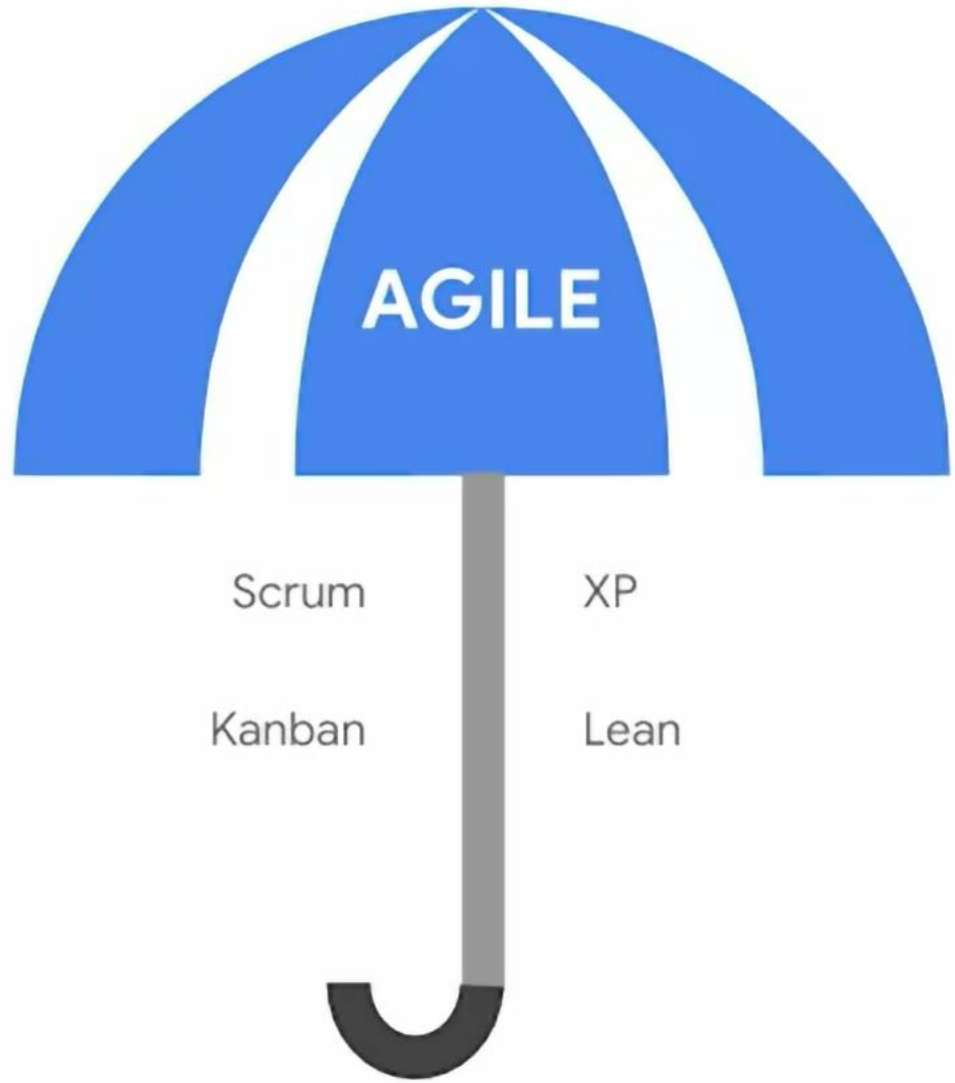

AGILE
Scrum
XP
Kanban
Lean

# Kanban

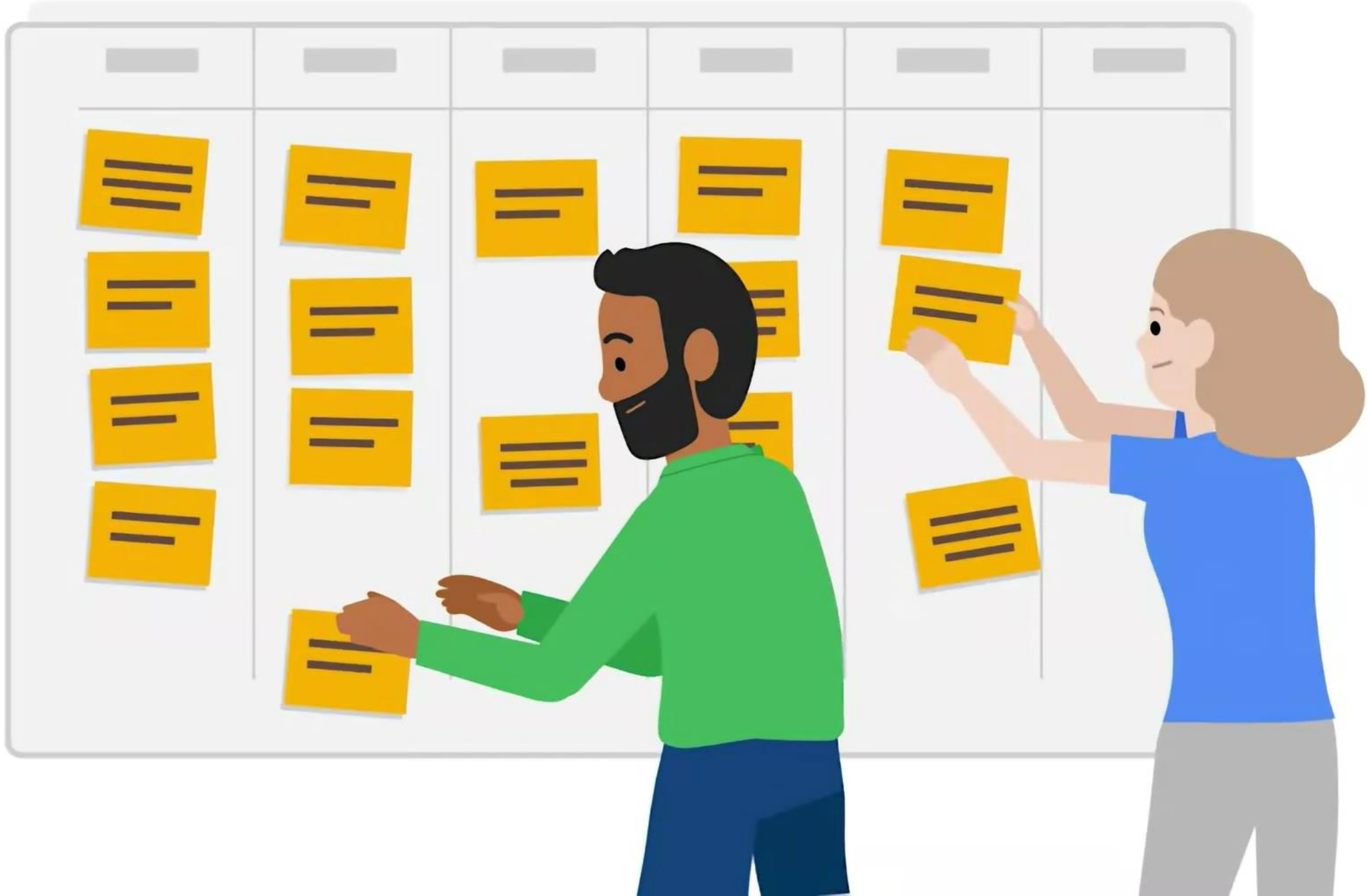
From Japanese

Kan 看 = “sign”

Ban 板 = “board”

# Benefits of Kanban

- Provides transparent visual feedback

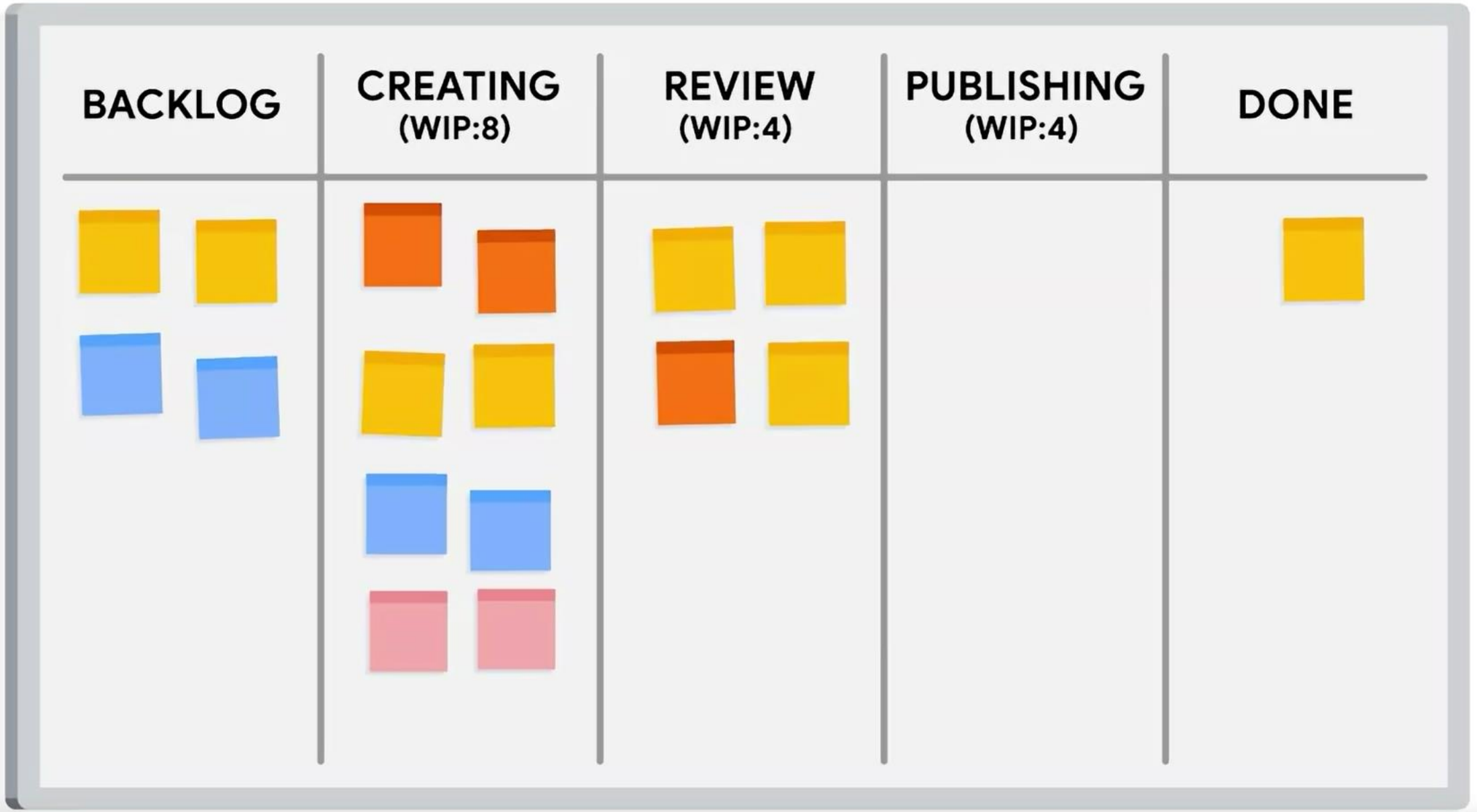


# Benefits of Kanban

- Provides transparent visual feedback
- Ensures that the project team only accepts a sustainable amount of in progress work

# Work-in-Progress (WIP) Limit

Tasks are limited to what the team can actually handle during a certain amount of time.



# Flow

A core principle of Kanban that aims to maximize efficiency

## Question

What are the *two* benefits of the Kanban methodology?

- [ ] Kanban tests out more and smaller features of a product before building them in full.
- [x] Kanban provides transparent visual feedback to everyone who might be interested about the status of work in progress.

**Correct**
The Kanban methodology is rooted in two Japanese words: Kan, which means sign, and Ban, which means board. Kanban offers transparent visual feedback about the status of work in progress. It also ensures the team only accepts a sustainable amount of in-progress work.

- [ ] Kanban maps out the process or stream to include all the steps involved in producing value for the customer.
- [x] Kanban ensures that the project team only accepts a sustainable amount of in-progress work.

**Correct**
Kanban has two key benefits. First, it offers transparent visual feedback about the status of work in progress. Second, it ensures the team only accepts a sustainable amount of in-progress work.

Skip Continue

# Extreme Programming (XP)

- Aims to improve product quality and the ability to respond to changing customer needs
- Takes best practices for the development process to "extreme" levels

# XP activities

- Designing

XP wants to ensure that all of the pieces of the product will fit together properly, so it stresses simplicity.

# XP activities

- Designing
- Coding

XP demands clear and concise code so that others can easily read and understand the program.

# XP Activities

- Designing
- Coding
- Testing

The goal is to test for and eliminate any flaws in a feature before building it and continuing on.

# XP Activities

- Designing
- Coding
- Testing
- Listening

Listening to the customer and ensuring that the requirements are integrated into the product.

# XP Innovative Practices

- Pair Programming
  - Two team members work together at the same time on one task
- Continuous Integration and Continuous Refactoring
  - Merging product changes into a shared version of the product
- Avoid Big Design Up Front
  - Design is just enough to get started and should be continuously improved as the product evolves
- Write Tests, Not Requirements
  - Embed product requirements into the test plan

## Question

Which Extreme Programming (XP) innovation practice merges product changes into a shared version several times a day?

- ○ Pair programming
- ○ Avoid big design up front
- ◉ Continuous integration and continuous refactoring
- ○ Write tests, not requirements

**Correct**

The XP methodology aims to improve product quality and the ability to respond to changing customer needs. To that end, continuous integration and continuous refactoring help teams get quick feedback on the quality of the code or product.

Skip Continue

# 5 Principles of Lean

1. Define value
2. Map value stream
3. Create flow
4. Establish pull
5. Pursue perfection

1. **Define Value:** Identify and focus on what the customer wants and include the customer.

2. **Map Value Stream:** Map out the steps to production and challenge all wasted steps.

3. **Create Flow:** Ensure the product flows through the value stream efficiently, eliminating waste throughout the cycle.

4. **Establish Pull:** Ensure the customer is “pulling” on the product through this stream by asking for features and incremental deliveries.

5. **Pursue Perfection:** Push the team to continuously improve the first four process steps.