

Being a SW PA engineer in an AGILE environment

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Quality in AGILE



AGILE is the art of pivoting.

You assume that your customers' needs can constantly evolve. So, you organize your work in a way to be able to pivot according to those needs.

What is NOT AGILE ...

- > No planning
- > No documentation
- > Less discipline

Quality in AGILE

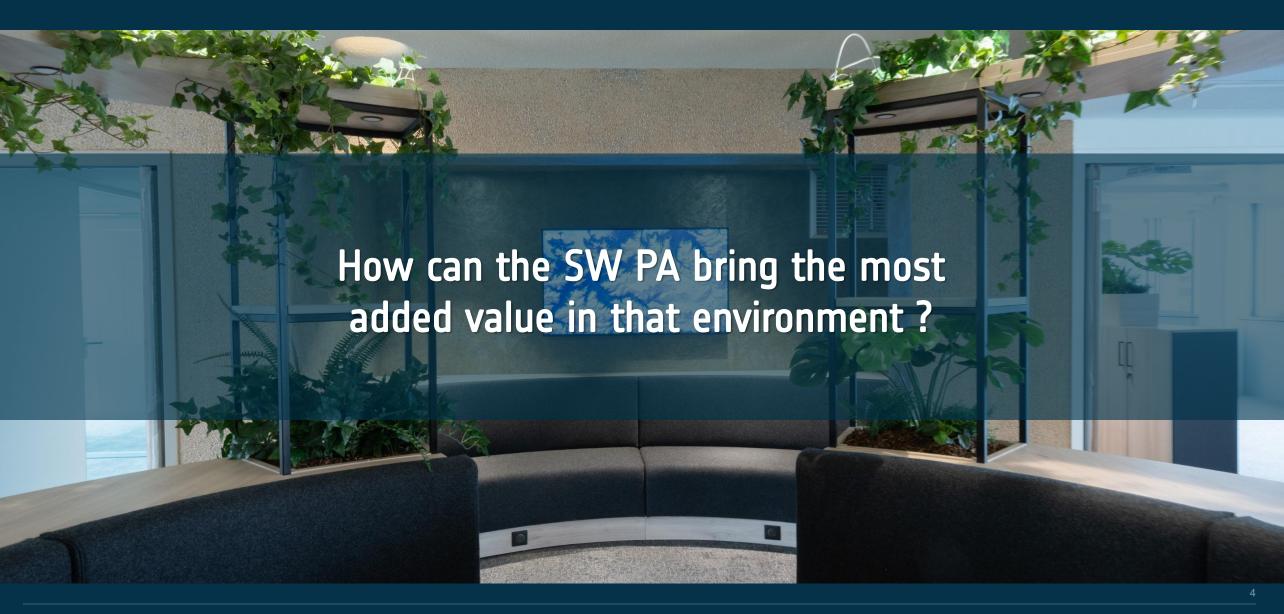


In Agile methodology, the concept of having a dedicated Quality Representative in a team is not explicitly covered. The only mention of it is that it is a shared responsibility among all members of the team.

However, systems being developed for the space industry are typically complex and highly critical, which is why the existence of the SW PA role has been historically enforced by our standards

SCRUM Team





SCRUM Team



Product Owner



Responsible for maximizing the value delivered by the team by ensuring that the team backlog is aligned with customer and stakeholder needs.

SCRUM Master



They are the "process guardian".

They ensure that the team
adheres to SCRUM principles and
practices. Facilitator role.

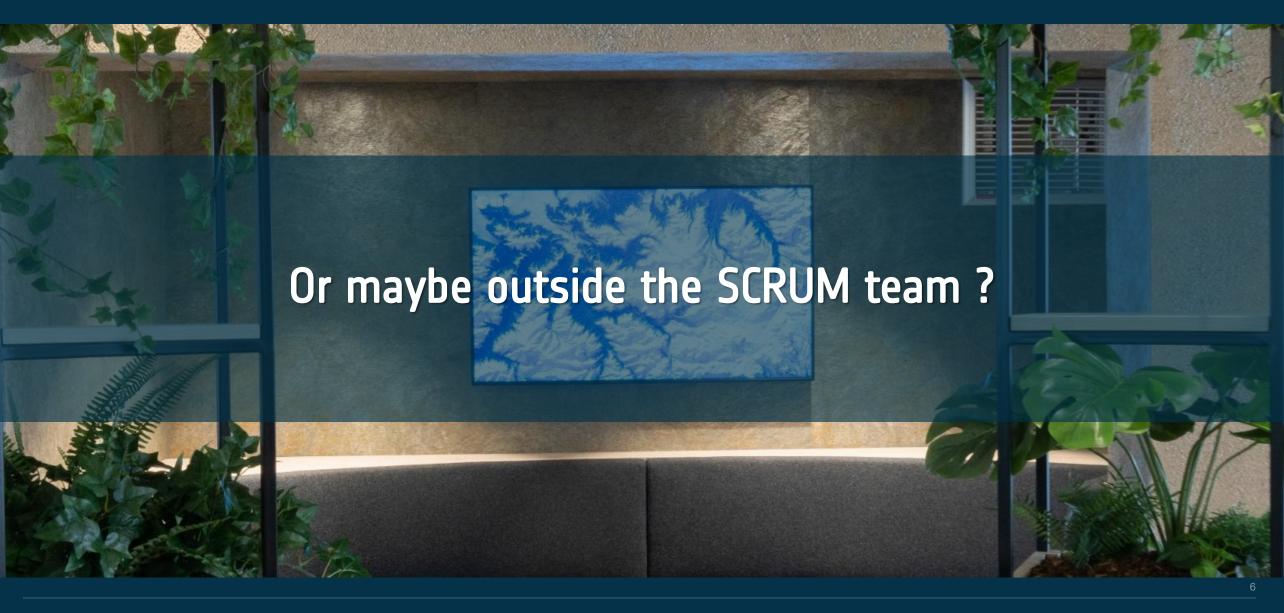
Development Team



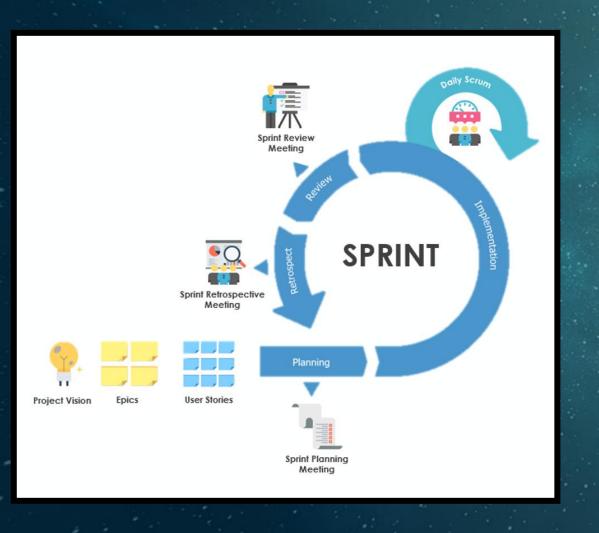
of a usable product increment each Sprint. The Developers team is crossfunctional and self-organized.

SCRUM Team





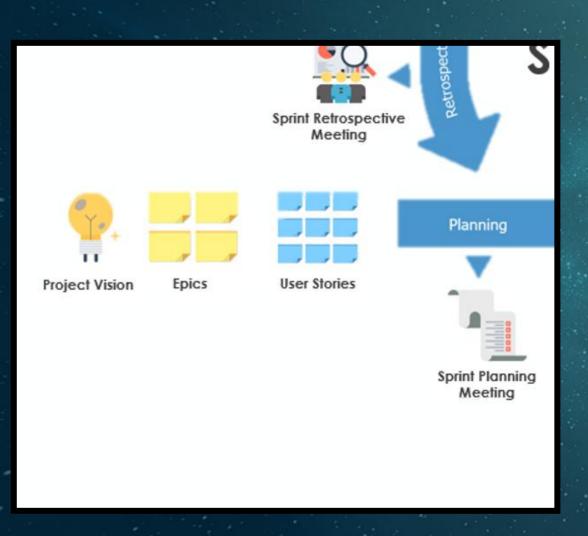




THE SCRUM FRAMEWORK

Opportunities and limitations for the SW PA engineer





SPRINT PLANNING

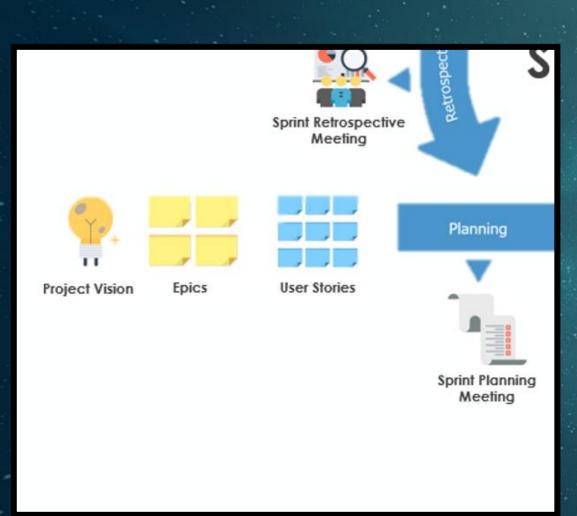


Plan the work for the next Sprint



The whole SCRUM team + others if needed to provide advice.





SPRINT PLANNING

Inside the SCRUM team

Outside the SCRUM team

Product Owner



- + Sets clear acceptance criteria
- Is not supposed to interfere with the technical activities to perform
 - **Create value VS Quality**

SCRUM Master



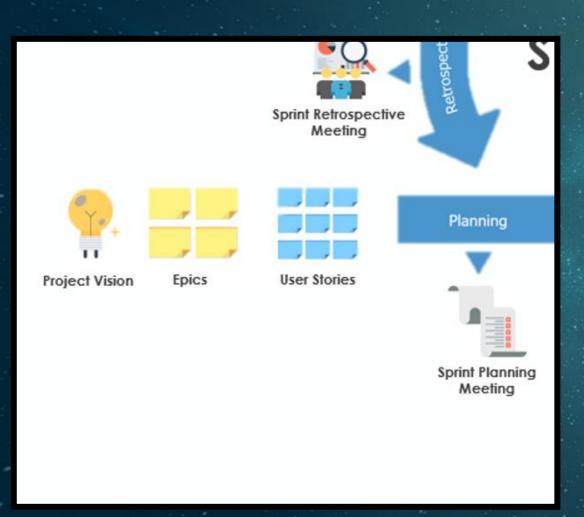
- + Makes sure that a proper Definition of Done is defined in each Features
- + Makes sure that SW PA activities are added in the Sprint Backlog
- Introduces bias on the developer's plan

Developers



- + Defines clear Definition of Done and Acceptance Criteria
- + Builds a more realistic plan
- Loss of ownership on the quality activities from the rest of the developers





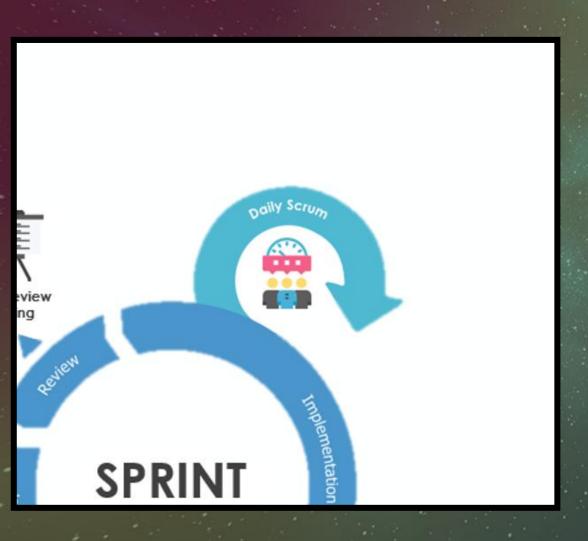
SPRINT PLANNING

Inside the SCRUM team

Outside the SCRUM team

- + If consulted, can provide expert knowledge that can help defining the Definition of Done
 - Is not implicated in the plan. Impacts the tasks to define and his availability
 - Can have a mismatch between the team's perception of Definition of Done and the one from the SPA





DAILY SCRUM

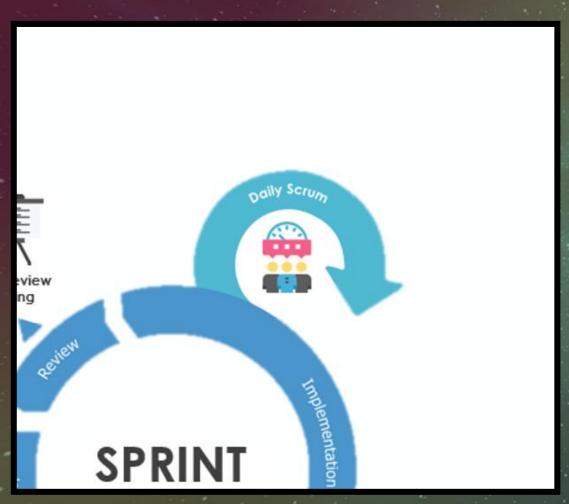


Inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary.



The whole SCRUM team





DAILY SCRUM

Inside the SCRUM team

Outside the SCRUM team

Product Owner



+ Change priorities if the technical debt impacts too much the creation of value

Rely on Developers to know
 if there are any quality issues
 micromanagement

SCRUM Master



+ Has a critical eye on the ongoing SW PA activities

 Risk of turning the meeting in a problemsolving session

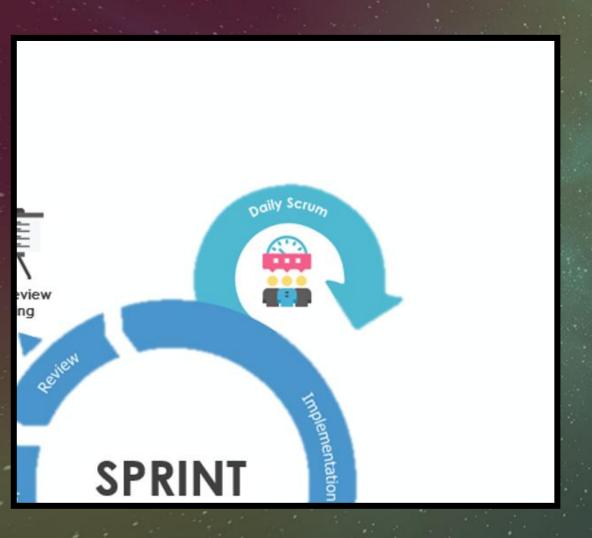
Developers



+ Identifies quickly any ongoing quality issues in the product and can act accordingly

- Relies on the Product Owner to accept any change in priorities





DAILY SCRUM

Inside the SCRUM team

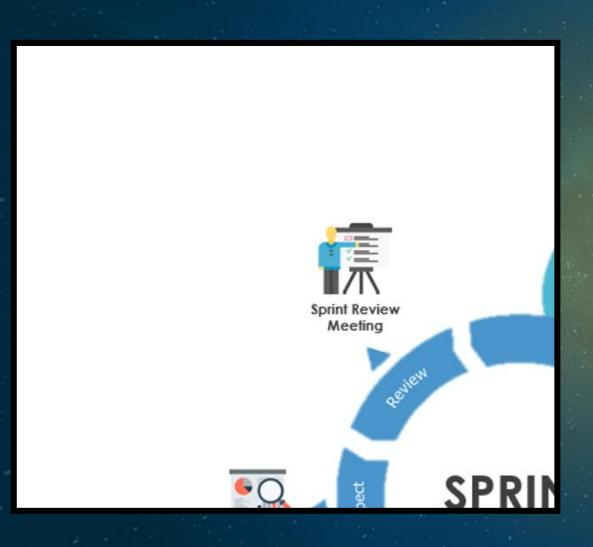
Outside the SCRUM team

No participation in this meeting

No visibility on quality progress and how to synchronize effectively

Blockers are not discussed immediately in the team, so they persist





SPRINT REVIEW



Inspect the outcome of the Sprint and determine future adaptations.



The whole SCRUM team + key stakeholders





SPRINT REVIEW

Inside the SCRUM team

Outside the SCRUM team

Product Owner



- + Evaluate more effectively the feedback from the stakeholder – Value/Quality
- Could downplay quality issues to focus on the created value to the stakeholder

SCRUM Master



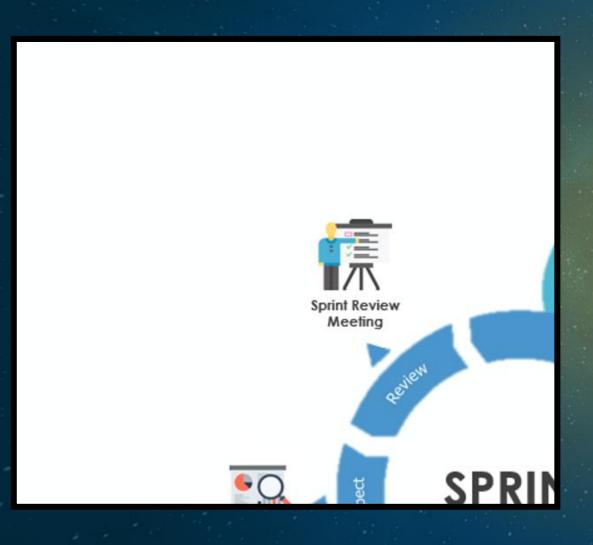
- + Makes sure that the activities in the Definition of Done were performed
- Difficulty to facilitate a transparent feedback with stakeholder

Developers



- + Gives an immediate feedback on the quality activities done
- + Confidently demonstrates features that are truly done
- Attracts naturally the SPA questions — Loss of ownership from the rest of the team





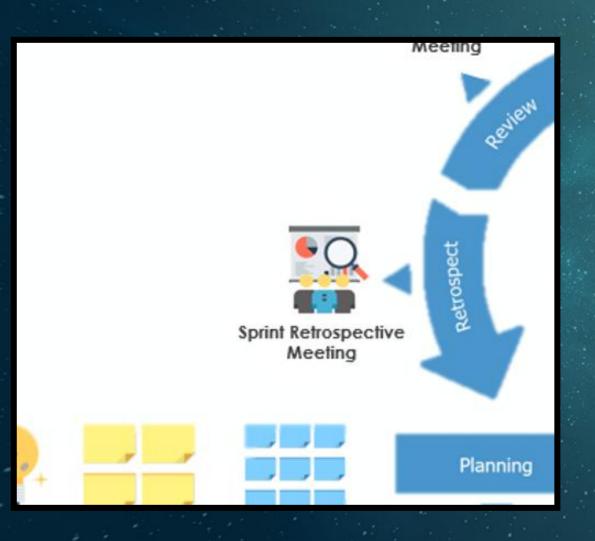
SPRINT REVIEW

Inside the SCRUM team

Outside the SCRUM team

- + Provide an unbiased feedback to the stakeholders, which can differ from the team's view
 - Feedback arrives too late. The Sprint is already finished
 - Definition of Done from the team may not align with the one that the SPA would have chosen





SPRINT RETROSPCTIVE

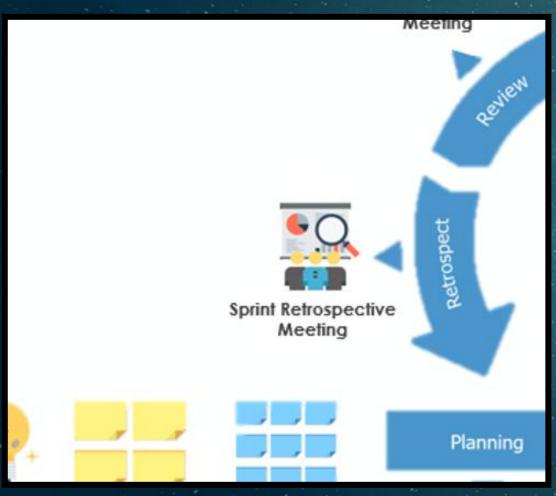


Plan ways to increase quality and effectiveness.



The whole SCRUM team.





SPRINT RETROSPCTIVE

Inside the SCRUM team

Outside the SCRUM team

Product Owner



- + Bring a perspective on how the process had an impact on the delivered value and the quality of it
- Higher chance to discuss about the content than the process

SCRUM Master



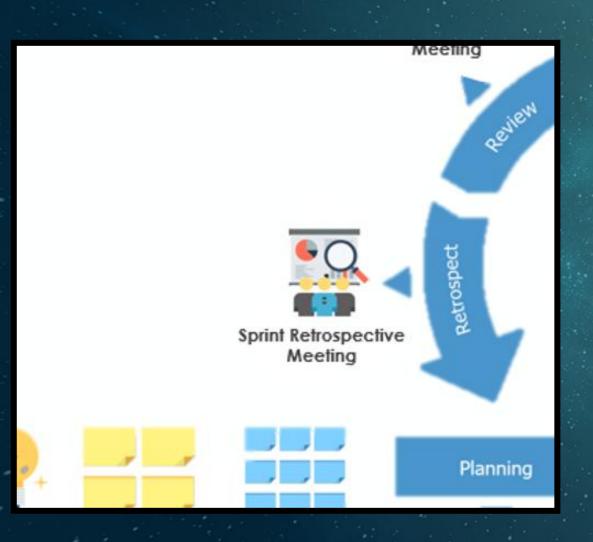
- + Can see how process inefficiency is impacting directly the quality
- Difficulty to facilitate a transparent feedback of the team

Developers



+ Sees how the process impacted the quality activities





SPRINT RETROSPCTIVE

Inside the SCRUM team

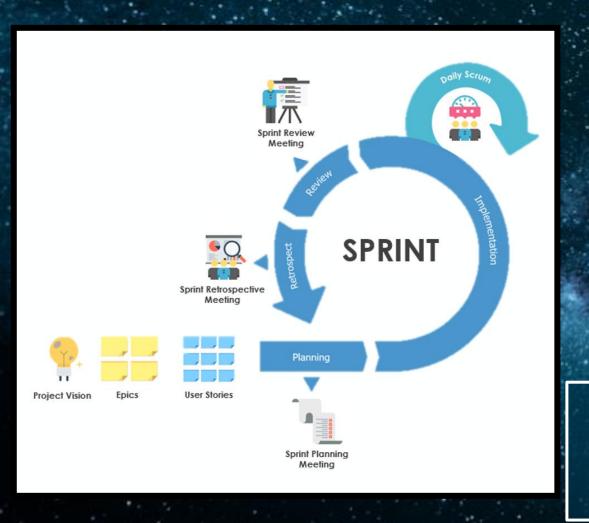
Outside the SCRUM team

+ Provide input for the feedback loop

No participation in this meeting

The team can't have an optimal critical eye of the impact of the process on the quality





What are the outcomes:

- 1. Will help you to identify the opportunities inside the framework
 - 2. Will help you to identify the limitations and find workarounds for them
- Will help you decide which role your SW PA engineer fits best

Will help create the most added value possible as a SW PA in this AGILE environment

