

**PSM™ I**

**Professional Scrum Master**

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## Focus

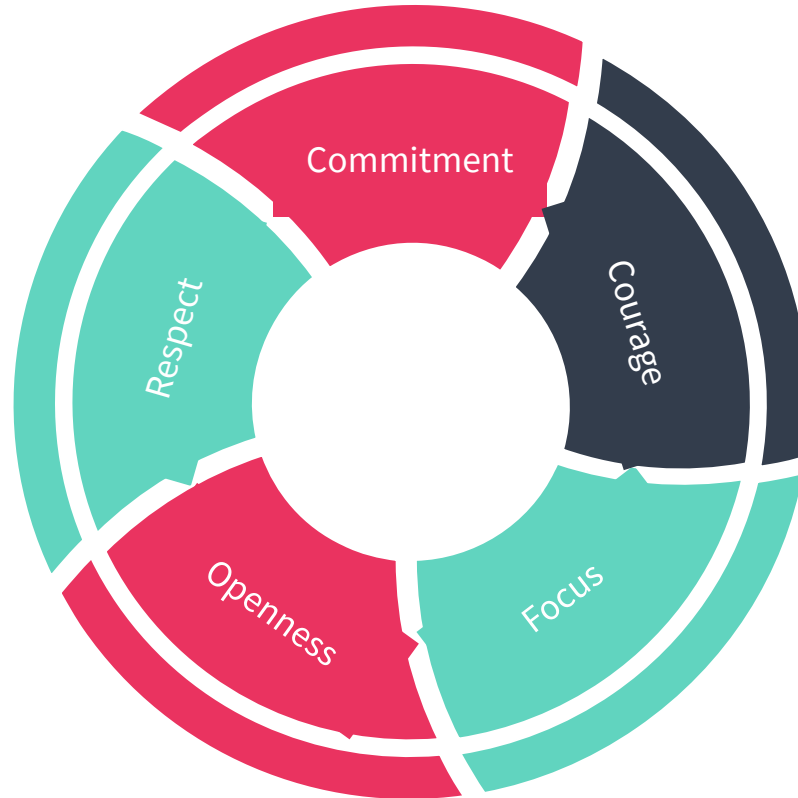
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# SCRUM - Key Point

# SCRUM is a Framework

Scrum employs an **iterative, incremental** approach to **optimize predictability** and to **control risk**

# SCRUM - 5 Values



If Scrum Teams become too large, they should consider reorganizing into **multiple cohesive Scrum Teams**, each focused on the same product. Therefore, **they should share the same Product Goal, Product Backlog, and Product Owner.**

# SCRUM - Team

< 10 pax

## #1 Product Owner

Accountable for **maximizing the value** of the product resulting from the work of the Scrum Team

The PO is also accountable for:

- Developing and explicitly communicating the **Product Goal**
- **Creating** and clearly communicating **Product Backlog items**
- **Ordering** Product Backlog items
- Ensuring that the **Product Backlog is transparent, visible** and understood

## #1 Scrum Master

Servant-leader, accountable for establishing Scrum as defined in the Scrum Guide

Responsibilities towards:

- Team
- Product Owner
- Organization

**NO** sub-teams or hierarchies - The Scrum Team is designed to optimize **flexibility, creativity, and productivity**

## #8 Dev Team

Cross-functional Team, self-organized

The Developers are always accountable for:

- Creating a plan for the Sprint, the **Sprint Backlog**
- Instilling **quality** by adhering to a **Definition of Done**
- **Adapting** their plan each day toward the **Sprint Goal**
- Holding each other **accountable** as professionals

# SCRUM - Team

#1 Scrum Master

## Team

## Product Owner

## Organization

- **Coaching the team** members in **self-management** and **cross-functionality**
- Helping the Scrum Team **focus on creating high-value Increments** that **meet the Definition of Done**
- Causing the **removal of impediments** to the Scrum Team's progress
- Ensuring that all Scrum events take place and are **positive, productive,** and kept **within the timebox**

- **Helping find techniques** for effective **Product Goal** definition and **Product Backlog** management
- Helping the Scrum Team understand the **need for clear and concise Product Backlog items**
- Helping establish **empirical product planning** for a complex environment
- **Facilitating stakeholder collaboration** as requested or needed

- **Leading, training, and coaching** the organization in its **Scrum adoption**
- **Planning and advising Scrum** implementations within the organization
- Helping employees and stakeholders understand and **enact an empirical approach** for complex work
- **Removing barriers between stakeholders and Scrum Teams**

# SPRINT - 4+1 Events

! Product Backlog Refinement meeting, is not an event in Scrum way

MAX TIME-BOXES for 1 month Sprint

 8h **SPRINT PLANNING** **TEAM**

- Sprint GOAL
- Sprint BACKLOG (product backlog items and the plan to deliver them)

 15m **DAILY SCRUM** **TEAM**

- Inspect and updating progress toward Sprint Goal and identify any impediment to be removed

 4h **SPRINT REVIEW** **TEAM + STAK**

- Sharing session about what was done well/bad during the spring
- Revised Product Backlog

 3h **SPRINT RETROSPECTIVE** **TEAM**

- What was well / need to be improve + action plan for that

 < 1 month **SPRINT**

**SPRINT:**  
1 week =  $\frac{1}{4}$   
2 weeks =  $\frac{1}{2}$   
3 weeks =  $\frac{1}{3}$

# SPRINT - Sprint

< 1 month

SPRINT

- No changes are made that would **endanger the Sprint Goal**
- **Quality** does not decrease
- The **Product Backlog** is refined as needed
- **Scope** may be clarified and **renegotiated with the Product Owner** as more is learned

**Too long:** the Sprint Goal may become invalid, complexity may rise, and risk may increase

A Sprint could be **cancelled** if the **Sprint Goal becomes obsolete**. Only the **Product Owner** has the authority to cancel the Sprint.



# SPRINT - Sprint Planning

8h

## SPRINT PLANNING

TEAM

- Sprint GOAL
- Sprint BACKLOG (product backlog items and the plan to deliver them)

The **Product Owner ensures that attendees are prepared** to discuss the most important Product Backlog items and how they map to the Product Goal.

The Scrum Team **may also invite other people** to attend Sprint Planning to provide advice.

- **Why** is this Sprint valuable? (Sprint Goal)
- **What** can be Done this Sprint? (Items)
- **How** will the chosen work get done?  
(Definition of Done for each item) ⇒ only Developers discretion!

**!** **Sprint Backlog** = **Sprint Goal** + Product Backlog **items selected** for the Sprint + the **plan for delivering** them

# SPRINT - Daily Scrum



15m

DAILY SCRUM

TEAM

- Inspect and updating progress toward Sprint Goal and identify any impediment to be removed

For the Developers  
of the Scrum Team

- Focus on progress toward the **Sprint Goal**
- Produces an **actionable plan for the next day of work**

⇒ this creates focus and improves self-management

⇒ eliminate the need for other meetings

# SPRINT - Sprint Review



## SPRINT REVIEW

TEAM +  
STAK

- Sharing session about what was done well/bad during the spring
- **Revised Product Backlog**

### Output

The result of the Sprint Review is a **revised Product Backlog** that defines the probable Product Backlog items for the next Sprint.

The Product Backlog may also be adjusted overall to **meet new opportunities**.

# SPRINT - Sprint Retrospective



## SPRINT RETROSPECTIVE

TEAM

• What was well / need to be improve + action plan for that

The purpose of the Sprint Retrospective is to:

- **Inspect** how the last Sprint went with regards to people, relationships, process, and tools
- **Identify and order** the major **items** that went well and potential **improvements**
- **Create a plan for implementing improvements** to the way the Scrum Team does its work

# SCRUM - 3 Artifacts

- Owned by **Product Owner**
- **Ordered list** of product backlog items, based on the business value
- **Dynamic**, based on the market feedback
- Top items are detailed, so they **can be estimated**

Product Backlog  
(Product Goal)

- **Product backlog items** completed during the Sprint and meeting the **Definition of Done**
- Sum of the **Product Backlog items selected** for this Sprint + the **plan for delivering** them

Increment  
(Definition of Done)


- Owned by **Development Team**
- **Outcome of Sprint Planning**

Sprint Backlog  
(Sprint Goal)


# SCRUM - Rules

- **Definition of Done (DOD):** list of items on a checklist, that should be completed to consider the Increment as done (=> decided by the team or multiple team)
- **Time-Boxing:** all events are time boxed
- **Scrum Values:**
  - **C** - commitment
  - **C** - courage
  - **F** - focus
  - **O** - openness
  - **R** - respect
- **Sprint Cancellation:**
  - by the **Product Owner** (advised by Scrum Master and Development Team)
  - if Sprint Goal becomes **obsolete**
- **Team size:** (skill constraints) - **< 10 pax** - (coordination issues)
- **10% effort of Development Team max** for Product Backlog Refinement meetings

# SCRUM - Empiricism + Lean thinking



**Knowledge comes from the experience** and making decisions based on what is observed (empirical process control theory)



**Reduces waste** and focuses on the essentials.

# SCRUM - Empiricism 3 Pillars

## 3 Pillars

- **Transparency** = common language and shared understanding ⇒ **Enable Inspection**
- **Inspection** = regularly inspect artifacts to find any deviation and fix them ASAP + look back ⇒ **Enable Adaptation**
- **Adaptation** = improvement and adaptation sprint over sprint, along with priorities

Definition of Done

4 events: Sprint Planning, Daily Scrum, Sprint Reviews, Sprint Retrospective

⇒ **each event in Scrum is a formal opportunity to inspect and adapt something.** These events are specifically designed to enable critical transparency and inspection.



# Focus - Definition of Done

- The development organization can define a **Definition of Done that all Scrum Teams must follow as a minimum**
- **Each Product Backlog Item** completed during the Sprint **must comply** with the Definition of Done
- **The Increment must adhere** to the Definition of Done

Difference between **Definition of Done** vs **Acceptance Criteria**:

- **Acceptance Criteria:** are defined to establish if the work performed meets the expectations often in terms of business functionality
- **Definition of Done:** specifies the level of quality that the Product Increment should have

What should be taken into account for the Definition of “Done”?

- **Definition of "Done" of other Scrum Teams** working on the same Product
- **Conventions, standards and guidelines** of the Organization

Who is responsible for creation of the Definition of “Done”?  
→ **The Developers**

# Focus - Product Backlog Items

- Can be **renegotiated during the Sprint**
- Typically has attributes such as **description** and **size**

Who is **responsible for sizing** the Product Backlog Items in the Product Backlog?

→ **The Developers** as part of the Product Backlog Refinement activity. The Product Owner is there to explain requirements.

A Product Backlog is **never complete**. The Product Backlog **evolves as the product and the environment** in which it will be used evolves. The Product Backlog is **dynamic**. **As long as a product exists, its Product Backlog also exists.**

Product Backlog management includes:

- **Clearly expressing** Product Backlog items
- **Ordering** the items in the Product Backlog to best achieve goals and missions
- **Optimizing the value of the work** the Development Team performs
- Ensuring that the Product Backlog is **visible, transparent, and clear to all**, and shows what the Scrum Team will work on next
- **Ensuring the Development Team understands items** in the Product Backlog to the level needed

Based on which criteria should the **Product Owner order the items in the Product Backlog?**

→ Whatever he deems **relevant to optimize value**. The job of the Product Owner is to **focus on delivering as much value as possible**. How this is done is **totally up to the Product Owner**.

# Focus - Product Backlog Refinement

What is the purpose of the Product Backlog refinement activity?

→ Prepare the **Product Backlog for the following Sprints**

Who is **responsible for sizing** the Product Backlog Items in the Product Backlog?

→ **The Developers** as part of the Product Backlog Refinement activity. The Product Owner is there to explain requirements.

# Focus - Sprint

Which Scrum events must the Product Owner attend?

→ **Sprint Review / Sprint Retrospective**

- The Sprint's length should be of **one month or less** with a preference toward shorter Sprints
- Sprints have a **fixed length that helps create consistency** throughout the development effort
- **Sprints cannot end sooner** unless the **Product Owner cancels the Sprint**. Sprints have a fixed length that helps create cadence

It is possible to **create multiple Product Increments during a single Sprint**

Difference between **Outputs** vs **Outcomes**:

- You can generate more output in terms of functionality (**outputs**)
  - ...but have unhappy customers (**outcome**)
- ⇒ We prefer **outcomes over outputs**

During the Sprint:

- No changes are made that would **endanger the Sprint Goal**
- **Quality goals do not decrease**
- **Scope may be clarified and re-negotiated** between the Product Owner and Development Team as more is learned

# Focus - Sprint Planning

## Input:

- The **Product Backlog**
- The **latest product Increment**
- The **projected capacity of the Development Team** during the Sprint
- The **past performance** of the Development Team

## Output:

- The **Sprint Goal** (WHY)
- The **Sprint Backlog** (WHAT)
- The **Definition of Done** (HOW)

Who is responsible for crafting the Sprint Goal at the Sprint Planning?  
→ **The (whole) Scrum Team**

The Scrum Team should use **empiricism to determine the length** of the Sprint **during every Sprint Planning meeting.**

**The Developers can change**, add, or remove the **Sprint Backlog Items** after the Sprint Planning meeting has ended ⇒ **but will keep the Sprint Goal in mind.** Typically, the Developers will collaborate with the Product Owner throughout the Sprint. **The main idea is to allow some flexibility.** As the Developers work on the Increment, they may discover new things, so the plan needs flexibility.

# Focus - Sprint Backlog

Who creates and controls the Sprint Backlog?  
→ **The Developers**

What is the Sprint Backlog?  
→ The **Product Backlog items selected** for this Sprint + **the plan for delivering** them

Who is allowed to **modify** the Sprint Backlog once the Sprint has started?  
→ **The Developers**

# Focus - Daily Scrum

Official name (NO daily stand-up)

The **Scrum Master does not attend the Daily Scrum**. Should the Scrum Master notice that the Daily Scrum goes over the time-box, **they will coach the Developers on how to keep it within the time-box**.

# Focus - Multiple Teams

Scrum does not require having aligned Sprints for multiple teams  
⇒ Scrum Teams working on the same product could have **different Sprint lengths**

When many Scrum Teams are working on **a single product**, all Scrum Teams **must have a Definition of Done that makes their combined Increment valuable and useful.**

If there are multiple Scrum Teams working on the system or product release, the development teams on all of the Scrum Teams **must mutually define the Definition of “Done.”**



# Focus - Hitches and Pain Points

The Developers think it is no longer possible to reach the Sprint Goal by the end of the Sprint  $\Rightarrow$  the Scrum Team **should try to reach the Sprint Goal until the last day** of the Sprint

## Release $\neq$ Deliver

- The Scrum Team can **deliver an Increment** (meaning that the Increment is releasable) **without releasing it**
- So...  $\Rightarrow$  the Scrum Team **musn't release** at least one Increment in every Sprint

The **Sprint is cancelled only in the case if the Sprint Goal became obsolete**. If some work could not be done, the Sprint Backlog should be **re-negotiated between the Product Owner and Development Team**.



When a Sprint is cancelled, **any completed and "Done" Product Backlog items are reviewed**. If part of the work is potentially **releasable**, the Product Owner typically accepts it. **All incomplete Product Backlog Items are re-estimated and put back on the Product Backlog**.



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THANK YOU

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