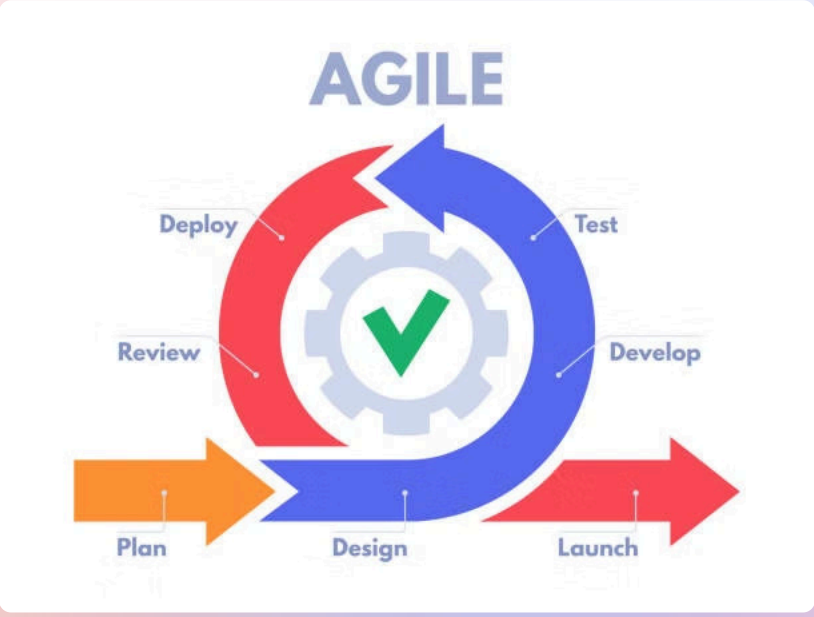



# Agile: How to improve colaboration in IH projects

- Agile is an iterative approach to project management and software development that emphasizes flexibility, collaboration, and customer feedback.
- Aims to allow teams to respond quickly to changes and deliver value incrementally.

# The Agile Manifesto

## Individuals and Interactions

Over processes and tools, Agile values people and collaboration.

## Working Software

Over comprehensive documentation, Agile prioritizes delivering functional solutions.

## Customer Collaboration

Over contract negotiation, Agile emphasizes working closely with stakeholders.

# Agile Principles

1 **Rapid Iteration**

Deliver working solutions frequently, with a focus on continuous improvement.

2 **Adaptive Planning**

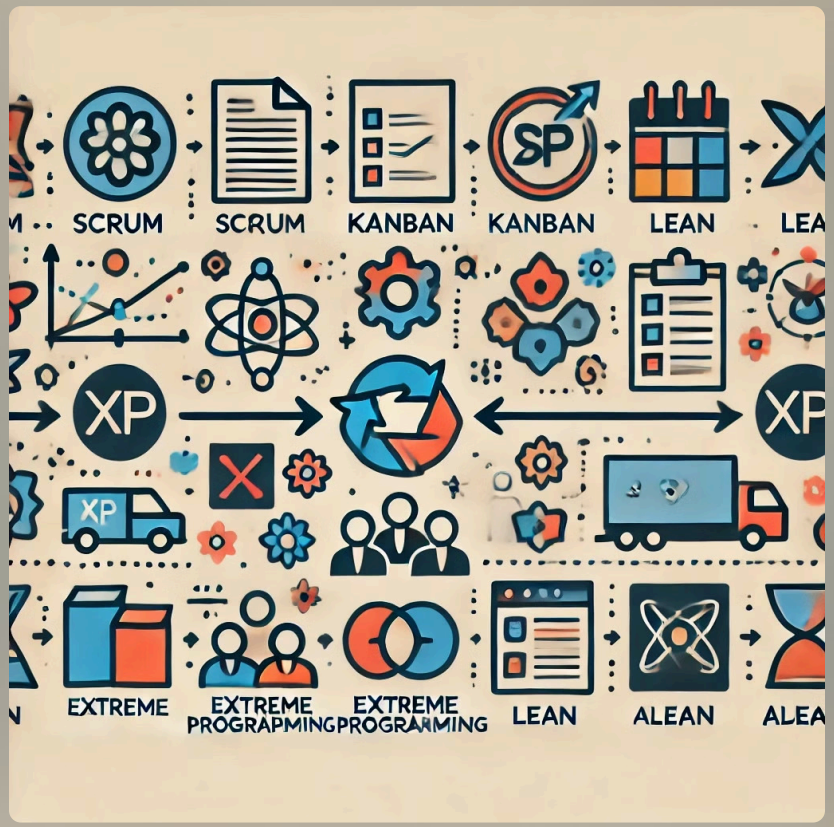
Embrace change and adjust plans as needed to respond to new requirements.

3 **Collaboration**

Encourage cross-functional teamwork and open communication with stakeholders.

4 **Customer or Stakeholder Feedback**

Regularly seek input from end-users to ensure the solution meets their needs.




# Agile Frameworks

## Scrum

A structured framework with sprints, daily standups, and a focus on incremental delivery.

## Kanban

A visual, pull-based system that emphasizes continuous flow and eliminating waste.

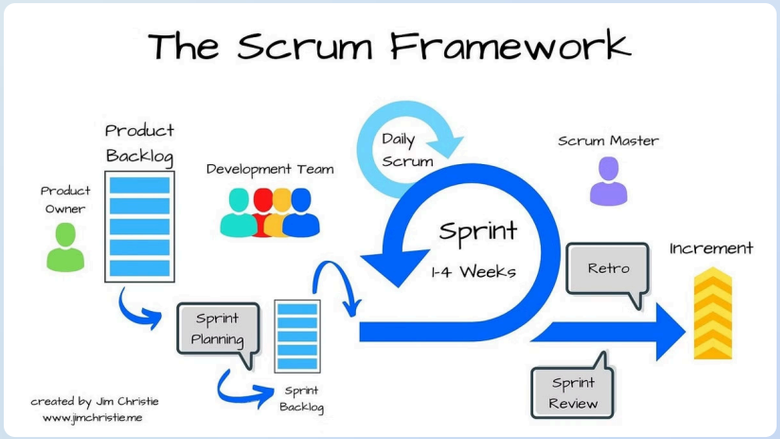
## Lean

Focuses on maximizing value and minimizing waste through experimentation and learning.

## Hybrid

Many teams blend elements of different frameworks to create a customized approach.

# The Scrum Framework




1

## Backlog

A prioritized list of features, bug fixes, and tasks for the project.

2

## Scoping & Sprint Planning

A fixed-length iteration (typically 2-4 weeks) where the team completes a set of tasks.

3

## Daily Standup

A brief, focused meeting where the each team member discusses progress and blockers.

4

## Results

Implement work resulting from sprint tasks.

5

## Sprint Review

QA results. Define improvement areas and log new tasks in backlog.

# Implementing Agile in Data Analytics

1

## Define Scope

Clearly identify the project's goals and the data required to achieve them.

Start small, look for an MVP first.

2

## Prioritize Tasks

Organize work into sprints based on business value and technical dependencies.
Split work amongst team members

3

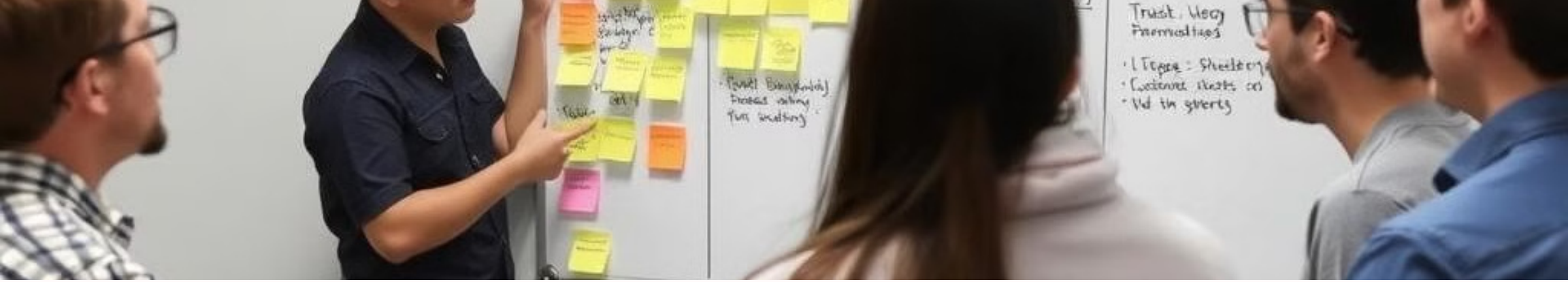
## Standups & Tasks advancing

Release working solutions frequently, gathering feedback to guide future iterations.

4

## Continuously Improve

Reflect on the process and identify opportunities to enhance team efficiency and project quality.



# Agile Ceremonies

### Sprint Planning
***[First ½ days from project release]***

Define the sprint goal and select the work to be completed.

### Daily Standup
***[Each class w/ TA]***

Brief, focused meetings to discuss progress and identify blockers.

### Sprint Review
***[Project Presentation]***

Demonstrate the completed work and gather stakeholder feedback.

### Retrospective
***[After project survey]***

Reflect on the sprint and identify areas for improvement.

# Agile Personas - example

### Product Owner

One student, responsible for setting priorities and defining the project vision. Ensures alignment between each colaborator. Should also have involvement on code.

### Data Analyst(s)

One/Two students, focusing on the core analysis tasks.

### Data Engineer(s)

One/Two student, managing the data pipelines and preparation.

### QA/Reviewer

Peer reviews, every student can be a code reviewer of their peers works. One student can focus more on the presentation side.