

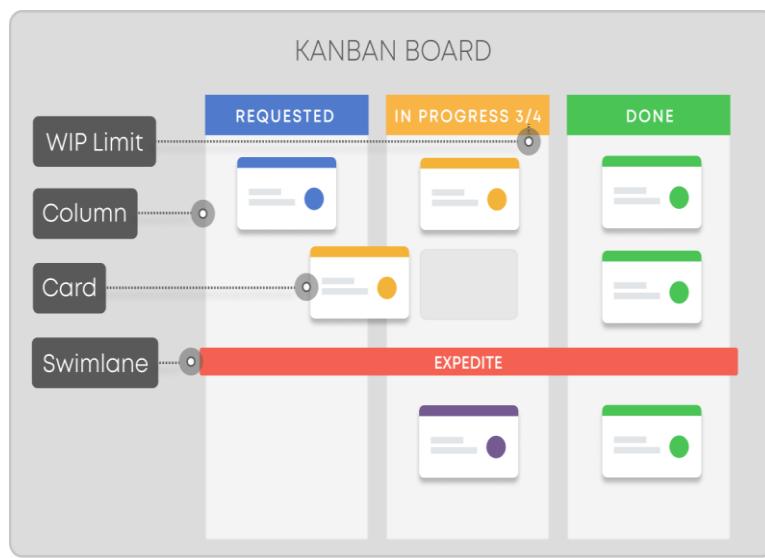
# What is KANBAN?

**Kanban** is an Agile methodology used to **visualize work, limit work in progress (WIP)**, and **improve flow**.

It uses a **Kanban board** with columns like *To Do*, *In Progress*, *Done* to track tasks and optimize delivery continuously.

## Key Characteristics of Kanban:

- Visual workflow
- Work-in-Progress (WIP) limits
- Continuous delivery (no fixed sprints)
- Focus on flow efficiency



# What are Lean Principles?

Lean principles focus on delivering maximum value to the customer while minimizing waste. They originated from manufacturing and are widely used in software development and Agile practices.

## Core Lean Principles:

### 1. Eliminate Waste

Remove unnecessary work such as delays, rework, overproduction, and unused features.

### 2. Build Quality In

Ensure quality at every stage instead of fixing issues at the end.

### **3. Create Knowledge**

Encourage learning, experimentation, and continuous improvement.

### **4. Defer Commitment**

Make decisions as late as possible to keep flexibility.

### **5. Deliver Fast**

Deliver value quickly to get early feedback and reduce risk.

### **6. Respect People**

Empower teams and encourage collaboration.

### **7. Optimize the Whole**

Improve the entire system instead of optimizing individual parts.

# **The 7 Principles of Lean Software Development**

## **Deliver Fast**

Aims to accelerate delivery times to respond quickly to market needs.



## **Eliminate Waste**

Focuses on removing non-value-adding activities to enhance efficiency.



## **Defer Commitment**

Advocates for making decisions at the last responsible moment to maintain flexibility.



## **Build Quality In**

Emphasizes integrating quality at every stage of development.



## **Create Knowledge**

Encourages continuous learning and knowledge sharing within teams.

<https://www.6sigma.us>

# What is Kanban Board?

A Kanban board is a visual tool used to manage and track work as it moves through different stages of a process.

It helps teams see workflow clearly, limit work in progress, and improve efficiency.

## Key Components of a Kanban Board

- Columns – Represent stages of work (e.g., *To Do*, *In Progress*, *Testing*, *Done*)
- Cards – Represent individual tasks or work items
- WIP Limits – Restrict the number of tasks in a column to avoid overload

## Types of Kanban Boards

- Physical Board – Uses whiteboards and sticky notes
- Digital Board – Tools like Jira, Trello, Azure Boards

## Benefits of Kanban Boards

- Improves transparency
- Reduces bottlenecks
- Enhances team collaboration
- Enables continuous delivery

