

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 an ordered list of all the features and improvements 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

The Scrum Guide's 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 solely accountable for the Product Backlog.

An Ordered List of Features

The Scrum Guide's definition of the Product Backlog demands that the list be ordered in a sequence that puts the important items at the top.

There is also only one Product Backlog. Any product feature that's needed and likely to be built within a reasonable time horizon is listed in the one, true Product Backlog.

Items that have existed in the backlog for an extended period of time without having been built, or items that are not likely to be built any time soon should be pruned away. The Product Backlog should

help provide focus. It shouldn't not be cluttered with items that are never likely to be built.

If there's a product enhancement that needs doing 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.'

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 reinforces the fact that it is also the *only* source of work to be 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.

Only the Scrum Master can assign work to the Scrum Developers that is not a part of the Product Backlog.

- ☐ True
- ☐ False

This is false for a number of reasons.

First, the Scrum Master doesn't assign anyone any work, ever. A Scrum Master might coach a Product Owner on how to do their job better, but they never assign anyone work.

Secondly, the Product Backlog is the only source of work for the Scrum Team. If it's not part of the Product Backlog, the Scrum Developers shouldn't be working on it.

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)

- ☐ A) Grooming
- ☐ B) Refinement
- ☐ C) Decomposition
- ☐ D) Planning

Option C is correct.

The Scrum Guide describes decomposition as breaking "Product Backlog items into smaller work items of one day or less." The term 'grooming' has fallen out of favor.

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)

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

Be @Scrumtuuous.

Option A is correct.

A Product Backlog cluttered with items with no real viable prospect of being worked on within the foreseeable future should be removed from the Product Backlog.

The Product Backlog should help the team focus. It shouldn't create confusion or anxiety.

Test Yourself

When does Product Backlog refinement occur:

(Choose 1)

- ☐ A) Product Backlog refinement happens during Sprint Planning
- ☐ B) Product Backlog refinement happens during the Sprint Retrospective
- ☐ C) Product Backlog refinement happens during the Daily Scrum
- ☐ D) 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.

Do you tell a nuclear engineer how long it should take to cool down a nuclear reactor? No, because you don't know anything about nuclear reactors. They do.

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)

- ☐ A) The Product Owner
- ☐ B) The Scrum Master
- ☐ C) The Scrum developers
- ☐ D) 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

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

- ☐ True
- ☐ False

This is true.

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

Commitment: The 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. It's the Product Backlog's target.

Test Yourself

The Product Goal represents the current state of the project?

- ☐ True
- ☐ False

This is false.

The Product Goal represents the future state of the project.



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

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-finalized, permanent part of the Product Backlog.

It's semi-finalized because it shouldn't be changing very often. 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 when the project kicks off.

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

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)

- ☐ A) An approved budget
- ☐ B) Known stakeholders
- ☐ C) Well-defined users
- ☐ D) Potentially unclear boundaries

Options B and C are correct.

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

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

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 objective 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.

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.

Test Yourself

The Product Backlog is a ordered list of the things that are needed to improve the product.

☐ True

☐ False

This is true.

This precisely describes the purpose of the Product Backlog.
