



"LCI would like to acknowledge and thank Felipe Engineer-Manriquez of McCarthy Building Companies and Stephanie Roldan of Rosendin Electric for their leadership, work and collaboration to create this workshop. Learning opportunities like this exist because people like Felipe and Stephanie engage to create them."

> -Kristin Hill, LCI, Director Education Programs





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Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.

# Arjon Arjon

# Course Description

Are you ready to make your work exponentially easier and valuable to your organization? Scrum harnesses the power of individuals working together as a team. Double your productivity using this framework with less effort. This tactical course is geared for individuals and teams with Lean practitioner experience. Workshop resources will be provided to guide scaling up to fully functional Scrum teams.

# Learning Objectives











01.

Gain an overview understanding of the Scrum framework and terminology.

02.

Understand the relationship between Scrum and Lean.

03.

Experience hands-on application of Scrum

04.

Use the Scrum framework individually and/or with your teammates.

# WARNING

Using Lean principles and Agile methods result in increased capacity.

More time to improve, optimize, and coach others will be <u>YOUR</u> problem.

#### ean Construction Institute mmersive Education Program

# Rules of Engagement



This is a safe zone



Everyone has equal status



Speak up and share your ideas



Actively listen to others



One conversation at a time



Use E.L.M.O.



Silence phones



Be focused and engaged



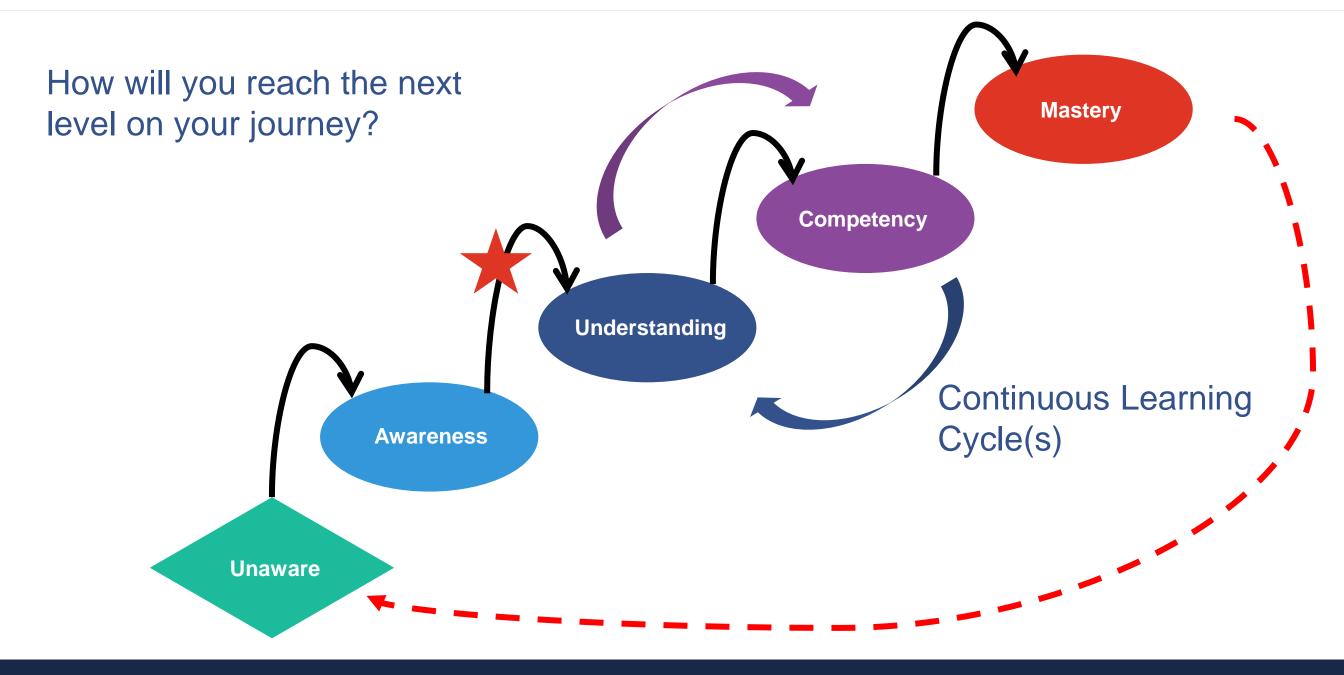
Stay on time



Have fun!

# Lean Journey to Mastery





# What could stop you from trying Scrum?

Small choices become actions, actions become habits, and habits become our way of life.

# ...Saying Hello



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# Session Agenda



12

00:02 – Introductions (Who's Who)

00:05 - Lean Introductions

00:45 - Scrum Board Game

00:08 - Mini Q&A / Break

00:50 – Scrum, LPS, and Vacation Sprint

00:10 - Final Q&A | Plus / Delta



### Introductions via Chat

Everyone ~

Type message here...

Claire, McCarthy, 4+ years Felipe, McCarthy, 20+ years



My name is...



Firm name...



### Six Tenets of Lean



- 1 Respect for people
- 2 Generate Value
- Focus on Flow
- 4 Eliminate Waste
- 5 Continuous Improvement
- 6 Optimize the Whole



# Does waste impact my work?



What are the different types of waste in LEAN? https://youtu.be/NJN-lsk\_DLU

**Non-Value Adding Activities** 

## DOWNTIME

#### **Defect**

Effort involved in inspecting for and fixing defects such as data entry errors

#### **DOWNTIME**

#### **Overproduction**

Unnecessary efforts
producing work in excess
or ahead of customer
requirements like
processing items before
they're required for the next
process

#### **DOWNTIME**

#### Waiting

Waste through delays or stoppages such as waiting for instructions, waiting for the next production step, or simply running slow computers

#### **DOWNTIME**

#### **Non-Utilized Talent**

Aspects such as ignoring improvement ideas from people on the floor or restricting employees' responsibilities to make routine decisions

#### DOWNTIME

#### **Travel/Transportation**

Unnecessary movement of work, for example sequential process steps are not co-located or files are being transported from one location to the other

#### **DOWNTIME**

#### Inventory

Holding information and material longer than required such as piles of unprocessed work, unread emails or overstocked marketing materials

#### **DOWNTIME**

#### Motion

Non-value-added movements of people such as unnecessary meetings or walking to the copier and printer

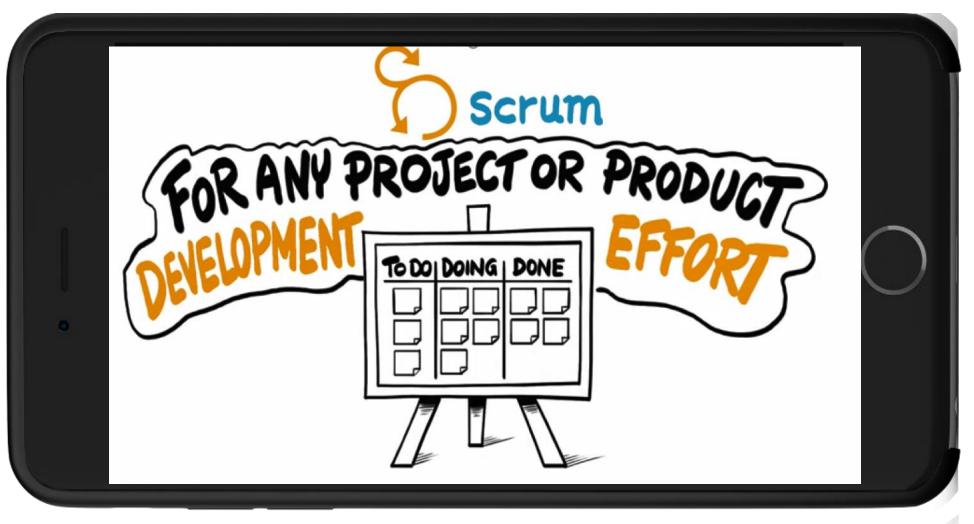
#### **DOWNTIME**

#### **Excess Processing**

Unnecessary activity due to complex processes and systems such as too many approvals or an application form where the same data is needed in different places

# Lean Construction Institute Immersive Education Program

### What is Scrum?



What is Scrum

https://youtu.be/TRcReyRYIMg



#### The Scrum Guide™

The Definitive Guide to Scrum: The Rules of the Game

#### November 2017

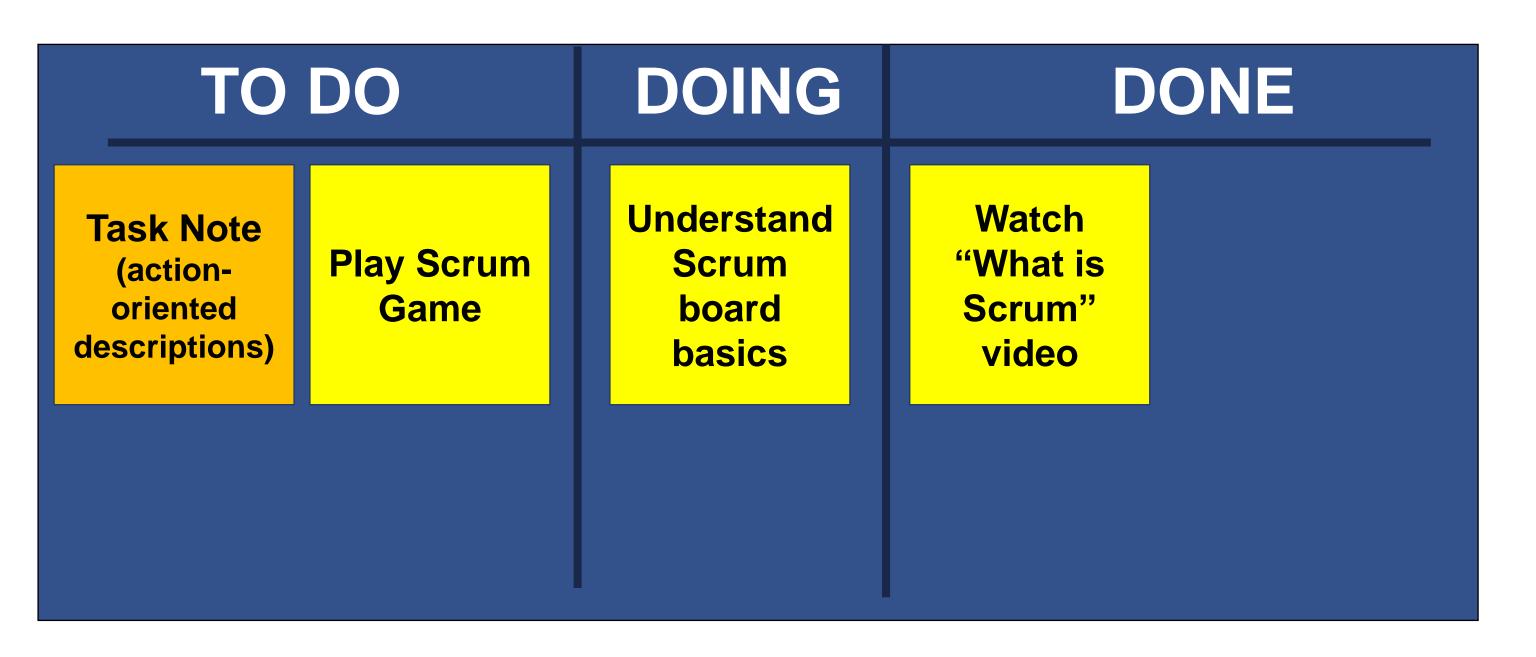


Developed and sustained by Scrum creators: Ken Schwaber and Jeff Sutherland

#### 19 Pages

- 1. Guide Purpose, Definitions
- 2. Uses of Scrum and Scrum Theory
- 3. Scrum Values
- 4. The Scrum Team
- 5. Scrum Events
- 6. Scrum Artifacts
- 7. Artifact Transparency
- 8. End Notes

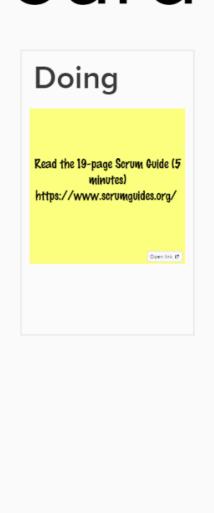
# Fundamental Scrum Board (Game Prelude)

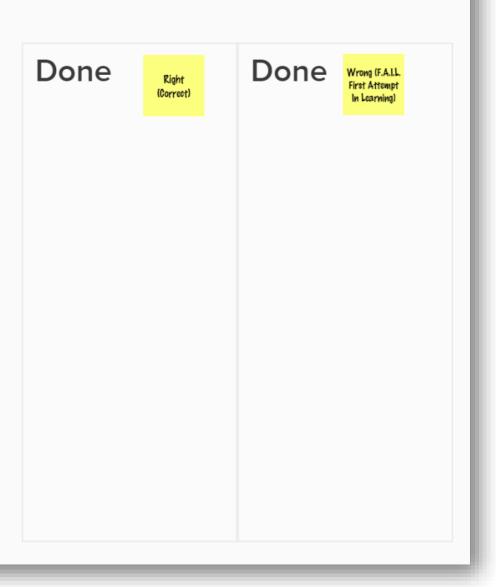


# Scrum Board Game (Mural Board onboarding)

Let's play in this board







Sprint Goal 10 points "Done Right"



Let's move as ONE



**Adidas - Black : Commercial** 

https://youtu.be/0C434QFTjok

Sprint Goal 10 points "Done Right"



Let's move as ONE



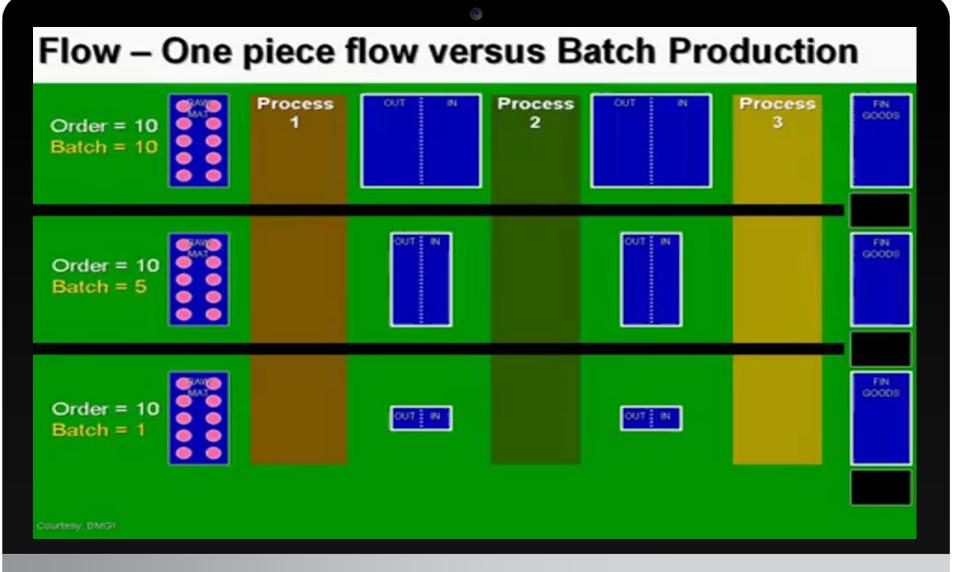
fast and furious 8 Dwayne Johnson entry | Haka dance by the rock | <a href="https://youtu.be/2BPvFnyWAG0">https://youtu.be/2BPvFnyWAG0</a>

TO DO		DOING	DC	NE	
	6		What page is	RIGHT	WRONG
			What page is the definition of Scrum found on?		
	7	2			
	8	3			
	9	4			
	10	5	1		

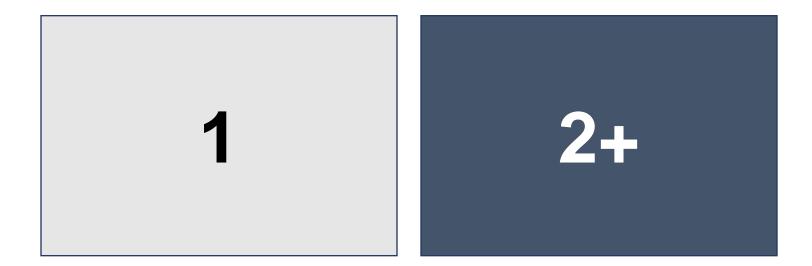
TO DO		DOING	DC	NE
6			RIGHT	WRONG
7	2		1	
8	3			
9	4			
10	5			

TO DO		DOING	DC	NE	
	6		2	RIGHT WRONG  1	WRONG
	7				
	<b>/</b>				
	8	3			
	9	4			
	10	5			

Batch size matters...,
What about Multi-tasking?



ONE PIECE FLOW versus BATCH PRODUCTION - Lean Manufacturing <a href="https://youtu.be/JoLHKSE8sfU">https://youtu.be/JoLHKSE8sfU</a>



In Scrum, how many tasks can be in the "Doing" Column?



TO DO		DOING	DC	NE
6		2	RIGHT	WRONG
7			1	
8	3			
9	4			
10	5			

TO DO		DOING	DC	NE
6		3	RIGHT	WRONG
7			1	
			2	
8				
9	4			
10	5			

Tasks that take longer than a week to complete

Tasks I can't complete this sprint

# What tasks are on my Backlog?

Value-added tasks
What's a backlog?

3c

3d

TO DO		DOING	DC	NE
6		3	RIGHT	WRONG
7			1	
8			2	
9	4			
10	5			

TO DO		DOING	DONE		
	6		1	RIGHT	WRONG
	7		4	1	
	<i>'</i>			2	
	8				
	9			3	
	10	5			



Is Scrum effective for individual use (not teams)?

lt Depends

TO DO		DOING	DONE		
	6		1	RIGHT	WRONG
	7		4	1	
	<i>'</i>			2	
	8				
	9			3	
	10	5			

TO DO	DOING	DONE	
6	5	RIGHT	WRONG
7	5	1	
		2	
8		3	
9			
10		4	

5a

Any Assigned
Work by Your

All It

All Items From My Email

# What kind of tasks belong on my board?

5d

Any Work Task That Takes More Than 15 Minutes

5c

Boss

Everything
Known To Be
Needed For This
Work Increment

TO DO	DOING	DONE	
6	5	RIGHT	WRONG
7	5	1	
		2	
8		3	
9			
10		4	

TO DO	DOING	DONE	
	6	RIGHT	WRONG
7		1	
8		2	
9		3	
10		4	
		5	



Can I create more columns on my Scrum board?



TO DO	DOING	DONE	
	6	RIGHT	WRONG
7		1	
8		2	
9		3	
10		4	
		5	

TO DO	DOING	DONE	
	7	RIGHT	WRONG
		1	
8		2	
		3	
9		4	
10		5	

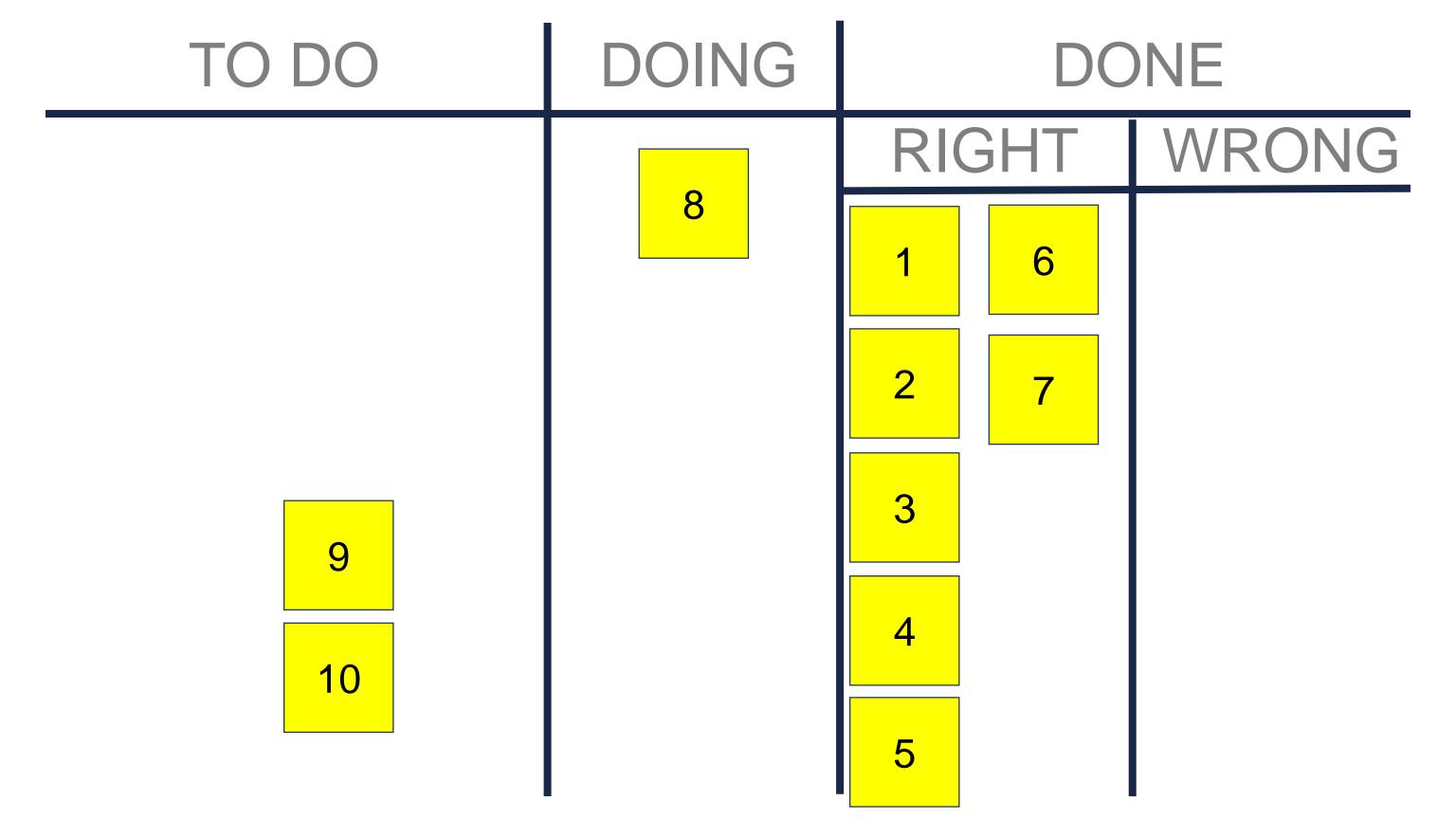


### Who moves the cards on the board?

**Product Owner** 

**Scrum Master** 

TO DO	DOING	DONE	
	7	RIGHT	WRONG
		1	
8		2	
		3	
9		4	
10		5	



Between 1 and 2 Weeks

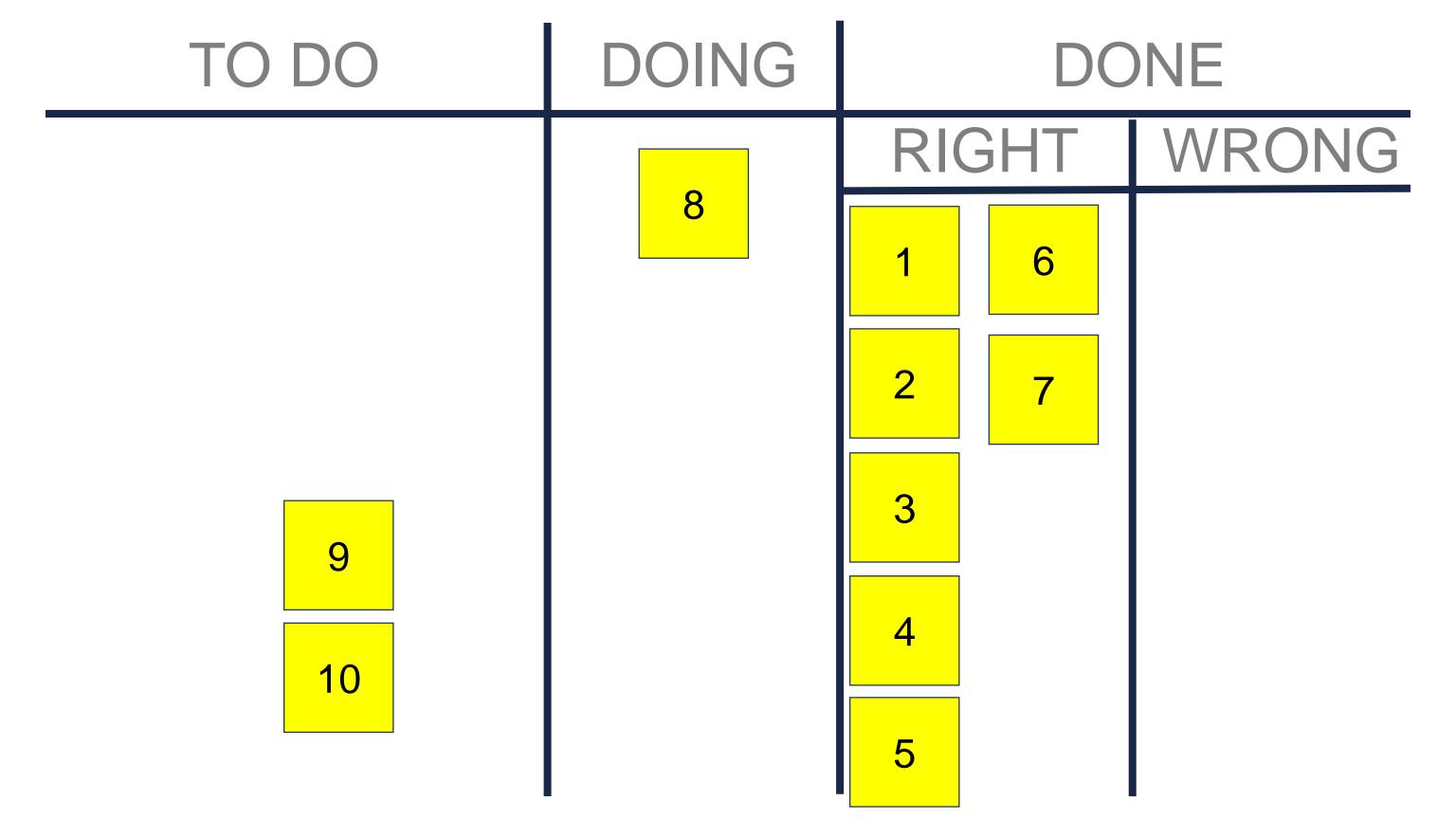
1 Month

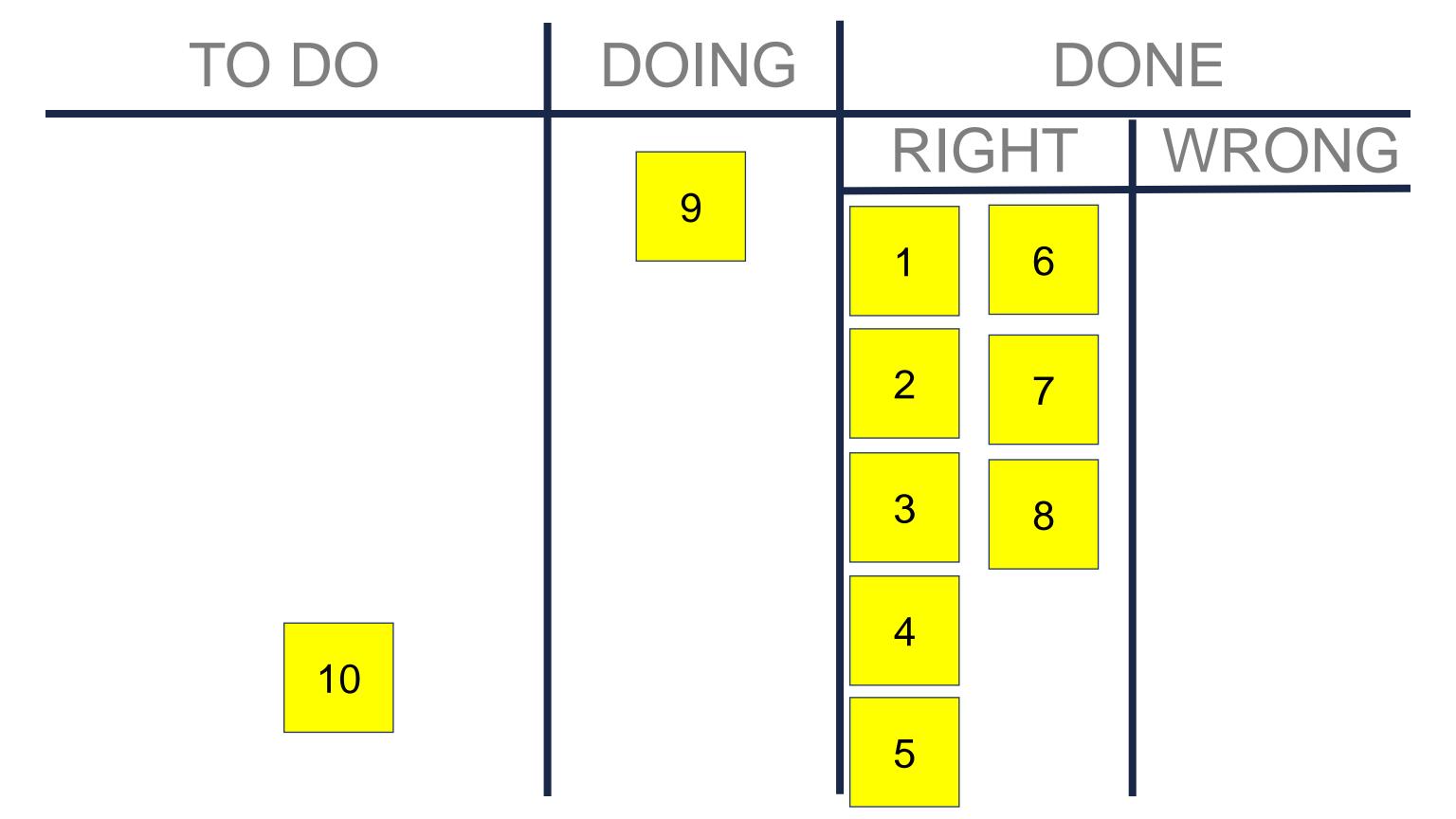
# What is the typical length of a Sprint?

1 Day



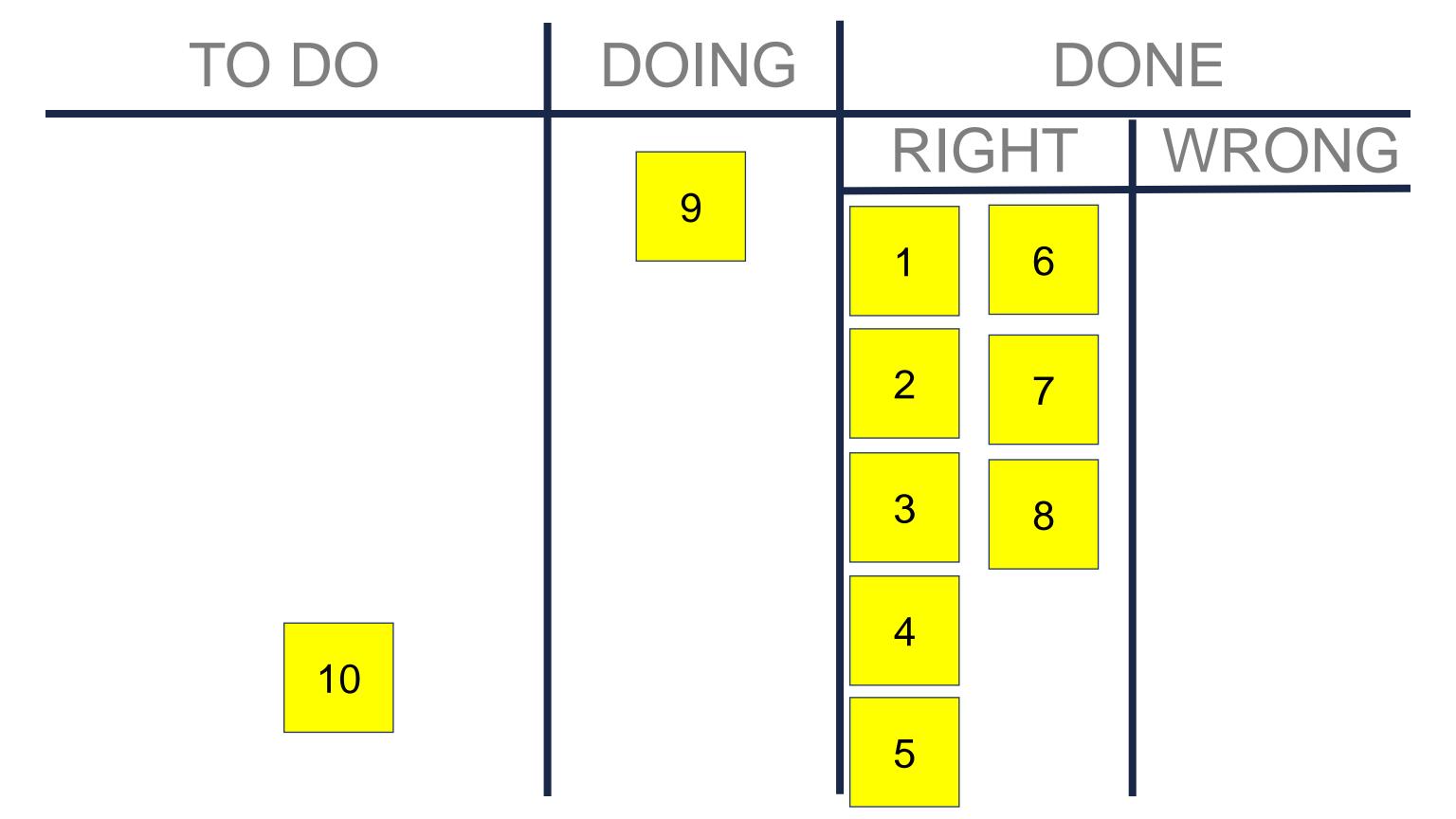


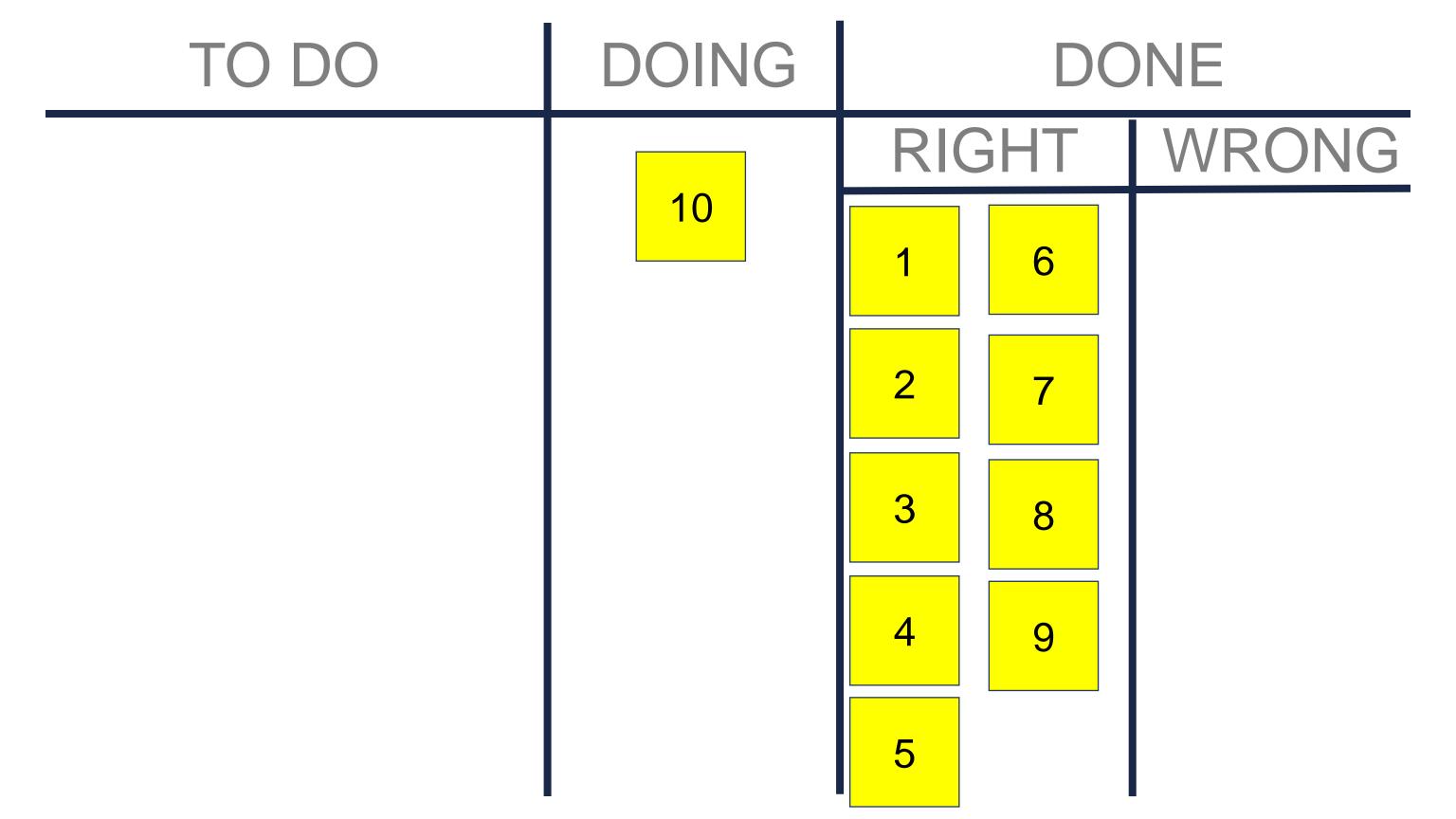






Finishing 100% of my tasks every week is the goal of Scrum.





The Team
Defines It

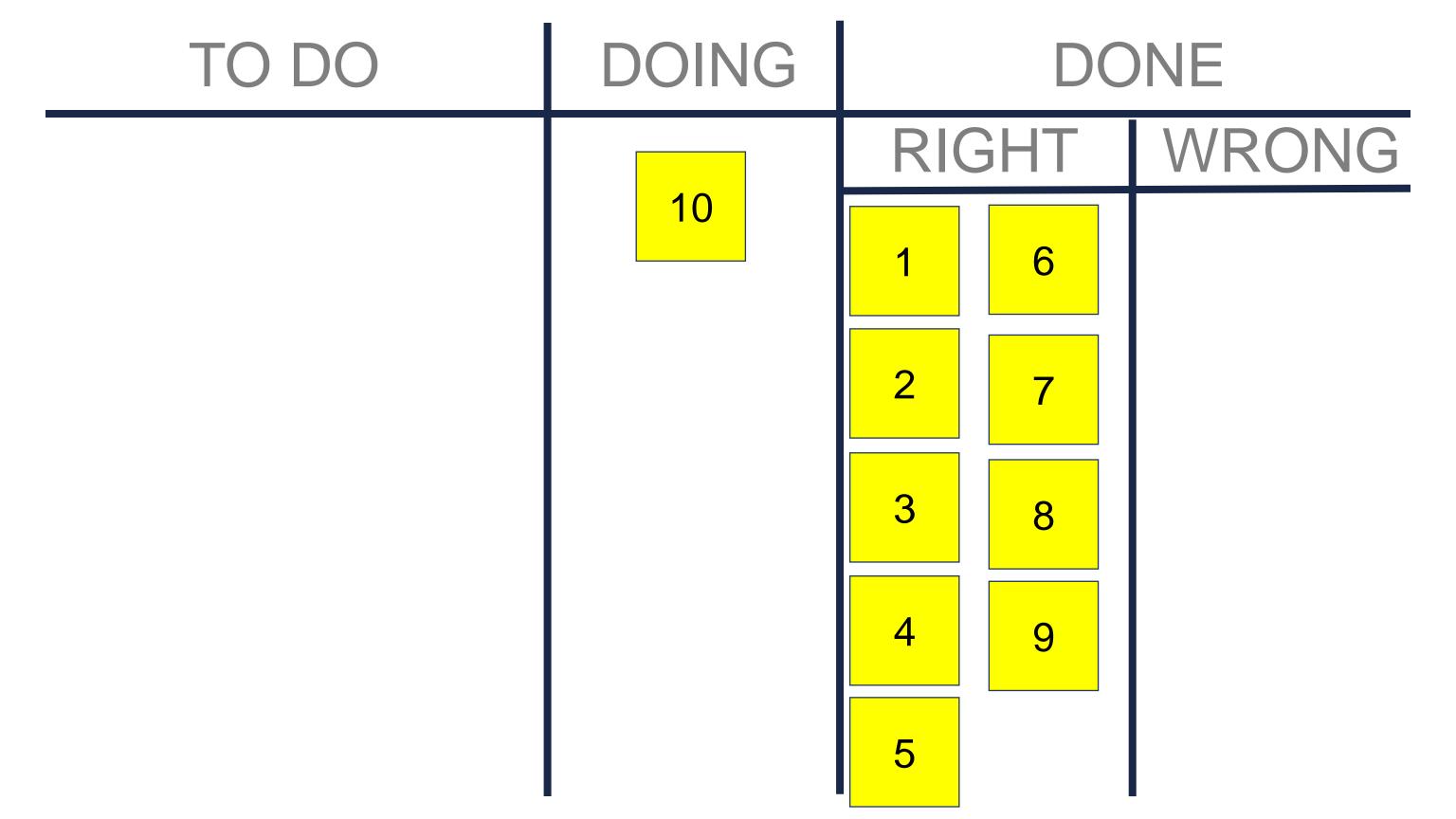
When the Task
is Completed
w/out Follow-Up

#### What does "Done" mean?

When I Tried My
Best on the
Task

The Scrum
Master Defines
It

10c



TO DO	DOING	DONE		
		RIC	GHT	WRONG
		1	6	
		2	7	
		3	8	
		4	9	
		5	10	

### Mini Q&A / Break







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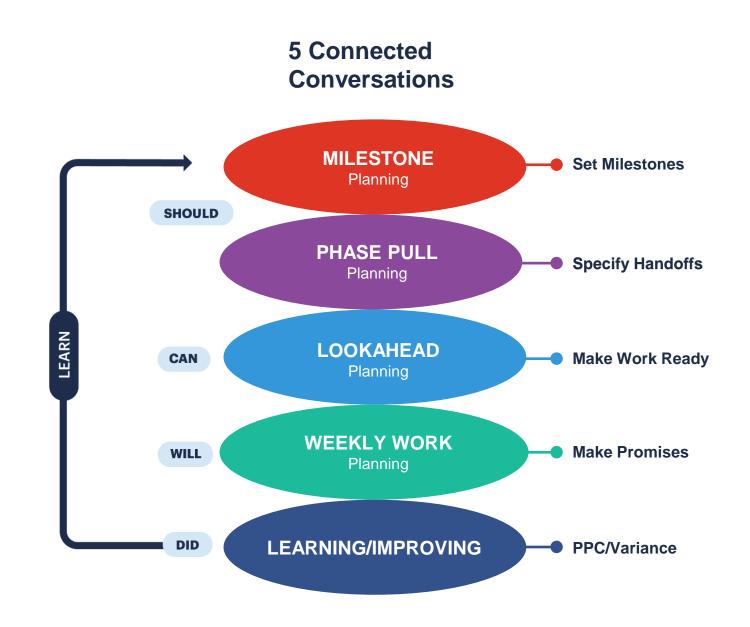
### 5 Connected Conversations Of LPS®



The LPS is a commitment-based system integrating 5 connected planning conversations at 5 levels:

- 1. Milestone Planning (Should)
- 2. Phase Pull Planning (Should)
- 3. Lookahead Planning (Can)
- 4. Weekly Work Planning (Will)
- 5. Learning & Improving (Did/Learn)

The Last Planner System® (LPS®) is a registered trademark of the Lean Construction Institute.

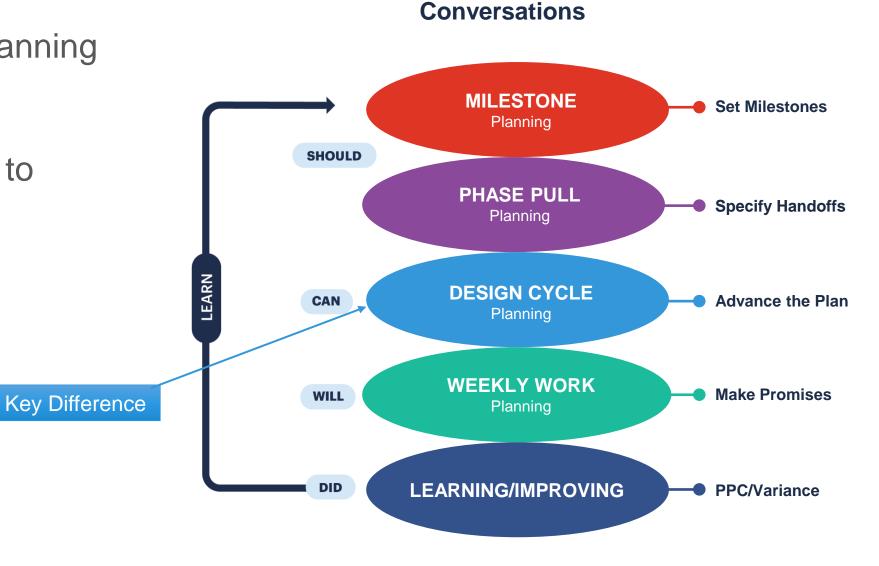


# LPS® Modified For Design



In modifying LPS for design, the 5 planning conversations remain the same.

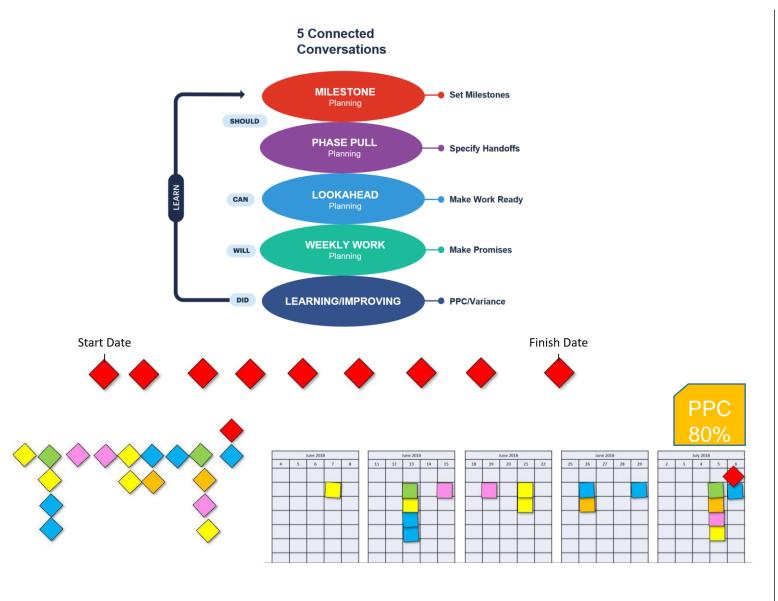
The Lookahead Planning level shifts to Design Cycle Planning.

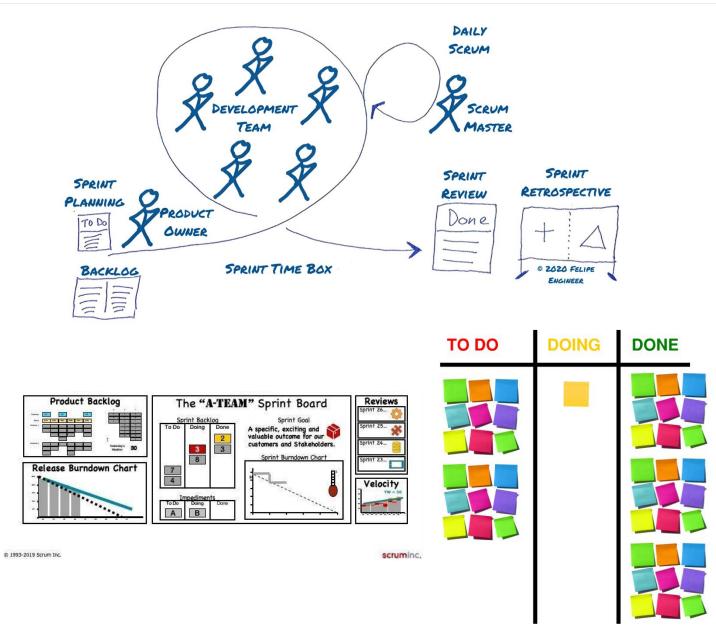


**5** Connected

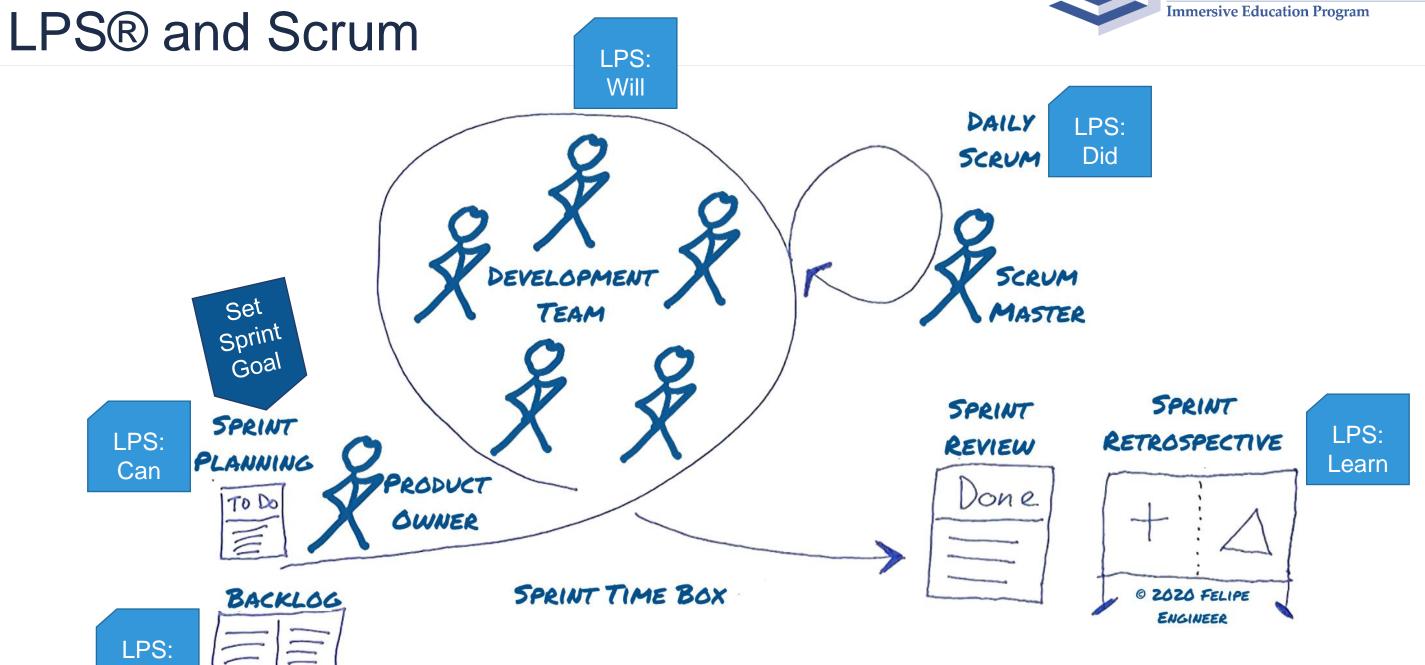
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### LPS® and Scrum







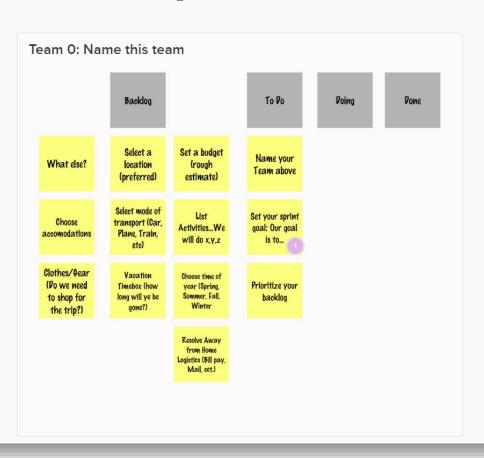


Should

# Vacation Sprint Planning (10 teams Mural Work)

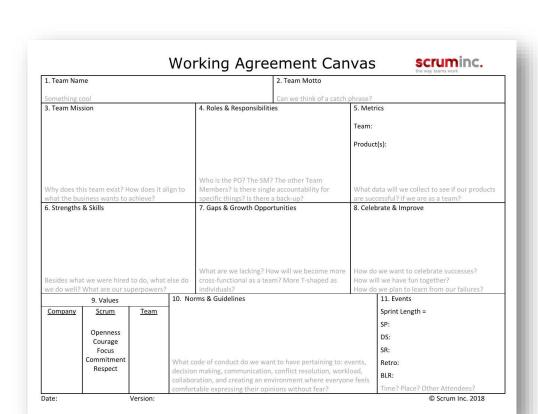
Teamwork Time

# Vacation Sprint Planning Example Board

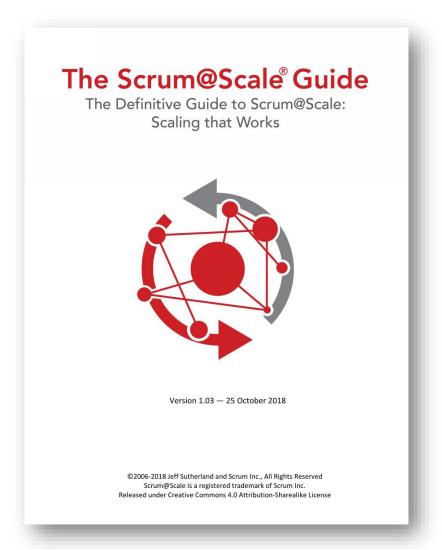


### Additional How-to References

# The Scrum Guide™ The Definitive Guide to Scrum: The Rules of the Game November 2017 Developed and sustained by Scrum creators: Ken Schwaber and Jeff Sutherland



Start here









### Lean Journey to Mastery





# Questions?



### eLearning Courses



#### Available now:

- Introduction to the Last Planner System®
- Introduction to Lean Project Delivery
- Lean in the Design Phase
- Effective Big Room
- Target Value Delivery







# Connect to keep Sprinting













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https://trello.com/b/ZGZYNYnW/about-felipeengineer-manriquez

### Plus/Delta



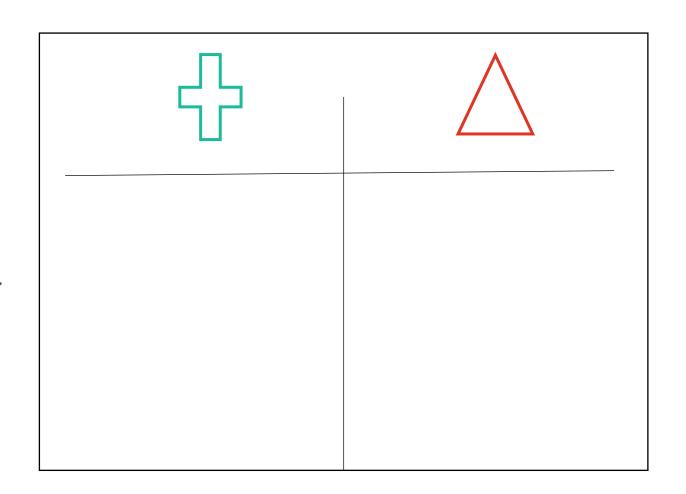
Conduct a Plus/Delta Capture via chat

**Plus:** What produced <u>value</u> during the session?

+ Felipe is a genuine Scrum Master!

**Delta:** What could we <u>change to improve</u> the process or outcome?

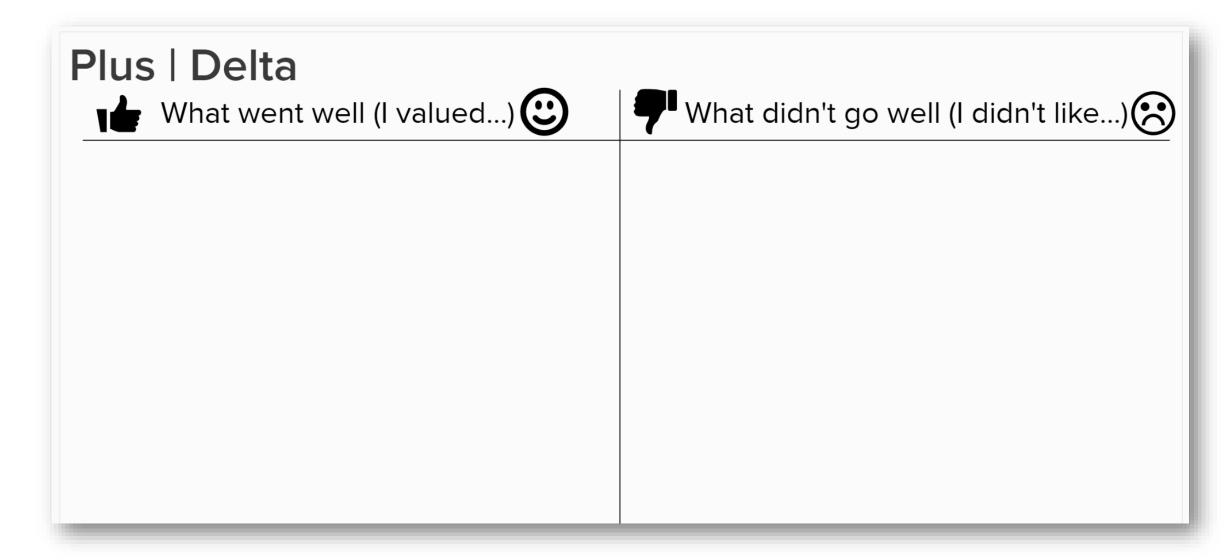
- Break was too long



### Plus/Delta



#### Capture via Mural







# This concludes The American Institute of Architects Continuing Education Systems Course

Lean Construction Institute



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