



Process Discovery using Python (Practicum)

Scrum

Mahsa Pourbafrani

Lab WS2020-2021

Scrum: applying agile on projects

- User Requirement
- Discover user's need
- Story process
 - who what why
- Test after the end of a story
- How to write Nonfunctional request

Characteristics of good user stories: INVEST quality

Independent

- From development perspective

Negotiable

- Not too much detail

Valuable

- Explicit value for the user

Estimable

- Possible to estimate the time of delivery

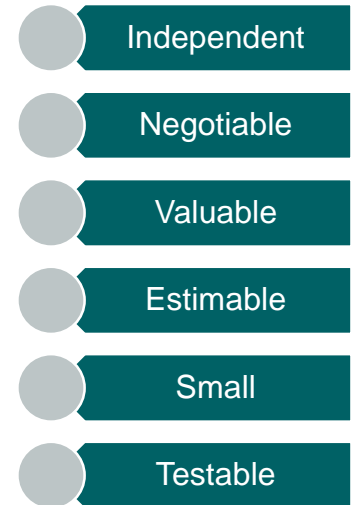
Small

- Small to be able to deliver

Testable

User stories: examples

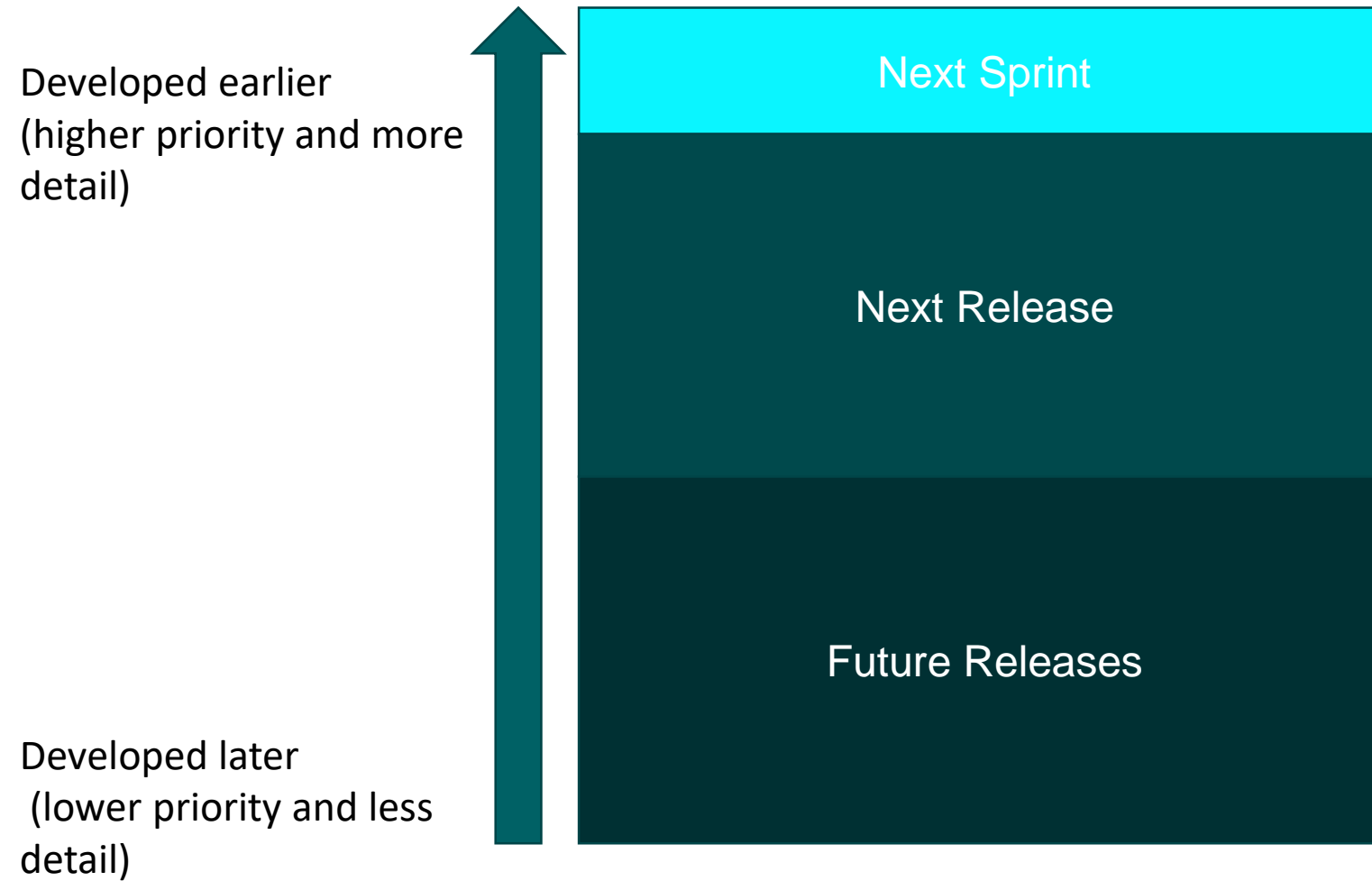
- As a developer, I want to finalize the database changes
 - It is a task, no direct value for the user
- As a customer ordering food, I want to locate previous food order lists so that I can see all the lists that I have.
 - The “*why*” needs to clear
 - As a customer ordering food, I want to see my saved food order lists so that I can reuse the list for future orders, making ordering faster and more accurate.



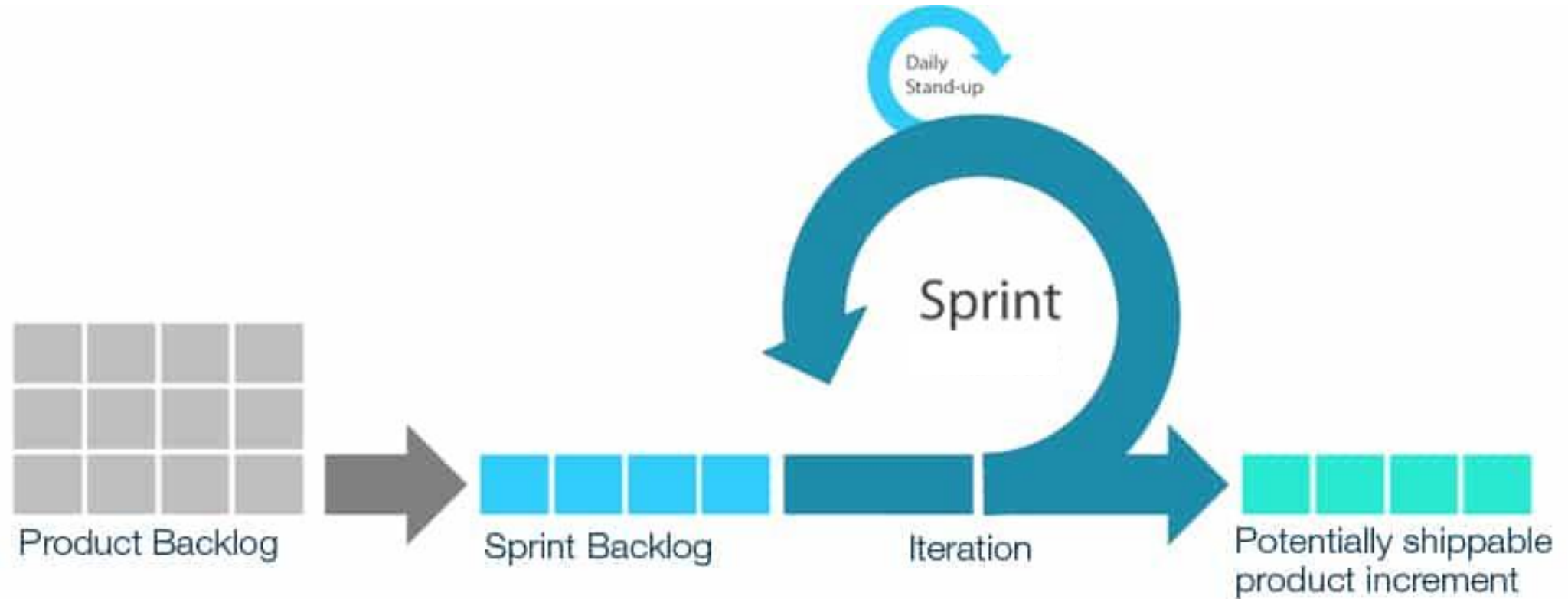
User stories: examples

- As a food service customer, I want to see different food item types displayed in different colors: RGB: #FF0000 for meat and # A52AFA for grains., so I can quickly identify my food items by food type.
 - Too much detail
 - As a food service customer, I want my custom item code to stand out so that I can find it on the screen more quickly.

Sprint planning



Scrum cycle - Sprint



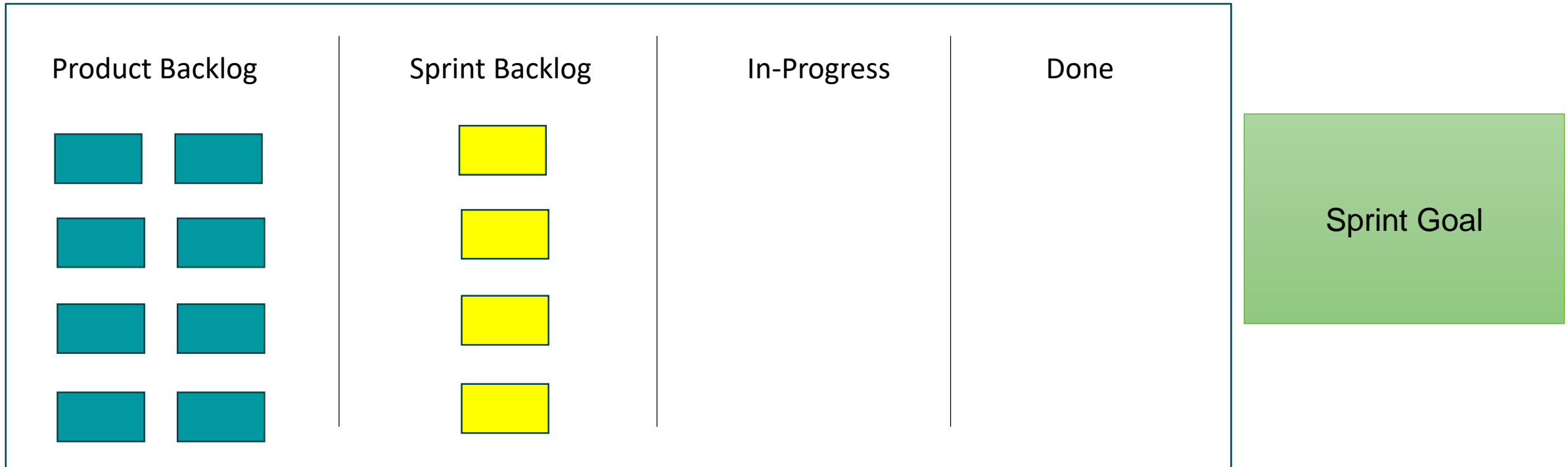
Sprint

- The iteration(cycle) itself
 - Sprint planning
 - Development
 - Daily Scrum
 - Sprint Review
 - Sprint Retrospective
- Each Sprint:
 - Has a goal
 - Example: ecommerce application
 - Sprint Goal: Implement basic shopping cart functionality including add, remove, and update quantities.
 - Delivers an increment according to this goal

Sprint planning

- It is the iteration planning
- Development Team and Product Owner define:
 - The items to be developed during the sprint taking account the priority of the product backlog
 - Sprint Goal
- Development team estimate the items regarding complexity and/or time

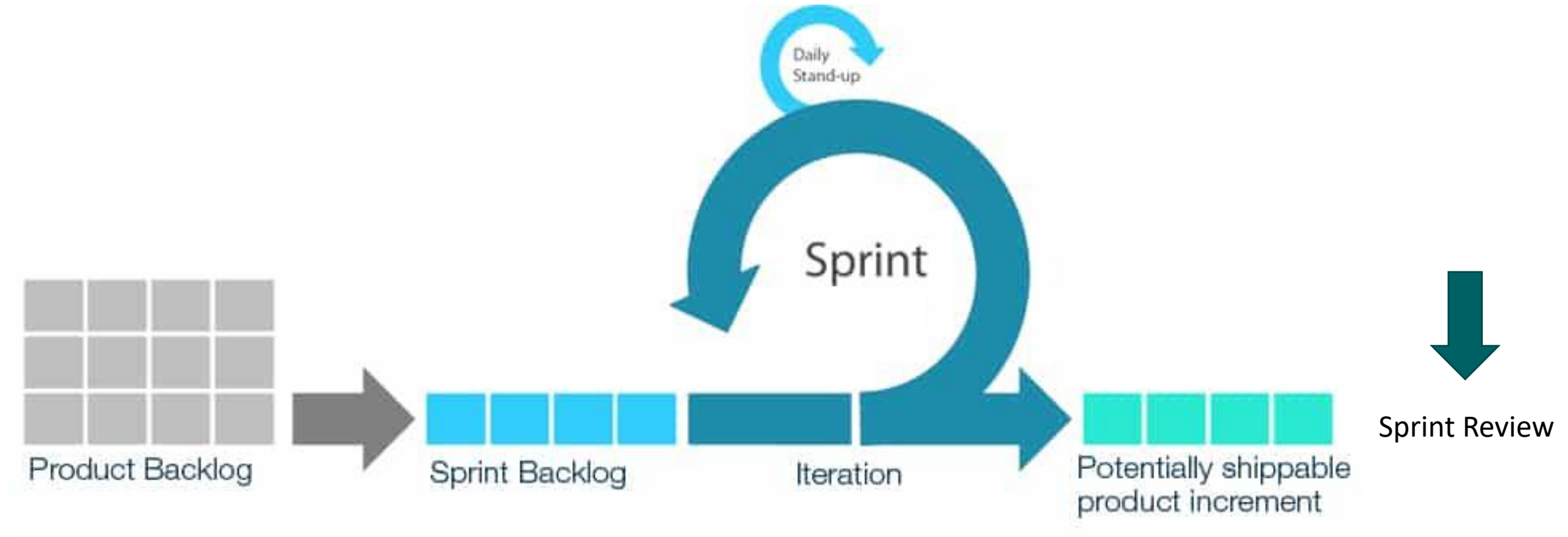
Result: Initial Sprint Backlog + Sprint Goal



Sprint backlog

- The items from the product backlog to be developed during the Sprint
- Can be modified during the Sprint
 - Estimates can be updated
 - Tasks can be added to existing items
- Needs to be visible for everyone
- Belongs to the Development Team

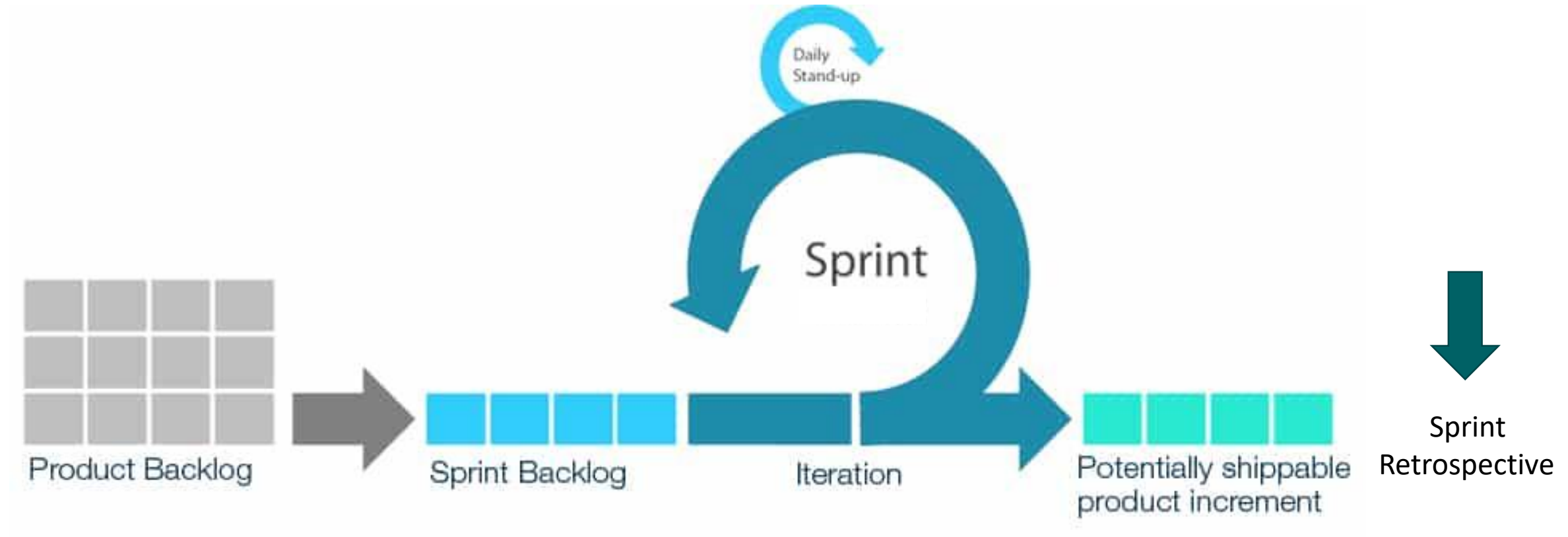
Sprint review



Sprint review

- Development team
 - Shows the product owner and stakeholders what has been done in the sprint
 - Answer questions about the product increment
- Product owner
 - Checks what is done and what is not and says if the Goal was achieved
- If anything needs to be changed
 - An item is included on the product backlog

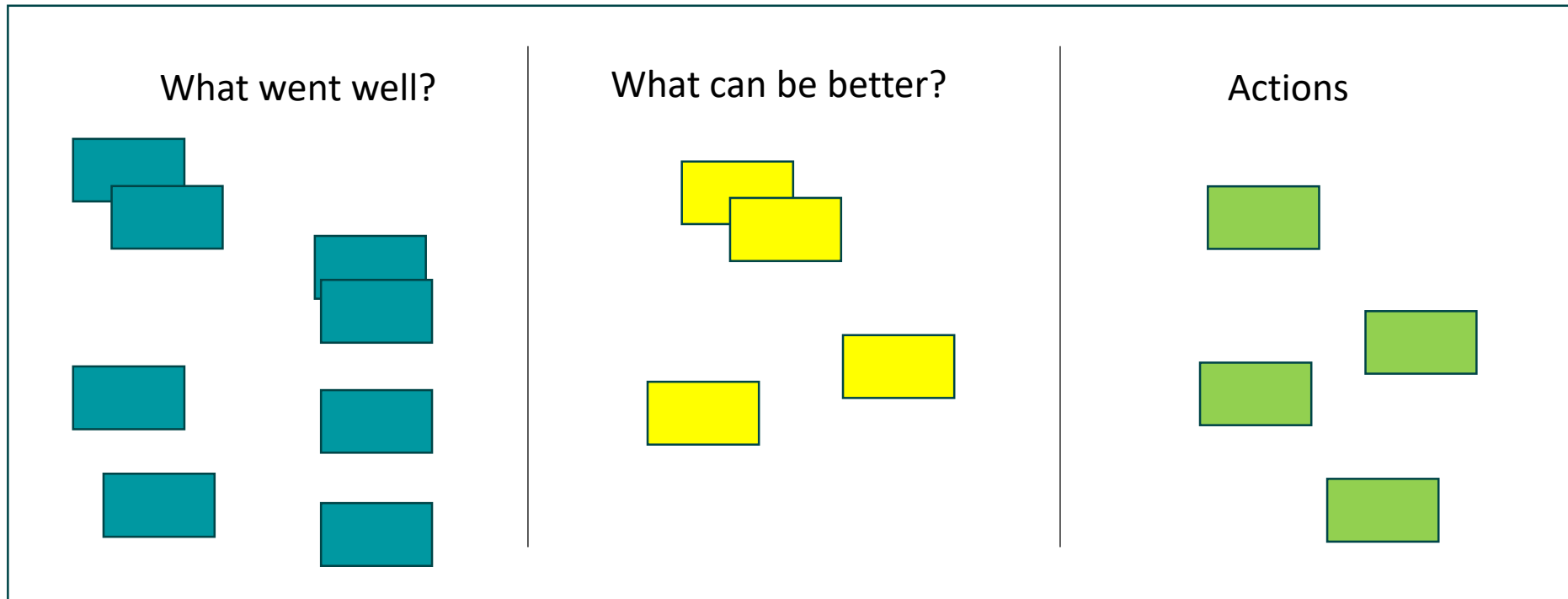
Sprint retrospective



Sprint retrospective

- Meeting to inspect how was the Sprint
 - What went well?
 - What can be better?
 - Actions to improve - adaption
- Should be present:
 - Development team and Product Owner

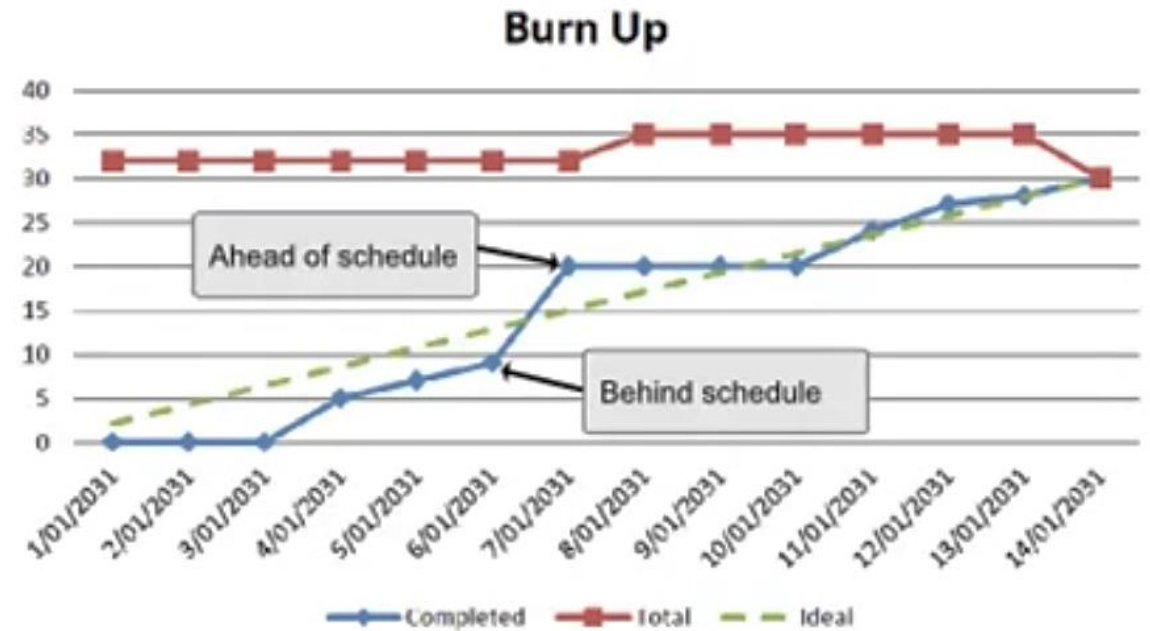
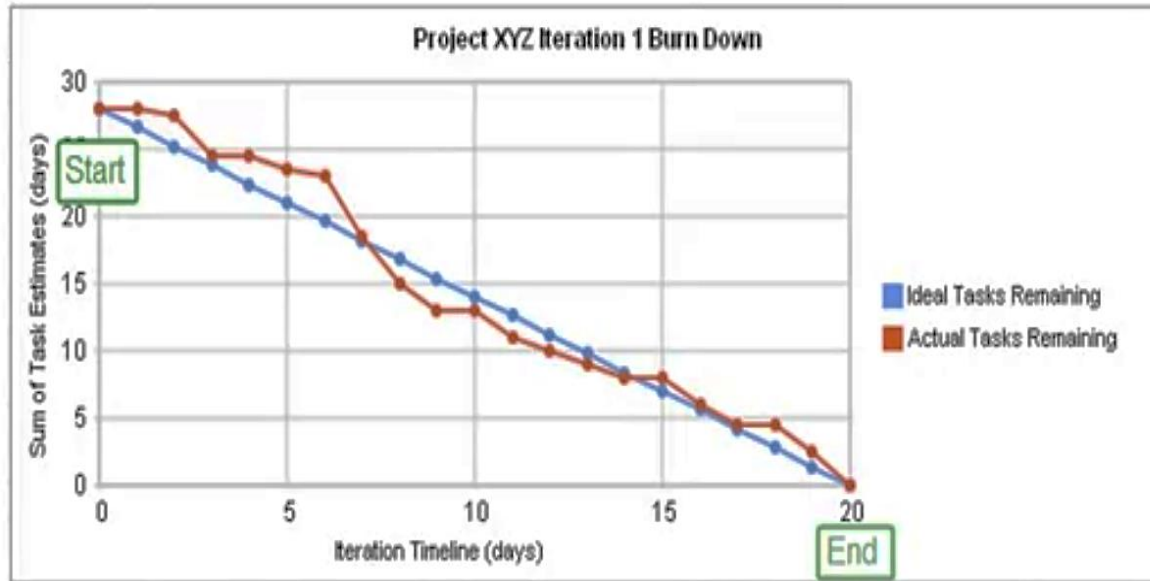
Sprint retrospective



Sprint tracking

- Ongoing through the sprint to the end
 - Burn down
 - Work left
 - Burn up
 - Work down + total work
 - Task board

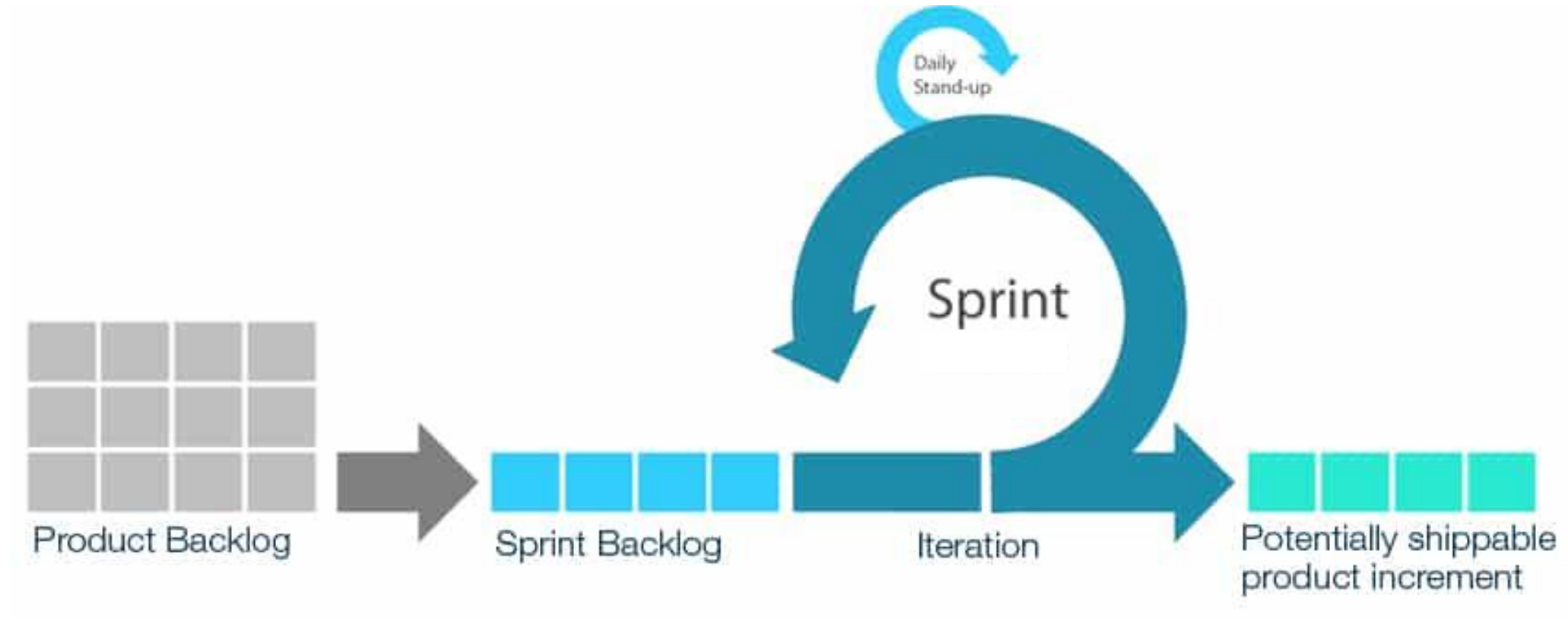
Burn down and Burn up examples



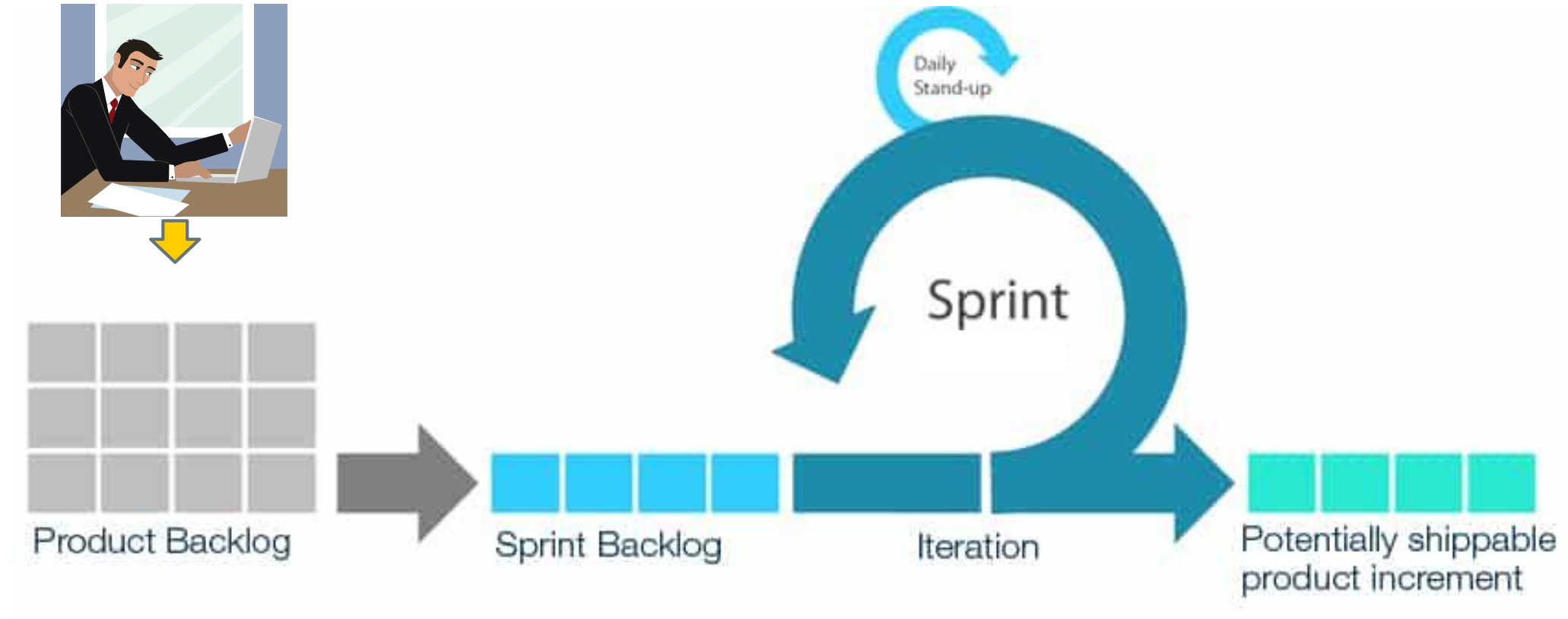
Task board

Story	To Do	In Progress	Done
Story A		Task	Task
Story B	Task	Task	Task
Story C		Task	Task

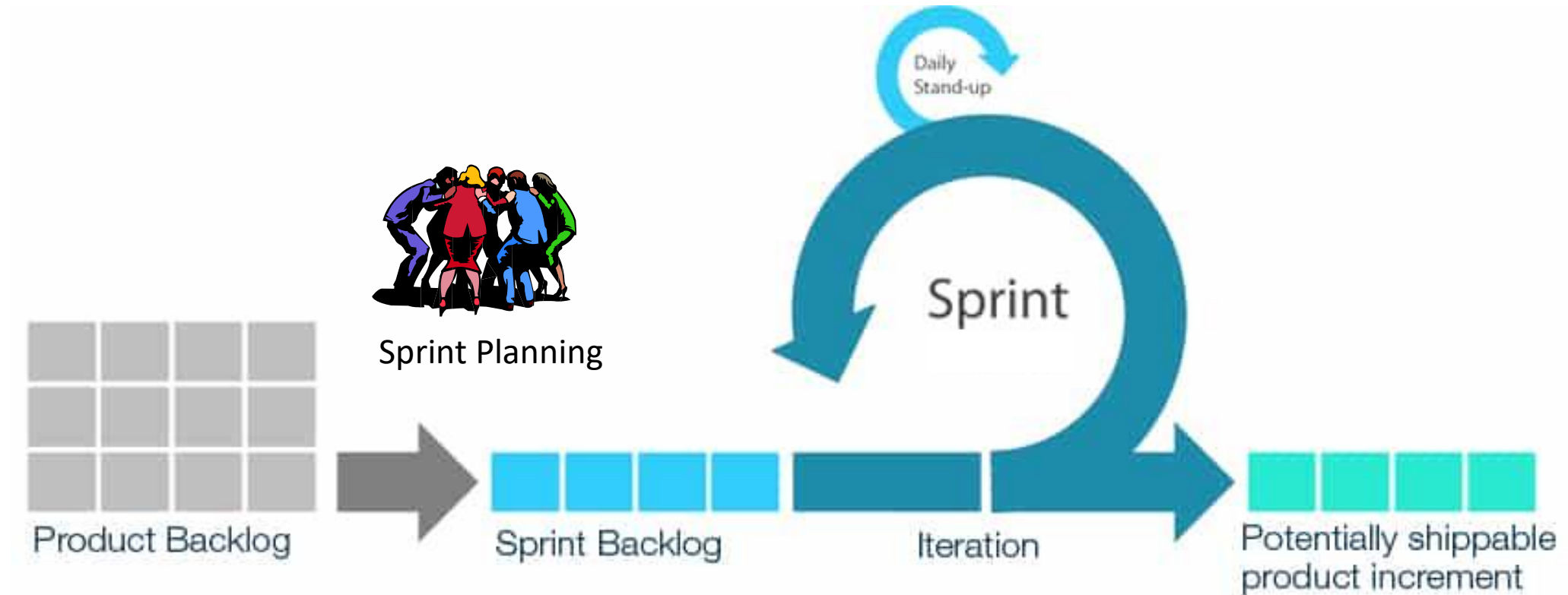
Scrum cycle- Summary



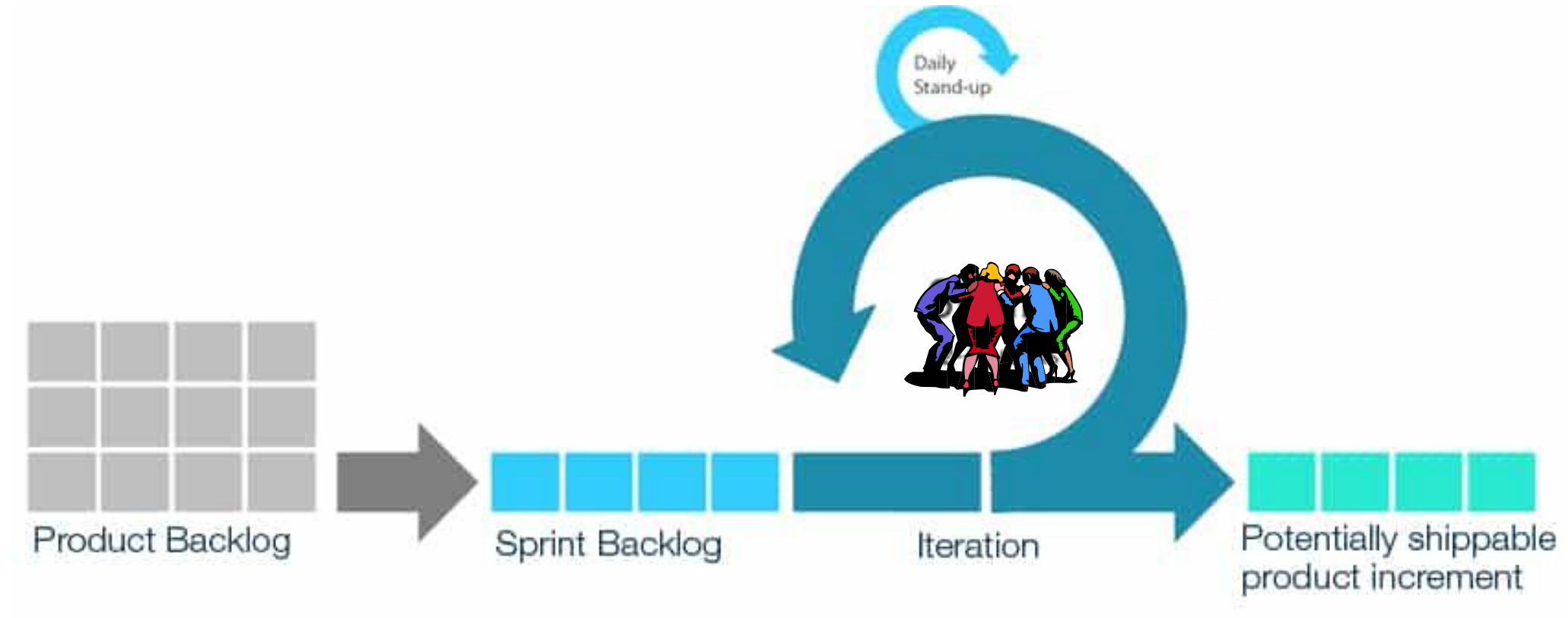
Scrum cycle- Summary



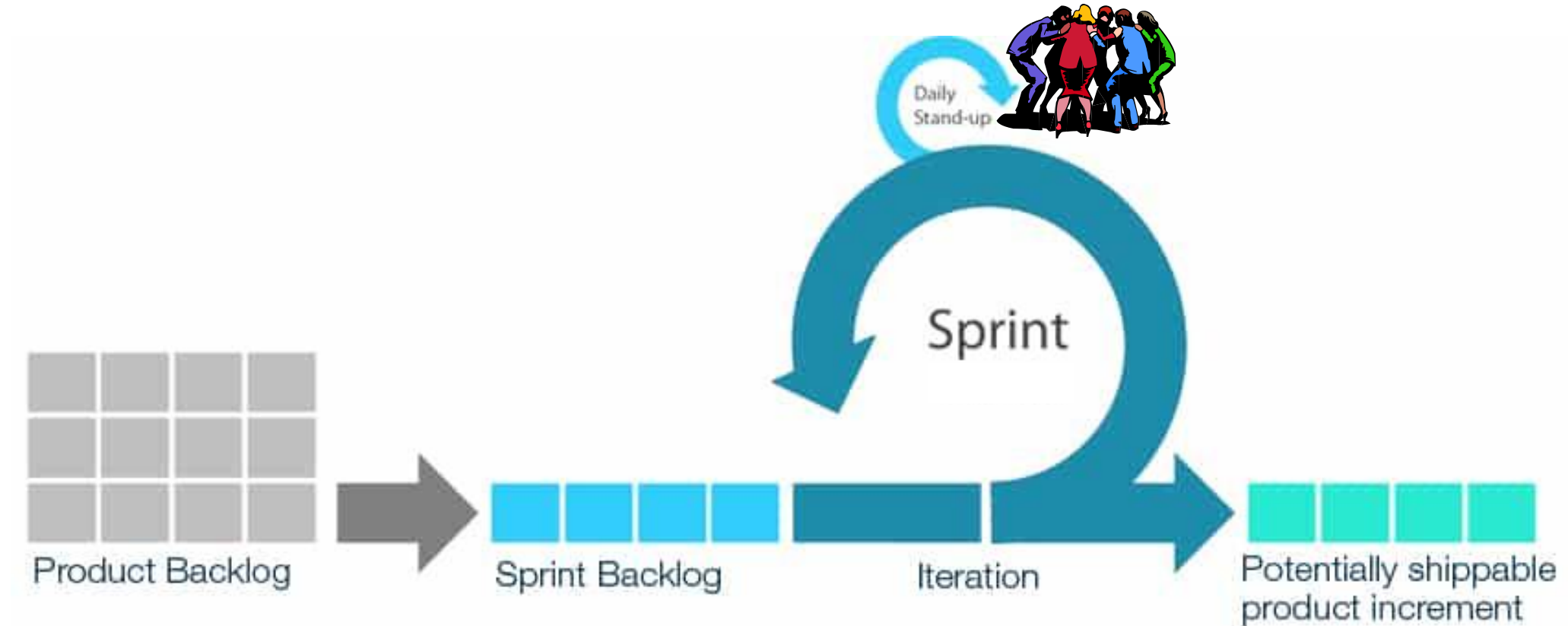
Scrum cycle- Summary



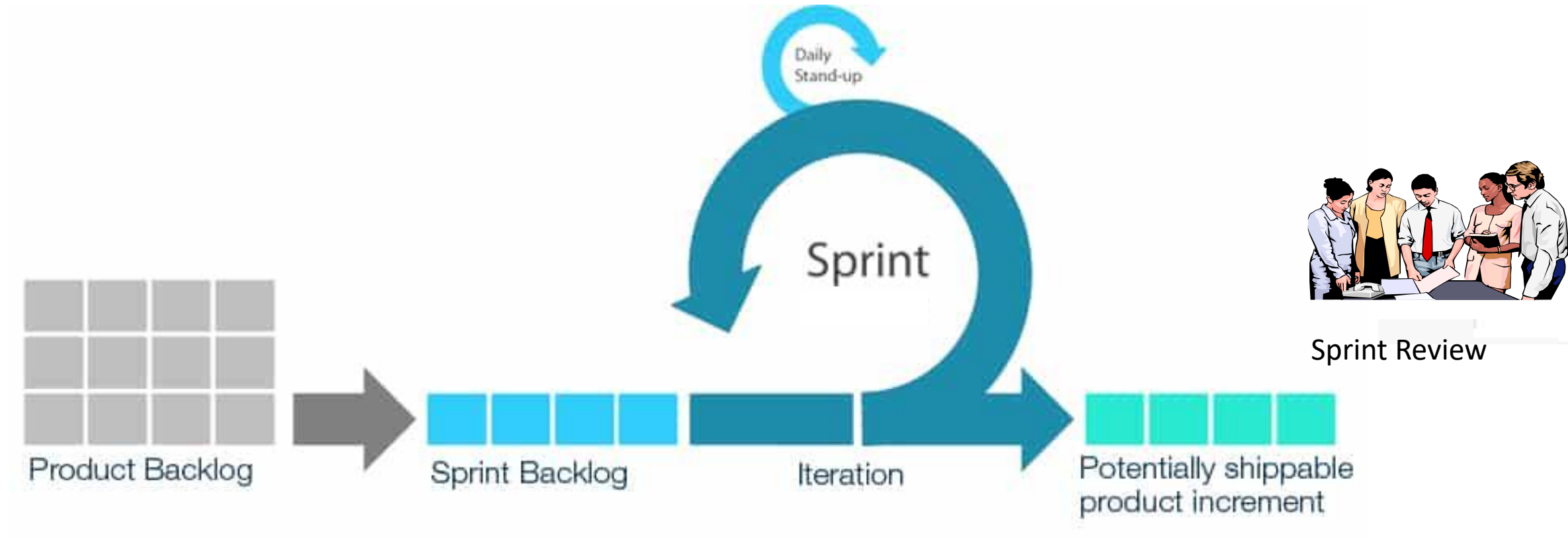
Sprint Summary



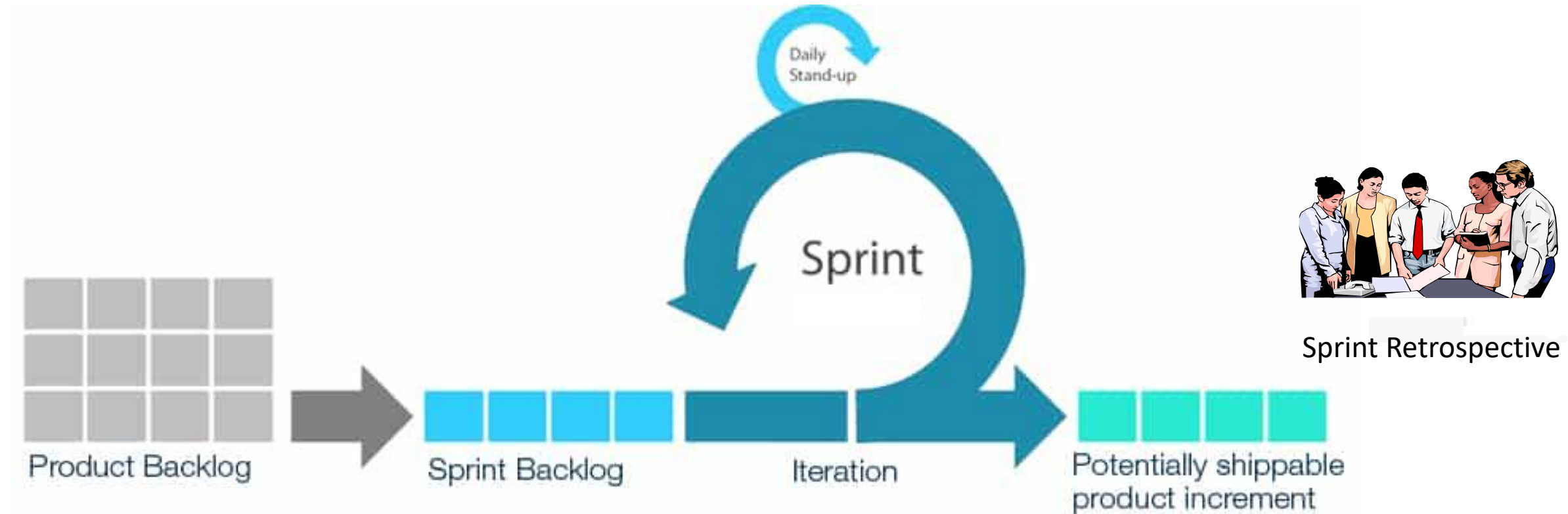
Sprint Summary



Sprint Summary



Sprint Summary



Deliverables

- At the beginning of each Sprint:
 - Stories in the sprint
 - Sprint backlog
 - Estimated!!!
 - The goal of the Sprint
- For each completed sprint
 - Performing review spring
 - The developed product
 - Show the sprint tracking results (one of the charts and task board)
 - Results of sprint Retrospective

Evaluation

- Picked stories and tasks should be run without any error same as a product.
- Ability to execute what is planned or most of it in the estimated time.
- Ability to manage the repository.
- Ability to manage the backlogs (product and sprint).
 - Trello, Gitlab.
- Planned documentation and tests for the tasks are done.
- «Sprint review» and «Sprint retrospective» are done.