**1 Slide**

let's talk about scrum!

if you google scrum we will find information about a method of restarting play in rugby. But today we will talk about scrum as a development methodology.

We’ll look at the global model of the scrum process, and then we will look at its components in more detail. but first some general information what scrum is and what it is eaten with

**2 Slide**

Scrum belongs to the agile family of methods. Method of organizing a collaborative workflow, which is based on the phased development and improvement of the product by a small team of specialists in various fields.

The workflow with this approach is divided into small time intervals, they are also called sprints or iterations.

Why is Agile like flexible? During each sprint, the development team creates a piece of the product that can be tested and evaluated. This approach allows you to make significant changes to the project, even when development is in full swing. This is agility.

**3 Slide**

Why Scrum methodology is needed

The approach is flexible and allows for experimentation, which is why it is effective when you need to quickly develop a new product. Especially if there is no final vision of the result or market conditions change too often. Scrum helps to gradually move towards the goal and monitor the effectiveness of the work done throughout the path.

The main goal of the approach is to give the customer the desired product on time and at the lowest possible cost.

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Scrum methodology has three pillars: Transparency, Inspection and Adaptation.

**4.1 Slide**

Transparency means presenting the facts as is. All team involved in process. They all trust each other, and they have the courage to keep each other abreast of good news as well as bad news. Everyone strives and collectively collaborates .

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Inspection by everyone on the Scrum Team. The inspection can be done for the product, processes, people aspects, practices, and continuous improvements. For example, the team openly and transparently shows the product at the end of each Sprint to the customer in order to gather valuable feedback.

**4.3 Slide**

Adaptation is about continuous improvement, the ability to adapt based on the results of the inspection. . If the customer changes the requirements during inspection, the team does not complain but rather adapts by using this as an opportunity to collaborate with the customer to clarify the requirements and test out the new hypothesis.

**5 Slide**

what are the components of the scrum mechanism? It consists of 3 roles, 5 events and 3 artifacts. Let's look at each of the main components separately.

**6 Slide**

Scrum Artifacts.

Scrum artifacts are pieces of information and tools that keep the project on-track: the product backlog, the sprint backlog, and the product increment.

**6.1 Slide**

Product Backlog

At the beginning of the workflow, a product backlog is compiled. A backlog is a changing list of requirements based on the customer’s needs. The backlog is not a to-do list; rather, it is a wish list of all the desired features for the product. The [scrum team](https://www.agile-academy.com/en/agile-dictionary/scrum-team/) uses the backlog to prioritize features and understand which features to implement first.  The backlog may change throughout the development process as the team learns more about the customer’s requirements.

**6.1.1 Slide**

Products are typically described by hundreds of requirements which are organized in the product backlog. Theme or epics cannot be completed in one sprint so they are broken into more user stories and subsequently a group of related tasks.

[Epics](https://www.atlassian.com/agile/project-management/epics) are large bodies of work that can be broken down into a number of smaller tasks (called stories).

[Stories](https://www.atlassian.com/agile/project-management/user-stories), also called “user stories,” are short requirements or requests written from the perspective of an end user.

On an agile team, stories are something the team can commit to finish within a one- or two-week sprint. Oftentimes, developers would work on dozens of stories a month. Epics, in contrast, are few in number and take longer to complete. Teams often have two or three epics they work to complete each quarter.

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Sprint Backlog

The sprint backlog is a list of tasks identified by the Scrum team to be completed during the [Scrum](https://www.mountaingoatsoftware.com/agile/scrum) sprint. During the sprint planning meeting, the team selects some number of product backlog items, usually in the form of [user stories](https://www.mountaingoatsoftware.com/agile/user-stories), and identifies the tasks necessary to complete each user story. Most teams also estimate how many hours each task will take someone on the team to complete.

**6.2.1 Slide**

The sprint backlog is commonly maintained as a spreadsheet, but it is also possible to use your defect tracking system or any of a number of software products designed specifically for Scrum or agile.

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During the Scrum sprint, team members are expected to update the sprint backlog as new information is available, but minimally once per day. Many teams will do this during the daily scrum. Once each day, the estimated work remaining in the sprint is calculated and graphed by the ScrumMaster, resulting in a sprint burndown chart like this one.

* When the actual work line is above the ideal work line, more work is left than planned. The project is behind schedule, and optimization is needed.
* When the actual work line is below the ideal work line, more work is completed, and the project is ahead of schedule.

This information helps project managers take corrective and preventive actions on time, if needed, and bring the project on track.

**6.3 Slide**

Increments

The output of every sprint is a working product increment.Each increment is additive to all prior increments and thoroughly verified, ensuring that all increments work together. An Increment is the latest stable version of their product that is usable by the users.

**7 Slide**

Scrum encourages us to hold five key events during a Sprint, all intended to help us work efficiently and closely together, as well as to improve our knowledge and become more effective in the future.

These five events are:

• The Sprint

• Sprint Planning

• Daily Scrum

• Sprint Review

• Sprint Retrospective

**7.1 Slide**

Sprint

The Sprint is the heart of Scrum. It’s a time-boxed event happening every two or three weeks on average, however.

Thanks to relatively short feedback loops, Sprints help the Scrum Team to inspect, adapt, and learn how to optimize the software development process in order to ship quality products at regular intervals. Sprints also help to break down large and complex projects into bite-sized, manageable pieces.

Sprints give the possibility to respond to change quickly, which is more challenging with traditional project management. Working in Sprints helps prioritize the features that matter most and not waste time on something that won’t provide much value.

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Sprint Planning

This is the event that kick starts each Sprint and is where the Product Owner and Developers discuss which Product Backlog Items (PBI’s) will be included in Sprint.

The outcome of the Sprint Planning event is to get a Sprint Goal and Sprint Backlog that everyone agrees is realistic and achievable.

What is taken into account during each Sprint Planning event?

* the work items from the Product Backlog
* the team’s capacity
* previous performance

During the Sprint Planning session, it’s essential to communicate and work together so that it’s clear what needs to be done to achieve the Sprint Goal and how it will be measured.

**7.2.1 Slide**

Various methods are used for an objective assessment of time and labor costs for example Planning Poker

**Step 1:** Hand out the cards

Participants are all given an identical deck of cards, each with a different number.(story-points)

**Step 2:** Read the story

Next, the product owner (or possibly a product manager) will read each story out loud to the group.

**Step 3:** Discuss

**Step 4:** Estimate and share

After everyone has had their say and gotten any questions answered, each person will secretly choose a card from the deck to represent their estimate of story points. When everyone is ready, all participants reveal their cards at the same time.

The higher a participant’s card is, the more difficult that participant estimates the story will be to complete.

**Step 5:** Consensus

If all participants’ reveal the same card, then that number becomes the consensus. The group can move on to the next story.

But if the cards differ, then the group continues its discussion about the story. Those with higher (or lower) estimates than the rest of the group will explain their reasoning and try to persuade their coworkers to see their position.

**Step 6 :** Repeat

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Daily Scrum

Daily Scrum meeting is a short daily event focused on the progress towards the Sprint Goal. It’s a crucial meeting that helps the team get aligned, spot any blockers in the Sprint Backlog, and adapt the plan for the rest of the Sprint.

It’s usually a short, 15-minute daily event where the Development team discusses any impediments that may jeopardize the Sprint Goal. It’s a simple check-in to make sure the development is on track

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The Sprint Review

The Sprint Review is held to showcase the Product Increment delivered in the Sprint to the stakeholders, which can lead to useful conversation. The purpose of this event is to gather feedback on the Product Increment, learn how to optimize the product value and adjust the Backlog if needed. Usually lasts about 2-4 hours.

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Sprint Retrospective

The Sprint Retrospective is run after every Sprint Review and before the next Sprint Planning session so it’s the official final Scrum event in the Sprint. It can be up to 3 hours long, depending on the duration of the Sprint. The Product Owner, Scrum Master, and the Development team get together to discuss what happened during the last Sprint and how the collaboration or processes can be improved.

The meeting will discuss the following issues

* What went well?
* What could be improved?
* How can we improve it?

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To improve the work, you can analyze the actions and divide them into groups:

* More of
* Less of
* Stop doing
* Keep doing
* Start doing

**8 Slide**

There are three specific accountabilities – three specific roles – within each team: product owner, Scrum Master, and developers.

**8.1 Slide**

Product Owner

A product owner is a person who manages the creation of a product and is responsible for what happens as a result.

The product owner is the link between the customer and the development team.

So, the main responsibilities of a product owner:

* Definition of the product vision.

The product owner is responsible for communicating with the customer, offering him certain features of the product, as well as a vision that would correspond to his business goals.

* Product backlog management.

Here, the responsibility of the product owner is to make a list of tasks and prioritize their implementation in accordance with the business objectives of the customer.

* Control at all stages of development

The Product Owner oversees the Sprint process and participates in Scrum activities.Evaluates the effectiveness of each iteration. He determines how well a particular task was completed, and decides whether to move on to the next sprint or implement a refinement.

**8.2 Slide**

Scrum Master

A Scrum master is responsible for ensuring that the Scrum team follows the processes that were agreed upon. Keeping obstacles and distractions out of the team's path is one of the responsibilities of the Scrum master. In this role, the individual acts as the interface between the Scrum team and other people or teams.

Responsibilities of a Scrum Master

* Facilitate the Scrum process: The Scrum Master ensures that the Scrum process is rigorously followed by the team. This includes conducting Scrum ceremonies such as Sprint Planning, Daily Standup, Sprint Review, and Sprint Retrospective.
* Remove impediments: The Scrum Master is responsible for identifying and removing any impediments that may be preventing the team from delivering value (technical issues to team dynamics).
* Facilitate communication: The Scrum Master is responsible for ensuring that there is clear communication between the team, the Product Owner, and any other stakeholders.
* Ensure transparency: The Scrum Master is responsible for ensuring that the team's progress is transparent to all stakeholders.(backlog and burn-down chart.)

**8.3 Slide**

The development team will consist of individuals with specialized skills, each one assigned to a different task. Throughout the creative process, the Scrum Master will keep everyone on-task and ensure deadlines are met and the finished project will be delivered to the product owner for approval.

The responsibilities of the development team include:

• Getting work done through a sprint. Developers must adhere to the principles of scrum.

• Ensuring transparency. To ensure transparency during the sprint, they meet daily at the daily scrum and other scrum events.

• Self-organization. The development team must be able to self-organize so they can make decisions to get the job done.

**9 Slide**

Advantages

• The team works in small stages, at each of which goals and ways to achieve them are determined, which increases the speed of work.

• The team works on different project tasks at the same time and achieves the desired goal faster.

• Large tasks are divided into small ones, so it is convenient to make adjustments in the process.

• Due to quick response to changes and elimination of errors, financial risks are minimized.

• Each team member knows what they are responsible for.

• Open exchange of information makes the work as transparent as possible.

• Daily visibility of achievement keeps motivation high.

**10 Slide**

I hope this information was useful to you, it became clearer to you what SCRUM is and what it is eaten with. Thank you for your attention!