1. What is Scrum?

Scrum is the most popular way of modern, flexible teamwork management. Not only do software development companies follow its methodology but more and more often teams from various industries such as finance, marketing, HR and creative industries find Scrum practical and applicable. Its ever-growing popularity makes Scrum the most proven organizational framework adapted by teams striving for maximum effectiveness.

Scrum is simple by design. First, it facilitates breaking down difficult problems into smaller, more understandable components. Secondly, it provides solid structure by dividing the work into stages to execute in given time frames, bringing measurable and satisfying results. Thirdly, it enables planning of the next stages of work using obtained results and conclusions drawn from the ongoing processes.

Scrum philosophy, theory and structure

It is important to remember that **Scrum is only a framework. It provides guidelines to construct a detailed blueprint of actions to take together with adapted to the needs and capabilities of the team and the organization.** Despite its generality, Scrum is finely outlined. The popularity shows its effectiveness, as according to the 15th Annual State Of Agile report from 2021, Scrum principles are used by as many as 66% of teams working following the most modern methodologies. And this percentage increases to more than 80% of teams across disciplines if we add methodologies derived directly from Scrum.

Scrum is comprehensive and serves to optimize teamwork. It offers a clearly-defined starting point. Also, the generality of Scrum principles makes it impossible to simply apply them in an instant. However, the sketchiness of this framework is intentional and flows along with project management practice. The Scrum philosophy focuses on the need for continuous development and reshaping through feedback, reflection and experience. It rejects complex, rigid systems that organize work without taking into account specific realities. The authors of Scrum, Ken Schwaber and Jeff Sutherland, call this principle empiricism in the official Scrum Guide.

Scrum theory

Scrum theory's main principle concerns empiricism. **Empiricism means keeping planning and assumptions to a minimum in favor of relying on experience, observation, and experimentation.** It becomes possible and effective thanks to the iterative approach, i.e., working in short cycles, which includes not only working on the product, but also planning it and evaluating the results. Three pillars of empiricism are the most important for Scrum's effectiveness:

- transparency thanks to it, both the people working and Stakeholders (to whom we will devote a separate entry in following article) can easily check the status of the work on Product at a given moment
- inspection means frequent and reliable updating and checking the progress, thanks to which it is
 possible to detect problems and solve them quickly
- adaptation means adjusting the ways of working and the Goals, which are described in a separate article, if there are errors or discrepancies during the inspection.

Empiricism works best if the team operating according to its principles has the ability to self-manage according to the lean concept. It implies a flexible organizational structure that allows adaptation to exist conditions, continuous improvement, and independence of Scrum Team.

Scrum structure

Scrum sets the framework for team action by defining: composition and roles in the team (Scrum Team), pace of its activities and meetings (Scrum Events) and methods to plan, manage and execute actions (Scrum Artifacts).

Scrum Team is an independent, interdisciplinary team of professionals working in Scrum, free from the influx of additional tasks from the organization. It is the basis of effective work in Scrum. Scrum Team consists of Product Owner, Scrum Master and Development Team. It is a small team with possibly constant composition, working on a specific Goal. Scrum Team should constantly improve and enhance not only the product but also its own way of working. This helps to increase the efficiency and quality of teamwork.

Scrum Team activities and meetings are called Scrum Events. These include Sprint, Sprint Planning, Daily Scrum, Sprint Review, Sprint Retrospective, and their components. The way of planning and executing, and the conditions for successful goal achievement, are described in Scrum Artifacts, i.e., Product Backlog and Sprint Backlog. These are very frequently updated documents reflecting the current state of work on Product.

Scrum Values

Scrum Values were not always present in the official Scrum Guide. They were added by user request to the edition published in 2016. We will describe the Scrum Values one by one, namely: **commitment, focus, openness, respect, courage.** The update of the Scrum Guide followed the principle of empiricism. That is, it was done based on the experiences of the teams implementing Scrum. It turned out that even the strict observance of the Scrum workflow didn't always cause positive changes in the teams. The purpose of introducing the Scrum Values was to clearly define the right approach to foster the implementation of Scrum principles.

1. Commitment

The first value that underpins the proper implementation of Scrum is the commitment to the work. A Scrumoriented Development Team has to be committed to Sprint Goal and Product Goal, but even more important is the commitment of each individual Developer. It provides not only an active effort to solve problems that arise in the course of daily duties. It also includes the willingness to support other members of the Development Team when they need it.

2. Focus

If each of the Developers is focused on sub-tasks with full commitment, it can be easy to lose sight of the main Product Goal and even the Sprint Goal. As a result, the Increment produced in a given Sprint will turn out to be incomplete. Therefore, focusing on Sprint Goal is extremely essential from a team perspective. Focus improves not only the level of tasks performed by individual Developers but also, their results come together to achieve Sprint Goal. And thus, the business value is realized: Scrum Team's workflow enables the creation and development of Product functionality.

3. Openness

The agile approach differs from the traditional approach primarily in its openness to change. That is why it was among the main values of Scrum. Both the Scrum Team and the Stakeholders benefit by cultivating the value of openness in their work. The variability in question can refer to many areas of the project, for example: reduction of the project scope, redefinition of Product functionality, reorganization of tasks performed by Scrum Team to optimize efficiency. Changes can result from Stakeholder decisions, business or technical constraints. Openness in the face of change is supported by transparency, which is one of the pillars of empiricism in Scrum. Thanks to transparency, Scrum Team members and Stakeholders know what the change results from and where it can lead.

4. Respect

Scrum Team members are independent, equal individuals. Developers, Scrum Master and Product Owner are all professionals who treat each other with due respect. There should be no room for hierarchy in a Scrum Team. Respect also serves to provide psychological well-being. This is especially true for members of the Development Team. By showing respect to each other, they can experiment freely and not be afraid to make mistakes, which are a necessary part of the innovation process and lead to improved Scrum Team performance.

5. Courage

Courage in problem-solving is, along with respect, a prerequisite for successful experimentation. It also makes the Scrum Team, when faced with difficult tasks, repeat attempts to solve them, until obtaining a satisfactory result. Being courageous in proposing business, technical, and interpersonal solutions helps to realize the innovation potential inherent in Scrum. Courage is also the foundation of self-management of the Scrum Team, which takes full responsibility for the consequences of the decisions made by the team members.

How to implement Scrum in your company?

Although the framework of Scrum is simple, its implementation in a company is not an easy task. Scrum is used to optimize teamwork, but initially, it can cause a lot of trouble. And even aggravate existing problems in the organization. So how to implement Scrum in your company?

Many entrepreneurs come up with the idea of using Scrum principles in their company. Scrum promises great team effectiveness, an energetic atmosphere, and no hierarchy. However, it sets very specific requirements for both the team and the individual people in Scrum Team. **When deciding to implement Scrum, it is worth considering the technical and organizational details.** So let's look at potential implementation issues, required team member competencies, and ways to separate Scrum Team from the overall organization.

1. Implementation. The task for Scrum Master

During Scrum implementation, the key figure is the experienced Scrum Master. He is solely responsible for the proper understanding of Scrum by all involved. Also, he assesses and amends all operations according to Scrum principles and values. Hiring Scrum Master with experience is critical if the company's employees have not worked with Scrum principles before. They will probably have a lot of questions, and Scrum Events will require detailed guidance by Scrum Master for at least the first few weeks. The Scrum Master's tasks are limited to the role of coach and leader, once the members of the future Development Team know the Scrum principles well enough. So, before starting other activities, answer the question: Are you able to find and hire the right Scrum Master?

2. Interdisciplinarity. How do you build a Development Team?

The next question a Scrum implementer must answer is:

Is my company already staffed with people capable of creating a self-sufficient, interdisciplinary team? There are two problems that may arise during the creation of the Team: lack of sufficiently mature (senior) staff with complementary competences and rigid organization structure.

All members of Scrum Team should be specialists in their field. And their competencies should be complementary to each other. A well-composed, interdisciplinary team should not be dependent on the help of external specialists. This is especially substantial if the Team is working with confidential and sensitive data that should not be shared with people outside the organization. Using external help also disrupts one of the pillars of Scrum, transparency. It can also create the risk of creating hierarchies within the Team. For example, separating "second-class Developers", people who will not take full part in Scrum Team activities. Problems with Scrum implementation may arise when the company is divided into strictly separated departments. If each member of Development Team works in a different department – a great deal of reorganization will be necessary. One of the topics to think about is a common workspace for an interdisciplinary team.

3. Scrum Rhythm. Separating the Scrum Team

Another key issue to consider while implementing Scrum is to create a kind of "firewall" to protect the fresh Scrum Team from the influx of external tasks. It will probably be formed by people who worked on other projects in your company. By force of habit, people with whom the new Scrum Team members have worked will continue to seek their help. And this can generate conflicts, cause an influx of additional tasks, and disrupt the rhythm of Scrum Events.

Is it worth implementing Scrum?

If you are seriously considering implementing Scrum in your company and are aware of the problems that may arise, analyze again whether Scrum is definitely the solution for you. **"Yes" has been said to Scrum by as many as 66% of agile teams.** However, the statistics don't show how effective the teams are freshly after implementation. Nor how long it takes to get to and then surpass pre-Scrum efficiencies. What's more, paying a lot of attention to the size of the Scrum Team and the volume of projects the team will undertake.