# **Agile and Scrum**

#### ▼ What is Agile and Scrum?

Agile and Scrum are methods used in the software development process. Agile is a philosophy that enables projects to be completed flexibly and quickly. Scrum, on the other hand, is one of the Agile methodologies and is an iterative approach based on teamwork.

#### ▼ To explain Agile in detail?

Agile is a philosophy used in the software development process. This philosophy adopts a flexible approach to adapt to rapidly changing requirements, constantly improving with customer feedback, and successfully completing projects. Agile methodologies, unlike traditional software development methods, are close to the customer throughout the project, which can adapt flexibly to changing requirements. It offers a collaborative and focused approach to producing quality software.

#### ▼ To explain Scrum in detail?

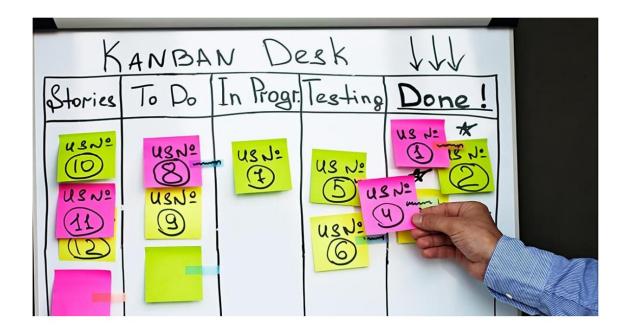
Scrum is one of the Agile methodologies. Scrum enables a software development team to iteratively produce products through collaboration. This ensures that the team is constantly working with customer feedback and that the product's requirements and priorities change in line with customer demands.

Scrum facilitates teamwork with features such as regular team meetings, short development cycles (sprints), setting project priorities, and open communication channels for collaboration.

#### ■ What kind of roles are there basically in Scrum?

- Product Owner: The product owner determines the customer's needs and expectations and manages the priorities of the product.
- Scrum Master: The team leader ensures that the team works in harmony with the
   Scrum methodology and optimizes the team's performance.

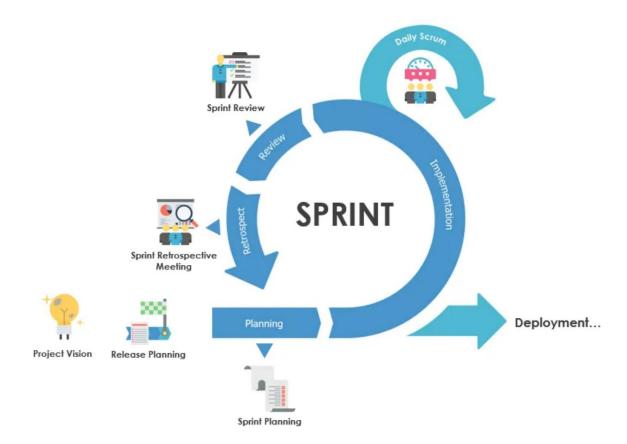
- Development Team: The software development team is the people responsible for the realization of the product.
- ▼ What other agile methods are there besides Scrum?
  - Kanban: Kanban is a visual representation of the workflow of a project.
     method. Using workflow cards, you can track the status of all phases of the project.



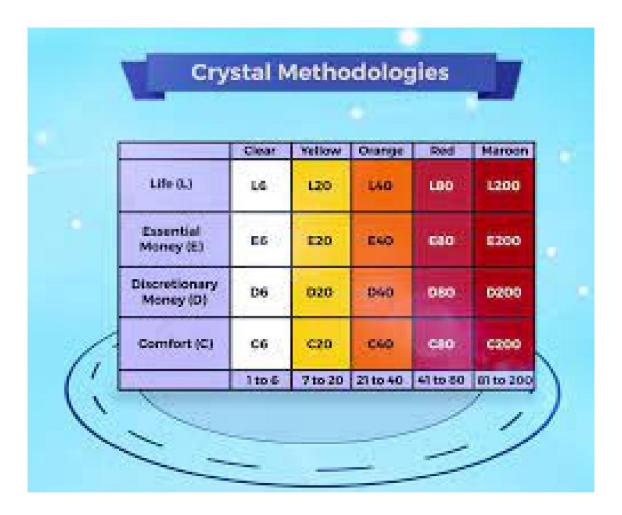
2. Lean: Lean is not a cost reduction program or technique, but an approach that focuses on reducing waste for the entire organization, creating value for the customer, and continuous improvement. The basis of the Lean approach is respect for people and continuous improvement (kaizen).



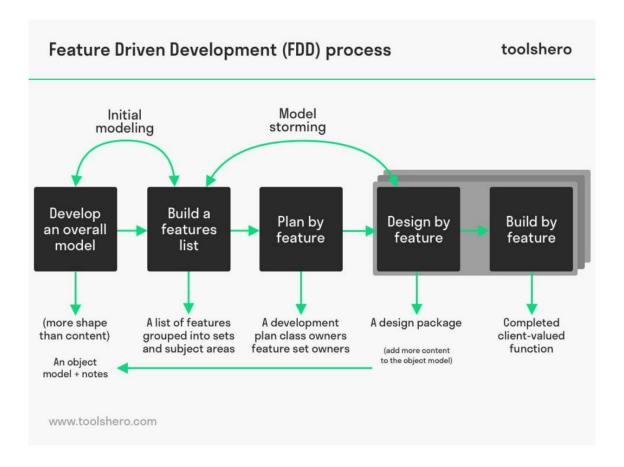
3. Extreme Programming (XP): XP enables rapid generation of code using predefined application and testing techniques for software development. XP works with frequent customer feedback and inter-team communication.



4. Crystal: Crystal offers a customized approach for projects of different sizes. It has several levels such as Crystal Clear, Crystal Orange and Crystal Yellow.



5. Feature-Driven Development (FDD): FDD is a method for managing large-scale projects. Project priorities are set and a team working in smaller, autonomous groups adds specific features.



- ▼ What makes Scrum methodology stand out from the rest?
  - Self-management: Scrum enables the team to self-manage. This allows the team
    to organize, plan and manage the work.
     Managers and leaders work to provide the appropriate environment for their
    needs, rather than managing the team.
  - Continuous improvement: Scrum is constantly working in iterations.aims to develop. This ensures rapid feedback and allows the team to regularly revise the product according to customer needs.
  - 3. Clearly define roles: Scrum defines that members of the team have specific roles and each has specific responsibilities. This makes it easier for the members of the team to clearly understand what they need to do and to ensure good cooperation between these roles.
  - 4. Daily meetings: Scrum requires the team to hold a short meeting every day.

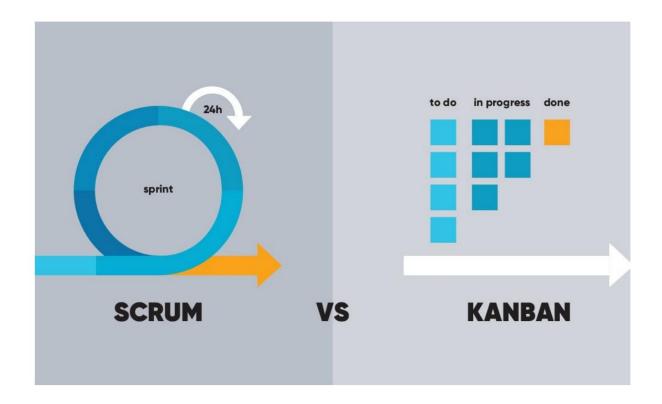
    This meeting allows the team to check its status, solve problems quickly.

and allows it to continue working.

- 5. Feedback-oriented: Scrum works based on customer feedback. This allows the team to understand customer needs and tailor the product accordingly.
- ▼ What are the differences between Kanban and Scrum?

Kanban and Scrum are both commonly used methods in Agile software development processes. Some key differences between Kanban and Scrum:

- 1. Management: Kanban is used to visualize and optimize the workflow, while Scrum is used to manage the work and produce results quickly.
- 2. Planning: Kanban does not have a planning meeting, so the business team is always time works on the highest priority task that is ready. Scrum uses regular Sprint Planning meetings to schedule work to be completed within a specific timeframe, called a Sprint.
- 3. Timing: In Kanban, jobs are taken as the work team finishes and move on to the next job.
  In Scrum, on the other hand, the works are completed in a certain time frame and new works are determined for the next sprint.
- 4. Roles: In Kanban, the business team does not have any specific roles to complete jobs works together for In Scrum, there are specific roles such as Product Owner, Scrum Master, and Development Team.
- Change Management: Kanban continuously manages changes in the workflow.
   Scrum manages changes throughout the Sprint process, and once the Sprint plan has begun, no changes are made to the team.
- 6. Metrics: Kanban tracks the duration of each step in the workflow and the status of the job. uses metrics to Scrum uses metrics to track the speed of the work team, the number of tasks completed per Sprint, and the rate at which work is done.



In a nutshell, Kanban is a continuous workflow management approach while Scrum is a framework designed to manage work to be completed within a given time frame. Kanban is less structured and more open to change, while Scrum has more structured and specific roles.

### ▼ How does the Scrum methodology work?

- Product Backlog Creation: In line with customer needs, product features
   It starts with identifying and prioritizing. In this step, the customer or business owner creates a product backlog that defines the product's goals and needs.
- 2. Sprint Planning: The team selects items to run for a certain period of time, called a sprint, and retrieves it from the product backlog. Sprint planning determines the tasks and goals that the team will complete during the sprint.
- 3. Sprint: A sprint is a sprint that lasts for several weeks (usually 1-4 weeks).
  is the work cycle. The team completes selected tasks throughout the sprint and holds short meetings each day to discuss their progress and obstacles.

## **SCRUM PROCESS**



- 4. Daily Scrum: The team conducts regular short meetings each day.
  Discuss their progress and obstacles. In these meetings, all members of the team inform and support each other on the progress of the tasks to be completed throughout the sprint.
- 5. Sprint Review: At the end of the sprint, the team reviews the completed work and the final product. shares its status with the customer or business owner. The sprint review meeting provides an opportunity to update the product backlog and gather customer feedback.
- 6. Sprint Retrospective: Sprint retrospective, what the team did during the sprint It is a meeting where he discusses what he has accomplished and what he can do. The team makes suggestions and plans for improvement to improve the process.
- ▼ What exactly does the Product Owner do and what are his duties?

The Product Owner works to extract maximum value from the product development process for the entire organization. This essentially means working closely with the development team and ensuring that all product requirements are well defined and executed in a timely manner.

▼ What exactly is Scrum Master and does it work?

**A Scrum** Master is a person who knows Scrum (**Scrum** Guide) very well and serves the Product Owner, Development Team and other stakeholders in the organization by helping and guiding, but does this on a voluntary basis, not as a team or project manager.

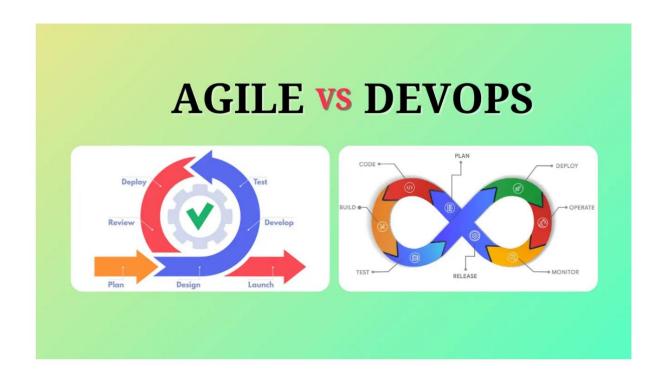
▼ What is the difference between Scrum and Devops processes?

Scrum and DevOps are two different methodologies with different purposes. While Scrum is used for project management and management of the software development process, DevOps is used for rapid delivery of software and its integration with operations.

▼ When should Scrum and Devops be used?

Scrum enables the team to work flexibly according to customer needs and aims to deliver the product on time through continuous improvement and iterations. Scrum allows a team performing different functions to collaborate, especially on large-scale projects.

DevOps, on the other hand, combines software development and business processes. This enables software to be delivered more quickly and continually aligns with business processes. DevOps is especially effective on systems where software needs to be updated regularly or projects that need to be delivered quickly.



To determine which method is better for the team, it is necessary to look at the team's business needs, product features, and deadlines. If the team wants to deliver software quickly and work more closely with operations, DevOps may be more appropriate. However, if the team wants to work flexibly based on customer needs and focus on iterations along with the continuous improvement process, Scrum may be more appropriate.