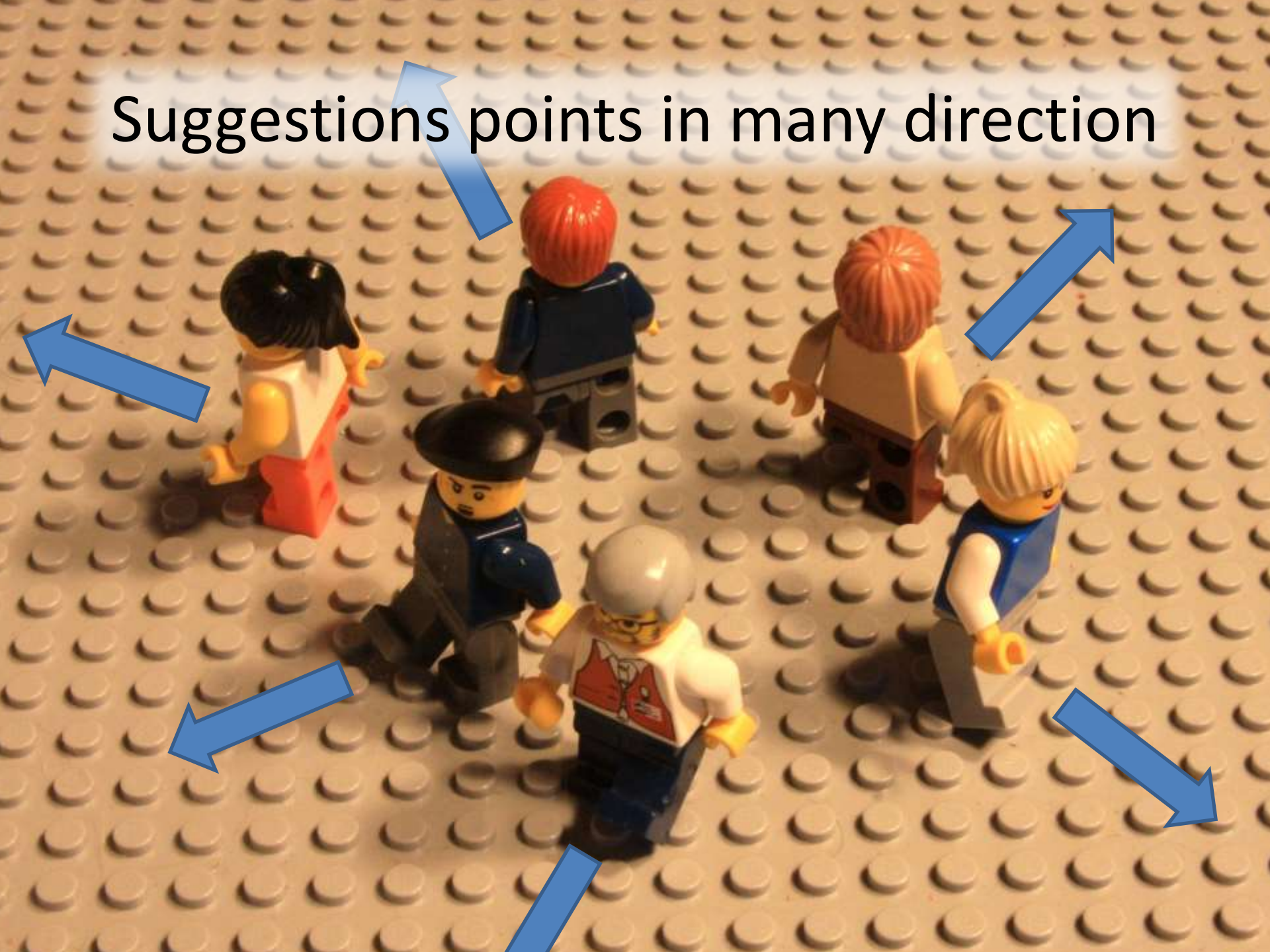

Born down
Open bugs
Improvements
Todo
Doin
Done


Burn down
Open bugs
Improvements
Todo
Doin
Done

Suggestions points in many direction



Improvement Whack-a-Mole


Born down
bugs
Improvements
Todo
Doin
Stop collecting problems

Stop doing Retrospective and Start your Toyota Kata

Håkan Forss
Lean/Agile Coach

avega group

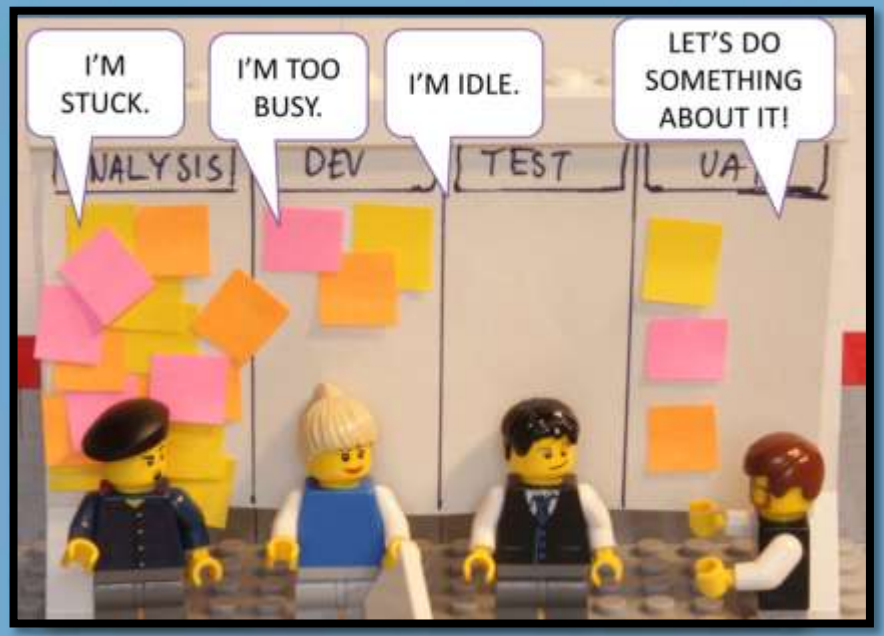
@hakanforss

Agile/Scrum/XP


SPC
visual management
Kaizen
6S
TPM
six sigma
Poke-Yoke
SMED
process flow
lean

KANBAN

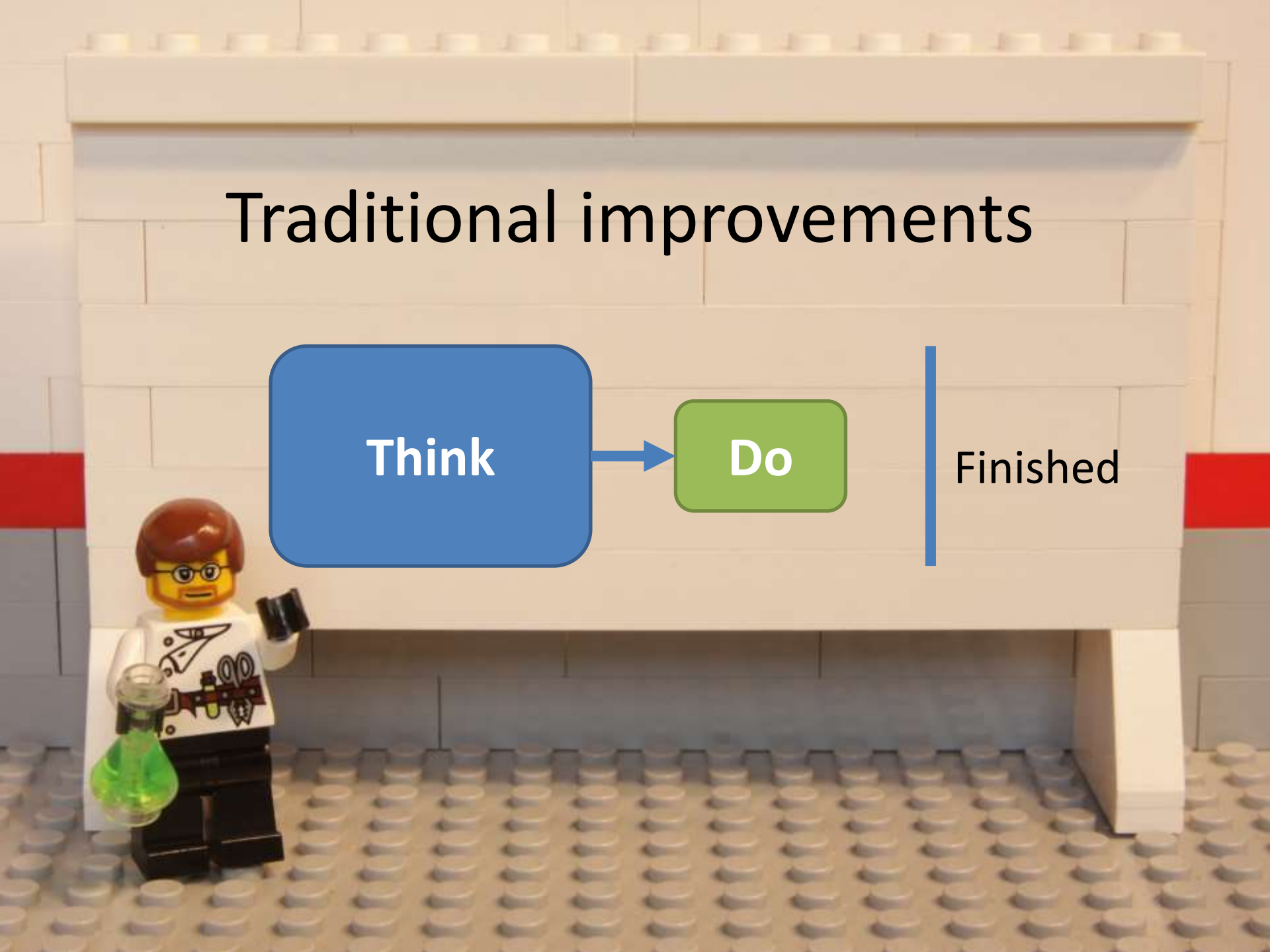
Successful Evolutionary Change for Your Technology Business



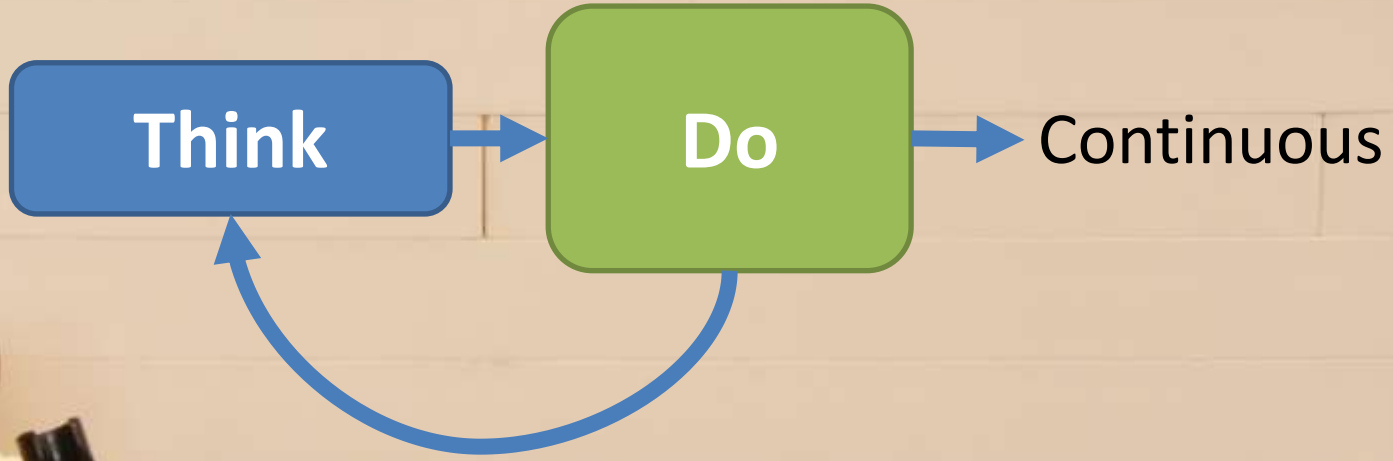
David J. Anderson


”To improve is to **change**;
to be perfect is to **change often**.”
Winston Churchill

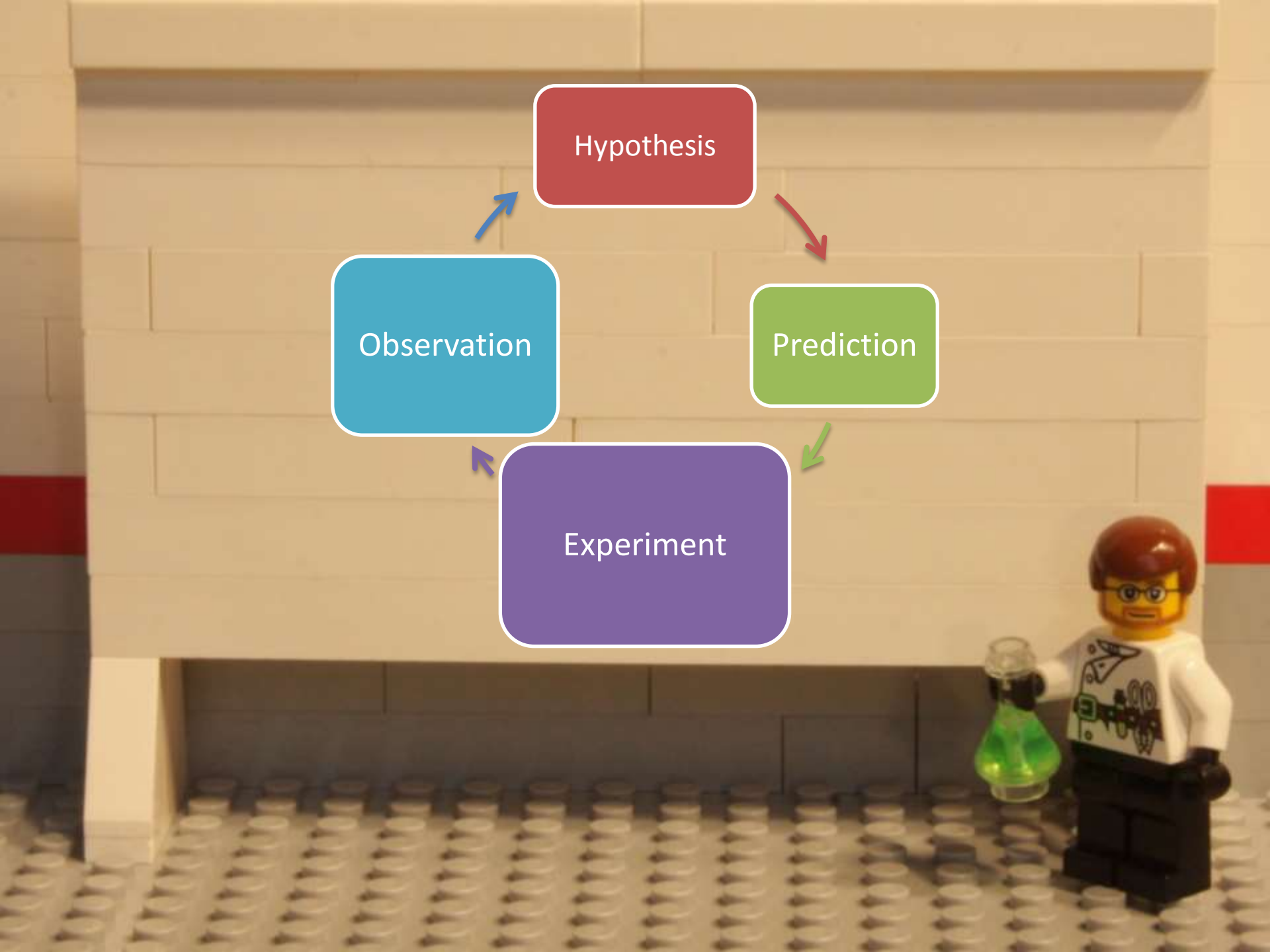
Traditional improvements



Lean improvements

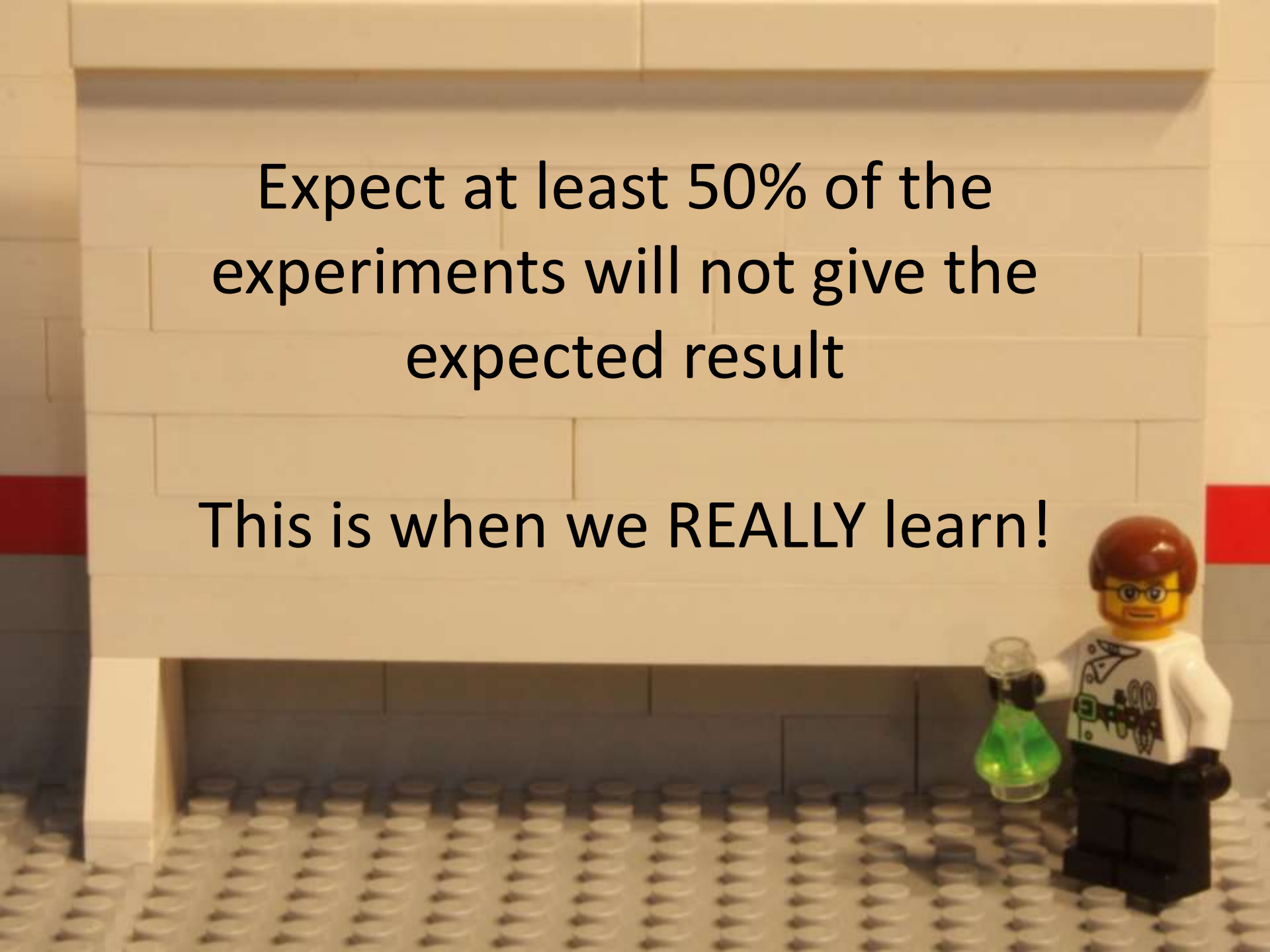


Improvements are experiments


Hypothesis
Prediction
Experiment
Observation

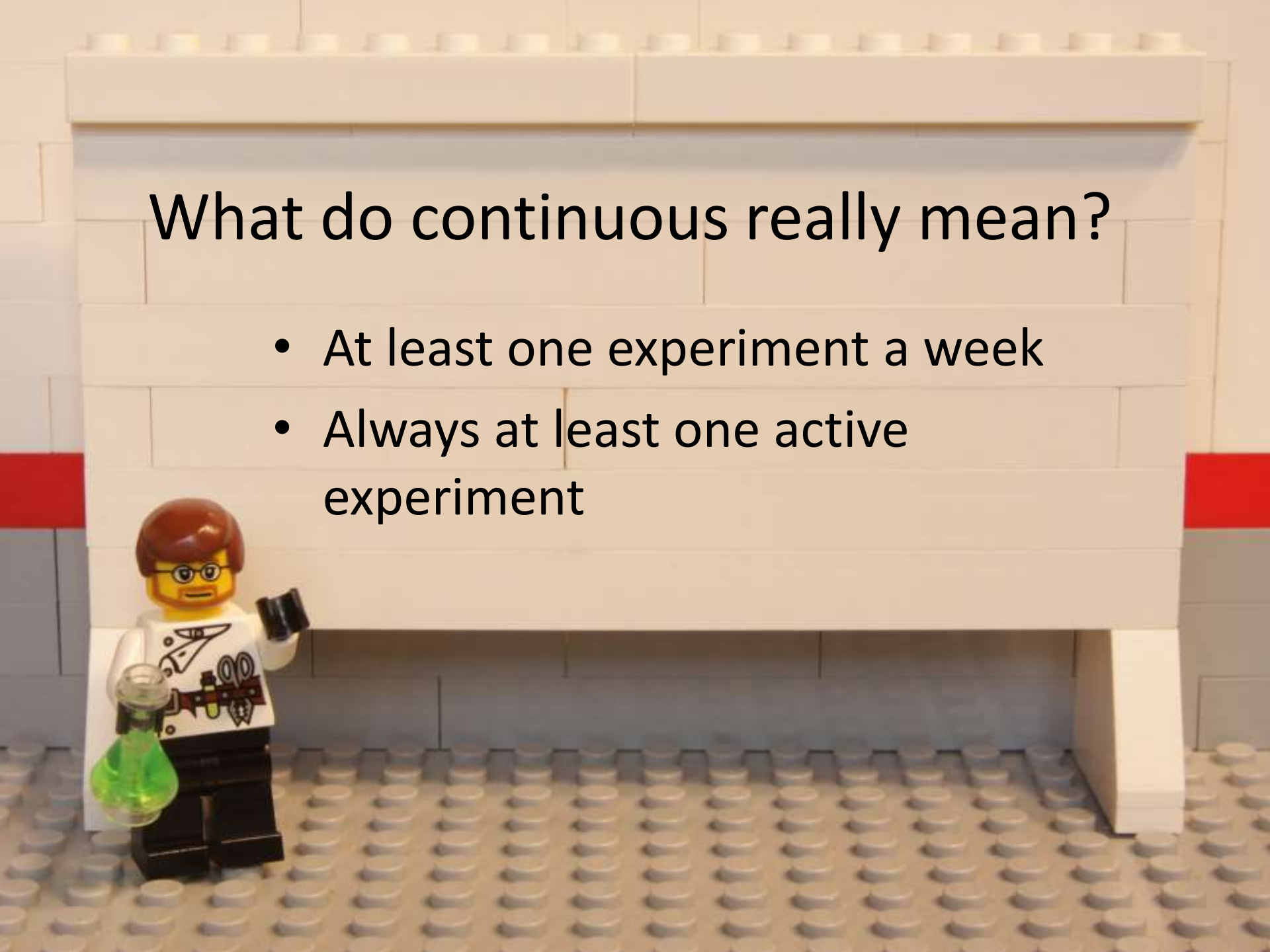
Expect at least 50% of the experiments will not give the expected result

This is when we REALLY learn!



What do continuous really mean?

- At least one experiment a week
- Always at least one active experiment



Daily work

Delivering value

Improving the work

See yourself as gardeners

If you don’t keep it up,

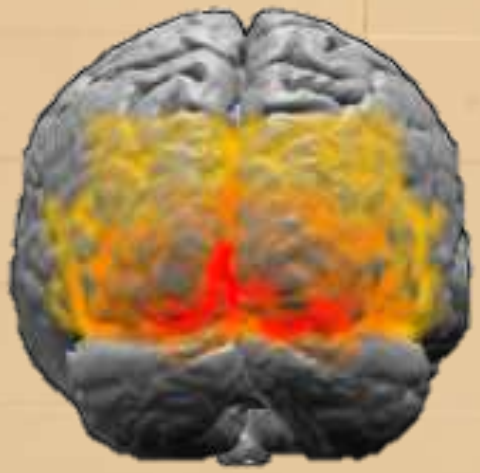
the weeds will grow back

Let’s do an experiment!

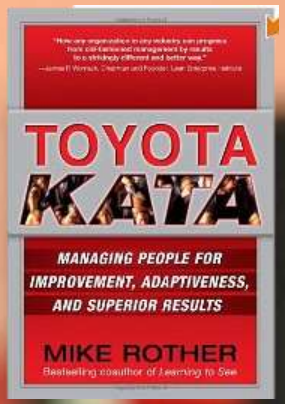
Cross your arms

Now cross them the other way

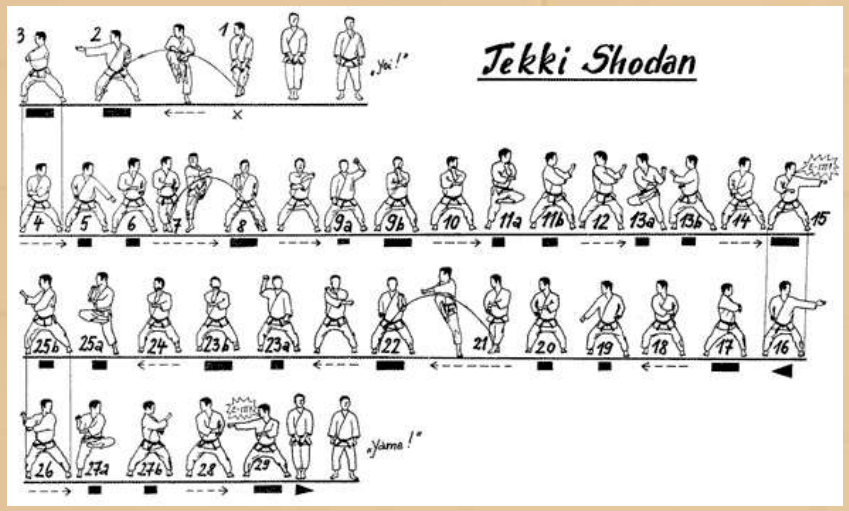
We need to rewire our brains for continuous improvements



Toyota Kata


TOYOTA
KATA
MANAGING PEOPLE FOR IMPROVEMENT, ADAPTIVENESS, AND SUPERIOR RESULTS
MIKE ROTHER

What is a Kata?

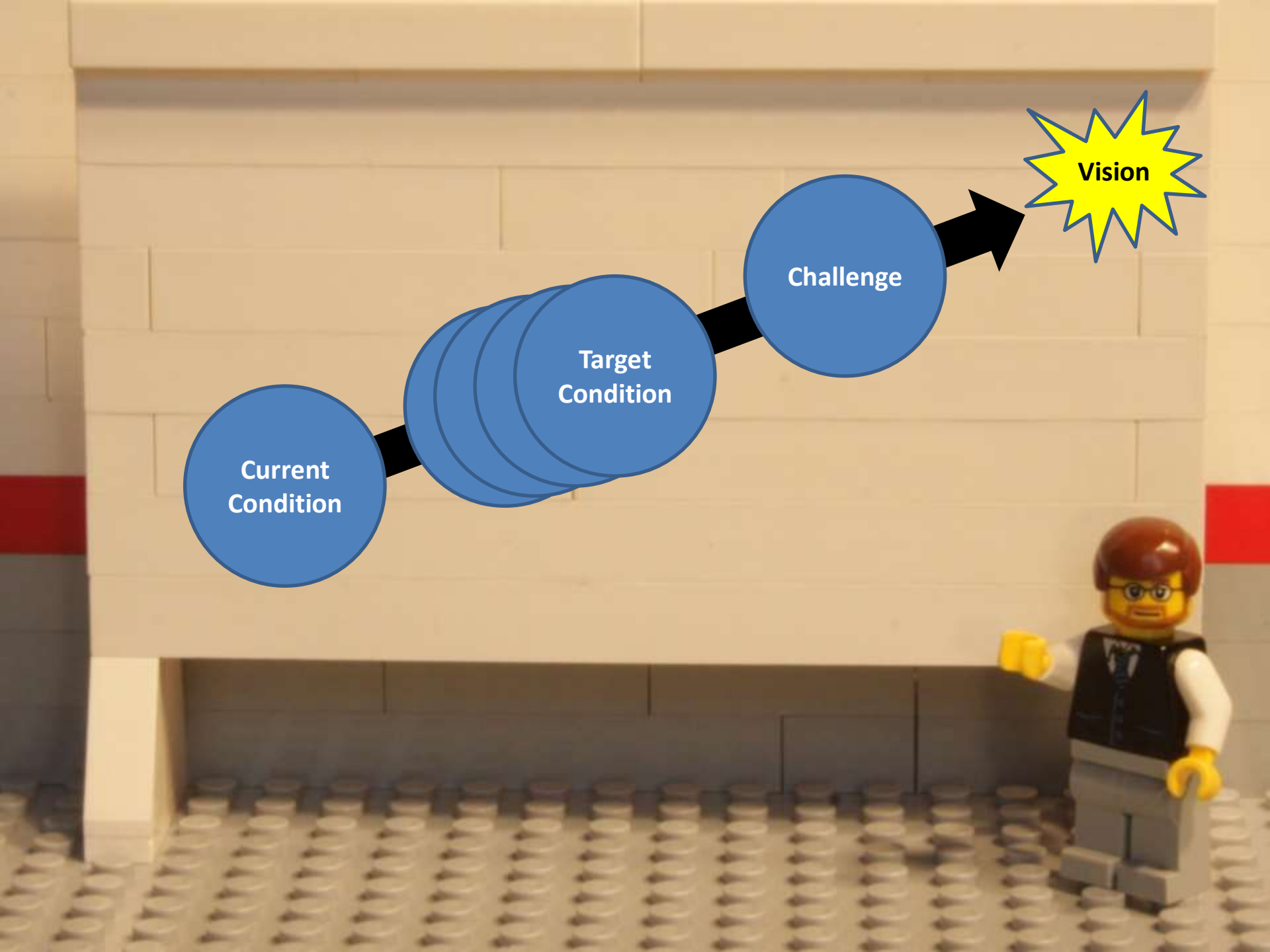


Create ”muscle memory” for continuous improvements


“We are what we repeatedly do. Excellence, then, is not an act, but a habit.”
Aristotle

Improvement Kata

Coaching Kata

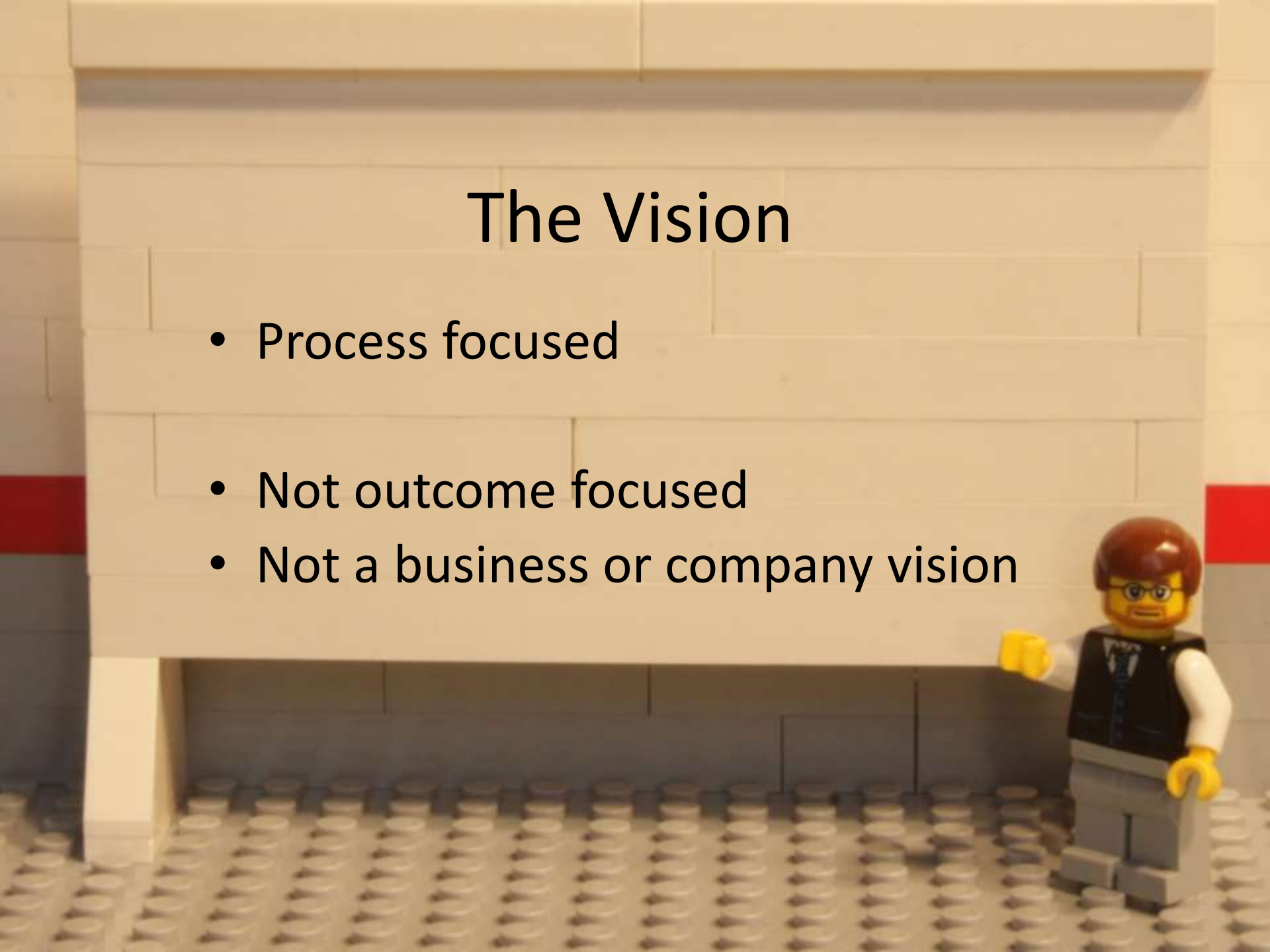

Vision
Challenge
Target Condition
Current Condition


Understand
the
Direction
N
S

The Vision

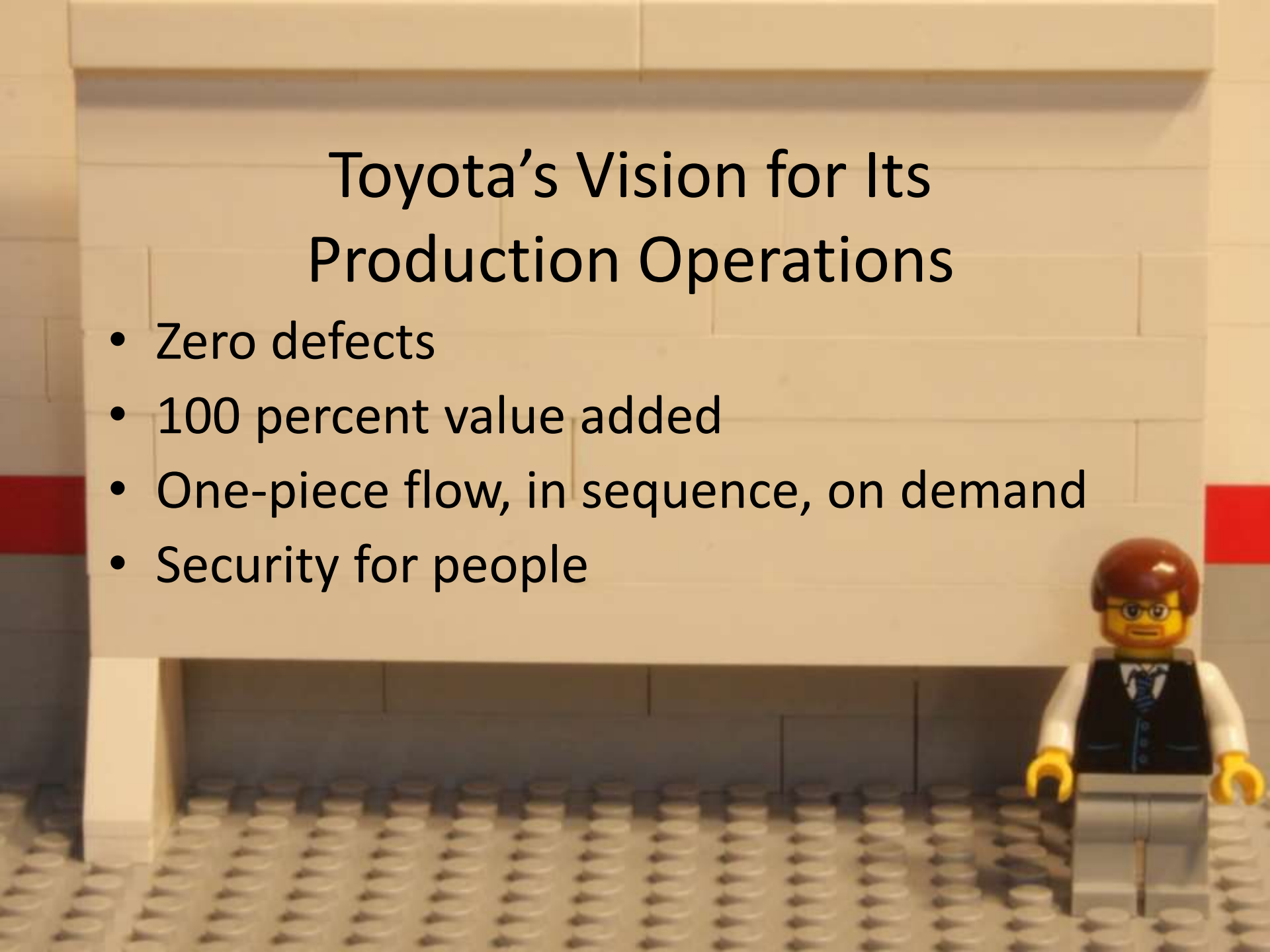
- Process focused

- Not outcome focused
- Not a business or company vision



Toyota's Vision for Its Production Operations

- Zero defects
- 100 percent value added
- One-piece flow, in sequence, on demand
- Security for people



Software development Vision example

- Zero defects, in production
- 100 percent value added
- Highest value first, on demand


Grasp the Current Condition
Backlog(6)
Analysis(3)
Dev(5)
Test(3)
Deployed
Urgent!


Go and See
Grasp the Current Condition

What to collect

- Data and facts, not gut feel
- Process metrics
- Outcome metrics

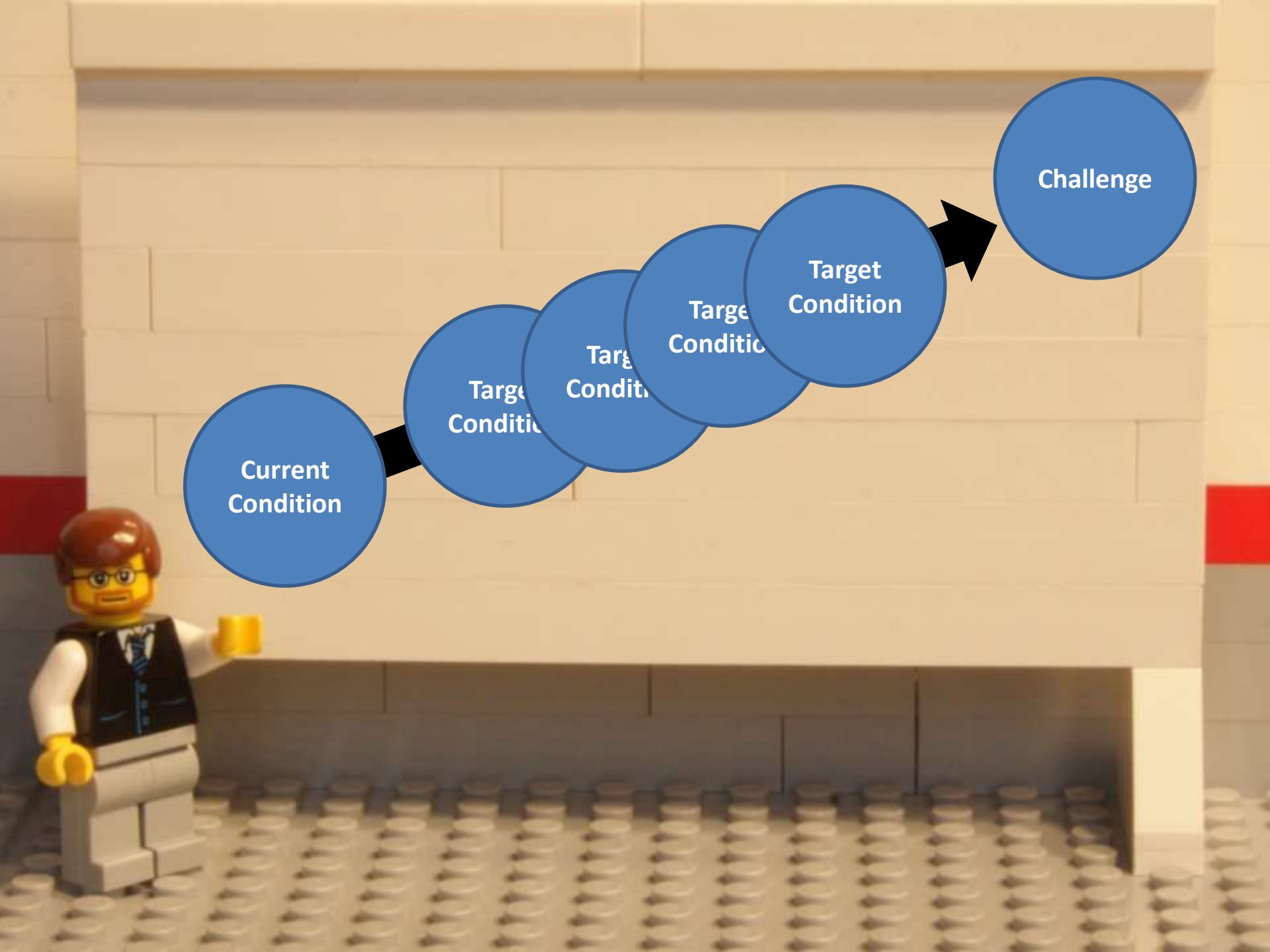

Our next target condition is…
Establish the Next Target Condition
Target Condition

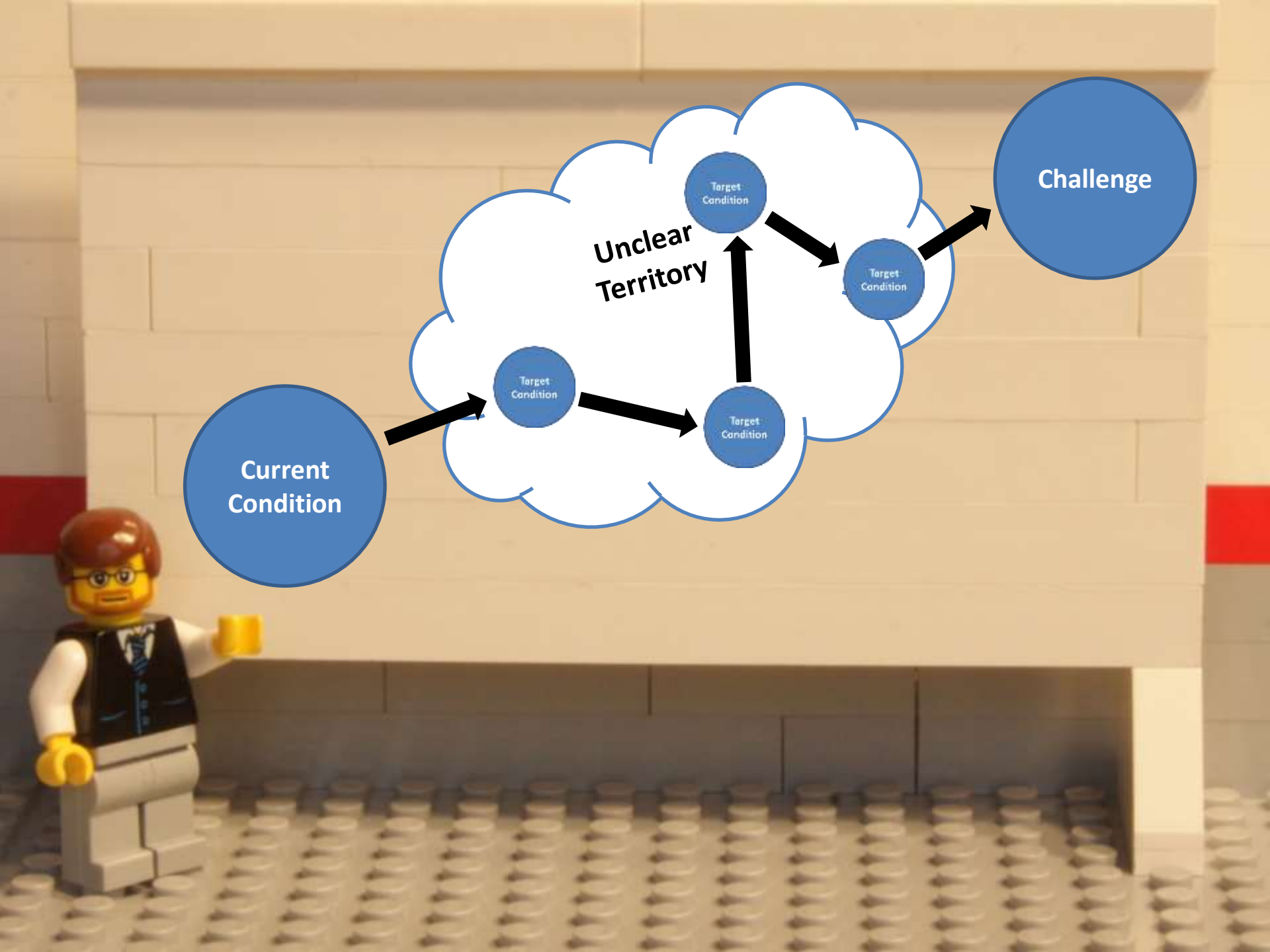
Beyond the knowledge threshold

Put a square peg in a round hole

Setting a target condition

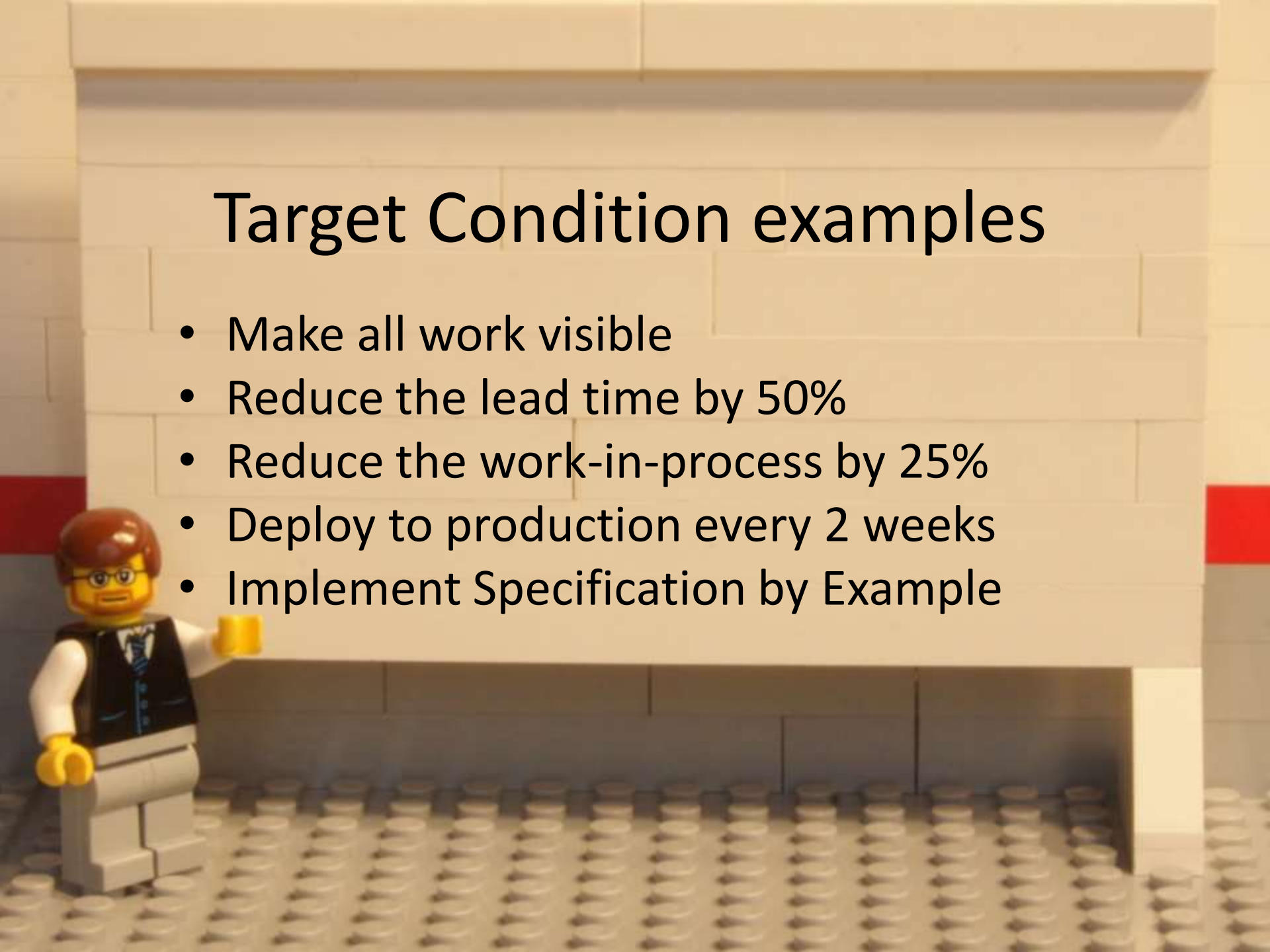
- Hypothesis on the journey towards the next Challenge and Vision
- Based on your business strategy and model for process improvement
- Follow the Goldilocks rule
  - Not too hard, Not too easy, Just Right

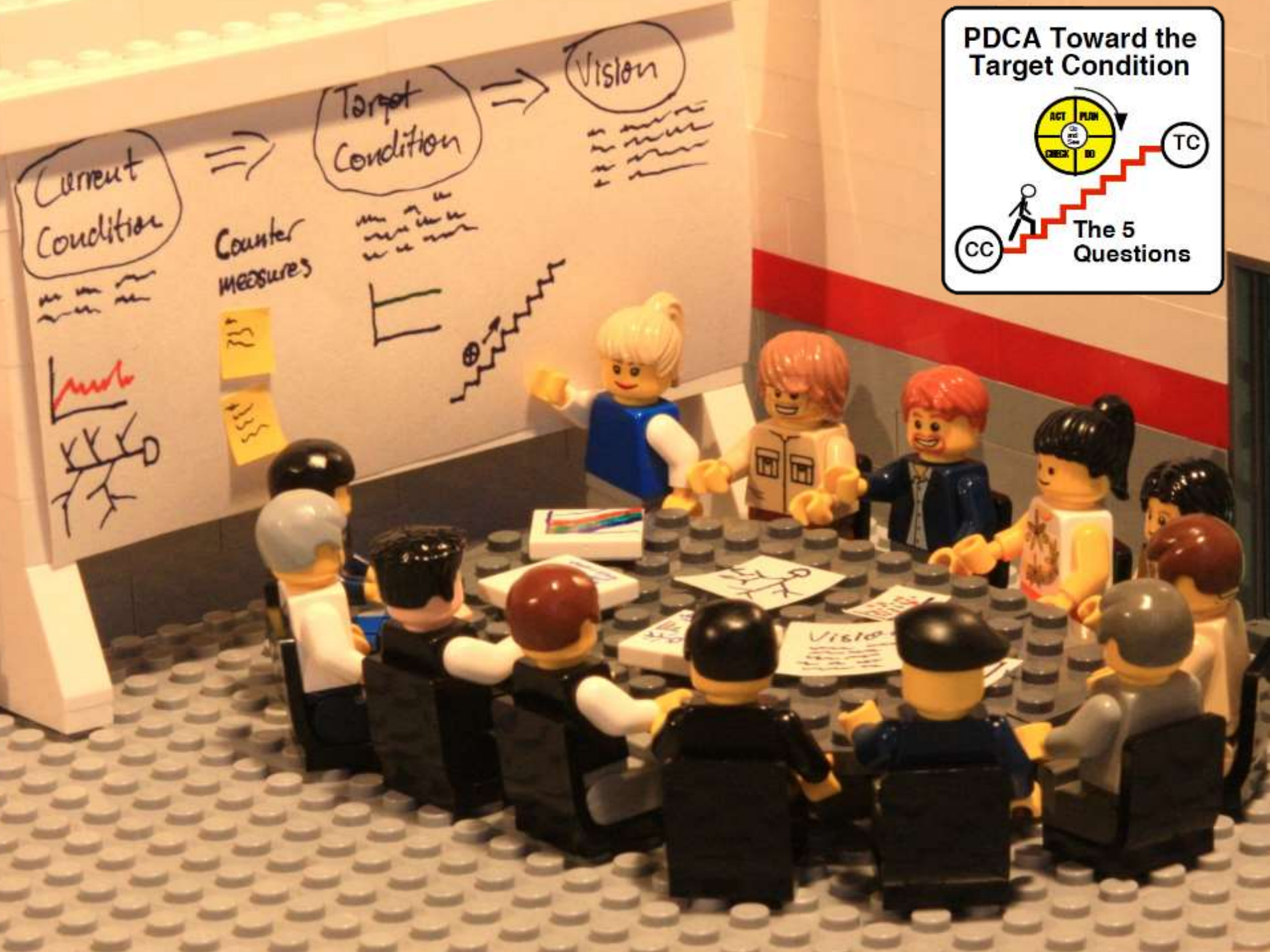

Current Condition
Target Condition
Challenge

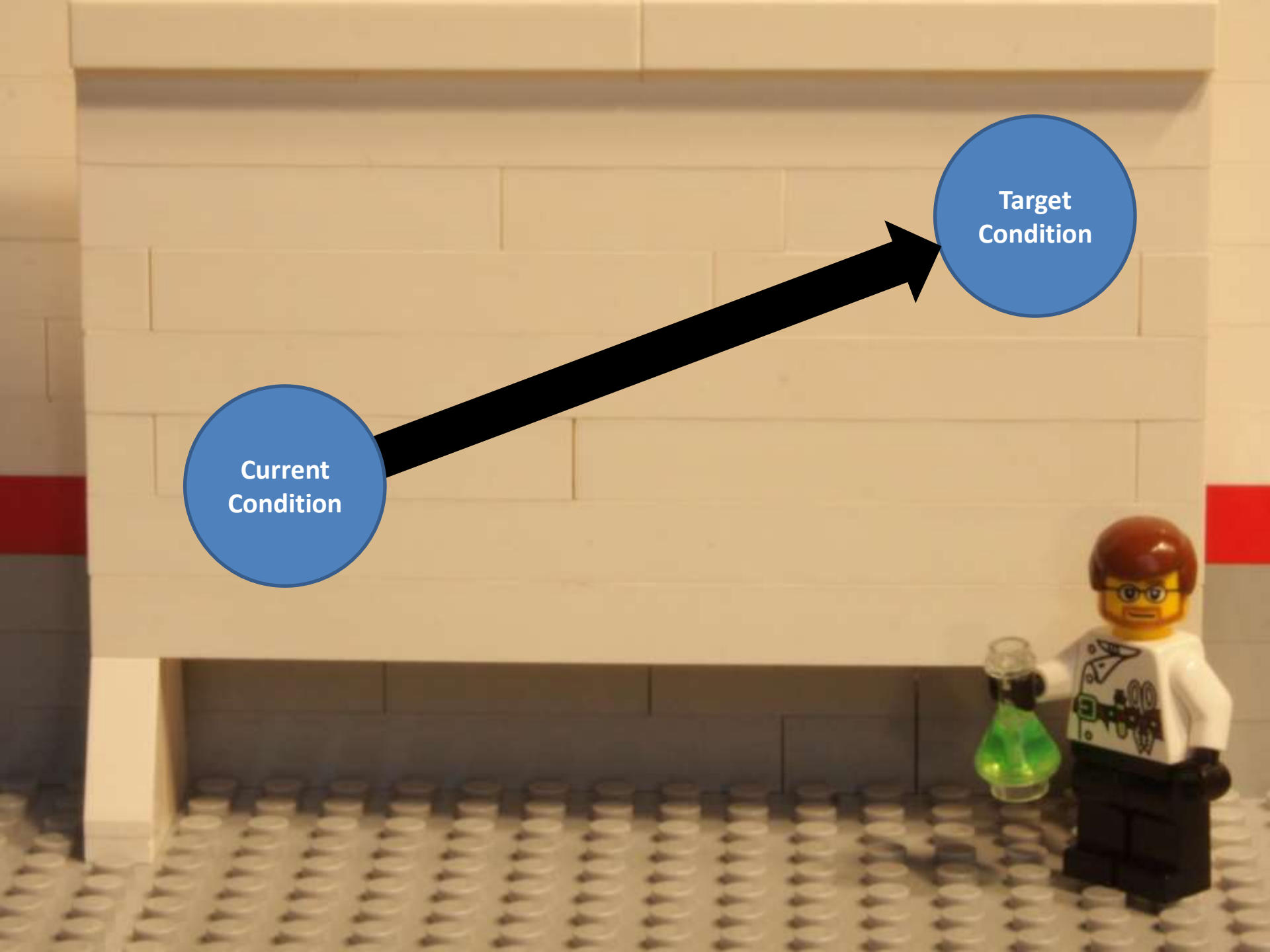

Current Condition
Target Condition
Target Condition
Target Condition
Target Condition
Unclear Territory
Challenge

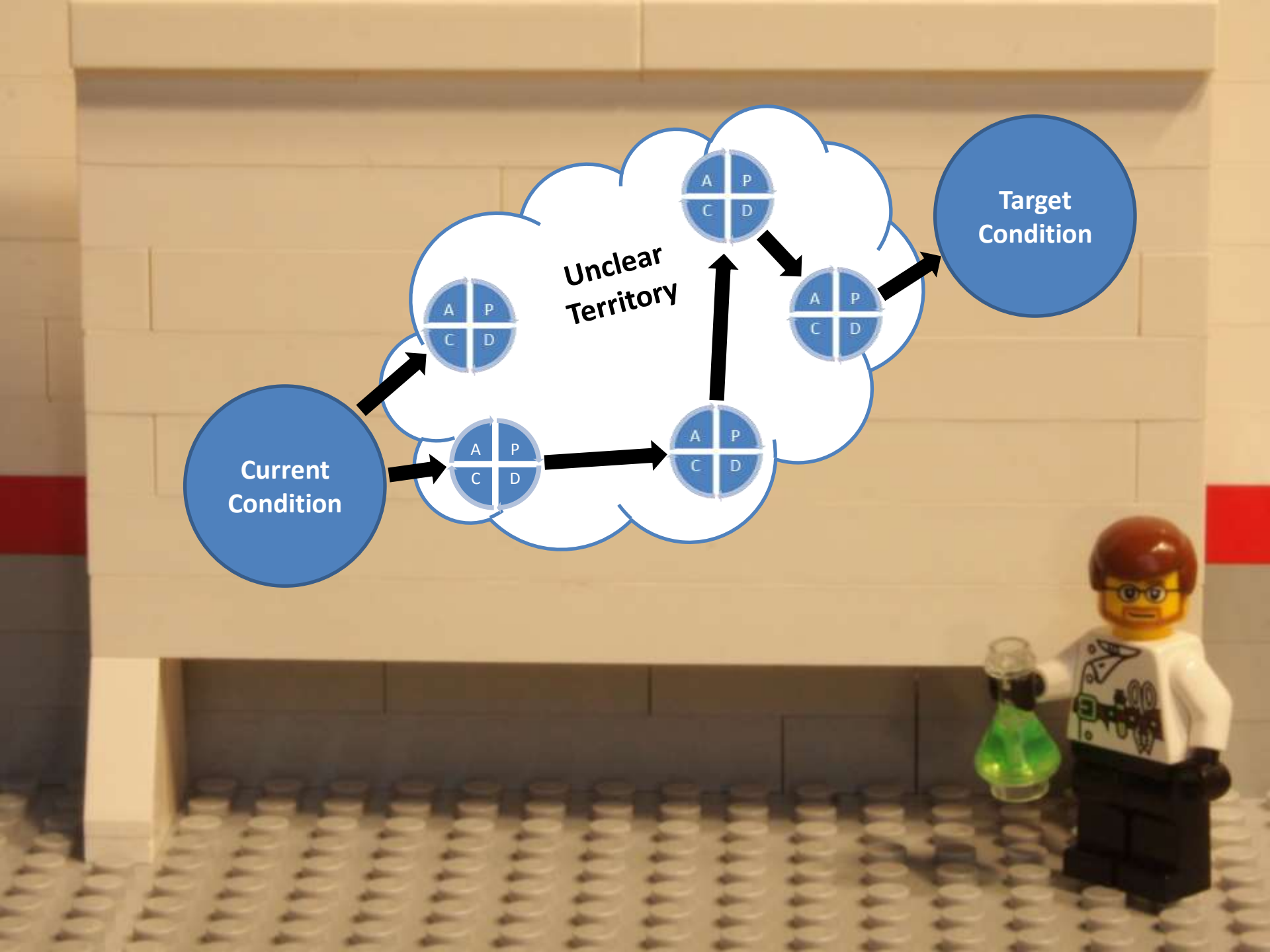
Target Condition examples

- Make all work visible
- Reduce the lead time by 50%
- Reduce the work-in-process by 25%
- Deploy to production every 2 weeks
- Implement Specification by Example




Current Condition
Counter measures
Target Condition
Vision
PDCA Toward the Target Condition
ACT
PLAN
CHECK
DO
TC
CC
The 5 Questions


Target Condition
Current Condition


Current Condition
Unclear Territory
Target Condition
A
P
C
D


Plan
Do
Act
check
PDCA Toward the Target Condition
ACT
PLAN
CHECK
DO
TC
CC
The 5 Questions

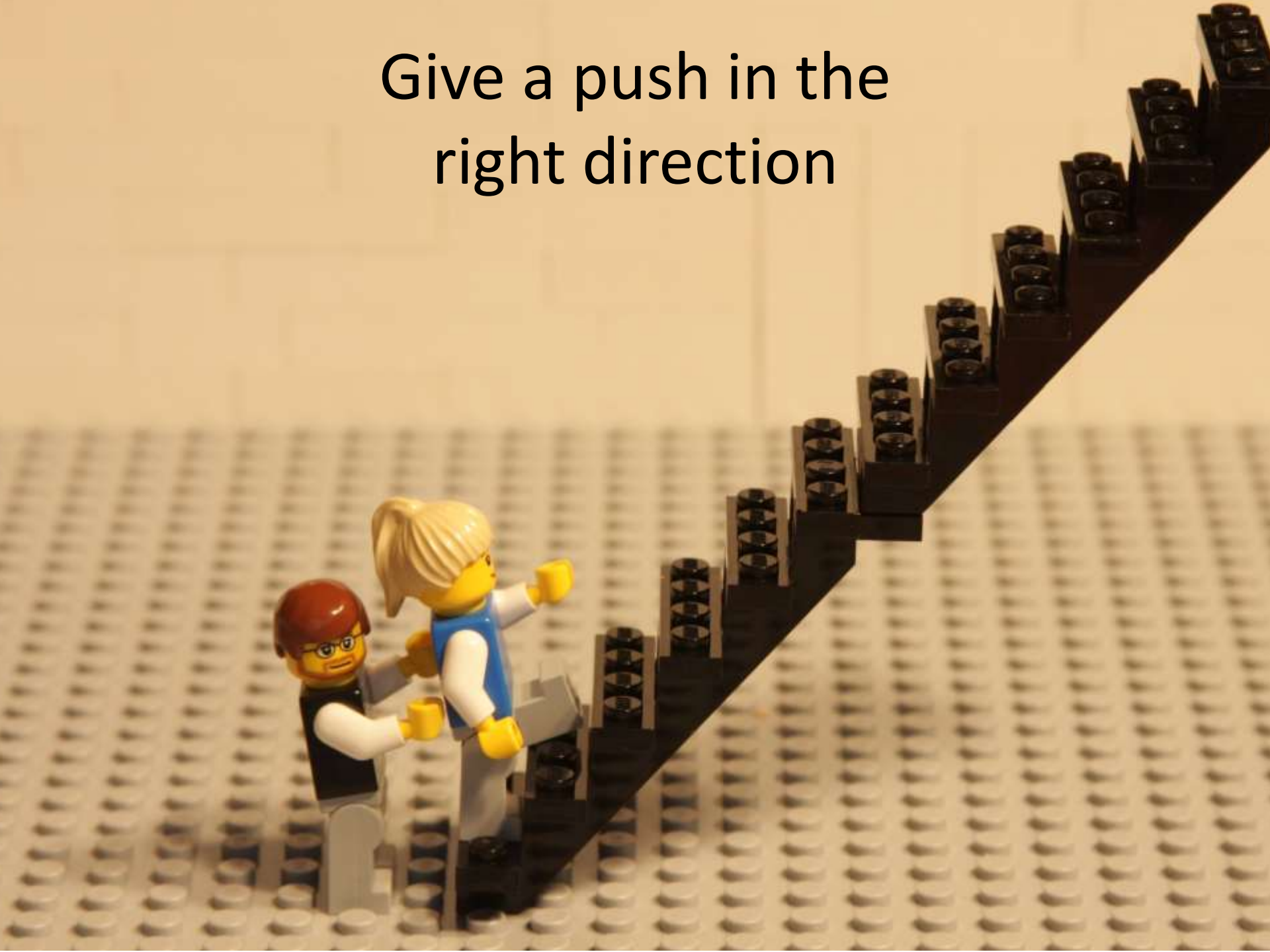
Improvement Kata

Coaching Kata

Leader coaching the learners

Give a helping hand

Give a push in the right direction



COACHING KATA

The Five Questions

1) What is the **Target Condition**?
2) What is the **Actual Condition** now?

--------*(Turn Card Over)*---------->

3) What **Obstacles** do you think are preventing you from reaching the target condition?

   Which *one* are you addressing now?

4) What is your **Next Step**? (next PDCA / experiment) What do you expect?
5) When can we go and see what we **Have Learned** from taking that step?

*You'll often work on the same obstacle for several PDCA cycles

Reflect on the Last Step Taken

Because you don't actually know what the result of a step will be!

1) What was your **Last Step?**

2) What did you **Expect?**

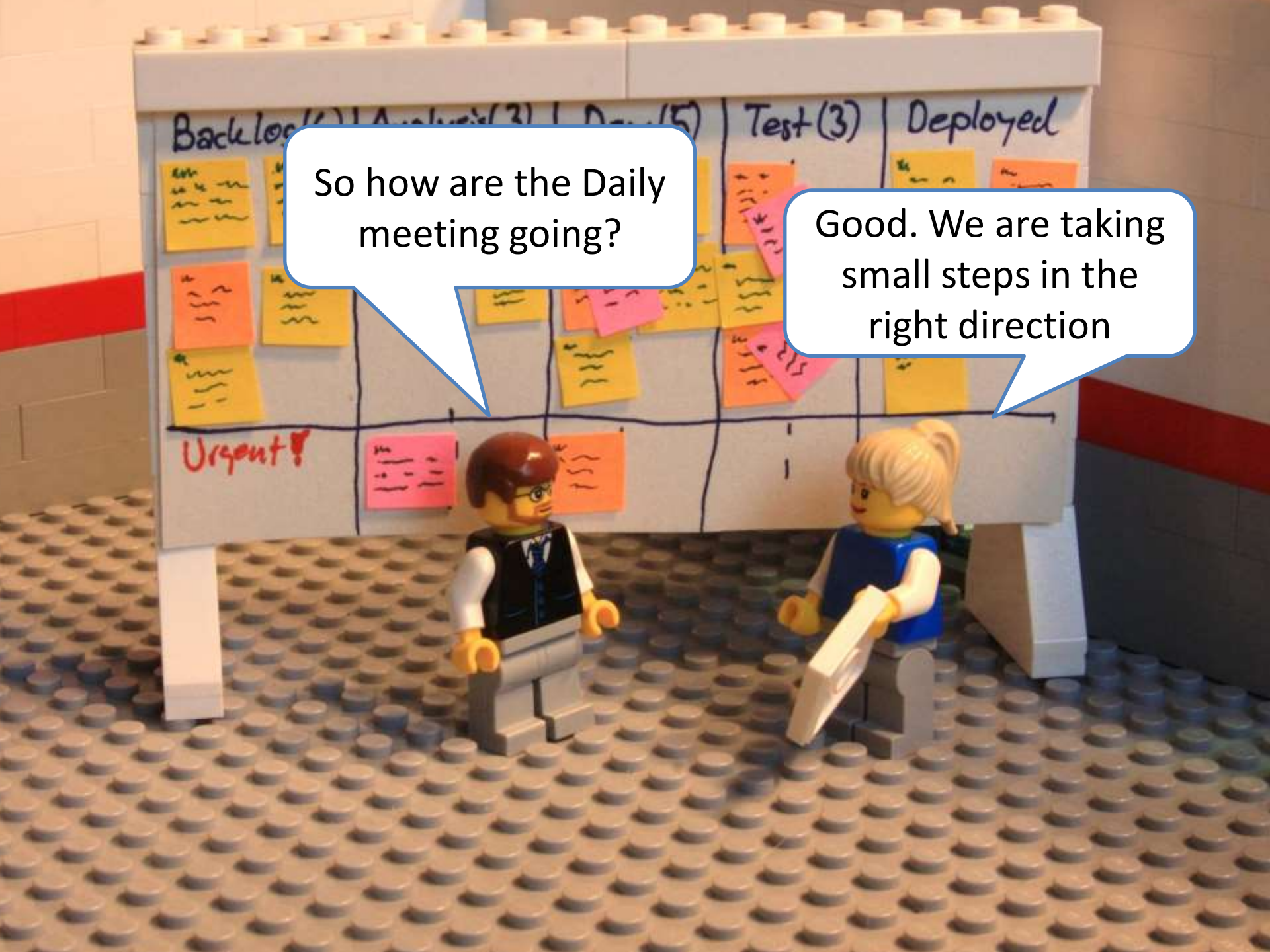
3) What **Actually Happened?**

4) What did you **Learn?**

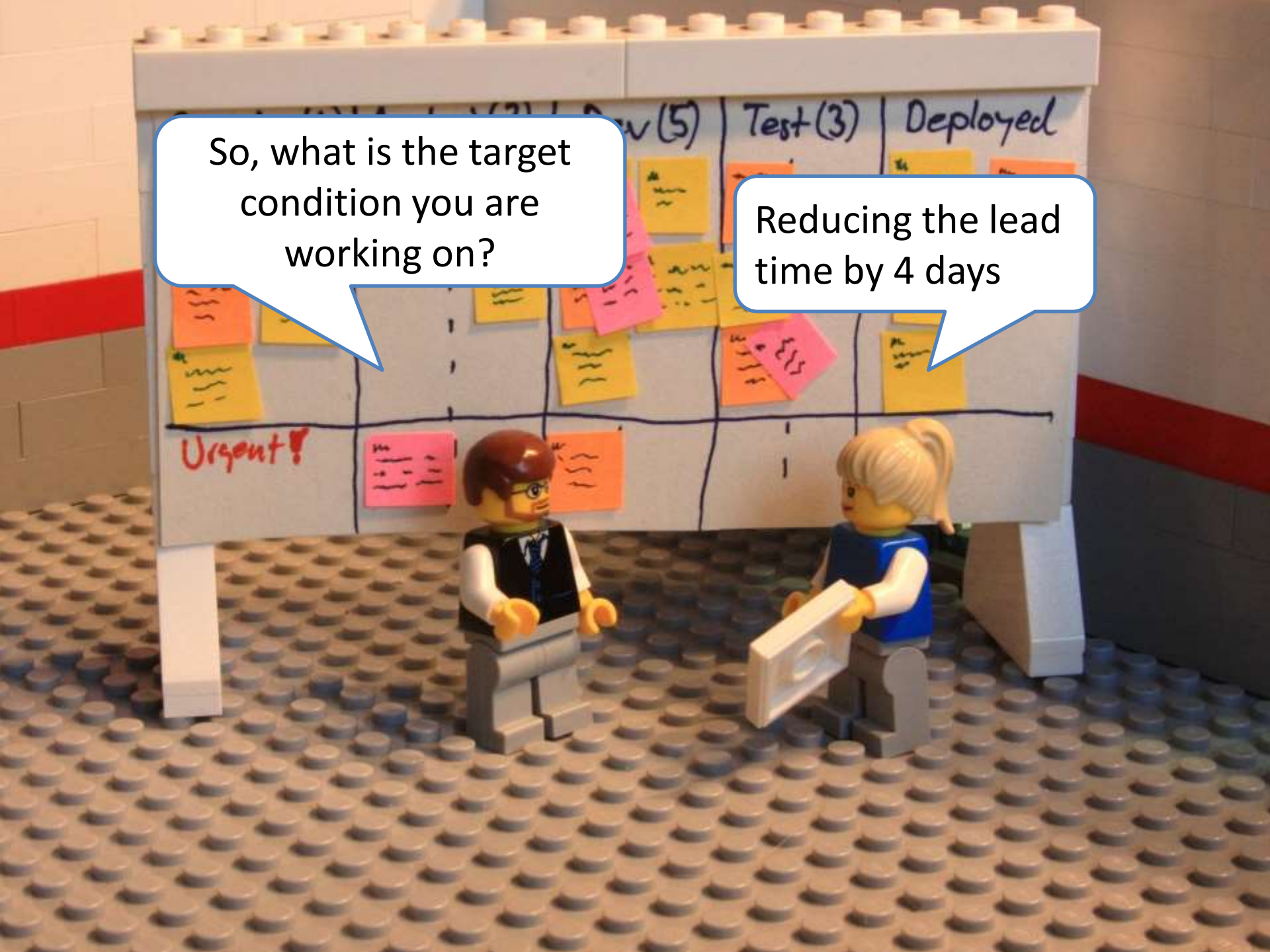
---------->

Return


Toyota Kata
in practice


So how are the Daily meeting going?
Good. We are taking small steps in the right direction
Test (3)
Deployed
Urgent!


Backlog(6)
Analysis(3)
Dev (5)
Test (3)
Deployed
You are starting to take small steps every day.
Small experiments that probe your way towards the Target Condition
I agree.

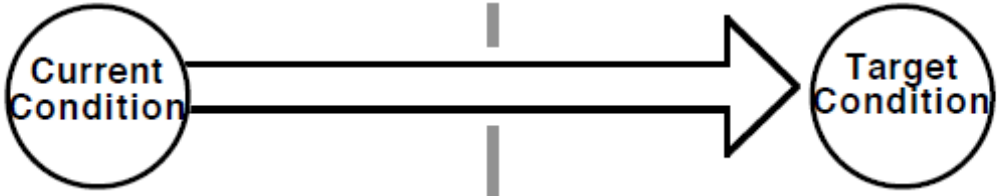

So, what is the target condition you are working on?
Reducing the lead time by 4 days
Test (3)
Deployed
Urgent!

TARGET CONDITION PLANNING FORM (Other)

Process Metric	Outcome Metric
Lead time	Throughput

Process Frontend | **Challenge** Half the lead time | **Achieve-by Date** 12th dec

Step 1: Fill in current condition data



Step 2: Fill in what you will keep the same

Step 3: Fill in what you want to change

Current Condition

Lead time

S = 10 days

M = 20 days

L = 40 days

Escaped defects

Level 1: 1

Level 2: 2

Level 3: 0

Customer satisfaction

NPS: 20%

Target Condition

Lead time

S = 8 days

M = 16 days

L = 36 days

Escaped defects

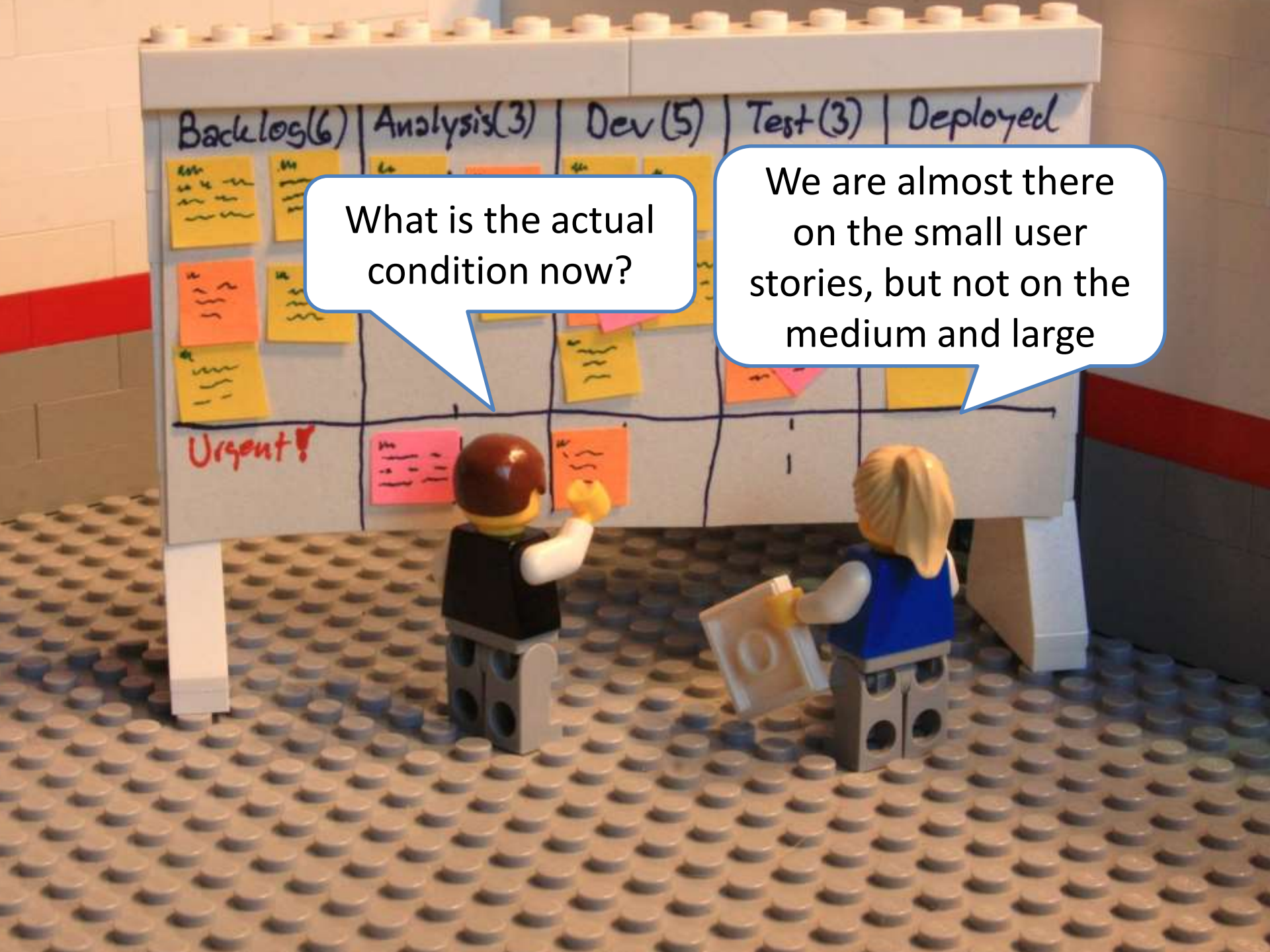
Level 1: 1

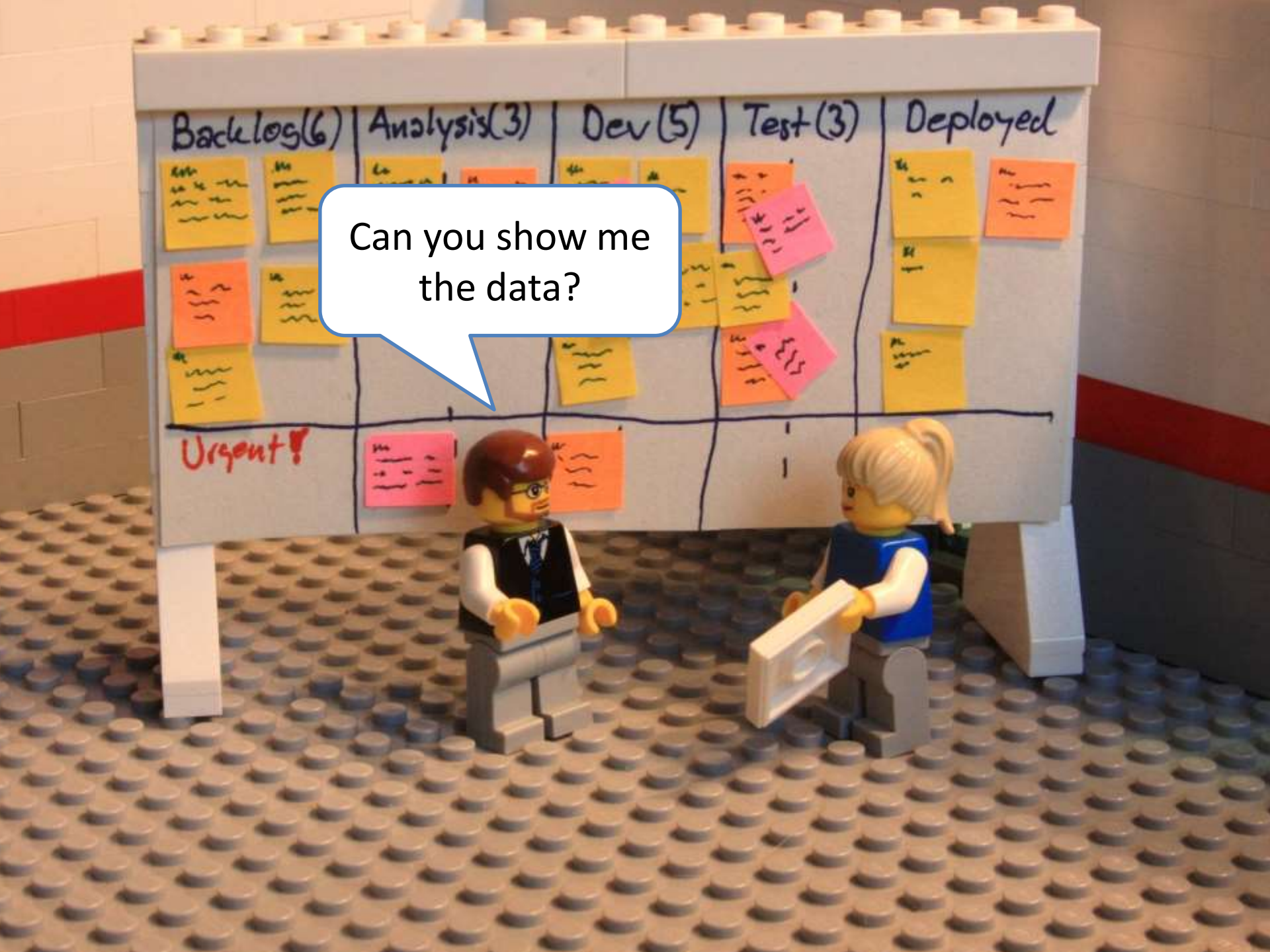
Level 2: 2

Level 3: 0

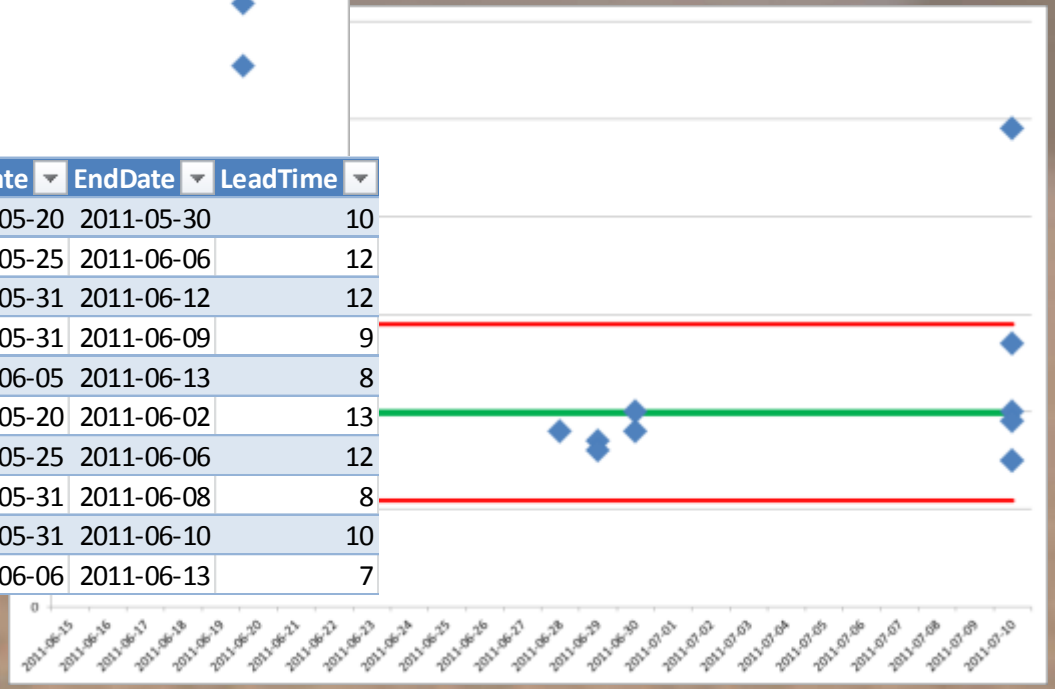
Customer satisfaction

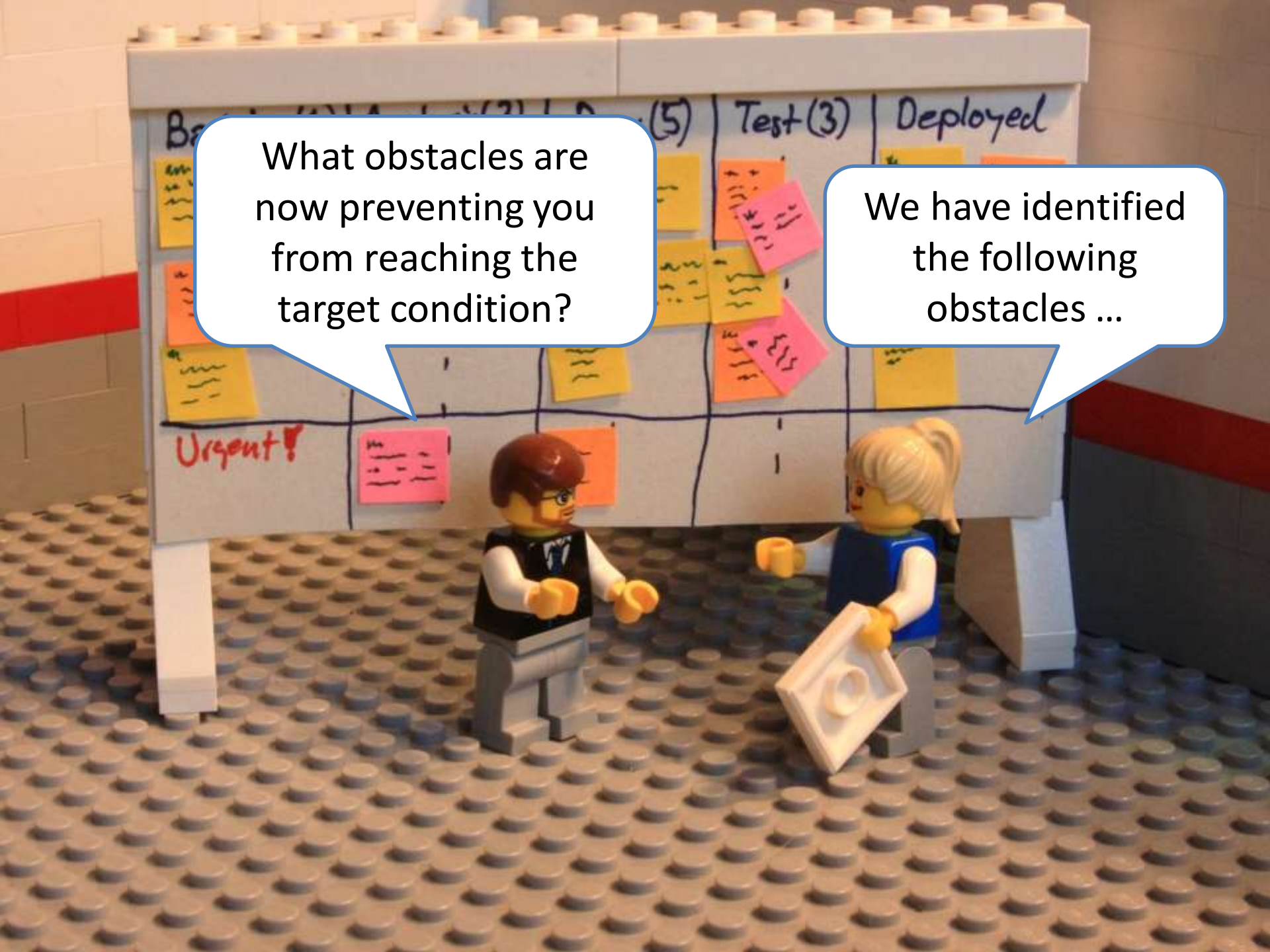
NPS: 20%

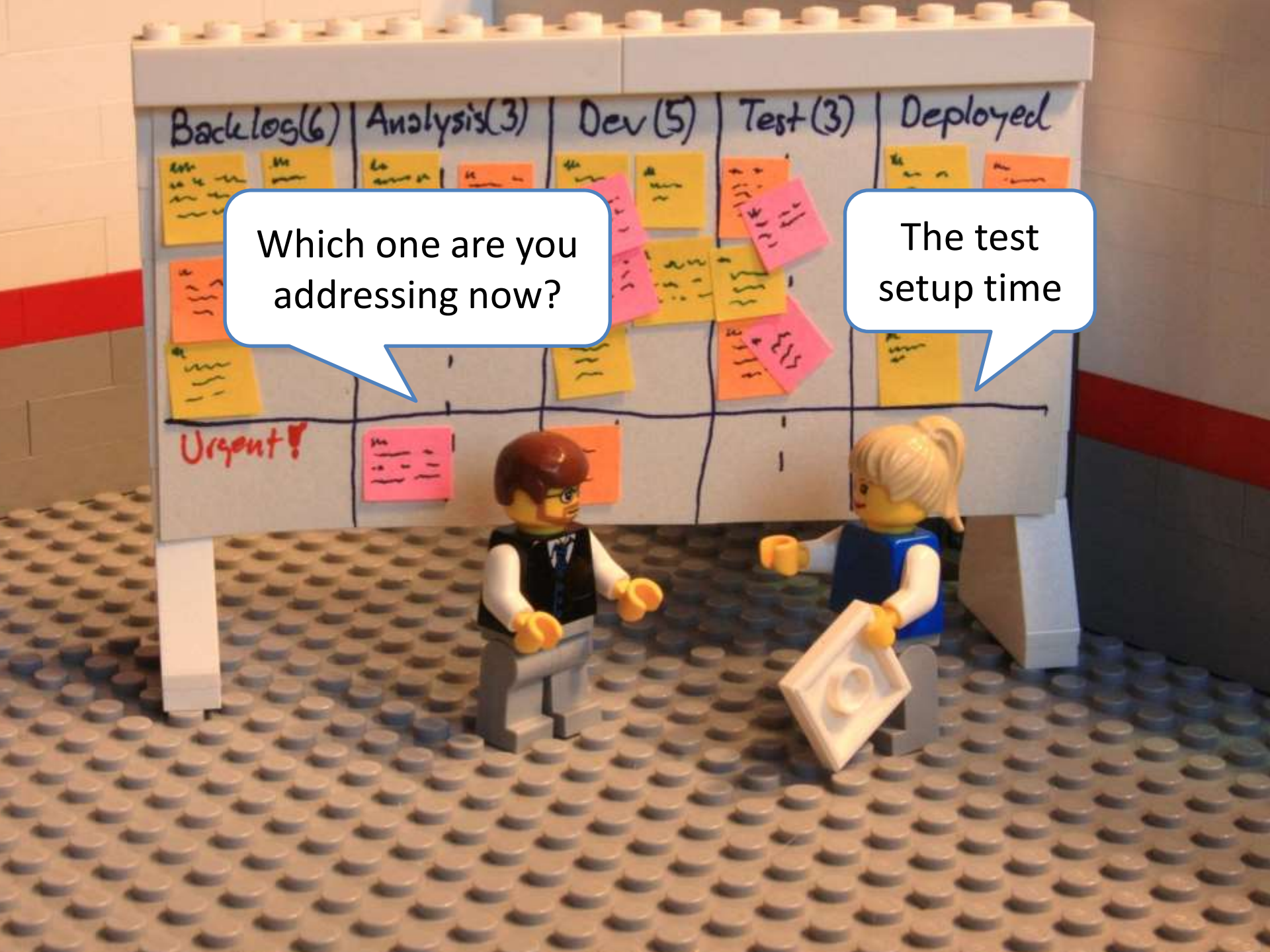

Backlog(6)
Analysis(3)
Dev(5)
Test(3)
Deployed
Urgent!
What is the actual condition now?
We are almost there on the small user stories, but not on the medium and large

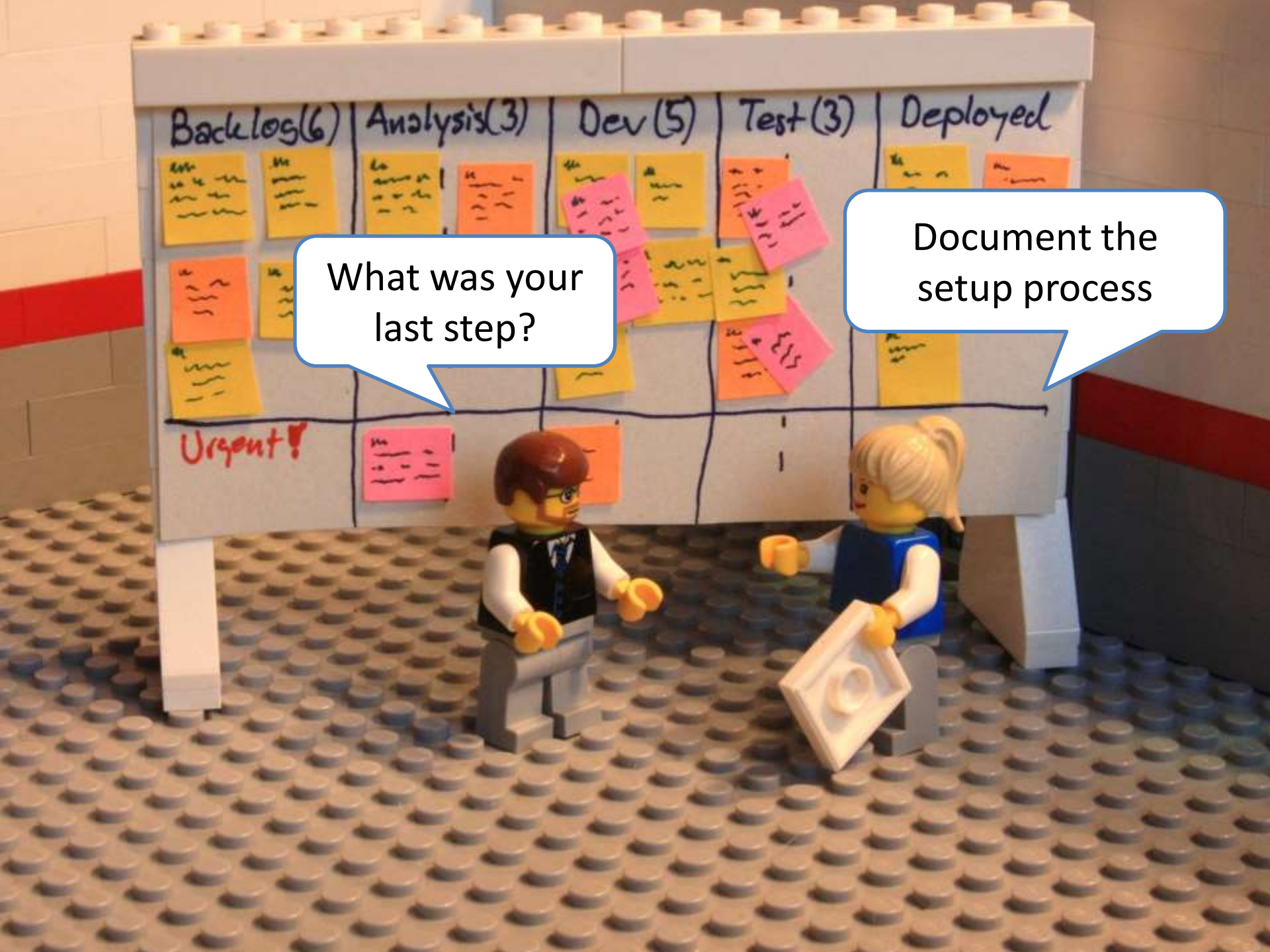

Backlog(6)
Analysis(3)
Dev (5)
Test (3)
Deployed
Urgent!
Can you show me the data?

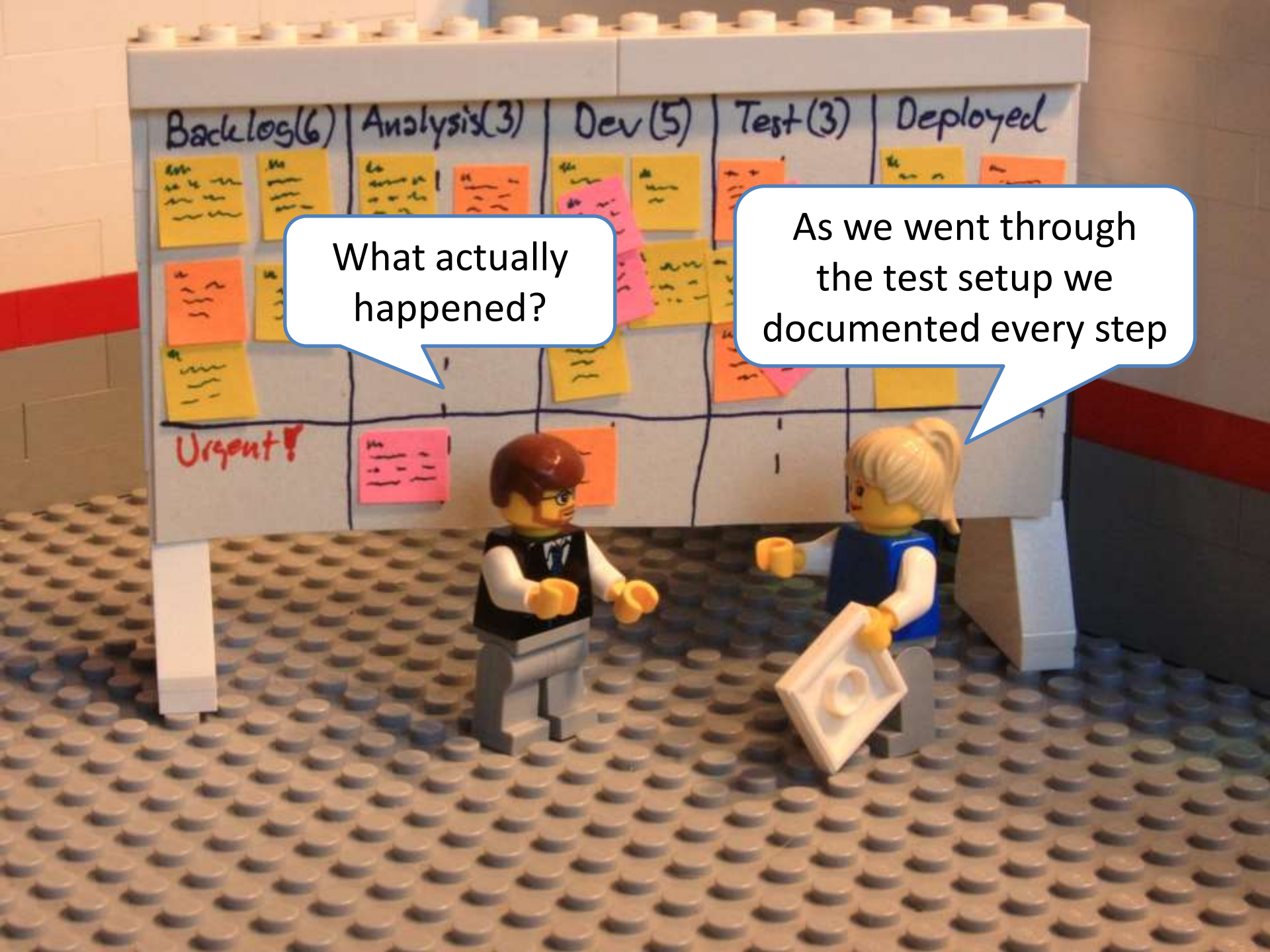
Id	Title	StartDate	EndDate	LeadTime
1010	Feature 1	2011-05-20	2011-05-30	10
1011	Feature 2	2011-05-25	2011-06-06	12
1012	Feature 3	2011-05-31	2011-06-12	12
1013	Feature 4	2011-05-31	2011-06-09	9
1014	Feature 5	2011-06-05	2011-06-13	8
1015	Feature 6	2011-05-20	2011-06-02	13
1016	Feature 7	2011-05-25	2011-06-06	12
1017	Feature 8	2011-05-31	2011-06-08	8
1018	Feature 9	2011-05-31	2011-06-10	10
1019	Feature 10	2011-06-06	2011-06-13	7

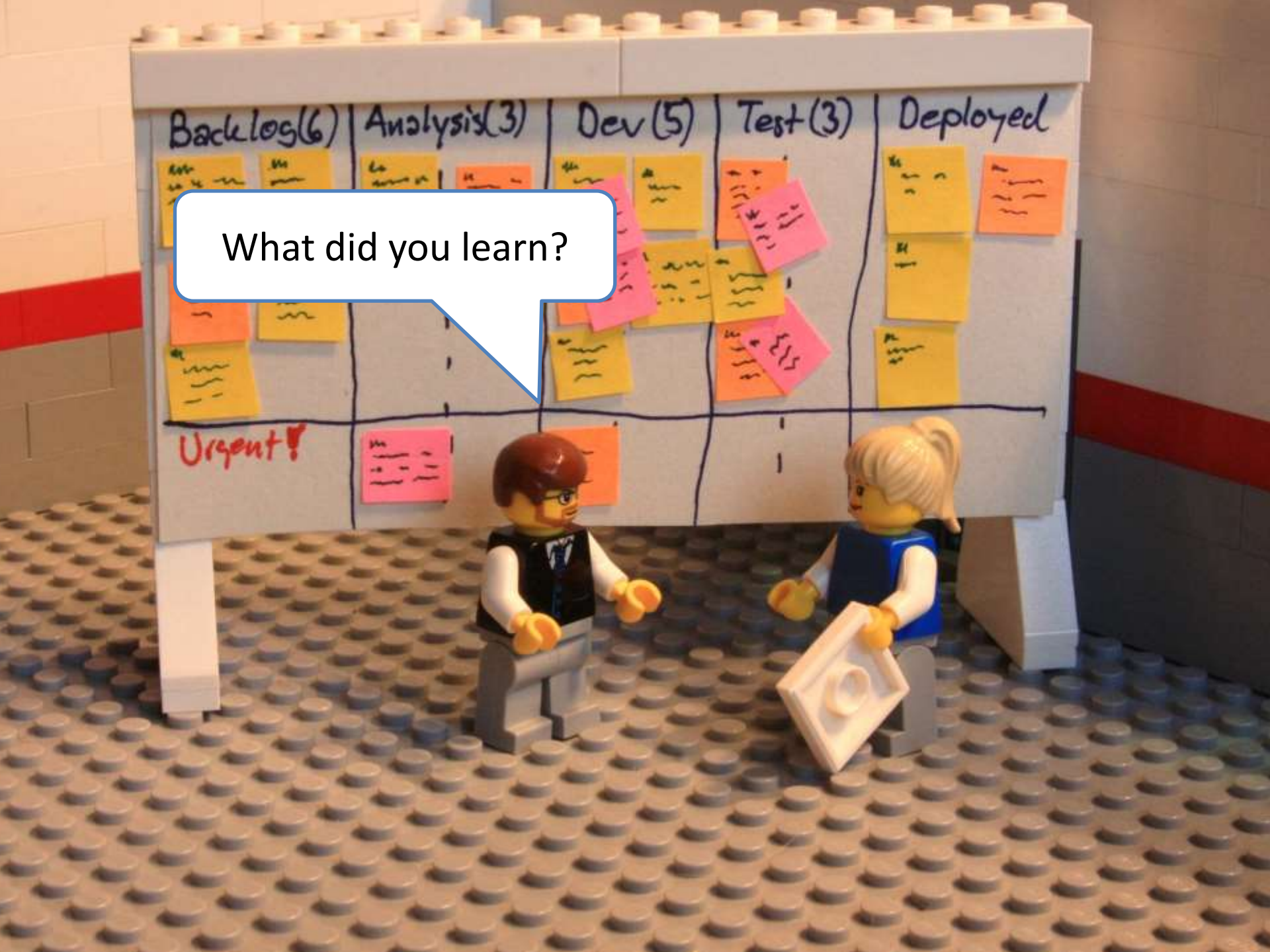



What obstacles are now preventing you from reaching the target condition?
We have identified the following obstacles …
Test (3)
Deployed
Urgent!


Backlog(6)
Analysis(3)
Dev(5)
Test(3)
Deployed
Urgent!
Which one are you addressing now?
The test setup time


Backlog(6)
Analysis(3)
Dev (5)
Test (3)
Deployed
Urgent!
What was your last step?
Document the setup process


Backlog(6)
Analysis(3)
Dev (5)
Test (3)
Deployed
Urgent!
What actually happened?
As we went through the test setup we documented every step


Backlog(6)
Analysis(3)
Dev (5)
Test (3)
Deployed
What did you learn?
Urgent!

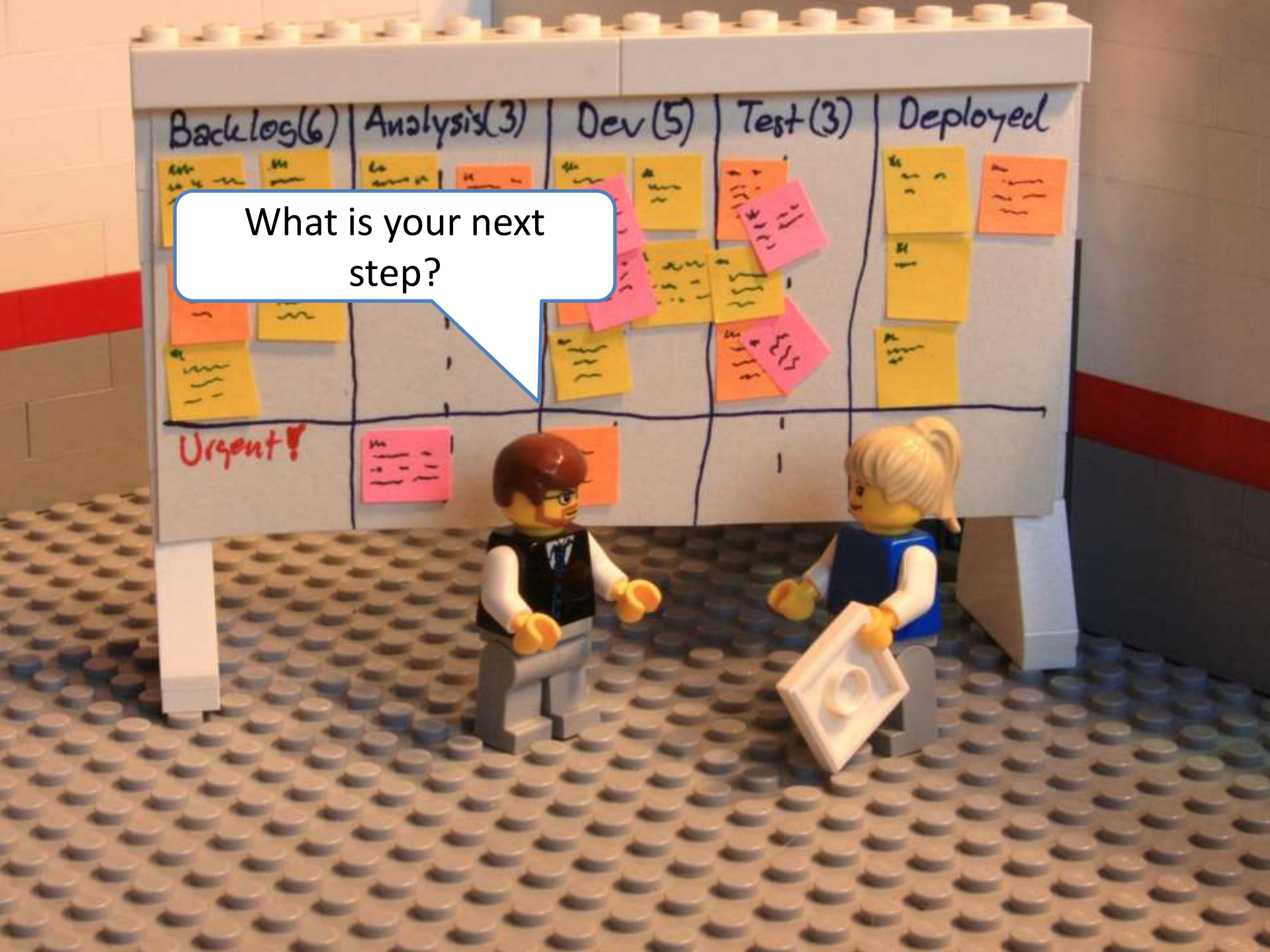
PDCA CYCLES RECORD *(Each row = one experiment)*

Date: 5th Dec

Process: Frontend

Process Metric Lead time

Step	What do you expect?	Coaching Cycle	EXPERIMENT	Result Observe closely	What We Learned
Document the setup process	We expect to understand the process better			Many steps are done manually even if they can be automated	Many of the steps can be automated with small changes to the current setup process


Backlog(6)
Analysis(3)
Dev (5)
Test (3)
Deployed
What is your next step?
Urgent!

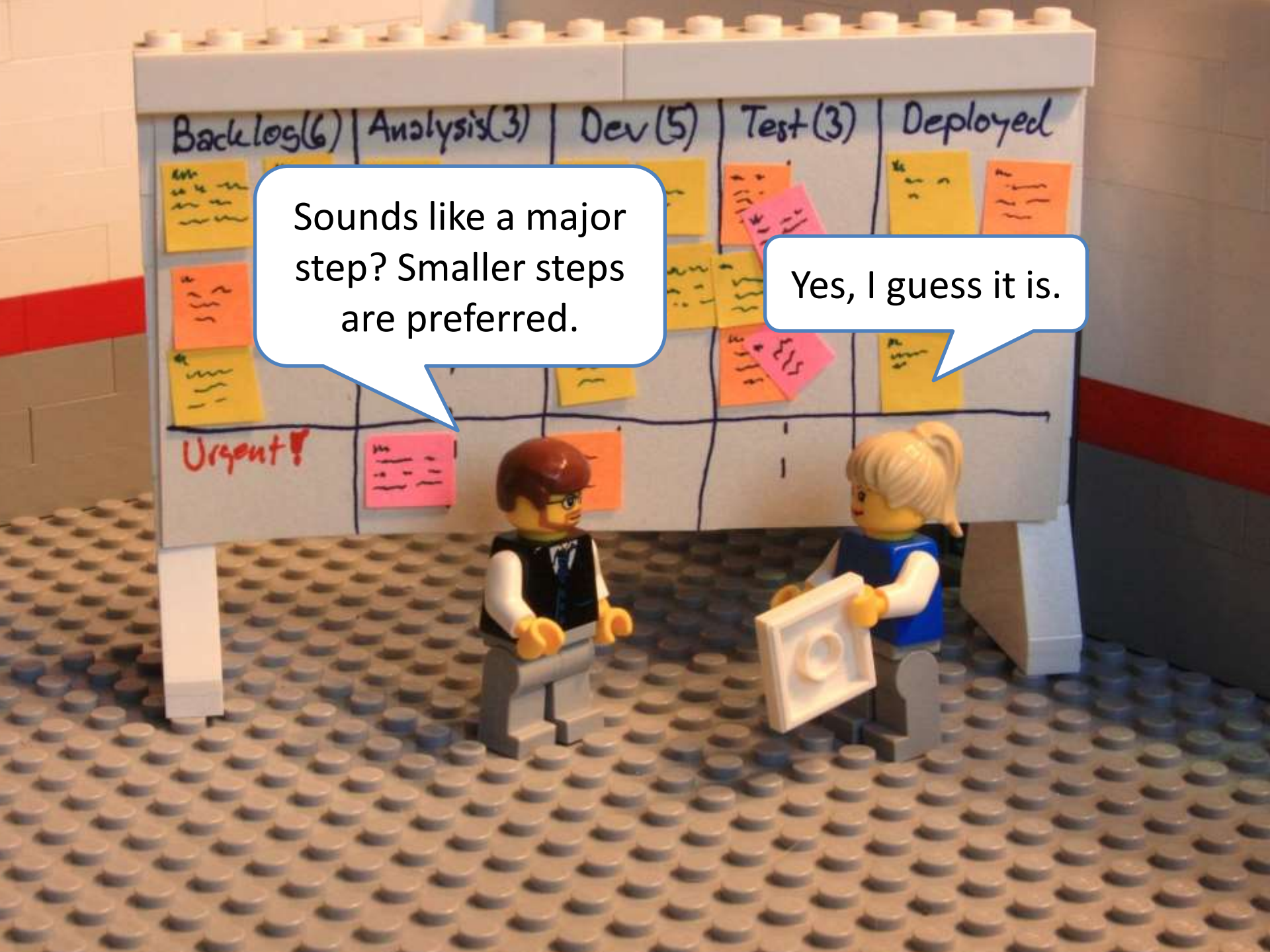
PDCA CYCLES RECORD *(Each row = one experiment)*

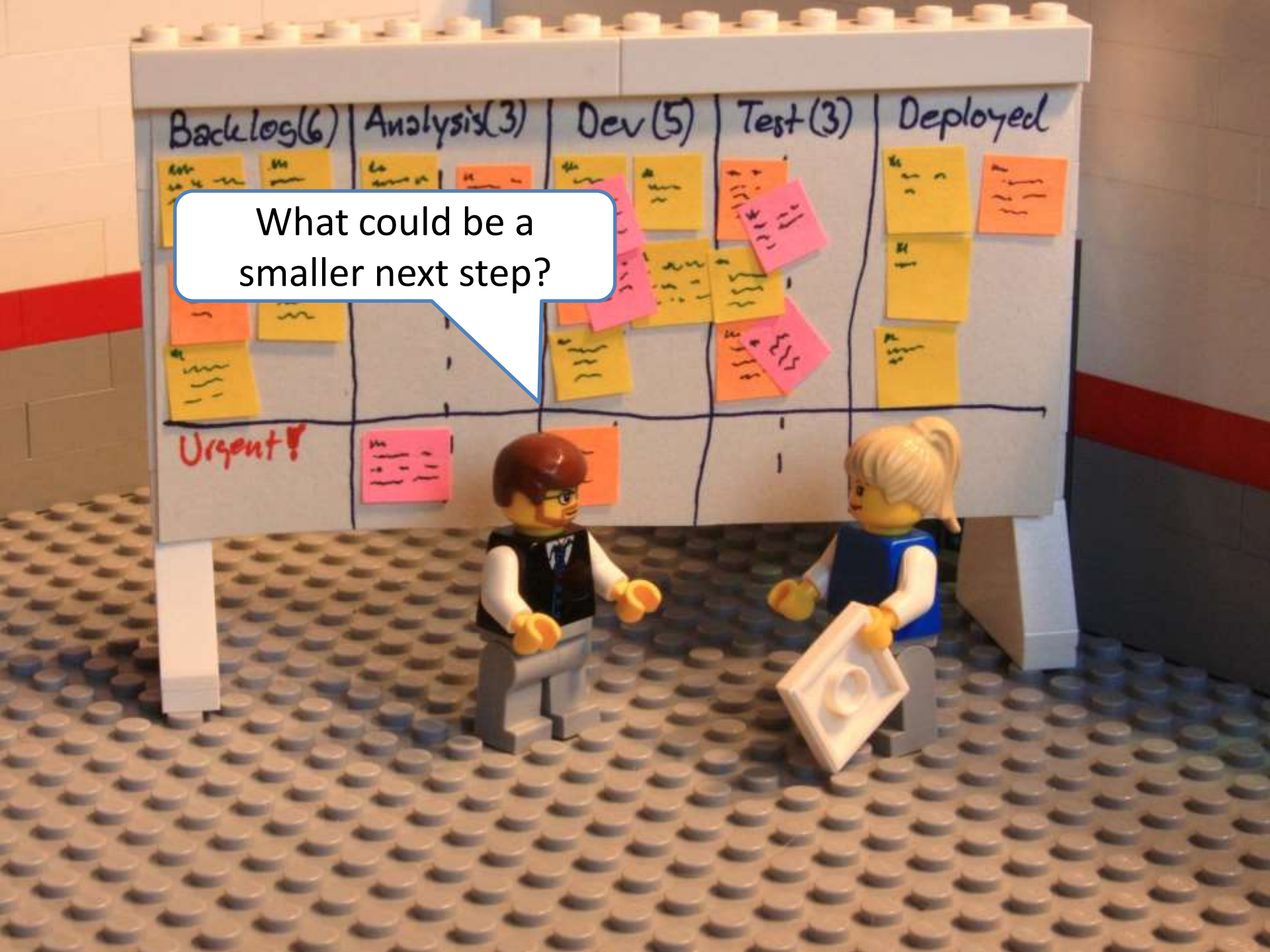
Date: 5th Dec

Process: Frontend

Process Metric Lead time

Step	What do you expect?	Coaching Cycle	EXPERIMENT	Result Observe closely	What We Learned
Document the setup process	We expect to understand the process better			Many steps are done manually even if they can be automated	Many of the steps can be automated with small changes to the current setup process
Automating large parts of the test setup					


Backlog(6)
Analysis(3)
Dev(5)
Test(3)
Deployed
Urgent!
Sounds like a major step? Smaller steps are preferred.
Yes, I guess it is.


Backlog(6)
Analysis(3)
Dev (5)
Test (3)
Deployed
What could be a smaller next step?
Urgent!

PDCA CYCLES RECORD *(Each row = one experiment)*

Date: 5th Dec

Process: Frontend

Process Metric Lead time

Step	What do you expect?	Coaching Cycle	EXPERIMENT	Result Observe closely	What We Learned
Document the setup process	We expect to understand the process better			Many steps are done manually even if they can be automated	Many of the steps can be automated with small changes to the current setup process
Automating large parts of the test setup					

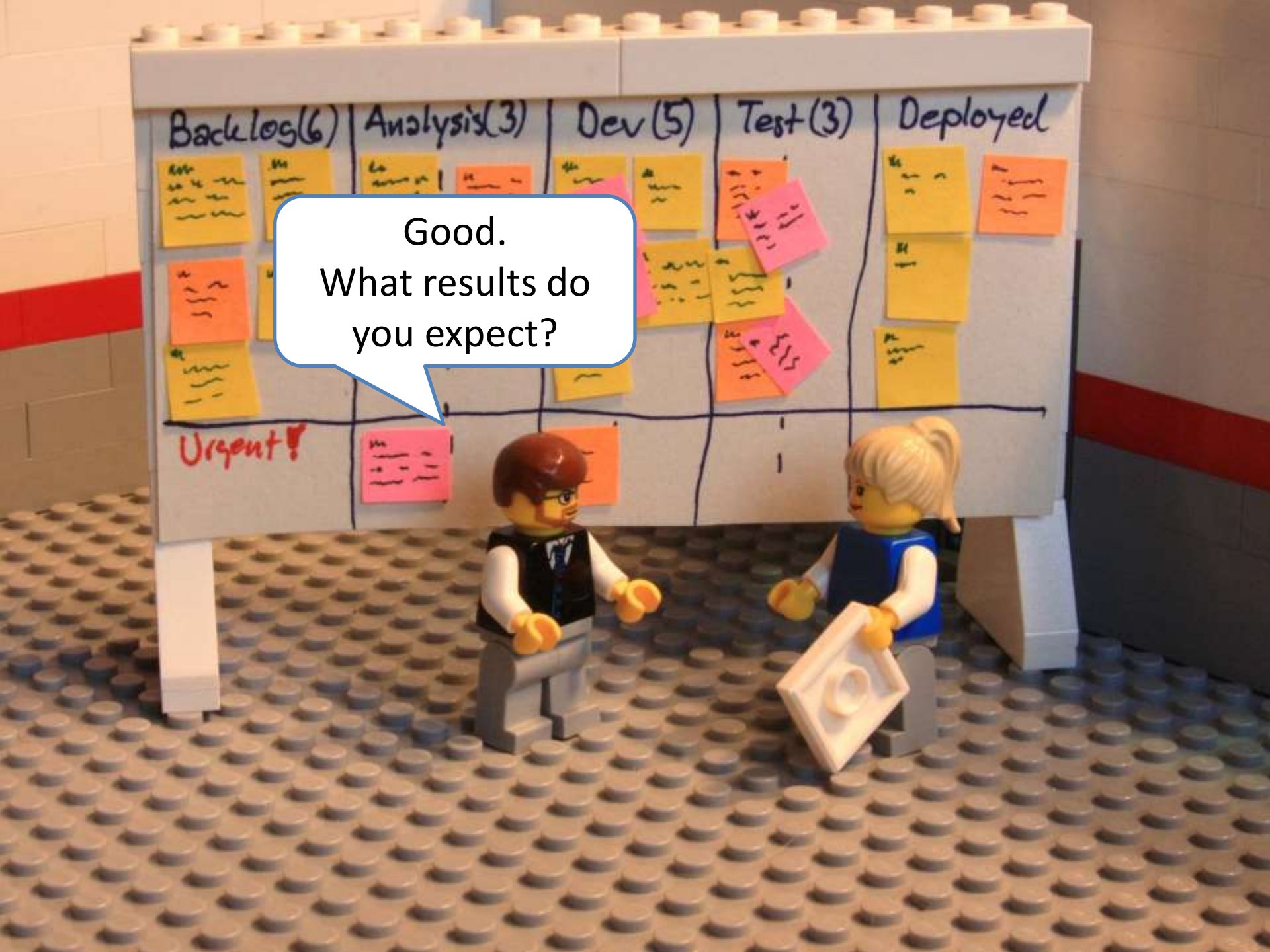
PDCA CYCLES RECORD *(Each row = one experiment)*

Date: 5th Dec

Process: Frontend

Process Metric Lead time

Step	What do you expect?	Coaching Cycle	EXPERIMENT	Result Observe closely	What We Learned
Document the setup process	We expect to understand the process better			Many steps are done manually even if they can be automated	Many of the steps can be automated with small changes to the current setup process
~~Automating large parts of the test setup~~					
Automating setup of test database					


Backlog(6)
Analysis(3)
Dev (5)
Test (3)
Deployed
Urgent!
Good.
What results do you expect?

PDCA CYCLES RECORD *(Each row = one experiment)*

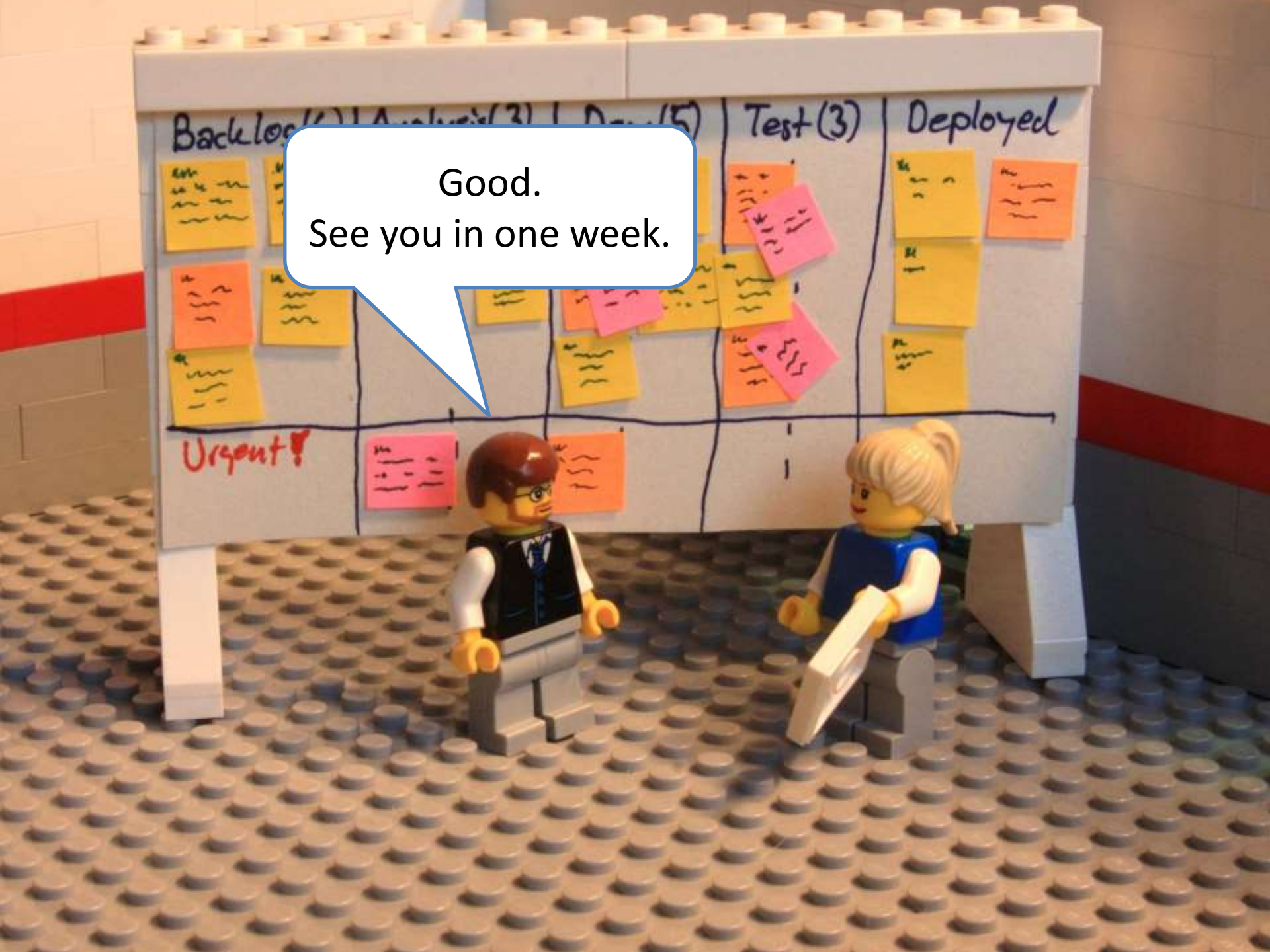
Date: 5th Dec

Process: Frontend

Process Metric Lead time

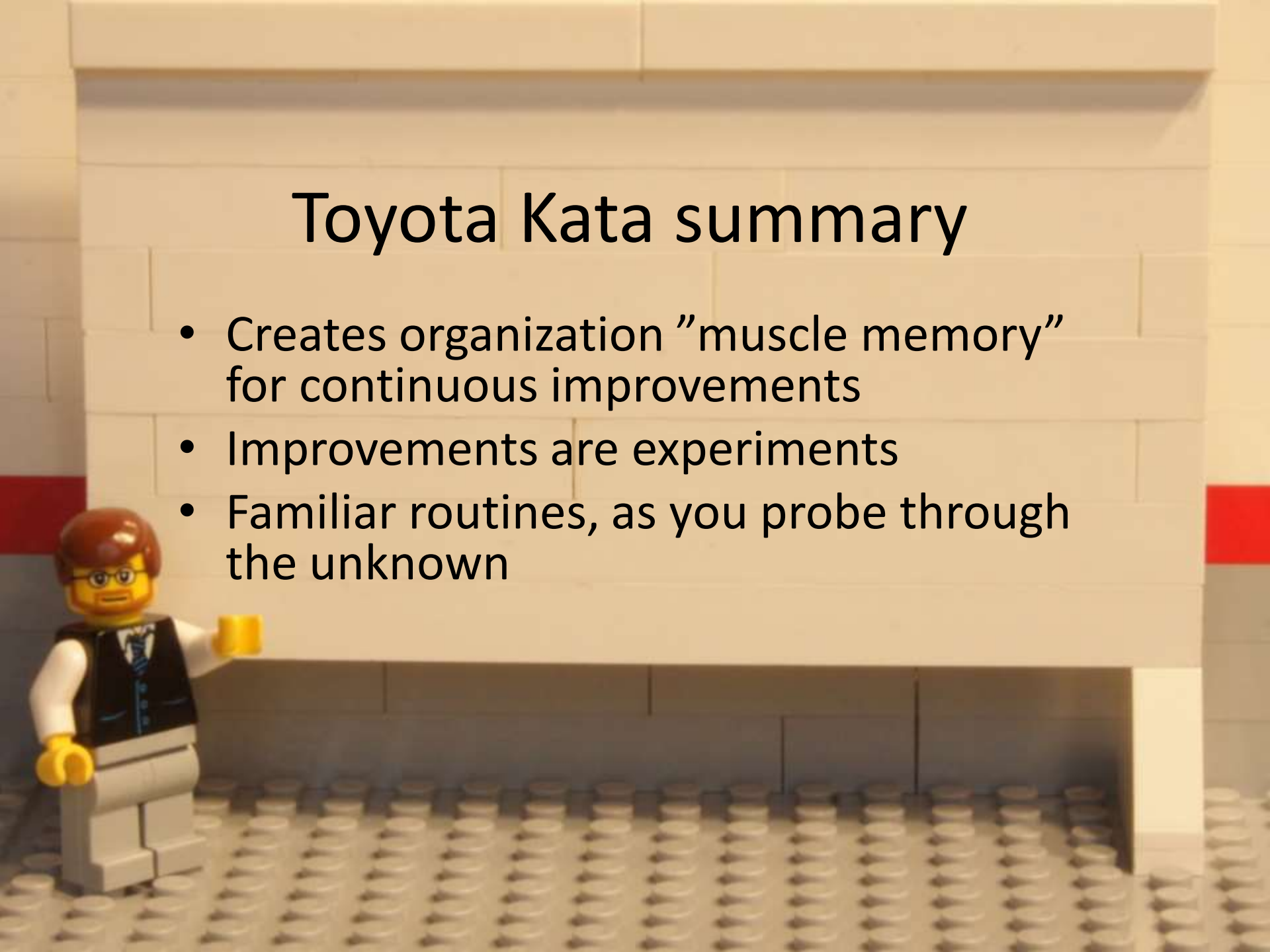
Step	What do you expect?	Coaching Cycle	EXPERIMENT	Result Observe closely	What We Learned
Document the setup process	We expect to understand the process better			Many steps are done manually even if they can be automated	Many of the steps can be automated with small changes to the current setup process
~~Automating large parts of the test setup~~					
Automating setup of test database	We expect to half the setup time for the test database				

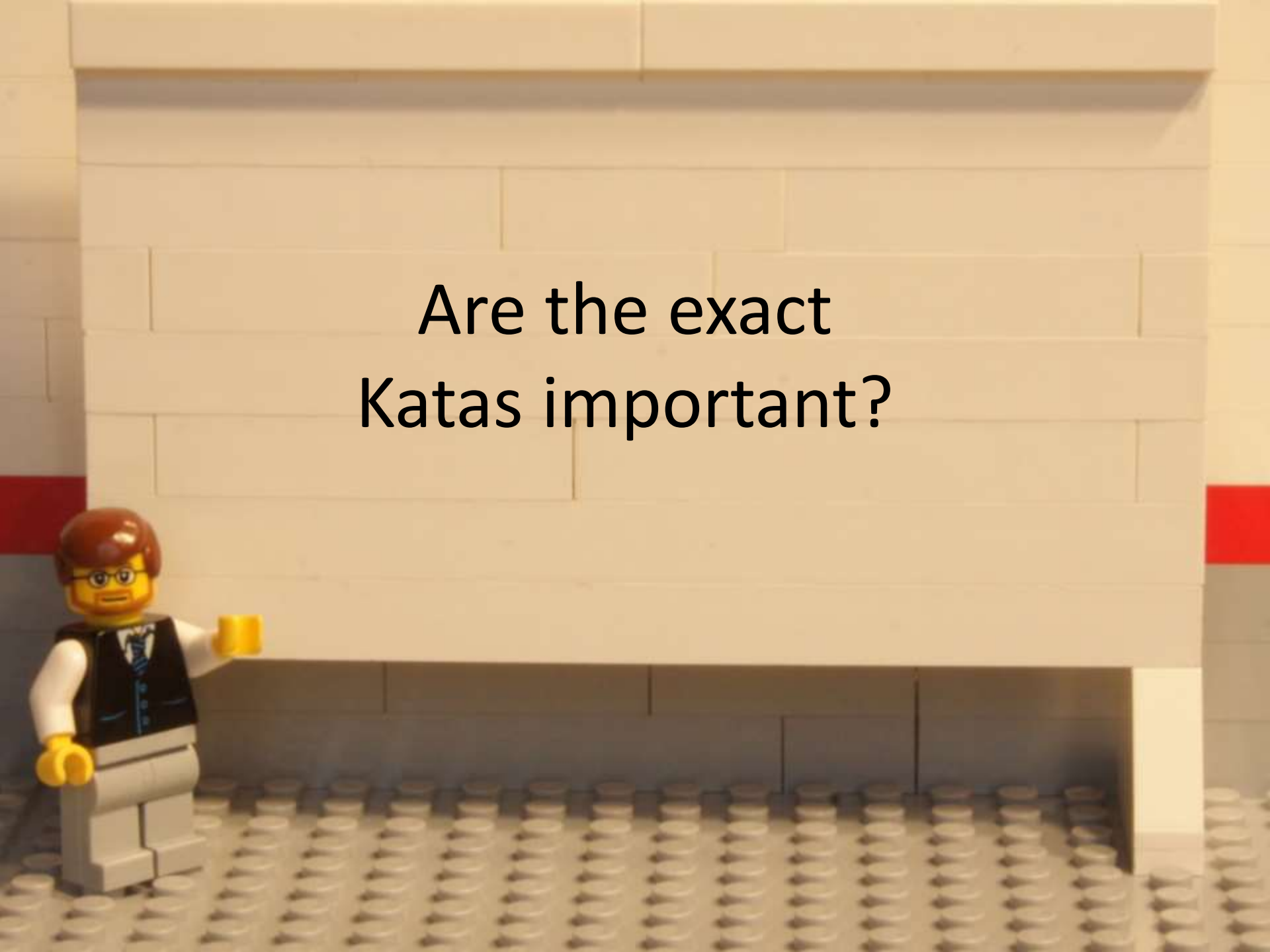

Backlog(6)
Analysis(3)
Dev (5)
Test (3)
Deployed
Urgent!
When can we go and see what we have learned from taking that step?
In one week.


Test (3)
Deployed
Urgent!
Good.
See you in one week.

Toyota Kata summary

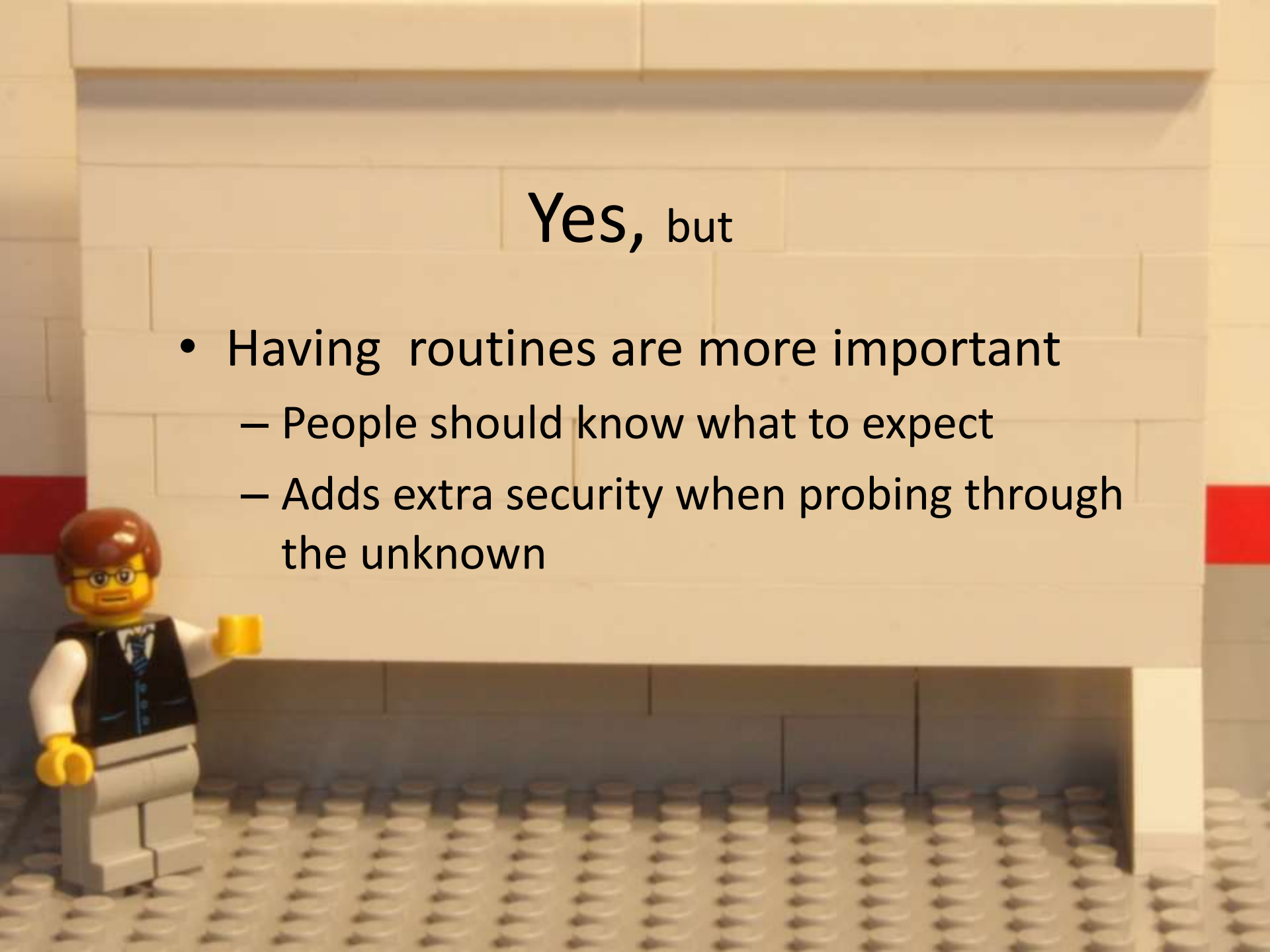
- Creates organization ”muscle memory” for continuous improvements
- Improvements are experiments
- Familiar routines, as you probe through the unknown




Are the exact
Katas important?

Yes, but

- Having routines are more important
  - People should know what to expect
  - Adds extra security when probing through the unknown




Toyota Kata may work for building cars,
but we develop software!

- Toyota Kata can, and have been applied in other domains with great success
- Toyota Kata has been successfully applied in product and software development


Kanban Kata
Rocks !!
Backlog(6)
Analysis(3)
Urgent!

Your treasure map to Toyota Kata!

http://hakanforss.wordpress.com/tag/toyota-kata/

http://www-personal.umich.edu/~mrother/Homepage.html

http://www.lean.org/kata/

http://www.slideshare.net/mike734

http://www.slideshare.net/BillCW3/

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