

## Topic 4: Agile and new ways of working

17th May 2022

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7th June 2022

### Welcome to the Digitalisation for international trade course!

This is the fourth topic of the programme: **“Agile and new ways of working”**, which aims to develop the concepts associated with the third domain of digital transformation: Innovation. Here you will begin to understand how your company can work in a more efficient manner to make the changes to the business model that will generate greater value to the customer networks.

**Contents:** scrum, kanban

The **objective** of this document is to present the main relevant concepts that will serve as a guide to enhance the inner organization of your business in order to innovate and disrupt in the digital age.

**Take up the challenge! Let's keep learning together**

## SCRUM

**Ken Schwaber** and **Jeff Sutherland** developed Scrum. They first co-presented Scrum at the OOPSLA conference in 1995.

Scrum is a framework for developing and sustaining complex products.

“The Scrum Guide” contains the definition of Scrum and is available from <http://www.scrumguides.org/>

Scrum is:

- Lightweight
- Simple to understand
- Difficult to master

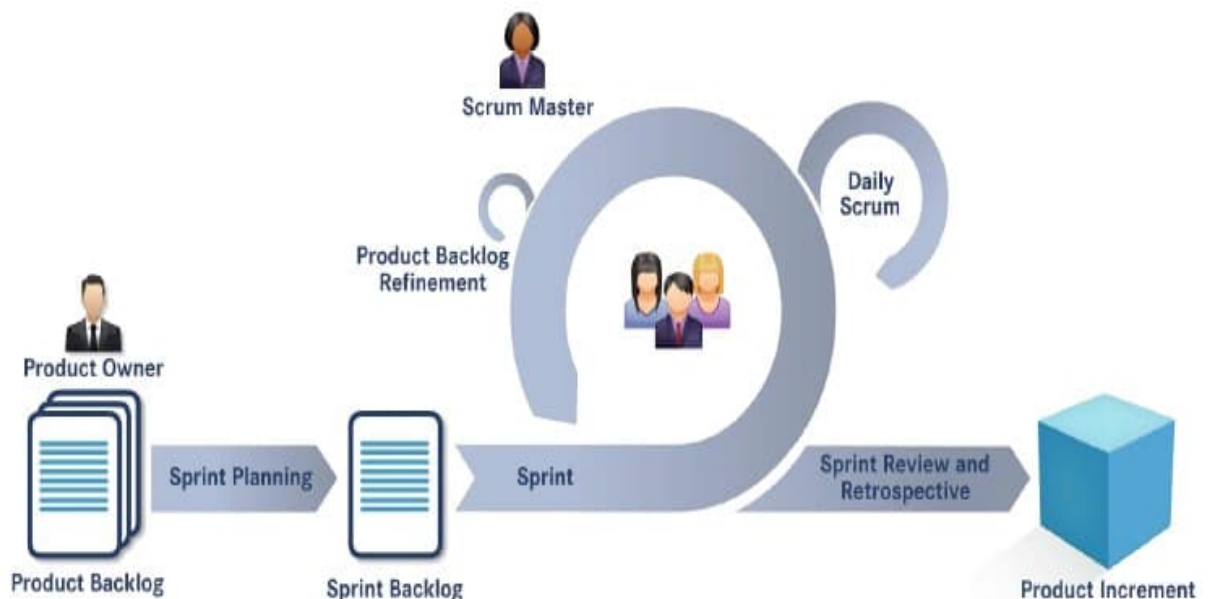
### Scrum in 100 words

Scrum is an agile process that allows us to focus on delivering the highest business value in the shortest time.

It allows us to rapidly and repeatedly inspect actual working software.

The business sets the priorities. Teams self-organize to determine the best way to deliver the highest priority features.

Every two weeks to a month anyone can see real working software and decide to release it as is or continue to enhance it for another sprint.



## SCRUM Framework

### Owner

- Product Owner
- Scrum Master
- Development Team

### Artifacts

- Product Backlog
- Sprint Backlog
- Increment

### Ceremonies

- Sprint review
- Sprint planning
- Sprint retrospective
- Daily scrum meeting

## ROLES

### Product Owner

- Define the features of the product
- Decide on release date and content
- Be responsible for the profitability of the product (ROI)
- Prioritize features according to market value
- Adjust features and priority every iteration, as needed
- Accept or reject work results

### SCRUM Master

- Represents management to the project
- Responsible for enacting Scrum values and practices
- Removes impediments
- Ensure that the team is fully functional and productive
- Enable close cooperation across all roles and functions
- Shield the team from external interferences

## SCRUM Framework

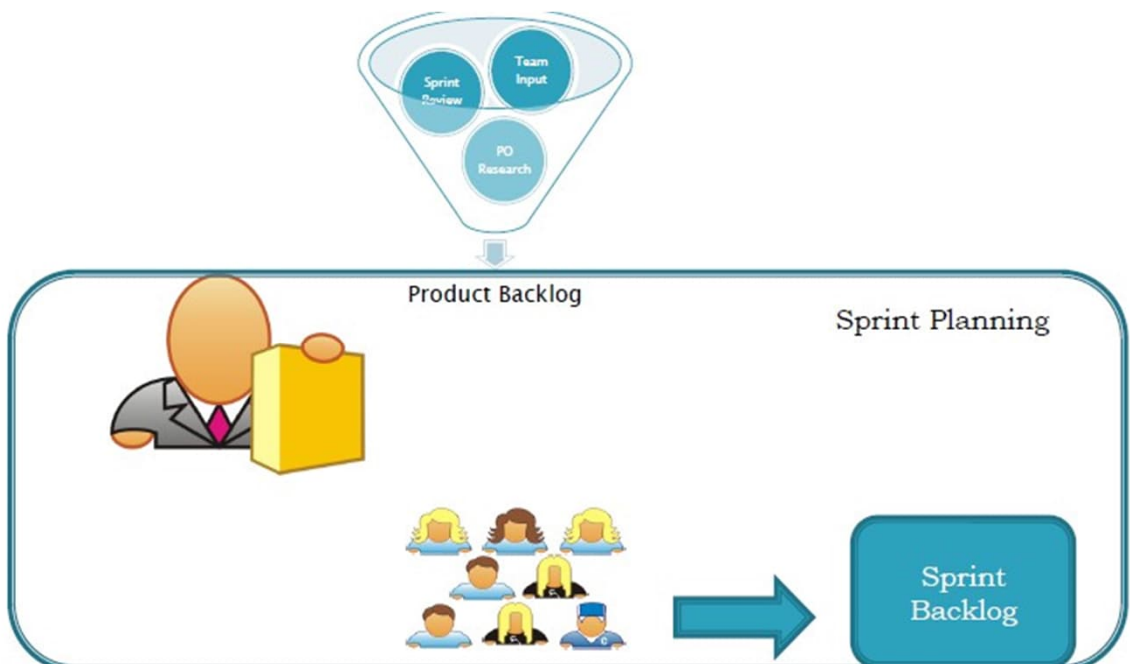
### Development Team

- Typically 5-9 people
- Cross-functional:
- Programmers, testers, user experience designers, etc.
- Members should be full-time
- May be exceptions (e.g., database administrator)
- Teams are self-organizing
- Ideally, no titles but rarely a possibility
- Membership should change only between sprints

## ARTIFACTS

### Product Backlog

- The requirements
- A list of all desired work (Product Backlog Item) on the project
- Ideally expressed such that each item has value to the users or customers of the product
- Prioritized by the product owner
- Reprioritized at the start of each sprint



Good product backlogs should be **DEEP** (Coined by Roman Pichler and Mike)

- *Detailed appropriately*
- *Emergent*
- *Estimated*
- *Prioritized*

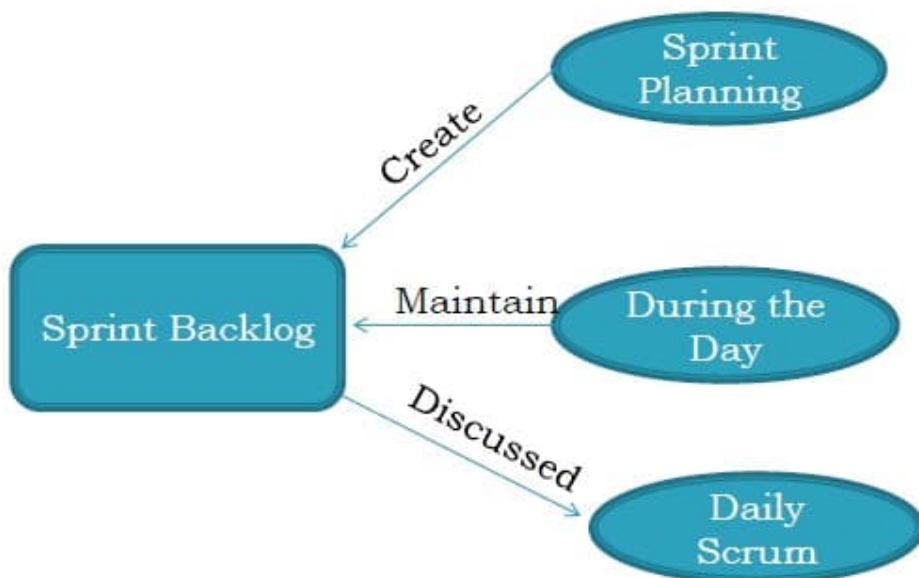
## SCRUM Framework

### Sprint backlog

- The Sprint Backlog defines the work the Team will perform to turn Selected Product Backlog items into a “Done” Increment.
- The list emerges during the Sprint.
- Each ongoing task identifies those responsible for doing the work
- Each Tasks has information about estimated amount of work remaining on the task on any given day during the Sprint.

### Managing the Sprint Backlog

- Individuals sign up for work of their own choosing
- Work is never assigned
- Estimated work remaining is updated daily
- Any team member can add, delete or change the sprint backlog
- Work for the sprint emerges
- If work is unclear, define a sprint backlog item with a larger amount of time and break it down later
- Update work remaining as more becomes known



### Increment

- The Increment is the sum of all the Product Backlog items completed during a Sprint and all previous Sprints.
- At the end of a Sprint, the new Increment must be “Done,”
- It must be in useable condition (Potentially shippable product)

## SCRUM Framework

### Definition of Done (DOD)

- Everyone must understand what done means
- This varies significantly per Scrum Team, members must have a shared understanding of what it means for work to be complete, to ensure transparency
- This guides Development Team in knowing how many Product Backlog items it can select during a Sprint Planning Meeting.
- The purpose of each Sprint is to deliver Increments of potentially releasable functionality that adhere to Definition of “Done.”
- Definition of Done may change during the project

## CEREMONIES

Ceremony/ Activity	Frequency – Duration	What is it?	Why do we need it?
<b>Stand up (15 minutes)</b>	Daily  15 minutes  First activity of the day, allows you to organise yourself for the day and work on your priorities.	It is a short meeting that takes place every day in which each team member shares 1. What they did yesterday 2. What they are focused on today 3. Any obstacles to progress	This ceremony provides transparency and accountability for the task manager and also encourages the team to collaborate and learn from each other.

## Scrum ceremonies

Ceremony/ Activity	Frequency – Duration	What is it?	Why do we need it?
<p><b>Sprint Planning (1 hour)</b></p>	<p>Fortnightly</p>	<p>A non-negotiable activity for all team members, key activities include:</p> <ul style="list-style-type: none"> <li>• Setting sprint objectives</li> <li>• Prioritisation</li> <li>• Creating user stories</li> <li>• Estimating</li> <li>• Clarifying the definition of done (what is a completed job?)</li> </ul>	<p>This ceremony allows you to set a target for the fortnight and plan your ability to deliver within the timeframe. This means that the availability of resources is taken into account when estimating the effort required to achieve the sprint target. The work is prioritised in a logical sequence and the "done definition" is clearly understood by all members.</p>
<p><b>Sprint Review/ Product Presentation (30 minutes)</b></p>	<p>Fortnightly</p>	<p>This ceremony, often referred to as the product launch, gives the team the opportunity to present and share with stakeholders what they have achieved over the past few weeks.</p> <p>It is usually presented visually in an open space for attendees to see and touch.</p>	<p>The team is able to celebrate its progress and learning within the team and with its stakeholders. When the product is delivered, it creates synergy for the organisation and a real sense of team.</p>

## Scrum ceremonies

Ceremony/ Activity	Frequency – Duration	What is it?	Why do we need it?
<b>Retro (30 minutes)</b>	Fortnightly	This is a non-negotiable activity and occurs at the end of a sprint. This ceremony focuses on what has worked well and what can be improved. Open and honest discussion is welcomed, and the conversation is supportive in nature.	The retros allow to continue with what is working well and what can be improved, this mentality will allow teams to improve performance.
<b>Continuous improvement</b>	Ongoing	Continuous improvement items are usually identified during the sprint or retro review. The priority of these elements is agreed by the team.	A team's focus on continuous improvement will improve the speed and quality of work. This has a positive impact on team rapport, trust and collaboration.



## Scrum ceremonies

Ceremony/ Activity	Frequency – Duration	What is it?	Why do we need it?
<b>Visual management</b>	Ongoing	<p>Work management is visible to the whole team. This can be managed through physical or digital dashboards.</p> <p>Generally, we see:</p> <ul style="list-style-type: none"> <li>• What items are in the backlog.</li> <li>• What is currently being worked on</li> <li>• What needs to be assessed in terms of quality</li> <li>• What needs to be validated</li> </ul>	<p>Visual management promotes transparency and accountability within a team. It helps to highlight where the team is focusing its efforts, what the priorities are and whether there are any blockages.</p> <p>Visual management also brings ideas to life in the form of customer walkthroughs, designs and prototypes.</p>

## Recommendations

**Website:** [What is Scrum?](#)

**Youtube Channel:**

<https://www.youtube.com/c/%C3%81gilEsPorCrisR%C3%BAa>

**Blog:** [Con un dibujito se entiende mejor – Blog de @julibetancur](#)

**Mural:** [Teaching the Scrum Framework Template | MURAL](#)

**Blog:** [▷ Kanban: TODO lo necesario para entenderlo el método \(javiergarzas.com\)](#)

## Introduction to KANBAN



**Note:** the video is in Spanish but you can activate Auto-translate on YouTube to get English and Portuguese subtitles.

- Japanese term meaning sign board
- Workflow management method
- To limit the piling up of excess inventory
- To visualize your work
- To maximize efficiency
- Continuous improvement

## KANBAN Core Practices

### 1 Visualizing your work

Visualize what you are doing with the help of an electronic board or whiteboard/marker. Whiteboard has been highly used for visualizing the status at any point.

### 2 Limiting work in progress

Work in Progress (WiP) limits has to be introduced to make sure that you are not bringing in more work than your team can handle.

### 3 Managing flow

To increase the time to market or the cycle lead time we need to improvise managing the flow of process.

### 4 Explicit process policies

Every team member should be aware of the process so that they can bring in any improvements over the period of time.

### 5 Feedback loops

Make sure to get the customers/end-users feedback to make sure the product delivered is the right fit for the business stakeholders.

### 6 Improving collaboratively

Any theories which can be implemented like Chaos, Queueing, gaming or theories of constraints etc. to make Kanban more interesting.