**Is Agile a methodology?**

No, it is not a methodology.

1. **Philosophy** (system of fundamental beliefs, concepts and principles)
   1. Agile philosophy promotes flexibility, collaboration and customer focus, values & principles mindset
2. **Framework (**basic supporting structure on which a system is built and developed)
   1. *Scrum*
      1. A structured approach with clearly defined roles, practices and artifacts that teams can follow.
   2. *Kanban*
   3. *Extreme programming (XP)*
3. **Methodology** comprehensive system of methods used within a particular field, which includes interconnected elements and rules that form a cohesive approach.
   1. Detailed instructions tailored to specific organizational needs
      1. Highly specific methodologies
      2. Rules tailored to environments
      3. Organizational needs adaptations

***Agile principles -> Scrum -> The Performa delivery model (PDM)***

***Artifacts in PDM (product backlog, Sprint backlog, Increment)***

user stories are called tasks (technical work)

* Features
* Bug fixing
* Technical debt

***Roles in PDM***

Team leader (dev team) = ~~Scrum master~~

*Scum knowledge & skills*

* Facilitating Scrum ceremonies
* Removing impediments
* Others

***Events in PDM***

**Perform delivery model (PDM) are sprints with 2 differences**

1. Speed over quality is consider a miss fit (iteration are like sprints)
2. The length of the iteration are 5 weeks

**Agile vs waterfall key differences**

**Waterfall**

* Planning (full requirements, clear objectives, scope locked)
* Execution (organize task into a logical sequence with durations and dependencies) [minimize deviations]
* Scope & changes (cost increase, delays, extra coordination efforts)
* Time & budget constraints (backward planning)
* Roles & team structure (hierarchical) [project sponsor, project manager, team members]

**Agile**

* Adaptive planning (continuously adjusted) [maximize project value]
* Execution quickly
* Scope & changes (requirements naturally grow)
* Time & budget constraints (no strict deadline, no strict budget) [planning forward]
* Roles & team structure (collaboration) [self-organized, communication]

**Hybrid methodologies**

* *Structure of waterfall*
* *Flexibility of Agile*

***Scrum vs Kanban***

**Scrum**

* lightweight framework, designed to help people, teams and organizations generate value by finding adaptive solutions to complex problems.
* Agile philosophy
* Breakdown complex tasks
* Visual management (boards)
* Backlog mechanism
* Continuous flow vs time bound structure (time-boxed schedule) [Sprints]
* Visualization (Sprint backlog)
* Roles (clarify responsibilities, enhance project coordination)
* Planning (detail planning for each sprint)
* **Framework that delivers a robust structure for project management**

**Kanban**

* method that utilizes a visual system for managing work as it moves trough a process, focusing on limiting the amount of work in progress to optimize workflow
* Agile philosophy
* Breakdown complex tasks
* Visual management (boards)
* Backlog mechanism
* Continuous flow vs time-bound structure (no time constraints, continuous flow)
* Visualization (limits)
* Roles (autonomy to distribute responsibilities)
* Planning (continual planning and adjustment)
* **Suitable for mature teams that benefit from its flexibility and autonomy (less structured and more freedom)**