

PMI®—Agile Certified Practitioner (PMI-ACP)®

Agile Planning, Monitoring, and Adopting: Part 3



After completing this lesson, you will be able to:

- Explain a Kanban card
- Identify the different types of Kanban boards
- Explain retrospectives and the various techniques of conducting retrospectives
- Describe Agile process tailoring



Kanban is a concept related to Lean and Just-In-Time (JIT) production.

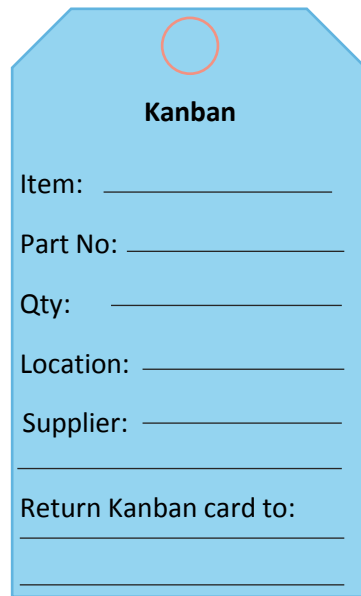
- A Kanban board shows the current status of all the stories to be done within an iteration.
 - The board is divided into segments reflecting key activities.
 - The stories are represented by index cards or Post-It Notes.
 - The status of a card is represented by its location on the board.
- A Kanban board helps the team understand how they are doing and what has to be done next. This makes the team self-directing.

Kanban Cards

Kanbans use cards to show progress through an iteration.

- The cards on a Kanban board reflect work items that move through different phases of the development cycle.
- The cards can reflect anything that needs to be tracked:
 - User Stories
 - Defects
 - Tasks
- Virtual Kanban boards can filter different types of cards based on the view required.

Example of a Manufacturing Kanban card



Kanban

Item: _____

Part No: _____

Qty: _____

Location: _____

Supplier: _____

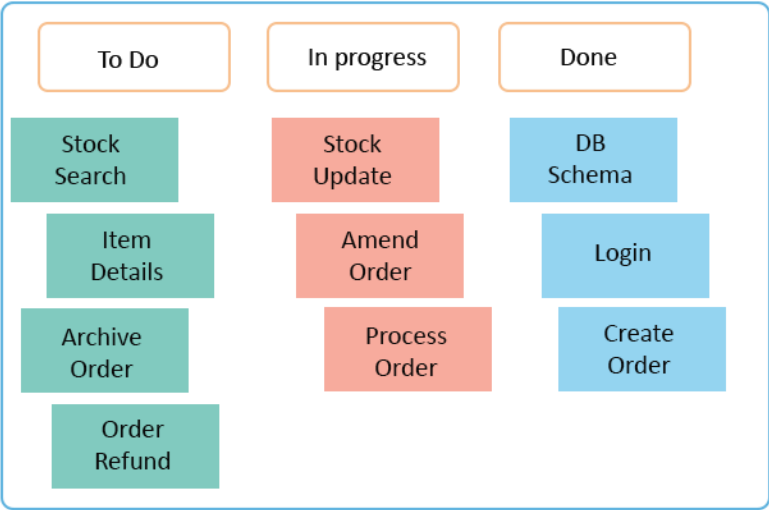
Return Kanban card to: _____

Simple Kanban Board

A simple Kanban board or a task board has three columns:

- To Do
- In Progress
- Done

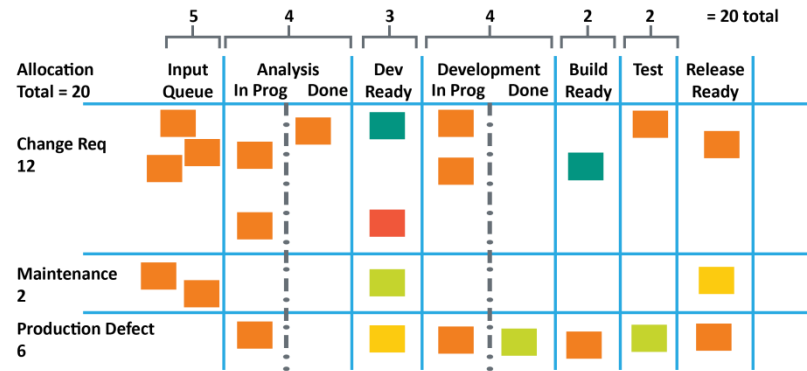
Tasks are represented by cards and status of the cards are posted under one of the three columns.



Detailed Kanban Board

Consider the following in a detailed Kanban board:

- The Work In Progress (WIP) Limit allows the downstream processes to determine when they can consume more work.
- Work in upstream processes halts if a WIP is met.
- Sub workflows can be used to better illustrate when a card is complete and ready for transition to the next queue.



Retrospectives are regular reviews of the team and its members to discuss what is working and what can be improved.

- Retrospectives should be conducted at the completion of every sprint or iteration.

Retrospectives should not be done only after a catastrophic failure.

- Retrospectives should be conducted at regular intervals, spread throughout the life of a project.
- Retrospectives are not about apportioning blame; instead it is to learn from the experience.

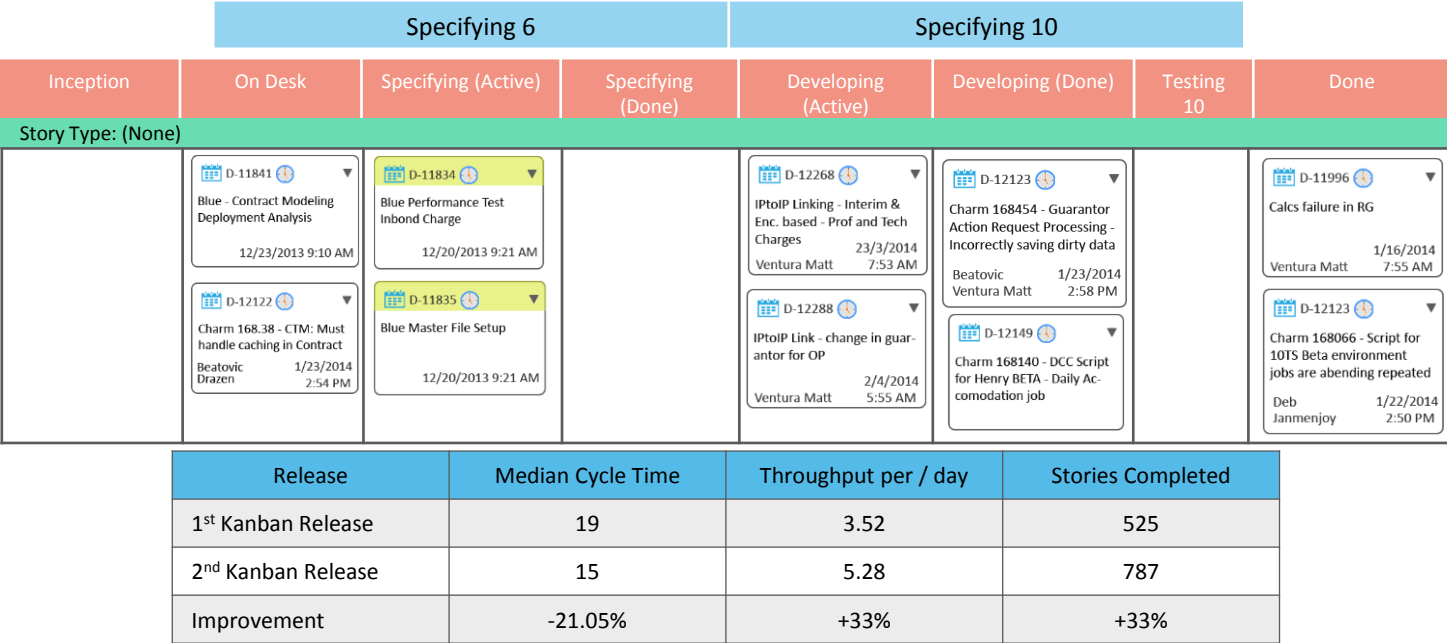
Siemens Health Services (HS), the health IT business unit of Siemens Healthcare, is a global provider of enterprise healthcare information technology solutions. Their systems provide new capabilities based on new technology to stay ahead of competition. The challenges continually faced to meet the committed release dates were:

- deadlines characterized by intense pressure and overtime;
- difficulty in planning and completing stories in time-boxed sprint increments;
- hectic last week of each sprint where teams would try to claim as many points as possible; and
- story “doneness” requiring rigorous testing by Test Engineers in fully integrated environments.

The Kanban method helped Siemens HS improve its cycle time, throughput per day, and stories completed. The metrics and charts on the Kanban board helped in:

- providing insight into systemic problems and patterns across the value stream
- acting as a catalyst for continuous improvements
- providing high degree of visibility into the progress of team and program (transparency)
- suggesting specific team interventions to improve the overall process performance (actionable)
- making measures such as “cycle time” and “throughput” tangible, unlike relative story points and velocity

The graphic below shows the Kanban board used at Siemens Health Services:



In retrospectives, teams look back on a past period of work so that they can learn from their experience and apply this learning to future projects. The agenda for a retrospective revolves around the following three areas:



What works?



What doesn't work?



What to start doing?

Retrospectives are necessary in an Agile project environment.

- They help to reflect and learn from the past.
- They determine how the team should work in the future.
- They help in improving communication within the team.
- They allow a team to own and drive their development process.

Retrospectives can be conducted at the iteration, release, or project levels. The retrospective should establish a goal that the whole team will work toward during the next iteration. The following points need to be considered while conducting a retrospective:

Participants

Every team member should participate in the retrospective.

Facilitator

The facilitator should be experienced and neutral, and foster active participation.

Setting expectations

Facilitator should set the duration, expectation, and the goals for the retrospective.

Ground rules

Facilitator should also clearly set the ground rules for the meeting.

All Retrospectives should follow the Prime Directive.

"Regardless of what we discover today, we understand and truly believe that everyone did the best job they could, given what they knew at the time, their skills and abilities, the resources available, and the situation at hand."

Norm Keith's Prime Directive

Brainstorming

This technique is used to generate ideas about lessons learned and about future improvements.

Participants reflect on the events of the iteration and brainstorm ideas on how to improve the next iteration.

Mute Mapping

This is a technique to identify related items from a brainstorming exercise. All participants collaboratively move cards to show affinities or similar items while not talking. This technique is fast and ensures the conversation is not dominated by any one participant.

A sample template for conducting retrospection is given below:

What went well?	What could be better?
What did we learn?	What still puzzles us?

Process tailoring involves tailoring or customizing the Agile processes to cater to a situation. It can include roles, processes, or procedures. Examples of project specific tailoring are as follows:

- Adding or removing work products and tasks.
- Changing milestones and what work products will be made available at each milestone, and extent of completion expected at specific times.
- Responsibilities for review and approval (RACI table can be used).
- Detailed procedures for reporting progress, performing measurements, managing requirements, managing change requests, etc.



QUIZ

1

Which of the following is not a characteristic of Retrospectives?

- a. They can occur for iterations, sprints, releases, or projects.
- b. They occur near the end of a project as part of the lessons learned.
- c. They are regular reviews of the team, by the team, to discuss how they are working.
- d. They should include everybody in the project team.



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- d. They should include everybody in the project team.



Answer: b.

Explanation: Retrospectives do not occur near the end of a project as part of the lessons learned. They happen throughout the project life cycle.



QUIZ 2

Which of the following techniques is not used for Retrospectives?

- a. Brainstorming
- b. Mute mapping
- c. Email
- d. Thorns and Roses



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Answer: c.

Explanation: Email is not used for Retrospectives. It should be conducted in person. Thorns and Roses is a technique to ask each team member what went well (Roses) and what didn't (Thorns).



QUIZ

3

What does WIP limit reflect?

- a. The number of resources available to work on a user story
- b. The number of story points that an iteration can deliver
- c. The point at which any more work items will cause a bottleneck
- d. None of the above



QUIZ

3

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- b. The number of story points that an iteration can deliver
- c. The point at which any more work items will cause a bottleneck
- d. None of the above



Answer: c.

Explanation: Work In Progress limit shows how many work items can be within an activity area at any given time.



QUIZ

4

Which of the following is not a reason for holding a retrospective?

- a. To reflect and learn from the past
- b. To decide how the team will work in the future
- c. To evaluate individual performance using a team perspective
- d. To allow a team to own and drive their development process



QUIZ

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- a. To reflect and learn from the past
- b. To decide how the team will work in the future
- c. To evaluate individual performance using a team perspective
- d. To allow a team to own and drive their development process



Answer: c.

Explanation: Retrospectives are not intended to apportion blame or to evaluate individual performance.



Here is a quick recap of what was covered in this lesson:



- A Kanban board shows the current status of all the tasks to be done within this iteration. The tasks are represented by cards or Post-It Notes and their statuses are seen by their location on the board.
- Retrospectives are regular reviews of the team, by the team members, to discuss what worked and what needs improvement for the next iteration.
- Three techniques of conducting an effective retrospective meeting are Norm Keith's prime directive, brainstorming, and mute mapping.
- Process tailoring involves tailoring or customizing the Agile processes to cater to a situation.



THANK YOU