



Study Guide: Agile & Scrum Framework

Editor: Victor Adetiba – MansaTek Training Academy

Date: 04/15/2023

Scrum Defined

A framework within which people can address complex adaptive problems, while productively and creatively delivering products of the highest possible value.

3 Pillars of Scrum - T.I.A.

Transparency – must be visible to those responsible for controlling the process

Inspection – reviews occur frequent enough to detect unacceptable variances

Adaptation – adjust when they fall outside of acceptable limits

Scrum Values – F.O.R.C.Ec

Focus – concentrates on and are answerable for doing the things that we have committed ourselves to

Openness – affording unobstructed transparency in behaviors and actions

Respect – showing a high regard for ourselves, others, and the resources entrusted to us

Commitment – willingness to dedicate ourselves to a goal and to do our best to meet that goal

Extreme **Courage** – daring to do the best that we can and the endurance not to give up

Scrum Team Roles

Developers - Developers are the people in the Scrum Team that are committed to creating any aspect of a usable Increment each Sprint.

Product Owner - The Product Owner is accountable for maximizing the value of the product resulting from the work of the Scrum Team. How this is done may vary widely across organizations, Scrum Teams, and individuals. The Product Owner is also accountable for effective Product Backlog management, which includes:

Scrum Master - The Scrum Master is accountable for establishing Scrum as defined in the Scrum Guide. They do this by helping everyone understand Scrum theory and practice, both within the Scrum Team and the organization.

Scrum Events

1. Sprint Planning
2. Sprint
3. Daily Scrum
4. Sprint Review
5. Sprint Retrospective

Artifacts

Product Backlog

Sprint Planning

Increment



MANIFESTO FOR AGILE SOFTWARE DEVELOPMENT

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

THE FOUR VALUES OF THE AGILE MANIFESTO

1. INDIVIDUALS AND INTERACTIONS over processes and tools
2. WORKING SOFTWARE over comprehensive documentation
3. CUSTOMER COLLABORATION over contract negotiation
4. RESPONDING TO CHANGE over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

THE TWELVE AGILE MANIFESTO PRINCIPLES

The Twelve Principles are the guiding principles for the methodologies that are included under the title "The Agile Movement." They describe a culture in which change is welcome, and the customer is the focus of the work. They also demonstrate the movement's intent as described by Alistair Cockburn, one of the signatories to the Agile Manifesto, which is to bring development into alignment with business needs.

1. Customer satisfaction through early and continuous software delivery

Customers are happier when they receive working software at regular intervals, rather than waiting extended periods of time between releases.

2. Accommodate changing requirements throughout the development process

The ability to avoid delays when a requirement or feature request changes.

3. Frequent delivery of working software

Scrum accommodates this principle since the team operates in software sprints or iterations that ensure regular delivery of working software.

4. Collaboration between the business stakeholders and developers throughout the project

Better decisions are made when the business and technical team are aligned.

5. Support, trust, and motivate the people involved

Motivated teams are more likely to deliver their best work than unhappy teams.

6. Enable face-to-face interactions

Communication is more successful when development teams are co-located.

7. Working software is the primary measure of progress

Delivering functional software to the customer is the ultimate factor that measures progress.

8. Agile processes to support a consistent development pace

Teams establish a repeatable and maintainable speed at which they can deliver working software, and they repeat it with each release.

9. Attention to technical detail and design enhances agility

The right skills and good design ensures the team can maintain the pace, constantly improve the product, and sustain change.

10. Simplicity

Develop just enough to get the job done for right now.

11. Self-organizing teams encourage great architectures, requirements, and designs

Skilled and motivated team members who have decision-making power, take ownership, communicate regularly with other team members, and share ideas that deliver quality products.

12. Regular reflections on how to become more effective

Self-improvement, process improvement, advancing skills, and techniques help team members work more efficiently.

The intention of Agile is to align development with business needs, and the success of Agile is apparent. Agile projects are customer focused and encourage customer guidance and participation. As a result, Agile has grown to be an overarching view of software development throughout the software industry and an industry all by itself.

Signatories

Kent Beck, Mike Beedle, Arie van Bennekum, Alistair Cockburn, Ward Cunningham, Martin Fowler, James Grenning, Jim Highsmith, Andrew Hunt, Ron Jeffries, Jon Kern, Brian Marick, Robert C. Martin, Steve Mellor, Ken Schwaber, Jeff Sutherland, Dave Thomas