

# SCRUM ALLIANCE® ADVANCED CERTIFIED SCRUM PRODUCT OWNER® Learning Objectives

March 2017

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## INTRODUCTION

### Purpose

This document describes the Learning Objectives (LOs) that must be covered in an Advanced Certified Scrum Product Owner course. These Learning Objectives take the following into consideration:

- Every implementation of Scrum is different.
- Teams and organizations apply Scrum within their context, but the fundamental framework always remains the same.

### The Learning Objectives for this course are based on:

- Scrum Guide, <http://scrumguides.org>
- Agile Manifesto, 4 values and 12 principles, <http://www.agilemanifesto.org>

### Scope

Scrum Alliance has adopted the *Scrum Guide, The Definitive Guide to Scrum: The Rules of the Game*, coauthored and updated (most recently in 2016) by the co-creators of the Scrum framework, as the guiding curriculum for this course. A-CSPO® candidates are expected to build a body of knowledge of the Scrum framework, including its roles, events, and artifacts. Incorporating Scrum principles and practices takes diligence, patience, and a commitment to continuous improvement. Scrum is a framework, not a prescriptive methodology.

Advanced Certified Scrum Product Owner candidates should expect that each Learning Objective identified in this document will be covered in an A-CSPO educational offering. The A-CSPO Learning Objectives fall into the following categories:

- 1. Performing the Role of the Product Owner**
- 2. Advanced Purpose and Strategy**
- 3. Empathizing with Customers and Users**
- 4. Advanced Product Assumption Testing**
- 5. Advanced Techniques for Working with the Product Backlog**

*Individual trainers (CSTs) or coaches (CECs) may choose to teach ancillary topics. Ancillary topics presented in an A-CSPO course must be clearly indicated as such.*

## LEARNING OBJECTIVES

### A note about examples used in the following Learning Objectives:

Several Learning Objectives include a list of examples. The examples are used to clarify the intent of the objective. Individual trainers or coaches can use the provided examples, their own examples that still meet the objective, or a mix of both. Examples do not imply that they are the only options, nor that they constitute an exhaustive list.

### A note about Bloom's Taxonomy:

While some Learning Objectives appear to tell the trainer how to teach, that is not the intent. Bloom's-style Learning Objectives describe what the learner can do upon completing the class. Rather than include that text in each Learning Objective, please mentally append the following phrase to each objective:

**“Upon successful completion of the A-CSPO course, the learner will be able to ...”**

## 1. Examining the Product Owner Role

### Examining the Product Owner Role

- 1.1. ... describe the impact on a Scrum Team and organization of at least three anti-patterns that might exist for Product Owners and relate one to your organization or Scrum Team. For example: The Product Owner is viewed as simply an order taker; the Product Owner says, “It’s all important,” focusing only on strategy and handing details off to the delivery team; leaving everything ambiguous, letting the team figure it out with no input; telling the team how to do their job; the organization assigns “proxy Product Owners” that don’t have authority to reorder; the organization has technical Product Owners for customer-facing products; a “part time Product Owner” who is attempting to fill the role while doing another job..
- 1.2. ... analyze how you as a Product Owner help the organization realize value through delivering product solutions that delight customers and users within the constraints of technical feasibility, organizational context, and regulatory requirements.
- 1.3. ... discuss the skills and capabilities needed for a Product Owner to collaborate as a member of a cross-functional Scrum Team in order to create successful products.
- 1.4. ... explain the role of the Product Owner and at least three of the benefits of mastering the role.
- 1.5. ... illustrate why Scrum and product ownership is important for you.

### Working with Stakeholders

- 1.6. ... identify at least four major stakeholder groups and describe how a Product Owner may interact with them during the development cycles (e.g., customers, sponsors, users, service, team members, customer support, training, governance (audit, compliance, risk), managers, infrastructure, security, architecture, etc.).
- 1.7. ... discuss three questions that will help you identify that you are working with the key stakeholders you need. Example questions: Can you clearly identify what you want from the stakeholder? Can you exist without or easily replace the stakeholder?

- 1.8. ... using two concrete examples, recognize when the Product Owner should not act as the facilitator for the stakeholders (i.e., emotional conflict, impediment to creativity, lack of facilitation skills, too invested in the outcome of the discussion to be impartial).
- 1.9. ... demonstrate at least three facilitative listening techniques (e.g., paraphrasing, mirroring, making space, stacking, etc.).
- 1.10. ... list at least three alternatives to open discussion (e.g., structured go-arounds, individual writing, listing ideas, dialogue in pairs or small groups, etc.) and demonstrate the use of at least one of them.
- 1.11. ... identify at least three indicators when a group is engaged in divergent thinking and at least three indicators where a group is engaged in convergent thinking.
- 1.12. ... identify at least three challenges of integrating multiple frames of reference.
- 1.13. ... describe at least three ways a group of stakeholders could reach their final decision (e.g., fist of five, decider protocol, majority vote, etc.).
- 1.14. ... practice a product backlog ordering session with multiple stakeholders.
- 1.15. ... debate the importance of various stakeholders participating in sprint review meetings (e.g., CEO, external customer, head of engineering, other teams, etc.).
- 1.16. ... demonstrate at least three techniques for engaging with stakeholders on a regular basis. For example, product backlog refinement, roadmapping, release planning, qualitative market research, Sprint Reviews, observe Daily Scrums, etc.

### **Working with the Development Team**

- 1.17. ... define technical debt and explain why the Product Owner should be cautious about accumulating technical debt (e.g., by showing how technical debt impacts the capacity of the team over time, the increase of cost for addressing technical debt too late, using the “Debt Quadrant” by Martin Fowler).
- 1.18. ... list at least five practices (e.g., from extreme programming: test-driven development, pair programming, continuous integration, collective code ownership, refactoring) that will help Scrum Teams deliver a high-quality product increment and reduce technical debt each sprint.
- 1.19. ... list at least three ways technical practices may impact the Product Owner’s ability to maximize business value each sprint (e.g., continuous integration allows early feedback, pairing speeds up understanding and reduces documentation effort, TDD improves quality and reduces rework and regression testing time).

### **Product Ownership with Multiple Teams**

- 1.20. ... list at least three scaling frameworks or approaches (LeSS, DAD, Enterprise Scrum, etc.).
- 1.21. ... describe how at least two large-scale participatory meeting formats (Open Space, World Cafe, Review Bazaar) might be adapted to scale Scrum meetings.
- 1.22. ... question the benefits of managing dependencies when compared to reducing/removing dependencies.
- 1.23. ... illustrate at least three techniques for visualizing, managing, or reducing dependencies between teams.
- 1.24. ... describe at least three benefits and drawbacks of feature teams and component teams.

## 2. Advanced Purpose and Strategy

### Developing Practical Product Strategies

- 2.1. ... demonstrate a context-rich approach for communicating with stakeholders and Scrum Team members.
- 2.2. ... describe at least one simple tool that captures key aspects of a business. For example: business model canvas, Lean canvas, value proposition canvas.
- 2.3. ... discuss a real-world example of how product strategy is operationalized and evolves over time in an Agile organization.
- 2.4. ... practice at least two approaches to identify purpose or define strategy and foster alignment and shared ownership. For example: co-creating, collaborating, product or vision box, cover story, selling, or telling.

### Advanced Roadmapping and Release Planning

- 2.5. ... organize and facilitate a stakeholder session to break down a solution or feature as progressively smaller items that may be completed in sprints.
- 2.6. ... create a prioritized product roadmap with stakeholders.
- 2.7. ... demonstrate how to plan a product release based on content from a roadmap, market segmentation and market window.

## 3. Empathizing with Customers and Users

### Customer Research and Product Discovery

- 3.1. ... use one technique to connect teams directly to customers and users to build deeper understanding and empathy (e.g., job shadowing, customer interviews, customer observation, collaborative customer games, usability testing, or simulating customer experience).
- 3.2. ... integrate at least three techniques to generate new product and feature ideas, and use at least one (e.g., design studio, brainstorming, collaborative customer games, etc.).
- 3.3. ... practice at least two techniques of product discovery and how each contributes to successful product outcomes (e.g., user research, customer experience design, interaction design, usability engineering, visual design) and practice one technique.
- 3.4. ... demonstrate at least two techniques to visualize and communicate product and feature ideas and assumptions. For example: business model canvas, customer journey map, user story map, user scenario, or design comic.

## 4. Advanced Product Assumption Testing

- 4.1. ... list two cognitive biases that may impact the Product Owner's capability to effectively deliver business value. For example, anchoring (on prior opinion or desired total effort), priming based on assumptions, confirmation bias, framing bias, self-serving bias, fundamental attribution error, etc.
- 4.2. ... appraise how effectively the sprint review meeting is used in your organization to inspect and adapt based on the product increment that was built in the sprint.

- 4.3. ... experiment with at least two approaches to incorporate testing assumptions into the Scrum framework. For example: Validation is complete prior to starting sprints, the Product Owner validates assumptions a sprint or two ahead of the Development Team, and the Scrum Team uses the Sprint Goal to deliver results to test assumptions.
- 4.4. ... develop three hypotheses for a given target user/customer segment and create a plan to test one hypothesis. For example, “I believe [target market] will [do this action/use this solution] for [this reason].” “The signal to detect the hypothesis is true or false is...”
- 4.5. ... compare at least three approaches to testing assumptions by their cost and the quality of learning (e.g., building potentially releasable product, customer interviews, ethnographic research, direct user observation, A/B tests, collaborative games, concierge/Wizard of Oz MVPs, paper prototypes, functional prototypes.).

## 5. Advanced Techniques for Working with the Product Backlog

### Differentiating Outcome and Output

- 5.1. ... describe one benefit of maximizing outcome and impact to the business, user, and market while minimizing output for a product/feature idea. For example: Don't build features that won't be used, faster time to market by focusing only on highest outcome, etc.

### Defining Value

- 5.2. ... use at least two techniques to model value. For example: “We believe that if we do X, then the result will be Y.” “By adding this capability, we expect click through rates to increase by 20% in the next three months.”
- 5.3. ... use at least two techniques to measure value. For example: usage metrics, NPS, customer and user interviews, social media sentiment, direct observation, ROI, profitability of the product, inbound customer feedback, etc.

### Ordering Items

- 5.4. ... describe and apply at least four factors to implement when ordering a product backlog (e.g., value, effort, risk reduction, dependencies, cost of delay, readiness to build, testability, learning value, ability to deliver to customers).
- 5.5. ... apply at least two different techniques to structure and filter the contents of a given product backlog (e.g., using themes, feature areas, concerns).

### Advanced Item Refinement

- 5.6. ... illustrate how the Product Owner can ensure that enough product backlog items are “ready” for the upcoming sprint. For example, create a shared Definition of “Ready,” hold frequent refinement sessions, empower more people to do this work, etc.
- 5.7. ... integrate feedback from at least three sources to generate product backlog items. For example: different stakeholder groups, regulatory requirements, learning from validation, defects, technical concerns, etc.
- 5.8. ... demonstrate how to communicate the purpose and intent of a product backlog item, answer clarification questions, and rephrase or split the product backlog item with others.

- 5.9. ... list at least three techniques to enhance user/customer contribution to product backlog item formulation (e.g., user story brainstorming, customer interviews, open planning meeting).
- 5.10. ... describe acceptance criteria for a product backlog item so that a Development Team can understand the conditions for the item to be accepted as done.