



TEAM FLOW MODULE

#theBestToStart
#Recommended #EnterpriseAgility
#Lean #new way
#NICE to learn
#FLOW #Agile
#Simulations



June 2017

Version 1.0

WELCOME



Thank you very much for acquiring Okaloa Flowlab to experience flow in a realistic but safe-to-fail work environment!

This slide deck contains following sections that will help you understand how to best use the material to get the most value out of Okaloa Flowlab when facilitating a workshop:

- **Introduction** – explaining the why and philosophy behind the simulations
- **The material** – overview of material included in the set
- **The quick, standard and advanced simulations** – background information and explanation on how the simulations work (set-up, rules, policies); guidelines on how to introduce and debrief the simulations
- **Questions and answers** – examples of typical questions participants could ask with suggested answers, list of Q&A asked by other facilitators
- **What's next** – description of the extended “Enterprise” Okaloa Flowlab set and examples of more advanced simulations and options
- **Acknowledgement**

TEAM FLOW - OBJECTIVE

producing outputs
following a plan



specialist workers
management push

#OkaloaFlowlab
#theBestToStart #Agile
#NICE #new way
#Lean to learn
#EnterpriseAgility



TEACHING
FLOW
THINKING



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INTRODUCTION



Watch our
intro video

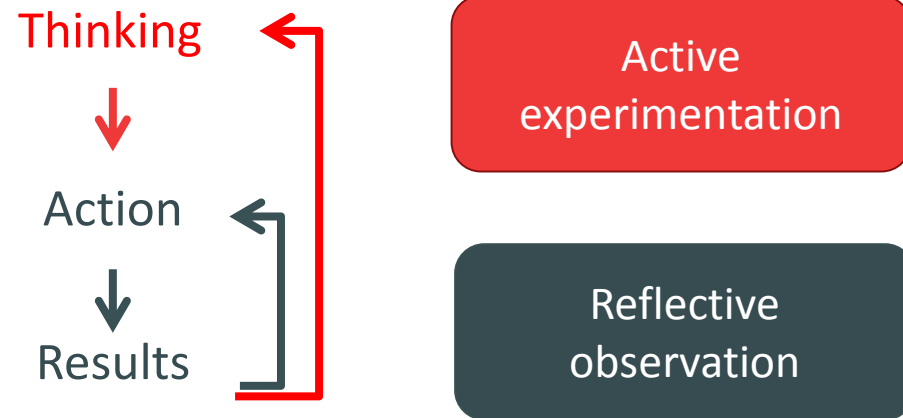
Agility is a mindset. It is not a set of practices that can be installed. But how do you get out of the practices trap, especially when you have to mobilize not just software development and IT teams but the entire organization towards business agility where value is created through meaningful work? How do you engage business teams, users and customers? How do you enable higher levels of collaboration, not just within teams but also across teams? In other words, how do you get individuals, teams and even the entire organization into a flow state where everybody is doing the right thing at the right time by having the right conversation? Rational explanations and models of agility will only go so far. To be truly effective, the agile mindset needs to be experienced, which is exactly the purpose of Okaloa Flowlab.

Through simulating a conventional work environment that reflects a mechanistic mindset characterized by a focus on resource efficiency, command and control and specialist workers, participants experience which roadblocks need to be overcome. As the team is taking its first baby steps into agile, they will experiment (in 2 or 3 rounds) with policies and practices (e.g. pull of work, cadences, limiting WIP) that enable collaboration, get the team into flow, and allow an agile mindset to emerge. Weaved into the simulations they will discover the fundamental difference between resource efficiency and flow efficiency.

SIMULATIONS, NOT A GAME

By using Okaloa Flowlab, you step into the flight simulator for experiencing and practicing agility in a safe-to-fail environment. It differentiates itself from other lean agile games by the fact that the focus is on learning and not on winning a game. Okaloa Flowlab is a learning tool that should be weaved into your course material so that practice and theory can interchange. Built on the premise that experience must come before theory, with Okaloa Flowlab you do experiments through board-play style simulations that reflect real work environments.

ACTIVE LEARNING



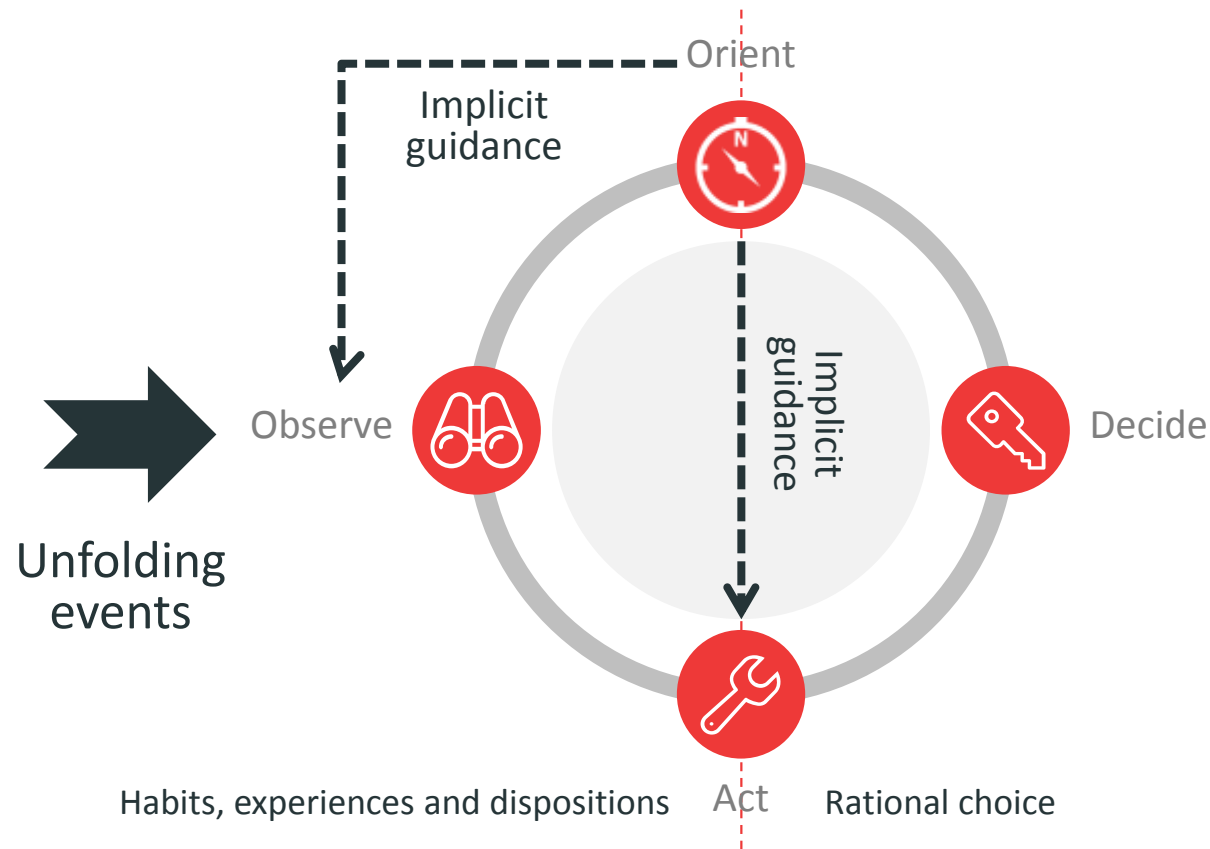
Every set of Okaloa Flowlab is played in different rounds of simulations. The **standard play** typically exists out of **2 rounds of simulation**. The 1st round simulates the current way of working (starting from a pre-defined business scenario); in the 2nd (and 3rd in case of an advanced play) round, the participants will define under the guidance of the facilitator an experiment to improve the current situation.

The goal with Okaloa Flowlab is to let participants discover a new way of thinking integrating science and experience. Our aim is to provide a learning tool that allows participants to learn new techniques to handle change and adaptation:

- reflective observations (Observe–Orient–Decide–Act) – after the 1st round participants will be asked to make observations in order to analyze what impedes flow
- active experimentation (Plan–Do–Check–Adjust) – based on these observations, participants will then be asked to define experiments and hypotheses

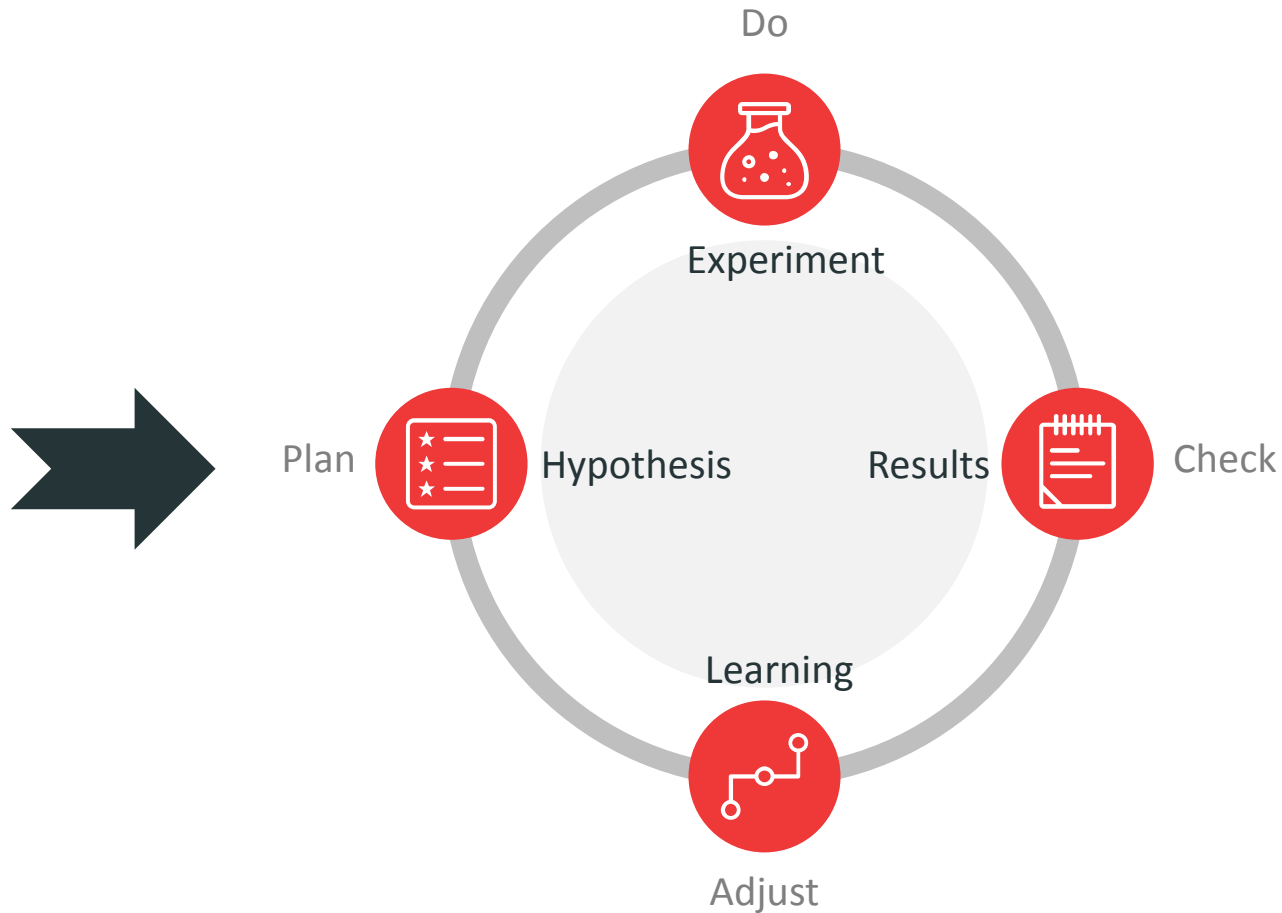
1ST ROUND – REFLECTIVE OBSERVATION

OODA LOOP



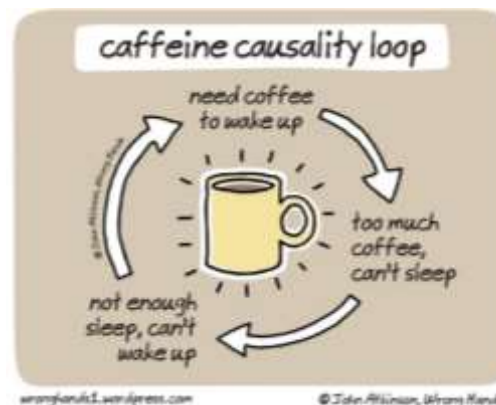
2ND ROUND – ACTIVE EXPERIMENTATION

PDCA LOOP



FLOW AND CAUSAL LOOPS

Flow and organizational resilience are the foundation for business agility. Flow, in one sense, is the creation of value through meaningful work. In another sense, it is the state that is characterized by clear purpose, total engagement and great situational awareness. Resilience is the study of how a system responds to a perturbation. Organizational resilience is the study of how organizations respond to change. The essence of resilience is to understand the causal loops that keep the system self-organizing. Causal loops can keep a system in an undesirable state, or they can keep a system in a desirable state. They are important to understand how to bring a system from one state to another. Flow - or the absence of flow - can be understood through a set of causal loops. Understanding of these causal loops can help to understand how to bring people, teams or even entire organizations into a state of flow. With Okaloa Flowlab you will be able to explore these causal loops.





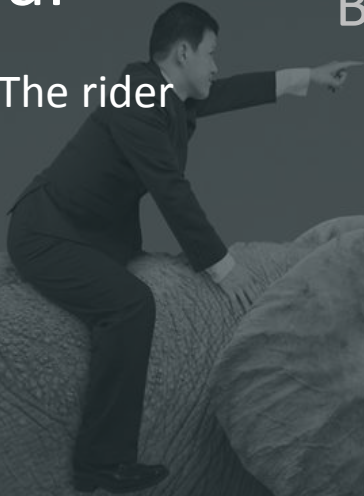
Watch our
intro video

OKALOA FLOWLAB

Because Flow must be experienced

rational
brain

The rider



intuitive
brain

The
elephant



Engage the intuitive as well as
the rational brain

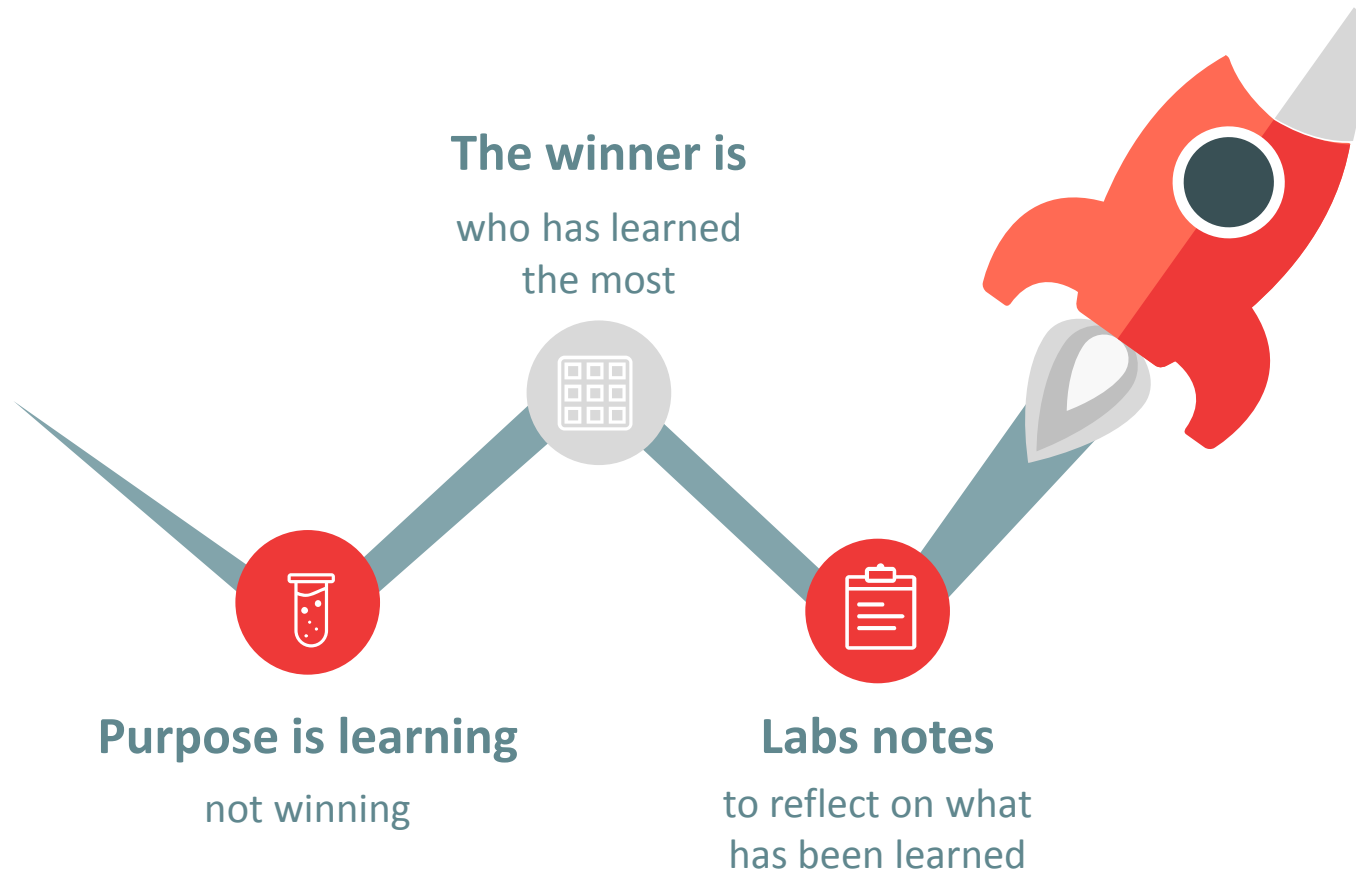


Quickly iterate between theory
and practice



Explore current and future
way of working in a safe
environment

LEARNING THROUGH SIMULATION



OKALOA FLOWLAB APPROACH

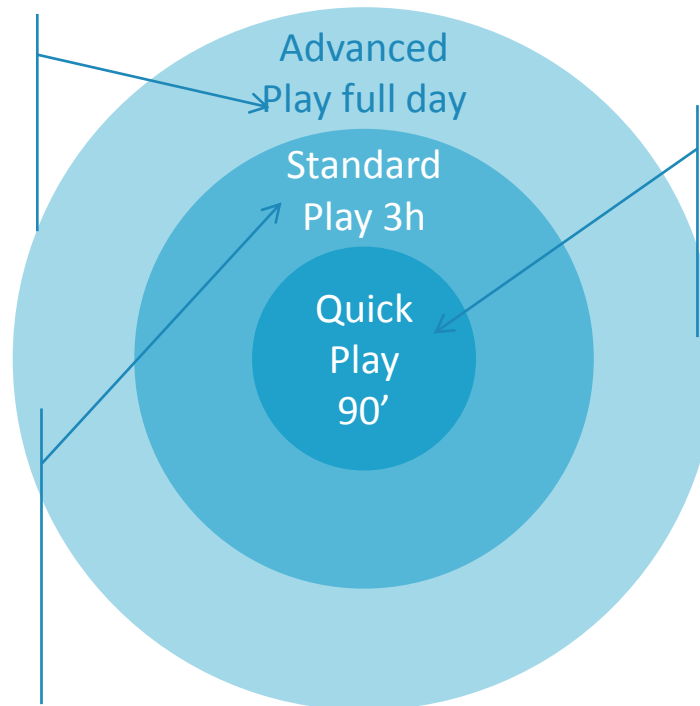
Okaloa Flowlab is a simulation environment that forms the backbone of your own workshop(s) whereby practice/experience comes before the theory. With Okaloa Flowlab, we are offering the material with which you can define your own workshop. In this guide we provide two scenarios of how to use Okaloa Flowlab. You are welcome to produce your own slides out of this guide provided that you respect the copyrights. Read our [terms and conditions](#) for more information.

LEARNING GOALS FOR PARTICIPANTS

Typically you run the simulations with 3-5 people around the board (ideally 4 people and 1 person taking up the role of project coordinator or leader). You can either run 2 or 3 rounds of simulation (i.e. quick, standard or advanced play) depending on how much time you have and what exactly it is that you want the attendees to experience.

- Standard play learning goals
- Additional specific learning goals that you want to address

- Quick play learning goals
- Flow metrics and Little's law
- Causal loops that underlie the organization of work
- Active learning loops (OODA and PDCA) and doing sound experiments



- Basics of flow thinking
- Understand the difference between resource efficiency and flow efficiency
- Understand how to improve (business) agility

*The **quick play** and **standard play** can also be used during a coaching session; with the **advanced play** you could run a full day workshop that is tuned towards your own needs.*

ADVISED LEVELS OF EXPERTISE FOR FACILITATION

As a facilitator of Okaloa Flowlab we expect that you are comfortable with facilitating workshops.

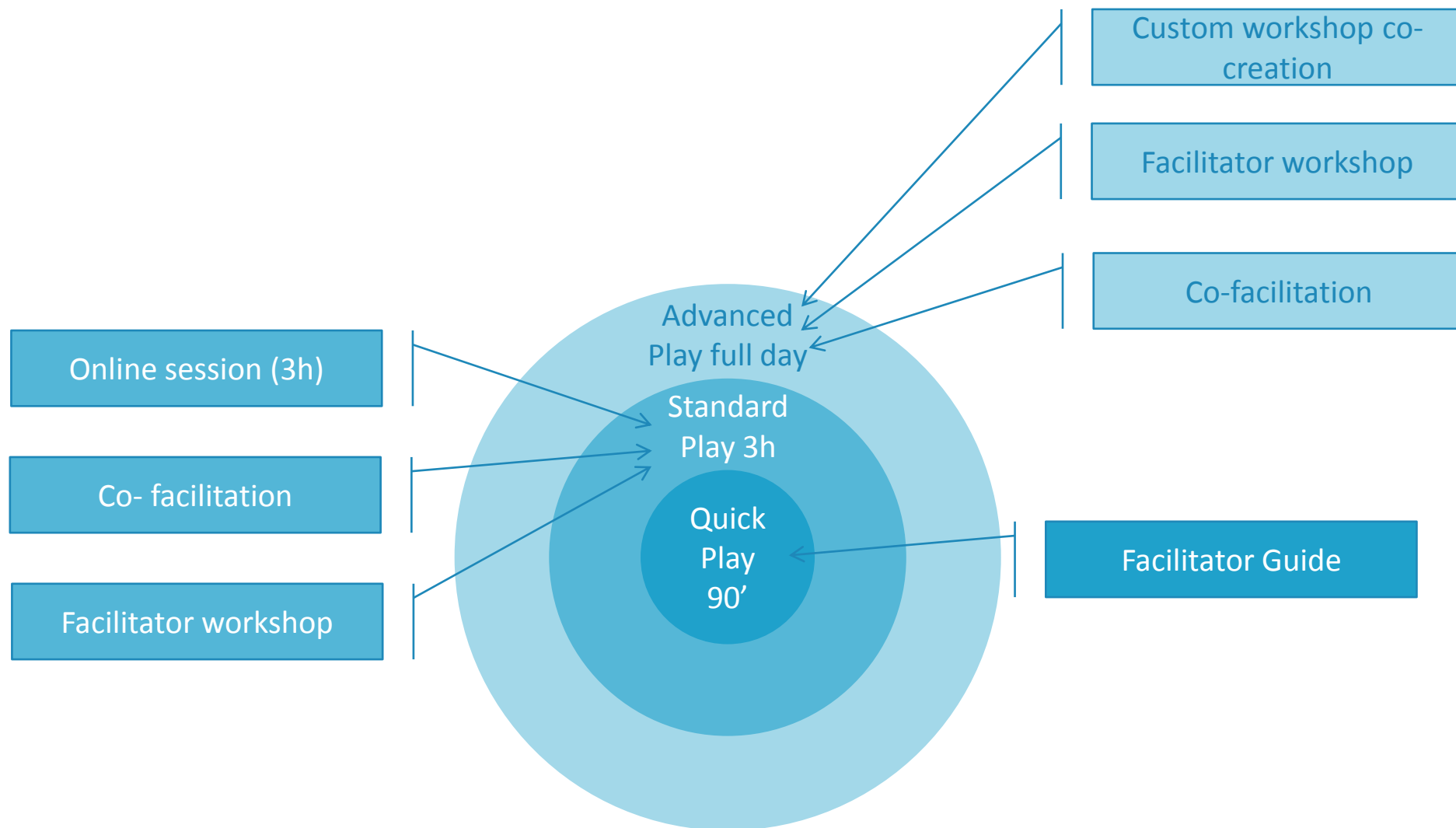
To run a **quick play** you need have experience with Scrum and/or Kanban and it is advised to have an understanding of flow thinking. We recommend to get familiar with the work of Niklas Modig: “[This is lean](#)”. We believe that this is key in order to be successful with using Okaloa Flowlab in your workshops. Here is a link to an introductory Ted talk of him about “[The efficiency paradox](#)”.

For the **standard play** you need to be an active lean agile practitioner. You need to have decent knowledge of flow metrics and know how to use them in practice: leadtime, CFD, Little’s Law, flow efficiency (reference work: “Principles of Flow”, by Donald Reinertsen). We also recommend to familiarize yourself with causal loops (Systems Thinking; Peter Senge). Furthermore, having knowledge about how to define and validate hypothesis as part of active learning (OODA/PDCA) is required (ref. John Boyd and W. Edwards Deming).

In order to run a full day workshop (**advanced play**) with Okaloa Flowlab you need to be able to embed the simulation material into your own course material whereby simulations and theory interchange with each other. This might require the ability to tune the simulations to your own needs. In this case, we encourage you to familiarize yourselves with the different simulations and extensions* so that you can broaden your experience and extract your own workshop material out of it.

* e.g. quality simulation, bottleneck, and capacity allocation – will be made available Fall 2017; some variants are developed by our contributor’s network; we encourage you to participate in that network.

ADVISED LEARNING PATH



ONLINE COACHING SESSION

Through our slack channel you will be able to ask questions, receive and submit feedback or simply get in touch with us, Okaloa Flowlab beta testers and other users. At the time of purchase you should have been invited. If this was not the case, please send an e-mail to info@okaloa.com.

In case you need more elaborated assistance, we can offer you an online on-boarding session to get you up to speed with the material and the approach. We will explain the simulations in detail and answer your questions regarding using the material for facilitation purposes. Typically such a session takes up to 3-hours (Price : see website).

OKALOA FLOWLAB FACILITATOR'S WORKSHOP

To become more skilled and proficient with Okaloa Flowlab, we recommend to attend one of our facilitator's (train-the-trainer) workshops. We will shorten the time needed for you to:

- become an experienced flow thinker,
- learn all you need to know about causal loops (systems thinking), and
- practice reflective observation and active experimentation (OODA/PDCA).

The Okaloa Flowlab facilitator workshop is run in the spirit of co-creation. Not only will you learn from the creators of Okaloa Flowlab how to best facilitate Okaloa Flowlab, introduce and debrief the different simulations and be creative with it, you will also be exposed to the “Enterprise set” featuring cross-team, upstream and end-to-end flow. Participants are encouraged to jointly explore workshop scenario's and how to best facilitate Okaloa Flowlab workshops.

A list of facilitator's workshops will become available after summer 2017.

Check some [testimonials](#) about the facilitator workshop.

CO-FACILITATION

Co-facilitation is highly recommended as a means to get familiar with, or further hone your skills to facilitate Okaloa Flowlab workshops. We recommend co-facilitation with peers as well as with Okaloa Flowlab creators and/or contributors. In all cases you remain responsible for organizing and marketing your workshops.

CUSTOM CO-CREATION

See slide [p 160](#).

DOMAIN INDEPENDENT

Team Flow is created such that it can be used in any business domain; the simulations lend themselves very well to be played with diversified teams (e.g. we have good experience with IT and business teams participating the same workshop; it stimulates a common language and allows them to reach a mutual understanding of underlying problems).



Check out our user [testimonials](#) and reach out to other users for more information (use the Okaloa Flowlab Slack channel).



DO NOT FORGET TO READ THE



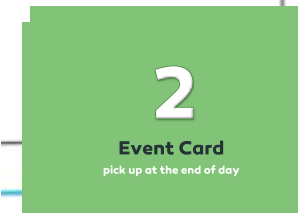
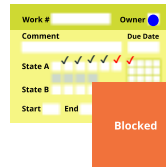
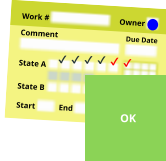
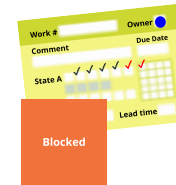
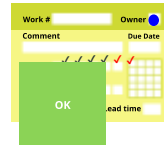
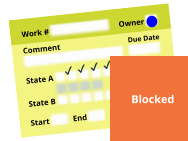
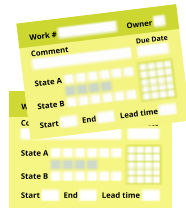
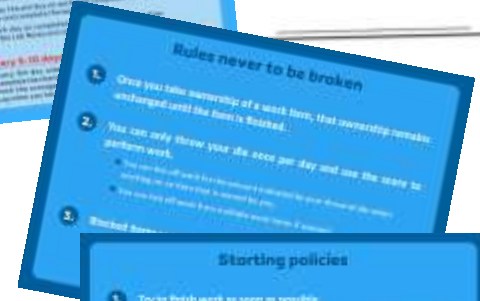
QUESTIONS AND ANSWERS SECTION!

[Click
here](#)

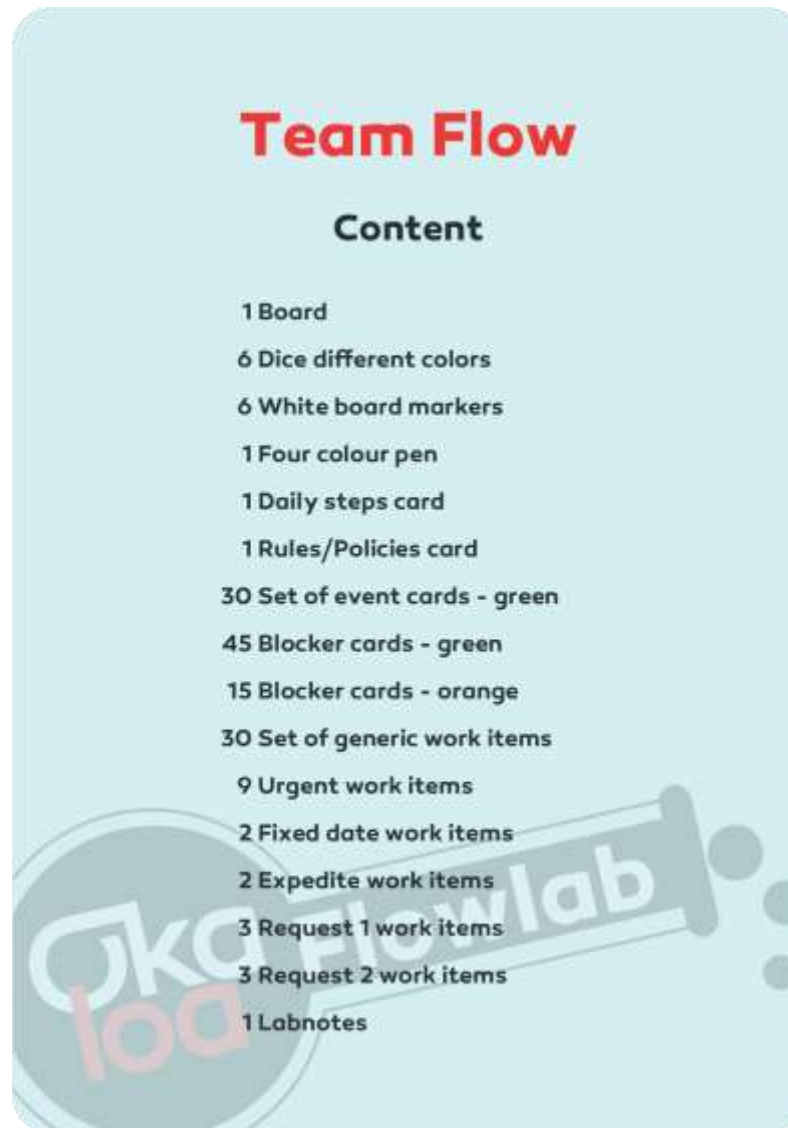
Material used for Team Flow simulations



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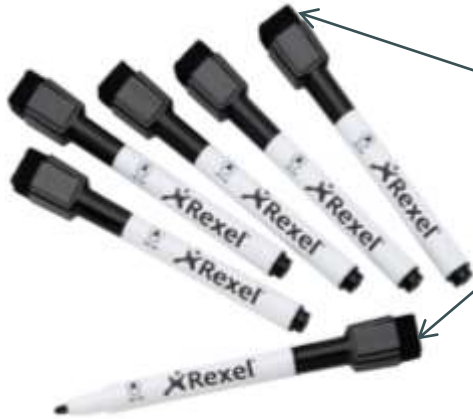


What is in the box



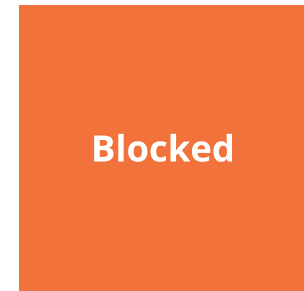
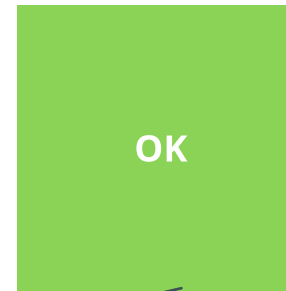
Each piece of material will be addressed in the following section when the mechanism of the simulations is explained.

What is in the box cont.



The included white board markers contain a wipe. This wipe works sufficient for wiping the cards.

The blue and purple marker appear almost the same when you tick off work on the cards so if possible avoid to use them together.



The 2 set of blocker cards needs to be mixed and shuffled very well (make sure that each round they are well shuffled!).



The set includes 1 bloc note, if needed you can order extra copies by sending e-mail to info@okaloa.com.

Cleaning the board

If you want to keep your board clean, we recommend that after each usage you immediately clean the board with a whiteboard cleaning kit.



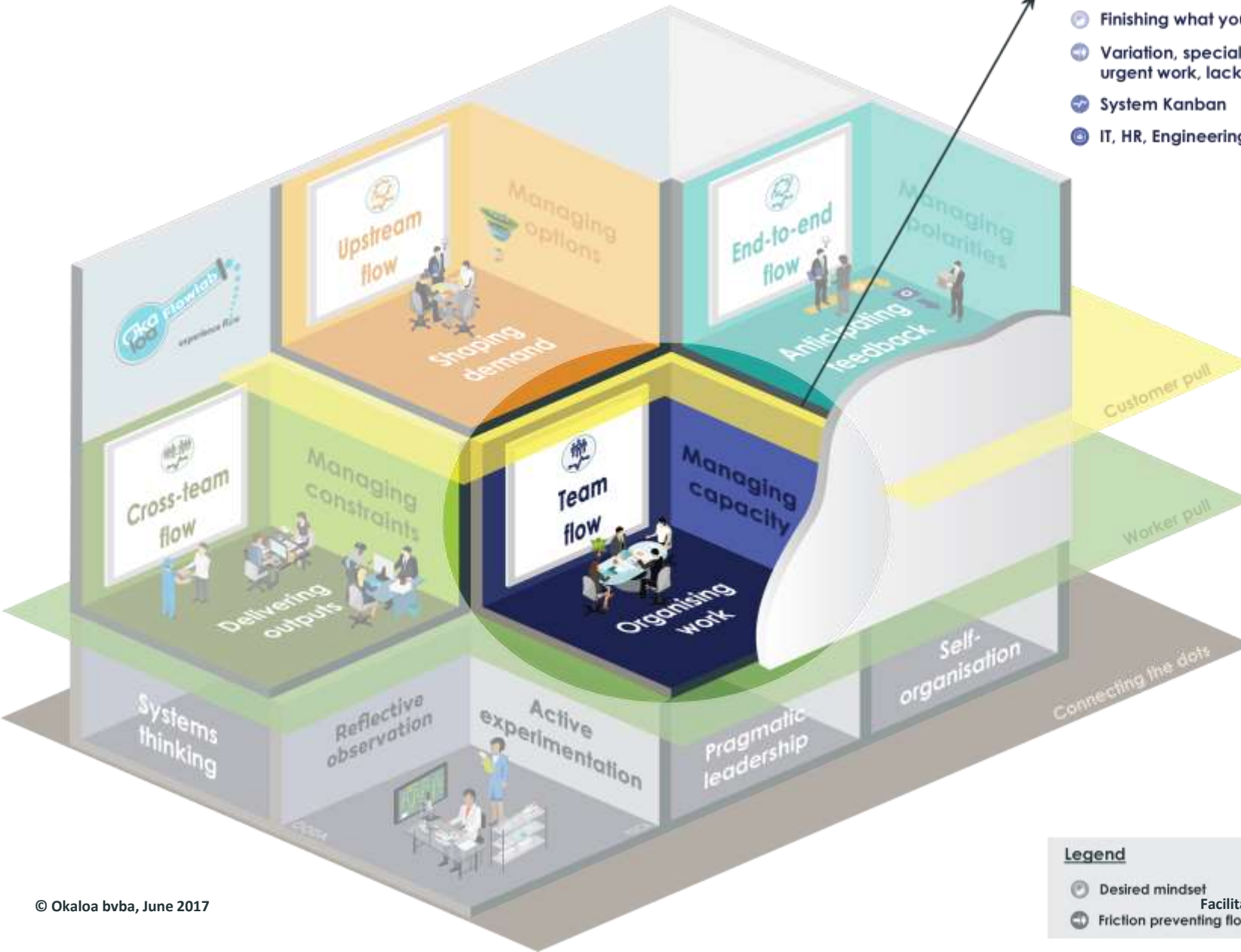
Static labels

- *The boards are provided as blank boards so that you can map the different steps of any business process on it. So the participants need to define the labels of the columns themselves. For simplicity we are working in 2 steps A and B.*
- *Some would like to have a fixed labels on the board and that is why we are experimenting with static, re-usable labels.*

TEAM FLOW IS A STARTING KIT

Improving capability

- Finishing what you start
- Variation, specialisation, too many commitments, urgent work, lack of quality, ...
- System Kanban
- IT, HR, Engineering, Finance, Legal, ...



Legend

- | | |
|--------------------------|-------------------------|
| Desired mindset | How to achieve flow |
| Facilitate | |
| Friction preventing flow | Applicable/relevant for |

QUICK, STANDARD AND ADVANCED PLAY

The Team Flow set supports a quick, standard and advanced play. The standard play is explained in the next 2 sections; for the advanced play go to [here](#). The major difference between quick and standard play is:

- 1) the level of tracking of metrics
- 2) the level of debriefing between the 2 rounds of simulation

Where relevant, differences will be indicated in the slides.

THE TEAM FLOW

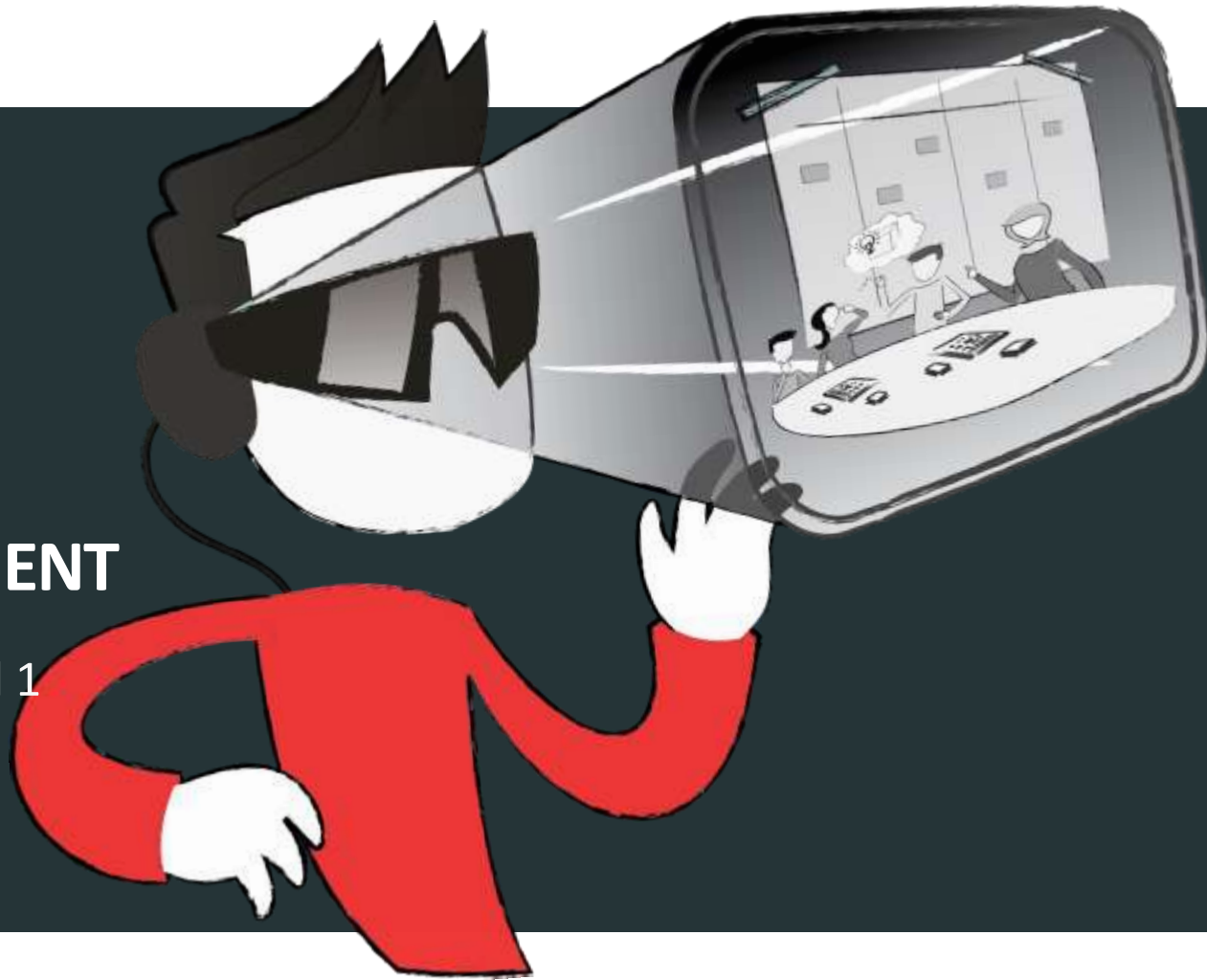
THE STANDARD PLAY

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#Recommended #EnterpriseAgility
#Lean #new way
#NICE to learn
#FLOW #Agile
#Simulations



VISUAL MANAGEMENT

Resource efficiency – round 1



BACKGROUND FOR ROUND 1



Introducing visual management

CURRENT MINDSET



KEY PERFORMANCE INDICATOR

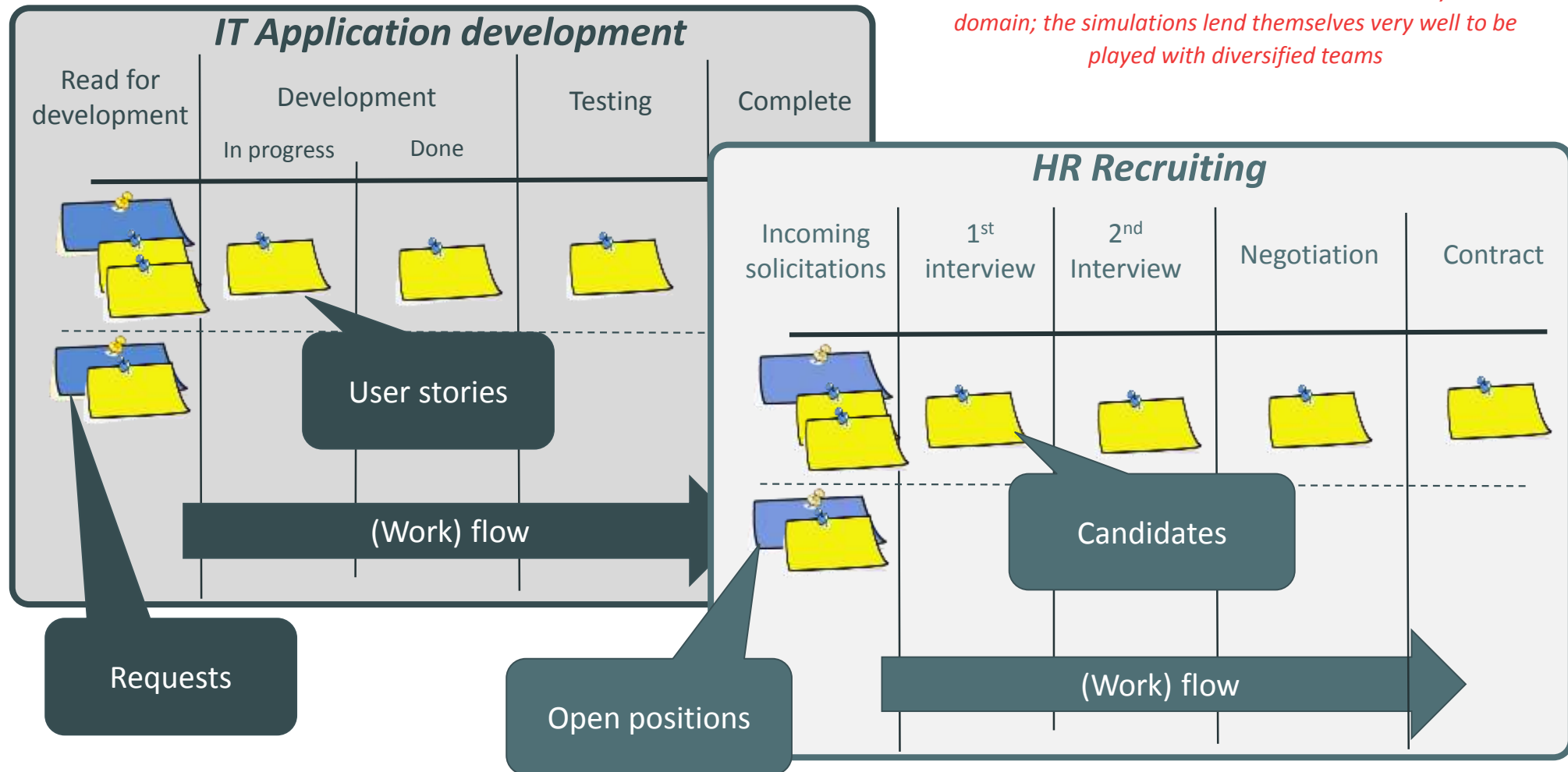
$$\text{Resource efficiency} = \frac{\text{Actual work time}}{\text{Available work time}}$$

- We are assuming a **resource efficiency mindset**
- Players and roles:
 - 3-5 players per boards with 1 (additional) player taking up the role of project manager or coordinator (if not enough players a player plays double roles);
 - project manager or coordinator is a very traditional project manager who is very focused on **keeping the team busy at all times**; and has a strong **command and control mindset** (he/she defines who is working on what when).
 - Team members are specialists in their domain and work in isolation (**silo thinking**).

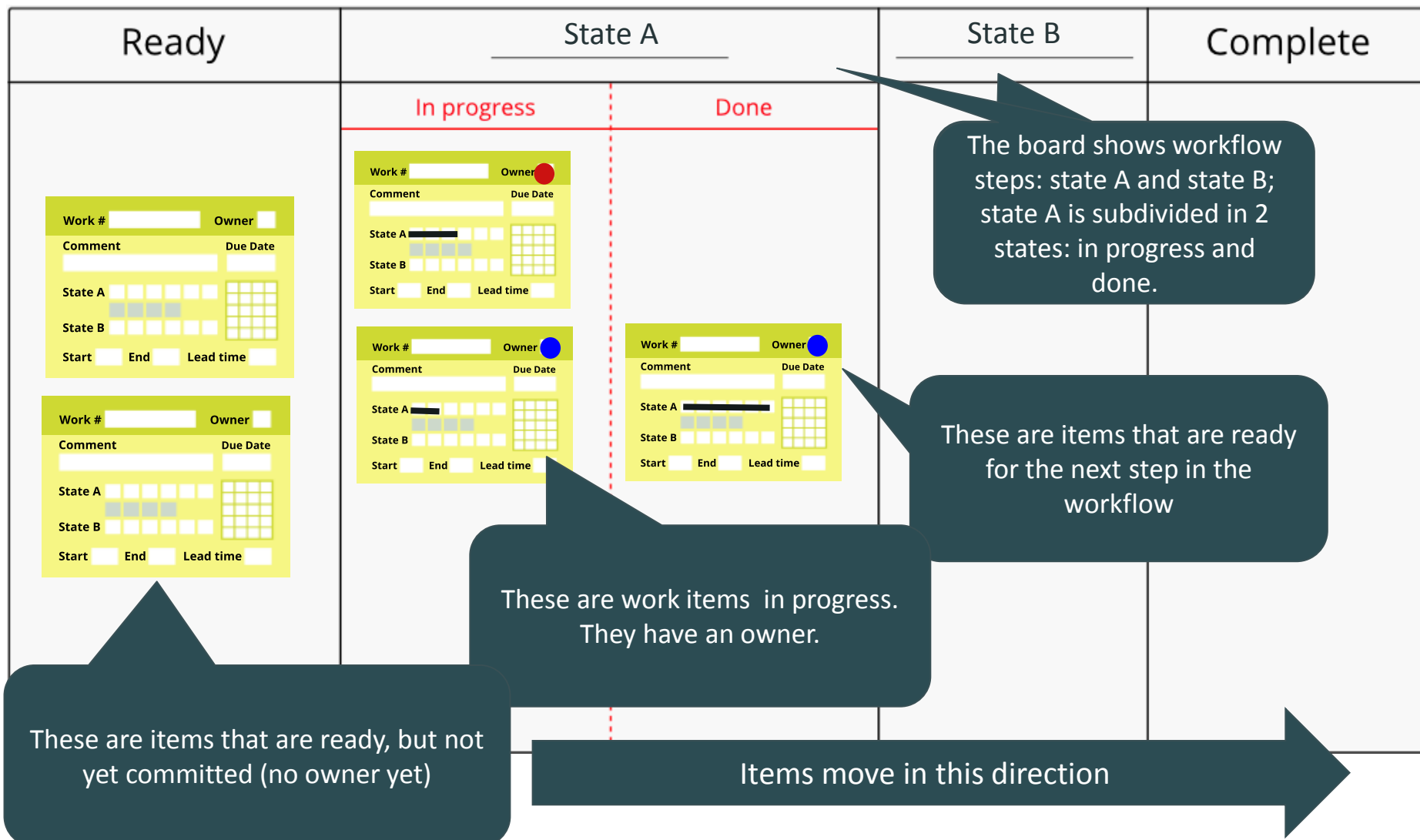
VISUALIZATION OF WORK

First steps into flow

Team Flow is created such that it can be used in any business domain; the simulations lend themselves very well to be played with diversified teams



FOCUS ON WORK



WORK ITEMS

Work #	<input type="text"/>	Owner	<input type="text"/>				
Comment	<input type="text"/>		Due Date	<input type="text"/>			
State A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
State B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Start	<input type="text"/>	End	<input type="text"/>	Lead time	<input type="text"/>		

This field can be used to indicate Urgent, Fixed date, Expedite, ...

Initials/color of owner.

Date for when a fixed date item needs to be delivered.

Work to be done in State A.

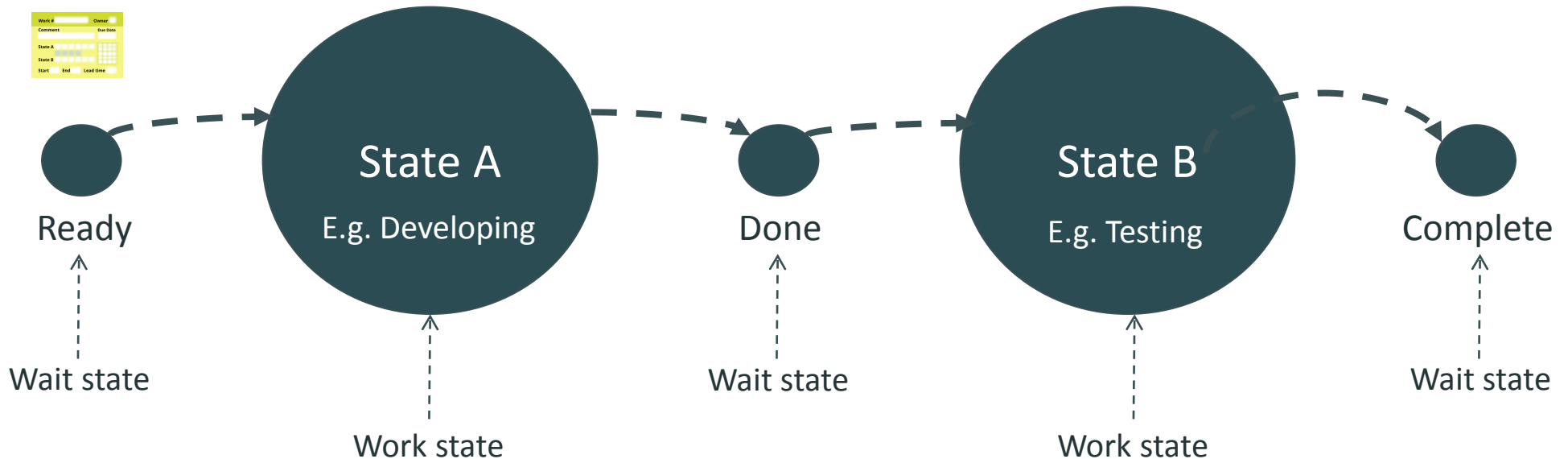
Work to be done in State B.

We will explain later!

Ignore these for the moment.

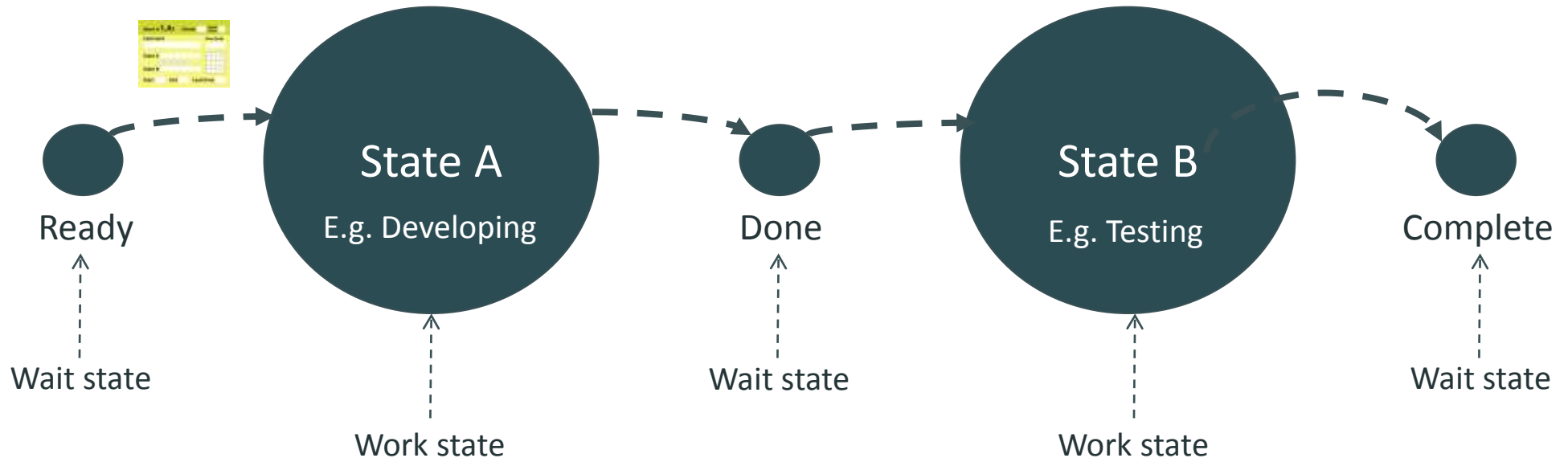
WORKFLOW

Our visualization is based on a workflow. We will show an example of how work “normally” goes through the workflow on the board in the next slides.

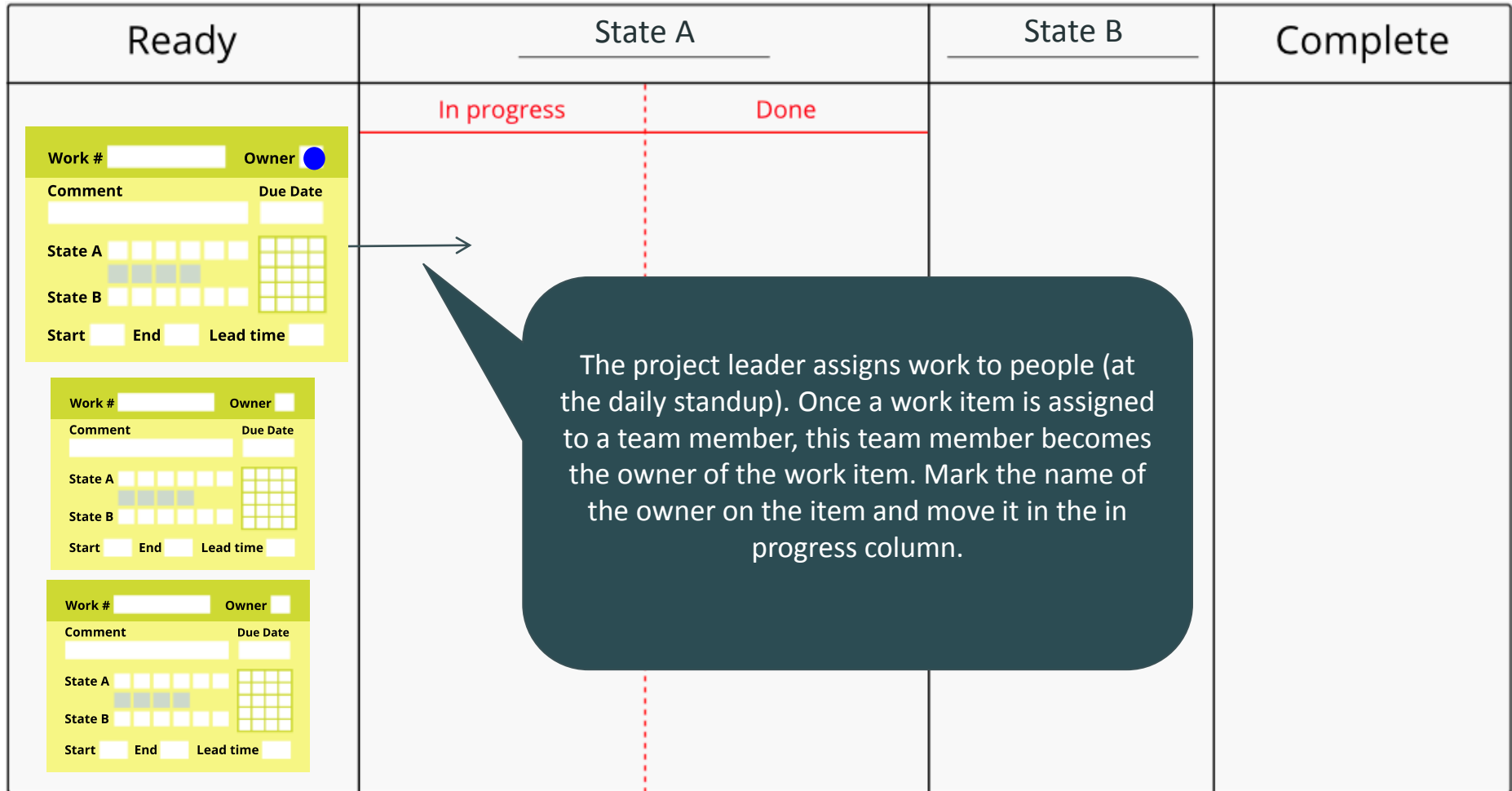


WORKFLOW – DAY 1

Starting work



DAY 1 – ASSIGNING WORK



DAY 1 – PERFORMING WORK

Ready	State A	State B	Complete
	<div style="display: flex; justify-content: space-between;"> In progress Done </div>		

Work # Owner ●

Comment Due Date

State A ☒ ☒ ☒ ☒ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Start End Lead time

1. Throw your die
2. Tick off the work

Work # Owner

Comment Due Date

State A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Start End Lead time

Work # Owner


Comment Due Date

State A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

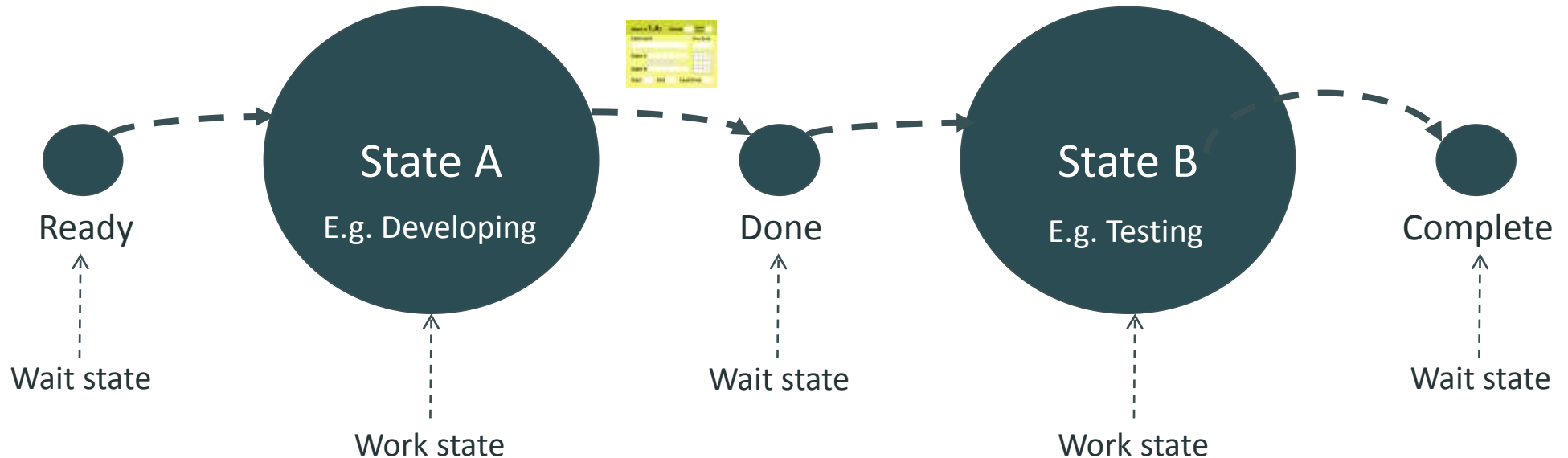
Start End Lead time

The die score represents variability of the work; the number of check boxes on the cards are the same but variability is introduced through throwing the die.

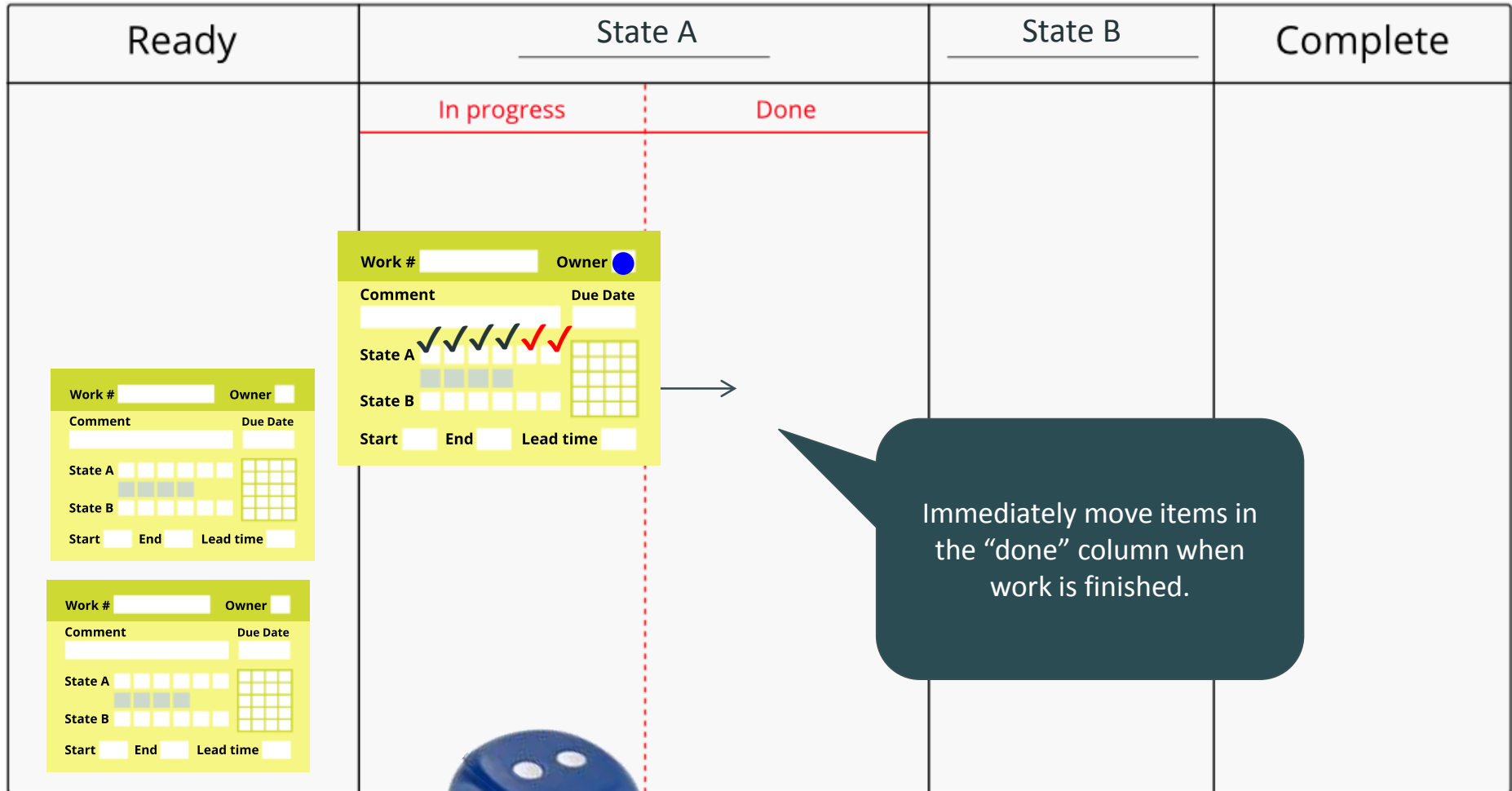


WORKFLOW – DAY 2

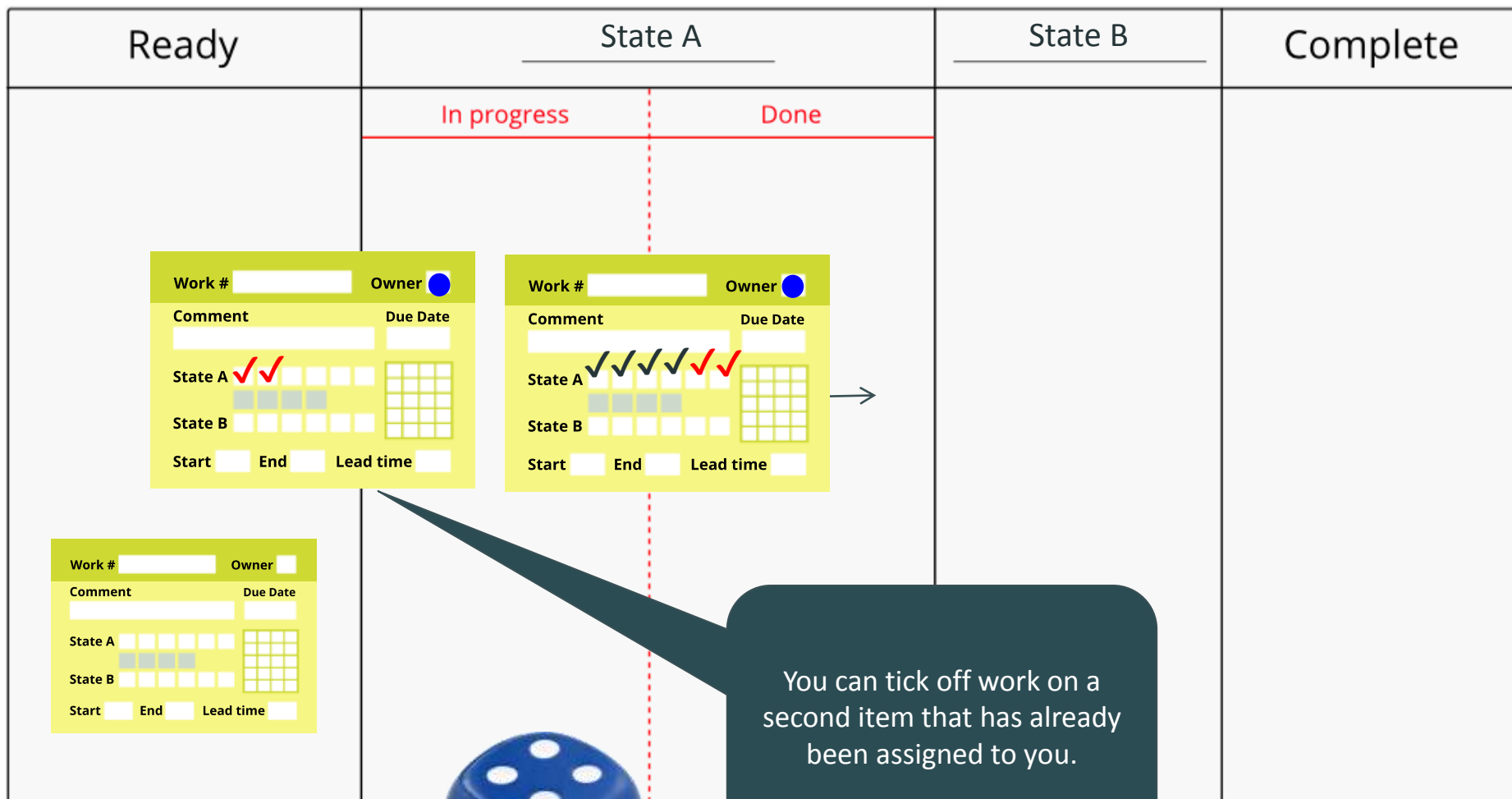
Moving to the first “done” column



DAY 2 – DO MORE WORK

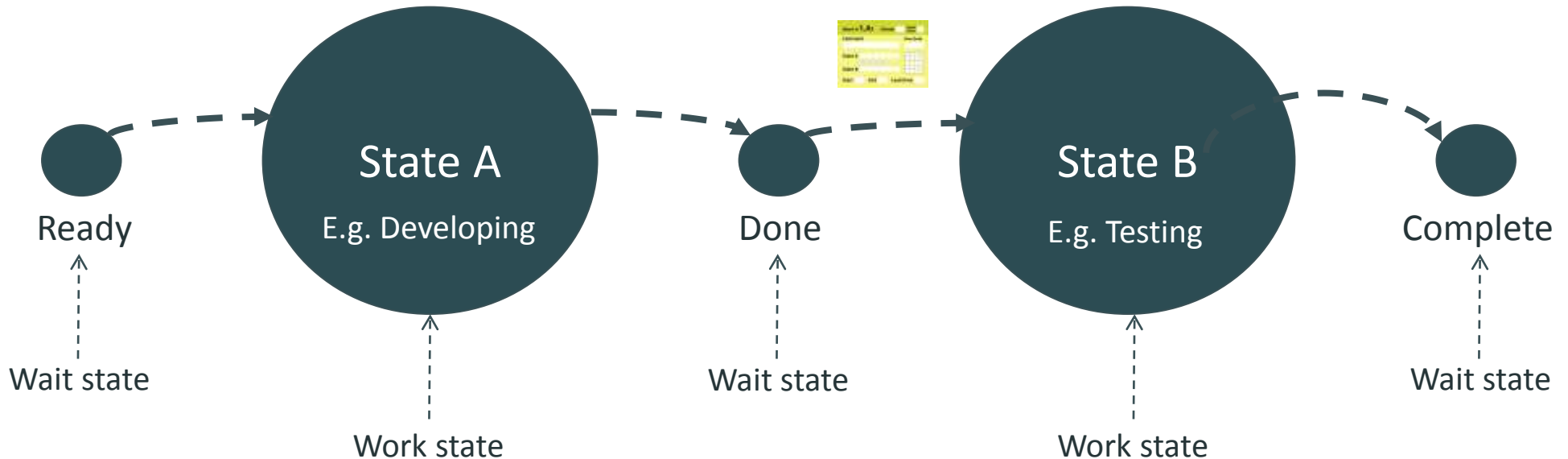


WORKING ON MULTIPLE ITEMS

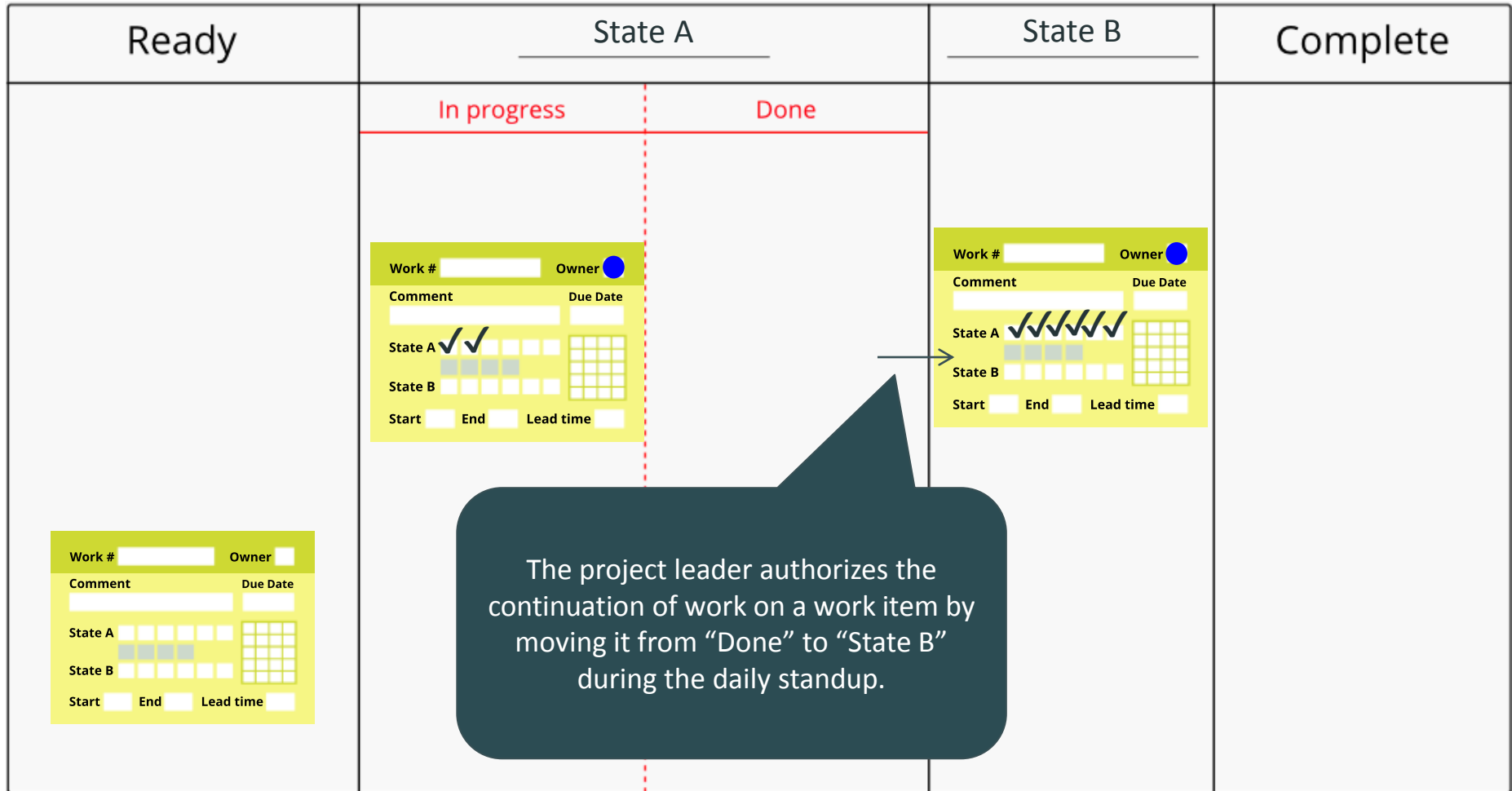


WORKFLOW – DAY 3

Moving to the next work state



DAY 3 – AUTHORIZE CONTINUATION OF WORK



DAY 3 – WORK CONTINUES

Ready	State A		State B	Complete
	In progress	Done		

Work # Owner

Comment Due Date

State A ☒ ☒ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Start End Lead time

Work # Owner

Comment Due Date

State A ☒ ☒ ☒ ☒ ☒ ☐ ☐ ☐ ☐ ☐

State B ☒ ☒ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Start End Lead time

Work # Owner

Comment Due Date

State A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

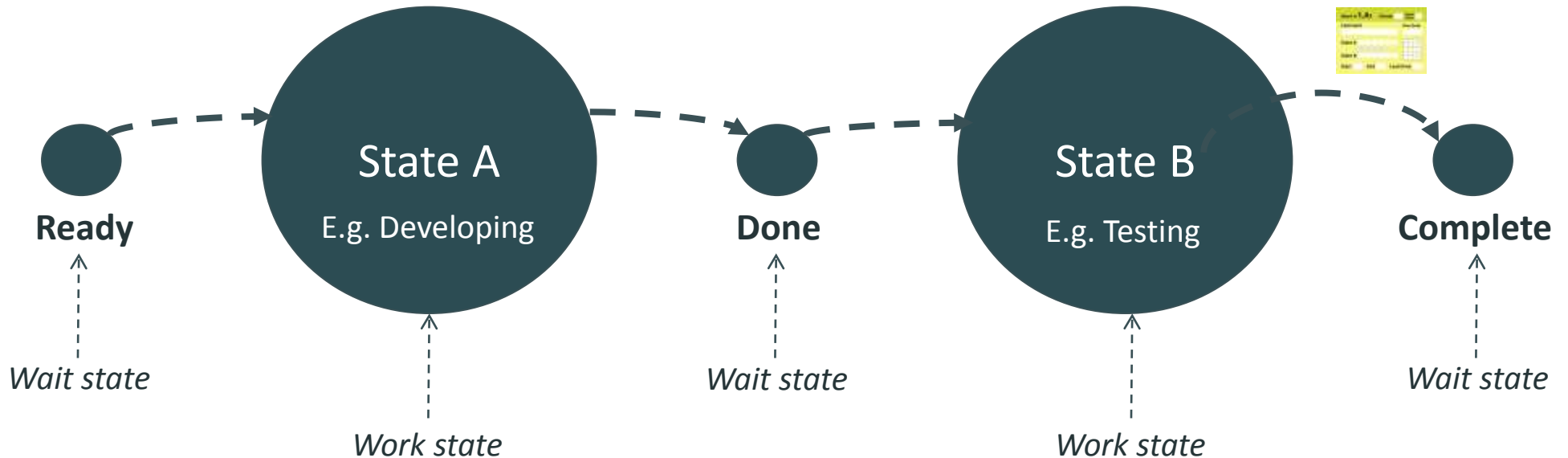
Start End Lead time

Work items in state B can be worked on.



WORKFLOW – DAY 4

Completing work



DAY 4 – WORK IS FINISHED

Ready	State A		State B	Complete
	In progress	Done		

Work # Owner

Comment Due Date

State A ☒ ☒ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Start End Lead time

Work # Owner

Comment Due Date

State A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Start End Lead time

Work # Owner

Comment Due Date

State A ☒ ☒ ☒ ☒ ☒ ☒ ☐ ☐ ☐ ☐

State B ☒ ☒ ☒ ☒ ☒ ☒ ☐ ☐ ☐ ☐

Start End Lead time

Immediately move items in the “complete” column when work is finished.

EVENT CARDS

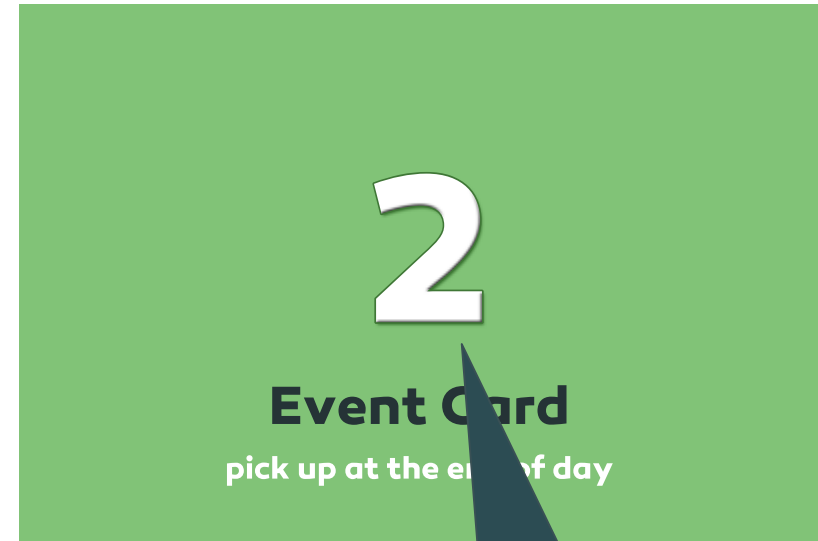
Draw the event card at the END of each day.

Day 1

- * Pick a blocker card for every active work item.
- * It is the end of the day, so mark the day as done and complete the CFD on the lab notes, and repeat this at the end of every day.



The event card will give instructions that need to be executed at the end of the day to the team; it is typically the project manager that reads them.



The number on the back of the card gives an indication of what day we are on.

BLOCKER CARDS

How work gets blocked.

The event card will indicate when a blocker card needs to be drawn.

Blocker card

team flow simulation



OK

No particular action required. Put back at the bottom of the blocker cards stack.

Blocked

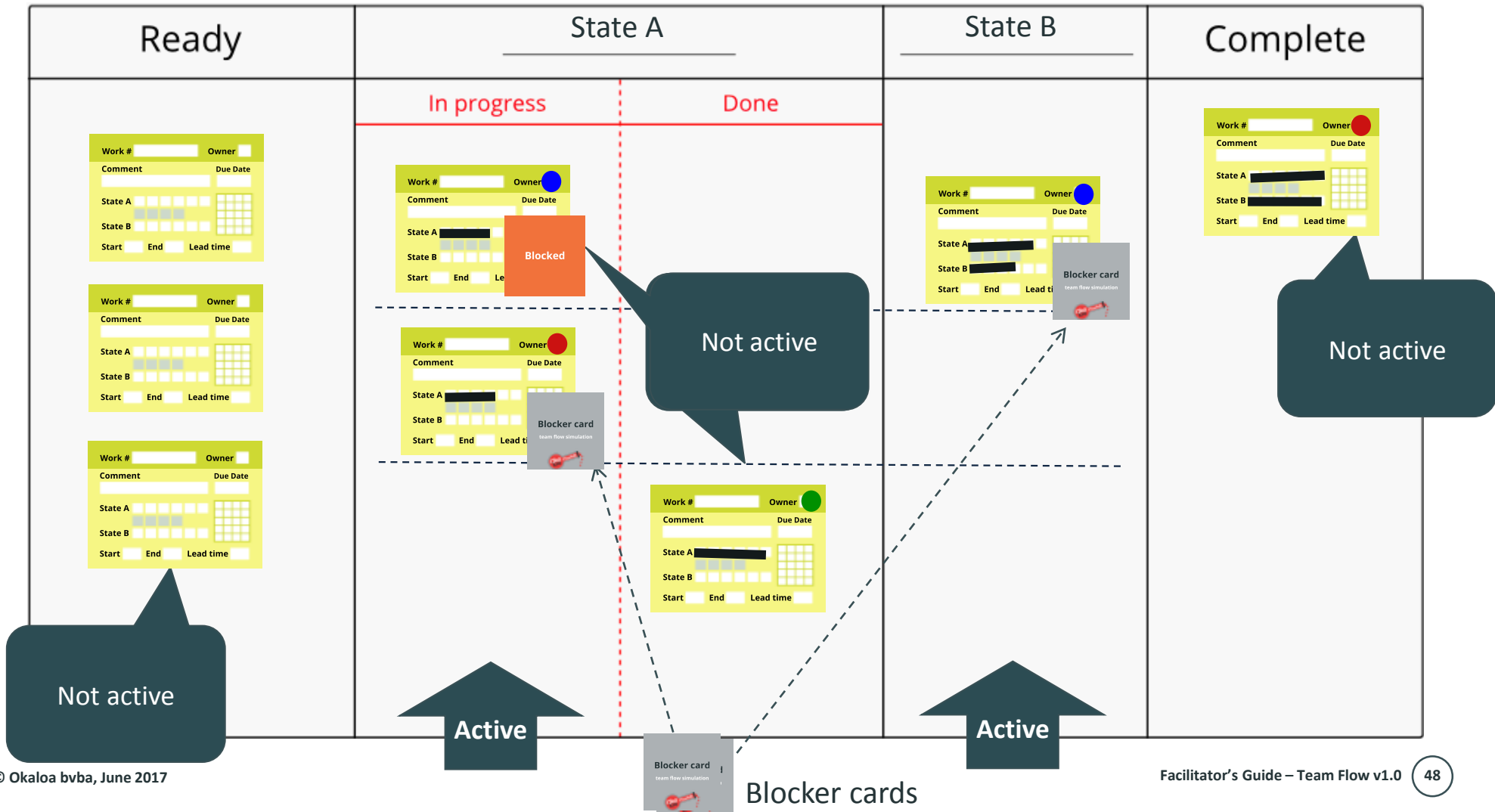
Block the item for which this blocker card was drawn.

Tip for the facilitator:

- In reality work can get blocked because of many reasons. When introducing blocker cards, it is good to discuss why work gets blocked in the participants' work environment. Reasons may include:
 - Dependencies
 - Technical issues
 - Waiting for input
 - Not clear what must be done
 - Interruptions

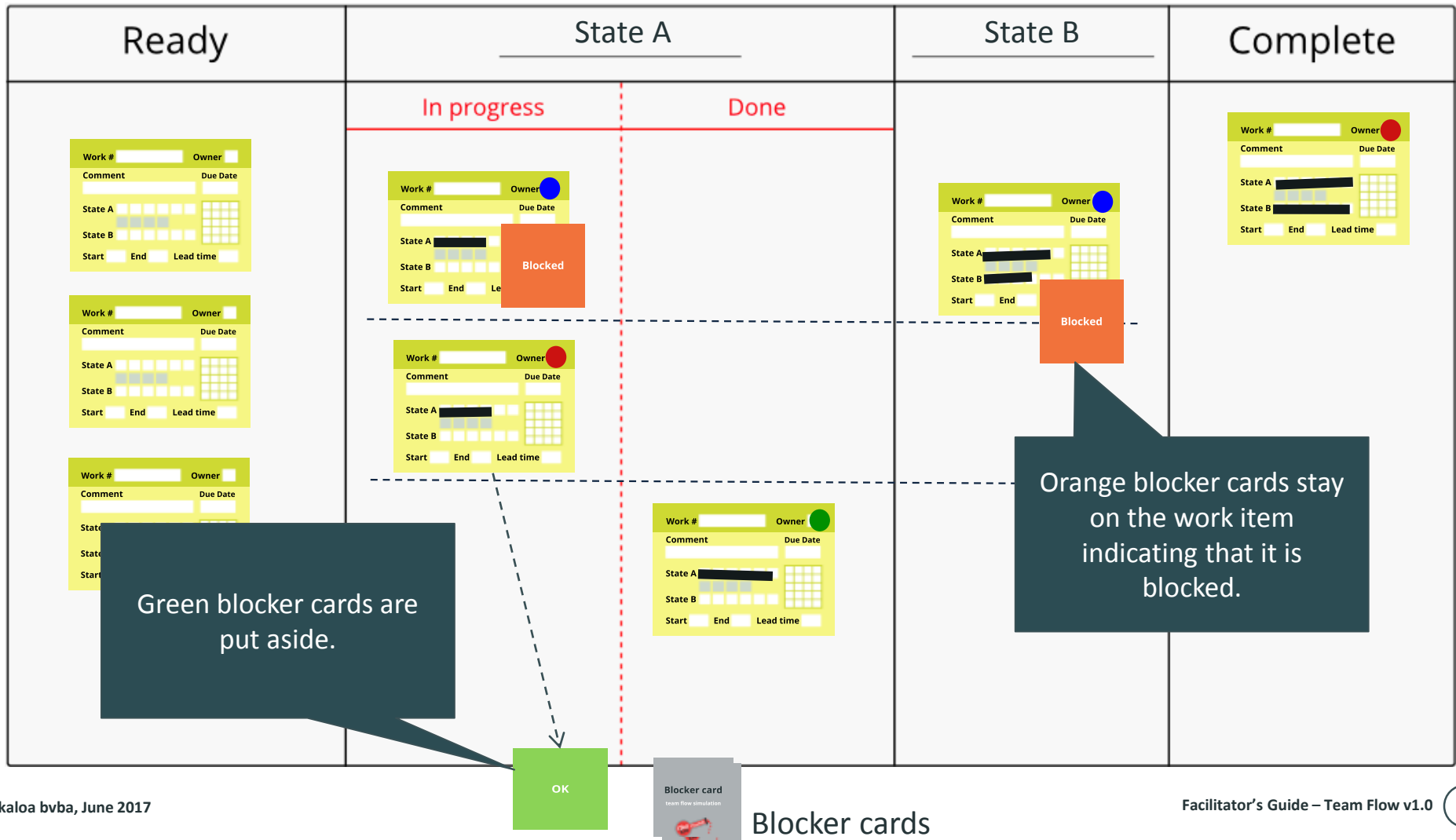
DRAWING BLOCKER CARDS

Draw a blocker card for each of your “active” work items.
Put the blocker card on the work item.



TURN BLOCKER CARDS

Turn cards around and remove the green ones and put them back at the bottom of the stack of blocker cards.



BLOCKING AND UNBLOCKING

Blocked item

Work #	<input type="text"/>	Owner	<input type="text"/>
Comment		Due Date	
<input type="text"/>		<input type="text"/>	
State A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Start	<input type="text"/>	End	<input type="text"/>

Blocked

- No work can be performed on the item as long as it is blocked.

Tip: Stress to the participants that on a single day they can either perform work or unblock but not both at the same time.

Unblocking an item

Work #	<input type="text"/>	Own	<input checked="" type="checkbox"/>
Comment		Due Date	
<input type="text"/>		<input type="text"/>	
State A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Start	<input type="text"/>	End	<input type="text"/>
		Lead time	<input type="text"/>

- An item can only be unblocked by throwing a 4 or more during the normal work-cycle.
- Remove the blocker card to unblock (and place it back at the bottom of the stack of blocker cards).
- No more work can be performed for the day (die score is made void by unblocking).

TEAM MEMBERS



Assign each team member a color.

One team member plays the role of coordinator who reads and makes sure that the daily steps are followed correctly, reads the event cards and completes the lab notes.

Daily steps card

guide for the coordinator

- 1. Standup meeting**
 - Decide which new items to start and assign them to a worker (taking ownership). Make sure there are enough items available to work on during the day.
 - Enter the start day on each new work item.
- 2. Perform work**
 - Each team member throws a die and ticks off the work (process your die).
 - Keep track of the touch time by ticking off a box in the raster on the work item each time work is performed on that item. In case of quality simulation use this raster to mark the number of potential bugs.
- 3. Take an event card**
 - The coordinator takes the event card and follows the instructions on the card.
- 4. Closure of the day**
 - As instructed on the event card, draw a blocker card for each active work item.
 - Enter the end day on each item completed during the day and complete the leadtime.
 - Mark day as completed in the measurement section of the Lab Notes and complete the CFD chart.
- 5. Every 5-10 days take measurements**
 - Every 5th day enter the delivery rate and WIP and complete the charts on the Lab Notes. Every 10th day mark the average touch or lead time over 10 days. Log when you have broken the rules or policies.

Lab Notes - Team Flow

Team:

Measurements			Experiments / estimations		
Days 1 - 5	Delivery rate	WIP	Days 6 - 10	Delivery rate	WIP
Days 11 - 15	Delivery rate	WIP	Days 16 - 20	Delivery rate	WIP
Days 21 - 25	Delivery rate	WIP	Days 26 - 30	Delivery rate	WIP

Experiments / estimations

Experiment 1			Experiment 2			Experiment 3		
Effect	Delivery rate	WIP	Effect	Delivery rate	WIP	Effect	Delivery rate	WIP

Cumulative Flow Diagram (CFD)

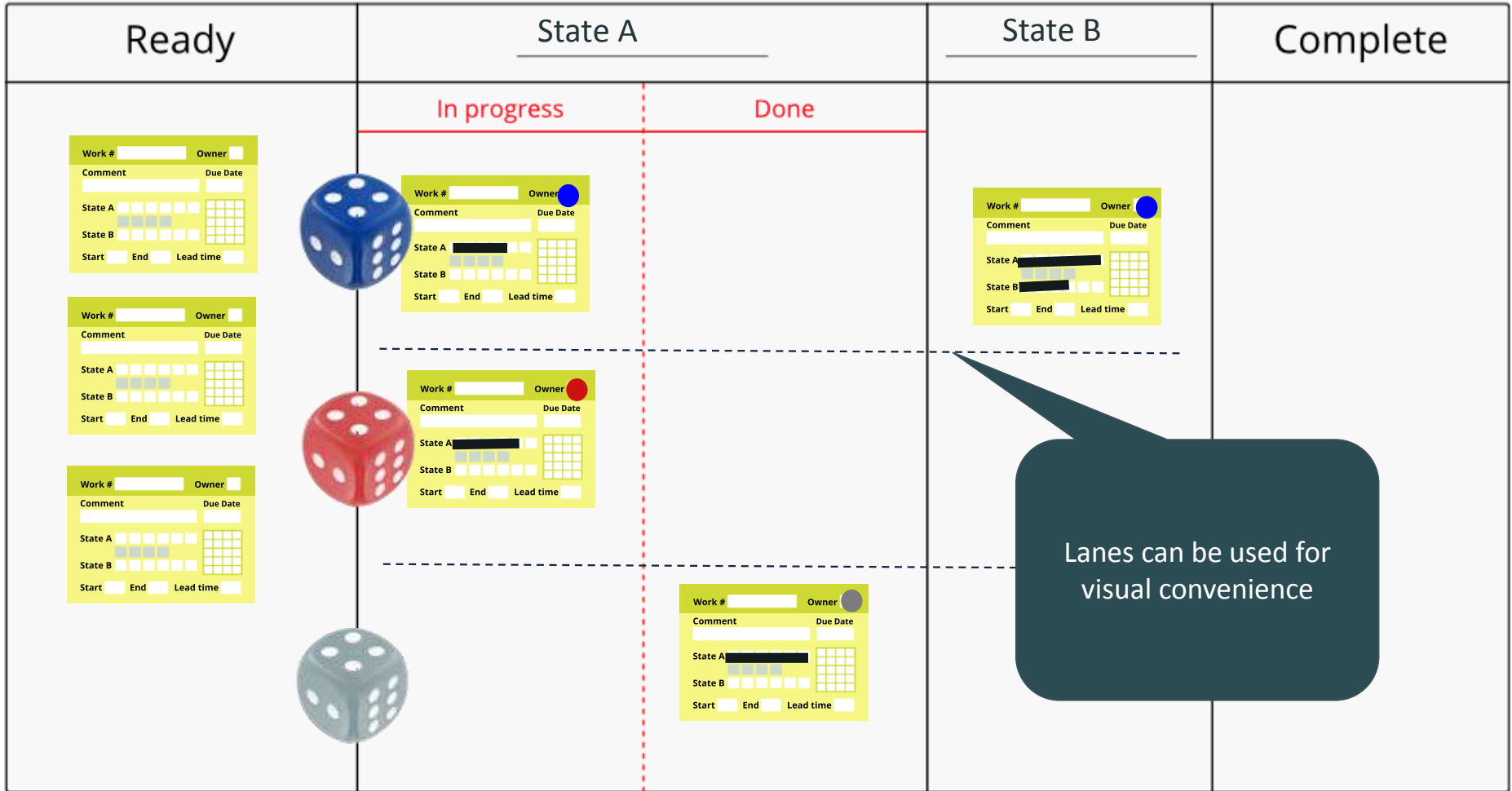
Lab Notes - Team Flow

Notes, log, comments, ...

Histogram

Control chart

LANES



RULES – NEVER TO BE BROKEN!

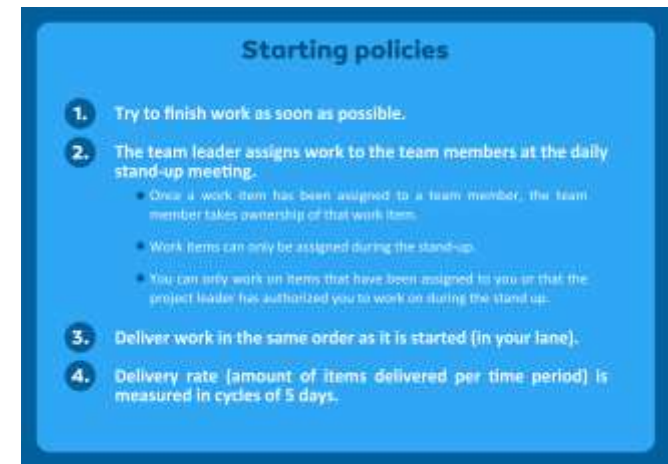
1. Once ownership of a work item has been assigned, that ownership remains unchanged until the item is finished
2. You can only throw your die once per day and use the score to perform work
 - You can tick off work for the amount indicated by your throw of die
 - You can tick off work from multiple work items if wanted
3. Blocked items can only be unblocked by throwing a 4 or more
 - If you throw less than 4, then perform work on another work item



Rules never to be broken

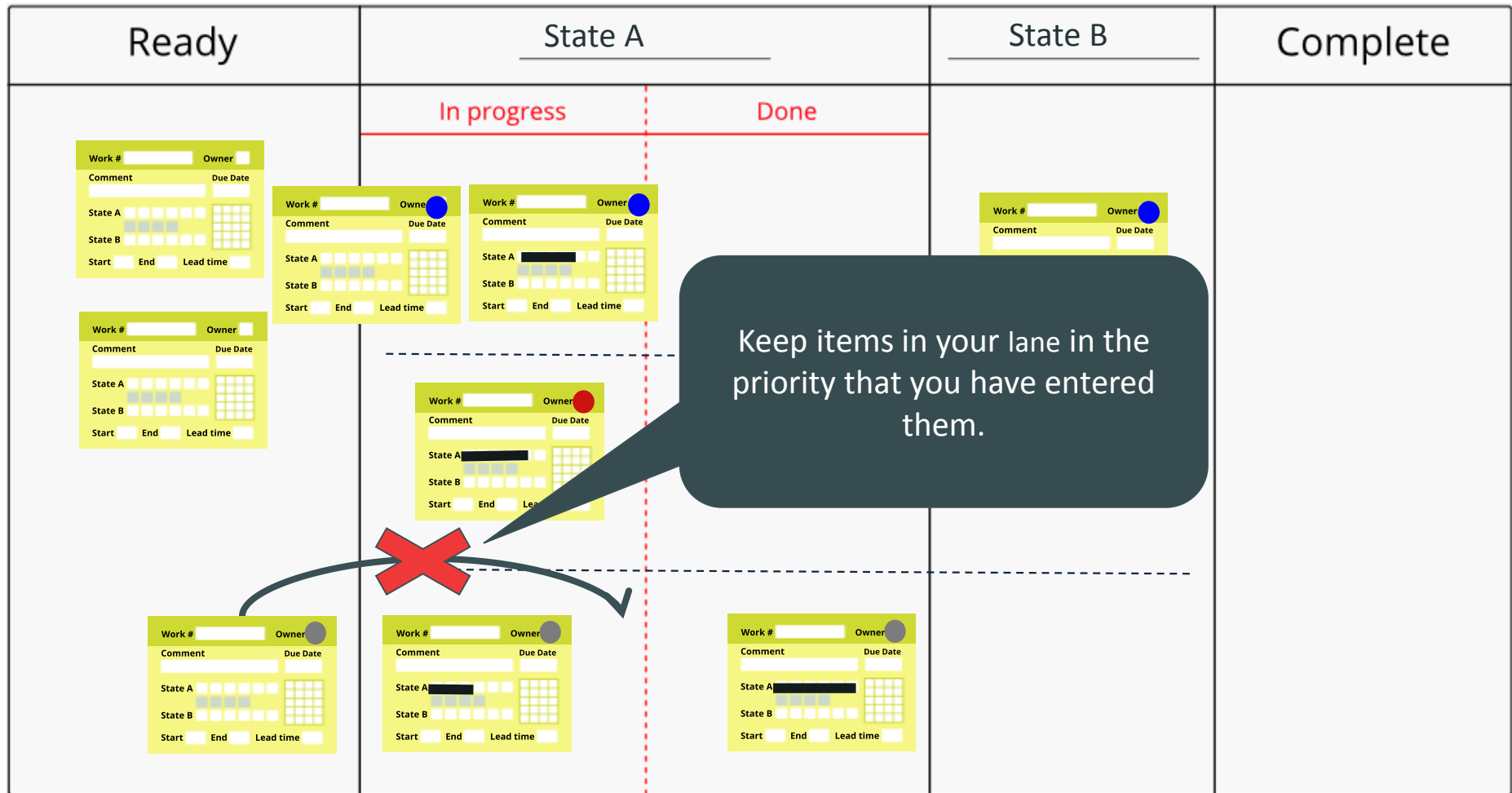
1. Once you take ownership of a work item, that ownership remains unchanged until the item is finished.
2. You can only throw your die once per day and use the score to perform work.
 - You can tick off work for the amount indicated by your throw of die when working on an item that is owned by you.
 - You can tick off work from multiple work items if wanted.
3. Blocked items can only be unblocked by throwing a 4 or more
 - If you throw less than 4, then perform work on another work item.

POLICIES

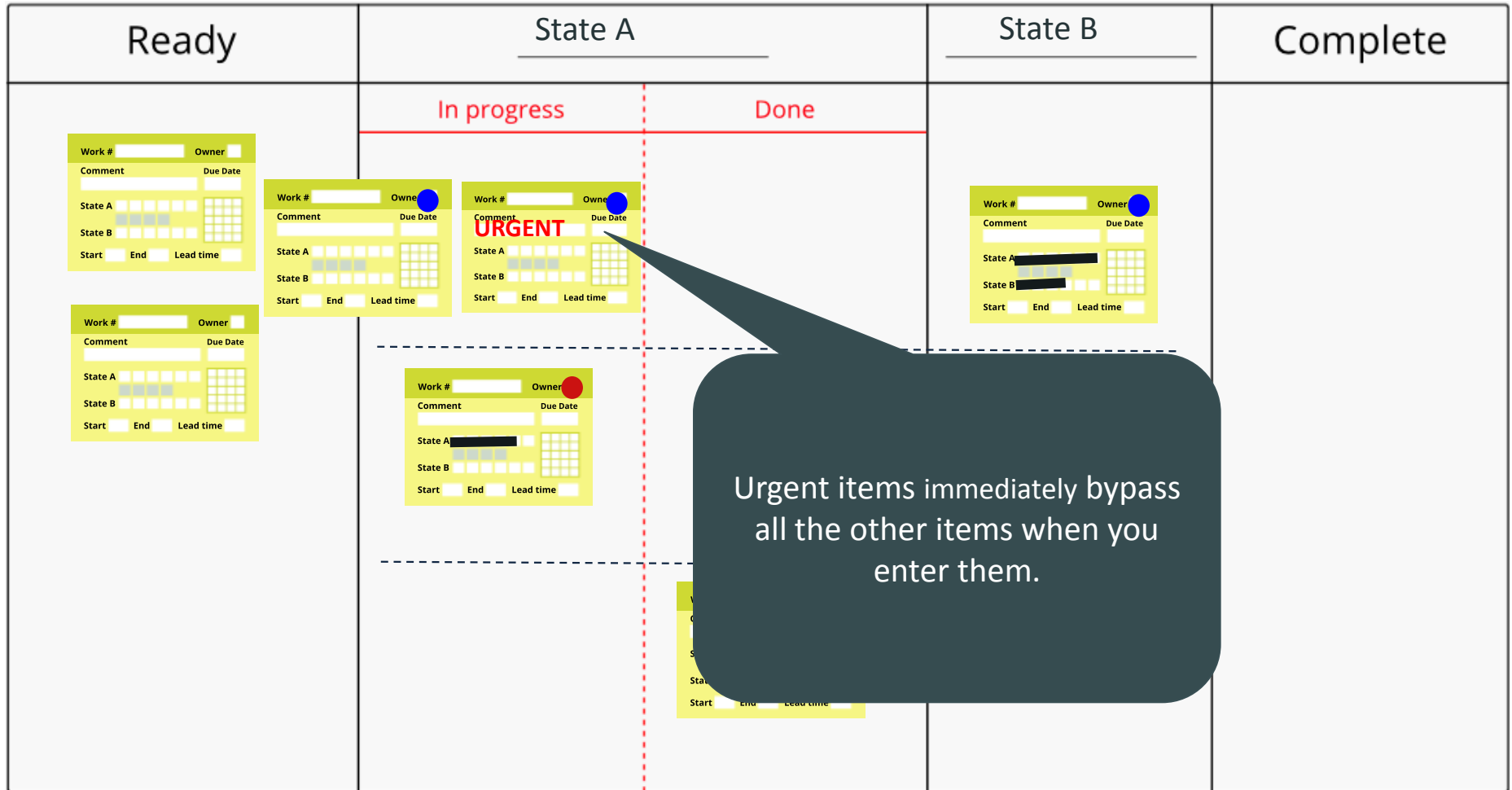


- Try to finish work as soon as possible
- The team leader assigns work to the team members at the daily stand-up meeting.
 - Once a work item has been assigned to a team member, the team member takes ownership of that work item
 - Work items can only be assigned during the stand-up
 - You can only work on items that have been assigned to you or that the project leader has authorized you to work on during the stand up
- Deliver work in the same order as it is started (in your lane)
- Delivery rate (amount of items delivered per time period) is measured in cycles of 5 days

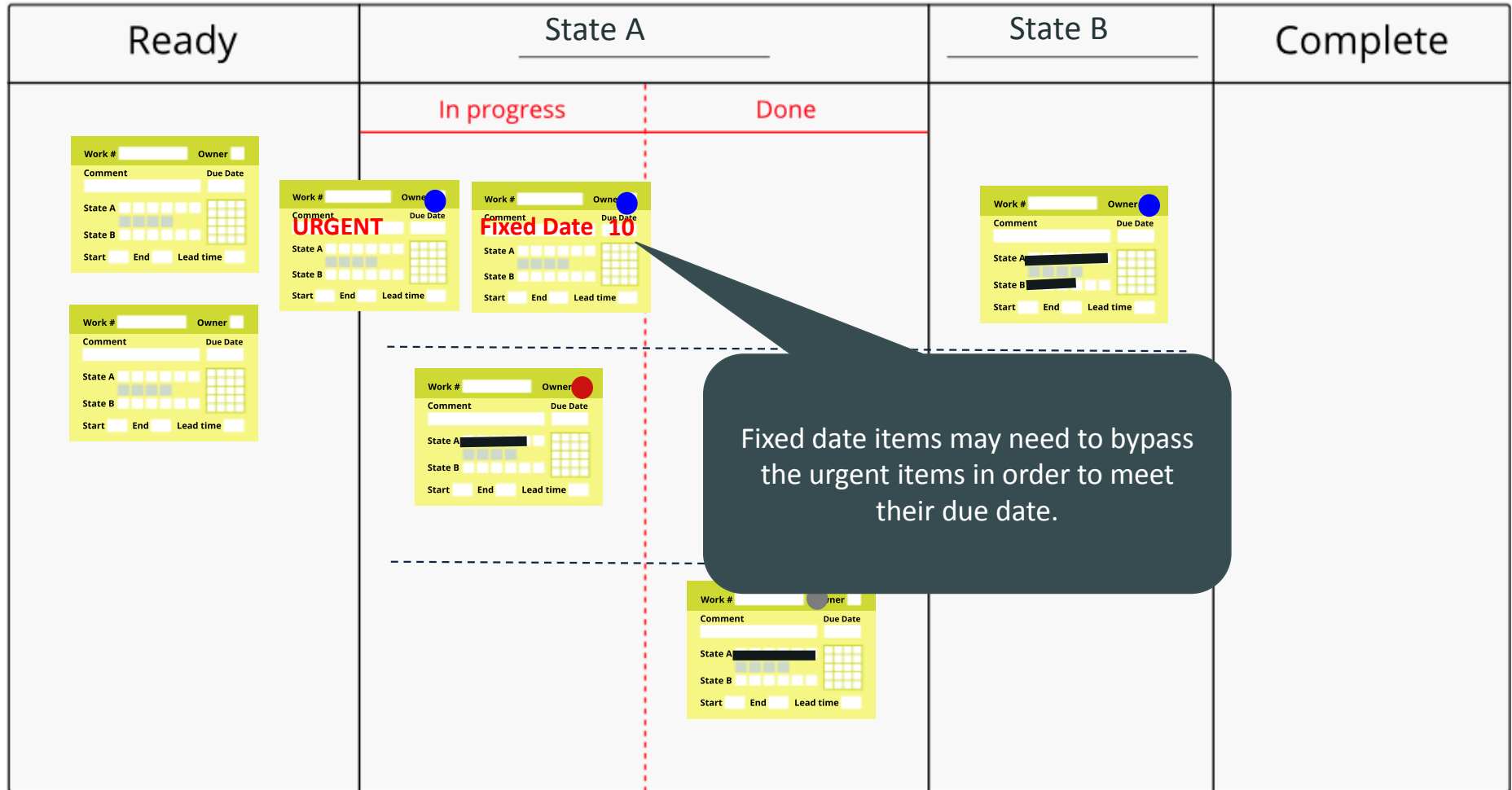
STANDARD PRIORITIES



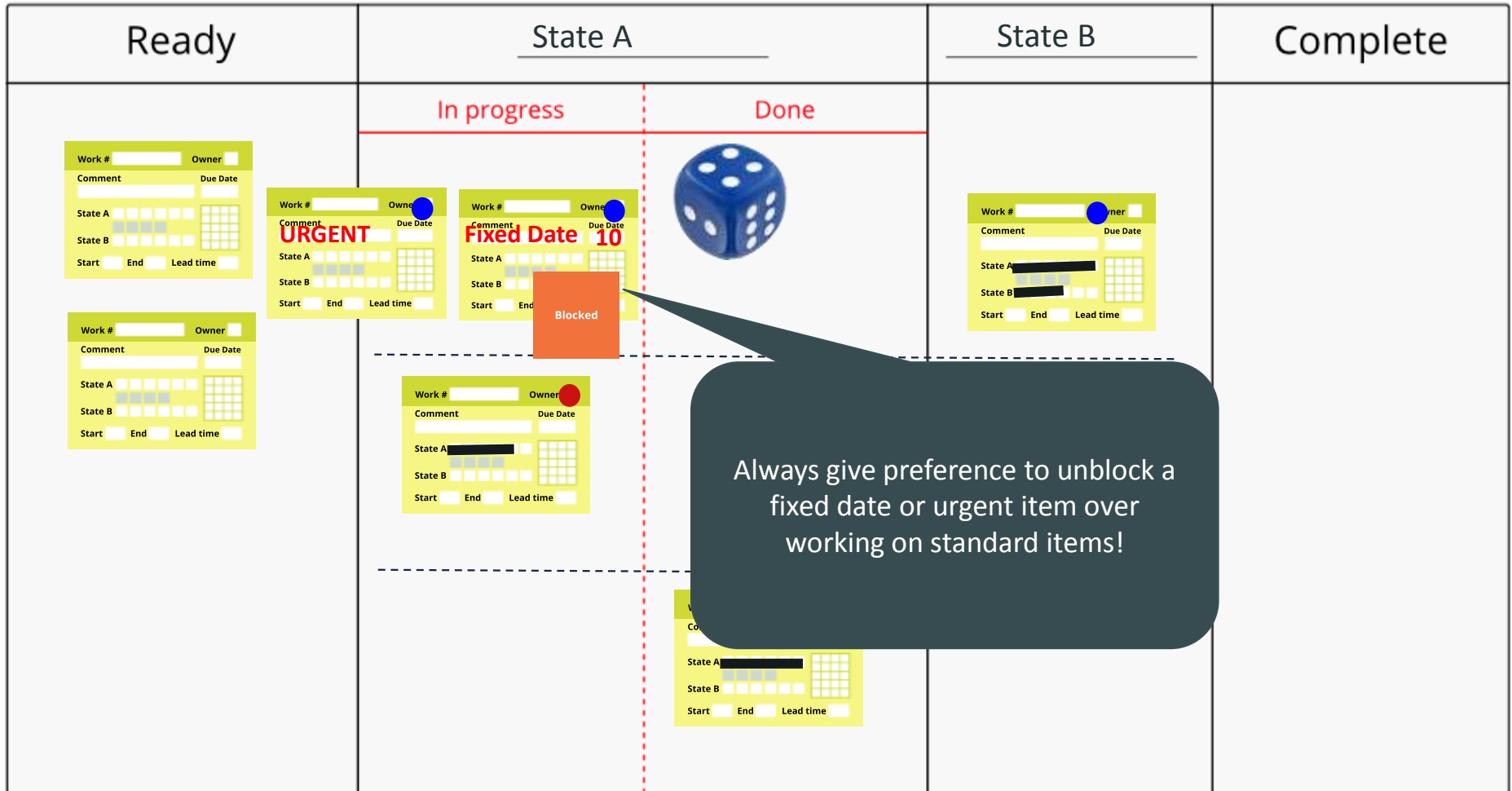
EXPEDITING URGENT ITEMS



EXPEDITING FIXED DATE ITEMS



PRIORITY FOR UNBLOCKING



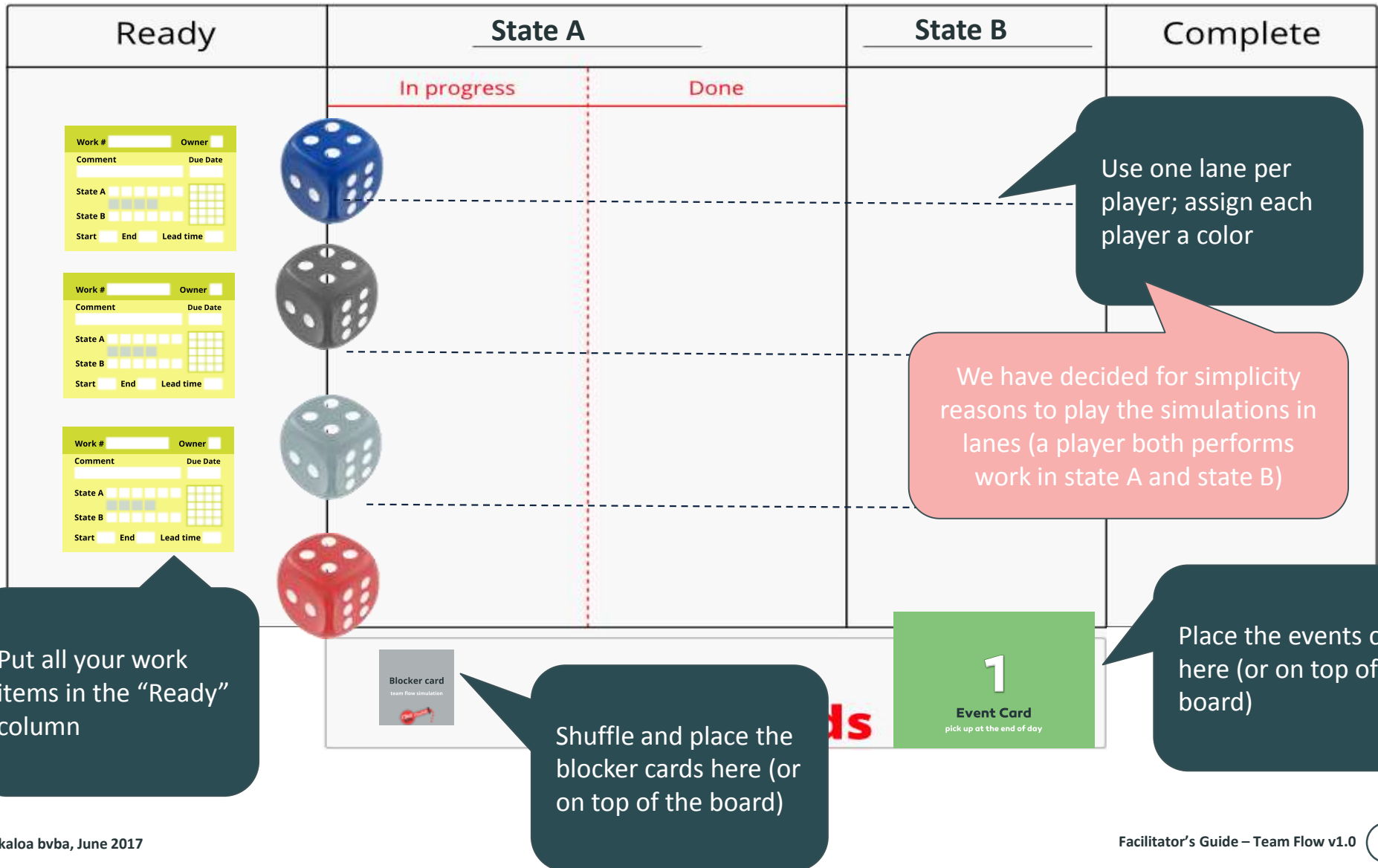
TRACKING WORK TIME (ACTUAL EFFORT)

Ready	State A		State B
	In progress	Done	
<div> <div>Work # <input type="text"/> Owner <input type="text"/></div> <div>Comment <input type="text"/> Due Date <input type="text"/></div> <div>State A <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></div> <div>State B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></div> <div>Start <input type="text"/> End <input type="text"/> Lead time <input type="text"/></div> </div>	<div> <div>Work # <input type="text"/> Owner <input type="text"/></div> <div>Comment <input type="text"/> Due Date <input type="text"/></div> <div>State A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></div> <div>State B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></div> <div>Start <input type="text"/> End <input type="text"/> Lead time <input type="text"/></div> </div>	<div> <div>Work # <input type="text"/> Owner <input type="text"/></div> <div>Comment <input type="text"/> Due Date <input type="text"/></div> <div>State A <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/></div> <div>State B <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></div> <div>Start <input type="text"/> End <input type="text"/> Lead time <input type="text"/></div> </div>	

Track the work time: put a mark on the work item(s) that you worked on that day.



ORGANIZE THE BOARD TO GET STARTED



IMPORTANT NOTES

- Start the session with 20 work items; keep the rest of the items and special work items (e.g; fixed date items, expedite, ...) separate; the event cards will indicate when the players need to ask the facilitator for a special work item.
- In this business scenario whereby focus is on keeping everybody busy we are going to track our timesheets; as a facilitator pay attention that every team does this correctly.
 - Use the special roster on the work item cards; we are not tracking ½ days so if a player is dividing the dice score over different work items just tell him/her that they need to pick one of the work items (preferable the item on which the highest score is added).
- Ask people to strictly follow this scenario; some will be tempted to start working together or will argue that this is not the way they work but ask them to play along and to be patient. This is very important to see the effects and learn from it.

Track the work time: put a mark on the work item(s) that you work on that day

Work #							
Comment							Due date
State A	✓	✓	✓	✓	✓	■	■
State B	✓	✓					
Start		End		Lead time			

Work time tracking is not applicable for quick play.

DO THE FIRST DAY TOGETHER

1. Standup meeting
 - Decide which items to take in progress (taking ownership)
2. Perform work
 - Throw and process your dice
3. Take the event card of day 1
 - Draw a blocker card for every active work item
 - Put the blocker card on the resp. work item
 - Turn blocker cards around and remove the green ones and put them at the back of the blocker cards stack



CLOSURE OF DAY 1

COMPLETING THE LAB NOTES

Measurements

<after 5 days days> <after 5 days days> <average over 10 days>

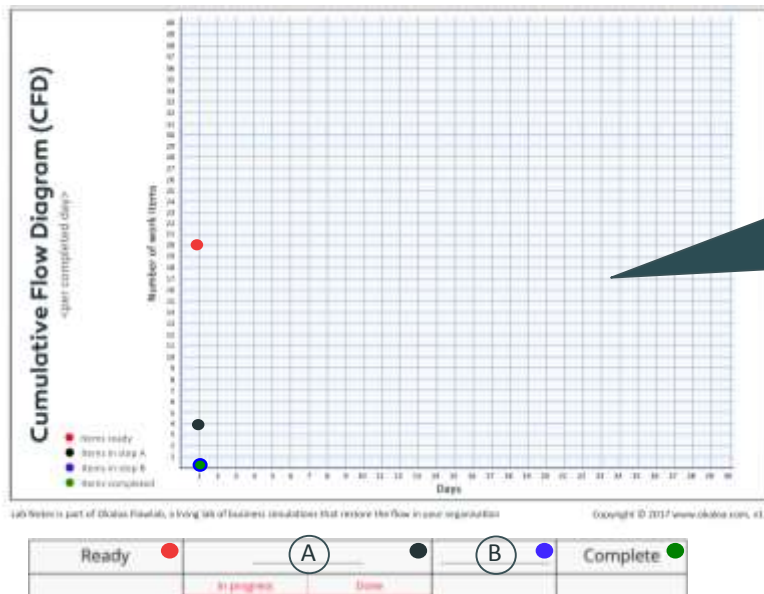
Days 1 - 5	Delivery rate	WIP	Days 6 - 10	Delivery rate	WIP	Touch-time
✓						
Days 11 - 15	Delivery rate	WIP	Days 16 - 20	Delivery rate	WIP	Leadtime
Days 21 - 25	Delivery rate	WIP				Leadtime

Mark day 1 as finished.

Notes, log, comments, ...

Log any exceptions such as rules or policies that have been broken*.

*At the backside of the notes you find a dedicated section for this.



Complete the CFD** – use the 4-color pen to draw the dots and lines.

CFD is not applicable for quick play.

** We noticed that completing the CFD can be confusing for some people who are not familiar with it so make sure you explain this upfront. Ask the team members to divide the work (the coordinator reading event cards and assigning work while another person completes the lab notes and 3rd person handles the charts). Alternatively you could skip this for the standard play.

**ASK IF THERE ARE ANY REMAINING
QUESTIONS?**

PLAY DAY 2 TO 5

1. Standup meeting

- Assign work to the team members (team or project leader)

2. Perform work

- Throw and process your dice

3. Close the day (team or project leader)

- Draw an event card
- Mark the day as done, complete the lab notes
- Make sure that everybody has followed the rules and policies as agreed!
- Every 5 days, note down the amount of work items that have been completed (= delivery rate)

END OF DAY 5

COMPLETING THE LAB NOTES: METRICS

Measurements		<after 5 days days>		<after 5 days days>		<average over 10 days>	
Days 1 - 5	✓✓✓✓✓	Delivery rate	WIP	Days 6 - 10	Delivery rate	WIP	Touch-time
		2	9				
Days 11 - 15		Delivery rate	WIP	Days 16 - 20	Delivery rate	WIP	Leadtime
Days 21 - 25		Delivery rate	WIP	Days 26 - 30	Delivery rate	WIP	

Mark delivery rate (items that have been completed in this cycle) and work items in progress (WIP) at the end of day 5.

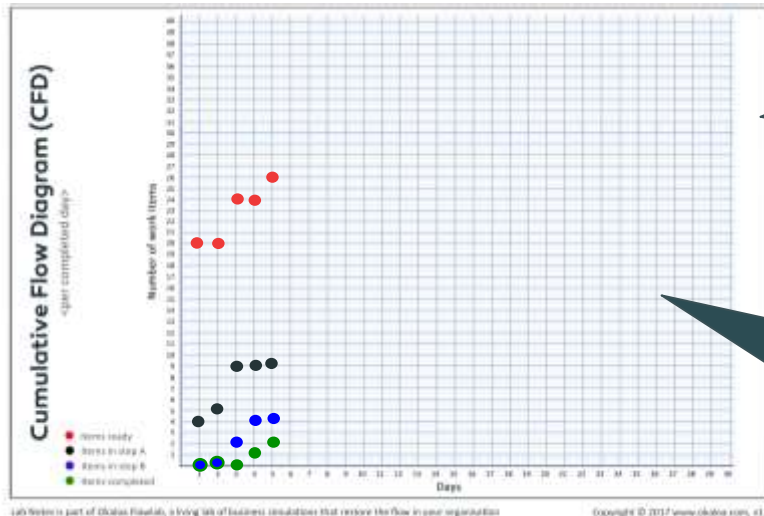
Notes, log, comments, ...

Log any exceptions such as rules or policies that have been broken.

At the backside of the notes you find a dedicated section for this.

CFD is not applicable for quick play.

Complete the CFD – use the 4-color pen to draw the dots and lines.



PLAY DAY 6 TO 10

Play 1 more cycle of 5 days:

1. Standup meeting
 - Assign work to the team members (team or project leader)
2. Perform work
 - Throw and process your dice
3. Close the day (team or project leader)
 - Draw an event card
 - Mark the day as done, complete the lab notes
 - Make sure that everybody has followed the rules and policies as agreed!
 - Every 5 days, note down the amount of work items that have been completed (= delivery rate)

ESTIMATION FOR REQUEST 1

Experiments / estimations							
Estimates for Request 1		Round 2			Round 3		
Effort	Delivery date	Delivery rate	WIP	Leadtime	Delivery rate	WIP	Leadtime
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Estimates for Request 2							
Effort	Delivery date						
<input type="text"/>	<input type="text"/>						

At day 7 the players will be asked to make an estimate for Request 1; use the dedicated roster on the lab notes for this (same for request 2 during round 2 of the advanced play).

END OF DAY 10

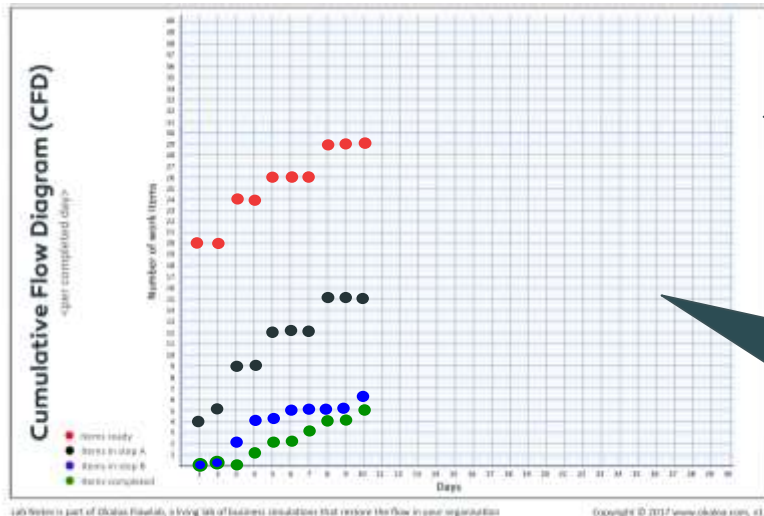
COMPLETING THE LAB NOTES: METRICS

Measurements			<after 5 days days>			<after 5 days days>			<average over 10 days>		
Days 1 - 5	Delivery rate	WIP	Days 6 - 10	Delivery rate	WIP	Touch-time					
✓ ✓ ✓ ✓ ✓	2	9	✓ ✓ ✓ ✓ ✓	3	15						
Days 11 - 15	Delivery rate	WIP	Days 16 - 20	Delivery rate	WIP	Leadtime					
Days 21 - 25	Delivery rate	WIP	Days 26 - 30	Delivery rate	WIP						

Mark delivery rate (items that have been completed in this cycle) and work items in progress (WIP) at the end of day 5.

Notes, log, comments, ...

Log any exceptions such as rules or policies that have been broken.



CFD is not applicable for quick play.

Complete the CFD – use the 4-color pen to draw the dots and lines.

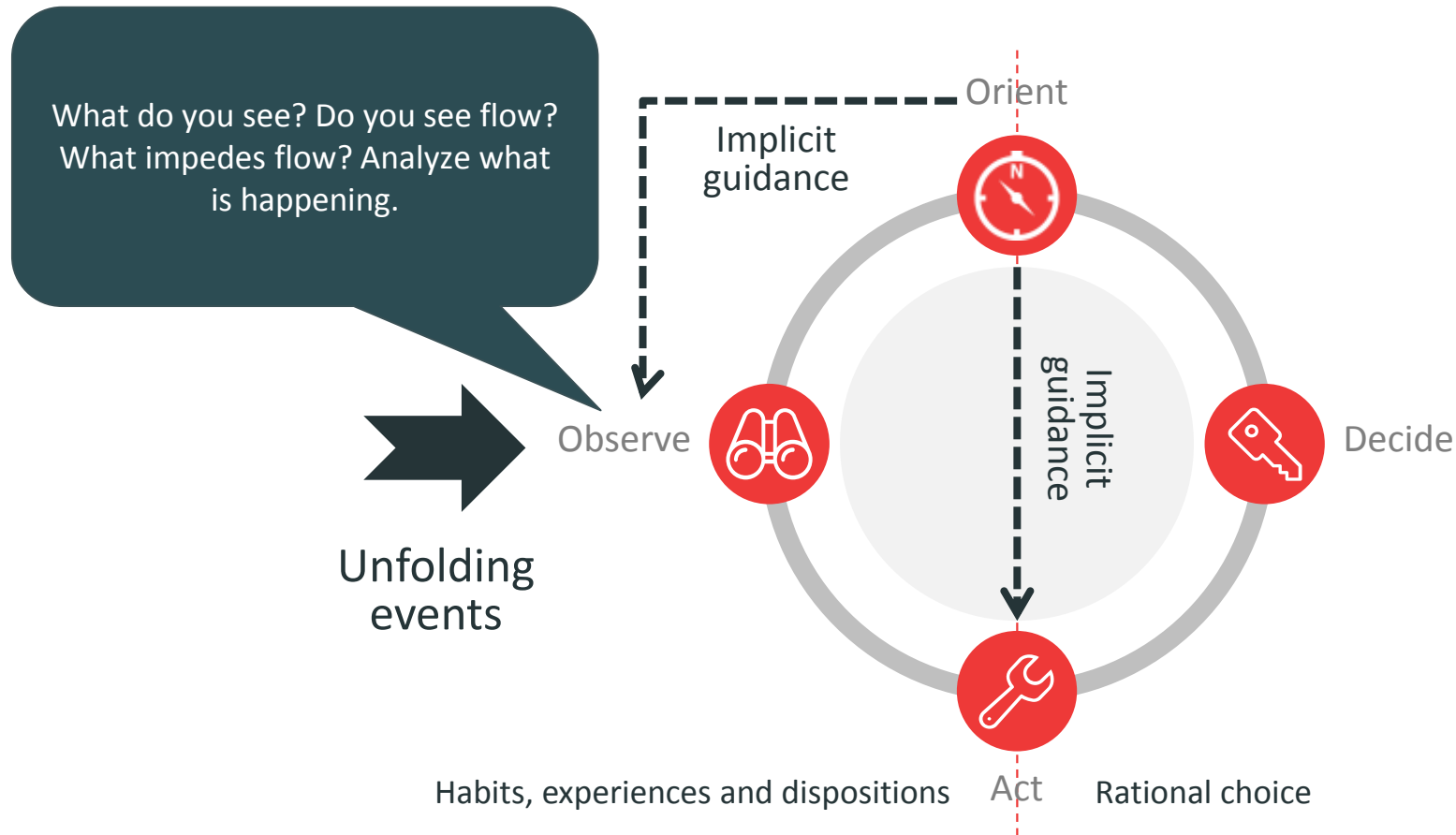
At the backside of the notes you find a dedicated section for this.

DEBRIEFING APPROACH

- The following slides serve as background information to facilitate the debriefing session
- The debriefing is typically done in the following steps;
 1. Observations and problem analysis by participants in their teams
 - Where are we in the OODA loop?
 - What are good observations?
 - Identifying causal loops!
 2. Sharing the observations and analysis
 3. Interpretation by facilitator
 - Calculating the lead time to demonstrate the use of Little's Law (CAUTION: boundary conditions may not hold)
 - Calculating flow efficiency to establish how realistic the simulation is (flow efficiency of the simulation should be around 10-15%)
 4. Summary and preparation for the next round
 - Summarizing the root causes and their effects
 - Options to improve

REFLECTIVE OBSERVATION

The OODA loop



MAKING OBSERVATIONS

- Observations
 - What do you see?
 - Observations are not opinions!
 - Observations are not actions!
- Look for impediments
 - What impedes flow?
 - What impedes fulfilling customer expectations?
 - What impedes giving answers to questions such as: “when will it be done?”

IDENTIFYING CAUSAL LOOPS

Gaining a deeper understanding by analyzing causal relations by looking at the parts AND the whole.

Identifying causal loops is not applicable for quick play.

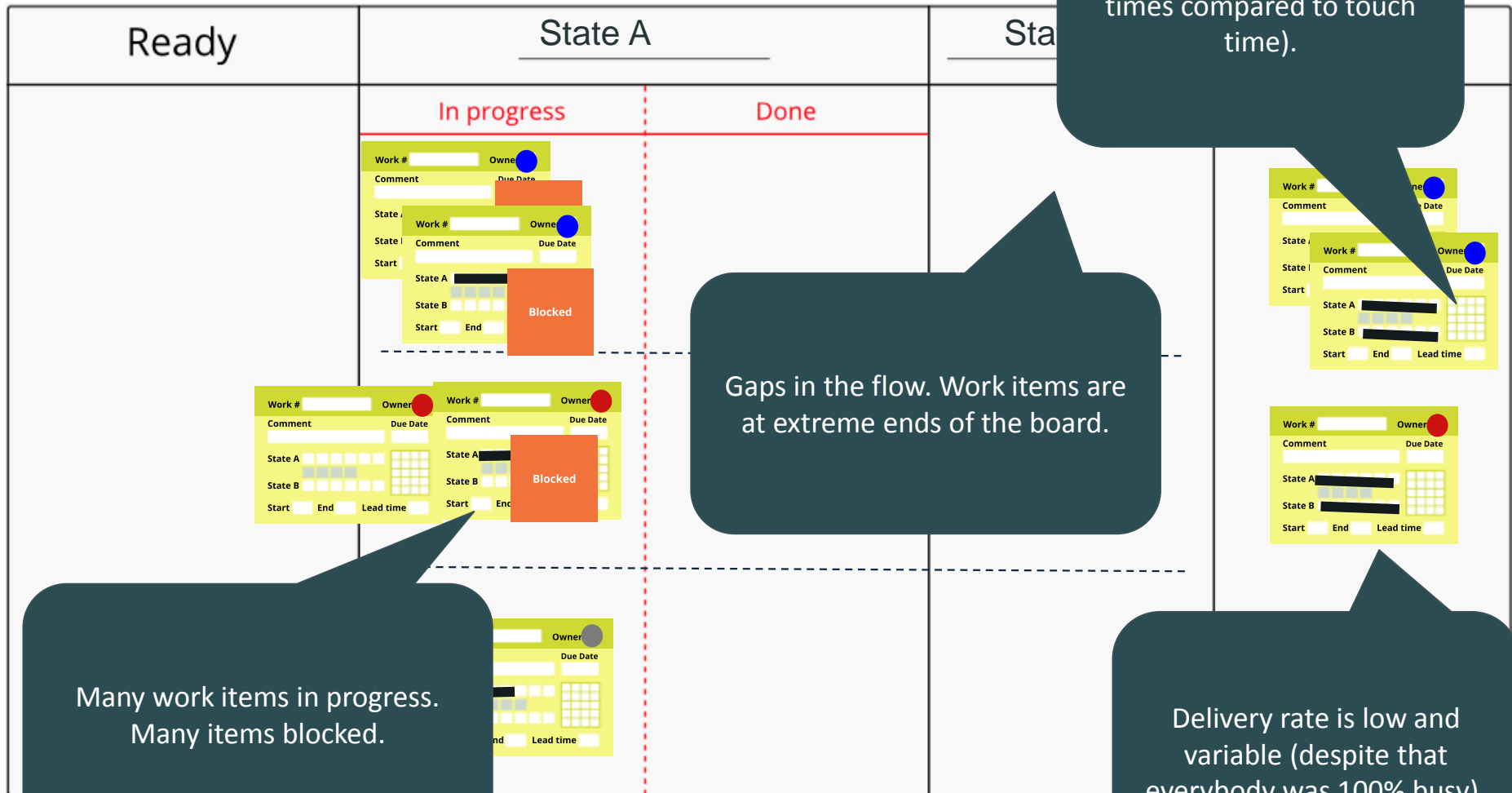
caffeine causality loop



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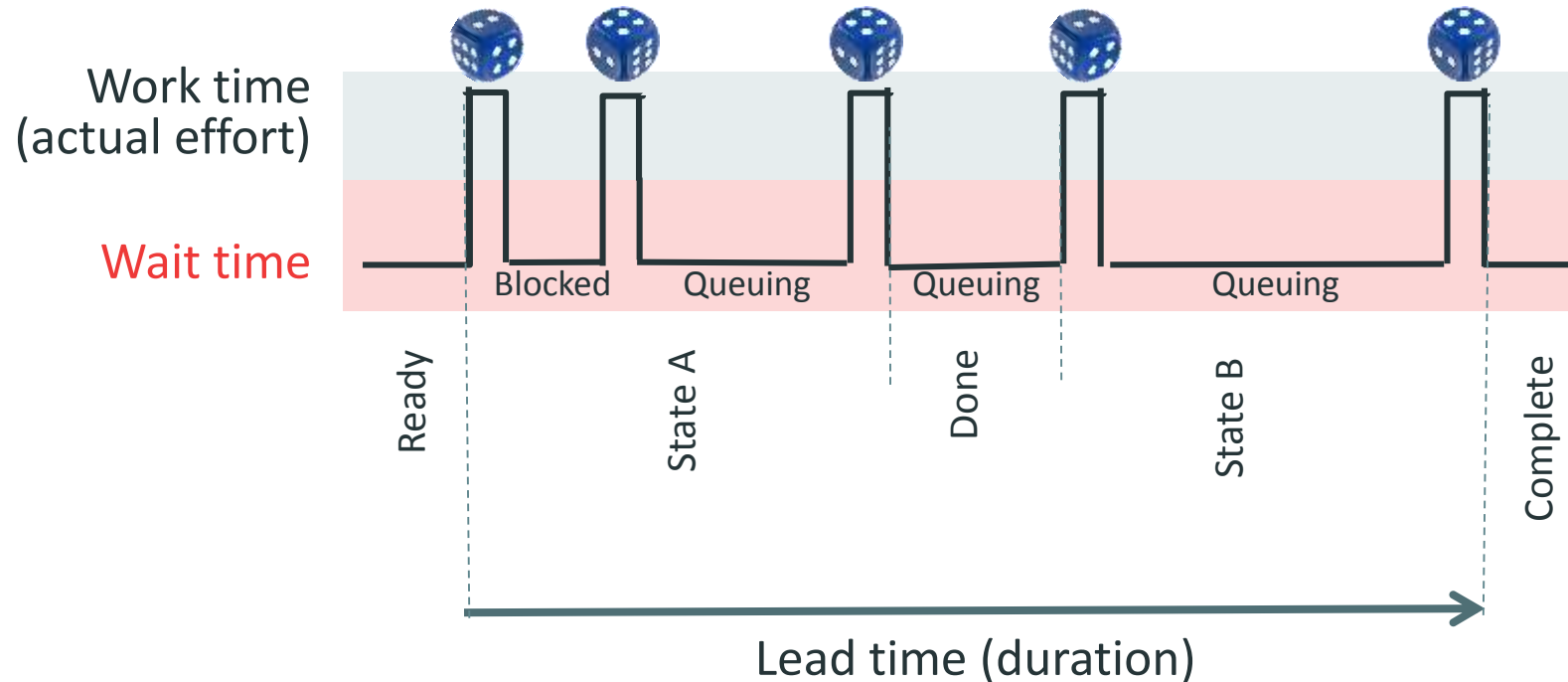
Tip: Participants can use their favorite problem analysis technique to analyze the problem (e.g. five why's). Participants however gain most insights when they look for causal loops (the above figure shows an example). In the simulation, look for the causal loops between blockers and WIP; predictability and “urgent” work (see also slides: “A vicious feedback loop” and “Low liquidity”).

WHAT DO WE SEE?



WAIT TIME

Lead times are dominated by wait times



**Work is mainly waiting as work in progress (WIP).
Large WIP and long lead times result in low flow efficiency.**

TOUCH TIME VS. LEAD TIME

Measurements			<after 5 days days>			<after 5 days days>			<average over 10 days>		
Days 1 - 5			Delivery rate	WIP		Days 6 - 10	Delivery rate	WIP	Touch-time		
✓✓✓✓✓			2	8		✓✓✓✓✓	3	15	3		
Days 11 - 15			Delivery rate	WIP		Days 16 - 20	Delivery rate	WIP	Leadtime		
Days 21 - 25			Delivery rate	WIP		Days 26 - 30	Delivery rate	WIP	Leadtime		

During the debriefing session of round 1 calculate together with the group the average time spent on an item (touch-time).

The facilitator may point out to the participants that strictly speaking the boundary conditions for Little's Law may not hold for the simulation as the system is trending.

Have a discussion about flow efficiency (use flip chart)

- Calculate the leadtime using Little's Law $\text{Delivery rate} = \frac{\overline{\text{WIP}}}{\text{Leadtime}}$ (make sure to use the values of 1 day and not 10 days)

Use this formula to explain that the simulation is reflecting quite a realistic situation.

Calculations are not applicable for quick play.

$$\text{Leadtime} = \frac{\text{WIP}}{\text{Delivery rate}}$$

→ 30 → 15
 0,5 (5 items over 10 days)

- Calculate Flow efficiency = $\frac{\text{Touch-time}}{\text{Leadtime}}$
- 10% → 3 → 30

In most simulations flow efficiency will be around 10% which is compared to reality quite a good result (in the Kanban community people report often about flow efficiency <10%).

WHAT ARE THE ROOT CAUSES?



Keep the
hands busy

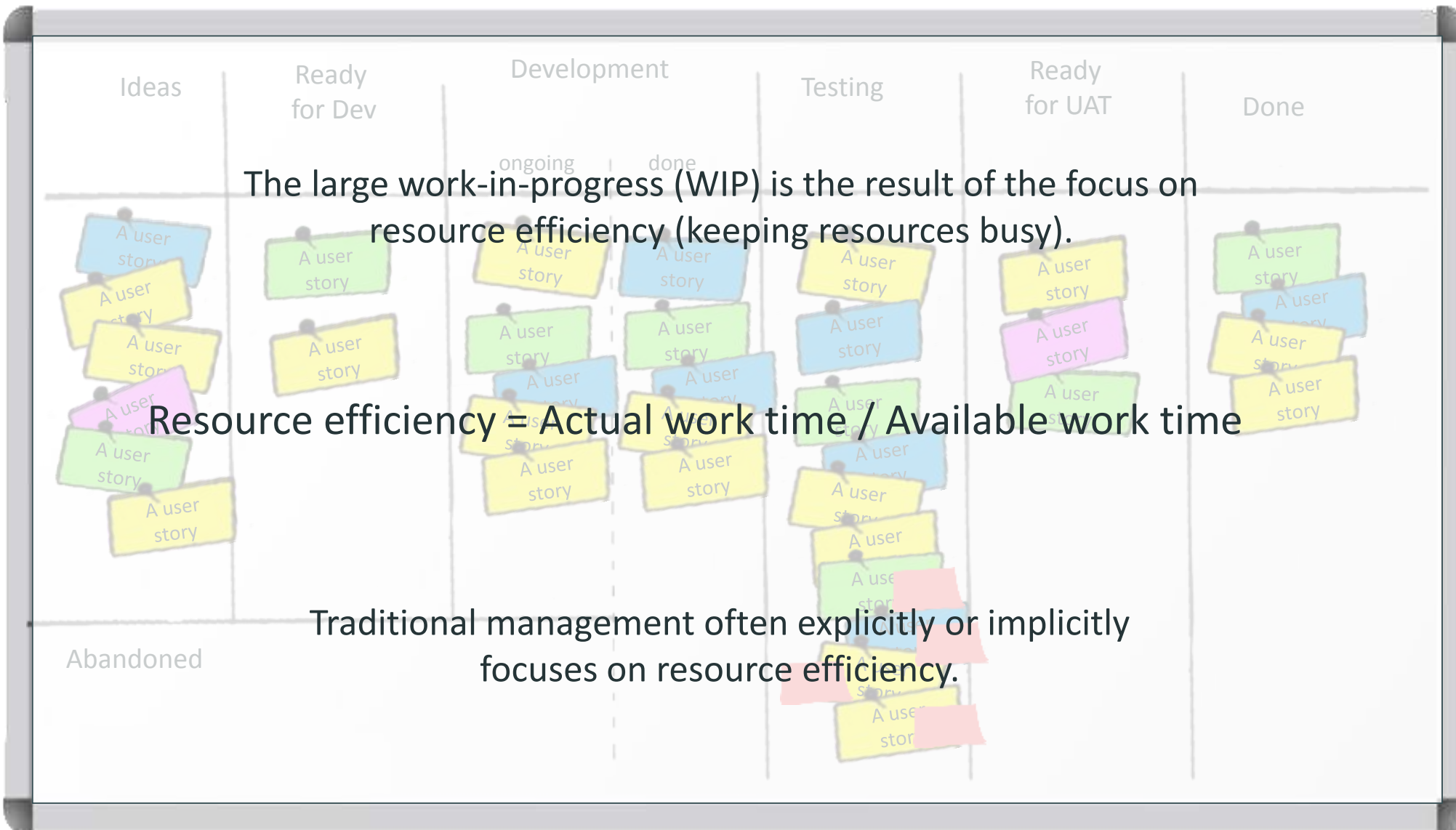


Command &
Control



Specialist
workers

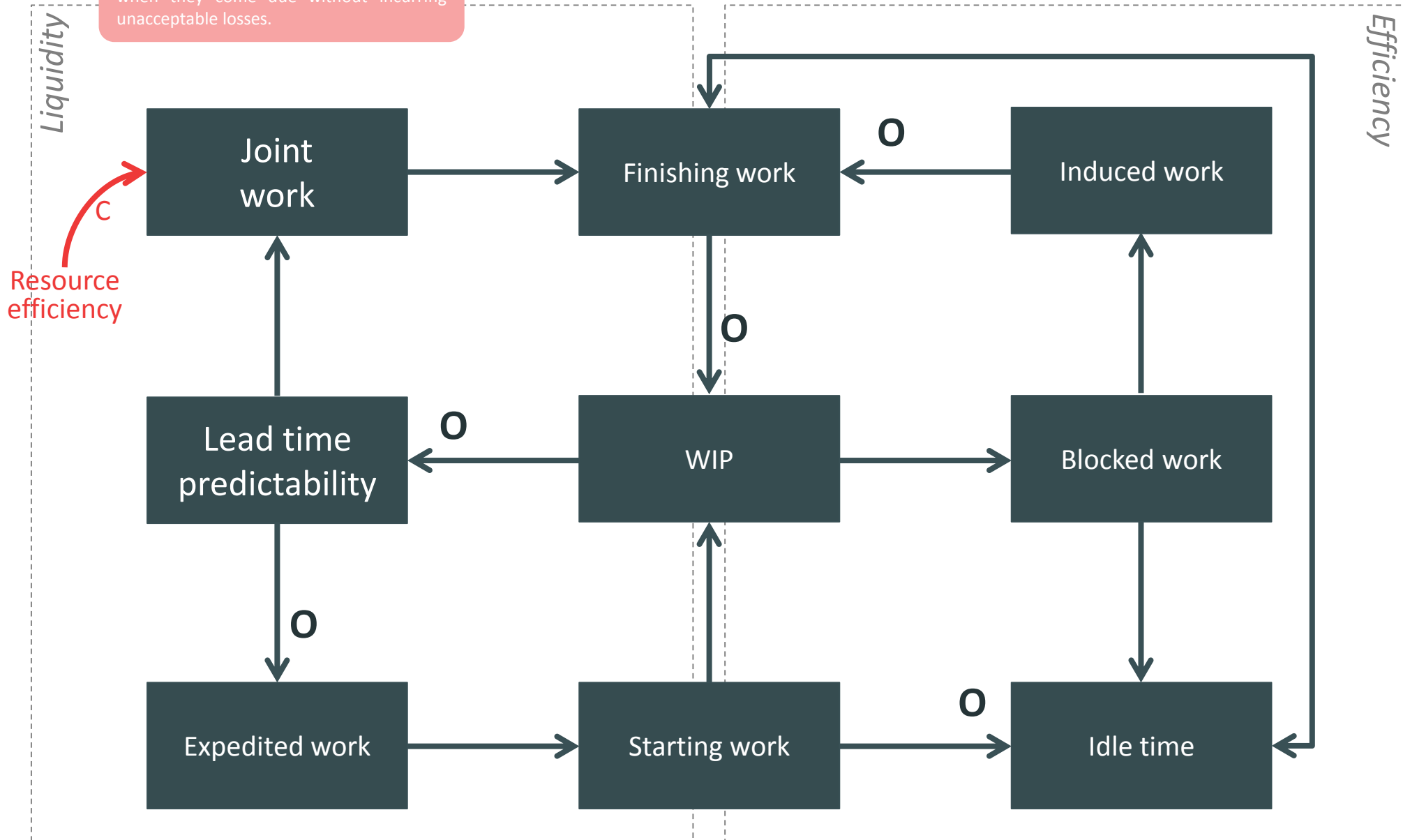
EFFICIENCY MINDSET



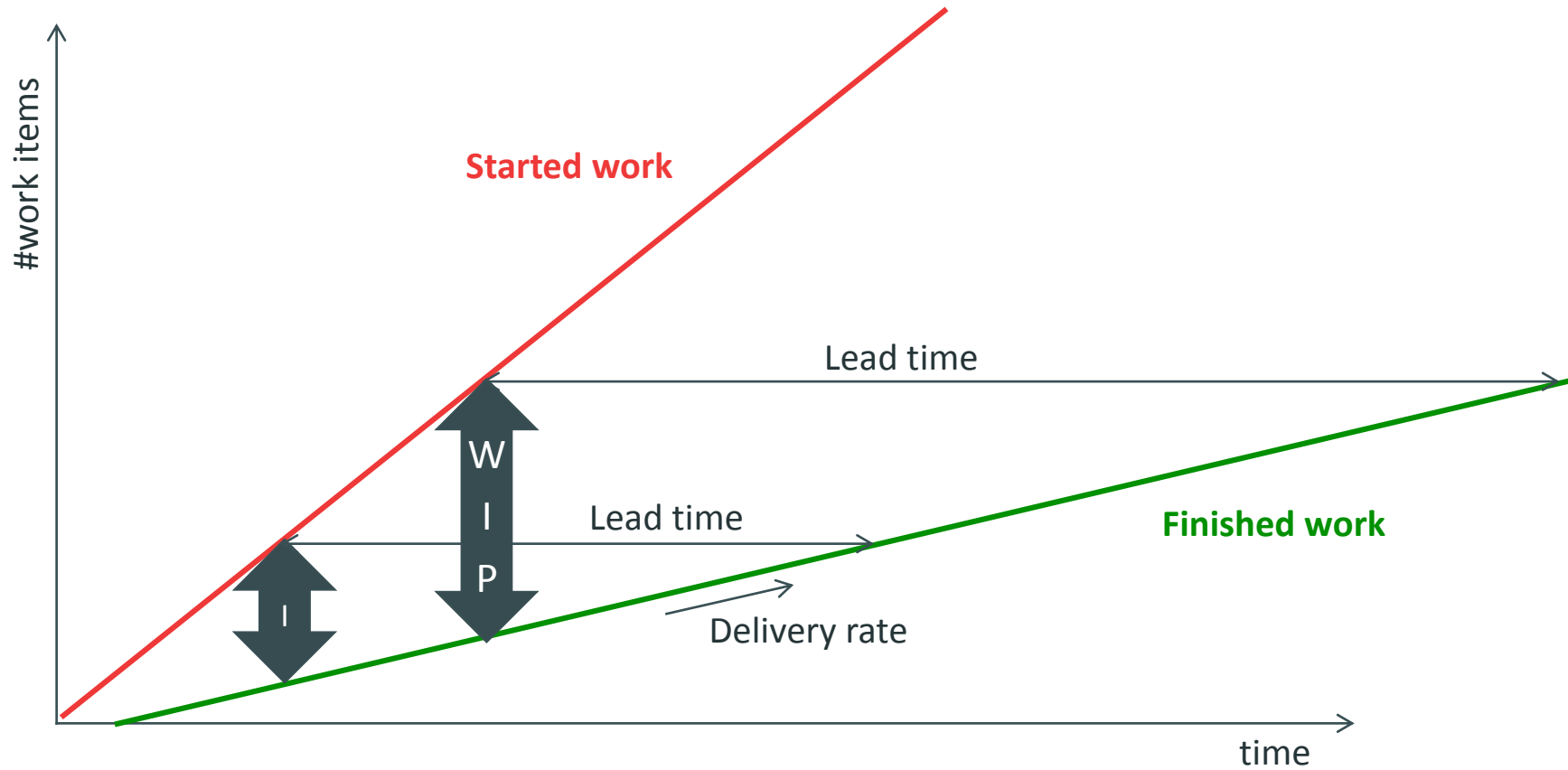
CAUSAL LOOPS

For the standard and advanced play you should be able, as a Okaloa Flowlab facilitator, to explain the causal loops shown on the next page and at the end of round 2 (p [106](#)). It is not a necessity that you use these slides but at least you need to address these loops because providing that level of inside is key for running a successful Okaloa Flowlab workshop. You can reach out to us in case you want to acquire a deeper understanding about this.

Liquidity is the ability to meet obligations when they come due without incurring unacceptable losses.

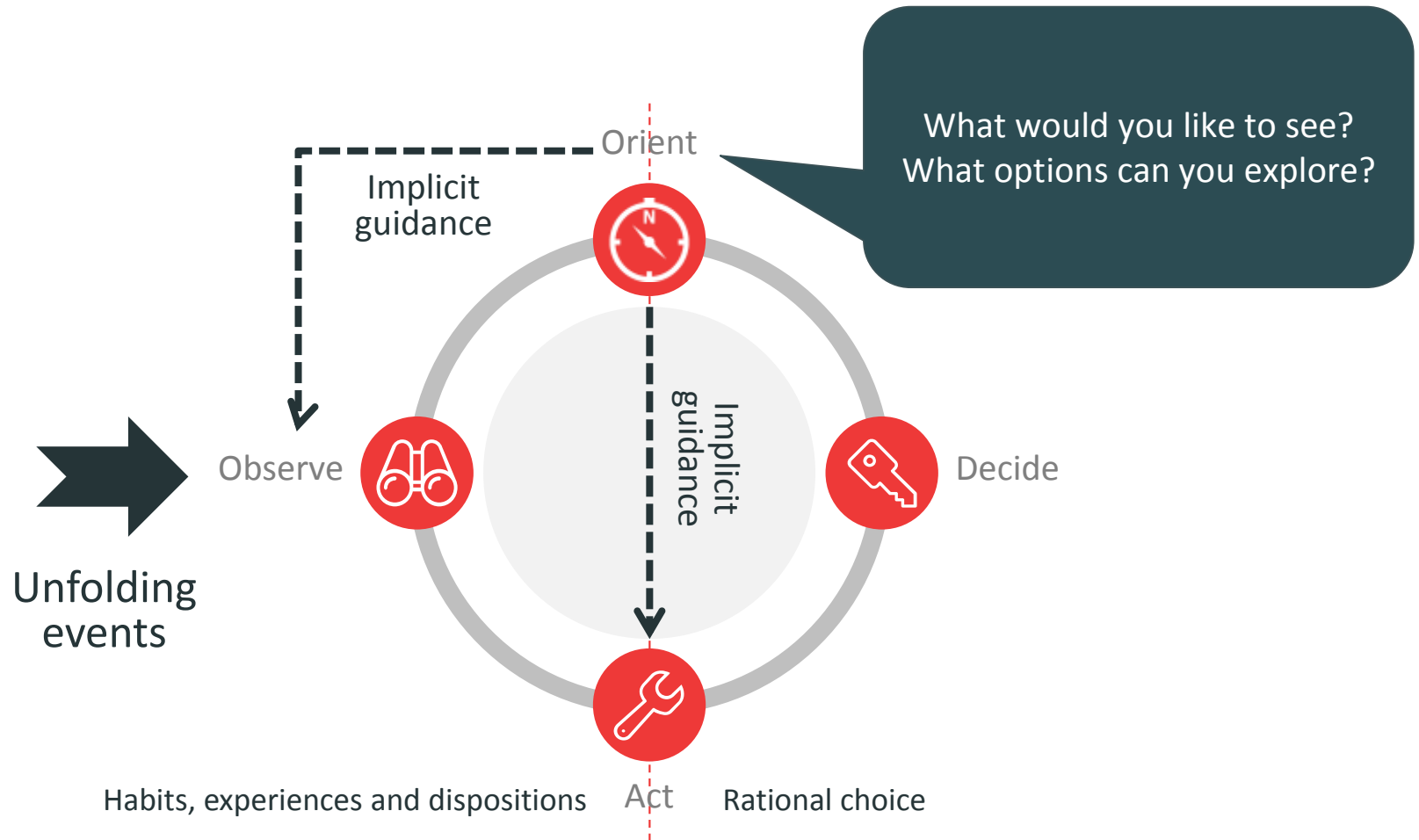


No Flow



REFLECTIVE OBSERVATION

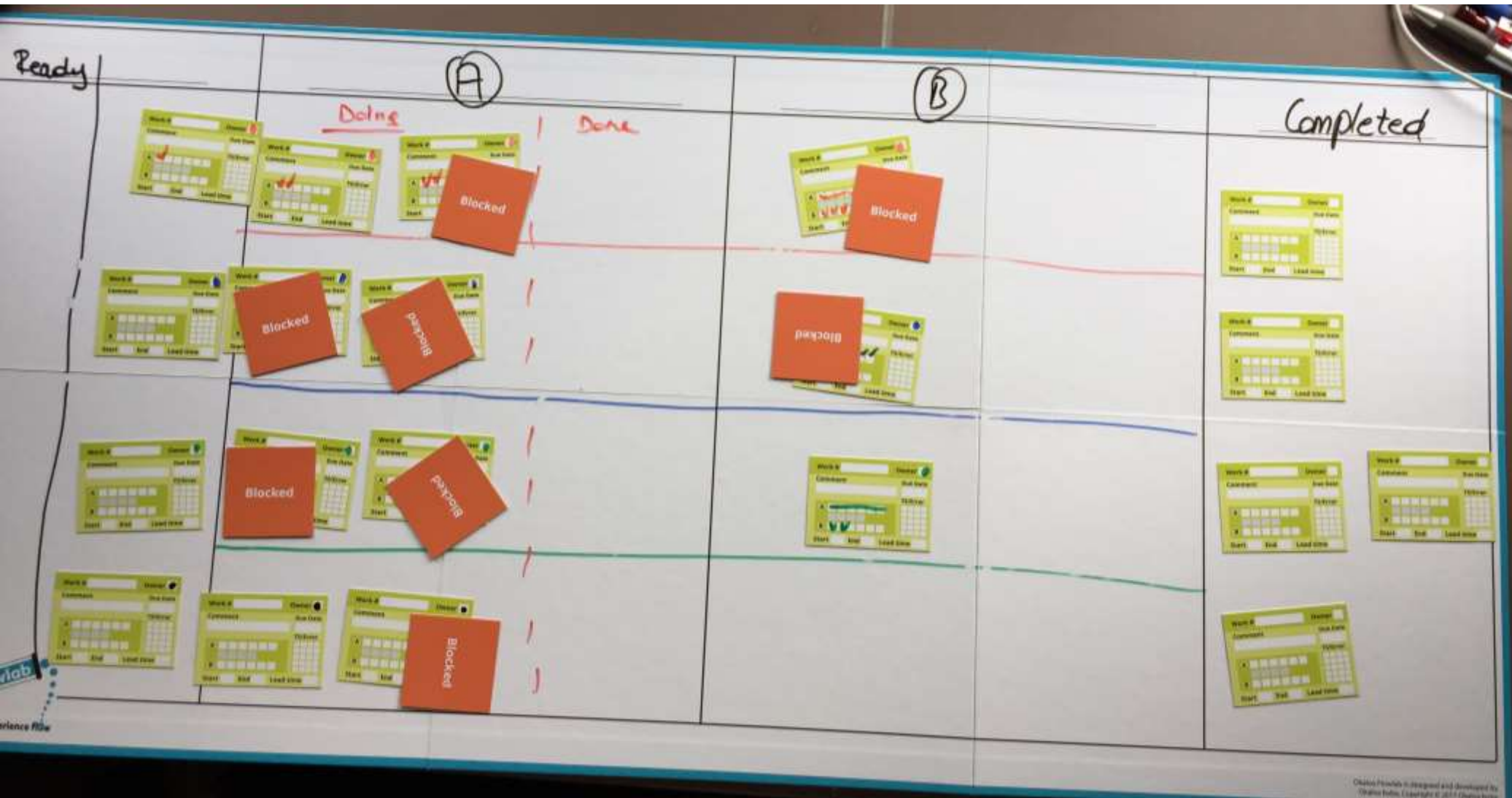
The OODA loop



ADDITIONAL DEBRIEFING TIPS

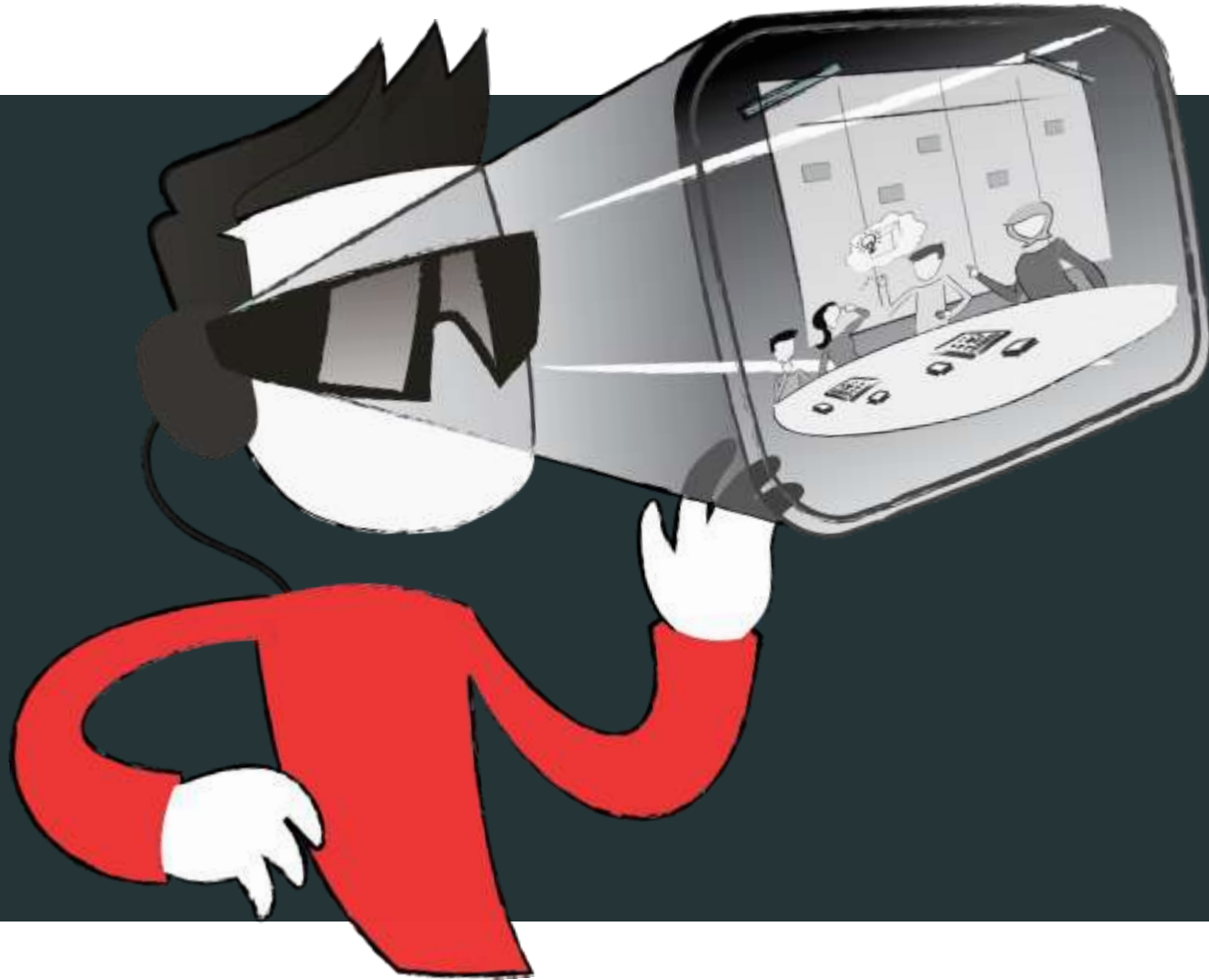
- General observations coming from participants
 - Difference in performance in team
 - A lot of blocked items
 - Long leadtimes
 - Little collaboration to finish work
 - Urgent items jump the queue causing the WIP to increase
 - Hard to predict when something will be finished
- Ask the participants if this resembles their reality
 - Some will say it does not sound realistic while others recognize their situation very well in this simulation
 - Blocking usually means that they are waiting for somebody else; or that they are called away so that their work is waiting
 - Explain that being called away means that extra effort is needed to restart your own work (which is the same as the effort needed to unblock)
 - To explain this is important to give the audience the feeling that these simulations are realistic (in most cases people follow this reasoning but keep in mind that you can always have exceptions in the audience so make sure that this does not distract you).
- Have a discussion about rationale behind urgent items
 - Since it is hard to predicate when an item is going to be finished, we make items urgent because that gives us the comfort that it will get the attention and hopefully will be delivered then
 - Ask them to predict the average leadtime (let them make a predication based on their experience with the current simulation)
 - Do the Little's Law exercise (see next slide)
 - While resource efficiency is 100% (everybody was constantly busy – that is if the project manager did his planning well), the flow efficiency is typically 10% during this simulation
 - See exercise on next slide

EXAMPLE OF TYPICAL BOARD AFTER ROUND 1

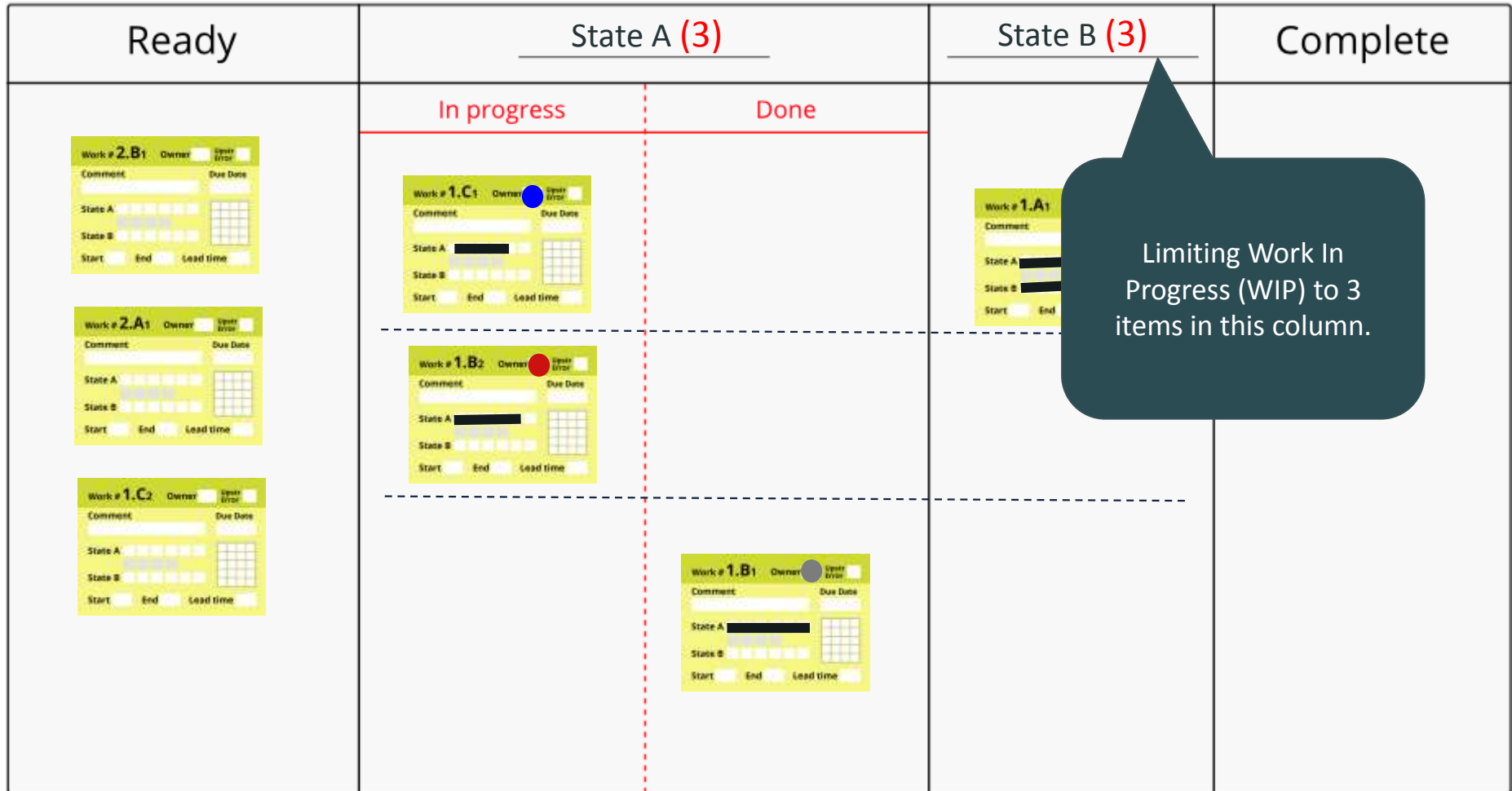


LIMITING WIP

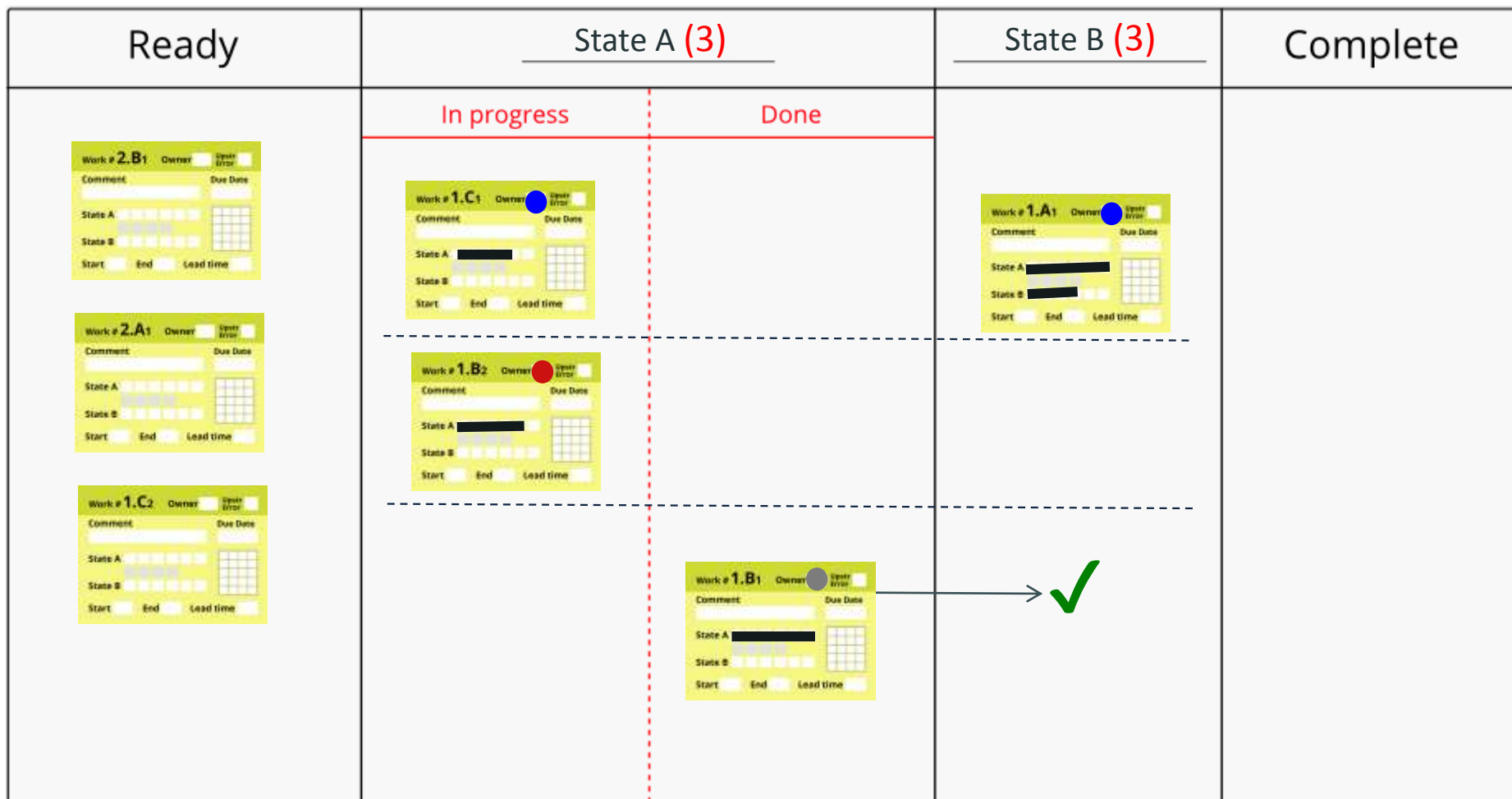
Flow efficiency - round 2



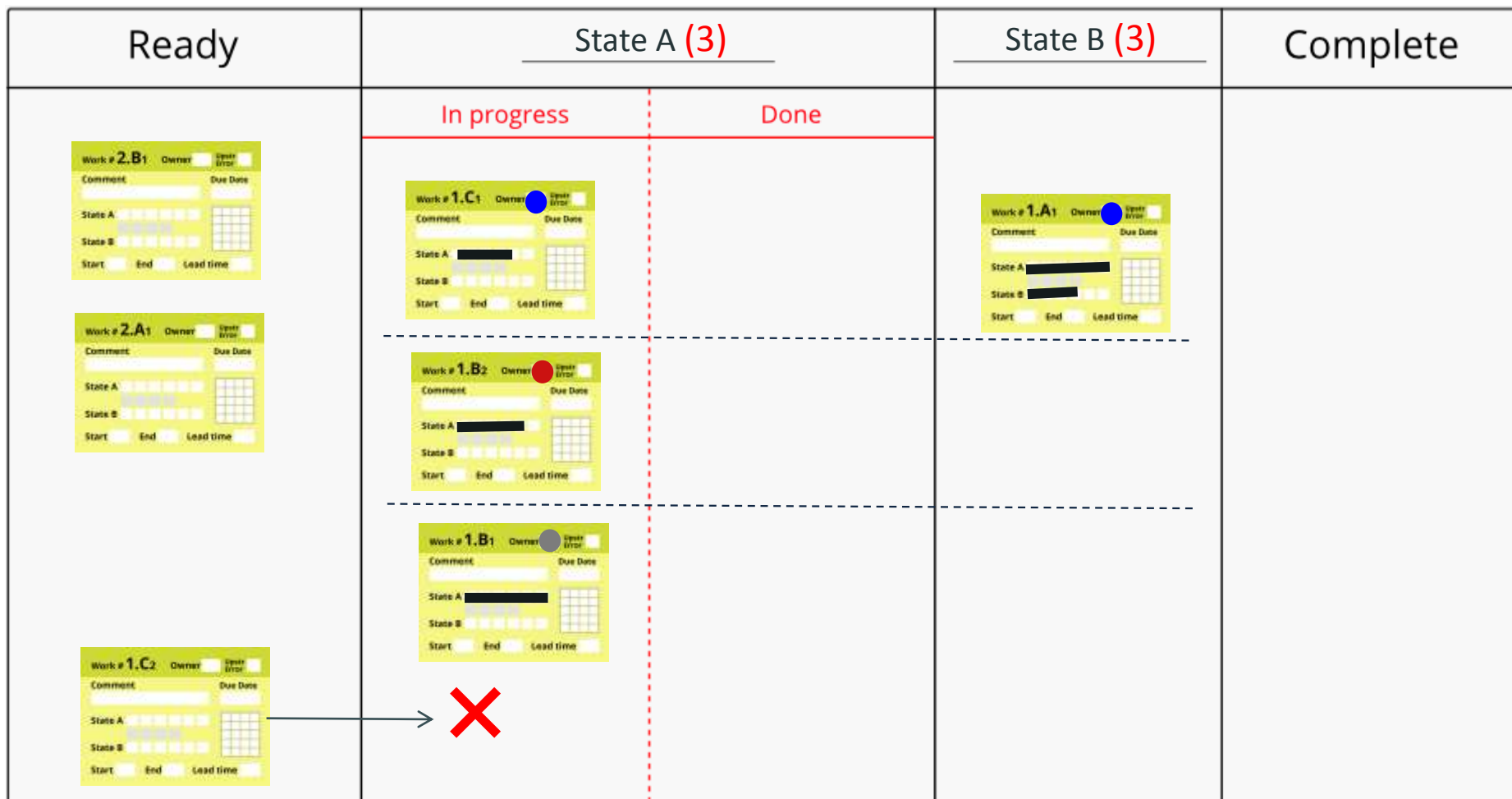
WIP LIMITS



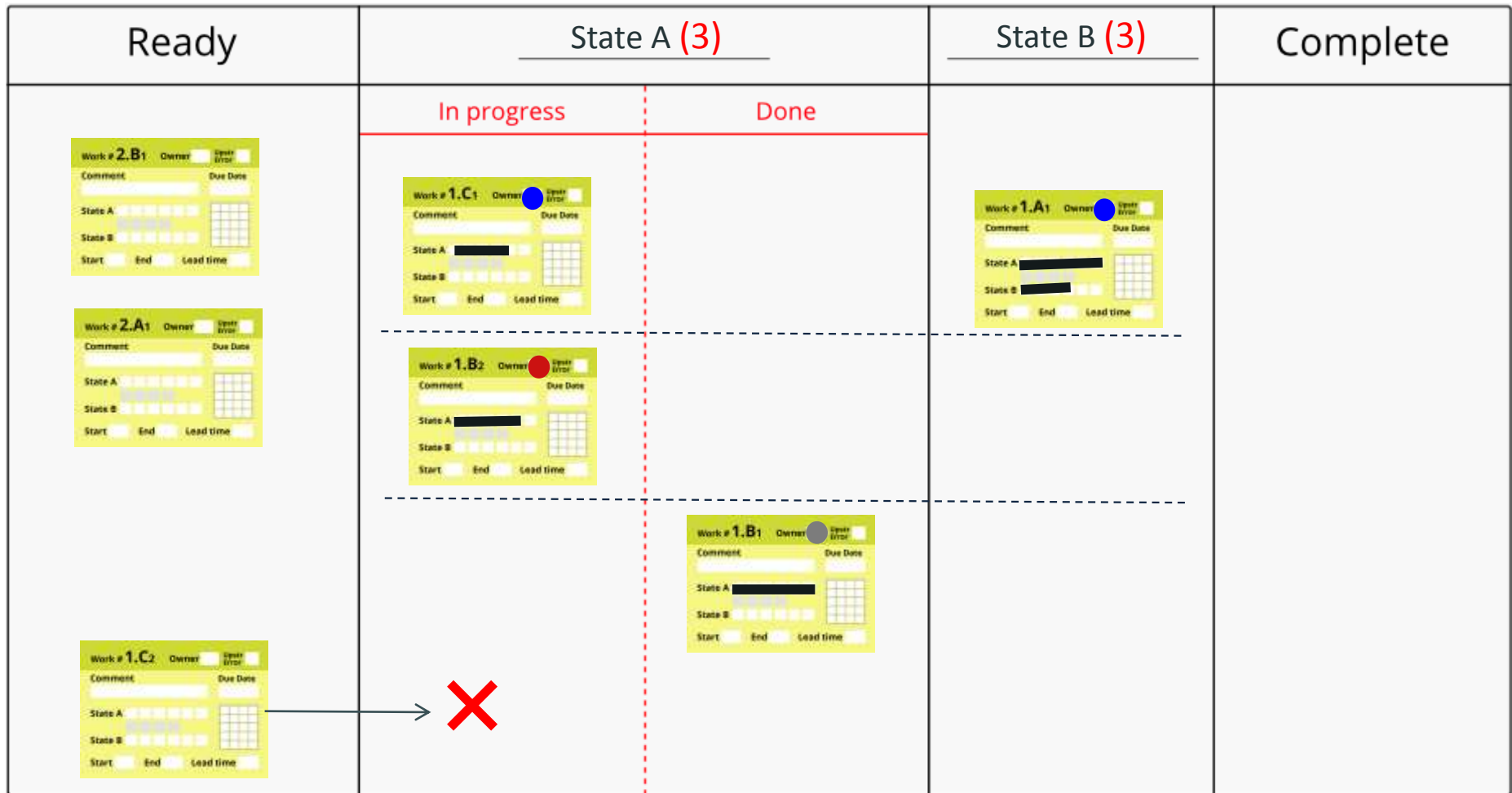
RESPECTING WIP LIMITS



RESPECTING WIP LIMITS

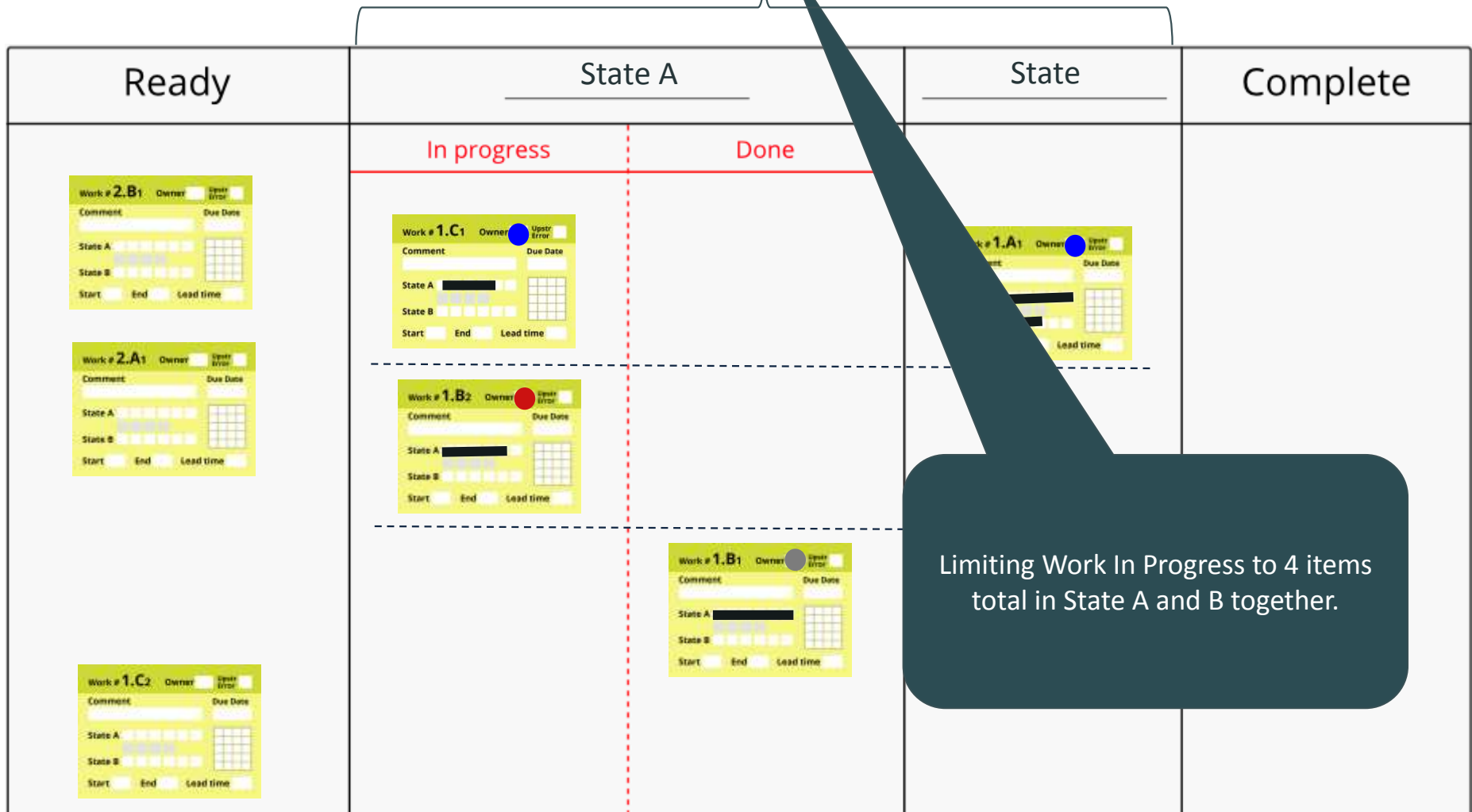


RESPECTING WIP LIMITS

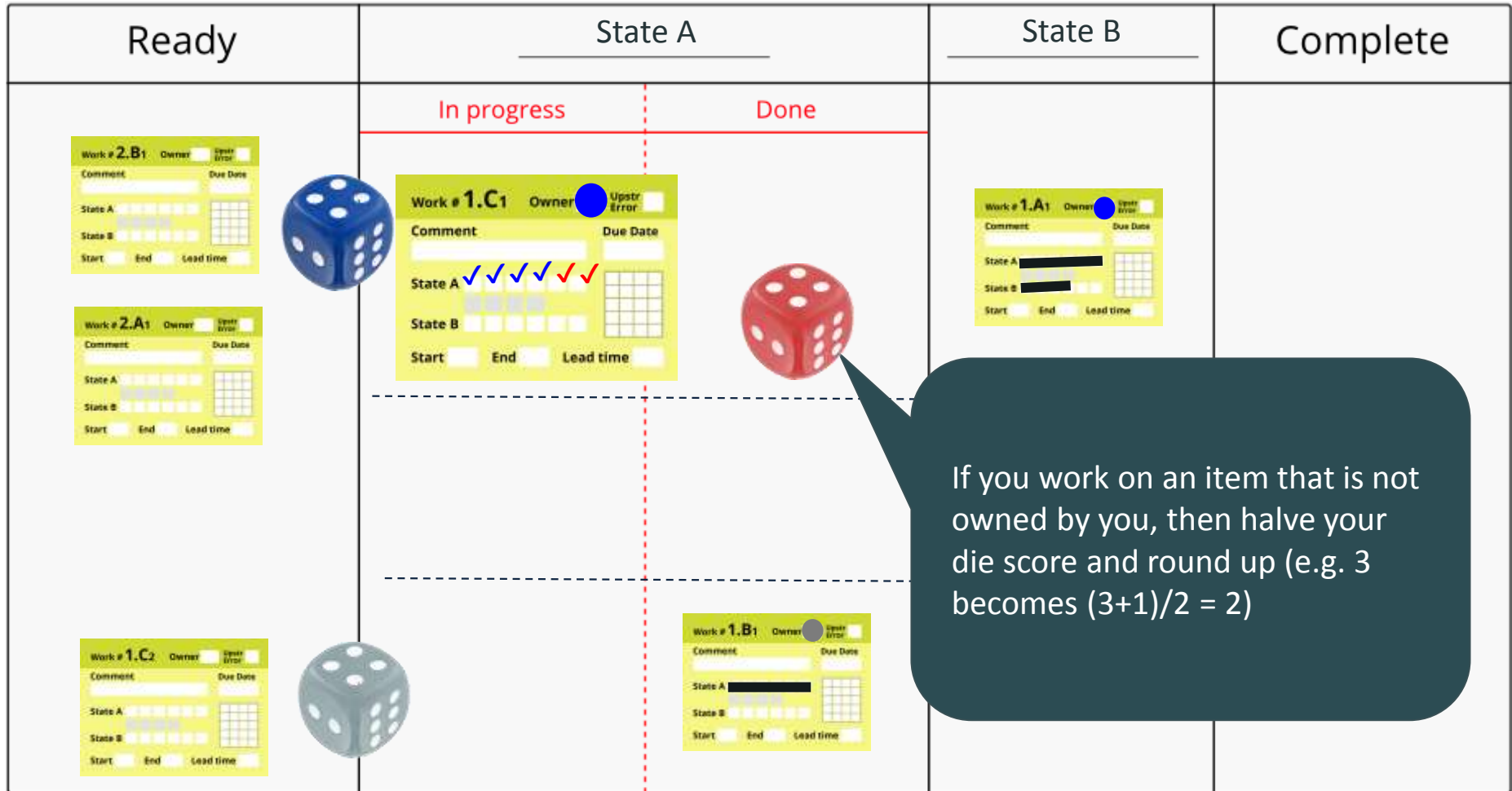


OR USE A CONWIP

(4)



SPECIALIST WORKERS / HANDOVER COST



ADDITIONAL RULES

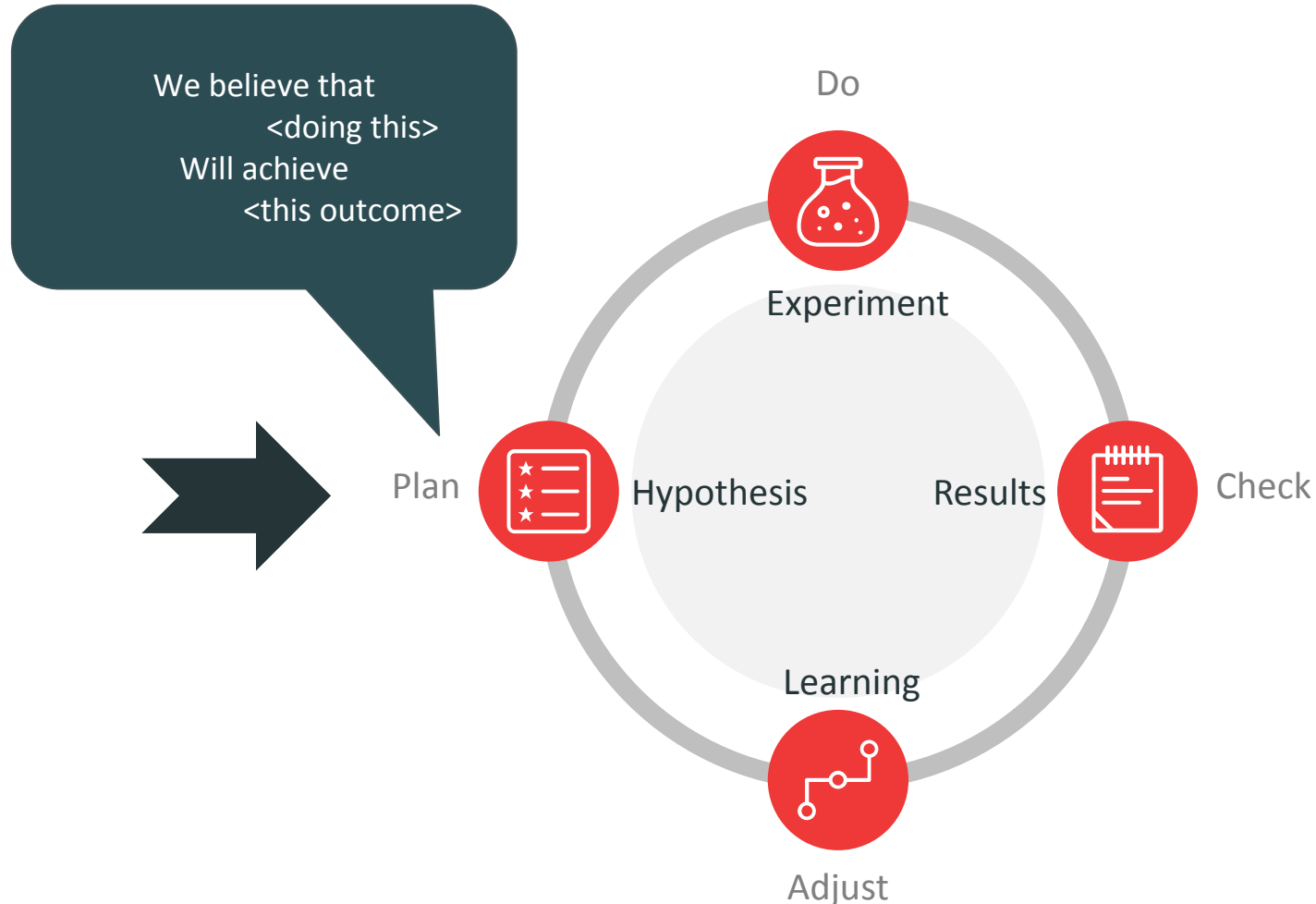
1. If you work on an item that is not owned by you, then halve your die score and round up (e.g. 3 becomes $(3+1)/2 = 2$)
2. You can unblock someone else by throwing 3 or more

POLICIES

- Try to finish work as soon as possible
- Only start work when capacity allows it (respect the Work In Progress limits)
- If you cannot do any work, then help someone else to unblock or perform work
 - If you throw 3 or more, unblock someone else if you can
 - Otherwise adjust your die score to $(die\ score + 1)/2$ and do work assigned to another person
- Throughput (amount of items delivered per time period) is measured in periods of 5 days

ACTIVE EXPERIMENTATION

THE PDCA loop



FORMULATE A HYPOTHESIS

Policy	Expectation	Why?
Limiting WIP to ?		

INSTRUCTIONS - ROUND 2

1. Start from empty board; let the teams clear the board and work items.
2. Make sure that the set with blocker cards is shuffled very well.
3. As a facilitator collect all the special work items again.
4. Let the teams start with a new lab note sheet and ask to complete the estimates for their new hypothesis.
5. Start again with event cards day 1 to 10.

ESTIMATION FOR ROUND 2

Experiments / estimations

Estimates for Request 1		Round 2			Round 3		
Effort	Delivery date	Delivery rate	WIP	Leadtime	Delivery rate	WIP	Leadtime
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

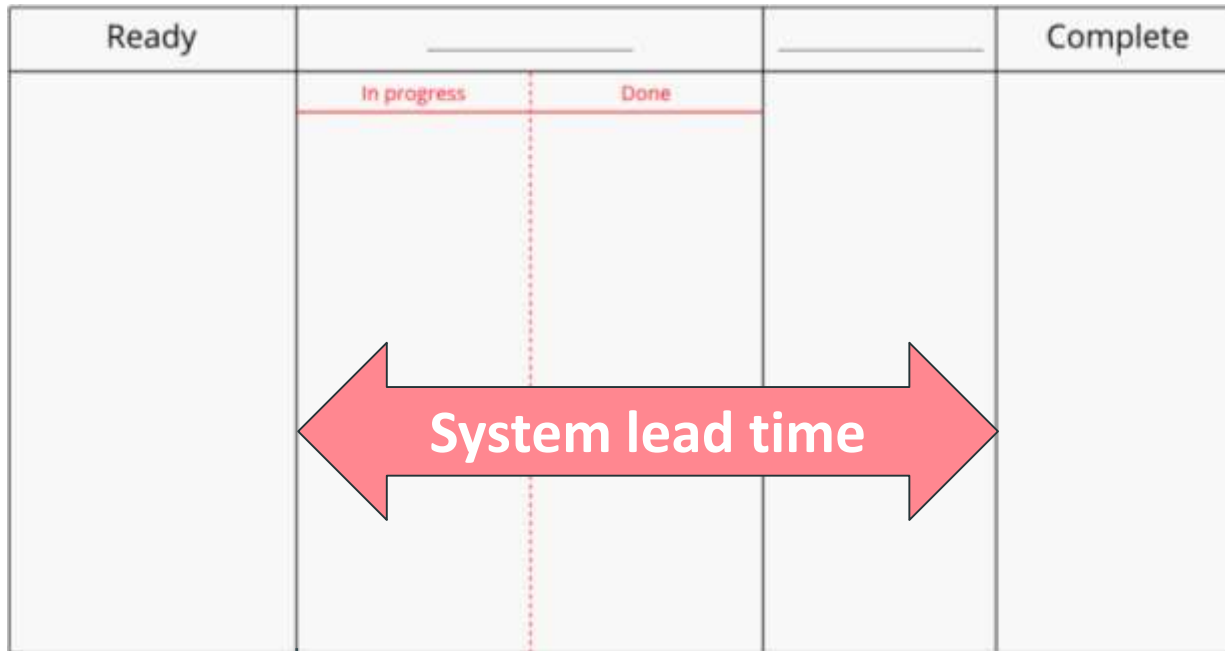
Estimates for Request 2	
Effort	Delivery date
<input type="text"/>	<input type="text"/>

At day 7 you will be asked to give an estimate for Request 1 – complete your estimates here.

Estimate what the outcome of round 2 will be so that at the end of round 2 you can validate your hypothesis.

CAPTURING LEAD TIME

Tracking of lead time can be omitted in quick play.



- Mark the start date when you take ownership of a work item
- Mark the end date when you move a work item into “complete”

We are no longer interested in touch-time so STOP tracking work time!

Work # 1.A1 Owner Upstr ☐ Error ☐

Comment Due Date

State A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Start End Lead time

Work # 1.A1 Owner Upstr ☐ Error ☐

Comment Due Date

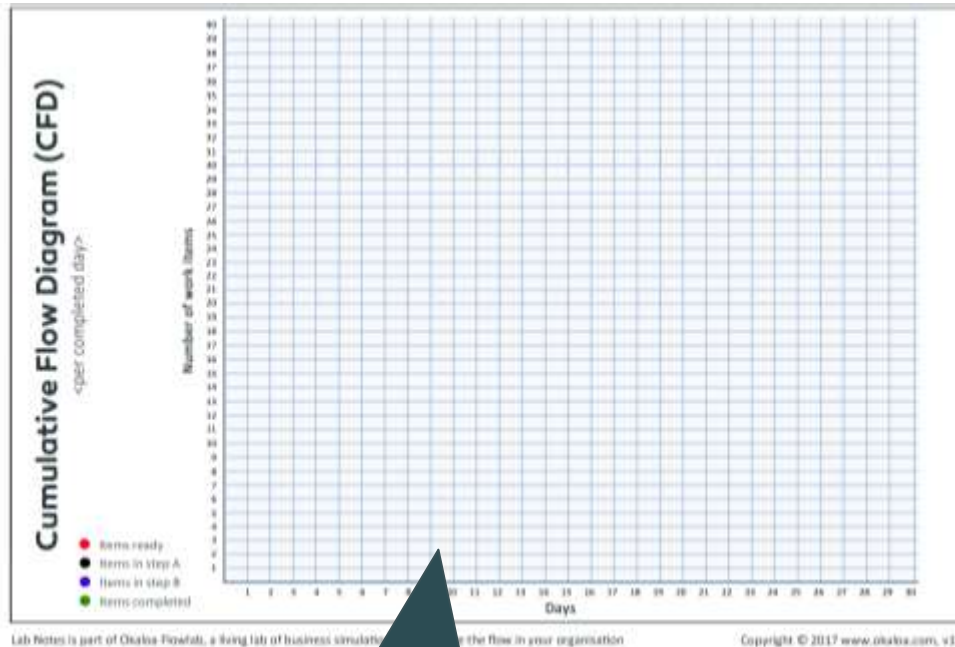
State A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

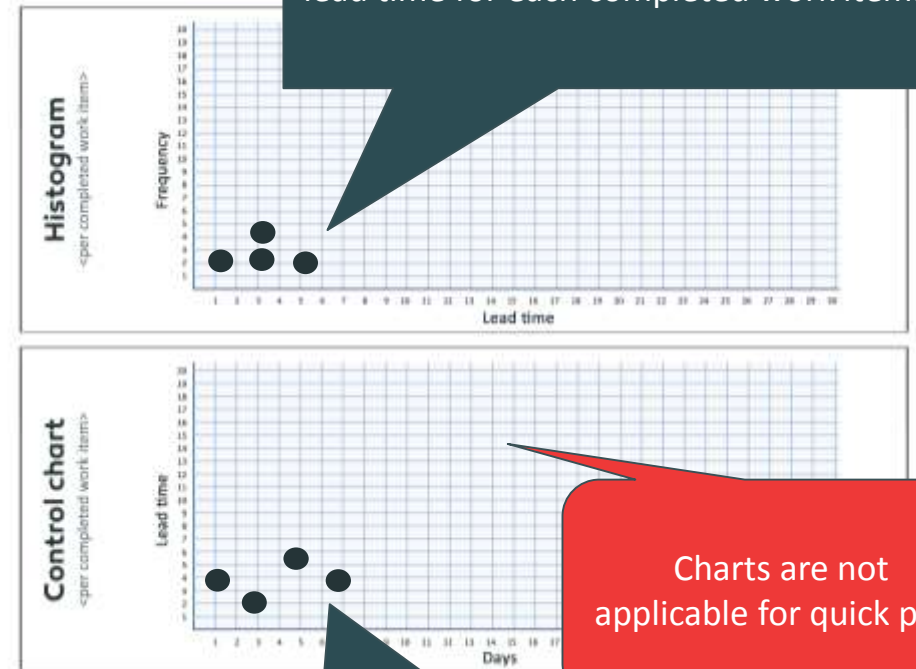
Start End Lead time

$$\text{Lead time} = \text{End} - \text{Start} + 1$$

EACH DAY COMPLETE THE CHARTS ON THE LAB NOTES



complete the CFD – use the 4-color pen to draw the dots and lines.



Add a mark of the occurrence of the lead time for each completed work item.

Charts are not applicable for quick play.

Mark the lead time on the control chart of the items that have been finished that day.

FACILITATOR TIPS

- It is good to have different teams choosing different WIP limits to be able to compare
- We recommend for the purpose of the simulations to work with CONWIP (since we are working lane and not column oriented)
- When people are absolutely not familiar with pull systems, Kanban or anything alike you might expect resistance and heavy discussion on the WIP number. Just let the team start with a number and leave it open to change it during the round.
- During the play you could have a discussion with each team individually about starting dates of urgent items
 - At day 2, 5 urgent work items need to be started
 - What will be the starting date in this round with adjusted policies? Is it when it is requested by the client, or when the team starts working on it?

PLAY DAY 1 TO 10

1. Standup meeting

- Review the board
- Every 2 days: Do not forget to replenish the “Selected” column

2. Perform work

- Throw and process your dice
- If needed pull in new work items from the “Selected” column

3. Close the day (team or project leader)

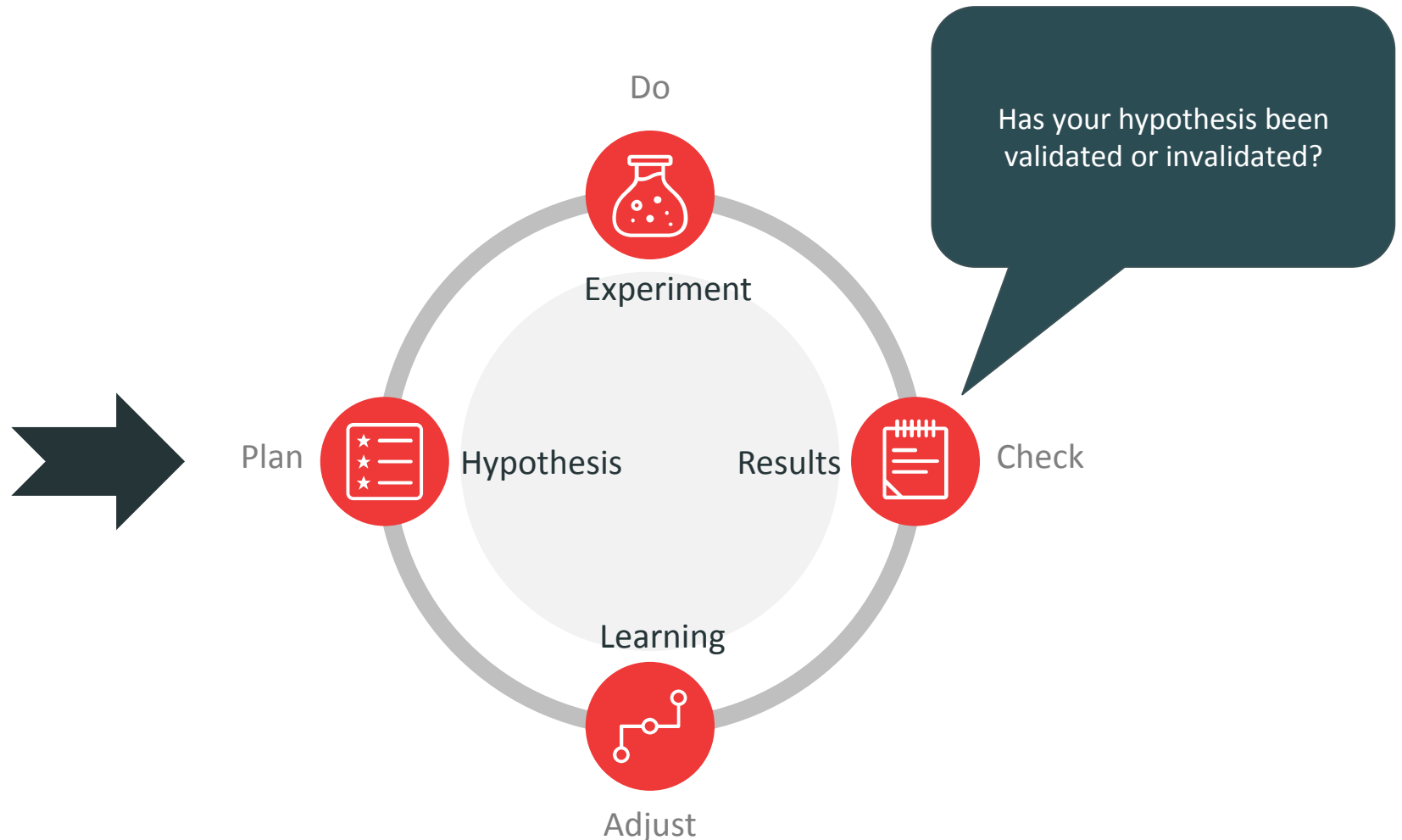
- Draw an event card
- Mark the day as done
- Make sure that everybody has followed the rules and policies as agreed!
- Every 5 days, note down the amount of work items that have been completed (= throughput)

DO

- Play 2 cycles of 5 days (10 days in total)
- Perform the following daily steps:
 1. Throw and process your die (each team member)
 - Unblock one of your items (when you throw 4 or more),
 - or perform work,
 - or take ownership of a new item **if WIP limits allow it (!!)**
 - or if you have no other option
 - unblock another player's item (when you throw 2 or more),
 - or perform work for another player (with adjusted die score)
 - Raise your hand (so that other team members know that your day is finished)
- 2. Close the day (team or project leader)
 - Draw an event card (team or project leader)
 - Mark the day as done
 - Make sure that everybody has followed the rules and policies as agreed!
 - Every 5 days, note down the amount of work items that have been completed (= delivery rate)

ACTIVE EXPERIMENTATION

THE PDCA loop



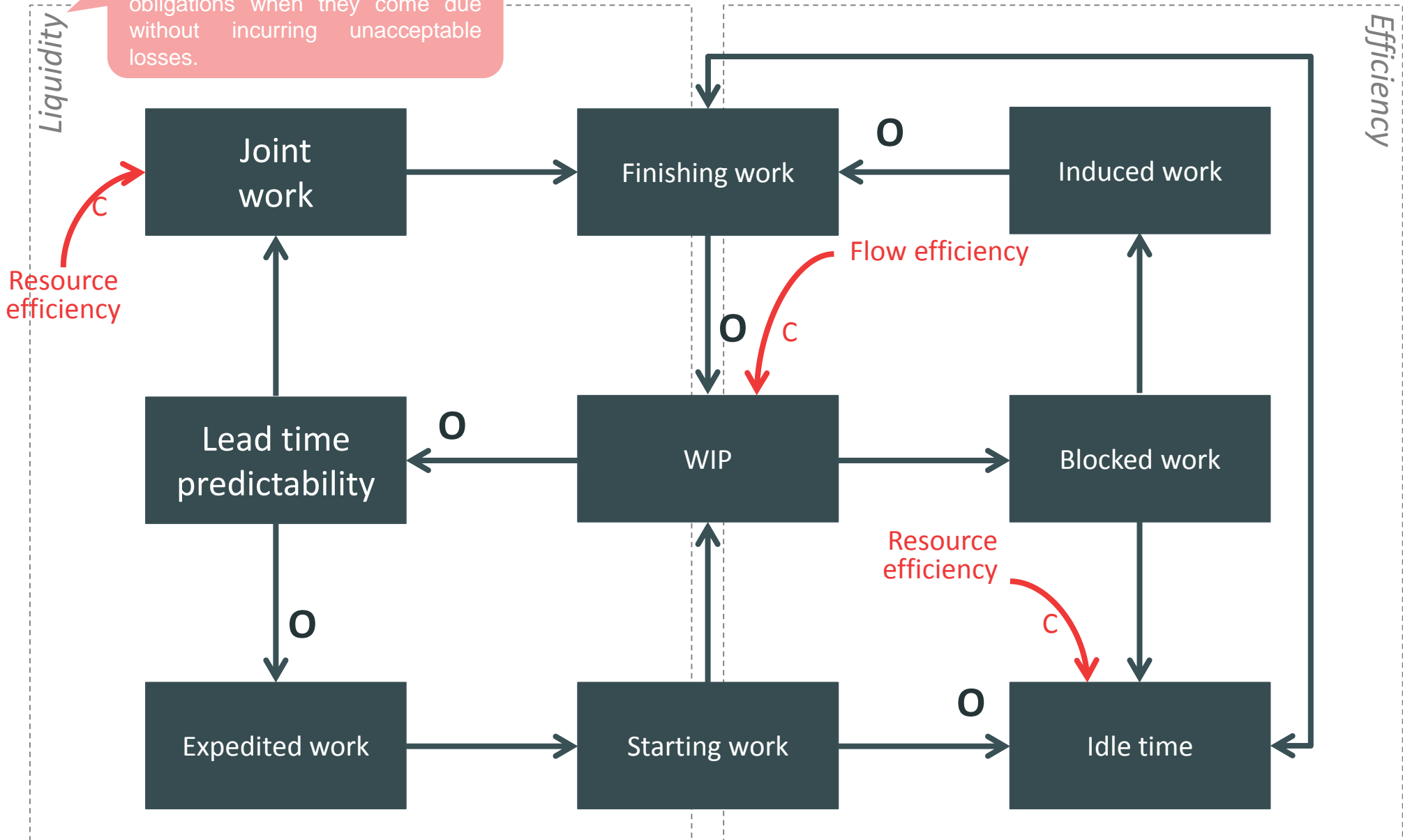
OBSERVATIONS

- What do you observe?
- Does it validate or invalidate your hypothesis?
- How do the causal relationships now compare with the previous round?

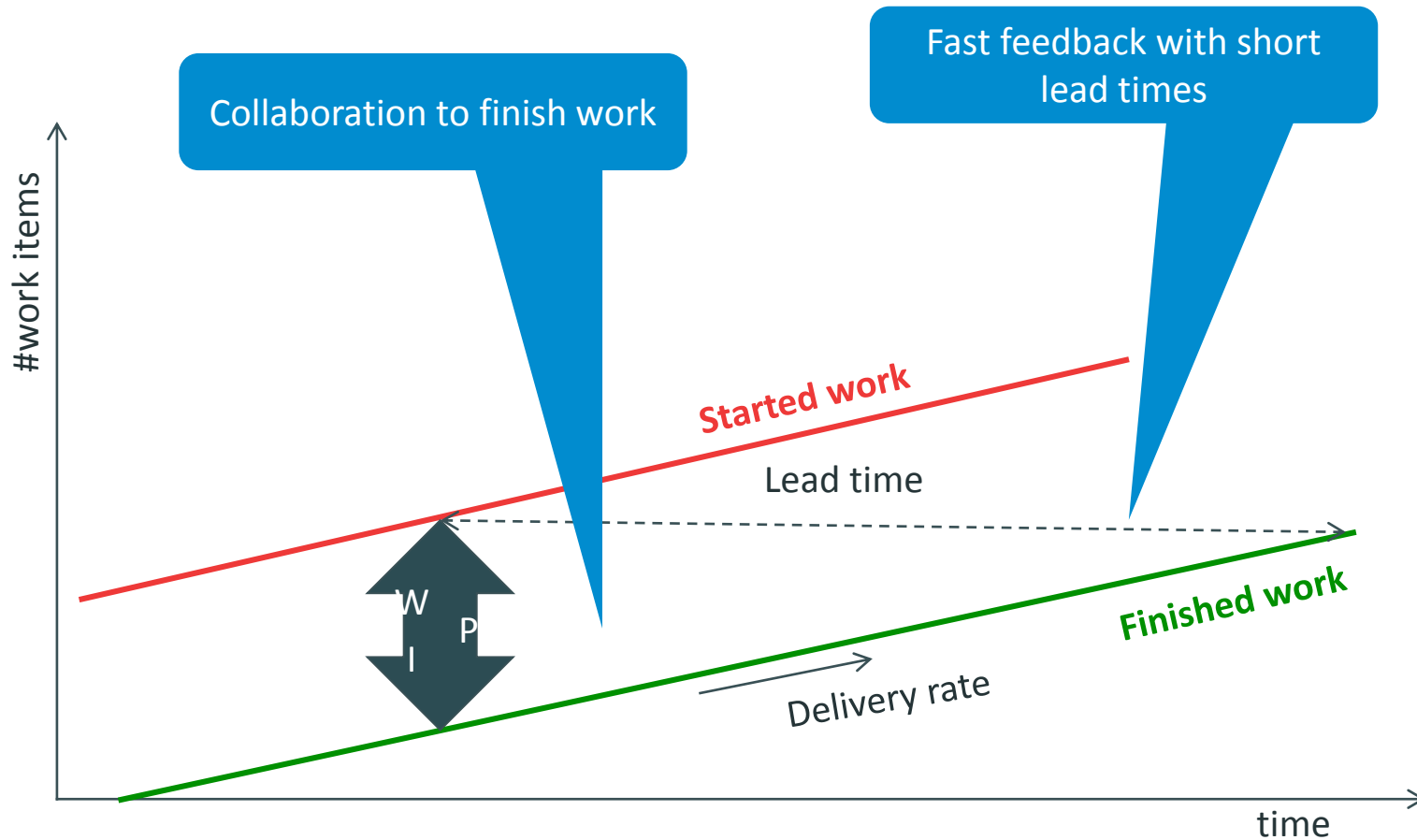
DEBRIEFING TIPS

- In case of the standard play, you should stress in the debriefing that limiting WIP is a step by step process, but in the simulation it is done in one go!

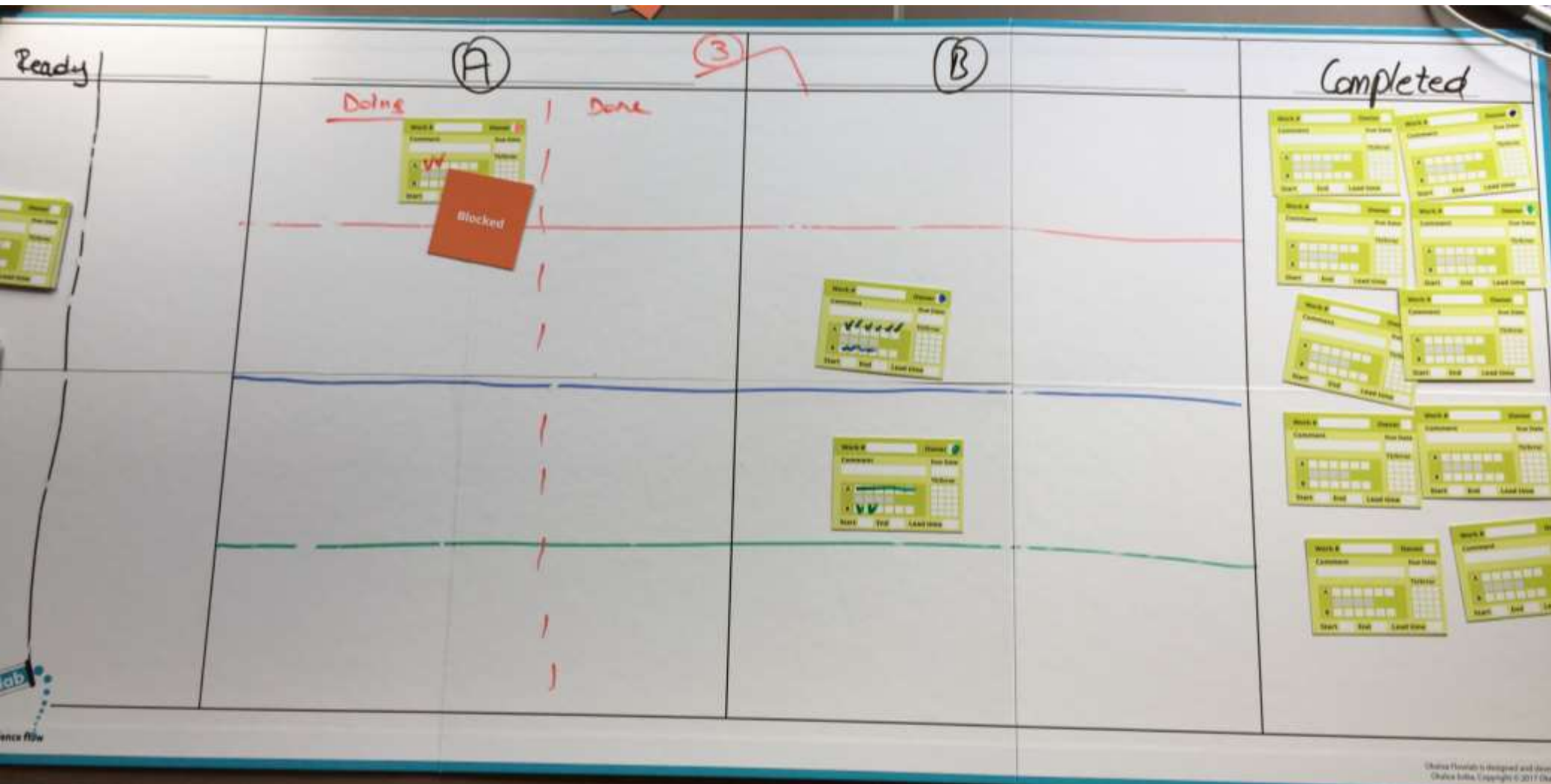
Liquidity is the ability to meet obligations when they come due without incurring unacceptable losses.



OUTCOME



EXAMPLE OF TYPICAL BOARD AFTER ROUND 2



THE TEAM FLOW ADVANCED PLAY

#theBestToStart
#Recommended #EnterpriseAgility
#Lean #new way
#NICE to learn
#FLOW #Agile
#Simulations



INSTRUCTIONS

An **advanced play** exists out of **3 rounds of simulation**:

- Start round 1 as in the standard play – only difference you could introduce here is asking people to enter ‘Start’ day so that you can collect lead time metrics starting in Day 20.
- Rather than immediately go to the improvements suggested by round 2 of the standard play (i.e. WIP limits), the approach for this advanced play is to do a range of experiments that should lead to more realistic improvements. We will do the experiments “starting from where we are now” (so boards will not be cleared like in the standard play but we continue from the current situation).
- As an intermediate step we will first experiment with changing policies like pulling work, cadences etc. (round 2 of advanced play) and gradually move towards more collaboration and limiting WIP (round 3 of advanced play, see round 2 of the standard play).
- For this version of the simulation you play 30 days (continue with the event cards):
 - Round 1: play day 1 to 10
 - Round 2: play day 11 to 20
 - Round 3: play day 21 to 30

IMPORTANT NOTES

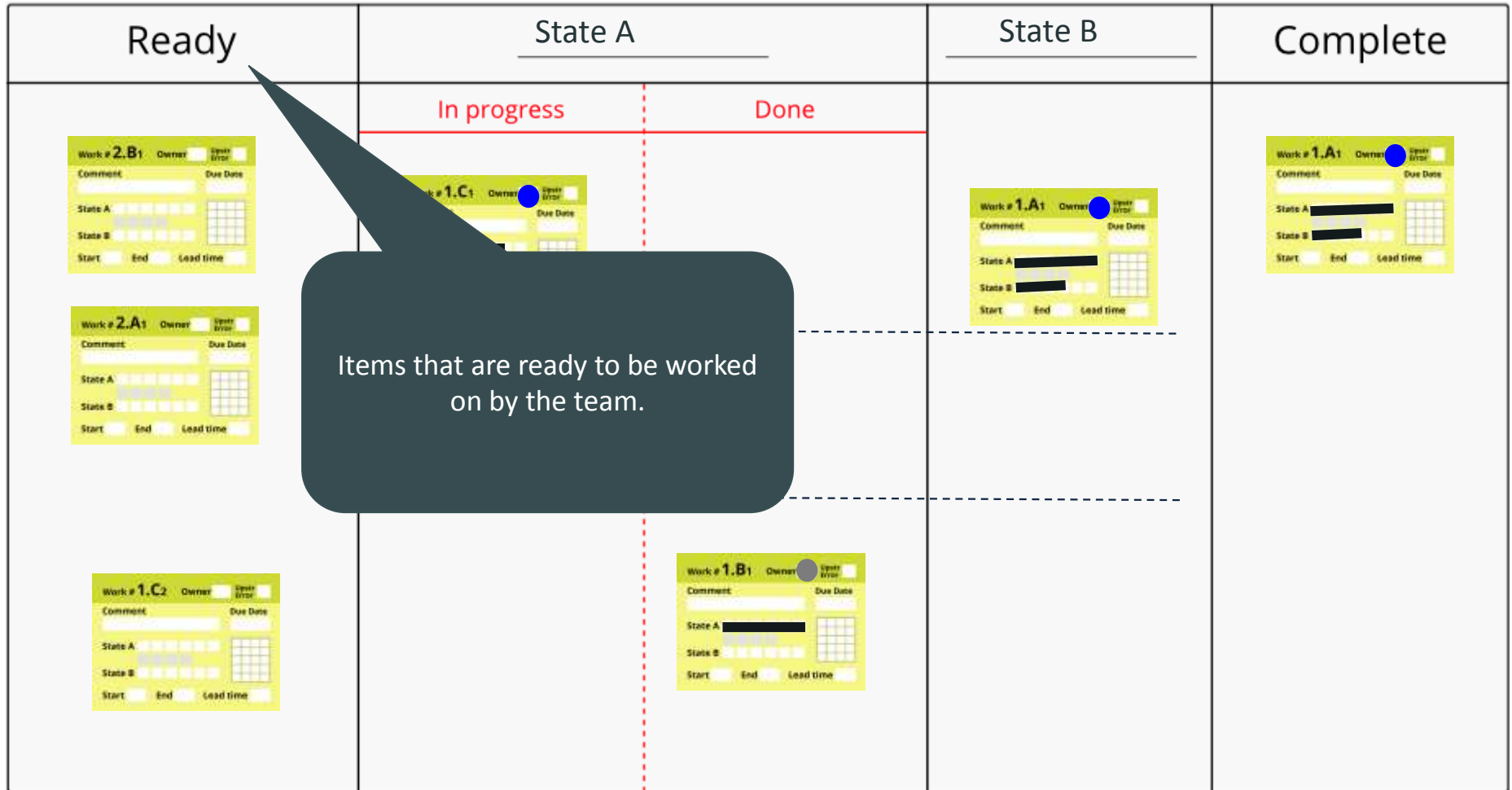
- The lab notes contain placeholders to complete 30 days so let the participants continue to complete their findings on the same lab note sheet.
- Since we continue the play starting from the existing board, tell people to focus on collaboration to make sure that they achieve their target WIP a.s.a.p. (and while they are doing this they will already start to finish work).
- In some cases people will already suggest to collaborate and/or limit WIP for round 2; since it is the goal to demonstrate a more realistic, evolutionary approach with this advanced play, you should challenge whether it is really realistic to jump immediately from no collaboration to collaboration and limiting WIP just like that. *You could instruct - before the start of round 2 - one or more persons in the teams to “refuse” to collaborate (role play style).*

LET`S PLAY

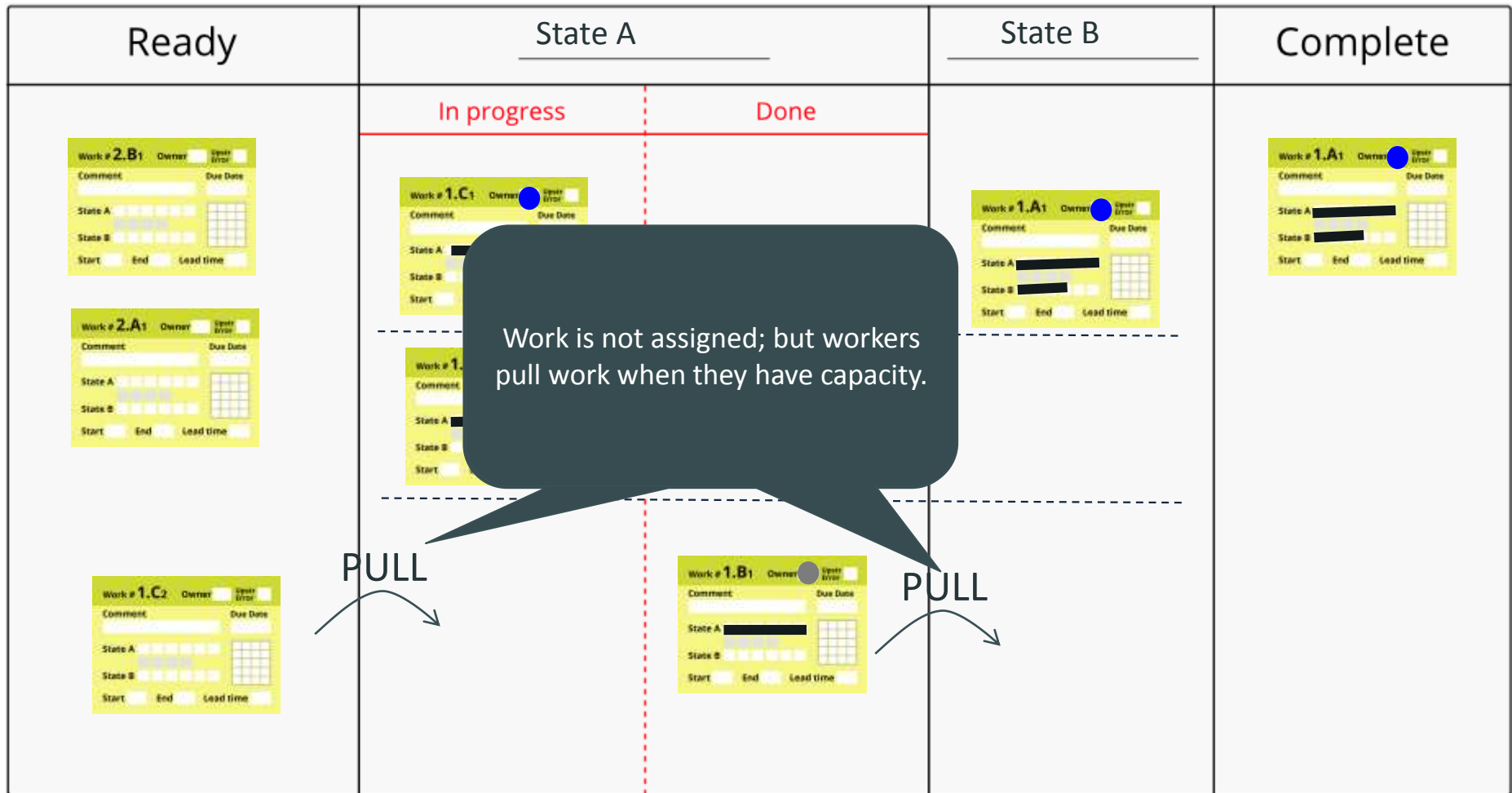
Cadence – round 2 of advanced play



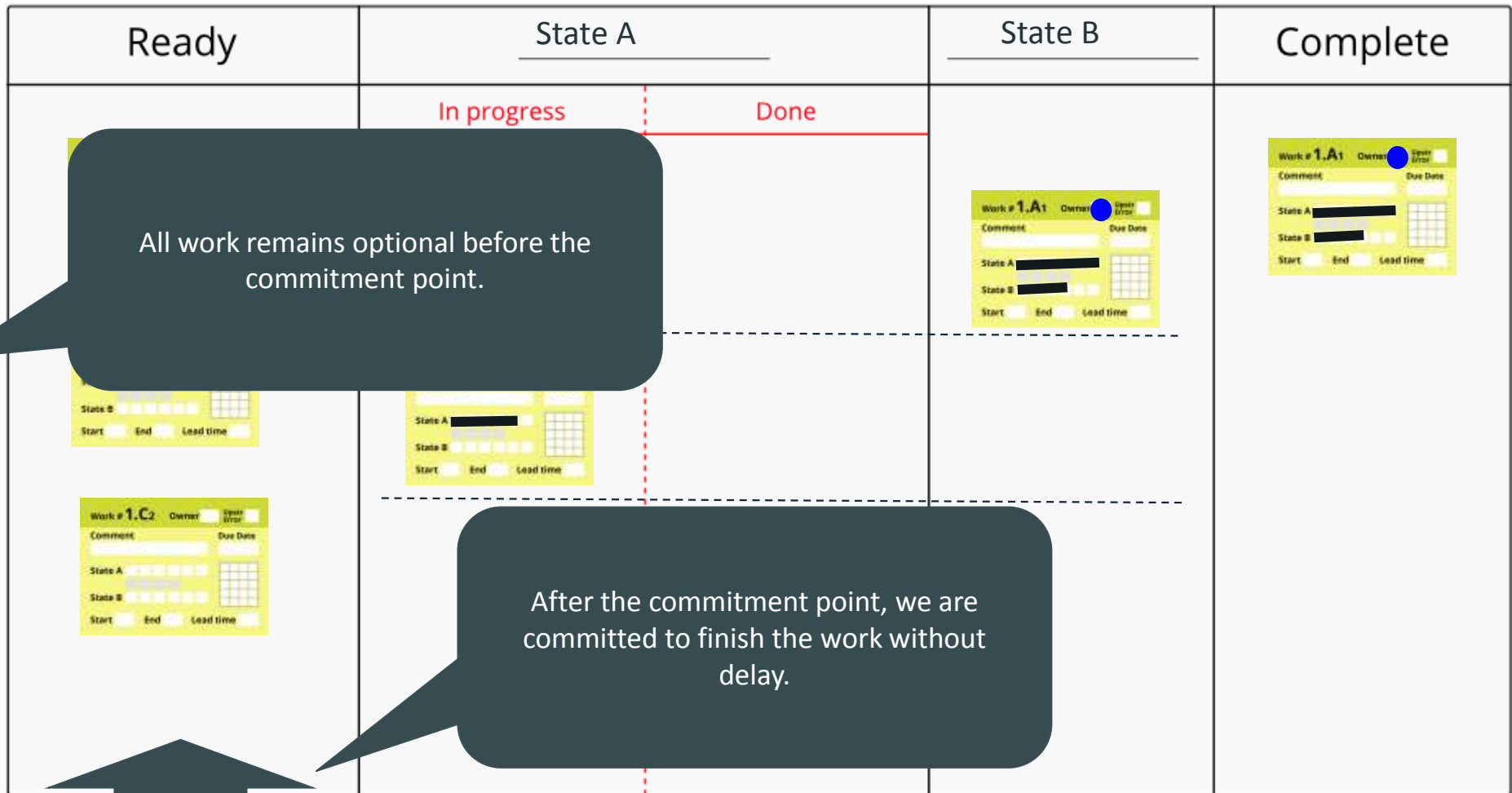
INPUT QUEUE



PULL

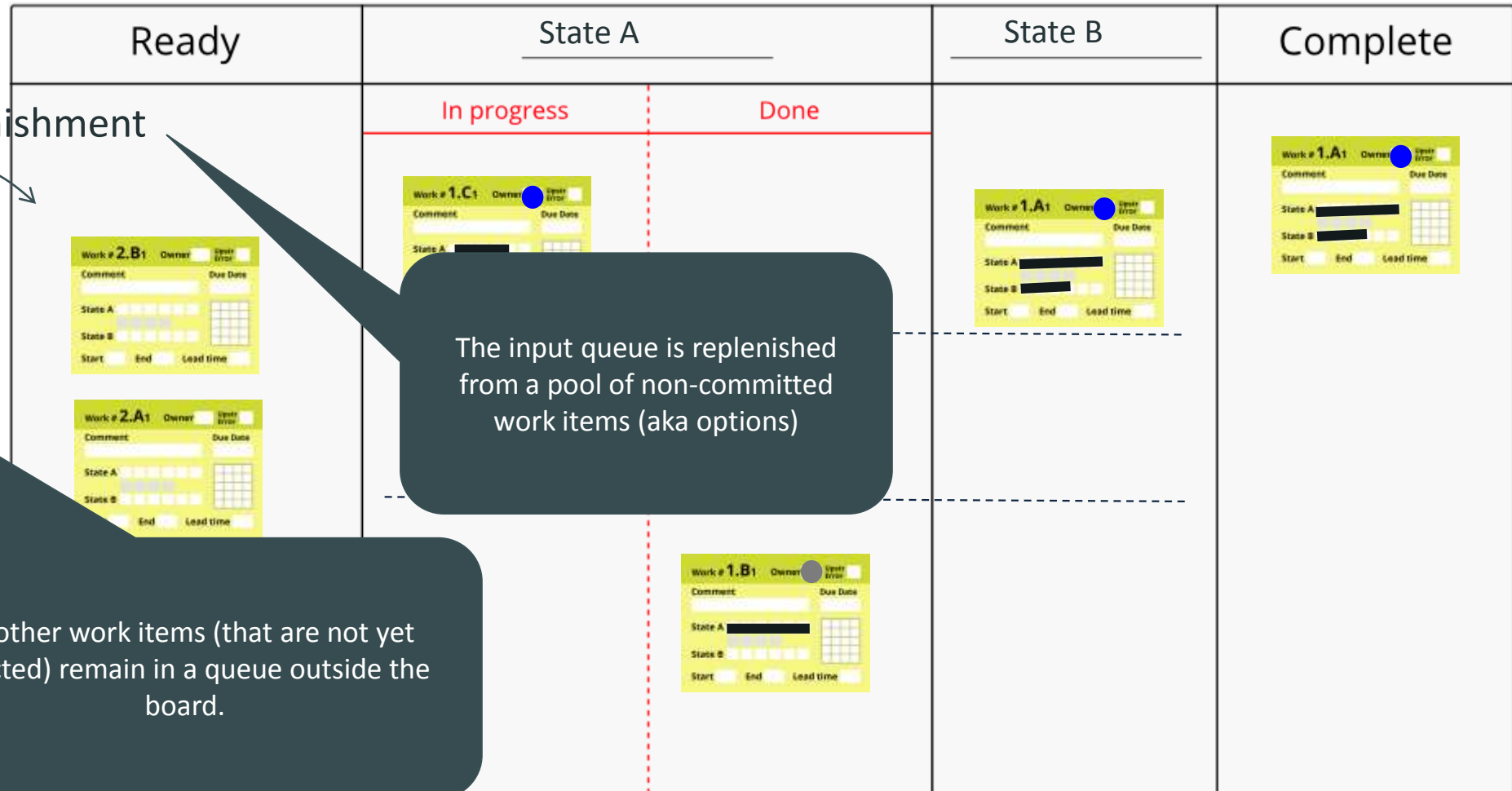


DEFERRED COMMITMENT

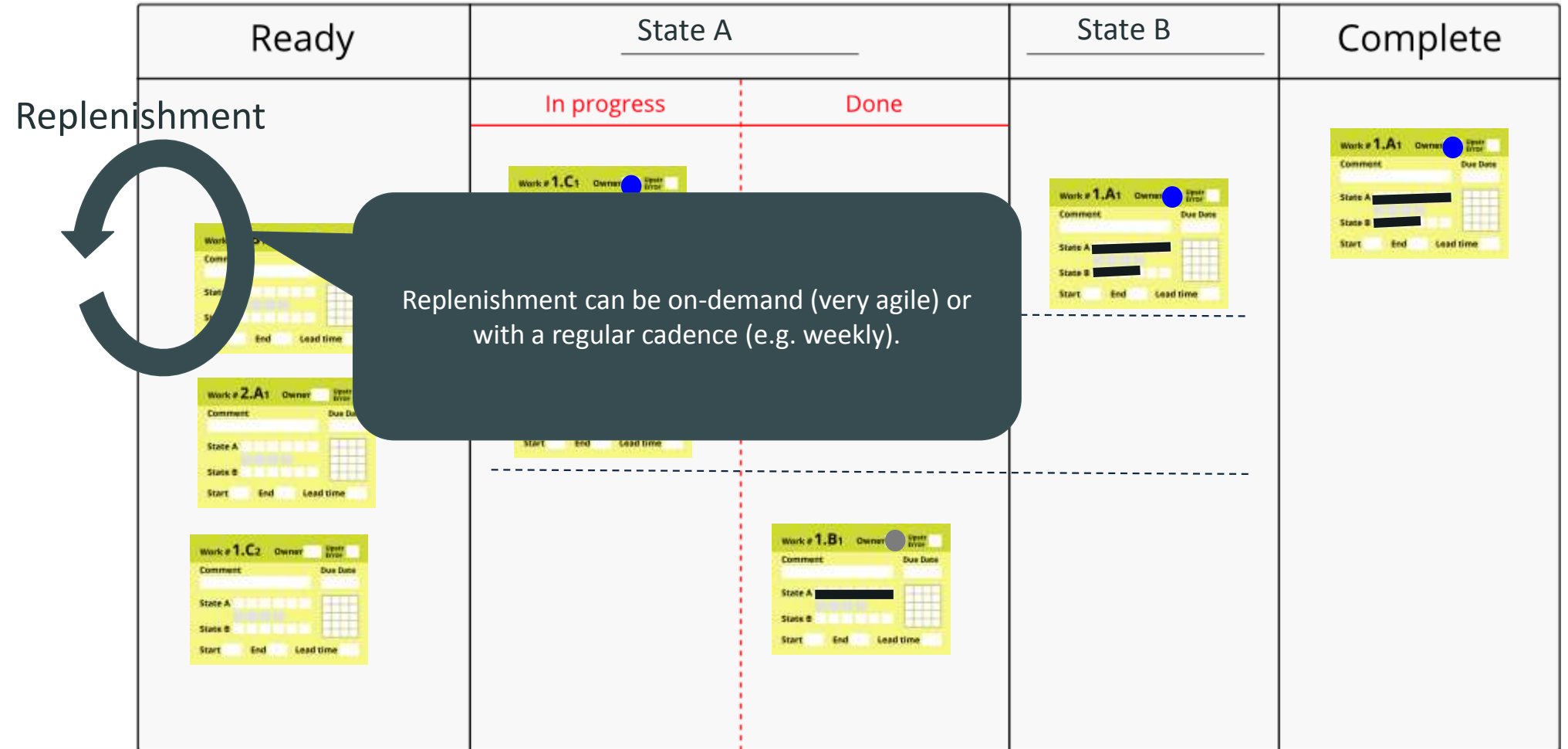


Commitment point

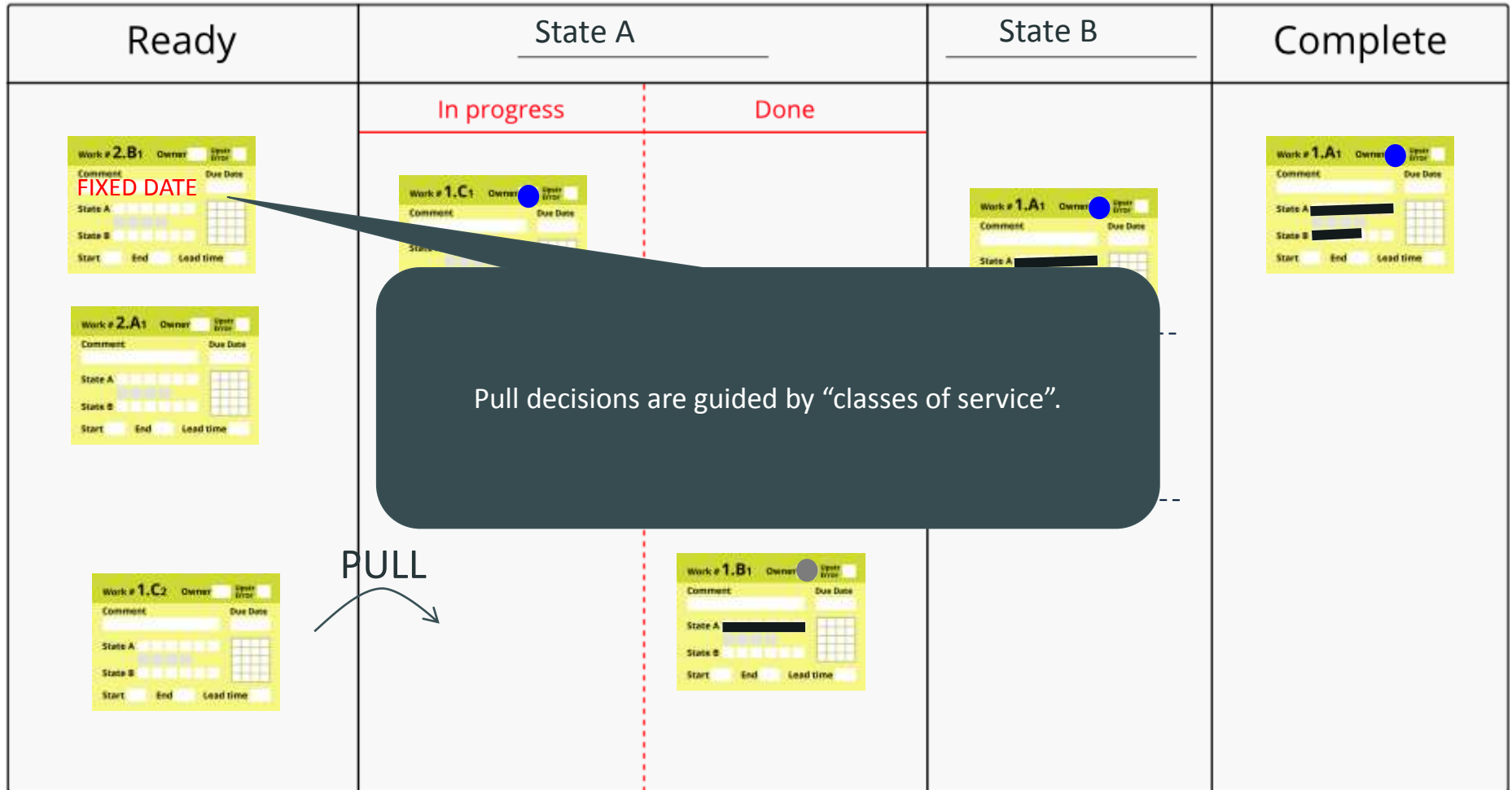
REPLENISHMENT



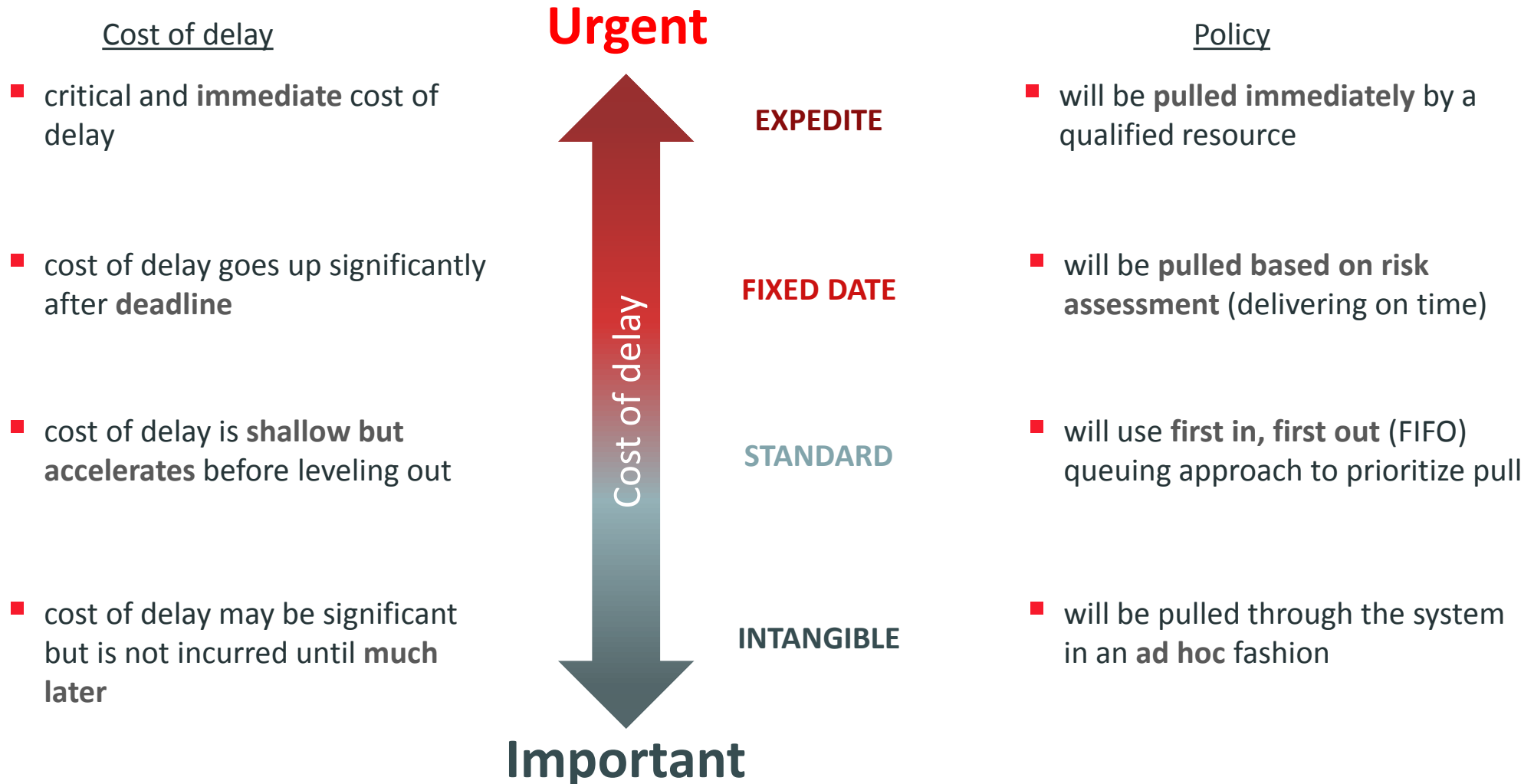
CADENCE



CLASSES OF SERVICE



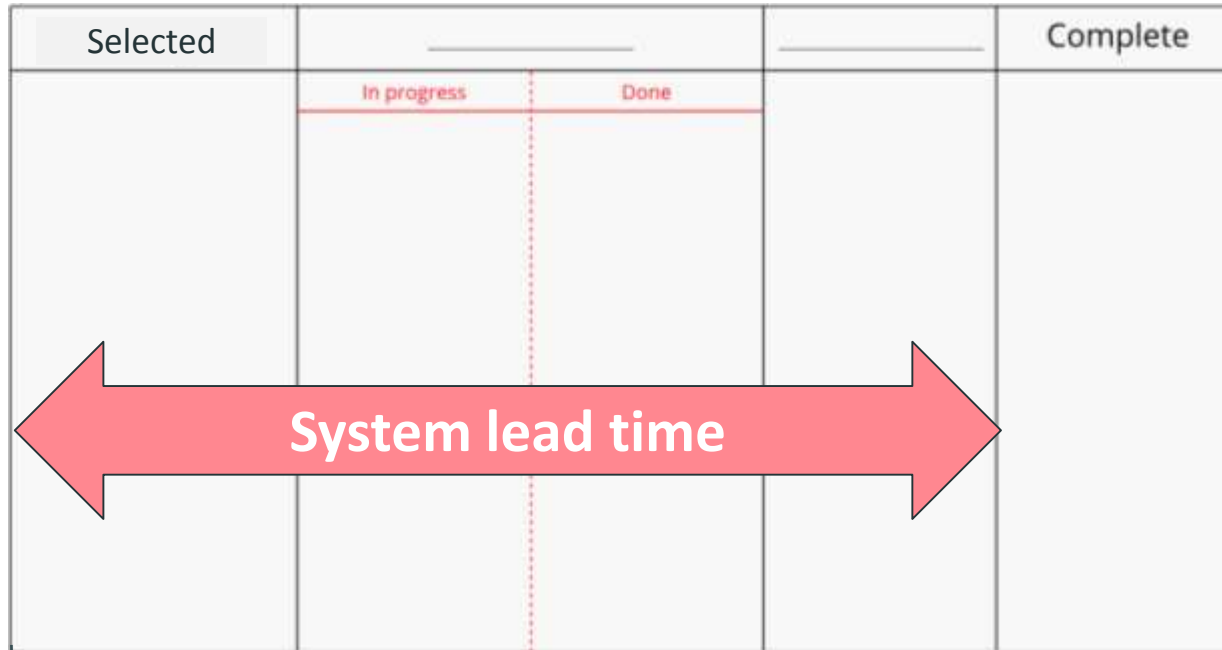
EXAMPLE



POLICIES

- Try to finish work as soon as possible
- Workers pull work when they have free capacity
- Work is pulled according to their class of service and the associated policies that have been agreed with the customer
- The “Selected” column is replenished every 2 days
 - Specific classes of service may lead to immediate replenishment when agreed with the customer and the team
- Throughput (amount of items delivered per time period) is measured in cycles of 5 days

TRACKING SYSTEM LEAD TIME



We can now start tracking system lead time

- Mark the start date when you select a work item
- Mark the end date when you move a work item into “complete”

Work # 1.A1 Owner Upstr ☐ Error ☐

Comment Due Date

State A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Start End Lead time

Work # 1.A1 Owner Upstr ☐ Error ☐

Comment Due Date

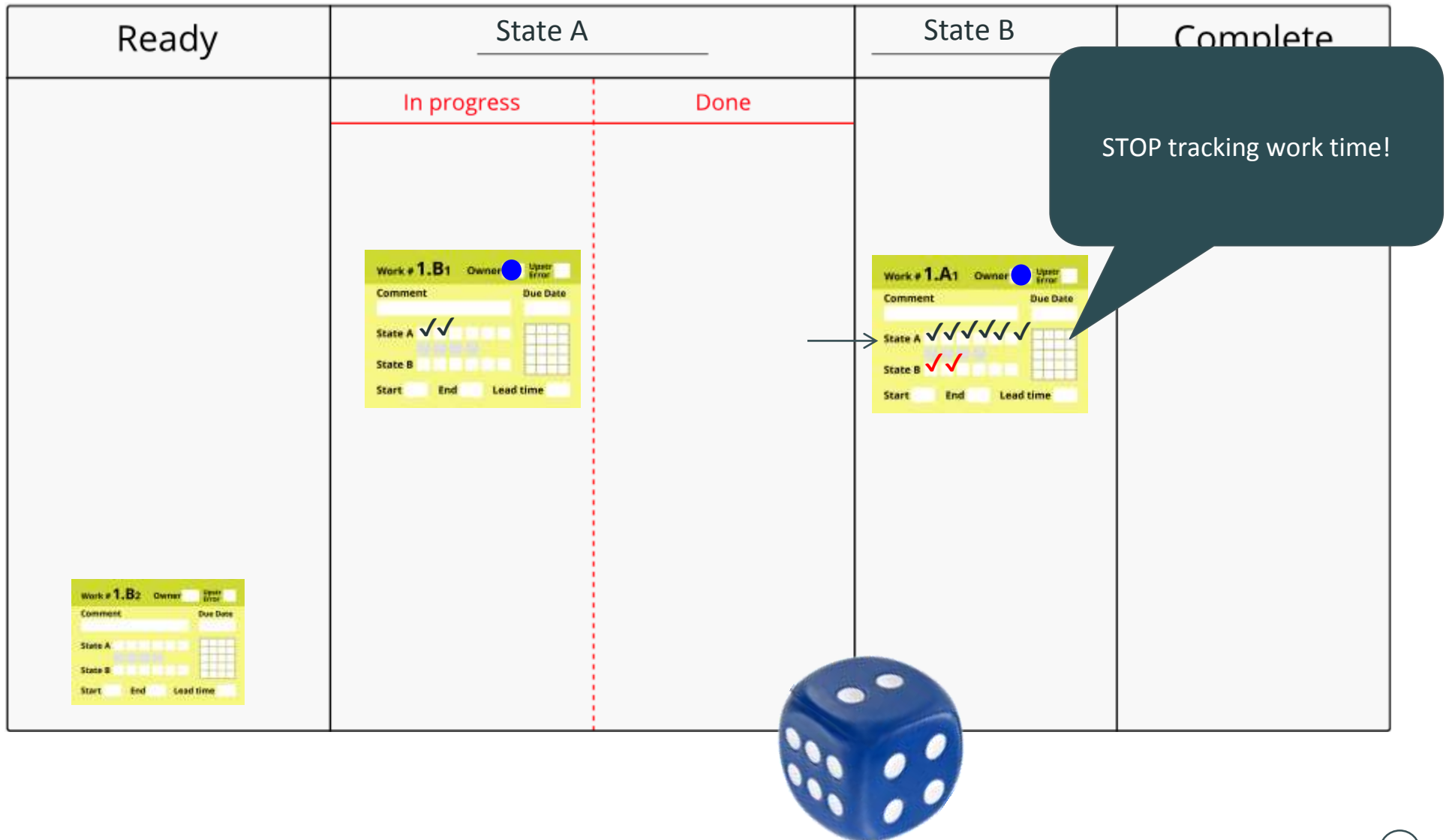
State A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

State B ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

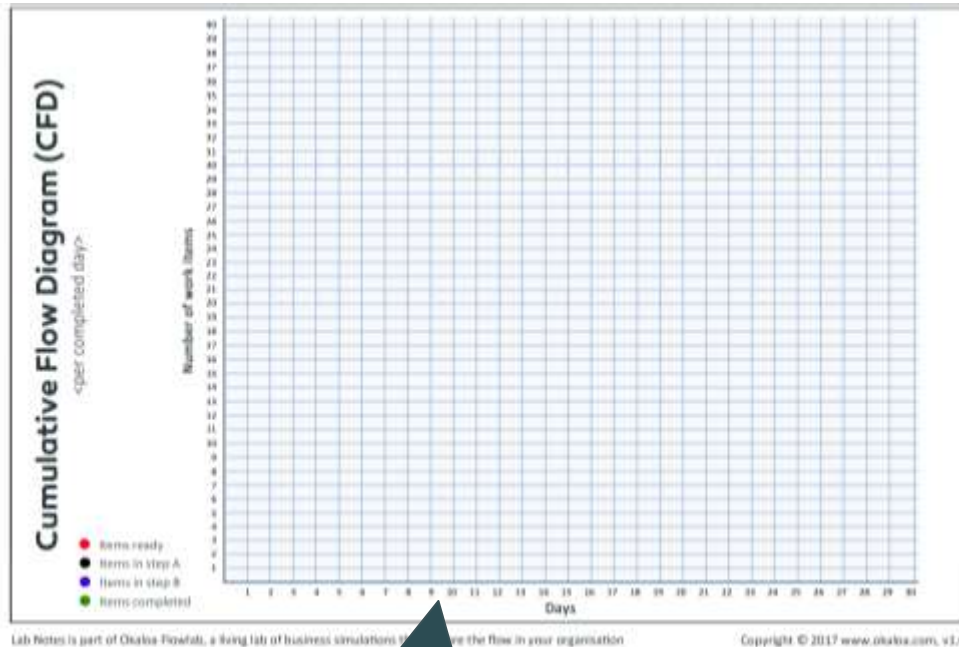
Start End Lead time

$$\text{Lead time} = \text{End} - \text{Start} + 1$$

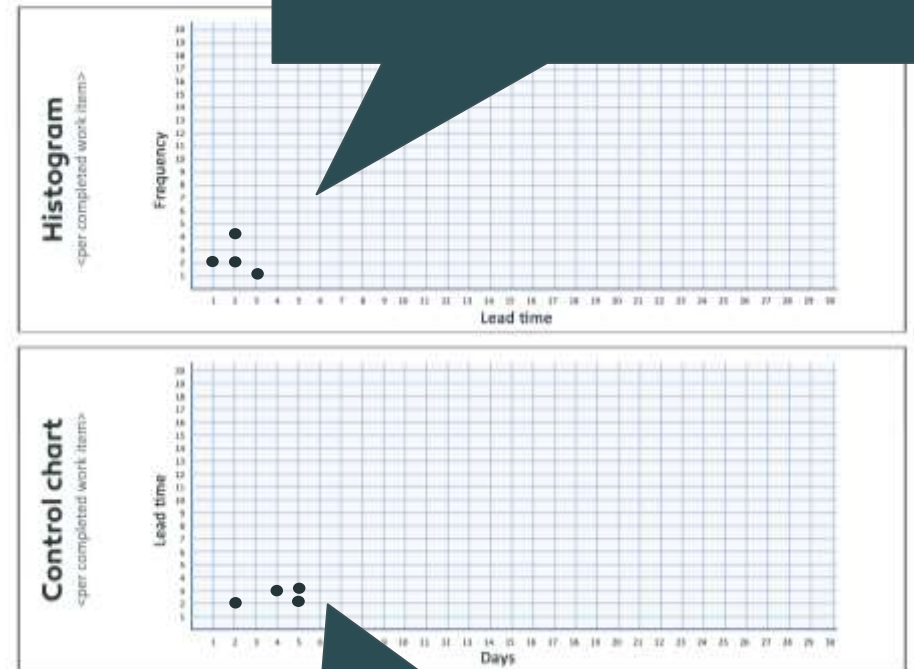
STOP TRACKING WORK TIME



EACH DAY COMPLETE THE CHARTS ON THE LAB NOTES



complete the CFD – use the 4-color pen to draw the dots and lines.

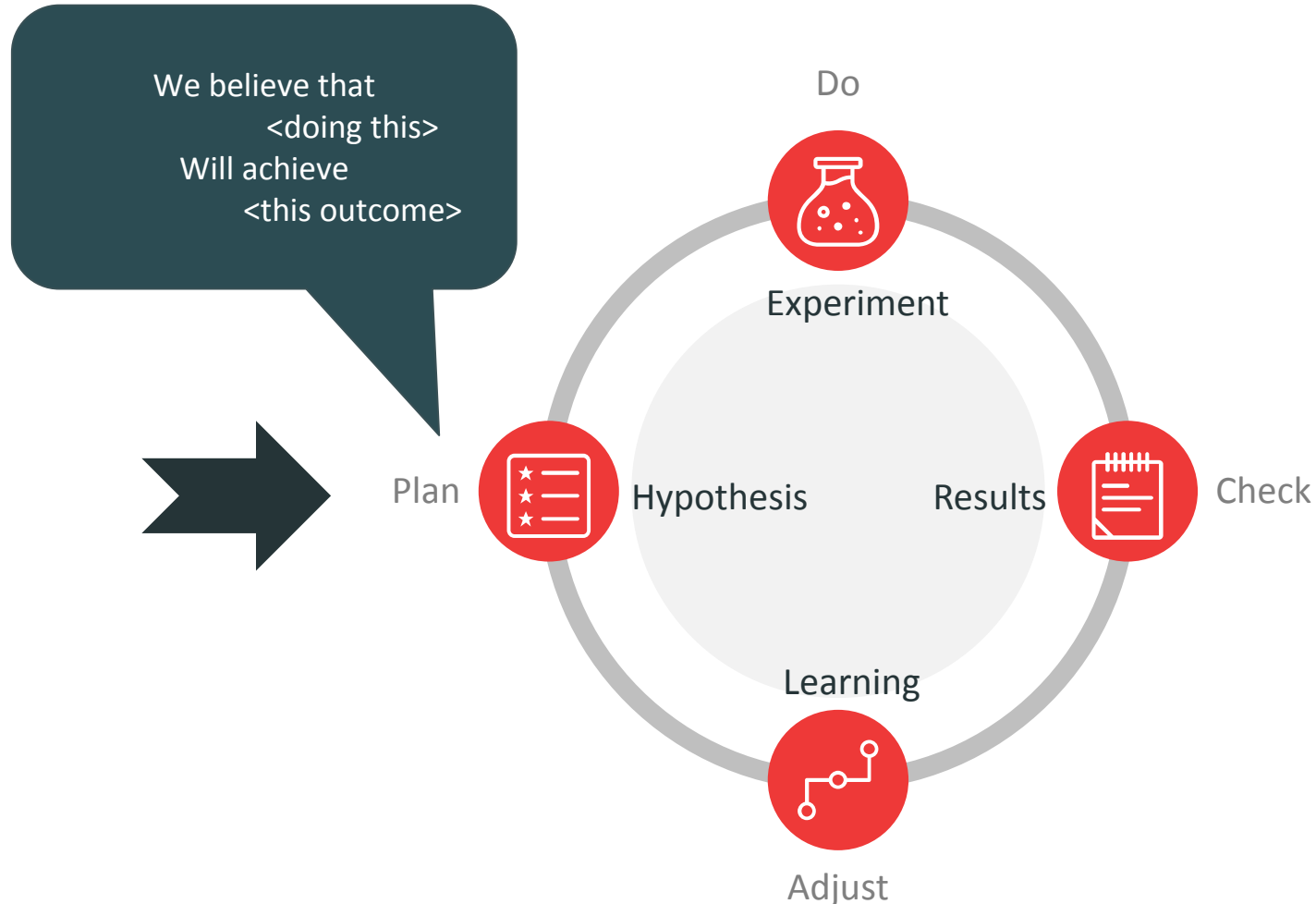


Add a mark of the occurrence of the lead time for each completed work item.

Mark the lead time on the control chart of the items that have been finished that day.

ACTIVE EXPERIMENTATION

THE PDCA loop



FORMULATE A HYPOTHESIS

Policy	Expectation	Why?
Pull work		

Class of service	Policy	Expectation	Why?
Expedite			
Fixed date			
Urgent			
Standard			

PLAY DAY 11 TO 15

1. Standup meeting

- Review the board
- Every 2 days: Do not forget to replenish the “Selected” column

2. Perform work

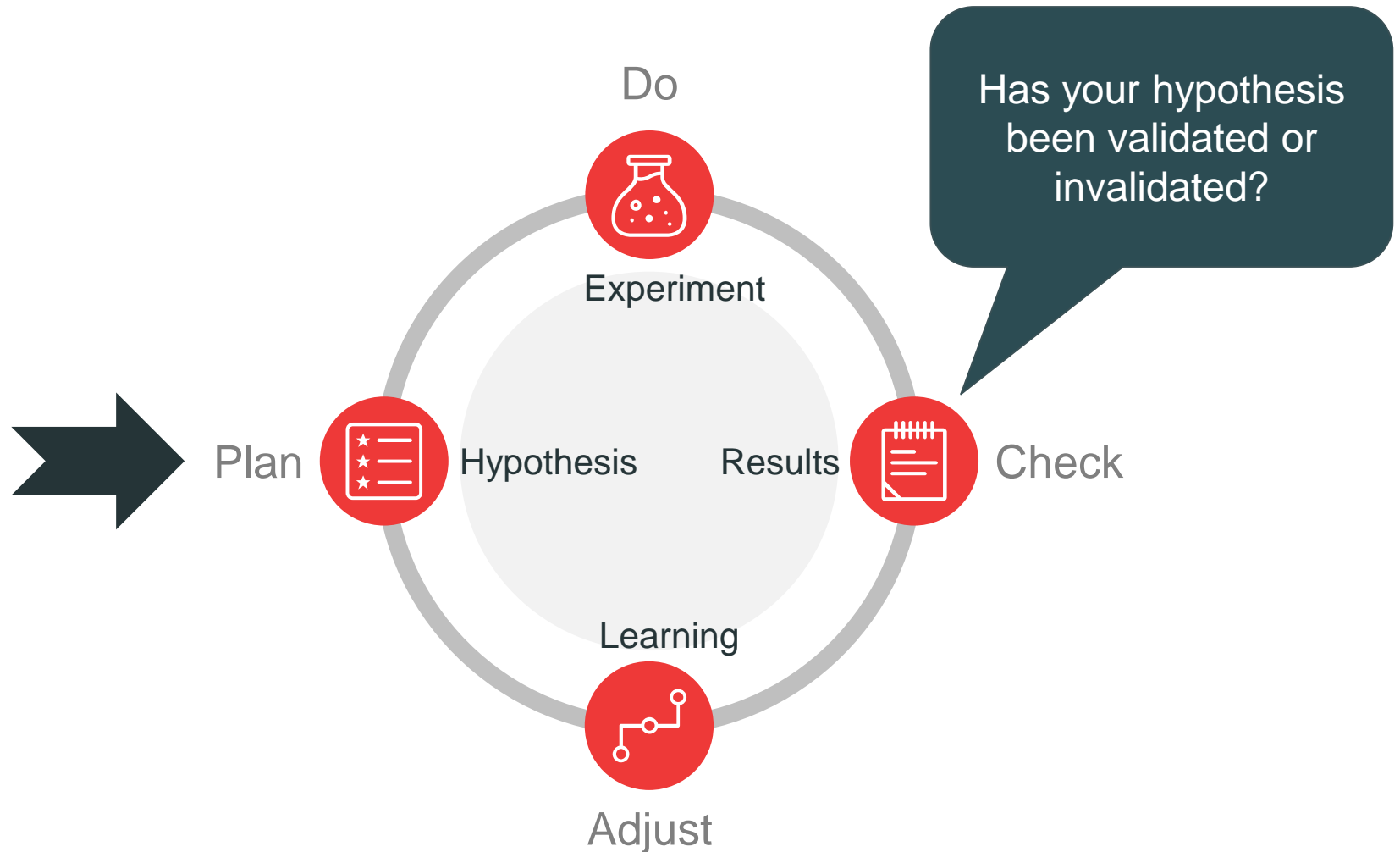
- Throw and process your dice
- If needed pull in new work items from the “Selected” column

3. Close the day (team or project leader)

- Draw an event card
- Mark the day as done
- Make sure that everybody has followed the rules and policies as agreed!
- Every 5 days, note down the amount of work items that have been completed (= throughput)

ACTIVE EXPERIMENTATION

THE PDCA loop



FACILITATOR TIPS

- Note that in some cases the WIP will decrease in this round while for other teams it might even increase
 - In reality, when teams are taking baby steps towards improvement, but notice the opposite effect, they might jump to the conclusion the agile isn't working
 - The real reason for this are the long queues that sustain themselves; that issue is often not addressed as is this case in this first cycle of 5 days of this round; addressed in the next 5 days
 - Tell the participants to move all the items that are not worked on or that are not urgent back to the ready or input column (i.e. all blocked and other items already in the active state for a longer time but with no activity at the moment); let them clear all the work on those items;
 - This one-off intervention will now improve the situation
 - Let's continue with the next 5 days
 - Participants should as of now start seeing progress

PLAY DAY 16 TO 20

1. Standup meeting

- Review the board
- Every 2 days: Do not forget to replenish the “Selected” column

2. Perform work

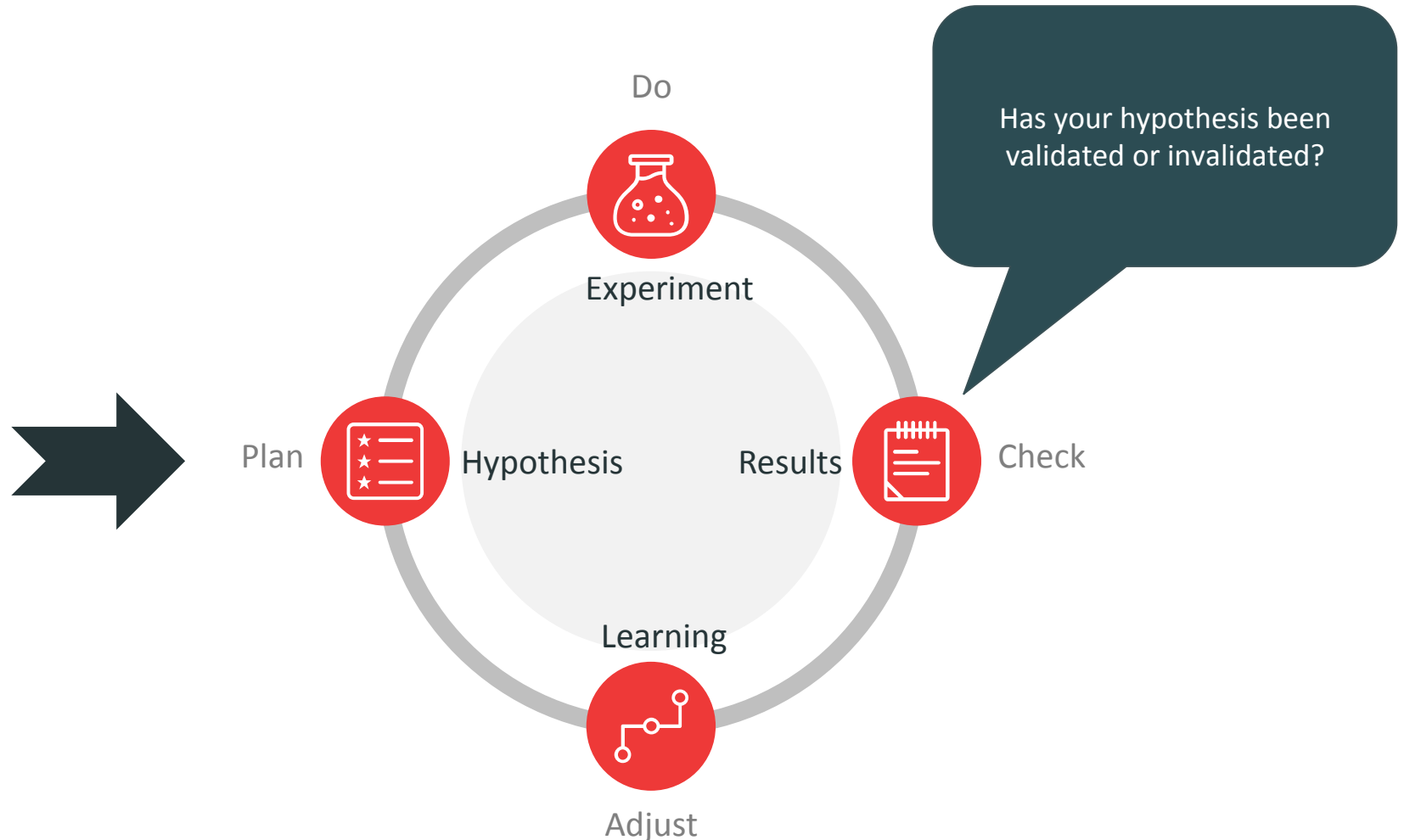
- Throw and process your dice
- If needed pull in new work items from the “Selected” column

3. Close the day (team or project leader)

- Draw an event card
- Mark the day as done
- Make sure that everybody has followed the rules and policies as agreed!
- Every 5 days, note down the amount of work items that have been completed (= throughput)

ACTIVE EXPERIMENTATION

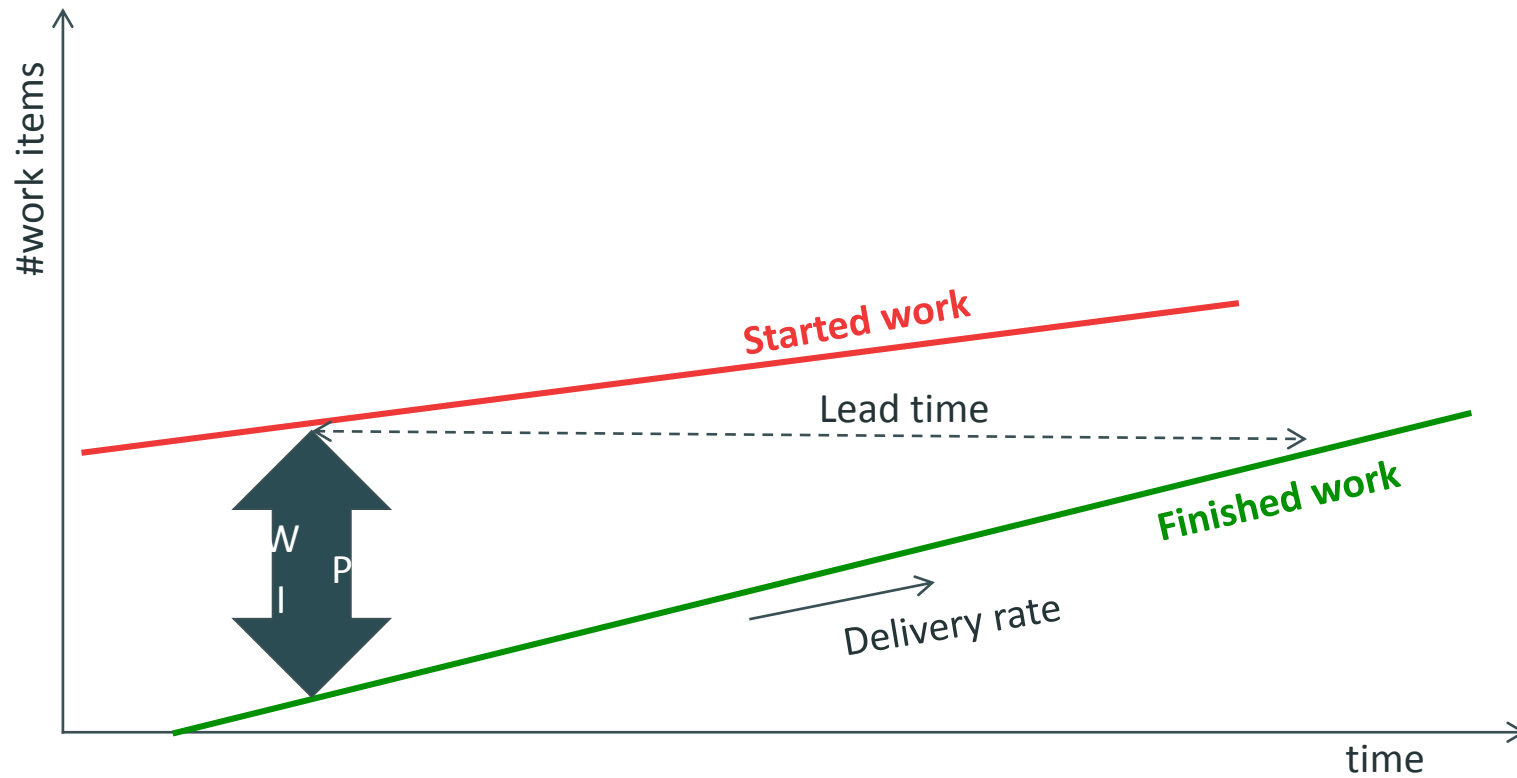
THE PDCA loop



MAKING OBSERVATIONS

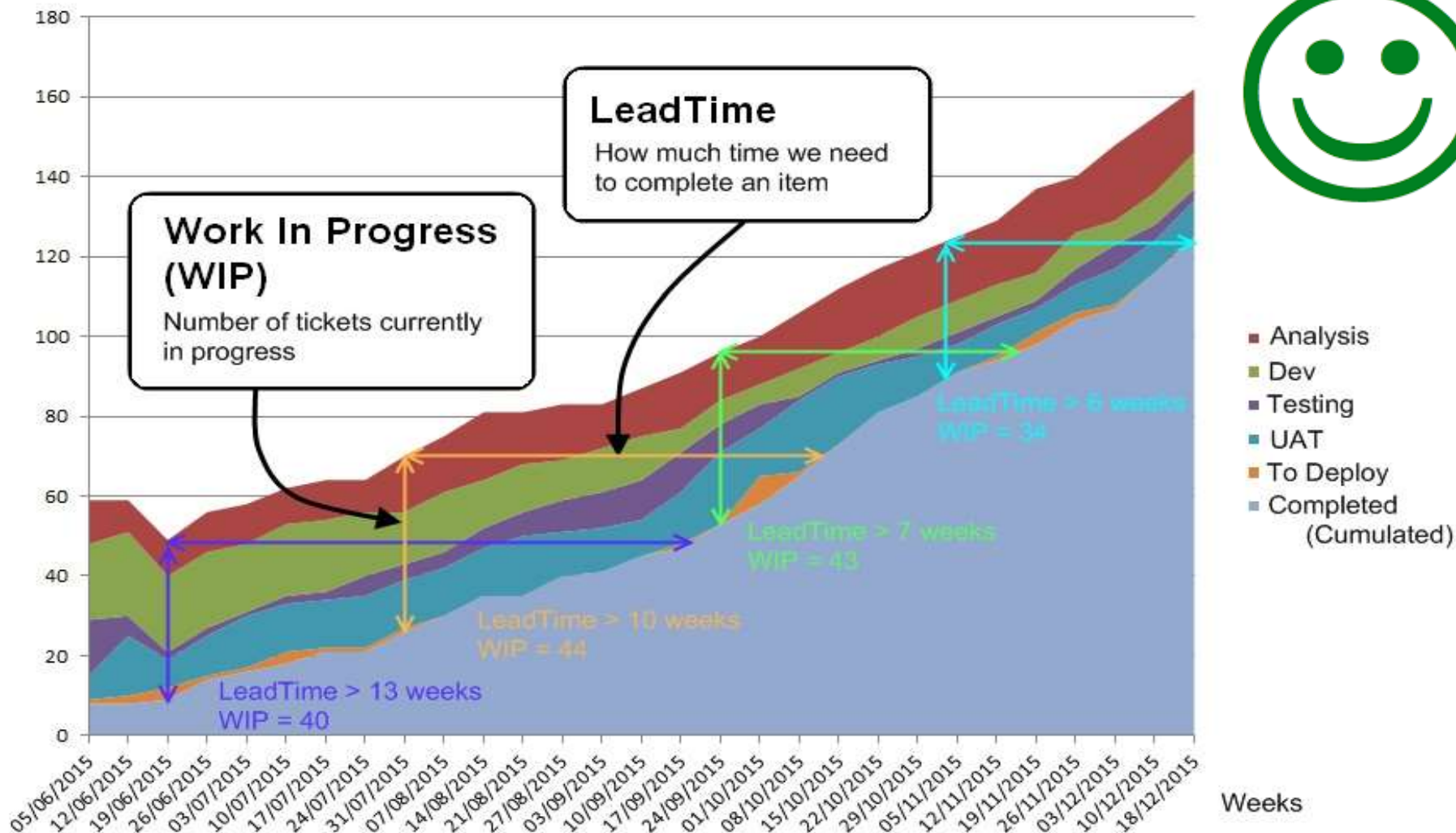
- What do you observe?
- Does it validate or invalidate your hypothesis?

CONVERGING TOWARDS FLOW



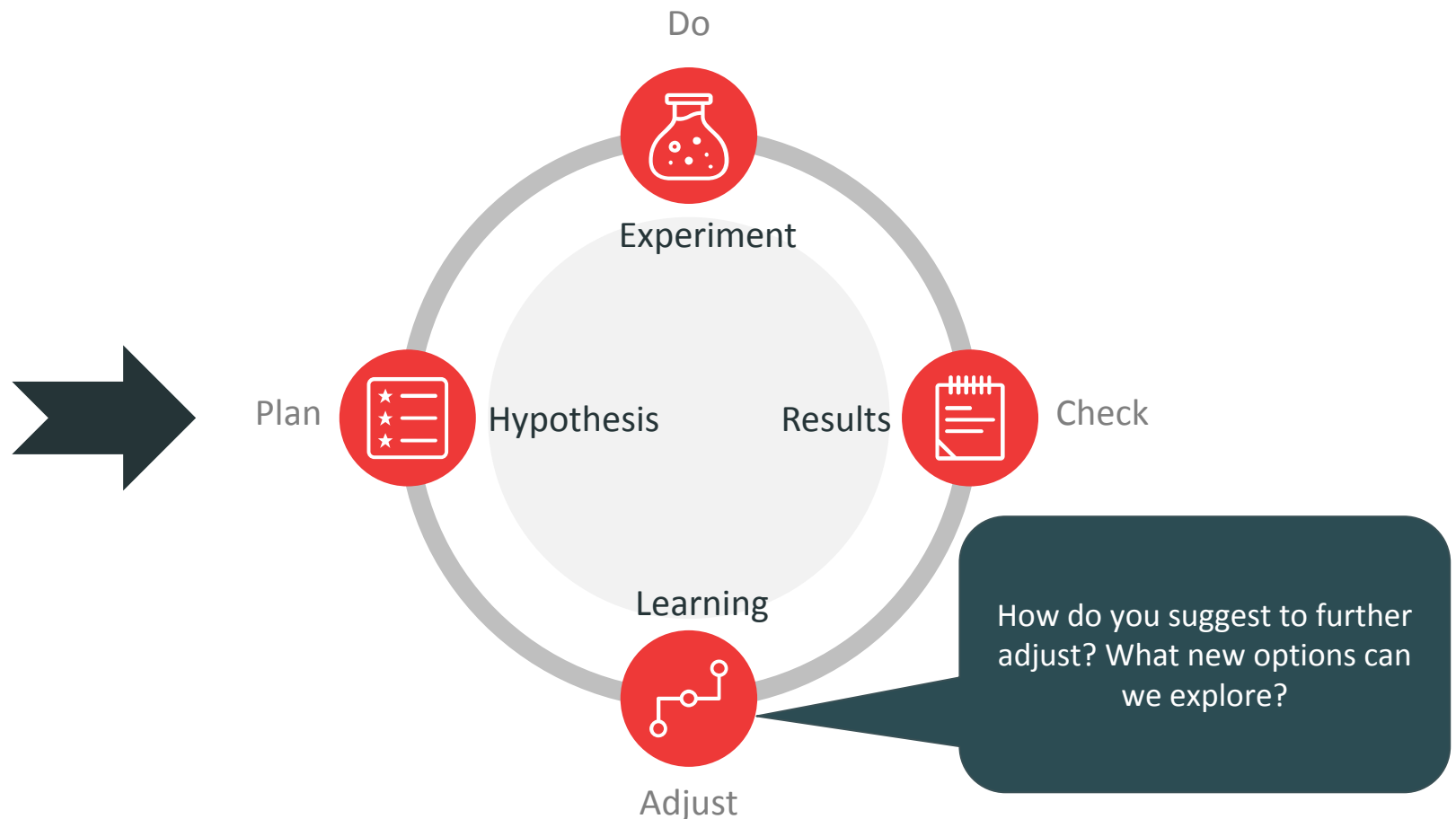
EXAMPLE

Kanban Tickets Qty



ACTIVE EXPERIMENTATION

THE PDCA loop



LIMITING WIP

Flow efficiency - round 3 of advanced play



INSTRUCTIONS - ROUND 3

Go to round 2 of the standard play for further instructions

ESTIMATION FOR ROUND 3

Experiments / estimations

Estimates for Request 1		Round 2			Round 3		
Effort	Delivery date	Delivery rate	WIP	Leadtime	Delivery rate	WIP	Leadtime
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Estimates for Request 2	
Effort	Delivery date
<input type="text"/>	<input type="text"/>

At day 22 you will be asked to give an estimate for Request 2 – complete your estimates here.

Estimate what the outcome of round 3 will be so that at the end of round 3 you can validate your hypothesis.

QUESTIONS AND ANSWERS

#theBestToStart
#Recommended #EnterpriseAgility
#Lean #new way
#NICE to learn
#FLOW #Agile
#Simulations



QUESTION 1

- **Q:** How many hours should I plan for a Team Flow simulation?
- **A:** The introductory simulation with round 1 (resource efficiency) and round 2 of the standard play (flow efficiency) can be done in 90 minutes if you stick to the bare minimum. It can take up to 3 hours if you do an elaborate debriefing. In case of the advanced play you should make it a full day workshop including elaborate debriefing interchanging with some theory.
 - Example of what other partners experienced:
 - Round1 of Team Flow: 1 hour = explanation of the simulation + doing the simulation with 3 teams + 10-12 min debrief; Round2 (standard): 25 min = doing the simulation + 5 min debrief
 - The team flow simulation took about 2 hours for two teams of 4 and 5

QUESTION 2

Q: I start with 4 people; the project leader assigns 1 ticket to each player and puts the tickets in State A, then, immediately selects another 4 tickets, assigns 1 ticket to each player and puts them in Ready state. Is that correct?

A: Partially correct and partially not correct. Once a ticket is assigned, it is put into State A; the rest of the work items is put in the Ready column (the Ready column contains the entire backlog). In the first round there is no notion of “deferred commitment” yet as work is assigned by the project leader. It is up to the project leader to decide how many items to assign. Strictly speaking, for the first day he only needs to assign one work item per person as there is no risk of idle time yet.

QUESTION 3

Q: As of day 2, the project leader can select at the beginning of the day, whatever he wants only from the stack with standard tickets and not from the stack with the special work items such as urgent, expedite and fixed date because those ticket can only be added through the event cards. Is that correct?

A: Yes that is correct. To make sure that the project leader does not assign those special work items randomly it is advised that you as facilitator keep them aside.

QUESTION 4

Q: The project leader should be proactive and assign more (enough) items to people to avoid that die points are lost, he should be in the mindset "What if all the players throw a 6, what are the options then? I don't want to lose points of the dice", is that correct? With that thinking I usually finish first 5 days with a WIP of 18.

A: That is correct, and yes it is possible that after 5 days you have such large WIP.

QUESTION 5

- **Q:** At the end of day 2, I should pickup blocked cards, should I pick cards for the 4 new urgent items that I are added at the end of the day?
- **A:** Yes indeed; we on purpose added the new urgent items to the board before the blocker cards are drawn .

QUESTION 6

- **Q:** Is it correct that we are tracking the "work time" every day to calculate the Flow Efficiency at the end of the simulation?
- **A:** Yes indeed if you play the standard or advanced play.

QUESTION 7

Q: If I try to unblock a ticket, and I throw only a 2 with my die, then I can use that score on another ticket (assigned to me and unblocked of course). Is that correct ?

A: Yes that is correct.

QUESTION 8

Q: If I throw a 6 with my die, and I have an URGENT ticket in State A that needs only 3, can I mark those, and use the other 3 points on another item that is assigned to me, even if that item is not URGENT, and in State B?

A: Yes.

QUESTION 9

Q: The Blue worker has one standard ticket blocked, one ticket urgent and one ticket with a fixed date. This worker now throws a 6, what should the Blue worker do first: work on fixed date or unblock the standard one? If I prioritize fixed date over a standard blocked one, then at the end of day 15 there will be many tickets blocked since the end of day 1...

A: That is exactly the point here in this round.

QUESTION 10

Q: In the second round, we mark start date when the ticket is on State A. Is that correct?

A: That is correct. In the second round work is pulled by team members. When a team member pulls a work item in State A, the start date is marked on the work item.

QUESTION 11

- **Q:** Why do we track working time in round1 and why do we stop tracking it in round 2?
- **A:** We use the working time to calculate flow efficiency to show that, although we work 100%, we have a low flow efficiency; in round 2 we stop tracking because we realise that this is not an interesting measurement; we want people to realise that lead time is more important.

QUESTION 12

- **Q:** Why don't we use the Histogram and Control chart in the first round , why don't we already use leadtime in the first round?
- **A:** Although you may decide differently for your own simulations, there are multiple reasons why we recommend not to track lead time in the first round:
 - it is a bit easier for the participants to get started;
 - it gives you as a facilitator the opportunity to show how you can calculate the lead time using Little's law – see calculation touch vs. lead time ([slide 75](#));
 - It is more in line with the background of round 1: a resource efficiency focussed organisation would typically track effort but not lead times

QUESTION 13

Q: In the first round I worked with 4 people (4 dice), now that the limit is only 3 on the first day, we still work with 4 people, so I assume that one ticket is being worked on by 2 people, but only one of them takes ownership so that the second person can only apply half of the points, is that correct?

A: That is correct but note that the CONWIP of 3 is just an example; teams can choose what they feel up to. In a more advanced play you can encourage participants to come up with their own rules for collaboration that better represent the type of collaboration that would be possible in their own work environment.

QUESTION 14

Q: If I have a ticket in state A that has only one point left, and I throw a 6, can I use those 6 points as follows: mark the one point left on the ticket in State A, then I move the ticket to state B and mark 5 points of state B on the same ticket?

A: In the second round you can do that because we are now in a pull system; in round one participant cannot do this since it is a push system whereby the project leader had to decide at the daily standup who will work on what item meaning that items finished in State A first need to go to a wait state (=the done column of State A) before they can move to the next state the next day if the project leader would decide during the standup meeting that you should work on it.

QUESTION 15

- **Q:** Are participants allowed in round 2 of the standard play to share their points with others although they could work on their own items? Common observation: some just start looking for most effective ways to distribute the point of everybody during the daily. In terms of simulation, it's a policy right? So they could change it?
- **A:** When we do a standard simulation, we allow to do this. It gives the maximum result, but then it may not represent reality. Especially the fact that people would go from no collaboration to almost swarming in one big evolutionary step. We deliberately designed the advanced version (30 days) to have something that is more realistic. We suggest to participant to come up with their own rules for collaboration that better represent the type of collaboration that would be possible in their own work environment.

QUESTION 16

- **Q:** The confusing bit happened when my team who knows Kanban, got themselves all tied into a knot when during the WIP simulation they were asked to take ownership of a number of cards as instructed on day 2 or 11. The WIP limits did not allow for it , and we went round in circles until we read the instructions again that showed that the start date gets filled in when ownership is "assigned". We did this and left the cards in the left most column until there was capacity to pull it in. The clock therefore started ticking (a commitment was made by the assignment), but the card had to wait for capacity to free up in the "in progress" side. How to handle this situation correctly?
- **A:** The card says indeed that you need to assign cards. In round 1, this is in line with the mindset of command and control. In round 2 (3), most people get a bit confused. That is intentional. It is an opportunity for discussion. Of course, when you have WIP limits, these new cards cannot be assigned. They get prioritised in the “Ready” column. This is a good opportunity to discuss why prioritisation needs to happen before the commitment point.

QUESTION 17

- **Q:** Looking at the event cards, it seems that 5 is the optimal number of players? e.g. day 11 introducing 5 urgent ones is really tough for just 3 players?
- **A:** If there are less than 5 players in a team there is discussion on who will pick up what but that us just perfect during the simulation.

QUESTION 18

- **Q:** In round 1 it says: "Track the work time: put a mark on the work item(s) that you worked on during that day". Does this mean on any active cards at that day, or only on those that you have been using die points or have unblocked?
- **A:** The latter; only those that really have been worked on.

FEEDBACK FROM BETA TESTER

- In this guide we introduced prioritization rules but some other facilitator like the ‘surprise’ factor of what to do with the urgent request. Here’s a quote of one of the beta testers: “It is a kind of surprise that is commonly used in training session in which participants think they need to ‘do something’, but in fact this is a trigger for behaviour that is the actual focus point of training. So in this case it is the realization that simple rules (policies) can replace lengthy team discussions.”
- Tracking the waste really was a valuable addition; we asked the team lead to keep track of the dice value that could not be used and thus was wasted. This happens when the team lead isn't proactive enough to ensure every team member has something to do. Advantages of the experiment: Waste/Slack points are easy to track, Motivates team leads in round 1 to make sure energy does not get wasted, Learning of value of Slack time

FEEDBACK FROM BETA TESTER CONT.

- “Using causal loop diagram on WIP, TP, LT, collaboration and blockages, and which parameters is the one that can be controlled best works really great when briefing the learnings!!”
- Team flow simulation with a team of process managers that pretend to work already for 1,5 years in an agile way. Timeframe was 2,5h - in this case just enough time for participants to reflect on learnings, although definitely too less time to give some background or further elaborate on questions or concepts?

General feedback: great simulation! Nice material and nice way to guide participants through a journey to get insights ... Participants (senior profiles & lean six sigma blank belts) got an 'aha' effect that for me shows again the strengths of the Flowlab.

WHAT'S NEXT

#theBestToStart
#Recommended #EnterpriseAgility
#Lean #new way
#NICE to learn
#FLOW #Agile
#Simulations



EXAMPLES OF EXTENSIONS AND ADDITIONAL SIMULATIONS

The Team flow set contains a basic simulation that can be played in 2 or 3 rounds (standard or advanced play). On top of this, we and some of our partners, have developed extensions or additional simulations. These simulations will be made available to you soon (some through online platform, for others additional physical material need to be acquired – more information will be communicated to you after summer 2017).

- **Overview of current set of extensions**

1. Quality simulation: showing the effect of limiting WIP on quality of work.
 2. Bottleneck simulation: showing how to address the issue of a bottleneck worker in a team.
 3. Extended set of event cards created by Susanne Bartel to be used for LKU KMPI training
 4. Extended set of event cards created by Andreas Bartel to address the topic of capacity allocation (LKU KMPI training)
- Other beta testers are also experimenting with other extensions, so more to follow

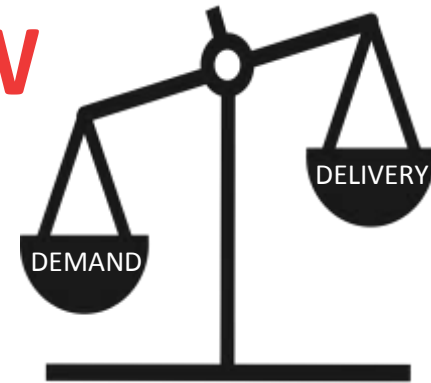


CUSTOM DEVELOPED SIMULATIONS

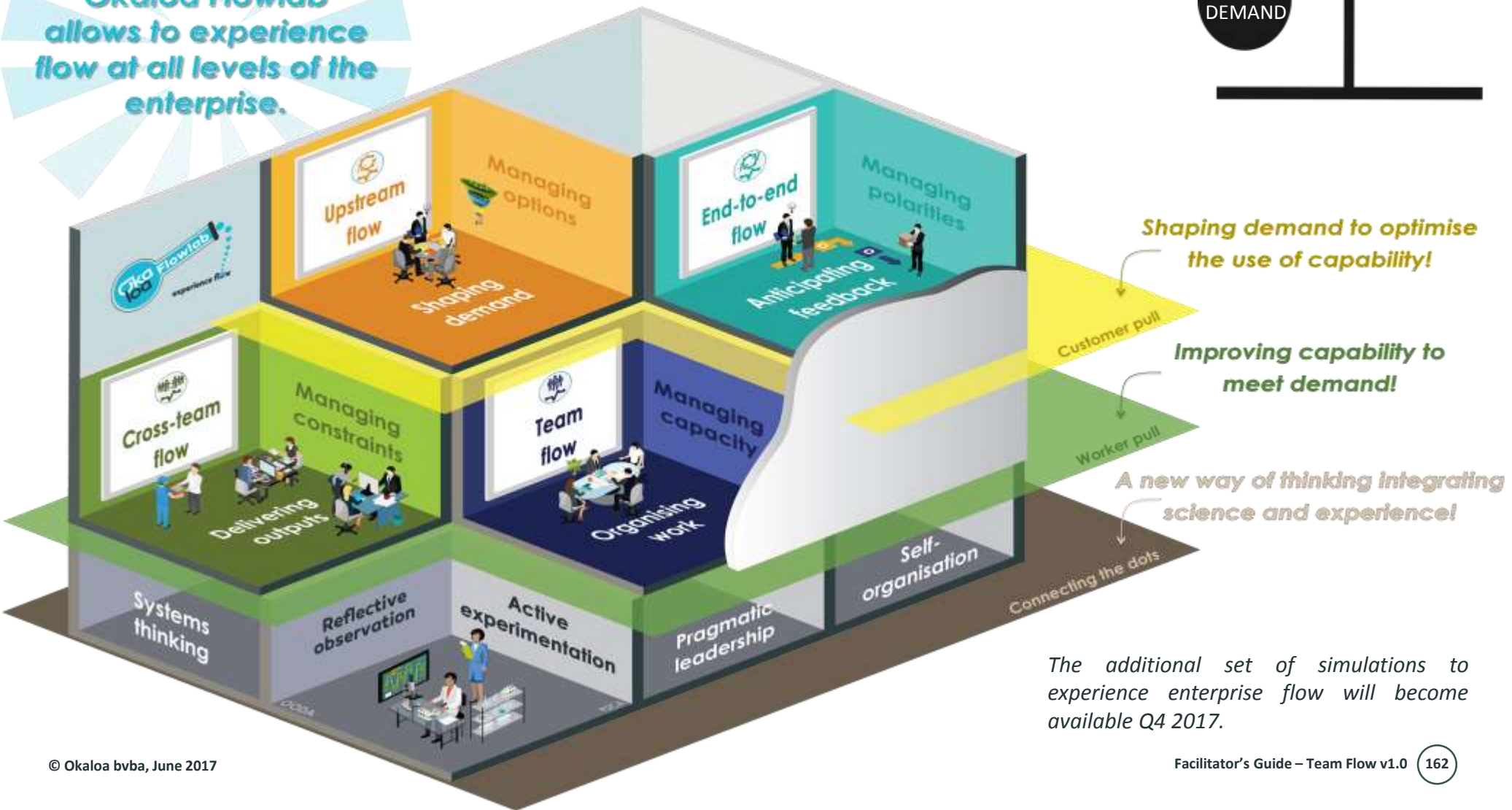
For some of our corporate clients we have developed specific simulations to address specific issues they are facing, e.g. simulation to show the impact of feature versus component teams. Feel free to contact us to see if we can help you with your (client) challenges and co-customize a workshop with you.

FOCUS ON ENTERPRISE FLOW

Creating value through meaningful work



Okaloa Flowlab
allows to experience
flow at all levels of the
enterprise.



The additional set of simulations to experience enterprise flow will become available Q4 2017.

ENTERPRISE VERSION - EXTENDED SET OF OKALOA FLOWLAB SIMULATIONS



Okaloa Flowlab is a laboratory of business simulations to experience flow and to lay the foundations for business agility

● Shaping demand

- Ensuring minimal options
- Uncertainty, fear of commitment, conflict, over-processing, ...
- Upstream and Customer Kanban
- Product, program and portfolio management

● Anticipating feedback

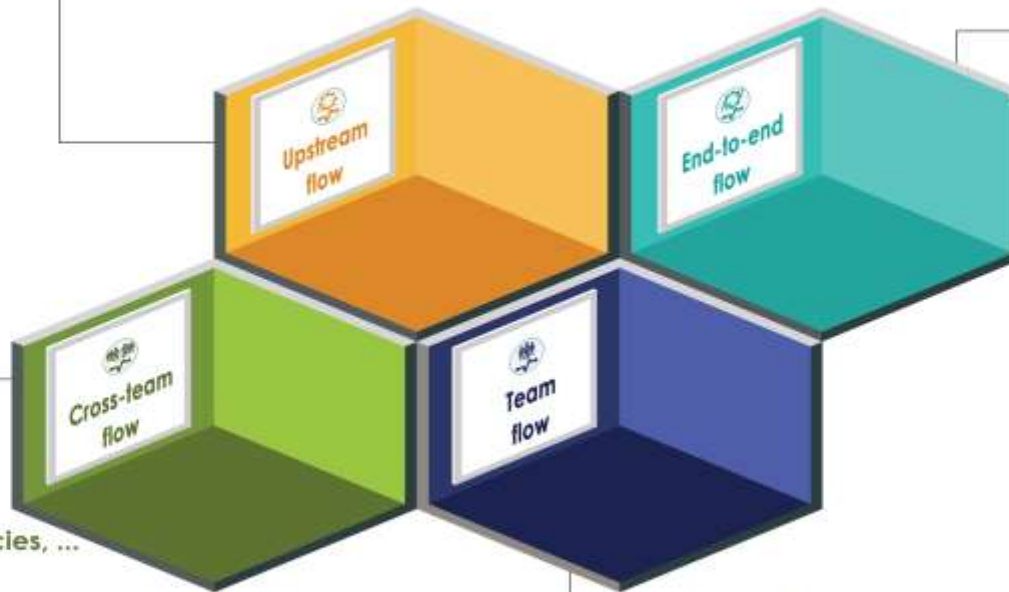
- Focusing on outcomes
- Inertia, mismatch between business and delivery teams, silo's, ...
- Discovery Kanban
- Agile portfolio management

● Delivering outputs

- Looking at the whole
- Bottlenecks and dependencies, ...
- Delivery Kanban
- Release, delivery and project management

● Organising work

- Finishing what you start
- Variation, specialisation, too many commitments, urgent work, lack of quality, ...
- System Kanban
- IT, HR, Engineering, Finance, Legal, ...



Legend

- | | |
|----------------------------|---------------------------|
| ○ Desired mindset | ○ How to achieve flow |
| ○ Friction preventing flow | ○ Applicable/relevant for |



FACILITATOR WORKSHOP

testimonials

“Intense two days indeed! And that was because it was so much more than just a FlowLab facilitators training. We didn't just learn some new simulations, we actually deepened our understanding of the intricate underlying models that go way beyond the basic simulations. Personally I think these kind of workshops (and even more than one) should be mandatory in order to be allowed to use the FlowLabs quality mark in your trainings/workshops. A very big thanks to Arlette and Patrick for creating the right context in the past 2 days for us to learn and grow. “

Kris Philippaerts

“The more I digest, the more I realize just how much I learned about, flow, options and system causal loop diagrams in agile transformations. Best learning: which aspects can you directly influence? Or what actions in the causal loop you can directly manipulate in order to have a leverage? “

Arno Korpershoek

“Still digesting the vast amount of insights and knowledge gained during the first Okaloa Flowlab facilitator workshop ! “

Vincent Pattyn

“Just finished a 2 days coach the coach session about flowlab coaching and facilitation with Patrick and some peers. It was exciting every second of the 2 days. Gained so many deep insights that I will need some time to digest it. A must for everyone!”

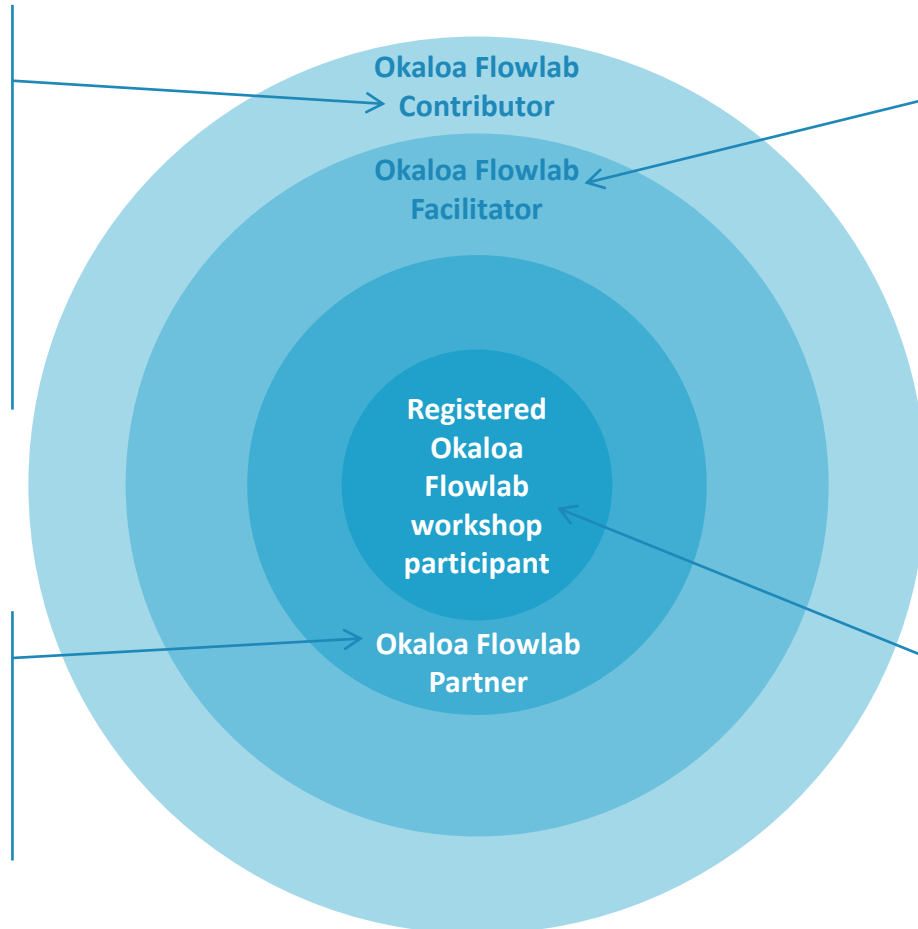
Wim Bollen

OKALOA FLOWLAB NETWORK

To maintain high quality of Okaloa Flowlab workshop facilitation and further development of Okaloa Flowlab it is the intention to create an Okaloa Flowlab network that could connect through an online dedicated platform to stimulate collaboration (future plan).

Substantial contribution to the development of Okaloa Flowlab through development of additional simulations based on existing material; additional material; or contributions that further develop the Okaloa Flowlab network (modalities to be discussed).

Everybody who purchased Team flow and uses the material to facilitate their own workshops.



Facilitator that is endorsed by the network*:

- proven experience with successfully facilitating Okaloa Flowlab workshops (as witnessed by the number of registered participants connected in the network), **and**
- co-facilitation with Okaloa Flowlab founder + other Okaloa Flowlab facilitator **or** participation in an Okaloa Flowlab facilitation workshop.

The core of the network; participants that value the experience and learning by doing the simulations are invited to connect to the network (modalities to be discussed).



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Thank you

Stay in touch!



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A tweet about Okaloa Flowlab would be
much appreciated.