

SCRUMBAN SIMULATION

A safe way to learn how to deal with
both planned and unplanned work
in an iterative approach.

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Scrum
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Scrumban: Setting the scene

Why Scrumban?



Will open a YouTube video

What is Scrumban?



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- Iterations
- Scrum roles
- Scrum meetings *
- Workflow
- Pull principle
- WiP limits

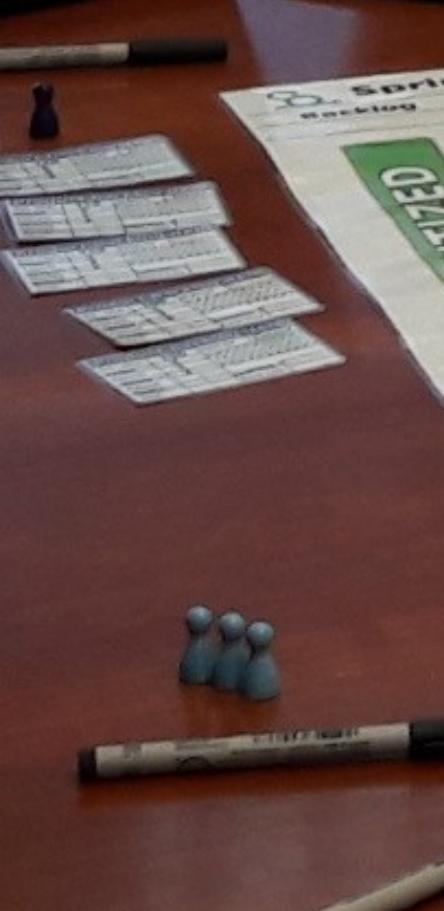


Scrum
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Scrumban simulation



Objective





Cards

| Product backlog item | |
|----------------------|-------------|
| Bus. value | 150 |
| MoSCoW | Must |
| Prepare | 3 |
| Execute | 4 |
| Validate | 2 |
| Planned | |
| Started | |
| Done | |
| Lead time | |
| Cycle time | |

| Unplanned work | |
|----------------|-------------|
| Priority | High |
| Investigate | 1 |
| Execute | 2 |
| Validate | 2 |
| Reported | |
| Started | |
| Done | |
| Lead time | |
| Cycle time | |

| Event | |
|---|--|
| You are ill. | |
| You are absent for the rest of the week | |

The board – planned work

| Sprint: 1 2 3 4 5 → | | Day Plan 1 2 3 4 5 6 7 8 9 10 Review/Retro | | | | | | | | | |
|---------------------|-------|--|---------|----------|------|--|--|--|--|--|--|
| Backlog | To do | Prepare | Execute | Validate | Done | | | | | | |
| | | WiP = | WiP = | WiP = | | | | | | | |
| ORITIZED | NNED | | | APPROVED | DONE | | | | | | |



The board – Unplanned work

| Reported | Accepted | Investigate | Fix | Validate | Solved |
|----------|----------|-------------|-----|----------|--------|
| | | | | | |

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Step by step explanation

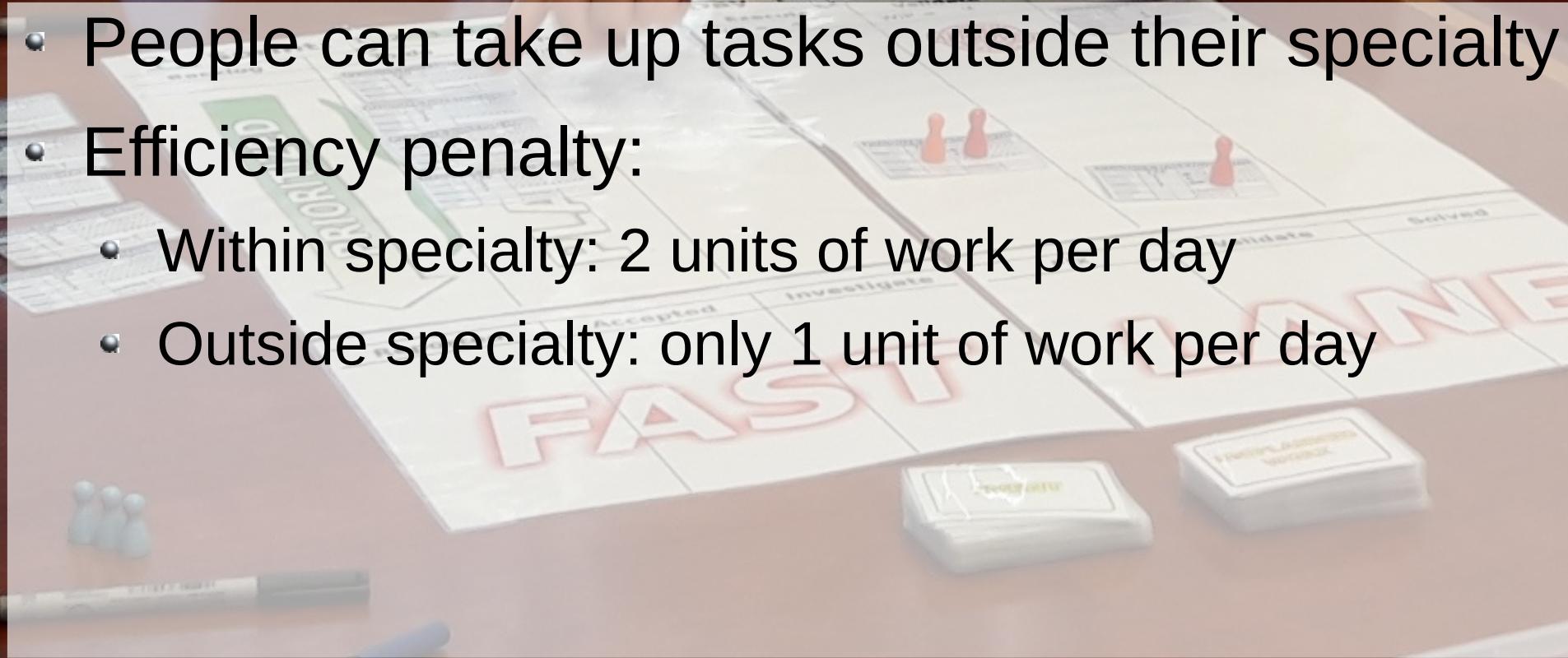


1. Preparation – Form a team

- Who will be the product owner?
- Who will do the execution work?
- Who will be more functional?
Combines prepare and validate tasks
- Or would you prefer 3 separate roles?
- Roles determine your team capacity

1. Preparation – Team & roles

- People can take up tasks outside their specialty
- Efficiency penalty:
 - Within specialty: 2 units of work per day
 - Outside specialty: only 1 unit of work per day



1. Preparation – WiP limits

- On activity level

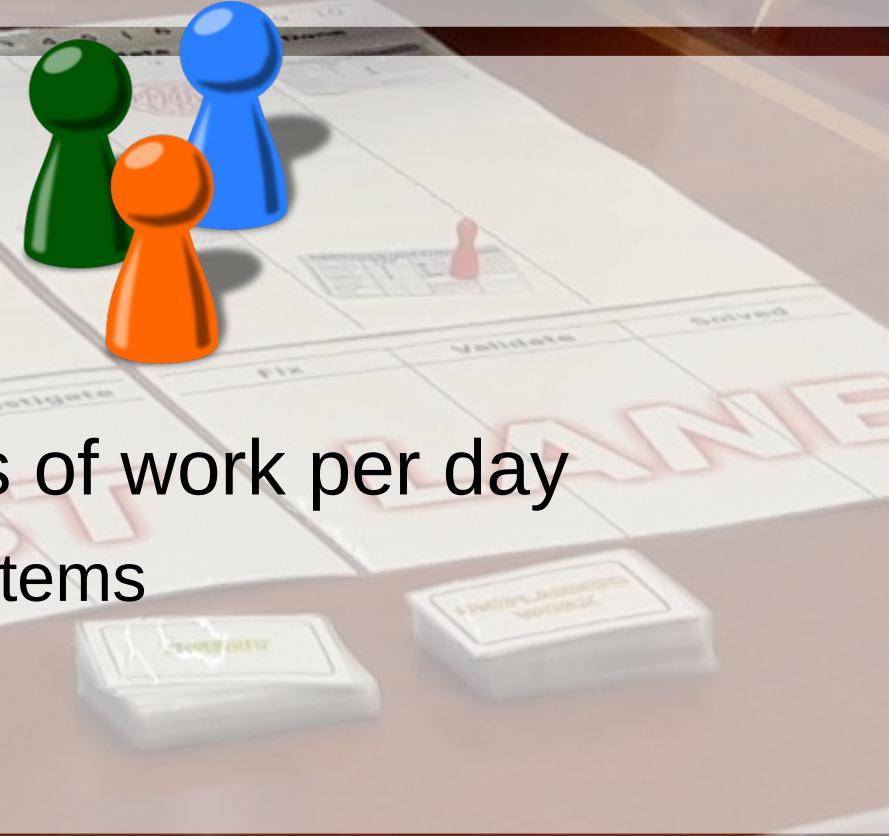
| Prepare | Execute | Validate |
|---------|---------|----------|
| WiP = | WiP = | WiP = |

- On individual level
3 pawns per team member



1. Preparation – WiP limits

- Why 3 pawns?
- A pawn is like an avatar
- Assign yourself to a task
- But you can only do 2 units of work per day
 - At most 2 different backlog items
- Extra pawn for e.g. events



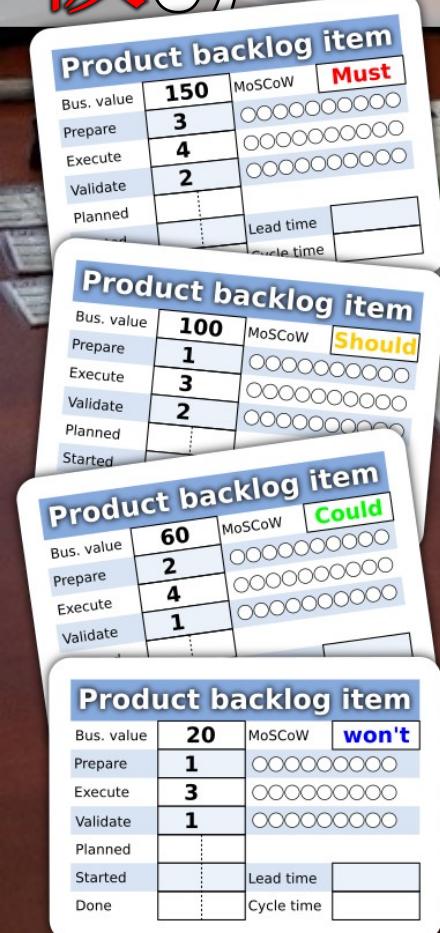
2. Prioritization

- Product owner decides priorities
- Puts the backlog items in the Backlog column
 - First set of most important items
 - Ordered by priority



2. Prioritization – How?

- MoSCoW score:
what is really important?
- Business value:
what gives the highest benefit?
- Workload:
what gives the fastest benefit?
- Combine criteria?



Product backlog item

| | | | |
|------------|-----|--------------|------|
| Bus. value | 150 | MoSCoW | Must |
| Prepare | 3 | oooooooooooo | |
| Execute | 4 | oooooooooooo | |
| Validate | 2 | oooooooooooo | |
| Planned | | | |
| Started | | | |
| Lead time | | | |
| Cycle time | | | |

Product backlog item

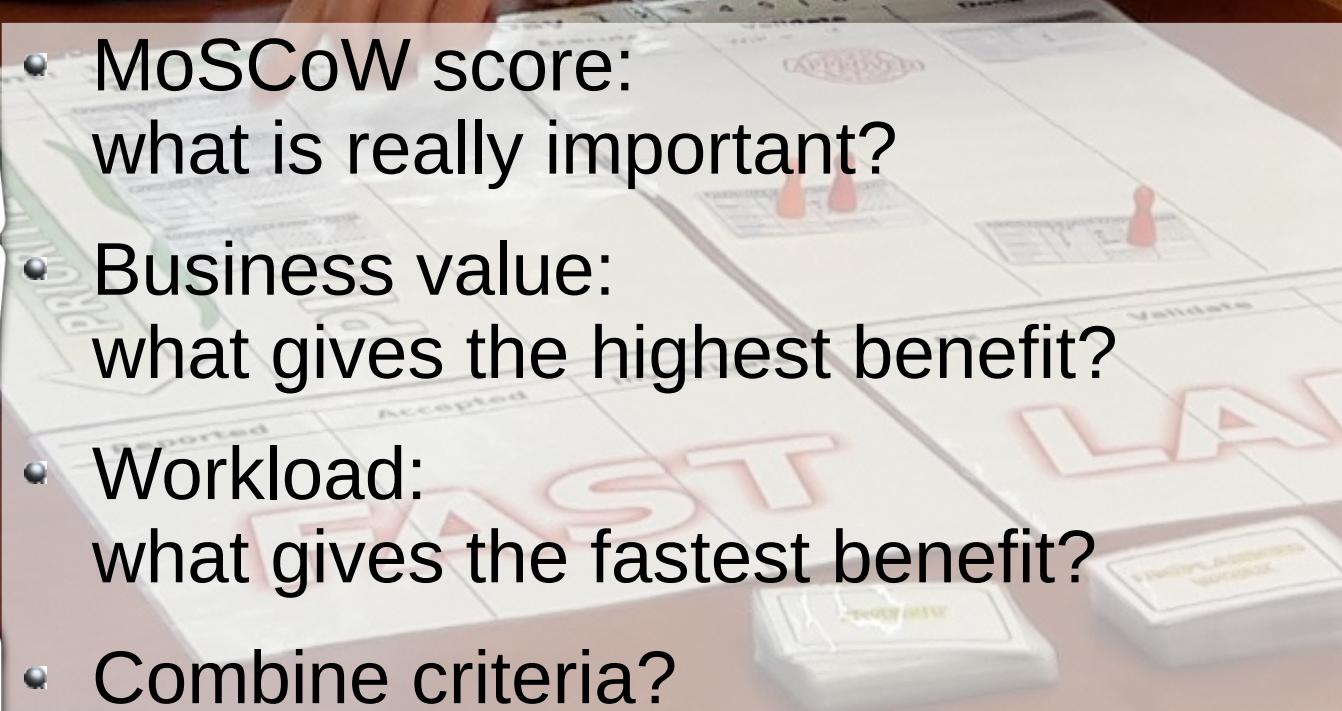
| | | | |
|------------|-----|--------------|--------|
| Bus. value | 100 | MoSCoW | Should |
| Prepare | 1 | oooooooooooo | |
| Execute | 3 | oooooooooooo | |
| Validate | 2 | oooooooooooo | |
| Planned | | | |
| Started | | | |
| Lead time | | | |
| Cycle time | | | |

Product backlog item

| | | | |
|------------|----|--------------|-------|
| Bus. value | 60 | MoSCoW | Could |
| Prepare | 2 | oooooooooooo | |
| Execute | 4 | oooooooooooo | |
| Validate | 1 | oooooooooooo | |
| Planned | | | |
| Started | | | |
| Lead time | | | |
| Cycle time | | | |

Product backlog item

| | | | |
|------------|----|--------------|-------|
| Bus. value | 20 | MoSCoW | won't |
| Prepare | 1 | oooooooooooo | |
| Execute | 3 | oooooooooooo | |
| Validate | 1 | oooooooooooo | |
| Planned | | | |
| Started | | | |
| Lead time | | | |
| Cycle time | | | |



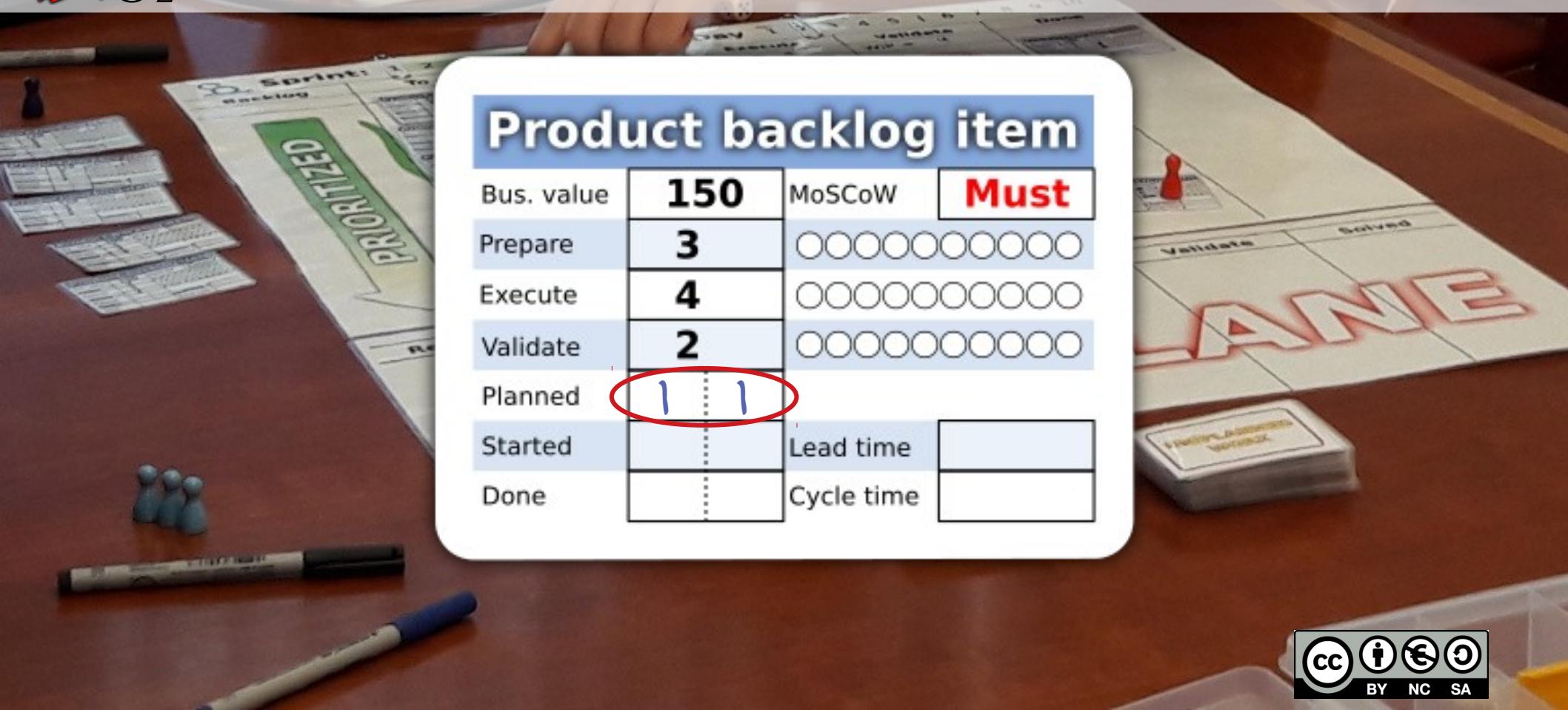
3. Planning

- Team determines capacity for next iteration
- Forecasts which backlog items they can implement according to capacity
- Move selected backlog items to To do column
- Now let the work begin...

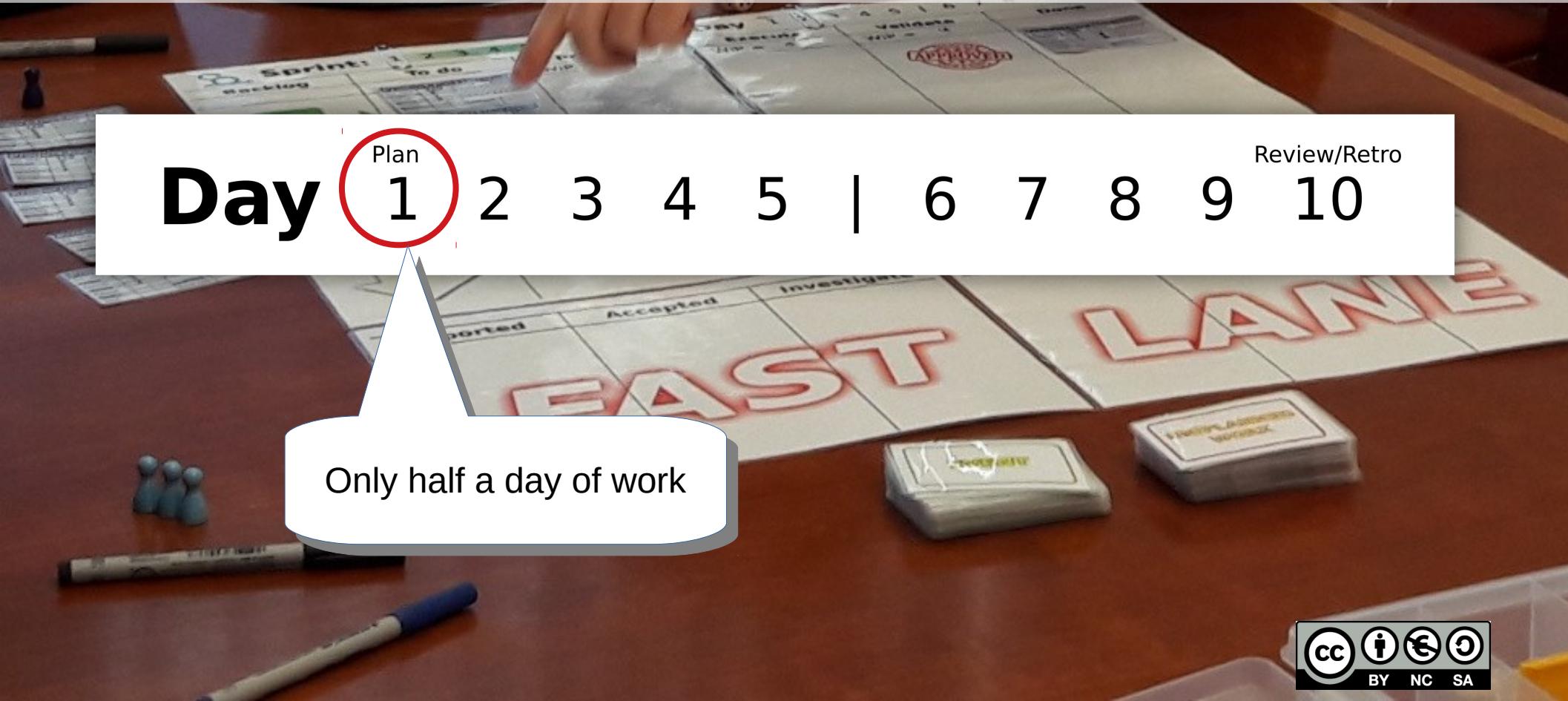
3. Planning – Capacity example

- Team of 2 functional and 2 technical members
- First day = $\frac{1}{2}$ capacity, 1 unit of work in specialty
- Last day = $\frac{1}{2}$ capacity, **only unplanned work**
- 8 days full capacity
- = 17 days functional + 17 day technical work
- = 34 unit of work functional + 34 technical
- - margin for unplanned work + unforeseen events!

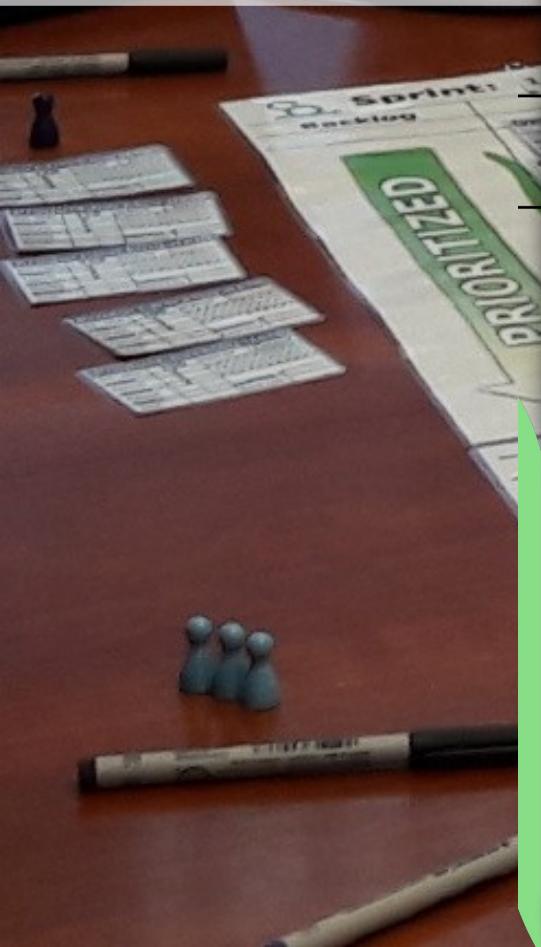
3. Planning – Advanced teams



4. Start working – first day



4. Start working



| To do | Prepare |
|-------|---------|
| | WiP = |

A photograph of a Scrum board with several Product backlog item cards. The cards have columns for Business value (Bus. value), MoSCoW priority (MoSCoW), and status (Prepare, Execute, Validate, Planned, Started, Done). Some cards also show Lead time and Cycle time. A large green arrow points from the 'To do' column towards the 'Prepare' column.

Product backlog item 1:
Bus. value: 150
MoSCoW: Must
Status: Prepare, Execute, Validate, Planned, Started, Done

Product backlog item 2:
Bus. value: 150
MoSCoW: Must
Status: Prepare, Execute, Validate, Planned, Started, Done

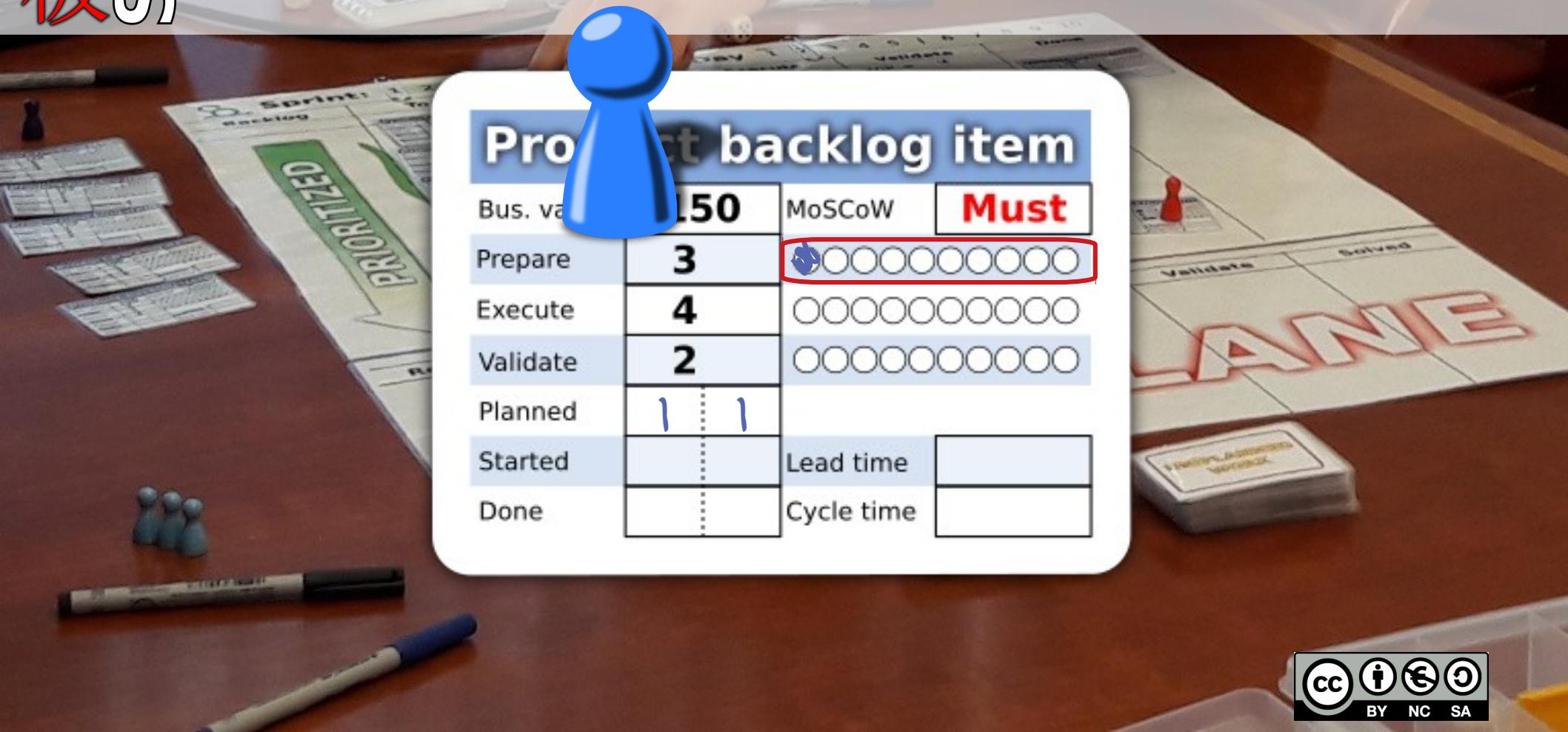
Product backlog item 3:
Bus. value: 150
MoSCoW: Must
Status: Prepare, Execute, Validate, Planned, Started, Done

Product backlog item 4:
Bus. value: 100
MoSCoW: Should
Status: Prepare, Execute, Validate, Planned, Started, Done

Product backlog item 5:
Bus. value: 100
MoSCoW: Could
Status: Prepare, Execute, Validate, Planned, Started, Done



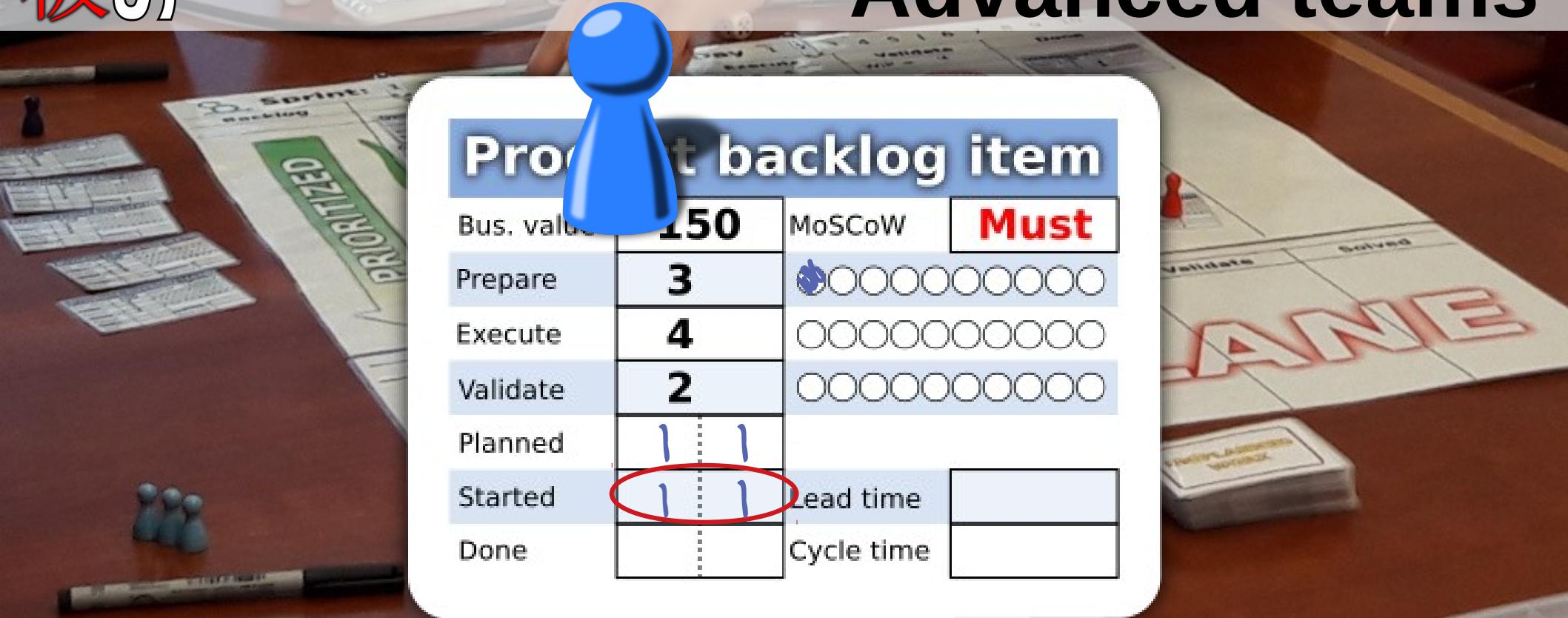
4. Start working



4. Start working



4. Start working Advanced teams

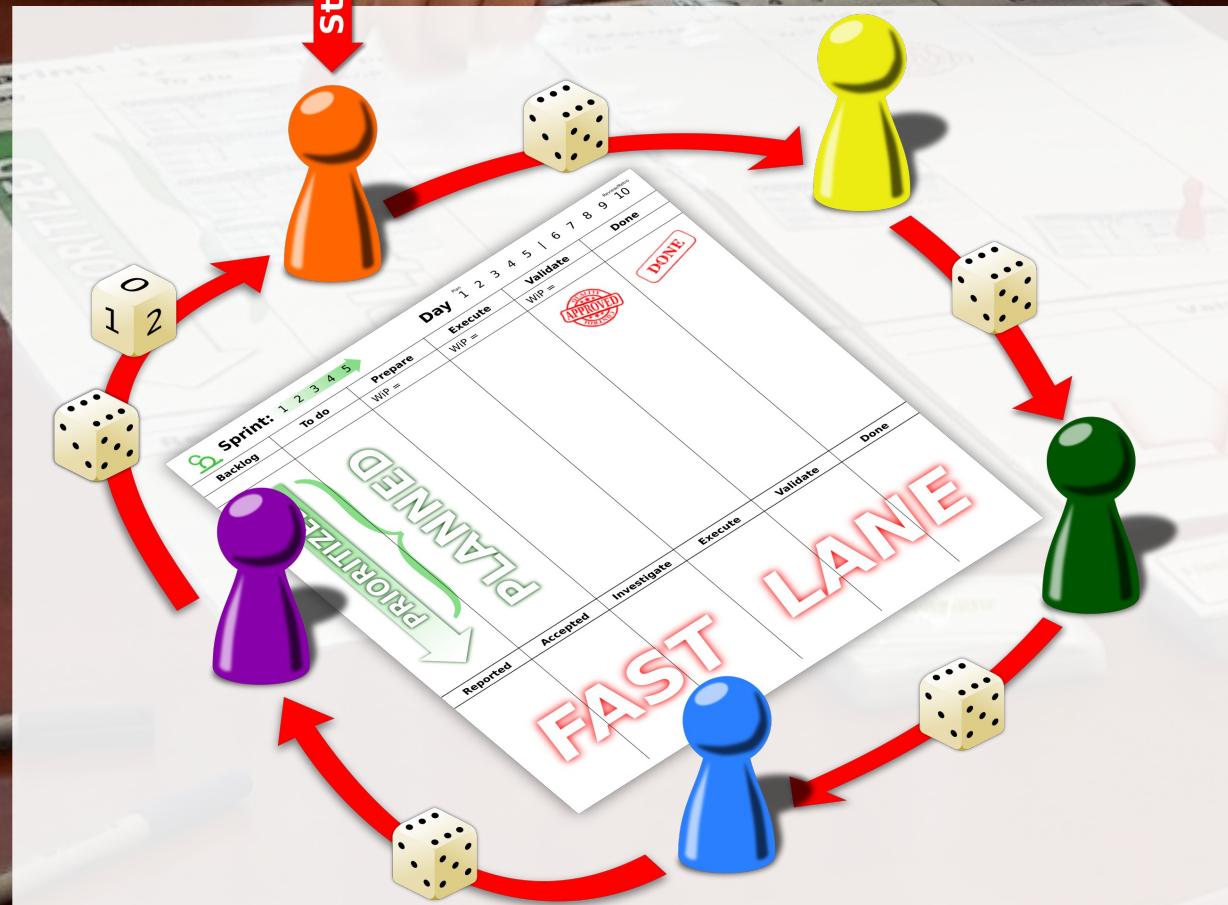




4. When an activity is done...

- You can remove your pawn
- Don't push items to the next stage
 - Pull the work
- Don't validate yourself what you implemented
 - Four eyes principle

5. Play in rounds





5. After each participant's round

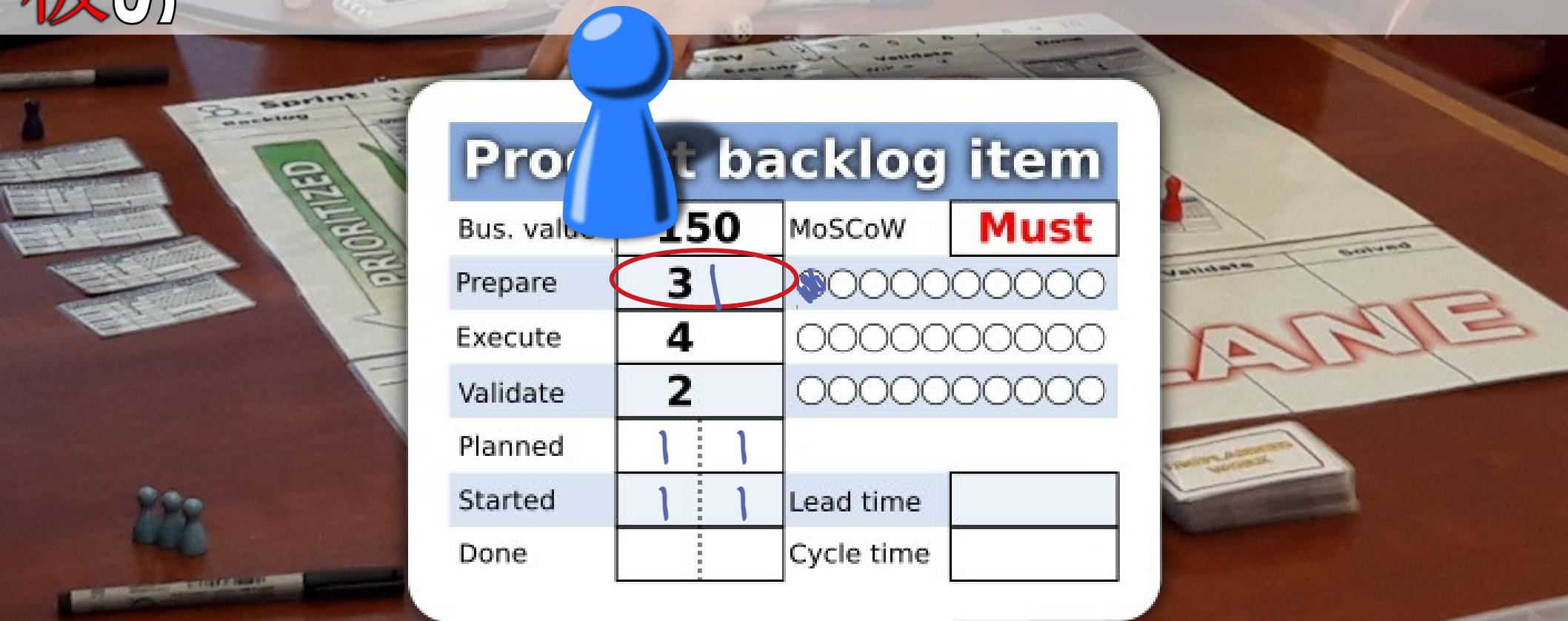
- Evolving insight - use the normal dice
 - 1: increase workload with 1 unit
 - 2: no action
 - 3: no action
 - 4: take an event card
 - 5: block item you last worked on
 - 6: unblock any blocked item



5. Why evolving insight?

- Something can take longer than expected
- You may need to wait for someone/something (a decision?)
- Or the opposite – something got clarified
- Something unforeseen can just happen (events)

5. Increase workload



5. Blocked item



6. End of day

- Use the Unplanned work dice
 - 0: lucky you – no unplanned work
 - 1: take 1 unplanned work card
 - 2: take 2 unplanned work cards
- Product owner decides what to do
 - Act immediately, plan or park



6. Accepting unplanned work

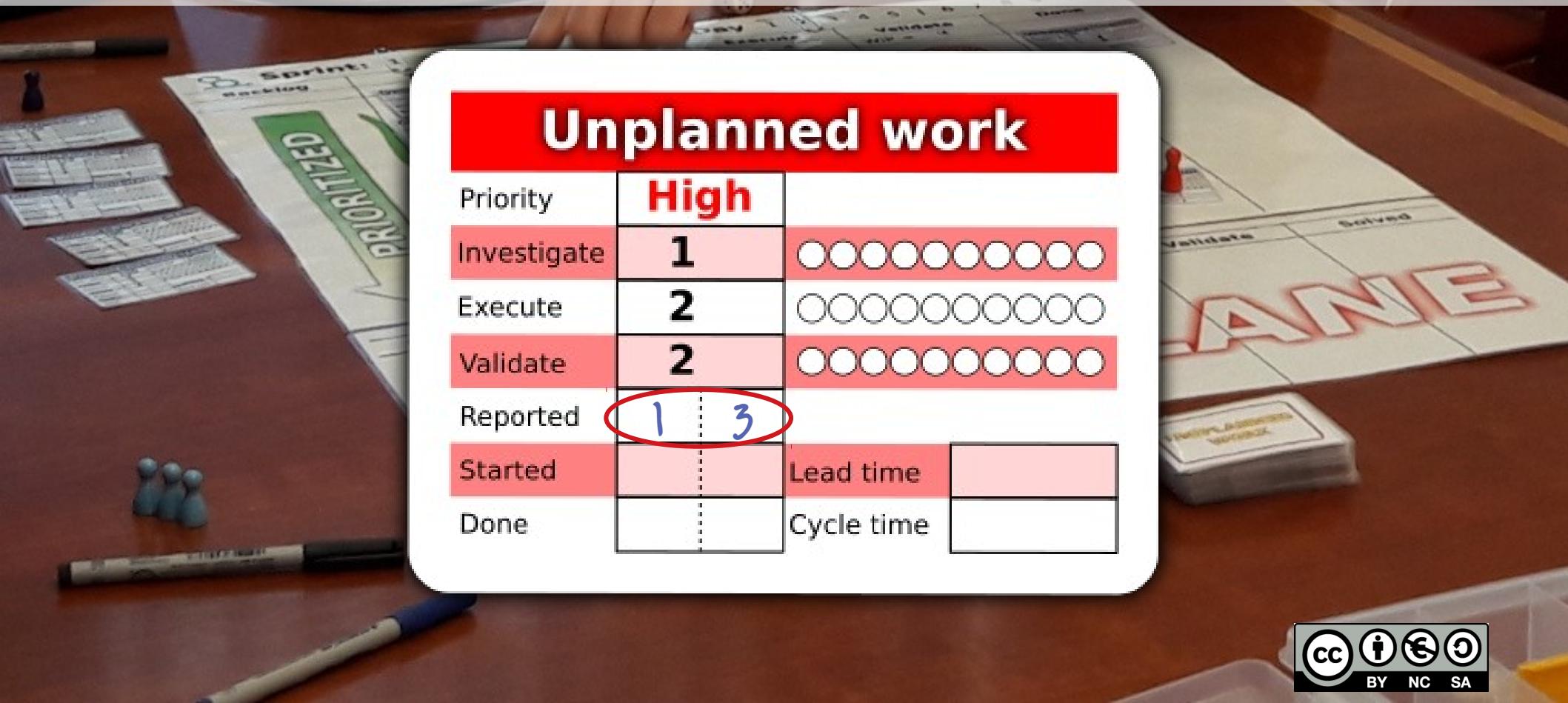
The image shows a ScrumBoard SIM game board. On the left, there's a row of cards labeled "PRIORITYIZED". In the center, a large white box contains two columns: "Reported" and "Accepted". Each column has three cards labeled "Unplanned work". A green arrow points from the "Reported" column to the "Accepted" column. The "Accepted" column has a large red "FAS" watermark. The background shows a real-world ScrumBoard setup with a keyboard, pens, and a notepad.

| Priority | High | Priority | High | Priority | High |
|-------------|------|------------|------|------------|------|
| Investigate | 1 | Validate | 2 | Validate | 2 |
| Execute | 2 | Reported | | Reported | |
| Validate | 2 | Started | | Started | |
| Reported | | Lead time | | Lead time | |
| Started | | Cycle time | | Cycle time | |
| Done | | Done | | Done | |

FAS

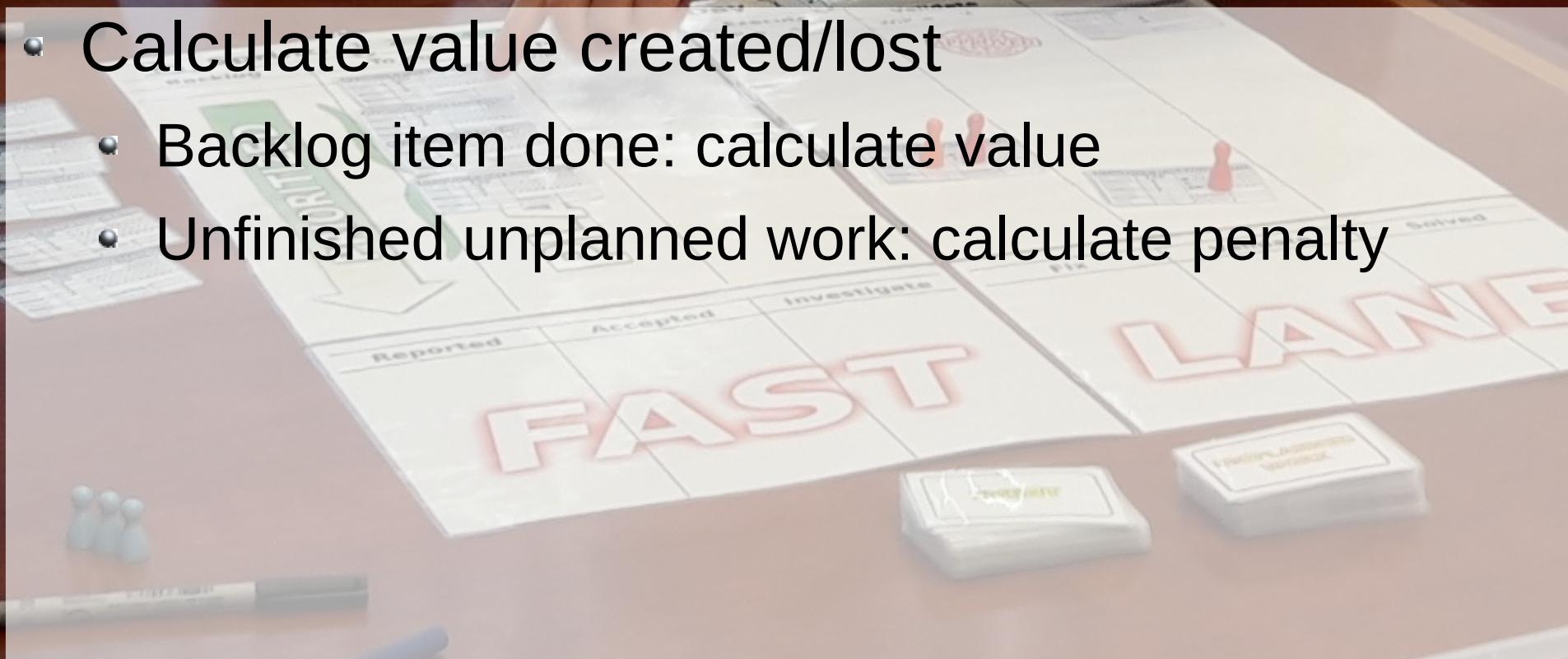
6. Unplanned work

Advanced teams



6. End of day

- Calculate value created/lost
 - Backlog item done: calculate value
 - Unfinished unplanned work: calculate penalty



6. Create value

Product backlog item

| | | | |
|------------|-----|------------|------|
| Bus. value | 150 | MoSCoW | Must |
| Prepare | 3 | ○○○○○○○○○○ | |
| Execute | 4 | ○○○○○○○○○○ | |
| Validate | 2 | ○○○○○○○○○○ | |
| Planned | | | |
| Started | | Lead time | |
| Done | | Cycle time | |

Business value x multiplier:
Must have: business value x 2
Should have: business value x 1
Could have: business value x 0,5
Won't have: business value = 0

6. Loose value

Penalty per day for not finishing unplanned work:
-1 for low priority
-10 for medium priority
-50 for high priority

Unplanned work

| | High | |
|-------------|------|------------|
| Investigate | 1 | ○○○○○○○○○○ |
| Execute | 2 | ○○○○○○○○○○ |
| Validate | 2 | ○○○○○○○○○○ |
| Reported | | |
| Started | | Lead time |
| Done | | Cycle time |



Value creation

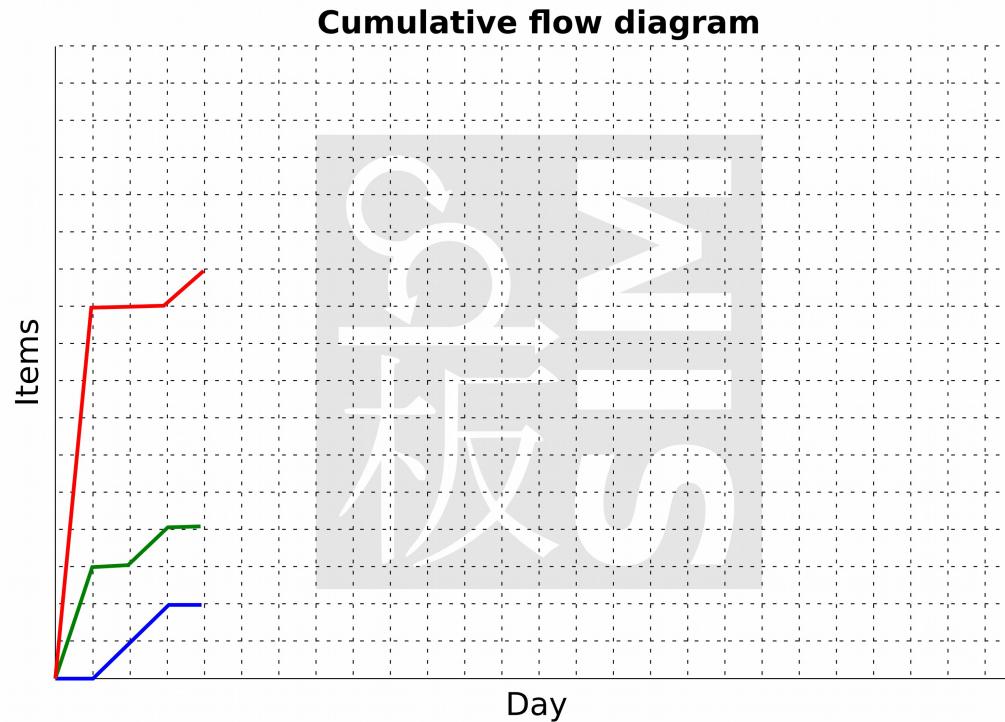
Team name:

| | Iteration 1 | Iteration 2 | Iteration 3 | Iteration 4 | Iteration 5 |
|-------|-------------|-------------|-------------|-------------|-------------|
| Day 1 | | | | | |
| Day 2 | | | | | |
| Day 3 | | | | | |
| Day 4 | | | | | |
| Day 5 | | | | | |
| Day 6 | | | | | |

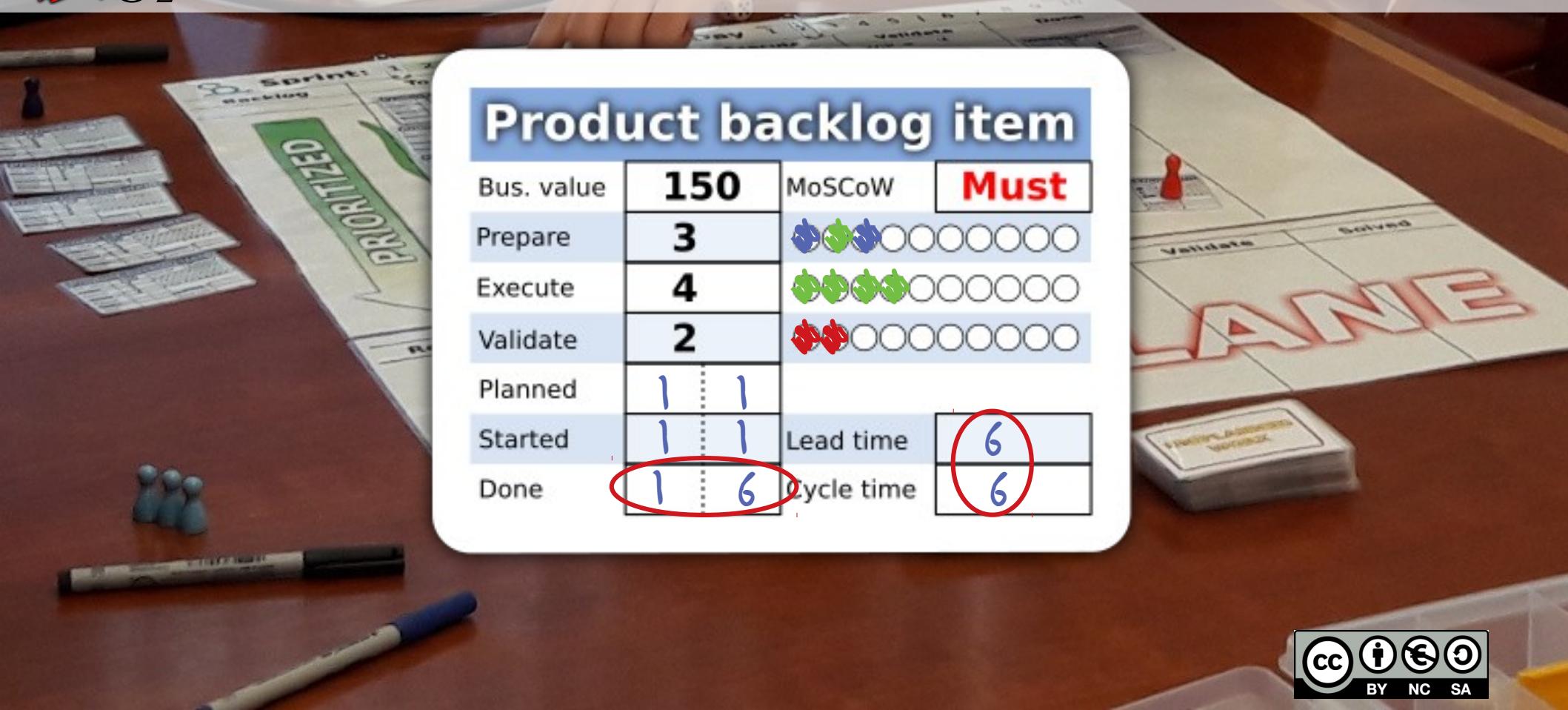
6. End of day

Advanced teams

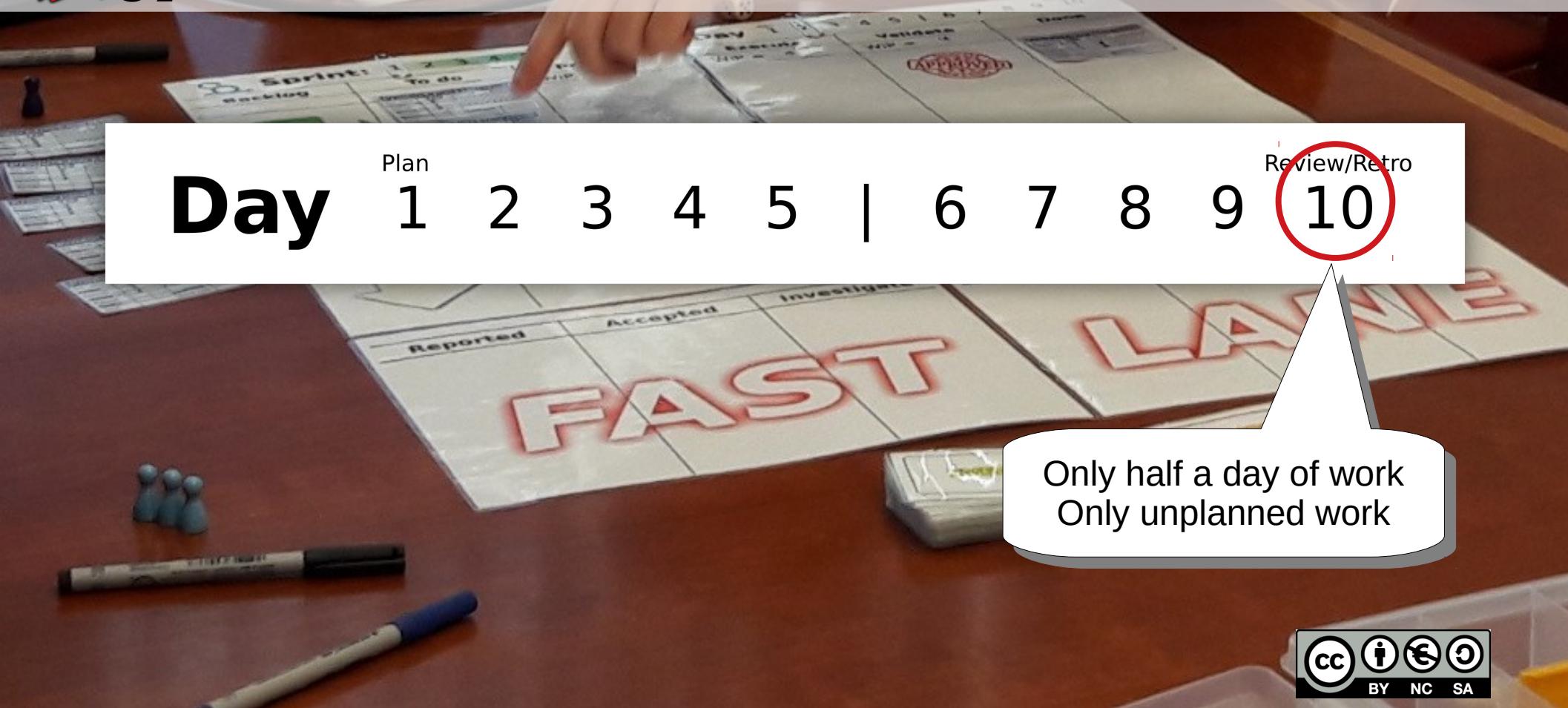
- Update cumulative flow diagram



7. Item done – advanced teams

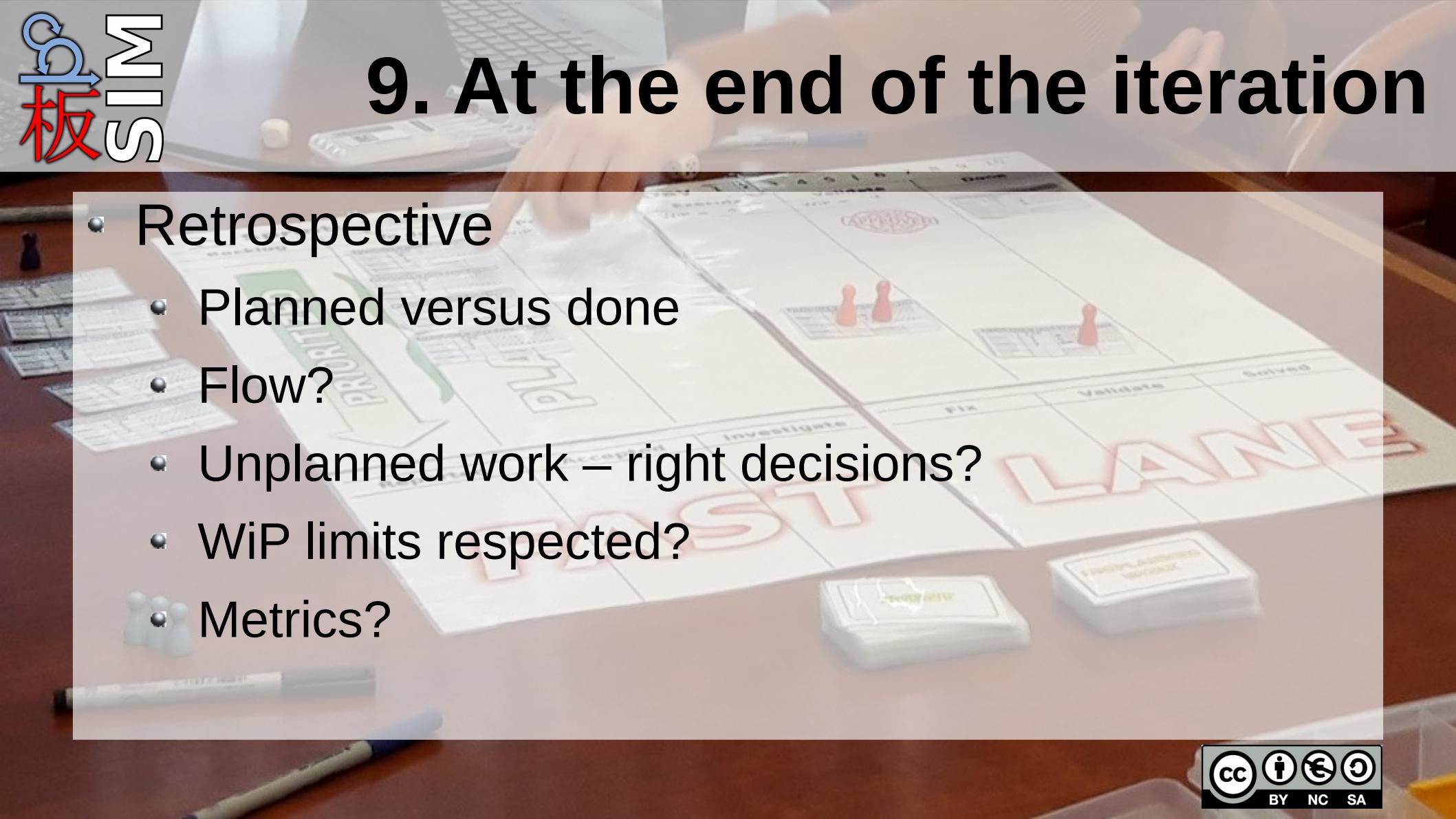


8. Last day of the iteration



9. At the end of the iteration

- Retrospective
 - Planned versus done
 - Flow?
 - Unplanned work – right decisions?
 - WiP limits respected?
 - Metrics?



Scrum Board

Enjoy the simulation!



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Debrief – What did you learn?