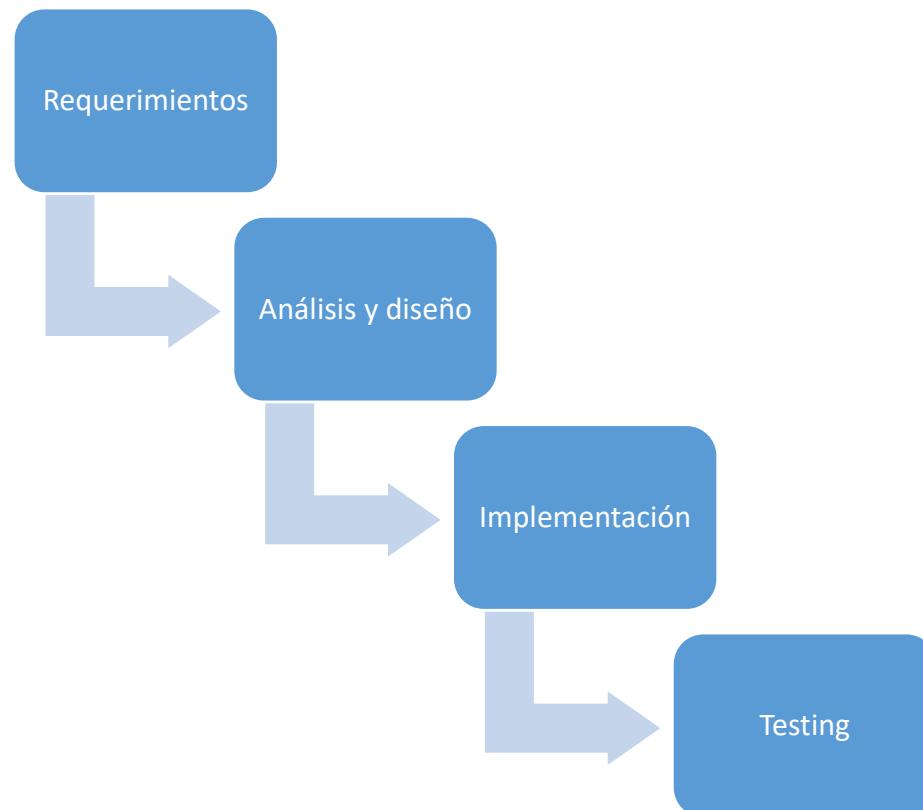


Repaso

- Desarrollo de software
- Metodología de desarrollo de software: describe el ciclo de vida a utilizar, es decir cómo las etapas del ciclo de vida se desarrollarán, y los artefactos a generar durante el desarrollo del producto
- Ciclo de vida:



Scrum

Santiago Vidal
ISISTAN-CONICET

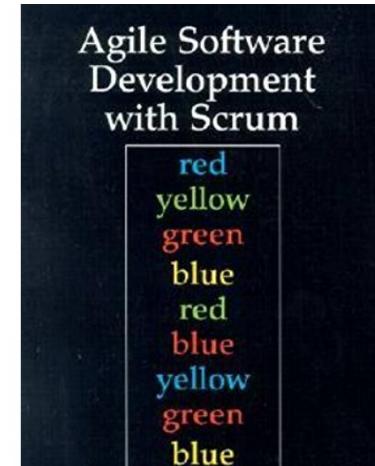




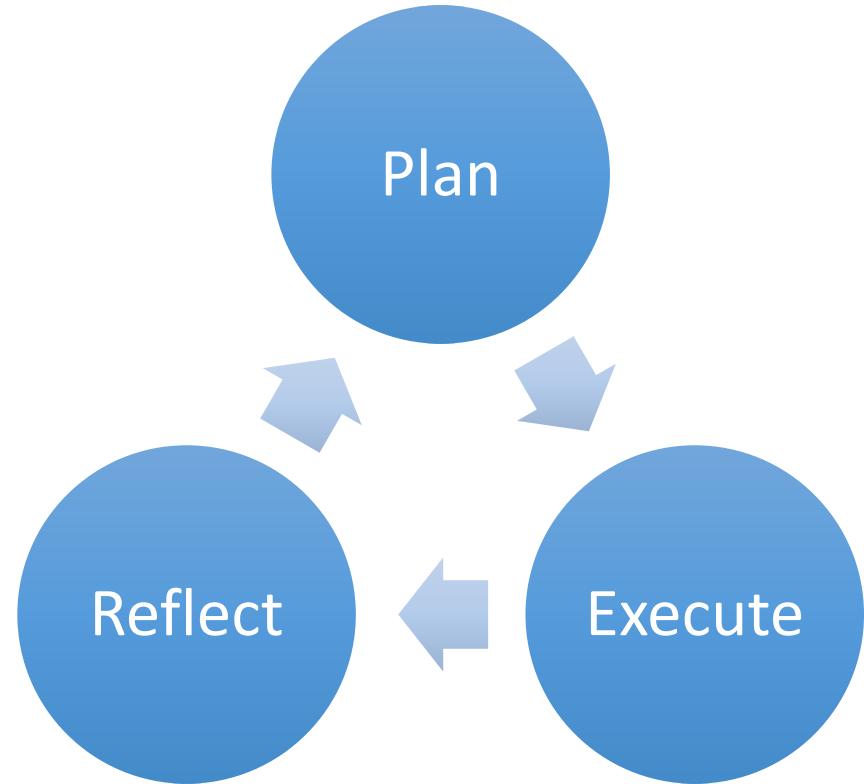
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“Scrum is not a methodology – it is a pathway”

Ken Schwaber (Boulder, Co, Nov. 2001)



Ken Schwaber ■■■ Mike Beedle



Scrum will help you fail in 30 days or less

Definition

- Scrum is a framework that allows you to create your own lightweight process for developing new products
- Scrum is simple It can be understood and implemented in a few days
- The rules of Scrum bind together the events, roles, and artifacts, governing the relationships and interaction between them.



Characteristics

- Self-direct and self-organizing team
- No external addition of work to an iteration, once chosen
- Daily stand-up meeting with special questions
- Demo to external stakeholders at end of each iteration
- Each iteration, client-driven adaptive planning



Scrum Pillars

- Transparency
 - aspects of the process must be visible to those responsible for the outcome
 - aspects must be defined by a common standard so observers share a common understanding
- Inspection (of artifacts and process)
 - Must be done frequently to detect undesirable variances
- Adaptation
 - When a deviation is found, the process must be adjusted
 - Scrum presents 4 events for inspection:
 - Sprint Planning
 - Daily Scrum
 - Sprint Review
 - Sprint Retrospective



Scrum Values

COURAGE

Scrum Team members have courage to do the right thing and work on tough problems



FOCUS

Everyone focuses on the work of the Sprint and the goals of the Scrum Team



COMMITMENT

People personally commit to achieving the goals of the Scrum Team



RESPECT

Scrum Team members respect each other to be capable, independent people



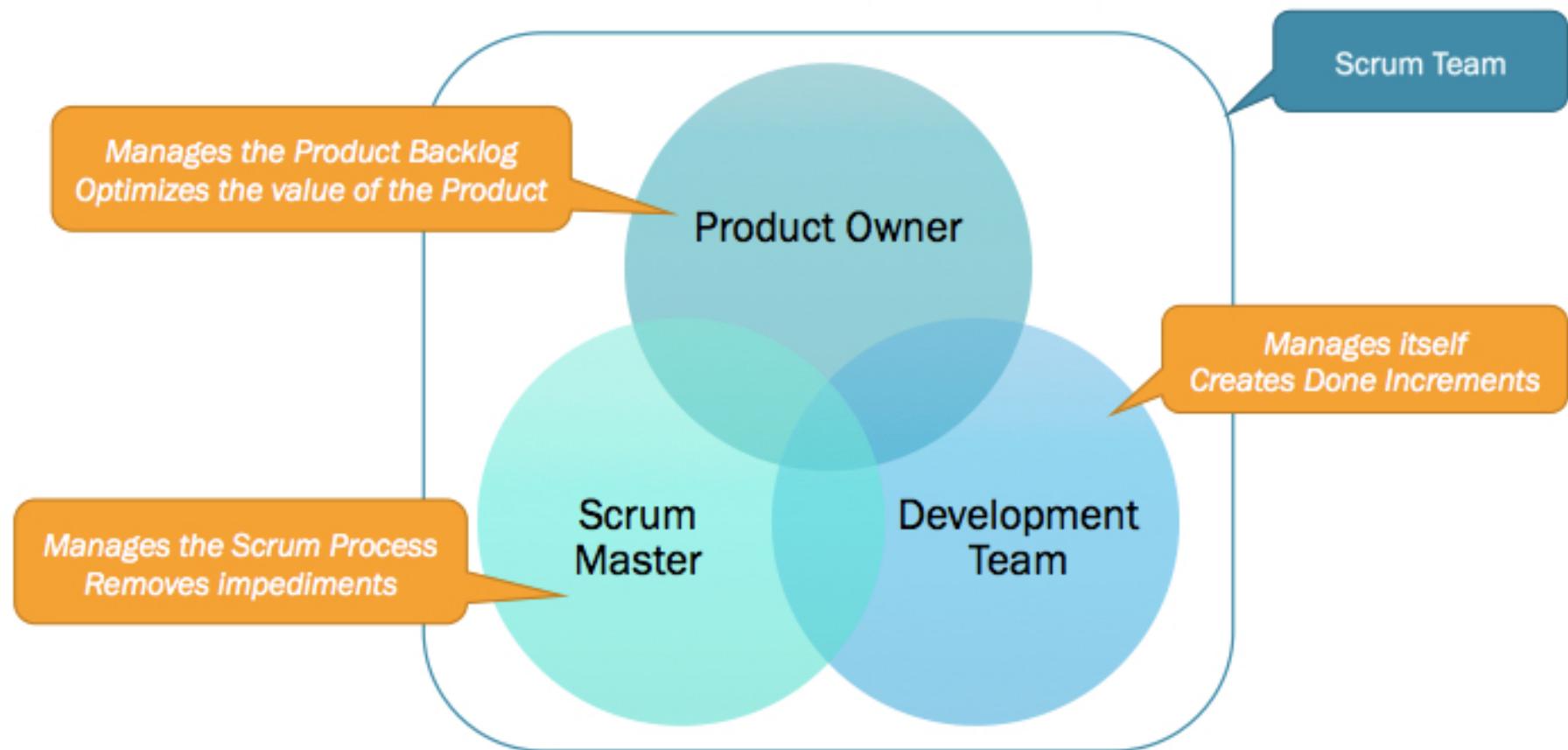
OPENNESS

The Scrum Team and its stakeholders agree to be open about all the work and the challenges with performing the work



SCRUM VALUES

The Scrum Team



Product Owner

- Officially responsible for the project in the client, only one person
- He/she is the sole person responsible for managing the Product Backlog:
 - Express product backlog items
 - Prioritize items of the backlog
 - Ensure understanding of the items
- Chooses the goals (from the product backlog) for the next Sprint



Development Team

- A team commits to achieve a Sprint goal
- Teams are self-organized (7 people +- 2)
- Small teams limit the amount of interaction
- Teams are cross-functional
- A Scrum Team should include people with skills necessary to meet the Sprint goal
- Each team member applies his/her expertise to all of the problems
- No third party can commit a person or team to do work
- No titles! Everybody should be available to code

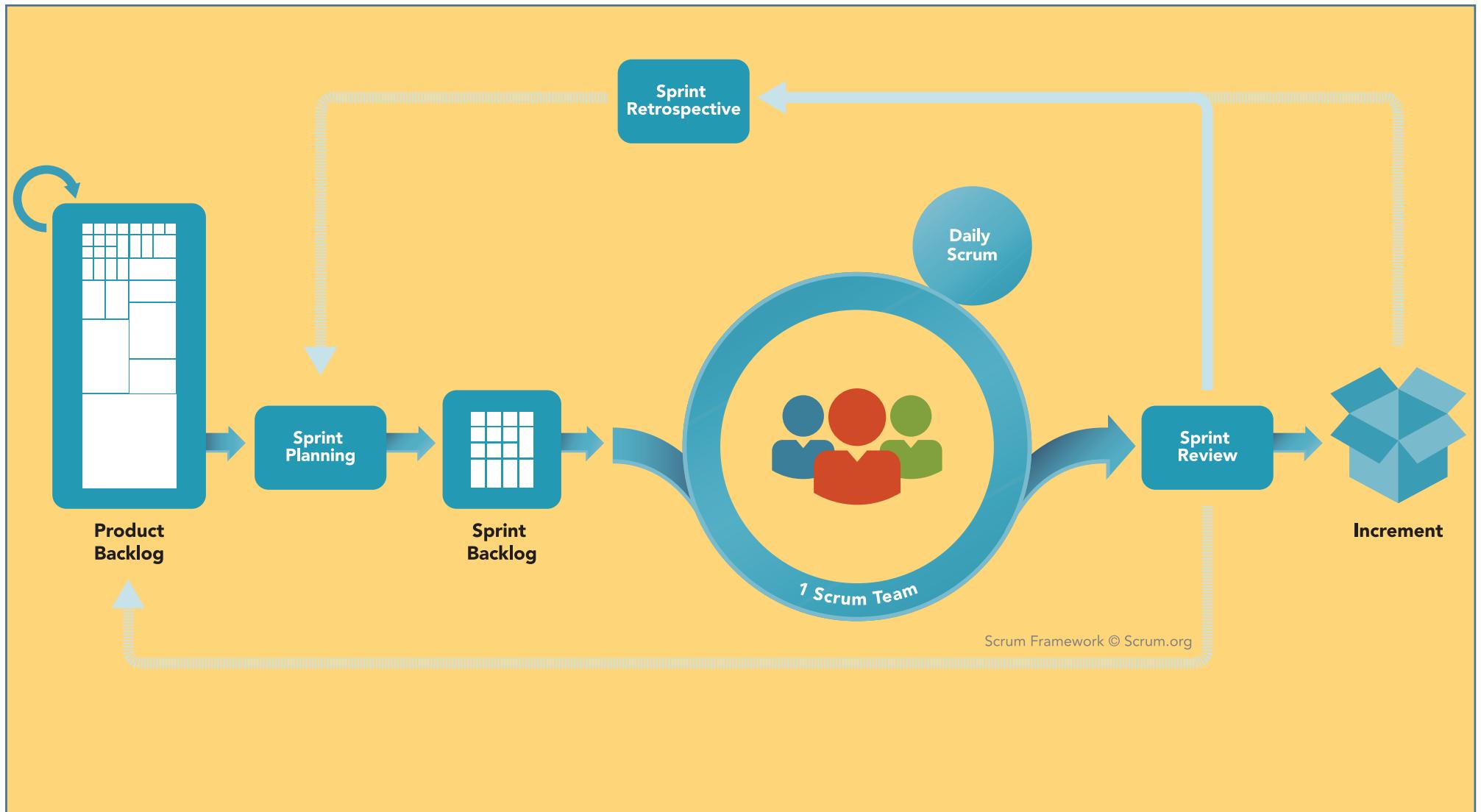


Scrum Master

- The **Scrum Master** is “**the facilitator**”
- Responsible for ensuring that Scrum values, practices and rules are enacted and enforced.
- He/She is the driving force behind the rest of the Scrum practices
- He/She sets them up and makes the practices happen
- The **Scrum Master**:
 - Remove impediments
 - Must take much initiative
 - Has to be determined in decisions

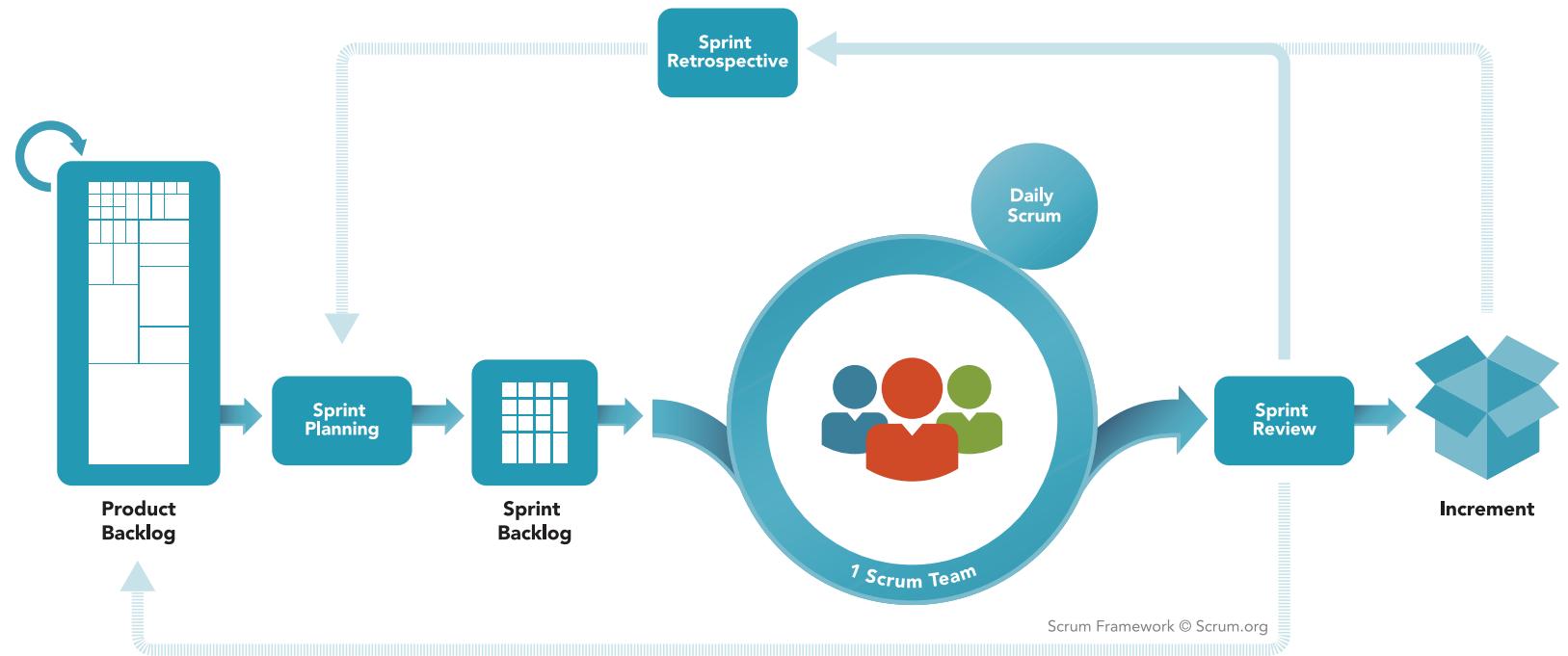


Scrum Framework



Scrum Events

- Sprint
- Sprint Planning
- Daily Scrum
- Sprint Review
- Sprint Retrospective



Sprint

- Time-box of one month or less during which a “Done”, useable, and potentially releasable product Increment is created
- Each Sprint may be considered a project with no more than a one-month horizon.
- When a Sprint’s horizon is too long the definition of what is being built may change, complexity may rise, and risk may increase.
- Sprints contain and consist of the Sprint Planning, Daily Scrums, the development work, the Sprint Review, and the Sprint Retrospective.



Sprint

A Sprint can be cancelled **only** by the **Product Owner** when:

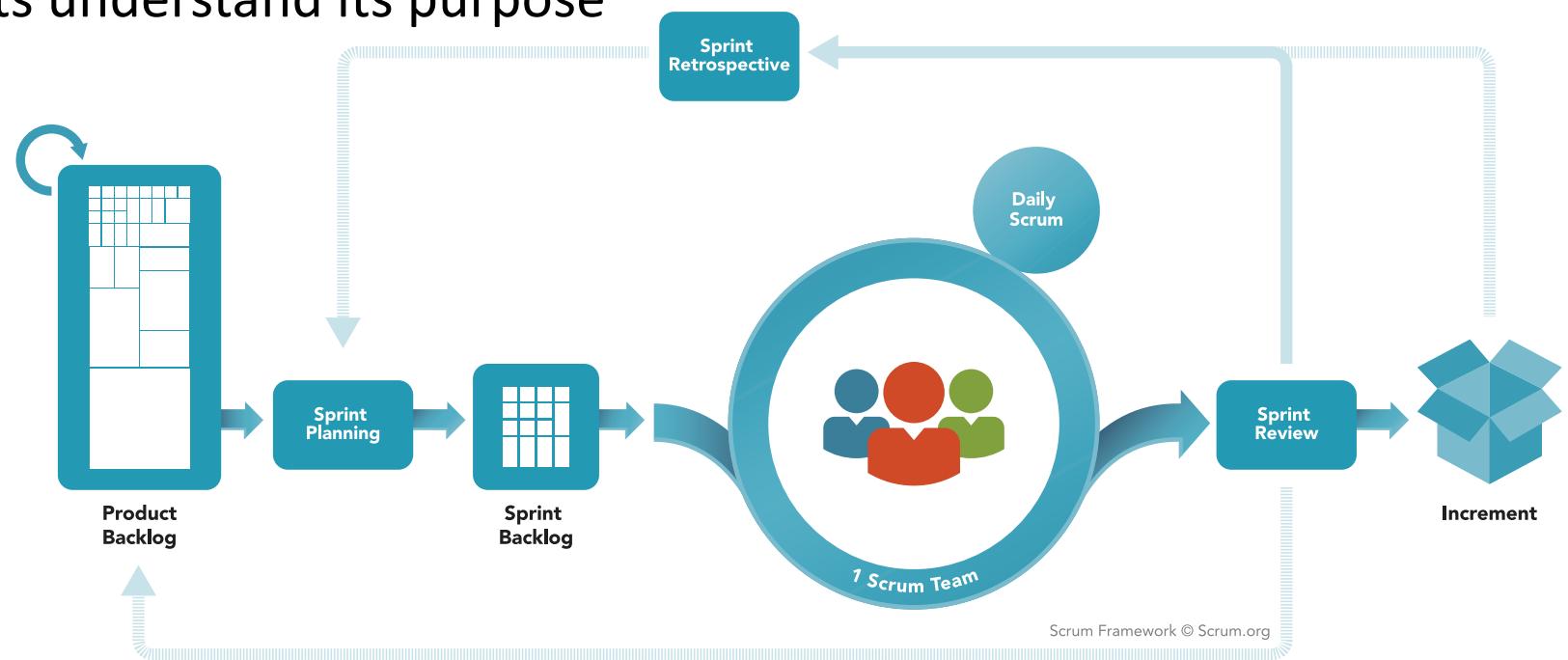
- The Sprint Goal becomes obsolete
- Management changed its mind
- Company changed direction
- Market conditions or technical requirements changed
- Team cannot achieve its Sprint Goal
- Team achieved Goal but need management directions



Sprint Planning

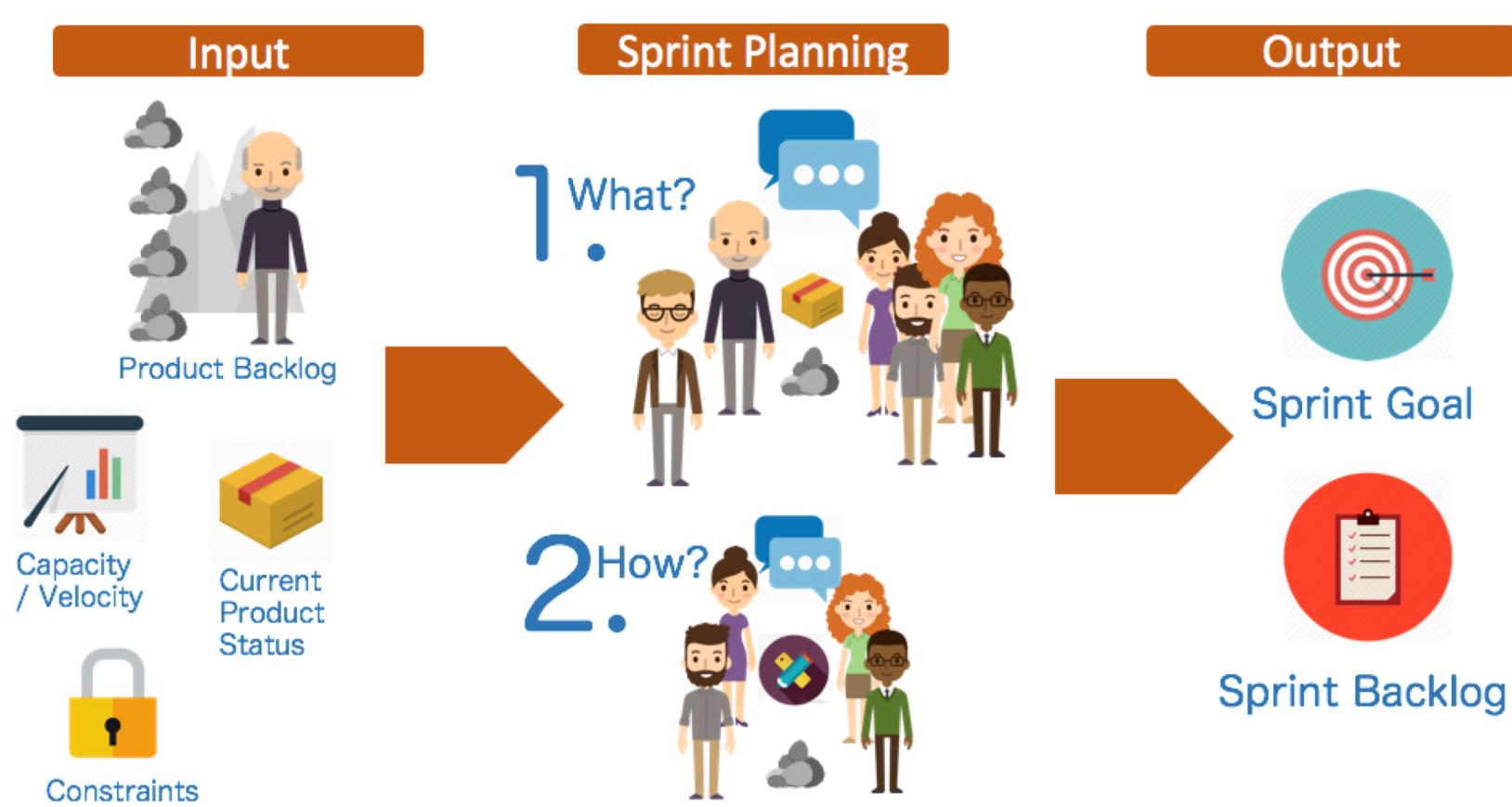


- Set a Sprint goal
- The plan is created by the entire Scrum Team
- Sprint Planning is time-boxed to a maximum of eight hours for a one-month Sprint
- The Scrum Master ensures that the event takes place and that attendants understand its purpose



Sprint Planning

- The planning must answer:
 - What can be delivered in the Increment resulting from the upcoming Sprint?
 - How will the work needed to deliver the Increment be achieved?



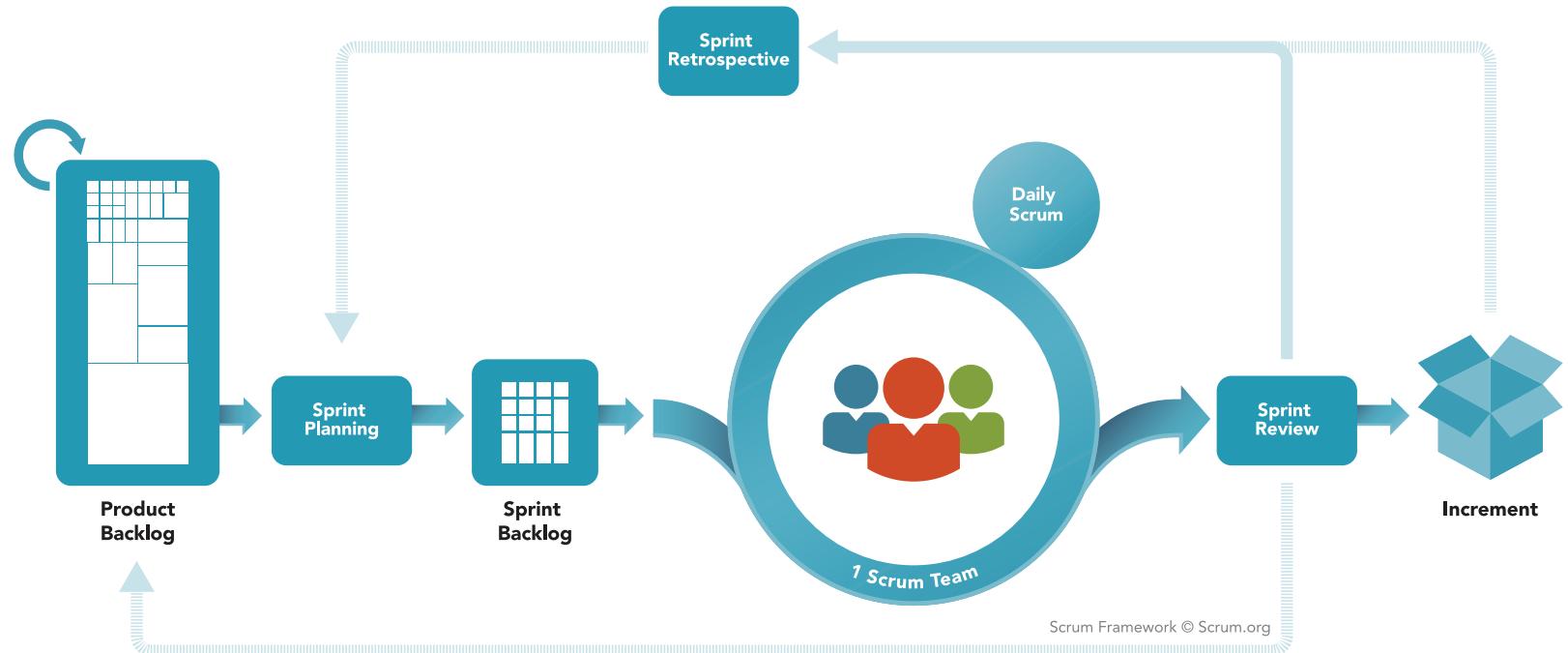
Daily Scrum

- 15-minute time-boxed event for the Development Team to:
 - Synchronize activities
 - Create a plan for the next 24 hours
- Questions that each member must answer:
 - What have you done since the last meeting?
 - What are you going to do until the next meeting?
 - Which obstacles are in your way?
- The Scrum Master:
 - ensures that the Development Team has the meeting (Development Team is responsible for conducting the Daily Scrum)
 - enforces the rule that **only Development Team members participate in the Daily Scrum**
- Nobody should arrive late, impose penalties

Sprint Review

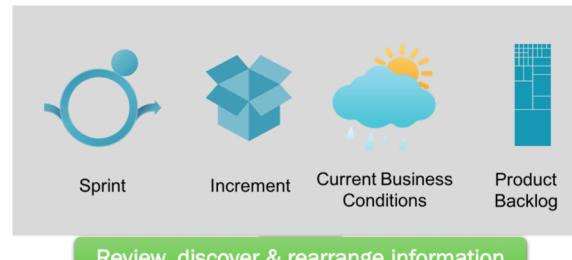


- Inspect the Increment and adapt the Product Backlog if needed
- Scrum Team + stakeholders
- Four-hour time-boxed meeting for one-month Sprints



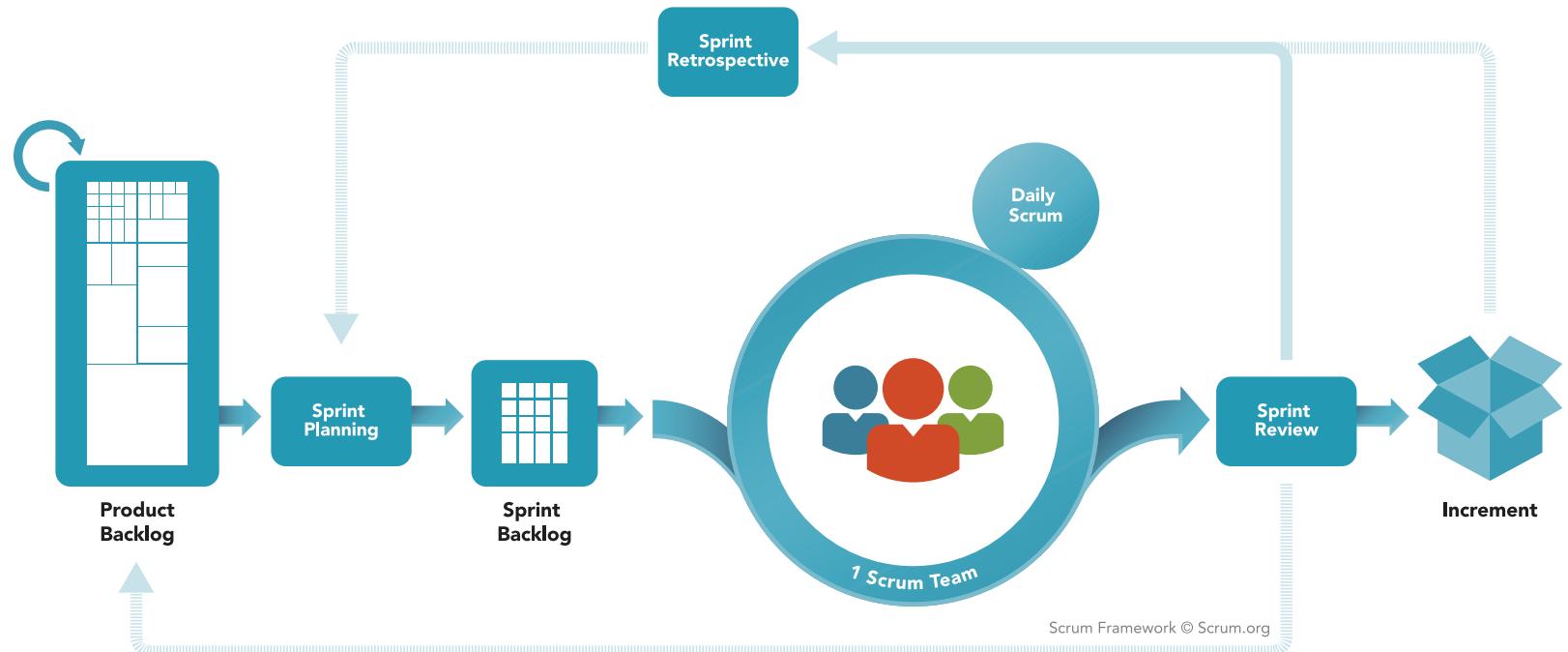
Sprint Review Elements

- The **Product Owner** explains what Product Backlog items have been “Done” and what has not been “Done”
- The **Development Team** discusses what went well during the Sprint, what problems it ran into, and how those problems were solved
- The **Development Team** demonstrates the work that it has “Done” and answers questions about the Increment
- The **Product Owner** discusses the Product Backlog
- The group collaborates on what to do next (input Sprint planning)
- Review of possible changes in market, timeline, budget, etc.



Sprint Retrospective

- The Scrum Team inspects itself and creates a plan for improvements
- Three-hour time-boxed meeting for one-month Sprints.
- The Scrum Team must identify improvements that it will implement in the next Sprint



Sprint Retrospective

A Typical Sprint Retrospective Model

What worked well?

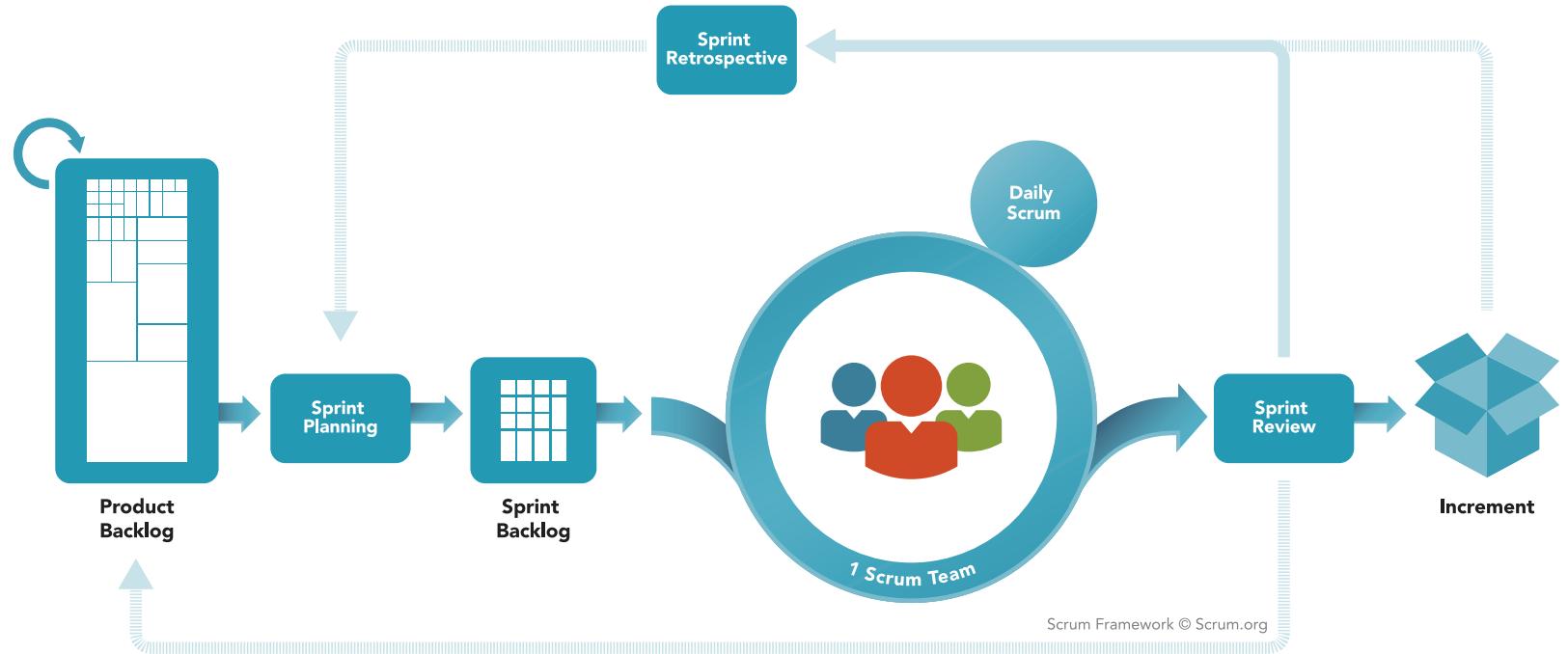
What could be improved?

What will we commit to
doing in the next Sprint?

*Scrum Team members
make actionable
commitments*

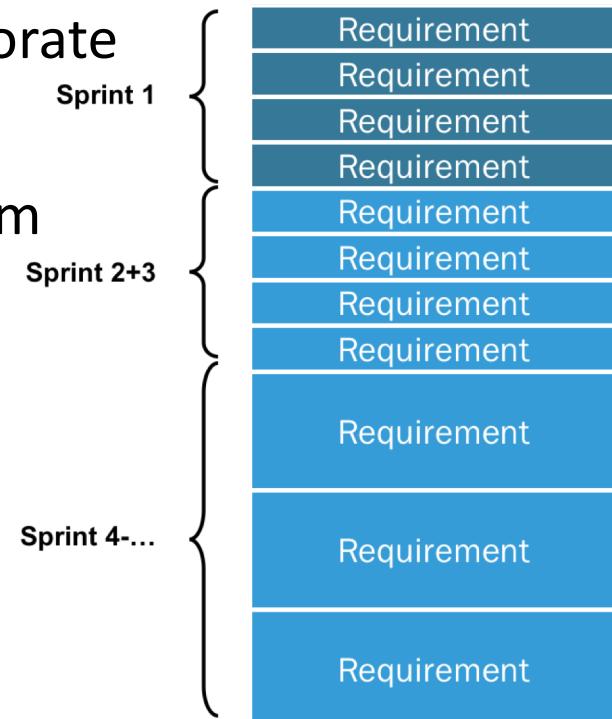
Scrum Artifacts

- Product Backlog
- Sprint Backlog
- Increment



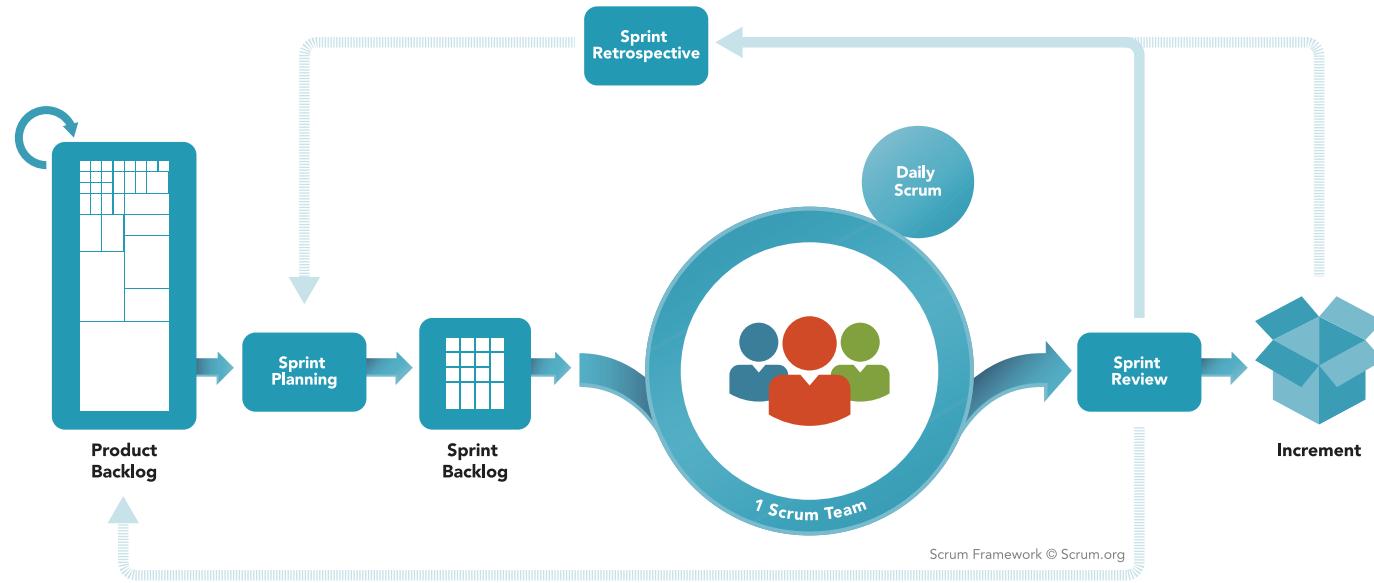
Product Backlog

- Ordered list of requirements of the product
- Responsibility of the Product Owner (content, availability, and ordering)
- It evolves as the product and the environment in which it will be used evolves
- Lists all features, functions, requirements, enhancements, and fixes
- Product Owner and the Development Team collaborate on refining Product Backlog items
- Items that can be “Done” by the Development Team within one Sprint are “Ready” for selection in a Sprint Planning
- Development Team is responsible for all estimates



Sprint Backlog

- It is the set of Product Backlog items selected for the Sprint
- It makes visible all of the work that the Development Team identifies as necessary to meet the Sprint Goal
- The Development Team modifies the Sprint Backlog throughout the Sprint
- Only the Development Team can change its Sprint Backlog during a Sprint



Sprint Backlog

Sprint Backlog			
Forecast	To-Do	In-Progress	Done
<p>Fix My Profile</p> <p>5</p>		<p><i>aliquip</i></p>	<p><i>ipsum</i></p> <p><i>duis</i></p> <p><i>sit</i></p> <p><i>ipsum</i></p>
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Increment

- It is the sum of all the Product Backlog items completed during a Sprint and the value of the increments of all previous Sprints
- At the end of a Sprint, the new Increment must be “Done”
- It must be in useable condition regardless of whether the Product Owner decides to actually release it.

