

SCRUM MASTER

Certification Guide

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Chapter 15: The Product Backlog

The Product Owner is the one member of the Scrum Team who is tasked solely with the job of 'optimizing the value of the work done by the Scrum Team.'

The way the Product Owner does that is by keeping a prioritized list of all the features and improvement the product under development requires.

This list is known as the Product Backlog.

The Product Backlog is an emergent, ordered list of what is needed to improve the product.

— 2020 Scrum Guide page 10

This definition makes it clear that the Product Backlog is the list of the features that need to be built to complete the project. The Developers on a Scrum Team should never be working on anything that isn't part of the Product Backlog.



Figure 1. The Product Owner is accountable for the Product Backlog. (Image from Freepik.com)

Ordered, Prioritized List of Features

This definition also demands that the list be ordered, in a priority sequence. The most important items are at the top.

There is also only one Product Backlog. Any product feature that's needed is listed in the one, true Product Backlog.

- There is no 'secondary backlog' for low priority features
- There is no 'high-priority' backlog for features executives want
- There is no 'parking lot backlog' to put features that haven't been touched in a year

If there's a product enhancement that needs doing, no matter how small or low-priority it is, it

exists in the Product Backlog.

The Product Backlog will change over time as more is known about what the stakeholders want and what the client needs. That's the idea of the Product Backlog being 'emergent.'

Test Yourself

True or False: The Product Backlog is a prioritized list of the things that are needed to improve the product.

This is true. This precisely describes the purpose of the Product Backlog.

Single Source of Work

The Product Backlog is the single source of work undertaken by the Scrum Team.

— 2020 Scrum Guide page 10

The fact that the Product Backlog is the *single source* of work to be undertaken by the Scrum Team indicates that it is also the *only* source of work undertaken by the Scrum team.

If the Scrum Team is going to work on something, then it has to first be part of the Product Backlog.

True or False: The Scrum Master can assign work to the Scrum Developers that is not a part of the Product Backlog.

This is false.

The Product Backlog is the only source of work for the Scrum Team.

Product Backlog Refinement

Product Backlog items that can be done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.

They 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.

This is an ongoing activity to add details, such as a description, order, and size.

Attributes often vary with the domain of work.

— 2020 Scrum Guide page 10

Developers may see a high-priority Product Backlog item that is far too complex to complete in a 3 or 4-week Sprint. When this happens, the developers work with the Product Owner to break the

item down into something more manageable.

The goal is always to break a Product Backlog item into something that can be completed within a Sprint. During Sprint planning, the developers are expected to further break all of the selected Product Backlog items down into units of work that can be completed in a day or less.

For each selected Product Backlog item, the Developers plan the work necessary to create an Increment that meets the Definition of Done.

This is often done by decomposing Product Backlog items into smaller work items of one day or less.

— Sprint Planning page 8

Test Yourself

Breaking Product Backlog items selected for the Sprint down into smaller work items of one day or less is called: (Choose 1)

- ☐ Grooming
- ☐ Refinement
- ☐ Decomposition
- ☐ Planning

Option C is correct.

The Scrum Guide describes decomposition as breaking "Product Backlog items into smaller work items of one day or less."

Test Yourself

A Product Backlog item has remained untouched for over a year, and there are no plans for the developers to work on this item within the next 12 months. What should the Product Owner do with this Product Backlog item? (Choose 1)

- ☐ Remove the Product Backlog item
- ☐ Create a separate, low-priority Product Backlog to track items like this
- ☐ Assign a high-priority status to the item so it gets completed in an upcoming Sprint
- ☐ Leave the item in the Product Backlog with a low priority

Option D is correct.

Every product feature that is required remains in the Product Backlog, even if other items consistently have a higher priority.

Test Yourself

When does Product Backlog refinement occur:

- ☐ Product Backlog refinement happens during Sprint Planning
- ☐ Product Backlog refinement happens during the Sprint Retrospective
- ☐ Product Backlog refinement happens during the Daily Scrum
- ☐ Product Backlog refinement is an ongoing activity that happens throughout the Sprint

Option D is correct.

The Scrum Guide has very few rules about what should happen and when.

If a Product Backlog item needs more details, needs to be refined, needs to be decomposed, or anything else, then the team should do it right away.

When work needs to be done, don't wait for an official Scrum event to do it. Just get the work done.

Estimation and Sizing

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

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

— 2020 Scrum Guide page 10

This point keeps coming up and up again in the Scrum Guide, and you can expect it to come up again and again on the certification exam.

Only the Developers know what it takes to accomplish a given piece of work. Only the developer can size up Product Backlog items and estimate how much time a given feature will take to complete.

Developers do the estimating in Scrum.

Test Yourself

Who is responsible for estimating how many Product Backlog Items can be completed in a Sprint? (Choose 1)

- ☐ The Product Owner
- ☐ The Scrum Master
- ☐ The Scrum developers
- ☐ The stakeholders

Option C is correct.

The developers are the experts. Only the developers know how long it will take to complete a Product Backlog item.

Test Yourself

True or false: Taking into account upcoming vacation time is more empirical than estimating productivity based on burndown charts.

This is true.

Burndown charts and velocity calculations are great, but they are not a replacement for actual knowledge and real-world experience.

Commitment: Product Goal

The Product Goal describes the future state of the product which can serve as a target for the Scrum Team to plan against.

— 2020 Scrum Guide page 11

Every arrow needs a target.

As the Scrum Team works to build the product, they need to know what the product is that they're building.

The Product Goal serves this purpose.



Figure 2. The Product Goal is the target to which the Product Backlog aims at.

Test Yourself

True or false: The Product Goal represents the current state of the project?

This is false.

The Product Goal represents the future state of the project.

Product Goal and the Product Backlog

The Product Goal is in the Product Backlog.

The rest of the Product Backlog emerges to define "what" will fulfill the Product Goal.

— 2020 Scrum Guide page 11

The Product Goal is a semi-permanent part of the Product Backlog.

It's semi-permanent because it shouldn't be changing all the time. It should represent the vision of the Product Owner and act as a steady target for all members of the Scrum Team to aim at.

On the other hand, the Product Backlog is *emergent*.

The project may start with little more than a vague idea of how to implement the product vision. The Product Backlog items may be poorly defined, as a full appreciation for exactly what product features are necessary may not exist.

Over time, as more is learned about the product, the stakeholders, the tech stack, the timelines and the team's capacity, Product Backlog items will be added, refined, decomposed and potentially even deleted.

The Product Goal should represent a relatively stable vision of what the Product Owner would like to build. The Product Backlog emerges and is refined over time.

Test Yourself

The Product Backlog has many items that have never been assessed and likely won't be worked on within the next year. What should the Product Owner do to clean up the Product Backlog? (Choose 1)

- ☐ Create a second Product Backlog and moved these items there
- ☐ Delete the old items from the Product Backlog
- ☐ Prioritize these Product Backlog items so the developers complete them
- ☐ Leave the Product Backlog items in the Product Backlog as they are

Option D is correct.

The Product Backlog contains everything needed to create the product and achieve the Product Goal.

If a Product Backlog item contributes to the completion of the Product Goal, then it must be in the Product Backlog.

Value Delivery

A product is a vehicle to deliver value.

A product has:

- a clear boundary,
- known stakeholders,
- well-defined users or customers.

A product could be a service, a physical product, or something more abstract.

— 2020 Product Backlog Definition page 11

The people behind the Scrum Guide have worked hard to get people out of the mindset that Scrum is just for software development.

This section further emphasizes the point that Scrum can be used to develop more than just software.

Test Yourself

During the Sprint, the product being built will have: (Choose 2)

- ☐ An approved budget
- ☐ Known stakeholders
- ☐ Well-defined users
- ☐ Has unclear boundaries

Options B and C are correct.

The Scrum Guide does not say anything about the topic of budgets, so option A is correct.

Option D is incorrect because the Scrum Guide insists that the product being built has clear boundaries.

TIP

The certification exam will create scenarios that make it sound like it's okay for a Scrum Master or CEO to add items to the Product Backlog. That can never happen. Only the PO can add items to the Product Backlog.

A Single, Shared Objective

The Product Goal is the long-term objective for the Scrum Team.

They must fulfill (or abandon) one objective before taking on the next.

— 2020 Product Backlog Definition page 11

According to the Scrum Guide, a Scrum Team can only work on one project at a time. They can't have their efforts split between two separate projects.

That doesn't mean an *individual Developer* or *Scrum Master* can't be on multiple teams at the same time.

I've quite often seen UI designers who have only a small part to play on a set of active projects be part of multiple Scrum Teams at the same time.

It's also very common for Scrum Masters to be on three or four different teams at a time.

There is no rule against an individual being on multiple teams with separate objectives, but a single Scrum Team can only have one objective in mind.

Test Yourself!

The Product Owner believes the Scrum Team has enough capacity to work on two separate projects concurrently. How do you, as the Scrum Master, advise the Product Owner to go forward with this plan? (Choose 1)

- ☐ Double the timebox for all Scrum events
- ☐ Create a second Product Backlog for the new project
- ☐ Add features for the new Project into the current Product Backlog
- ☐ Inform the Product Owner that a Scrum team can only work on one product at a time

Option D is correct.

A Scrum Team must fulfill or abandon one objective before taking on the next. A Scrum Team can have only one objective at a time.