

SCRUM Methodology:

Team_SCRUM

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Presentation Overview

- 1 Introduction
 - Definition
 - History of the Scrum Programming
- 2 The functioning of the Scrum Methodology
 - Scrum Events
 - Scrum Artifacts
 - Scrum Process
- 3 The Roles and Principles of the Scrum Methodology
 - Roles
 - Principles
- 4 Avantages and Disadvantages of the Scrum Methodology
 - Advantages of Scrum
 - Disadvantages of Scrum
- 5 Conclusion
- 6 References

Definition

Scrum is an agile framework for project management.

- Iterative development.
- Team collaboration for solving complex problems.
- Continuous improvement.



History

- Introduced by Jeff Sutherland and Ken Schwaber in the early 1990s.
- Scrum quickly gained popularity due to its focus on iterative development, collaboration, and adaptability.

The Scrum method is inspired by the "Scrum" formation in Rugby.



Figure: Scrum formation.

Generally

The framework involves breaking down projects into iterations, known as sprints, a sprint can have a duration that generally varies between two weeks and a month.

Scrum events

The Sprint is a container for all other events. Each event in Scrum is a formal opportunity to inspect and adapt Scrum artifacts. These events are specifically designed to enable the transparency required.

- Sprint.
- Sprint Planning.
- Daily Scrum.
- Sprint Review.
- Sprint Retrospective.

TIMEBOXING



Figure: Scrum Events

Scrum Artifacts

Scrum's artifacts represent work or value. They are designed to maximize transparency of key information. Thus, everyone inspecting them has the same basis for adaptation.

- Product backlog.
- Sprint backlog.
- Product increment.

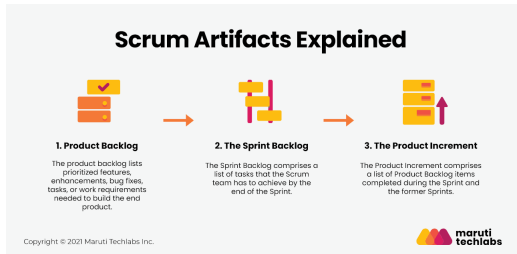


Figure: Scrum Artifacts.

Scrum Process

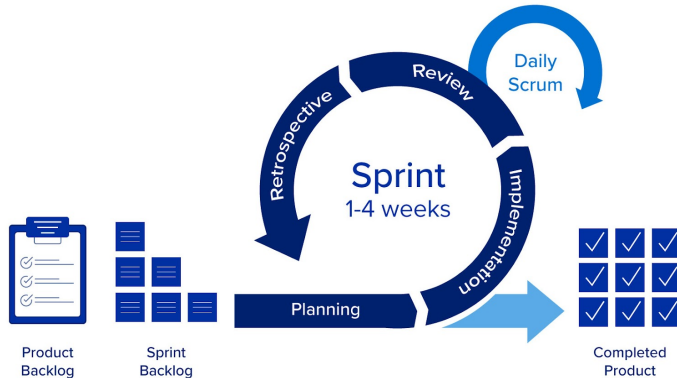


Figure: Scrum Process.

The Roles of the Scrum Methodology

We have 3 major roles for methods:

- **Product Owner :**

Is the one who define the customer's needs and vision for the final product. He work in collaboration with the rest of the team.

- **Scrum Master:**

His mission is to ensure that the team is fully operational and capable of accomplishing the tasks of each current sprint. He is a bridge between the product owner and the development team.

- **Development Team:**

Is responsible for delivering the final product at the end of each sprint.

The Roles of the Scrum Methodology

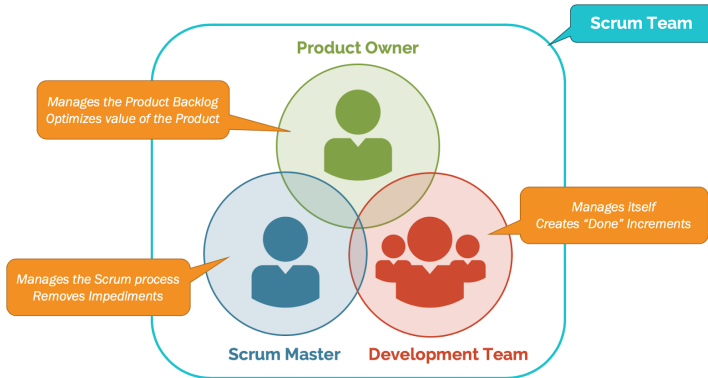


Figure: Scrum Roles.

The Principles of the Scrum Methodology

The Scrum Method is based on six principles that enable the A team that using it to be more efficient and productive. the principles are:

- Empirical Process Control
- Self-organization
- Collaboration
- Value-based Prioritization
- Time-boxing
- Iterative Development

The Principles of the Scrum Methodology

The 6 key Scrum principles



Control over
empirical processes



Self-organization



Collaboration



Value-based
prioritization



Time-boxing



Iterative development

Figure: Scrum Principles.

Advantages

As you might expect, there are several recognized advantages and disadvantages of the Scrum methodology. Let's start by exploring the advantages:

- Adaptability and flexibility.
- Creativity and innovation.
- Time to market
- Lower Costs.
- Creates Transparency.

Disadvantages

As with anything, where there are advantages there are also disadvantages. Let's now explore those disadvantages.

- Requires a Team Environment.
- Needs Experience.
- It can be hard to integrate with a classic project management approach.

Conclusion

Scrum is a simple, lightweight, and adaptable framework that teams can employ to continuously deliver value throughout a project. Scrum offers an excellent way of structuring work, with many advantages. It aims to create working environments where people are productive and happy. Besides, it provides a perfect approach for managing complex projects.



Schwaber, K. & Sutherland, J. The Scrum Guide. 2020. *Accessed April.* (2021)



Sutherland, J. & Schwaber, K. The SCRUM methodology. *Business Object Design And Implementation: OOPSLA Workshop.* (1995)



Carvalho, Henrique, Pereira Mello, Scrum agile product development method -literature review, analysis and classification (2011)



www.scrumstudy.com, Scrum Principles, (2024)

The End

Questions? Comments?