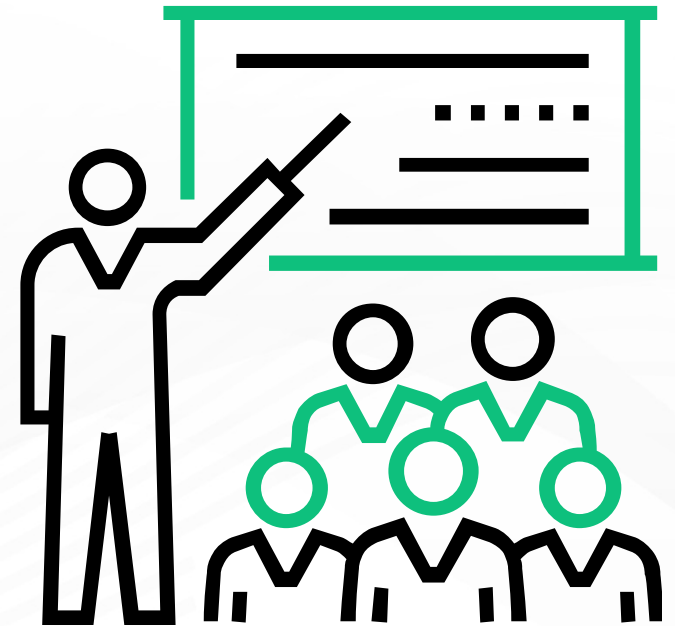


Module 2: Kanban Principles

Module Objectives

At the end of this module, you will be able to:

- Define Kanban principle
- Explain Kanban board
- Discuss Kanban core practices

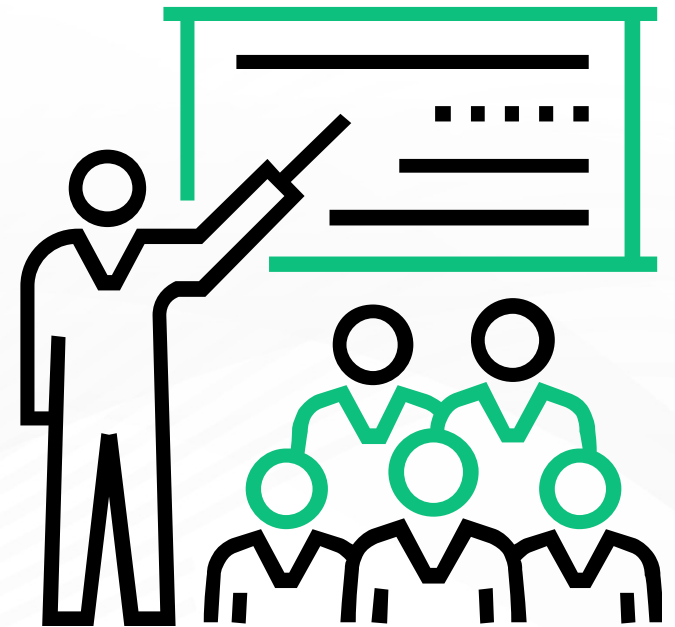


Module Topics

Let us take a quick look at the topics that we will cover in this module:

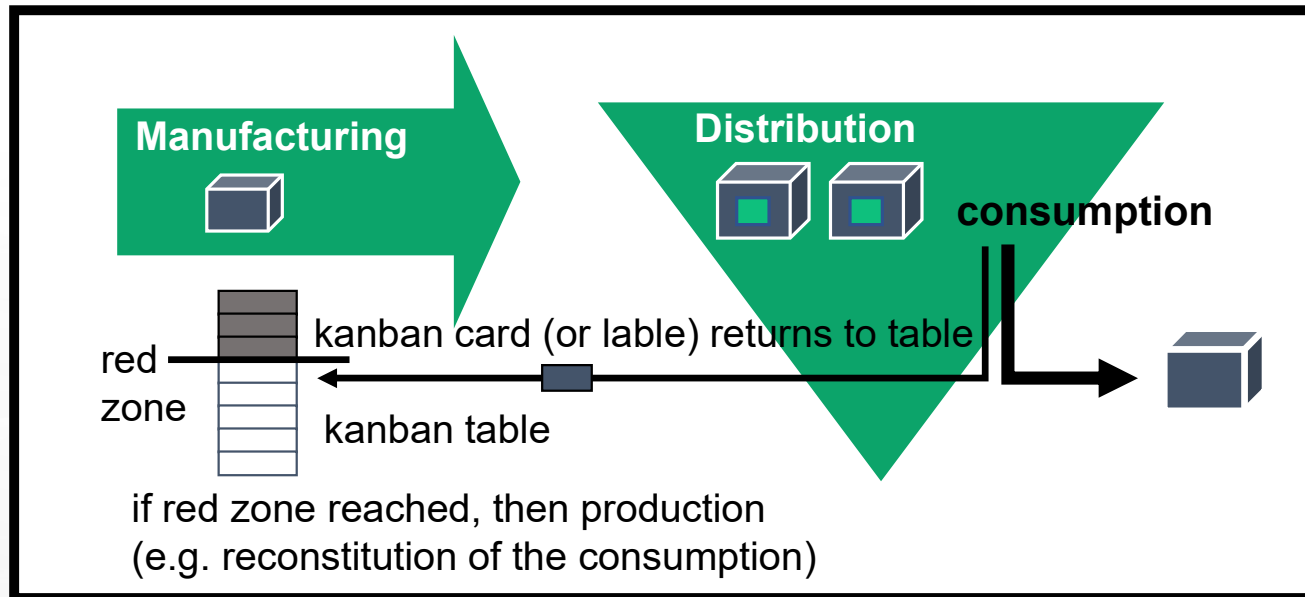
Testing and Debugging

- Kanban Principle
- Kanban Board
- Kanban Core Practices
 - ↳ Make work visible
 - ↳ Limit work in progress (WiP)
 - ↳ Manage flow
 - ↳ Make progress policies explicit
 - ↳ Implement feedback mechanisms
 - ↳ Improve collaboratively (using methods and models).



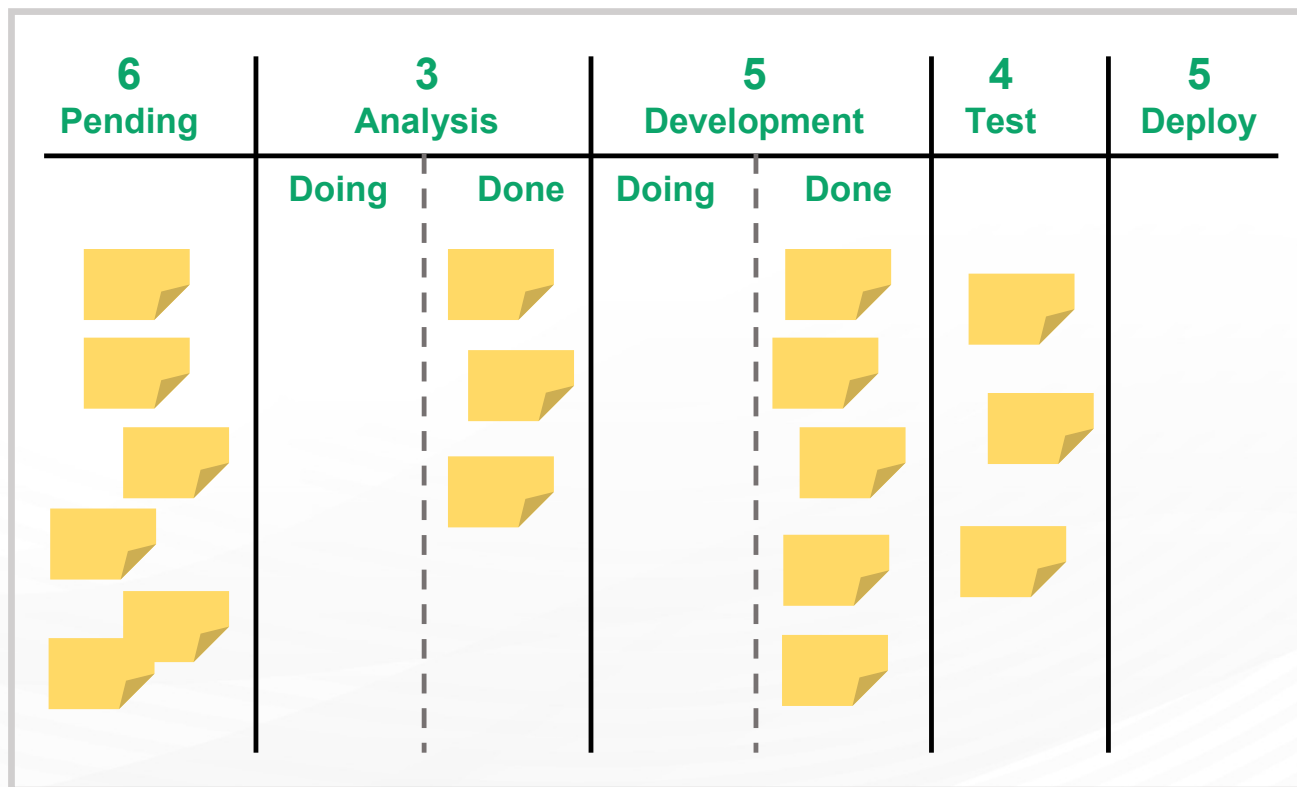
2.1 What is Kanban?

- Kanban means signal card in Japanese.
 - ↳ Kan - Signal
 - ↳ Ban - card
- Kanban System means a system that manages work using (real or virtual) Kanbans to control the flow.



Module 2: Kanban Principles

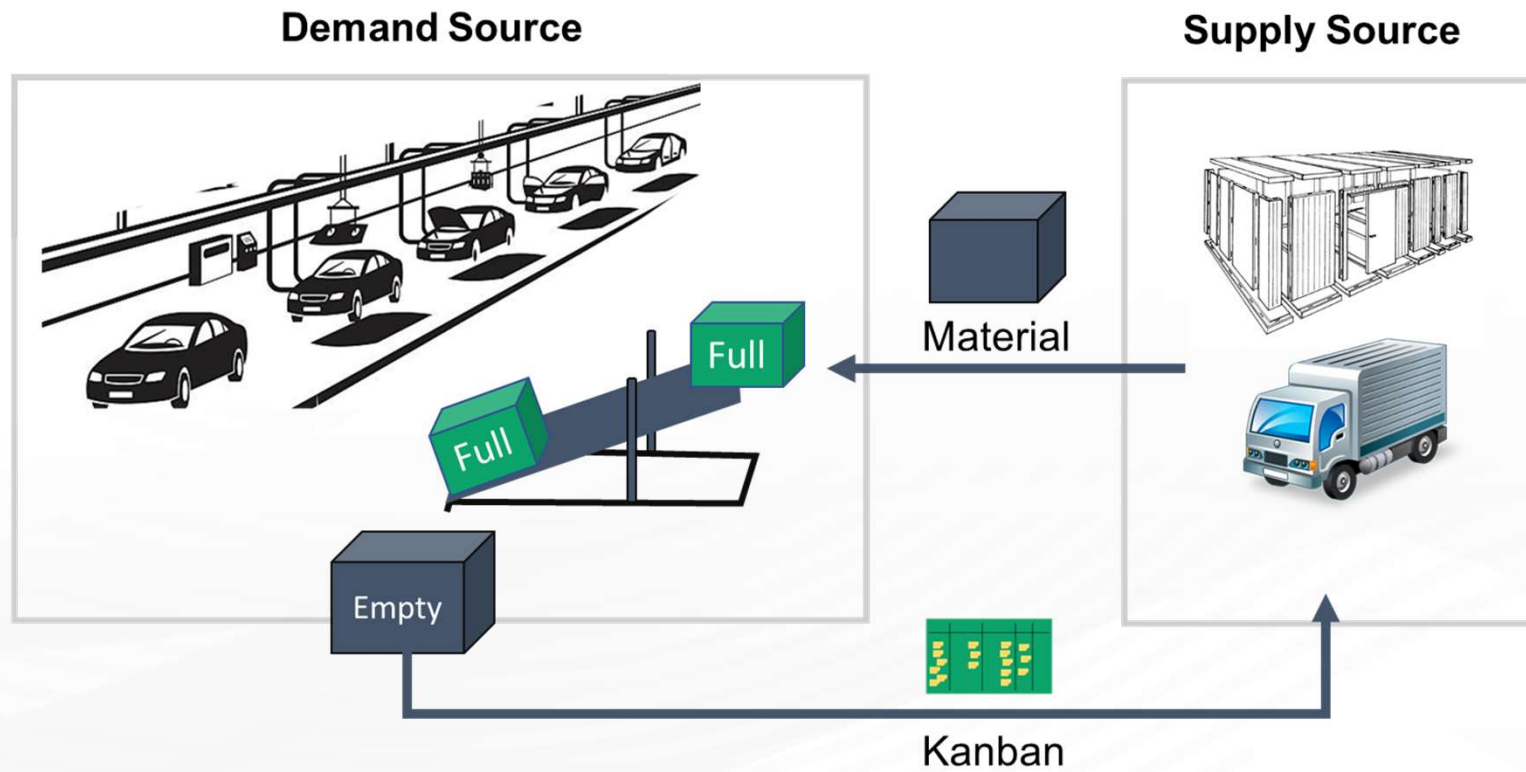
2.1.1 Kanban Cards



EXAMPLE OF KANBAN CARD

<div></div> KANBAN
ITEM: _____
PART NO: _____
QTY: _____
LOCATION: _____
SUPPLIER: _____
RETURN KANBAN CARD TO: _____

2.2 Kanban Principle

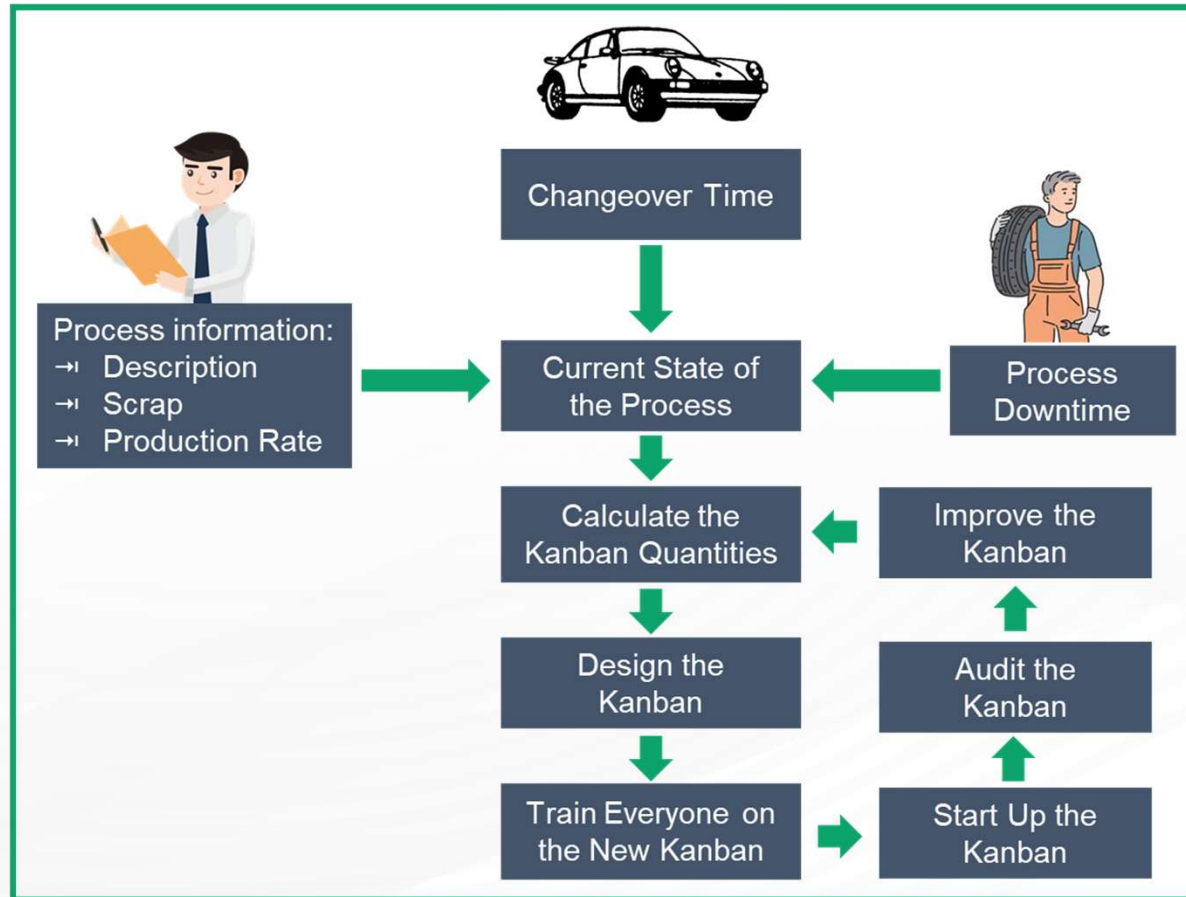


2.3 KANBAN Core Practices

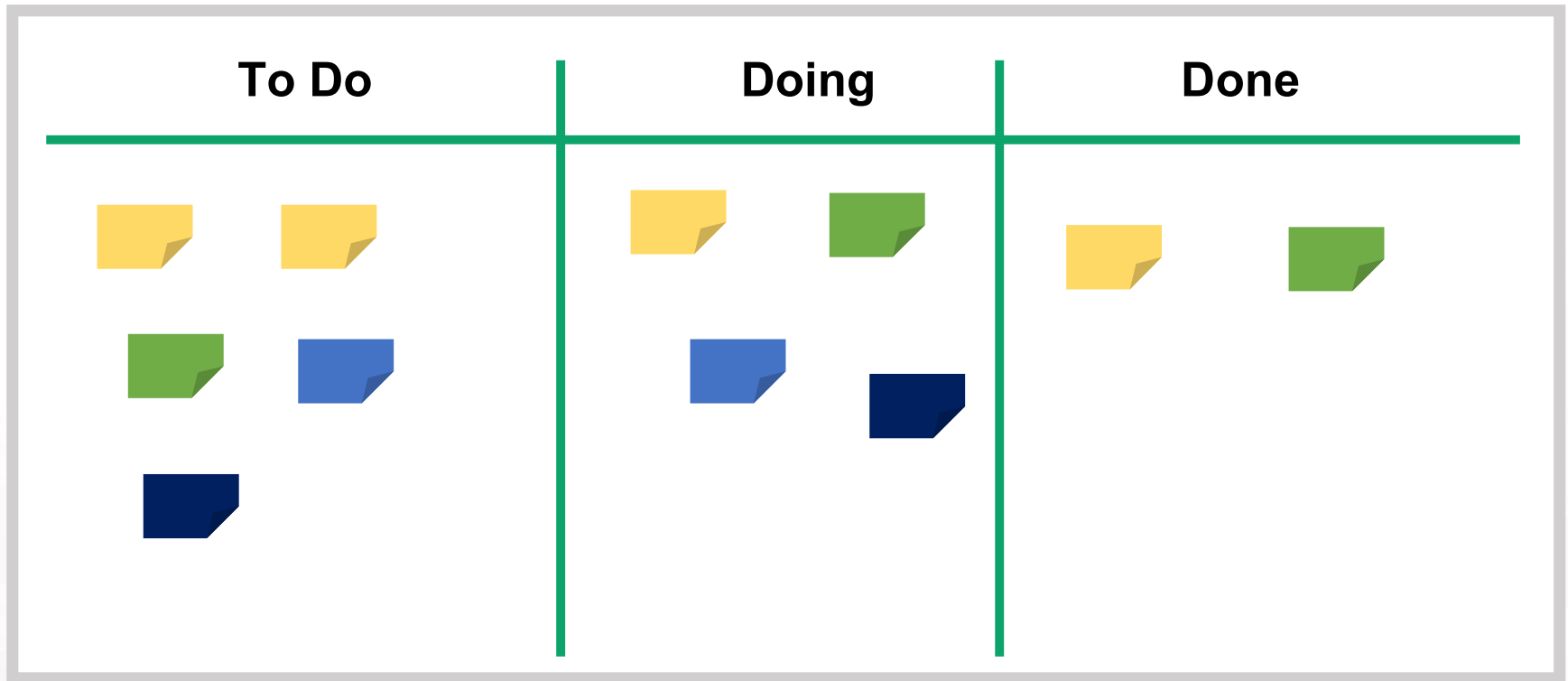
Following are the Kanban core practices

- 1 Make work visible
- 2 Limit work in progress (WiP)
- 3 Manage flow
- 4 Make progress policies explicit
- 5 Implement feedback mechanisms
- 6 Improve collaboratively (using methods and models)

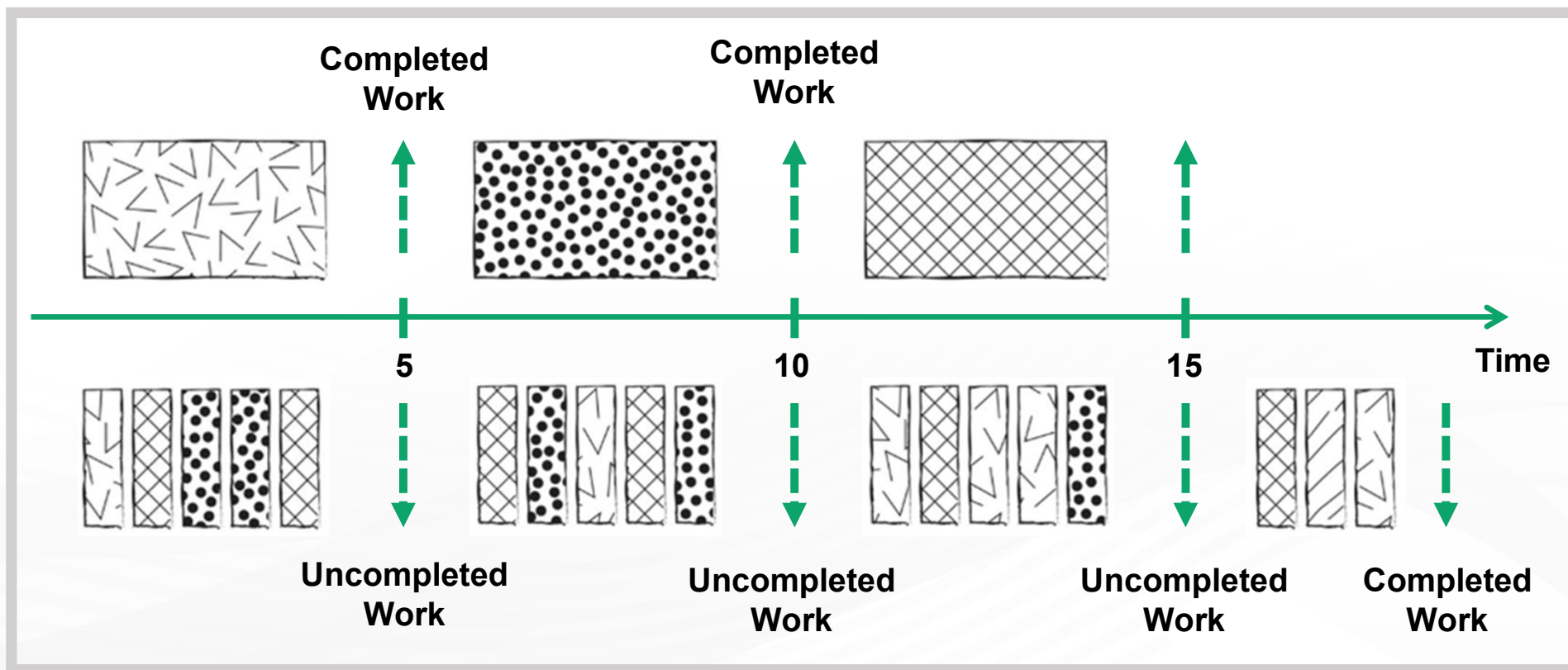
2.3.1 KANBAN Implementation Model



2.3.2 Make Work Visible

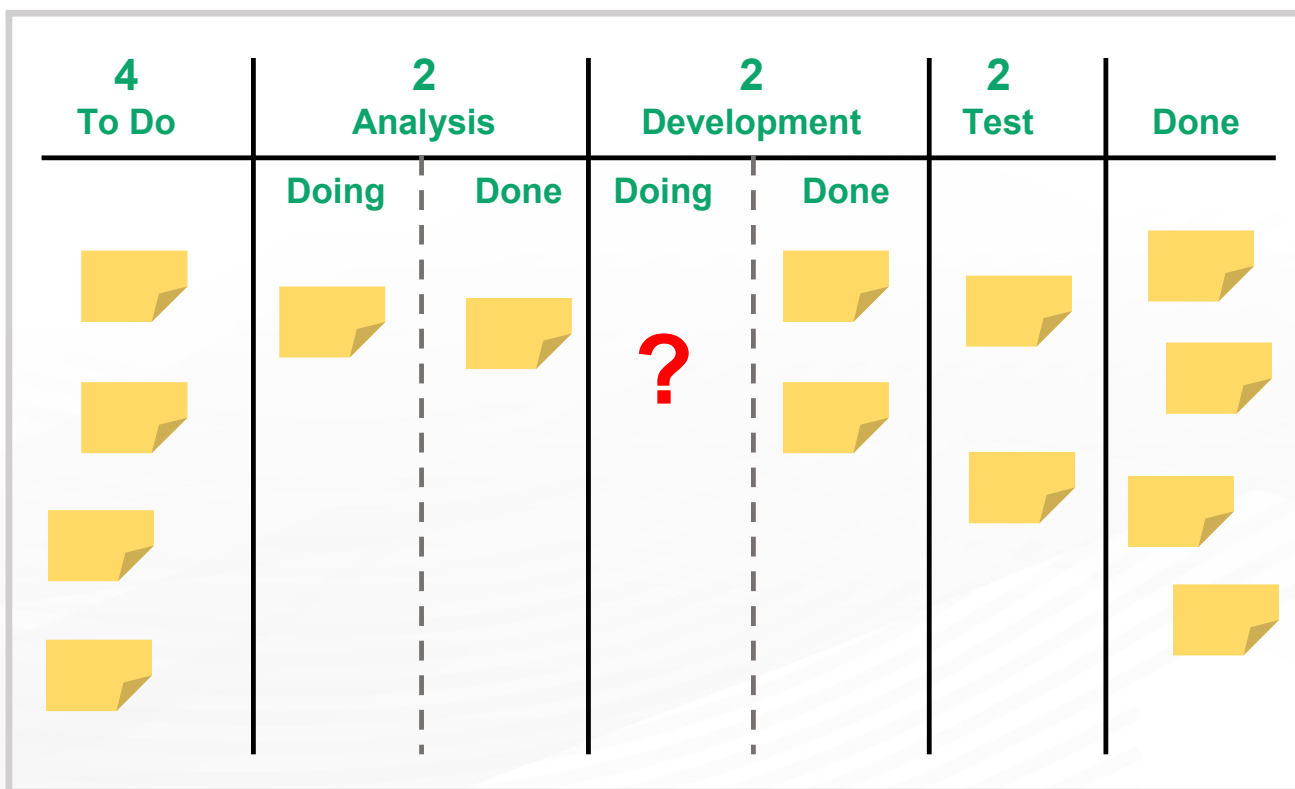


2.3.3 Limit Work in Progress

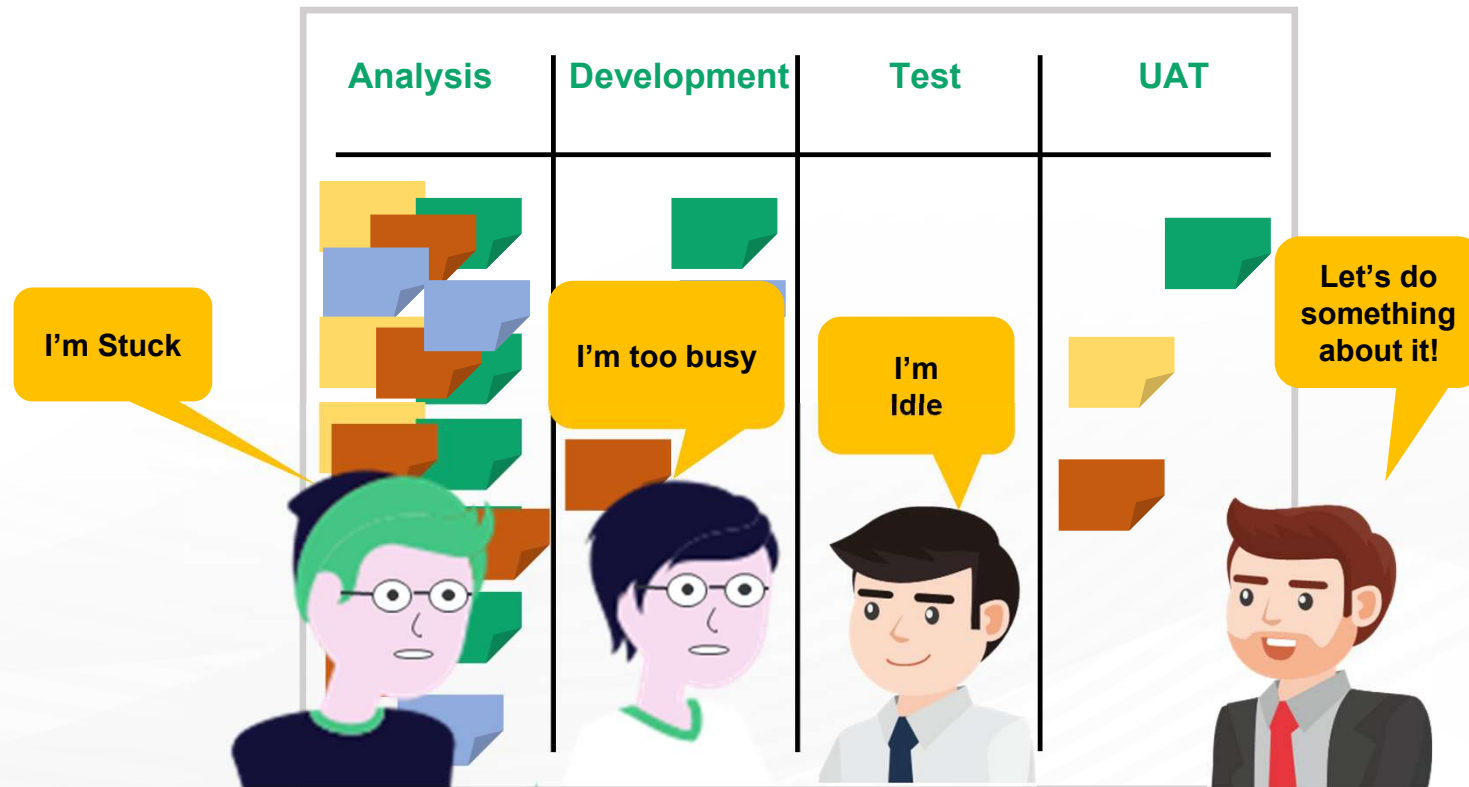


2.3.4 WIP Limits

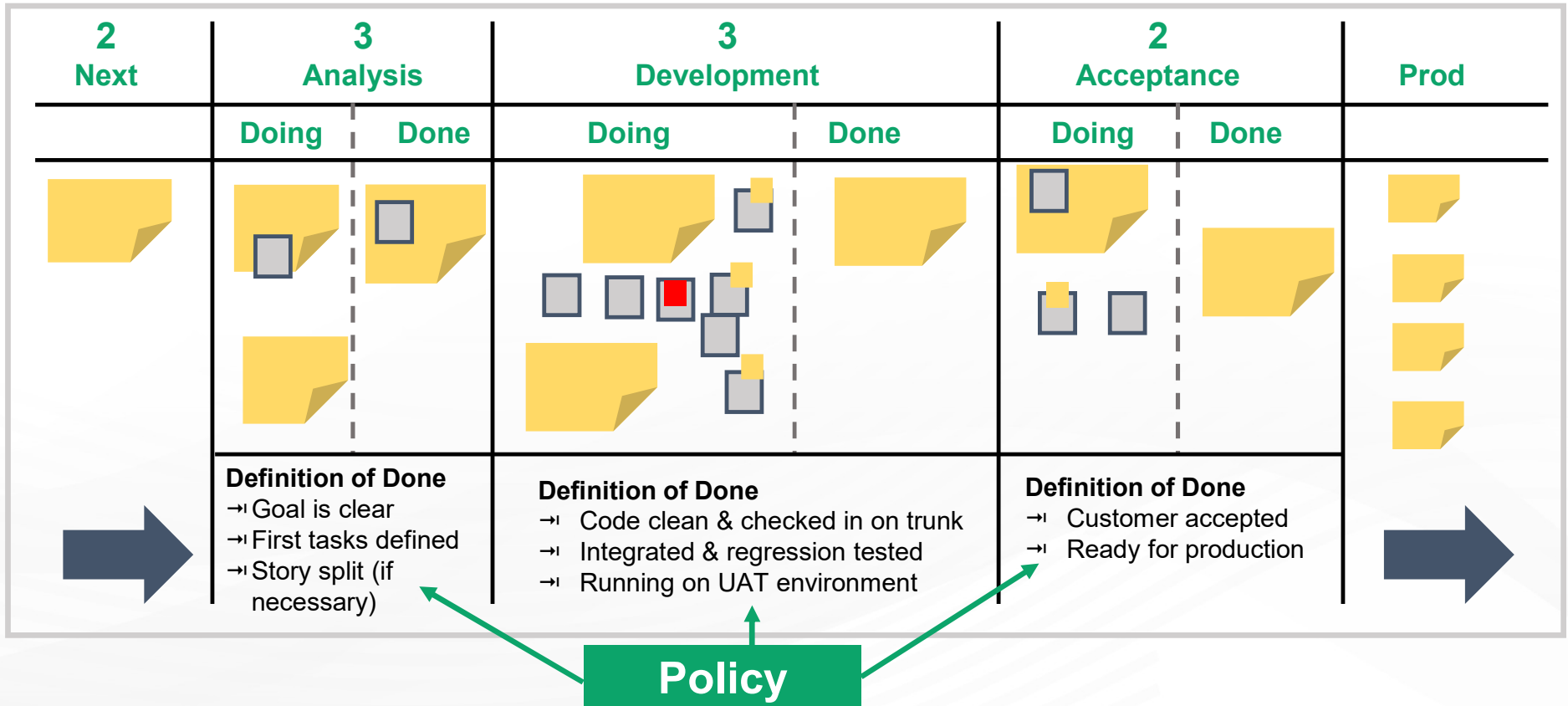
WIP limits make the bottleneck in the stage “test” visible



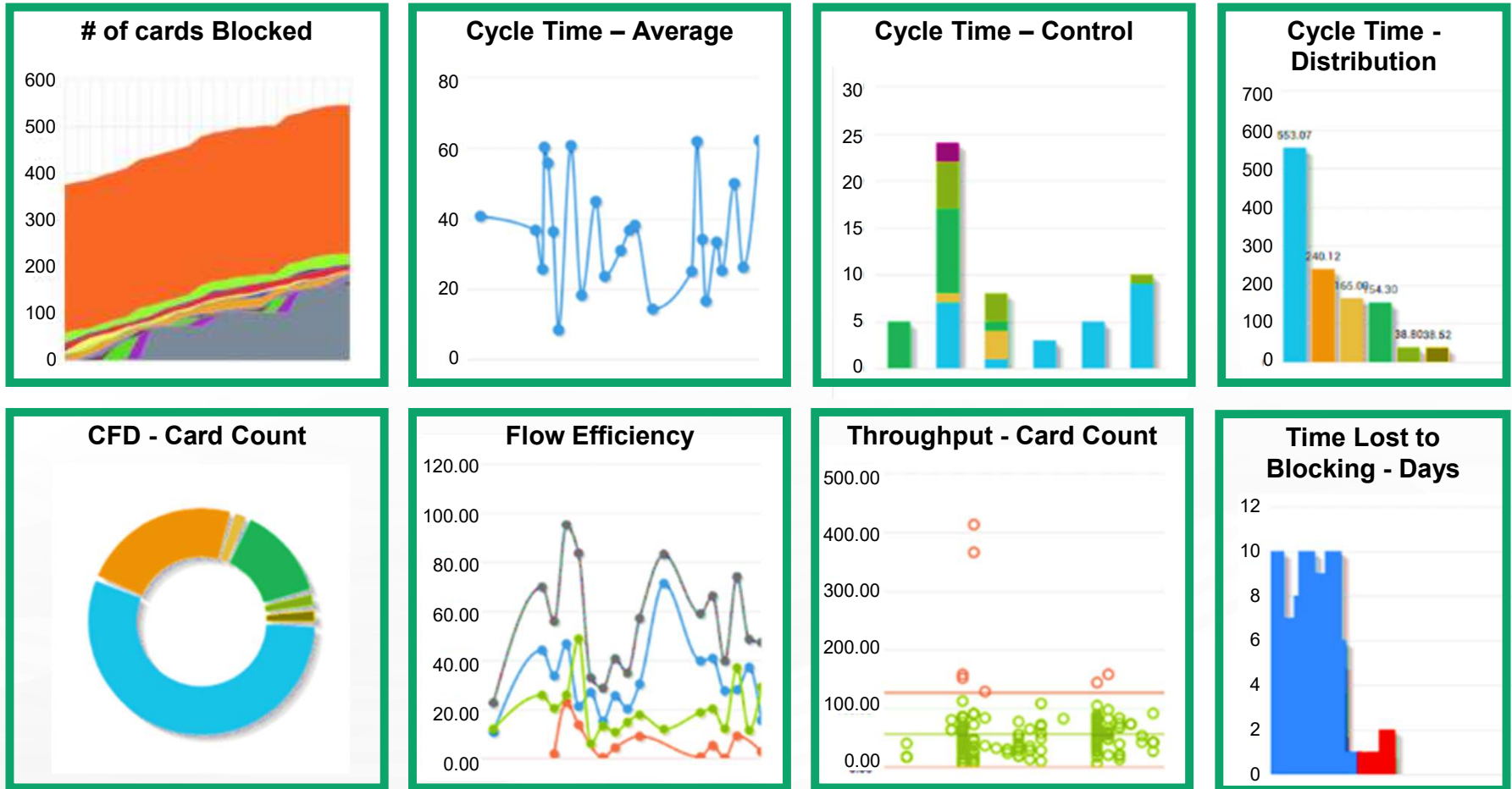
2.3.5 Manage Flow



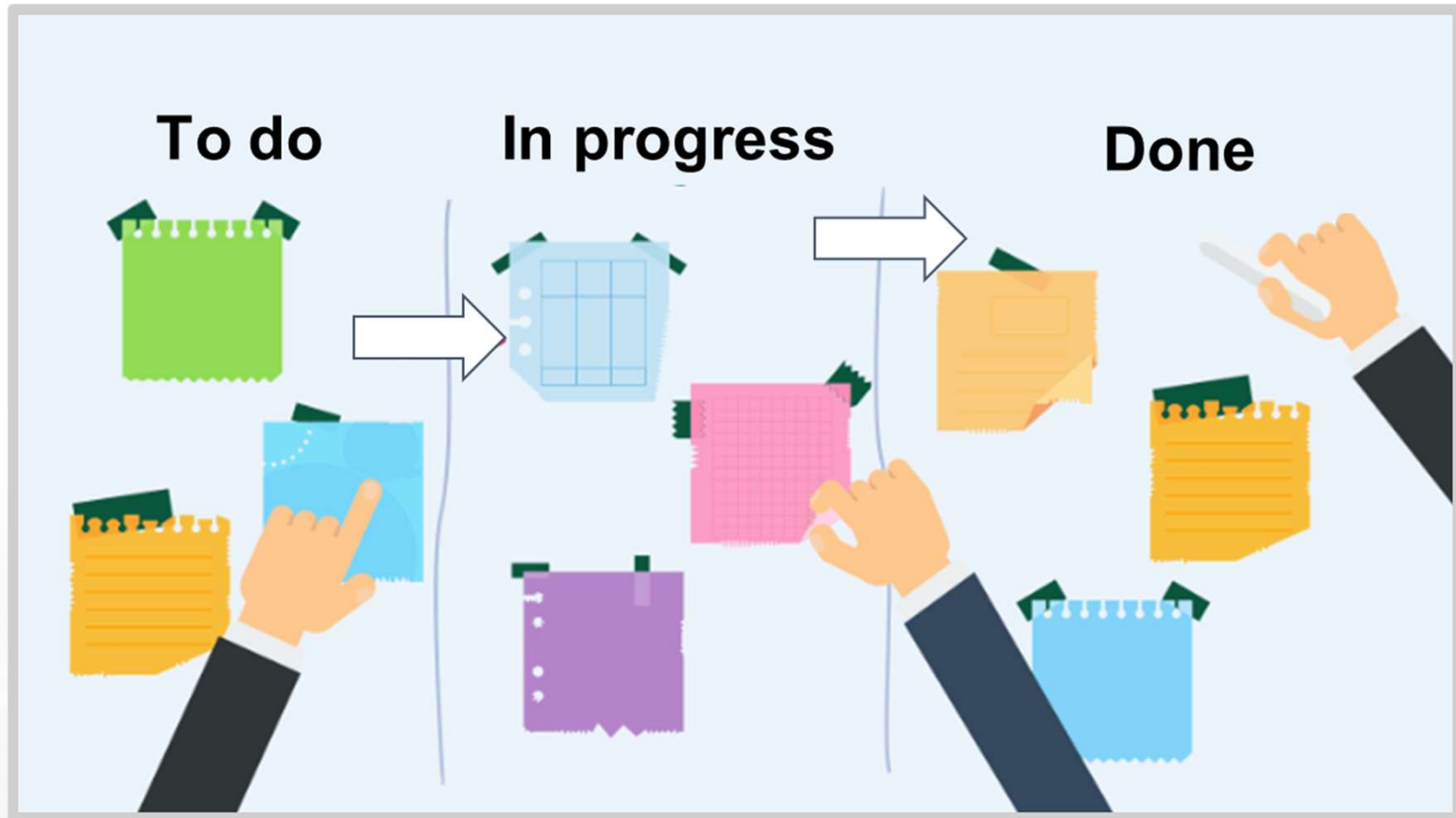
2.3.6 Make Progress Policies Explicit



2.3.7 Implement Feedback Mechanisms



2.3.8 Improve Collaboratively

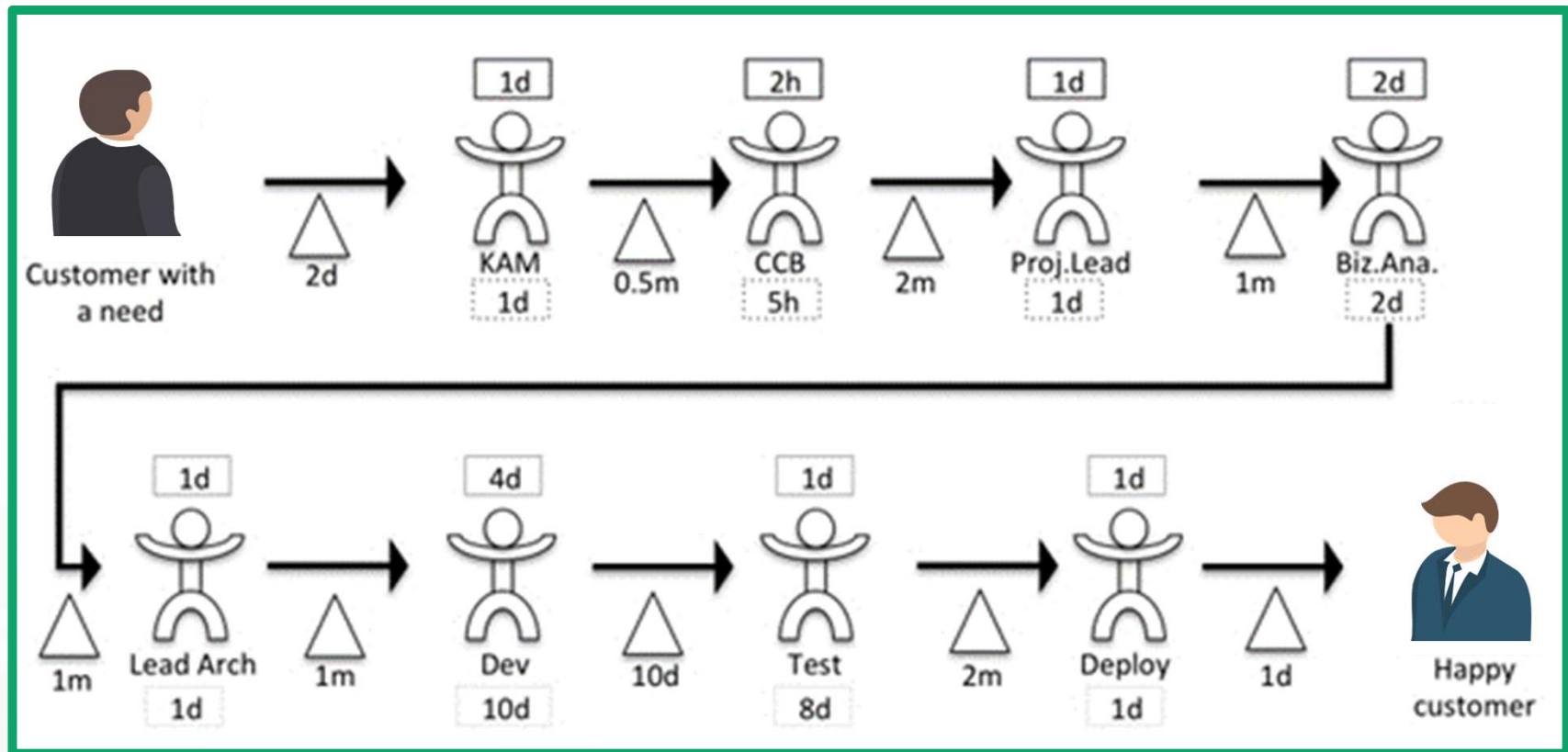


2.4 Value of System

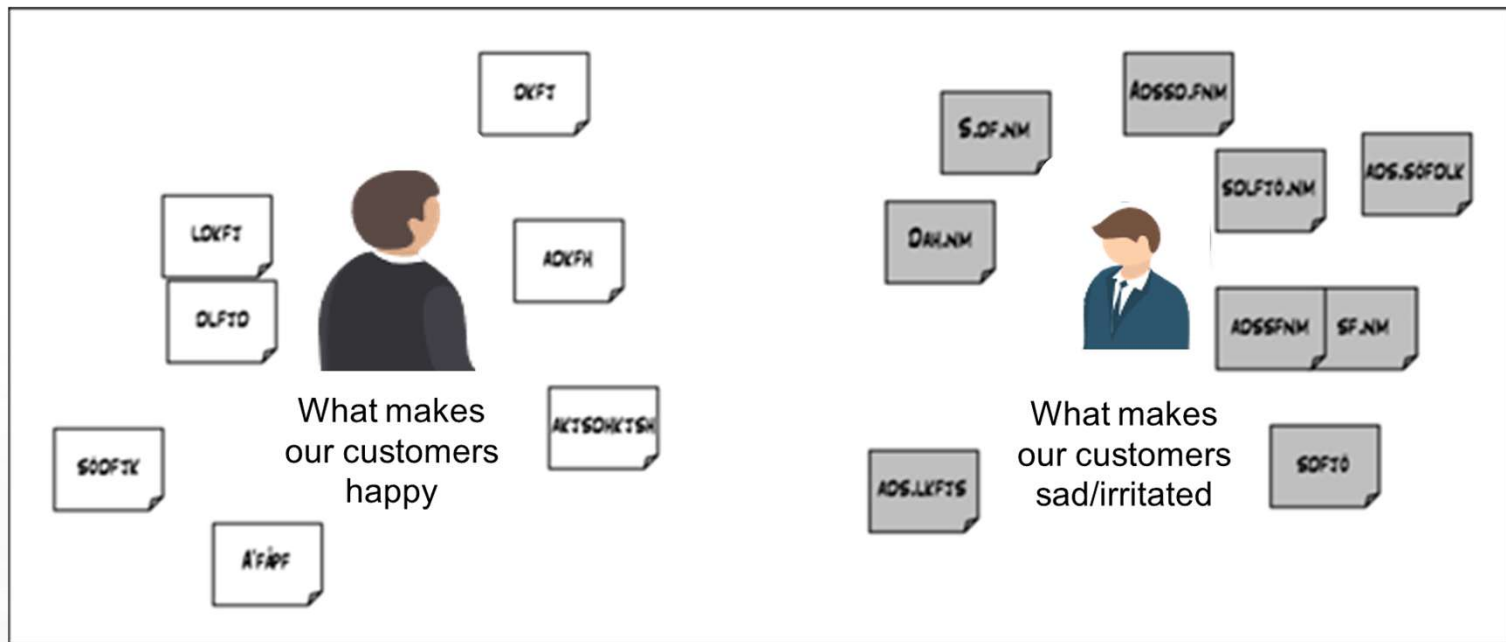


Your system is everything that happens between when your customer has a need until you have fulfilled the need. In the picture, the system is symbolized with a pipe.

2.4.1 Value of System- Mapping the Process



2.4.2 Value of system- Happy Customer



2.5 Classes of Service

There are many factors that will dictate how you respond and react to new feature requests

Urgency, which could be set depending on cost of delay, that is, how much it costs or how much you lose by waiting to complete the request

Who requests the change

Size of the request

Whether this request is stopping something else

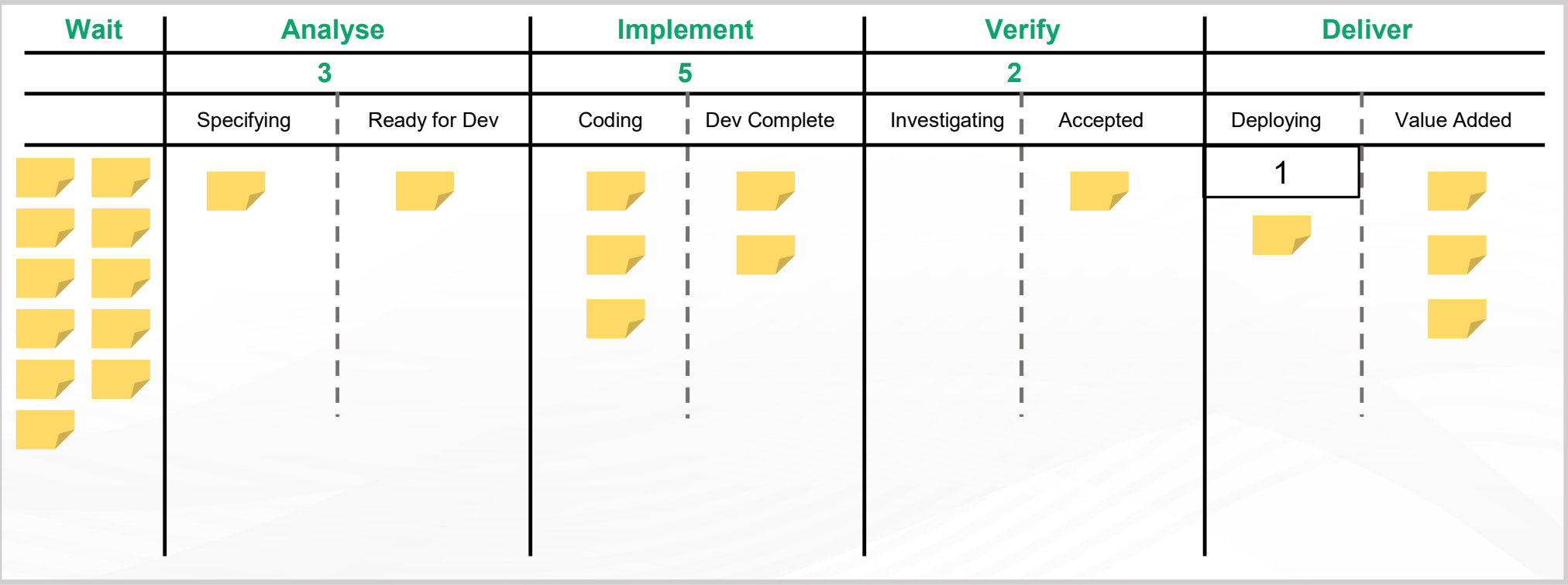
Module 2: Kanban Principles

2.6 Kanban Board

KANBAN BOARD

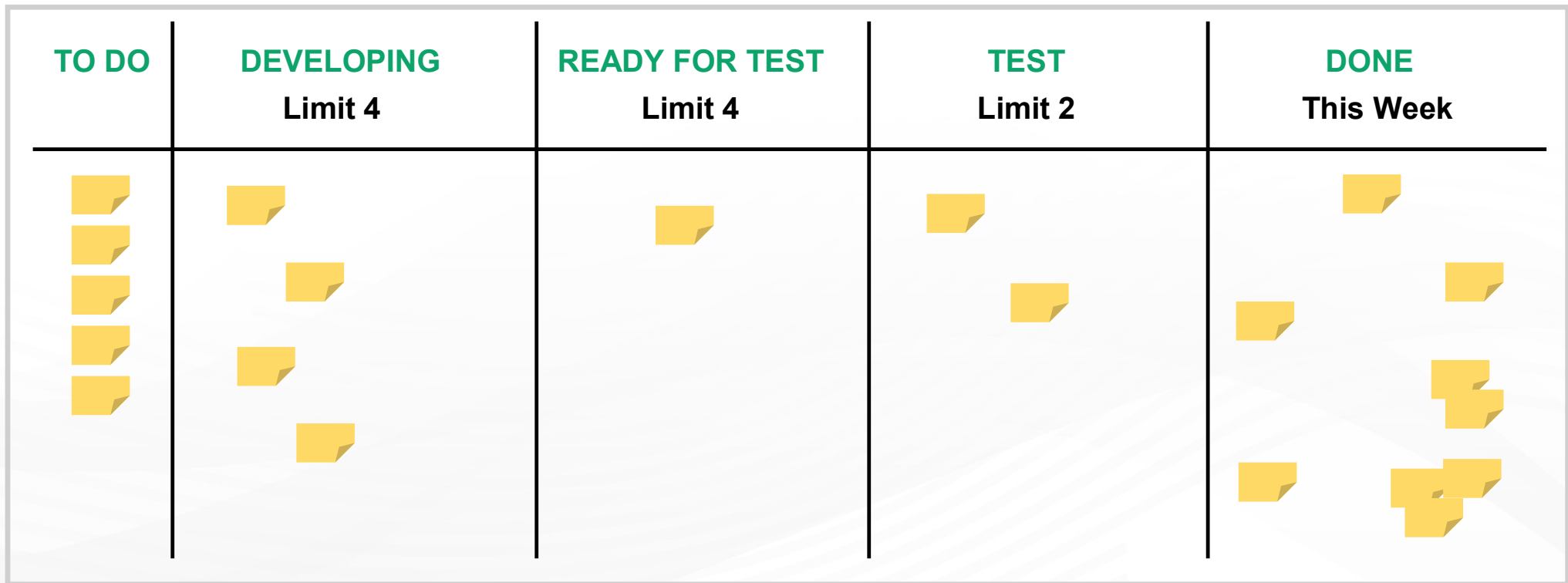
BACKLOG 2	IN DEVELOPMENT 4 MIN 0 MAX 3	IN TEST 2 MIN 3 MAX 5	DONE 2
KANBAN -1 Kanban cards represent work items >> Click the "KANBAN-1" link at the top of this card to show the Detail view -	KANBAN -2 Kanban boards are often divided into streams of work. By default, Kanban boards include an		
KANBAN-5 Work items flow through different stages from left to right >> Try dragging this card to "Selected for Development"	KANBAN-3 Add work items with "+Create issue" at the top right of the screen >> Try adding a new card now	KANBAN-6 Work in Progress (WiP) limits highlight delays. This column's limit is 1...	KANBAN-9 As teams develop with Kanban they get better at reducing average resolution time (aka cycle time). The Control CHart
	KANBAN-4 Work items are ranked in priority order (from top to bottom)>> Try dragging this card over the card below to tank its	KANBAN-7 ...so 2 work items violate the limit and cause the column to be highlighted	KANBAN-10 Instructions for deleting this sample board and project are in the description for this issues >> Click the "Kanban-10"
	KANBAN-8 Filters at the top of the board allow you to quickly cut down the shown items>>		

2.6.1 Kanban Board: Example1





2.6.2 Kanban Board: Example2

A very simple board with status columns and avatar magnets



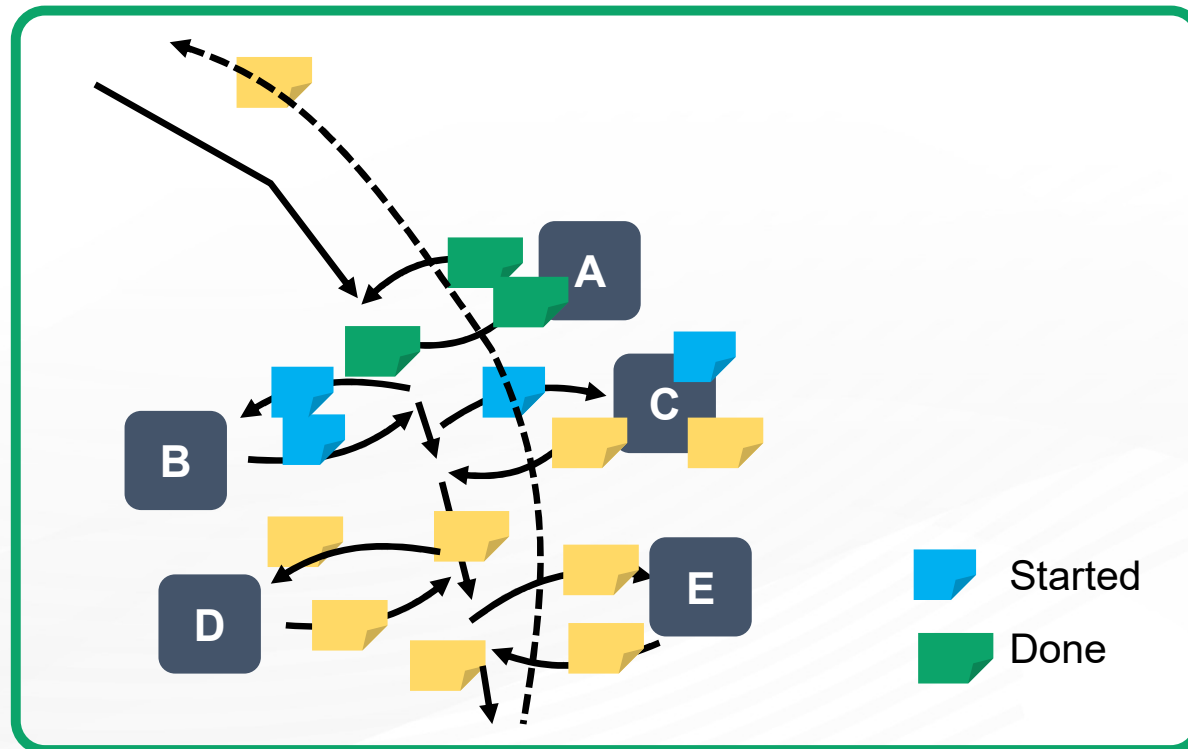
2.6.3 Kanban Board: Example 3– Internal Operation

A Kanban board for an internal operation department with three classes of services ("to do", "working on", and "done")

Prio	To DO	Working On	Done
Urgent			
Daily Duty			
2			
3			
1			

2.6.4 Kanban Board: Example 4 Without Rows and Columns

The architectural drawing has become a Kanban board where work is placed on it and the status is visualized with colored lines on the notes



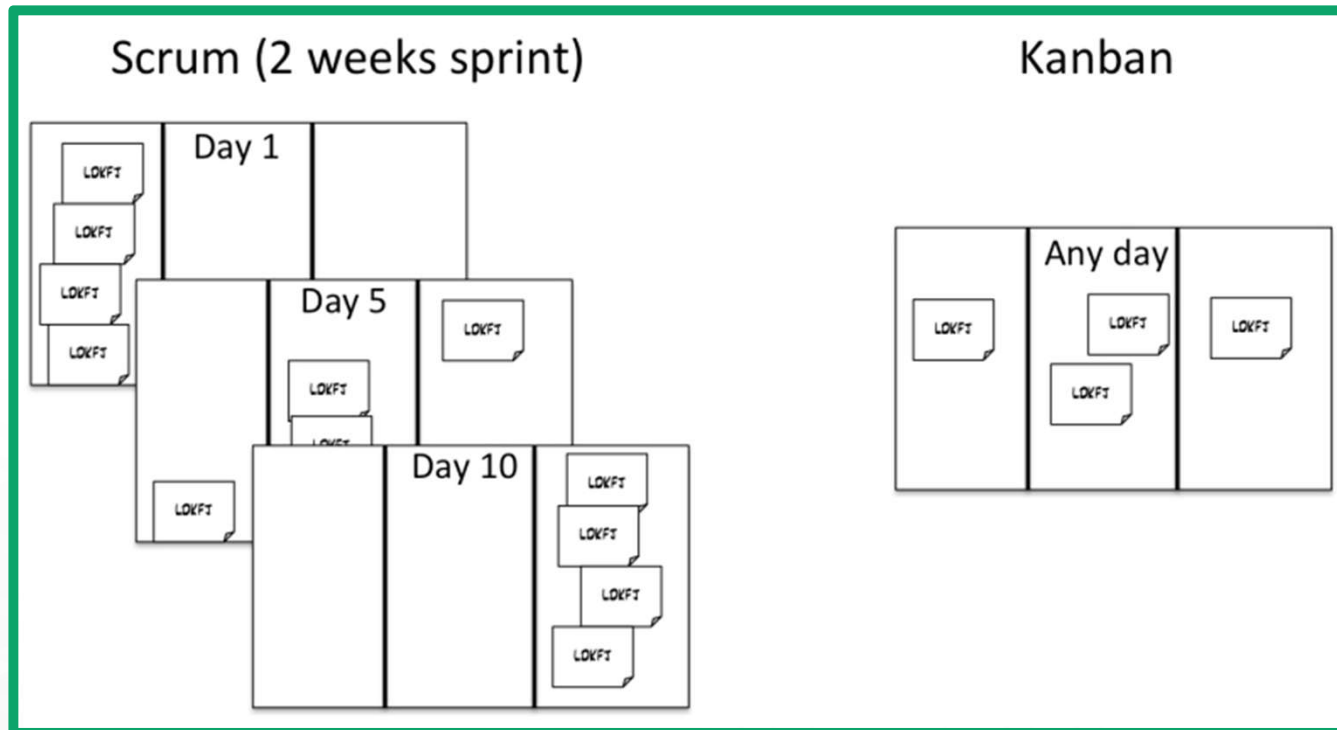
2.7 Meetings in Kanban

- 1 Story start meeting
- 2 Enterprise sync
- 3 Review meeting
- 4 Retrospective meeting
- 5 Project Kickoff workshop
- 6 Brainstorming
- 7 Daily Stand-up

MEETINGS IN KANBAN SYSTEMS



2.8 How to Choose Between Scrum and Kanban?



Module 2: Kanban Principles

In a Nutshell, we learnt:



1. Kanban Principle
2. Kanban Board
3. Kanban Core Practices
 - Make work visible
 - Limit work in progress (WiP)
 - Manage flow
 - Make progress policies explicit
 - Implement feedback mechanisms
 - Improve collaboratively (using methods and models)