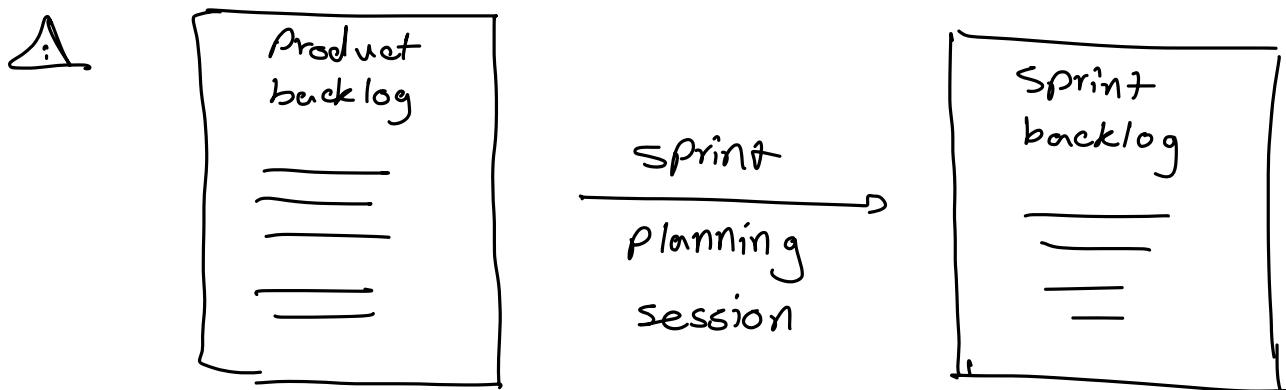
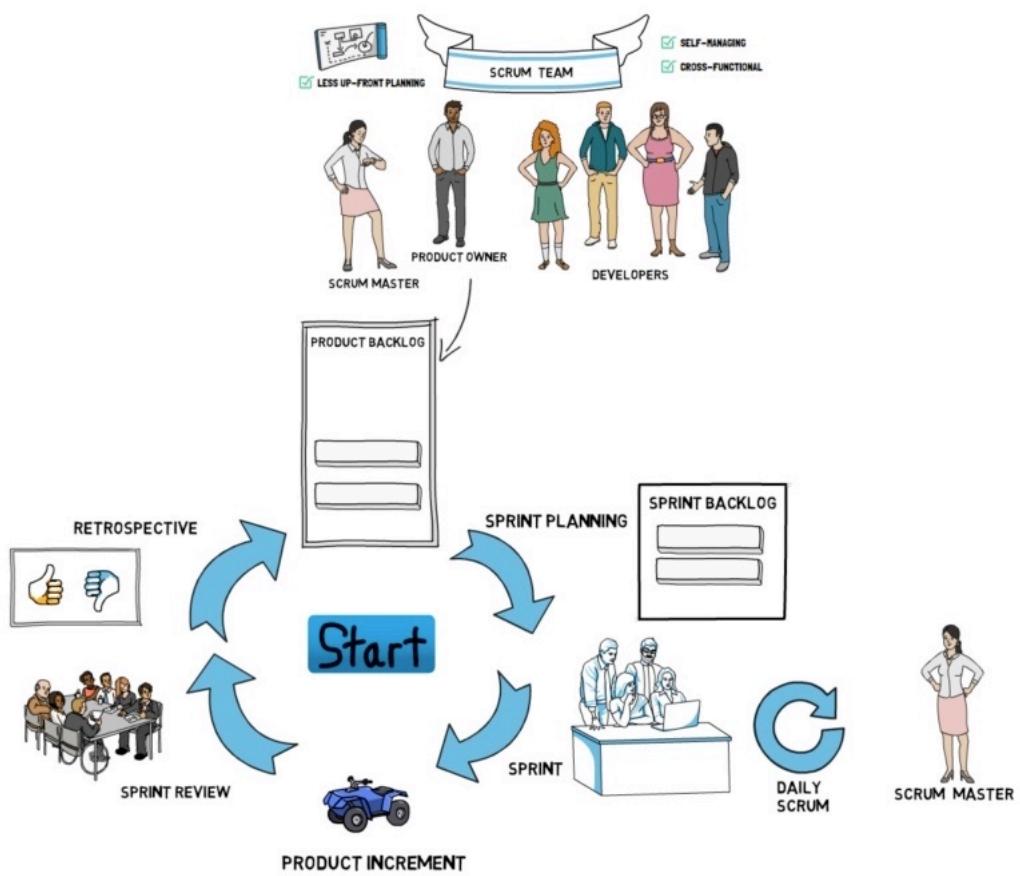


Introduction Agile & Scrum for Product Owners

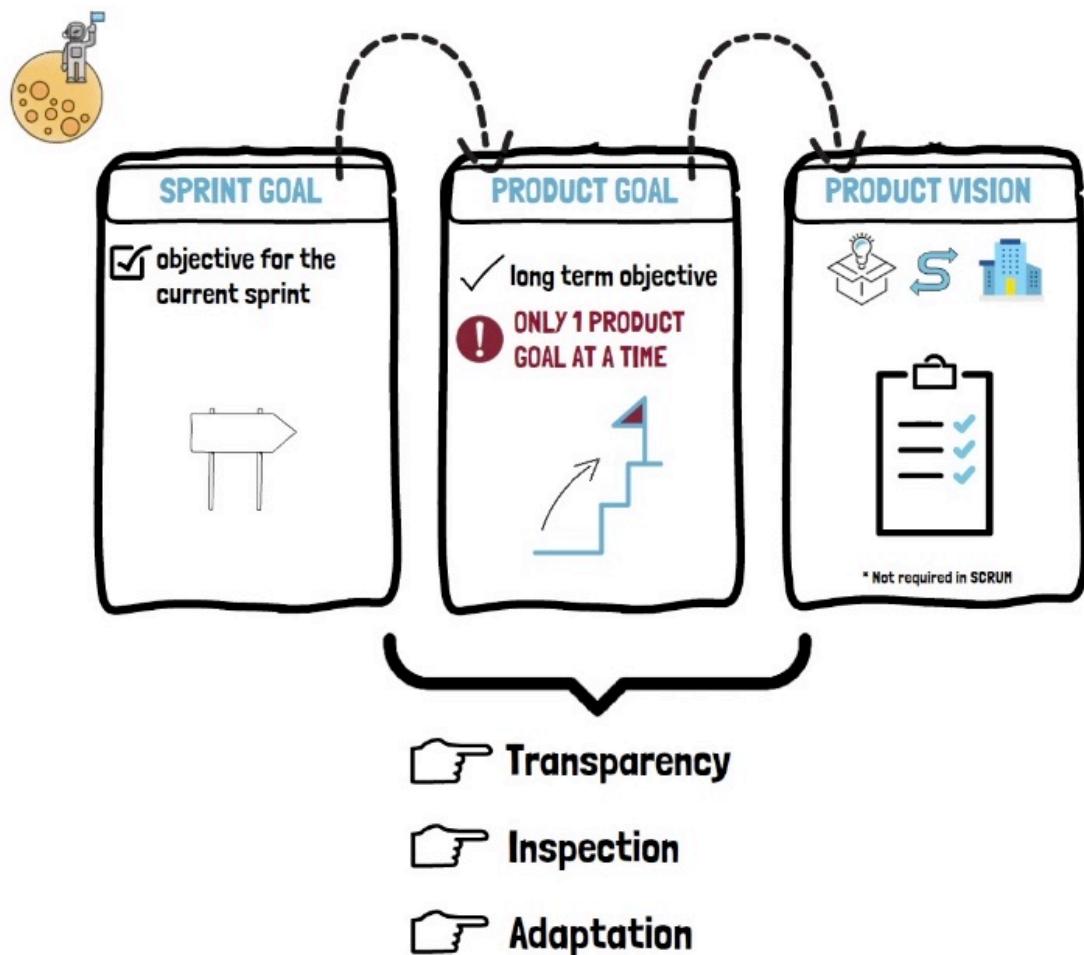
- △ Scrum is a framework that imposes time box's feedback loops and tries to deal with uncertainty
- △ right from the first sprint, a scrum team will try to create a working, tested and potentially releaseable product increment
- △ Scrum team
 - self-managing
 - cross functional
 - less up-front planning
- △ the product owner organizes product features in the backlog to ensure the stakeholders get the maximum value



- ⚠️ Scrum master keeps the team focused on the sprint goal, helps remove any impediments & ensures transparency over the entire scrum process
- ⚠️ During the sprint review meeting, the scrum team, together with the stakeholders, conduct a review of the work completed in the sprint and discuss what to do next
- ⚠️ During the sprint retrospective meeting, the scrum team looks back on how the sprint went & figure out ways to improve their development process



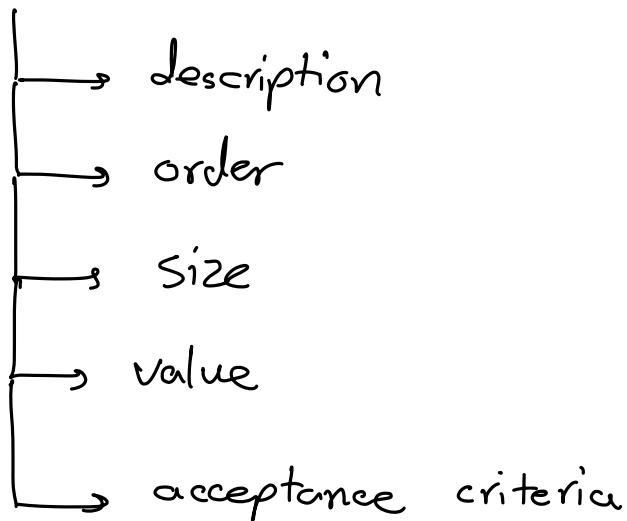
- Any product that an organization decides to develop should sustain the objective and the larger vision that organization has defined for itself
- A goal gives direction, helps focus on one thing and most importantly, creates transparency and opportunity



- the product backlog is an artifact designed to provide transparency and opportunities for inspection and adaptation

△ The product backlog can contain new features or improvements to existing ones, known defects or any other changes that need to be done on the product

△ Product backlog item has



△ The sole person accountable for the product backlog is the product owner
 └ responsible for content and ordering

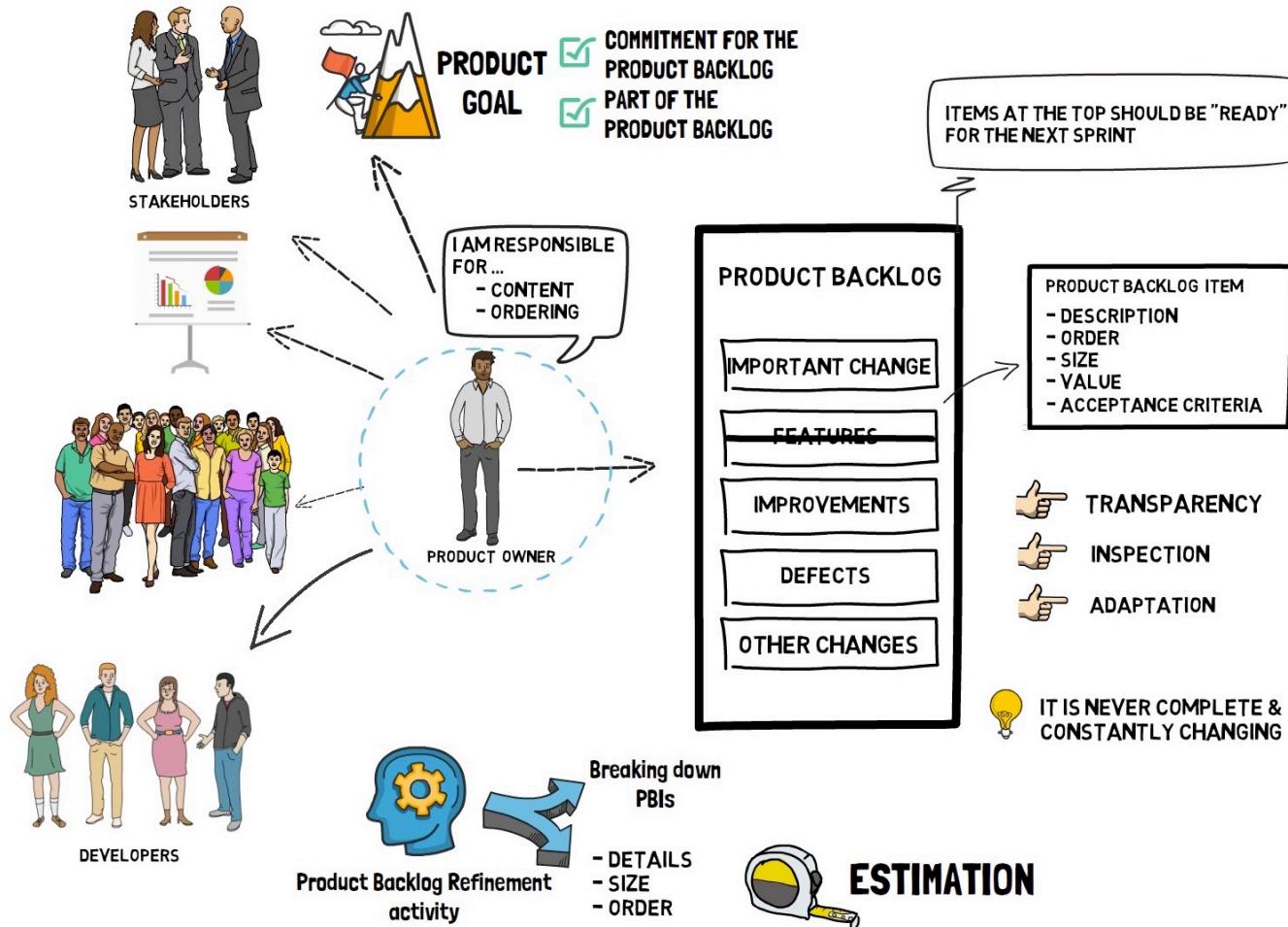
△ Product goal

- └ commitment for the product backlog
- └ Part of the product backlog

△ Product backlog is never complete and constantly changing

△ Product backlog items are often called stories

⚠ A product backlog item is ready when the scrum team agrees it can be done



⚠ User stories are short descriptions of a feature explained from the perspective of the user

⚠ typical user story template

└ As a <kind of user> ↗ who
I want <some objective> ↗ what
so that <some reason> ↗ why

⚠ If User stories are used, it is not mandatory for all product backlog items to be written as user stories

⚠ User stories are optional in scrum, not mandatory

⚠ what is value → depends on organization and product

- revenue
- market share
- customer satisfaction
- employee satisfaction

⚠ The product owner's main accountability is to maximize value

⚠ The backlog refinement meeting is not prescribed by Scrum → goal: not to refine sprint backlog but the product backlog



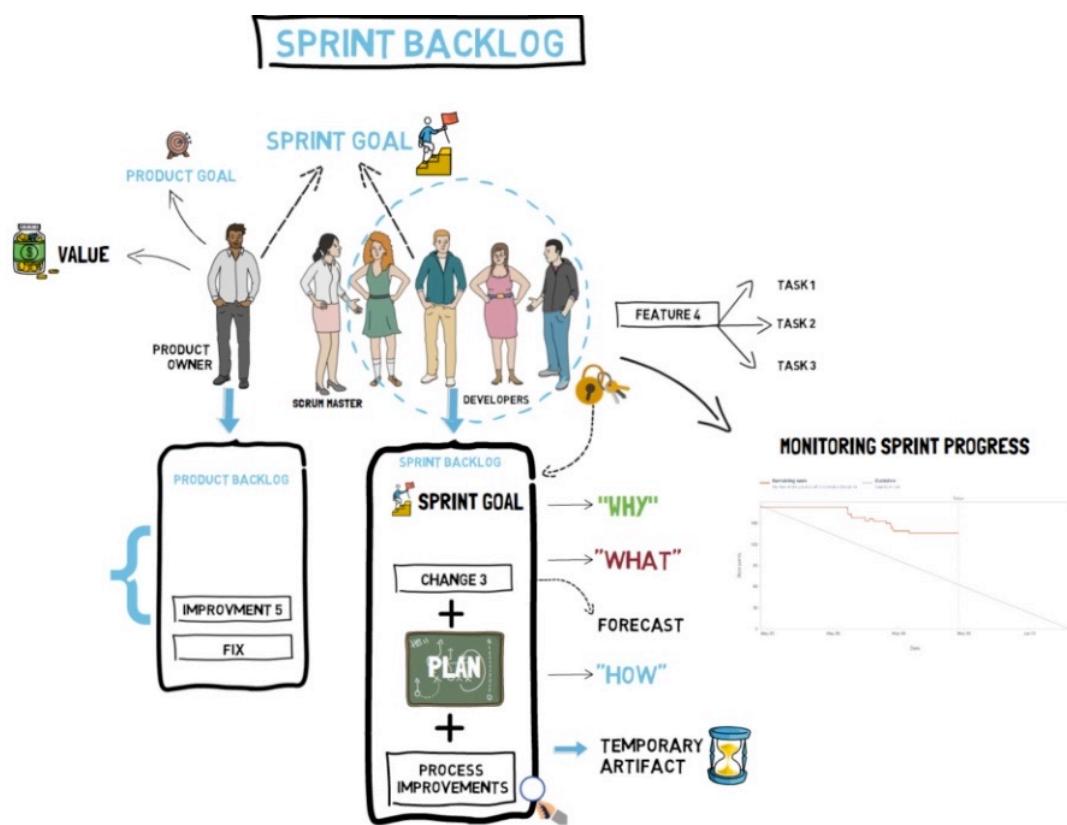
⚠ Estimate is the best guess of the effort necessary to carry out a given task → Not a certainty or a commitment

⚠ Estimation can be done in the form of hours or story points

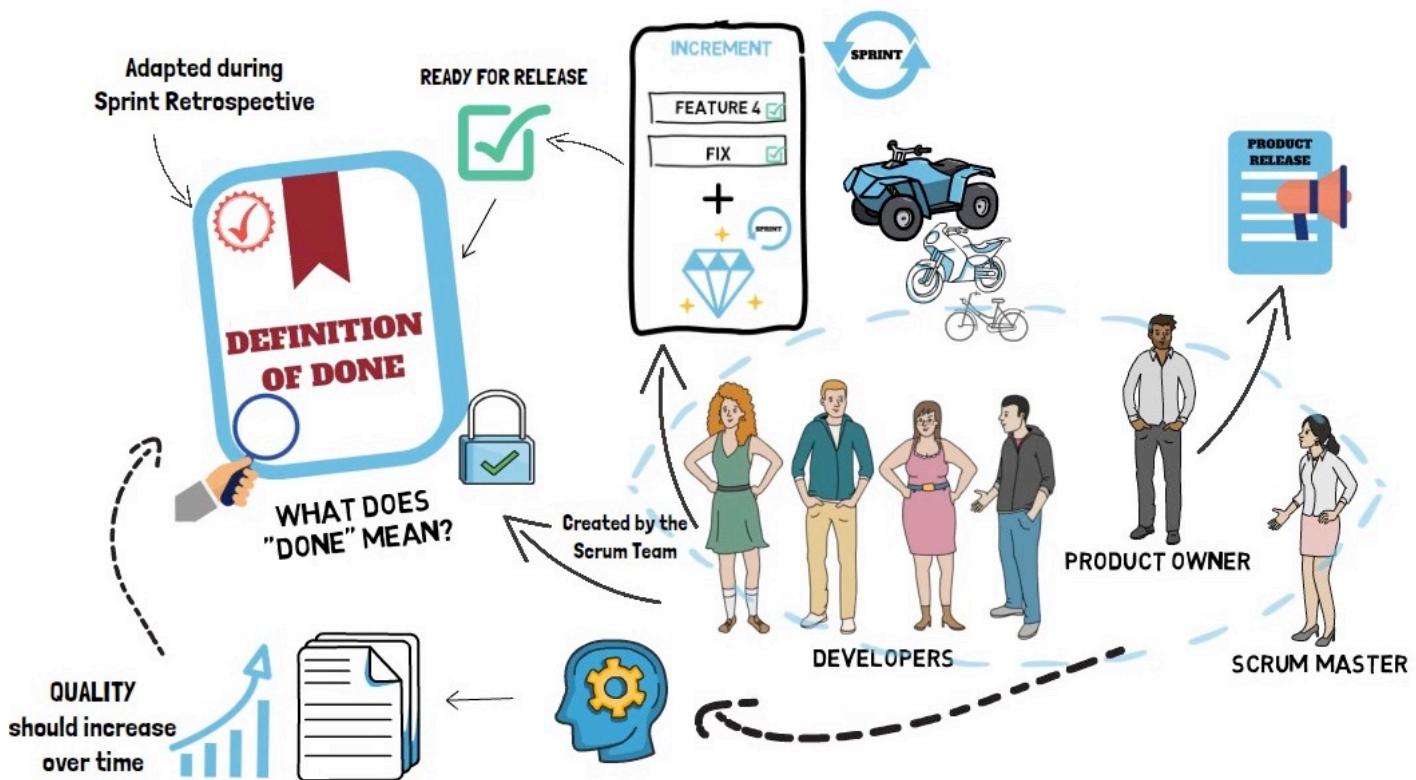
⚠ Sprint goal explains why the sprint is valuable

⚠ While the product backlog is the responsibility of product owner, the sprint backlog is the responsibility of developers

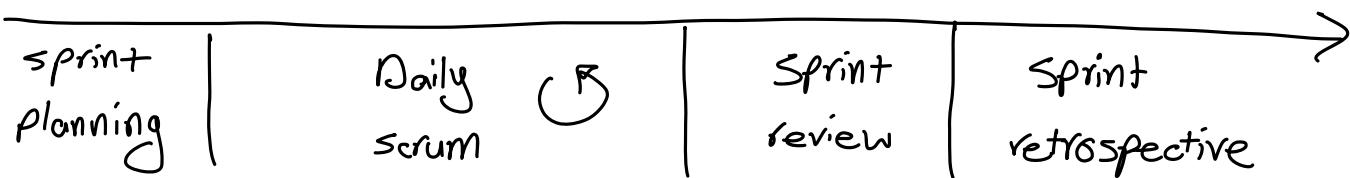
⚠ The developers are responsible for monitoring sprint progress and the likelihood of reaching the sprint goal



- △ Each new increment is an improved and usable version of the product
- △ At the end of each sprint, the increment must be completed according to the definition of done
- △ The definition of done can be adopted in sprint retrospective not in the middle of sprint

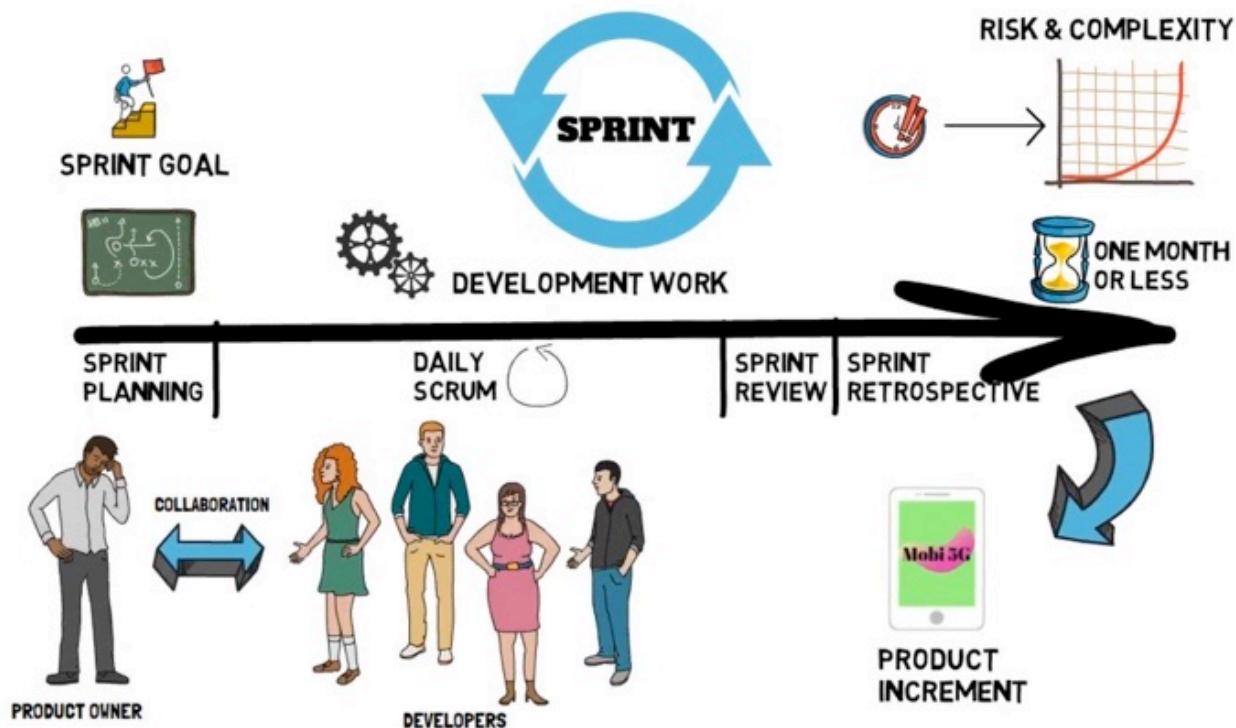


- △ All events in Scrum are time-boxed



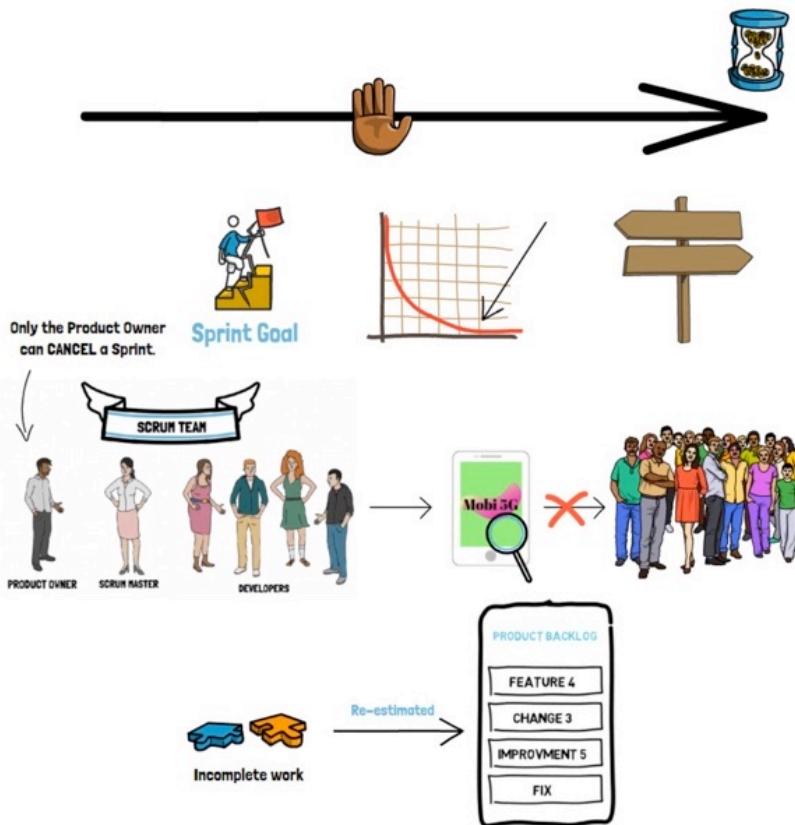
⚠ if the duration of sprint is too long, the complexity and the risk may increase

⚠ There should be no gaps between sprints



- ⚠ A sprint can be cancelled if the sprint goal becomes obsolete, if there are some significant & sudden changes on the market
- ⚠ Only product owner has the authority to cancel the sprint
- ⚠ The work that will be done in the sprint will be discussed during the sprint planning meeting
- ⚠ The stakeholders & managers will not attend sprint planning

CANCELLING A SPRINT



- △ Sprint goal guide the Scrum team on why they're building the increment & promotes effective teamwork
- △ The Sprint backlog will contain the sprint goal and a selected product backlog items and a plan for delivering the increment when needed



- **WHY** is this Sprint valuable?
- **WHAT** can be Done this Sprint?
- **HOW** will the chosen work get done?

⚠ Scrum master has the responsibility to manage events' duration



Sprint Planning meeting



MAXIMUM DURATION
of an event

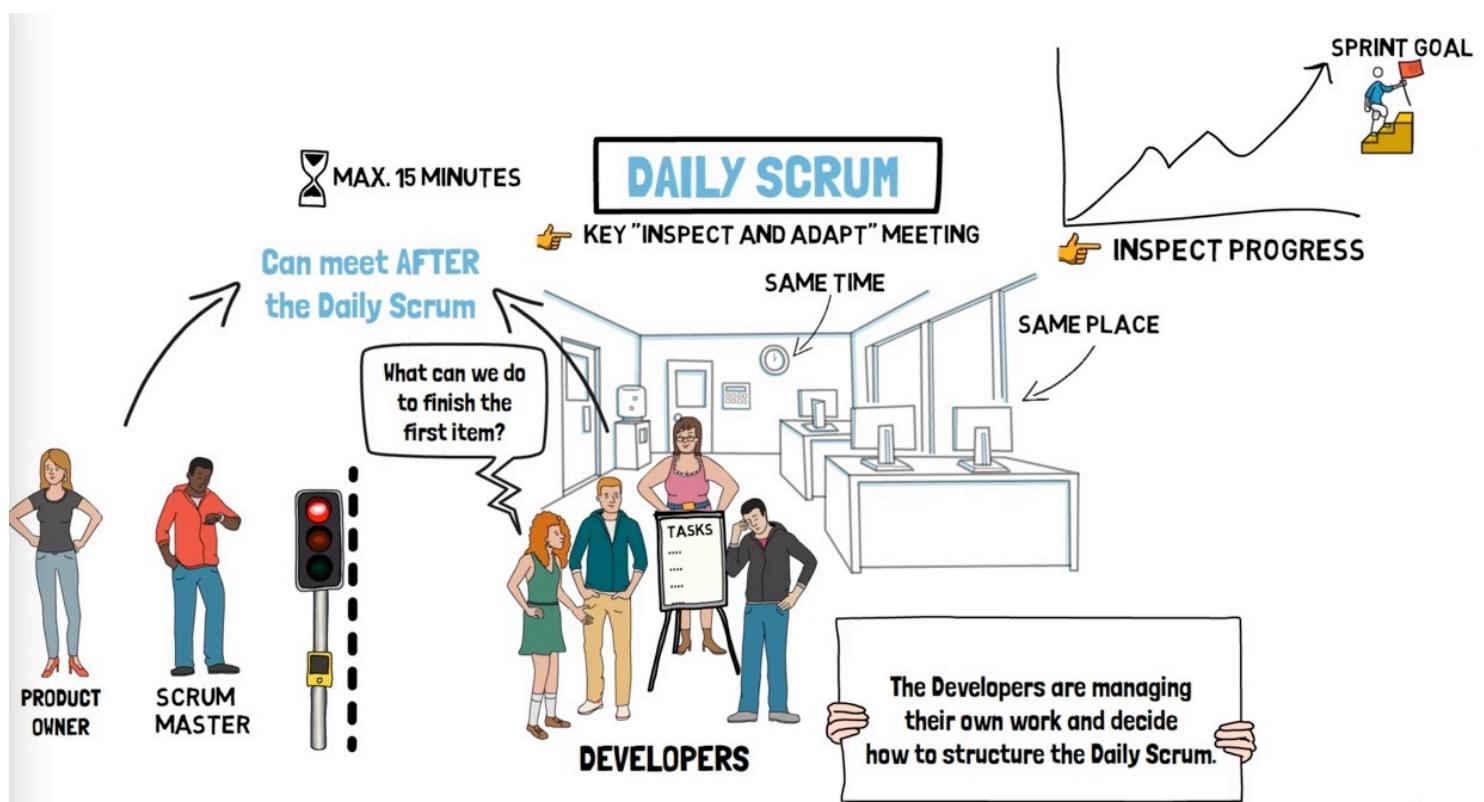


Time-Boxes force you to focus on the main important thing.

Time-Boxes are useful for making any issues visible.

Time-Boxes apply to ALL scrum Events, APART from the SPRINT itself

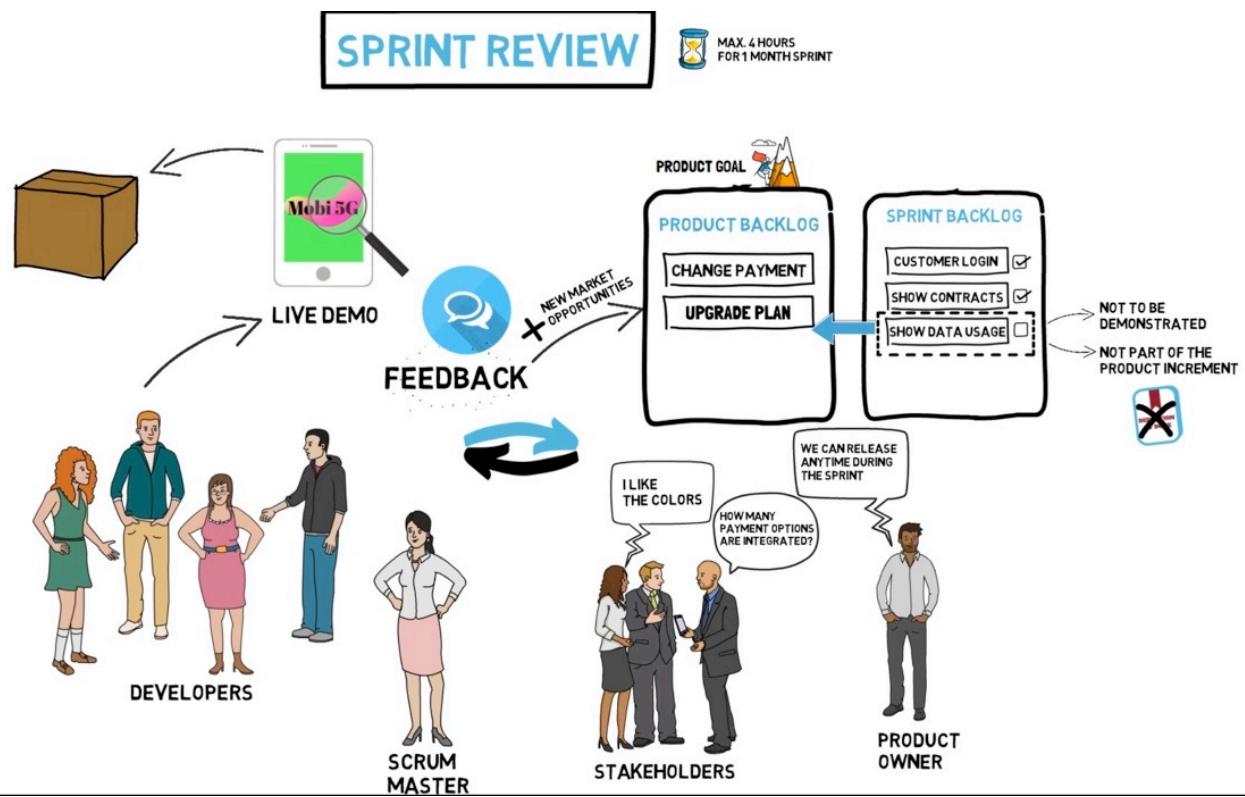
⚠ There is no need for scrum master and product owner to attend daily meeting



▲ The product owner owns the sprint review meeting

↳ attendance of key stakeholders is a must

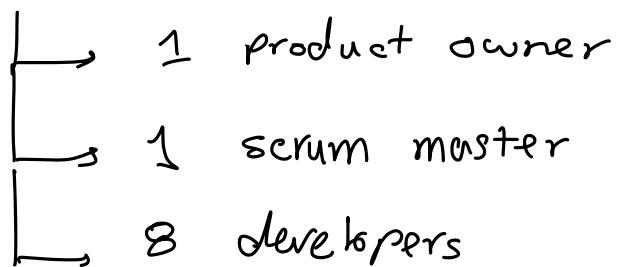
▲ The purpose of sprint review meeting is to inspect the outcome of the sprint and to adapt the product backlog



▲ The goal of sprint retrospective meeting is to inspect and adapt the development process



- ⚠ A self-managing team choose how to best accomplish their work rather than being directed by others outside the team
- ⚠ The scrum guide recommends a scrum team size no longer than 10 people

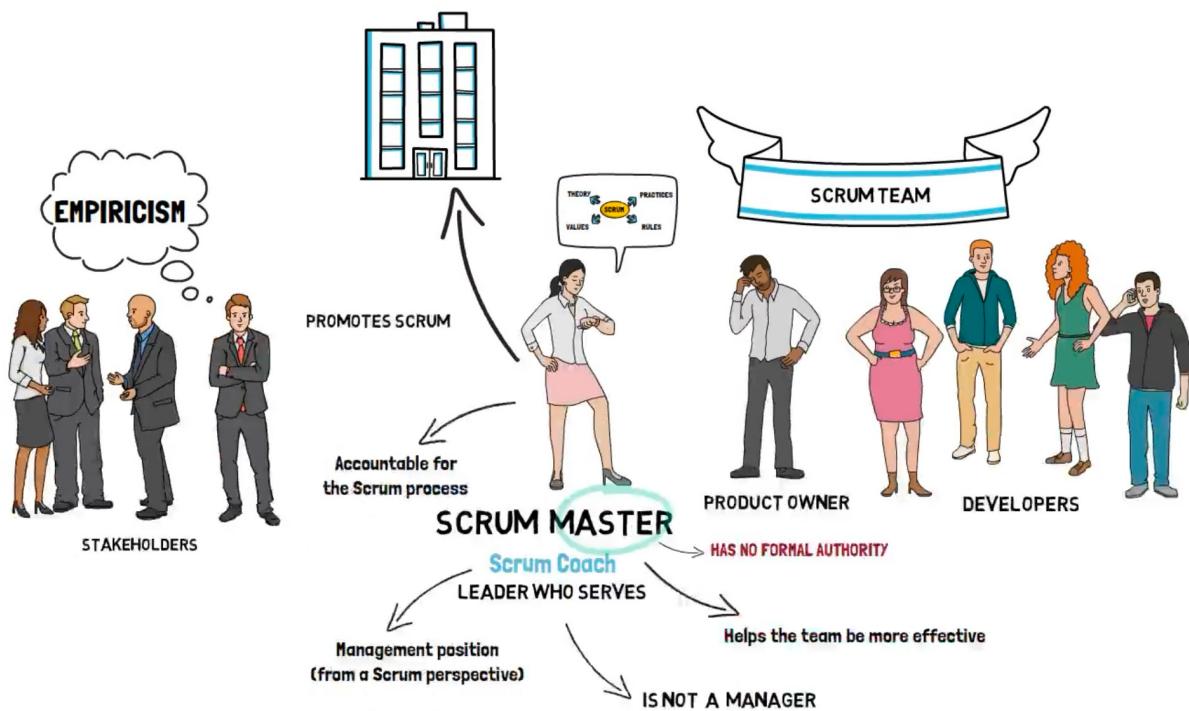


- ⚠ $4 \leq \text{SCRUM TEAM} \leq 10$
 - ↳ smaller productivity gains
 - ↳ increased coordination & complexity

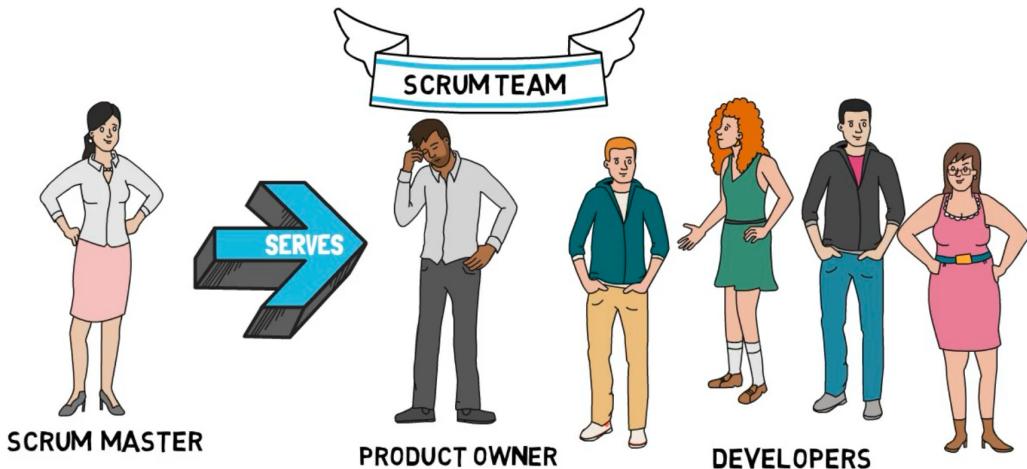
- ⚠ The primary responsibility of product owner is maximizing the value of the product
 - ↳ business outcome
 - ↳ customer satisfaction
 - ↳ technical value

- ⚠ Product owner can not be a committee but may represent a group of people

- ⚠ Product owner can delegate his/her task but still remains accountable
- ⚠ The developers doesn't mean just programmers
- ⚠ All developers are accountable for sprint outcome
- ⚠ Scrum master help everyone understand SCRUM practices, rules, values & theories
- ⚠ Scrum master is accountable for how scrum is understood & lived both by the scrum team & the organization . He/she also is accountable for how effective the scrum team works



A How Scrum master serves scrum team



KEY IDEAS

- Coaches the Scrum Team in self-management and cross-functionality.
- Helps the team to be effective and to create high-value Product Increments.
- Handles impediments.
- Helps the team resolve internal conflicts.
- Facilitates meetings & ensures they are achieving their purpose.
- Helps the Scrum Team understand the Scrum theory and practice.

A How scrum master serves product owner

- understanding scrum & agile practices
- ensuring that goals, scope and product domain are understood
- learn effective product backlog management
- product planning in an empirical environment

A what is feature team

→ works through all the layers of the application to fulfill a customer need

A what is component team

→ is focused on a single or multiple components of the system
→ increase the dependencies between the teams

A 1 product → 1 product backlog ⇒ 1 product owner

A Scrum is agile framework ≠ methodology

A Agile manifesto :

INDIVIDUALS AND INTERACTIONS OVER PROCESSES AND TOOLS.

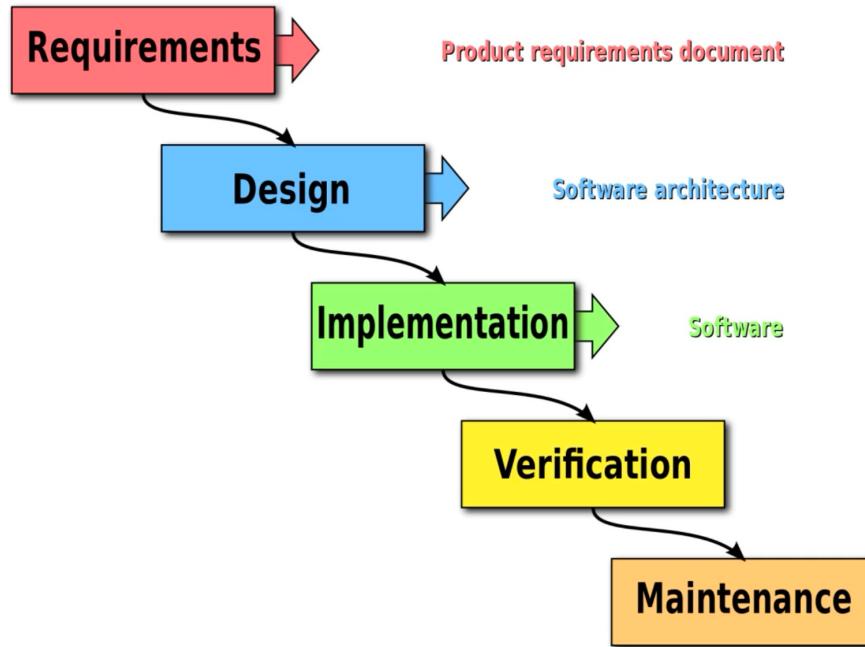
WORKING SOFTWARE OVER COMPREHENSIVE DOCUMENTATION.

CUSTOMER COLLABORATION OVER CONTRACT NEGOTIATION.

RESPONDING TO CHANGE OVER FOLLOWING A PLAN.

A Waterfall model is a linear-sequential life cycle model

⚠ Waterfall model



⚠ downsides of waterfall model

- we rarely have perfect knowledge at the beginning
- working software is produced late
- risk and uncertainty are relatively high
- not ideal if premises are changing often

⚠ scrum theory

- scrum is founded on empiricism
- empiricism asserts that knowledge comes from experience
- 3 pillars of the empirical process control
 - ↳ transparency, inspection, and adaption

A Scrum Values

- ↳ commitment
- courage
- focus
- openness
- respect

△ Technical debt is something that should be continuously deal with & not postponed

△ A burndown chart is a graphical representation of work usually represented in estimated time or story points versus the remaining time of the sprint (vertical axes)

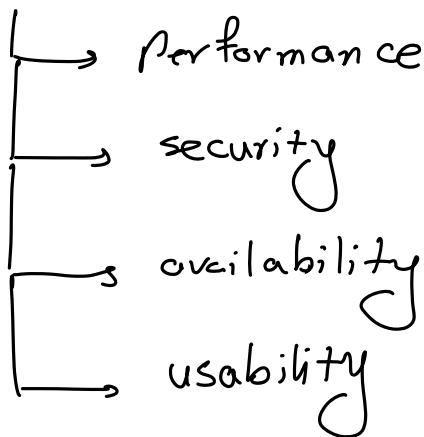
- is not mandatory
- is only related to the remaining work not business value, project costs or even productivity

△ Velocity is the measure of the amount of work a development team can handle during a typical sprint

$$\rightarrow = \frac{\text{work of sprint } \#1 + \text{work of sprint } \#2 + \dots}{\text{number of sprints}}$$

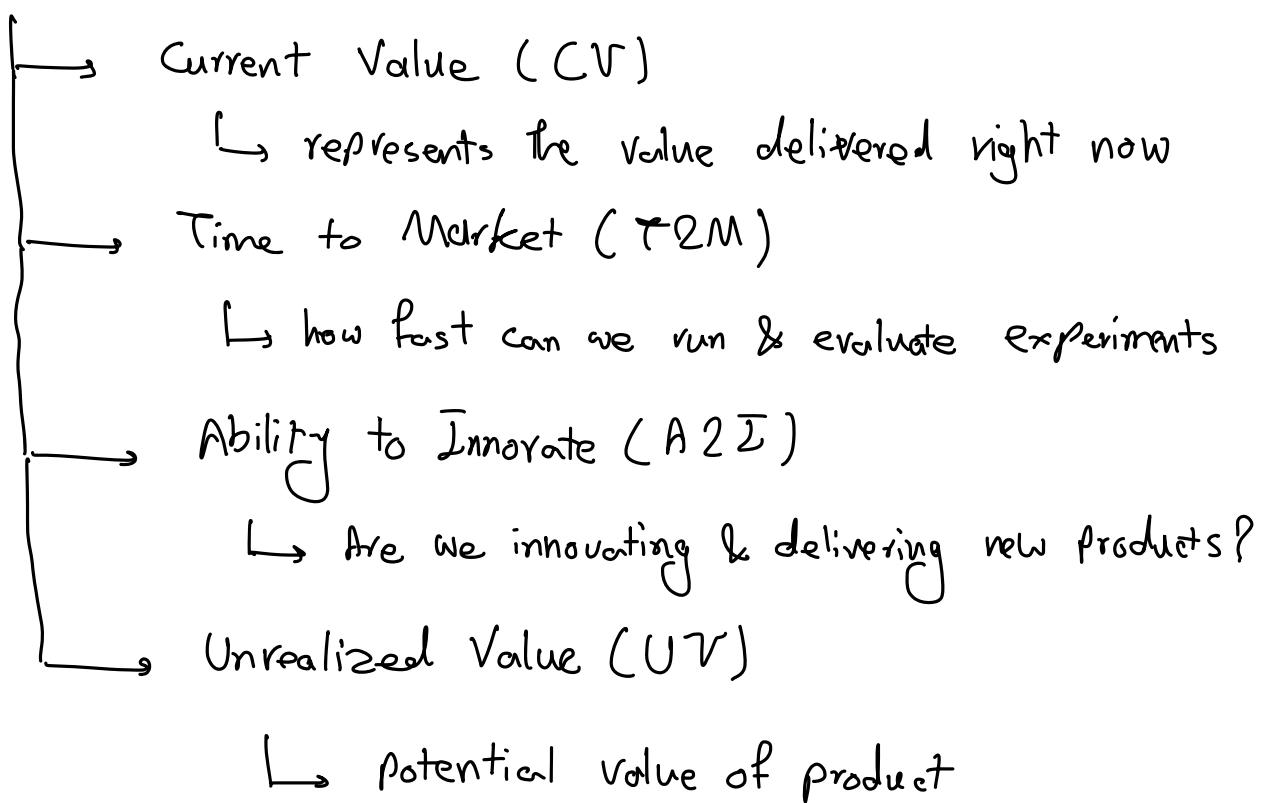
⚠ There is no commitment in Scrum! only estimates.

⚠ Non-functional requirements



⚠ Functional & non-functional requirements are the responsibility of the product owner

⚠ Key value areas (KVRAs)



⚠ Key Value Measures

