled Scrum.
- Describe the importance of feedback from multiple sources such as Stakeholders, Customers, and Scrum Team members.
- Explain the concepts of The MVP and The Pivot as they relate to feedback.
- Explain that feedback can apply to both product and delivery process.
- Assess their reference organization with respect to the effectiveness of its Feedback.

6.2 Metrics & Transparency

By the end of this course, students will be able to:

- Identify the goals, inputs and outputs of Metrics & Transparency in a scaled Scrum.
- Explain the importance of context and the need to understand what is being measured prior to adopting Scrum@Scale for an effective comparison of how a company operated previously.
- Identify different lenses for measuring progress and give sample metrics.
- Explain the value of looking at metrics together.
- Assess their reference organization with respect to the effectiveness of its Metrics & Transparency.

7 Certified Scrum@Scale Practitioner Credential

By the end of this course, students will be able to:

- Access and complete the Certified Scrum@Scale Practitioner exam.
- Download their Certified Scrum@Scale Practitioner Credential (upon successful completion of the exam).
- State the renewal process.