

# The Improvement Kata: Creating a Culture of Continuous Improvement

Maren Moss, Kyle Wood, Jeremiah Sugarman – JE Dunn Construction

THE ABC'S OF LEAN: TRANSFORMATION THROUGH ACTIONS, BEST PRACTICES AND COACHING

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## **Problem Statement**

# 3 things hinder a culture of continuous improvement:

- Not being deliberate and consistent with improvement conversations.
- Not connecting improvement ideas to action.
- Not learning from improvements made.

The **Improvement Kata** provides the structure to overcome these roadblocks.



# Objectives



The Improvement Kata – Theory



Case Study: Georgia Southern University

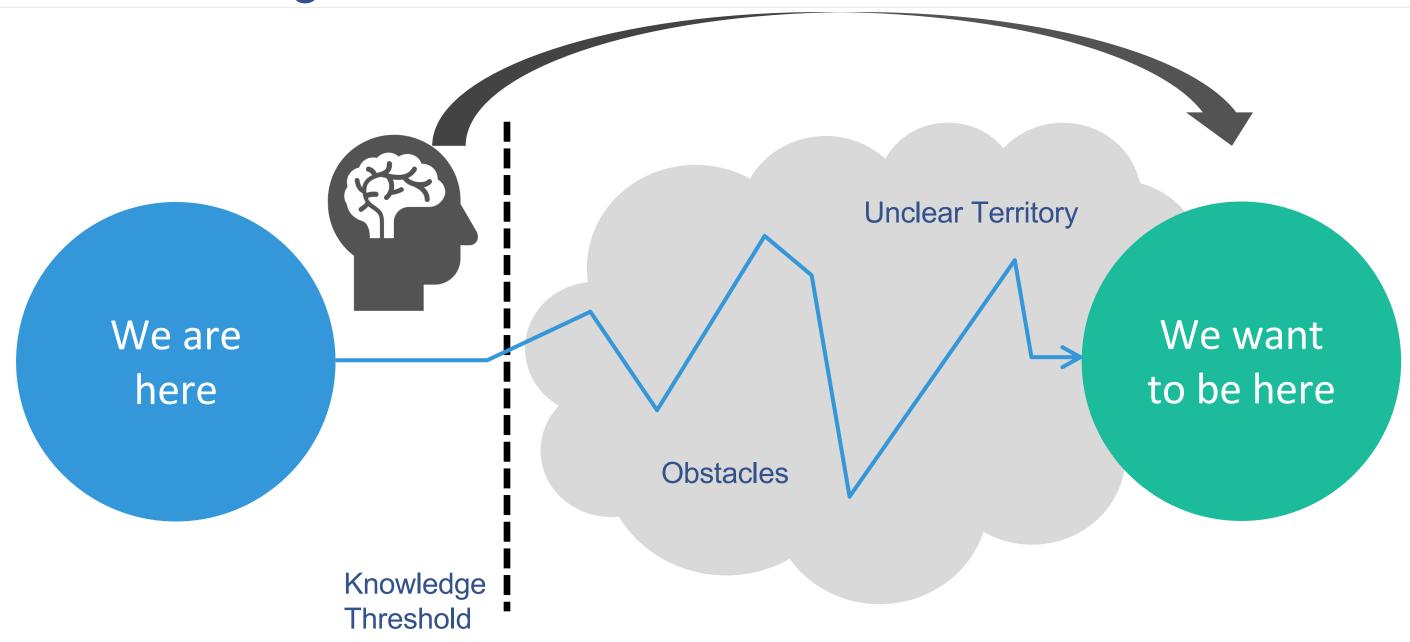


How to Implement

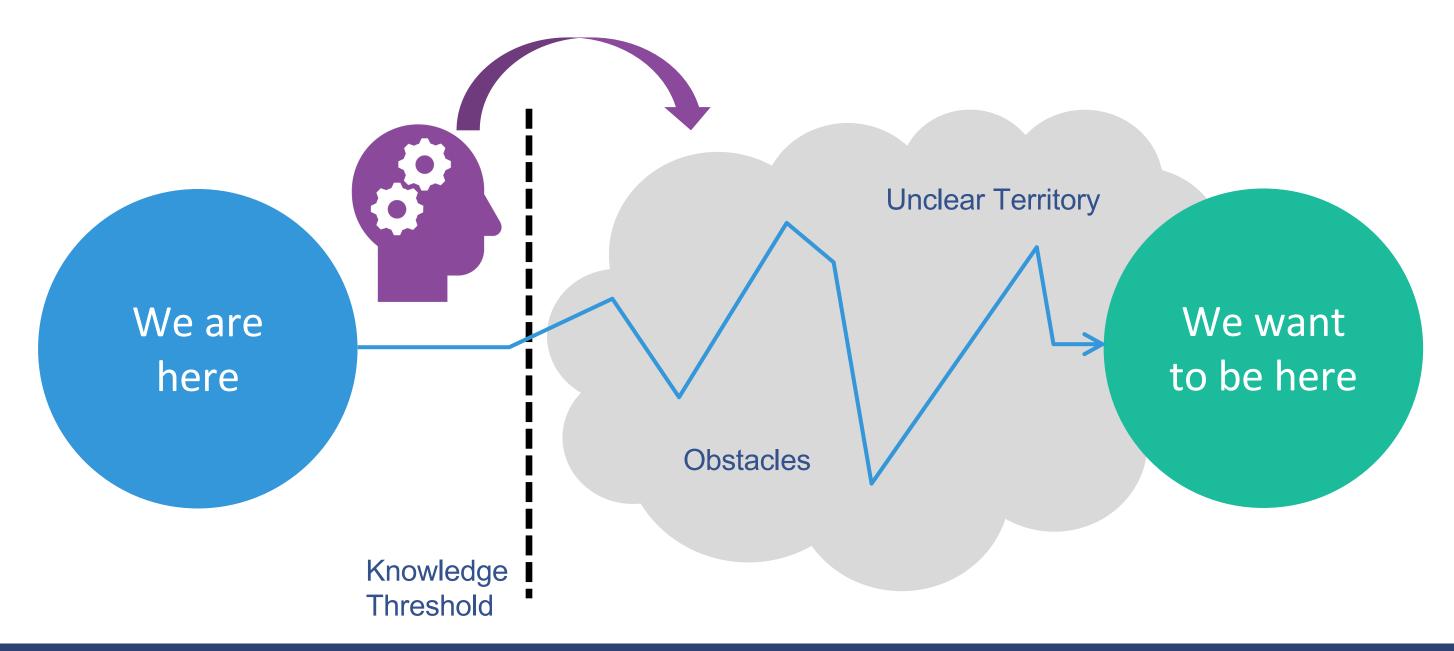
# Improvement Kata Theory



# The Knowledge Threshold

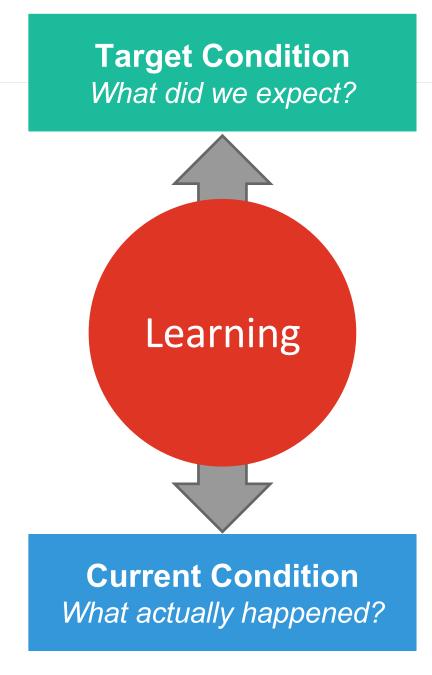


# The Knowledge Threshold



# Scientific Thinking

A "Problem" is the gap between the "Current Condition" and the "Standard or Target Condition"

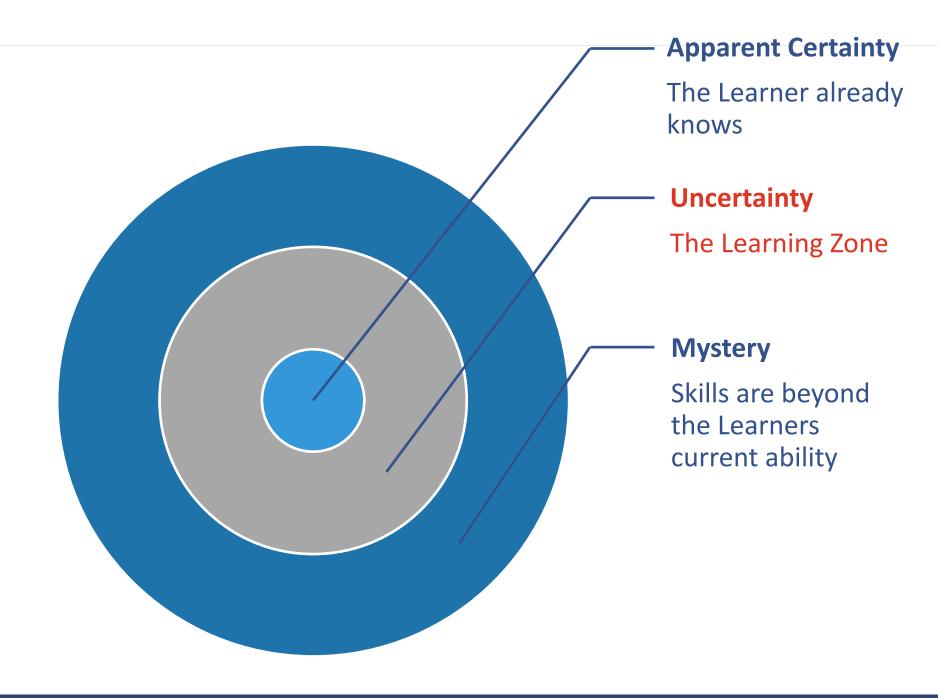


**Basic Pattern of Scientific Thinking** 

# Focus on Learning

### **Key Points:**

- The Learner needs to find their threshold.
- The Learner needs a coach.
  - We default to old habits.
  - We don't see what we're doing wrong.
- Learning needs to be deliberate and consistent.



# The Why

### **Key Points:**

- We have limited sight and need a method to navigate.
- To achieve this we use continuous improvement.
- We must have a culture (behavior) and way of thinking that supports it (mindset).



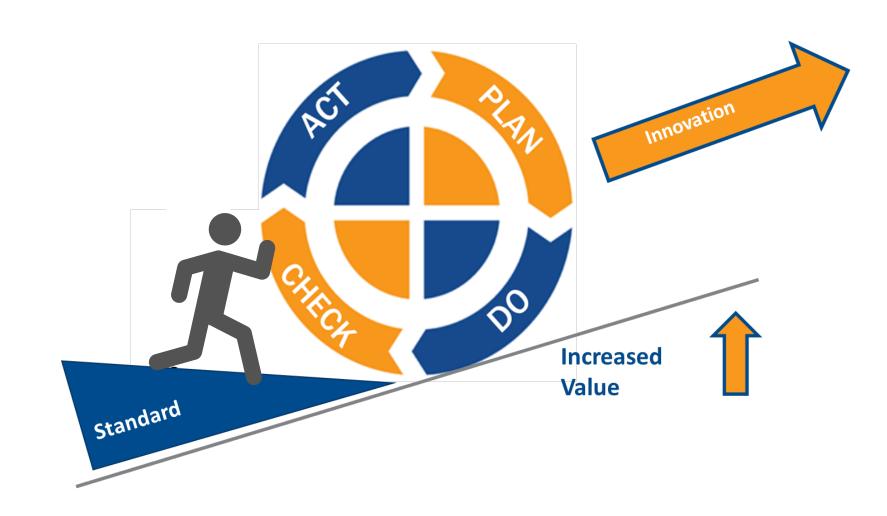
# The Toyota Kata

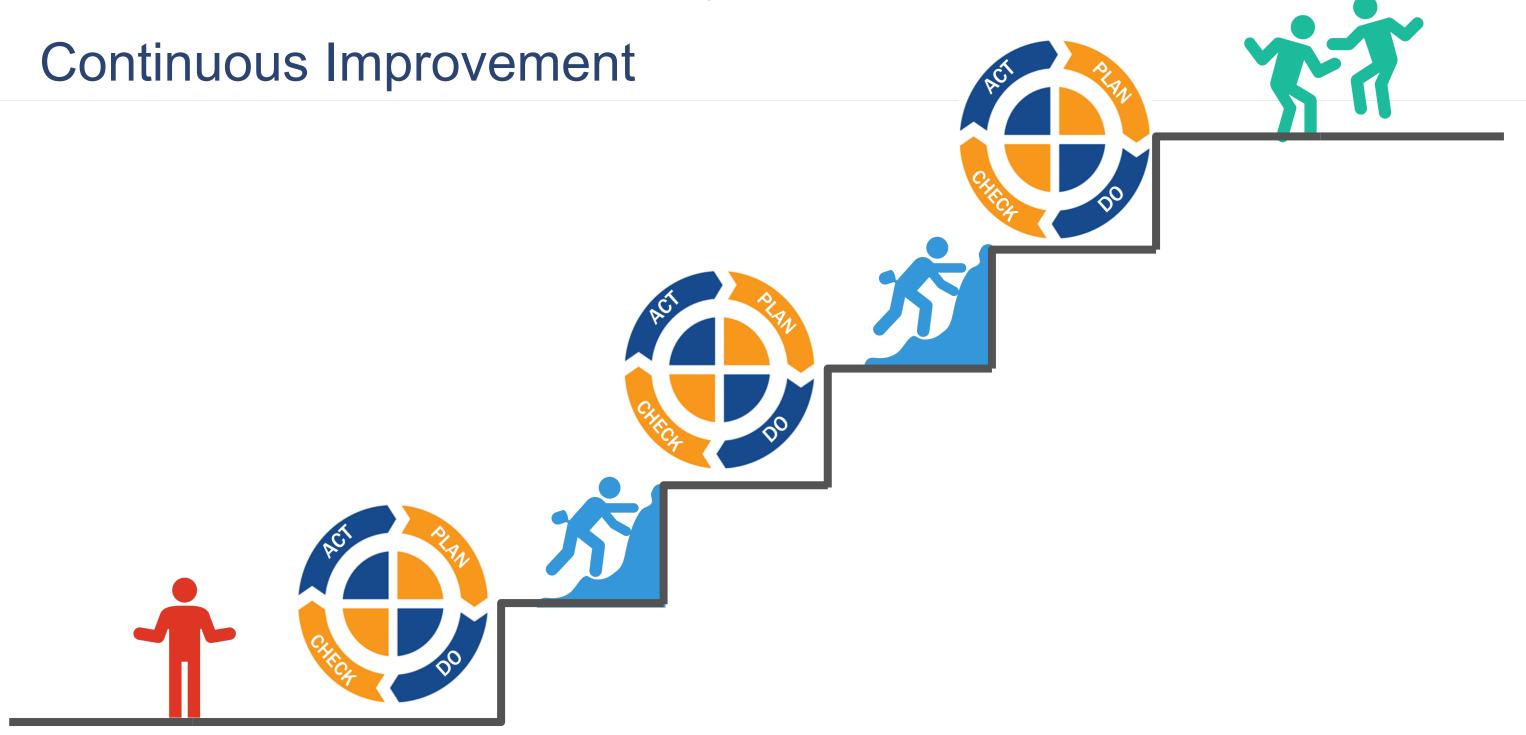
### **Key Points:**

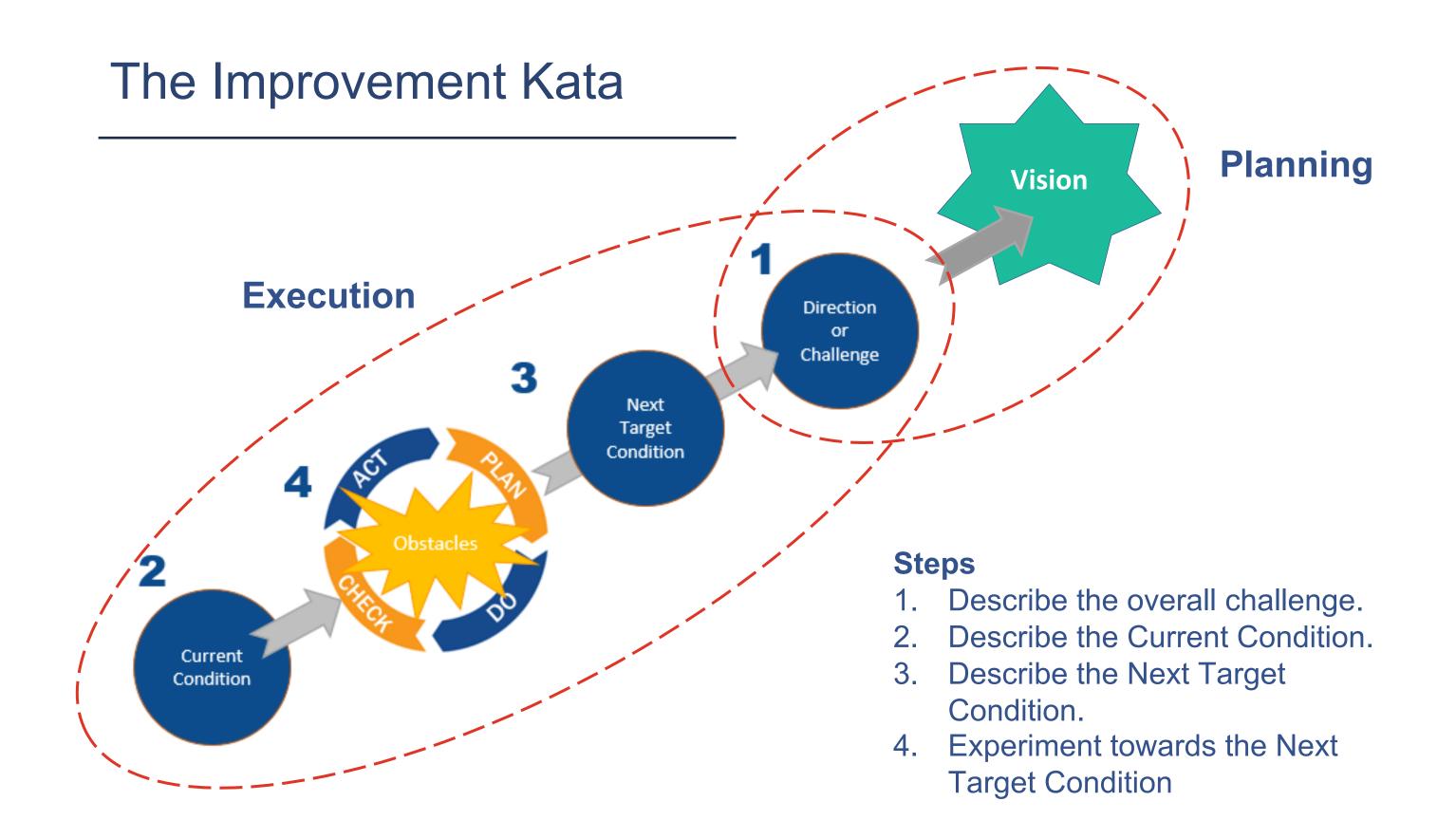
What routines and thinking are behind Toyota's success?

How can others imitate?

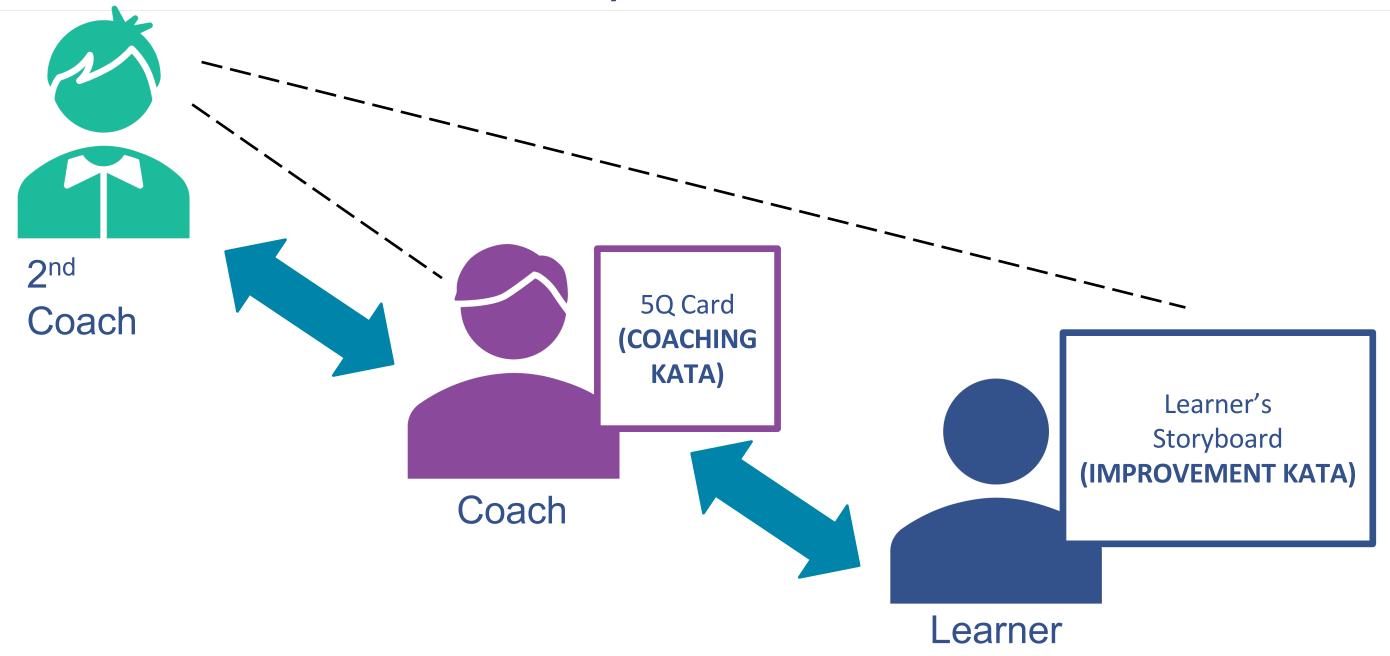
Key is = developing and practicing SCIENTIFIC THINKING in our culture and mindset







# Coach / Learner Relationship



# Georgia Southern University

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# Mindset: Learner vs. Performer



- Information driven
- Listens
- Asks questions
- Engaged
- Collaborative



- Results driven
- Speaks
- Gives answers / directions
- Disconnected
- Command and control

# **GSoU Improvement Kata**

• What challenge are we trying to improve?

**PLAN** 

What is the current condition?

What is the next target condition?

DO

What is the next PDCA experiment?

CHECK

When can we go and see what we have learned?

ACT

What did we learn from the last cycle?



### **GSoU Kata**

Challenge

Current Condition

**Next Target** Condition

**PDCA** Experiment

**Check Results** 





















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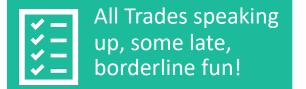
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Daily Stand Up participation





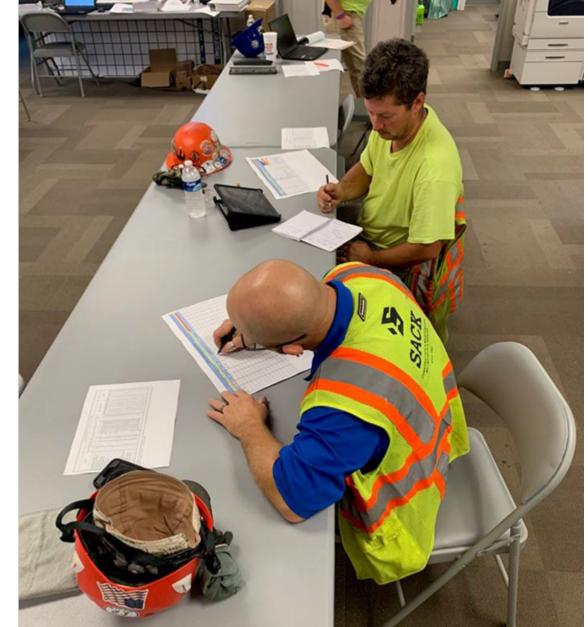




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# GSoU





# How to...



THEFTERETTE

# How you can apply this.







Practice Scientific Thinking



Track the Improvements

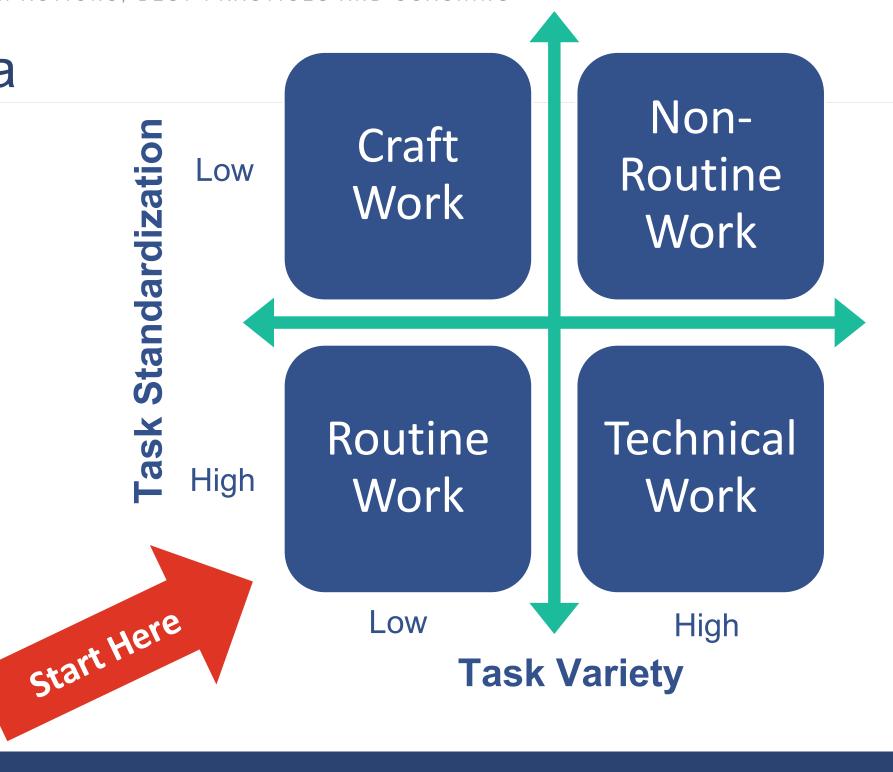


Become a
Coach <u>and</u>
Learner

# Selecting a Starter Kata

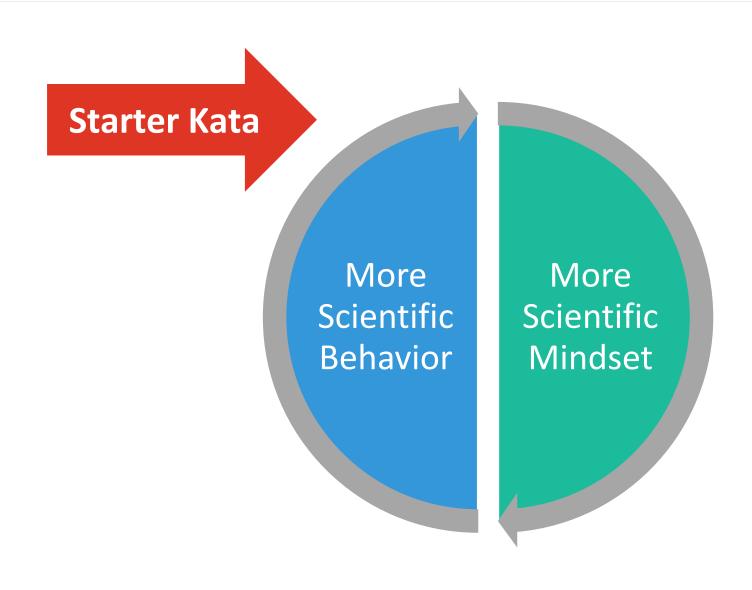
### **Key Points:**

- Start with routine work
- Look for opportunities with repetition and standardization
- The challenge should come from the Coach or 2<sup>nd</sup> Coach



# Practice Scientific Thinking



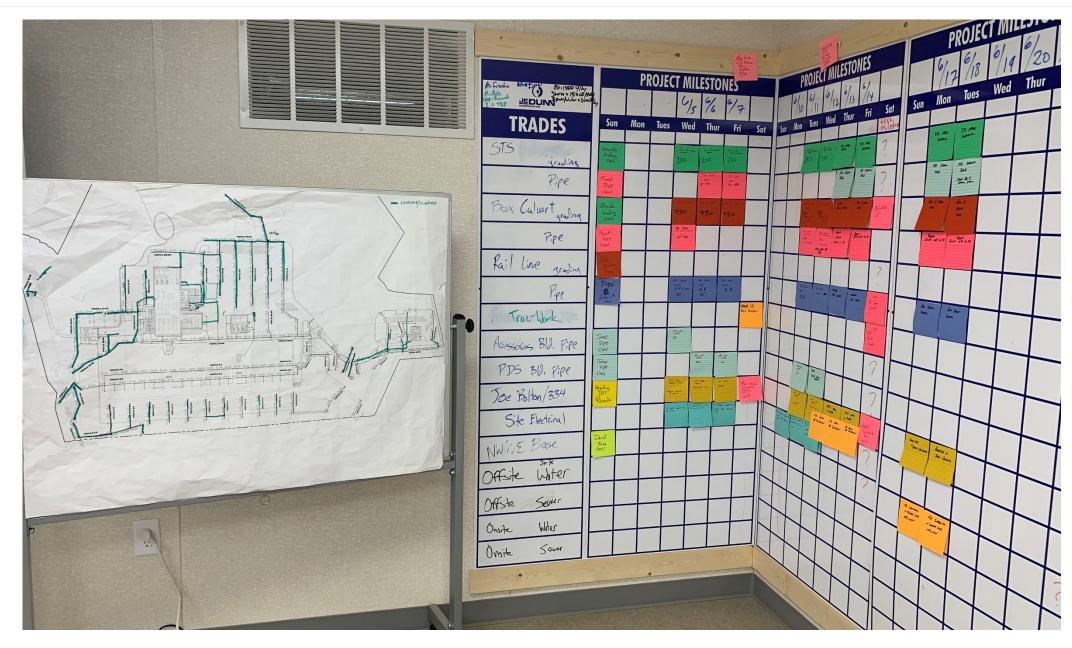


# Track the Improvements

### **Key Points:**

- Production rates by crew
- 1. Mass Grading 18,000 CY / Day
- 2. Storm Crews 150 LF / Day
- 3. Sewer / Water 200 LF / Day

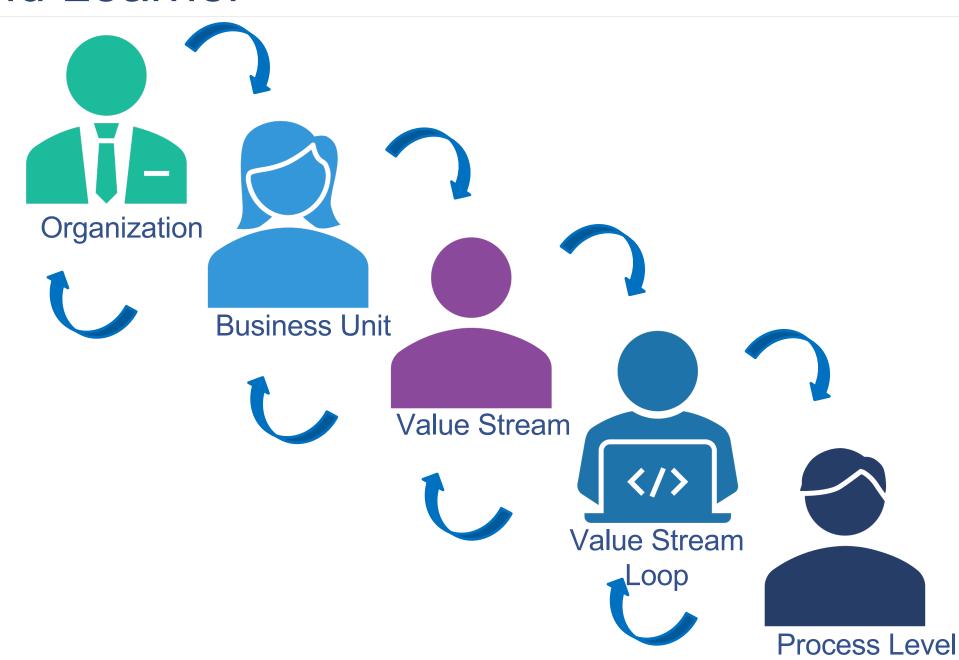




### Become a Coach and Learner

### **Key Points:**

- Coach and Learner Roles repeat across each level.
- Learner / Coach / 2<sup>nd</sup>
   Coach
- Alignment across the whole organization.
- Make innovation happen at every level.



# The Coaching Kata

### **FRONT**



### **BACK**

### **The Five Questions**

- 1. What is the **Target Condition**?
- 2. What is the **Actual Condition**?

----- (Turn Card Over) ------

- 3. What **Obstacles** do you think are preventing you from reaching the target condition?
- 4. What is your **Next Step**? (Next experiment) What do you expect?
- 5. How quickly can we go and see what we **Have Learned** from taking that step?

\* You'll often work on the same obstacle with several experiments

### Reflect on the Last Step Taken

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

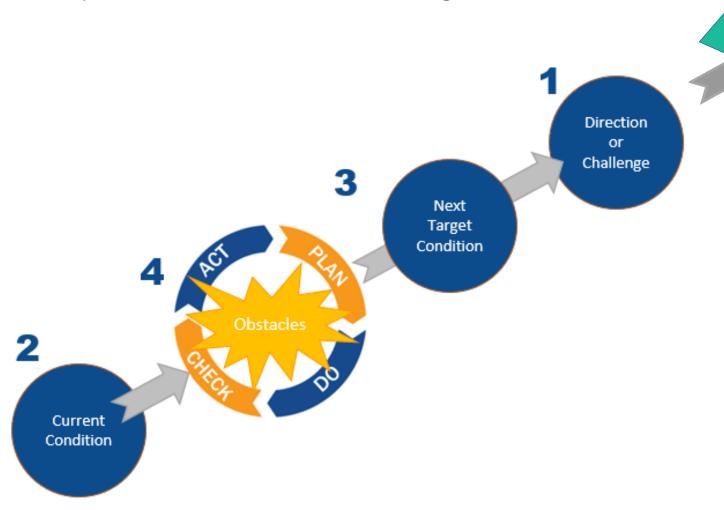
- 1. What did you plan as your **Last Step**?
- 2. What did you **Expect**?
- 3. What **Actually Happened**?
- 4. What did you **Learn**?

Return to question 3

DACHING KAT

### **Improvement Kata**

- 1. Describe the overall challenge.
- 2. Describe the Current Condition.
- 3. Describe the Next Target Condition.
- 4. Experiment towards the Next Target Condition



# ACHING KAT

Vision

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- What is the Actual Condition?

### ----- (Turn Card Over) ----->

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- 2. What did you **Expect**?
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Return to question 3

# **Key Terms**

**Kata** – A structured practice, method or routine.

Improvement Kata – A repeating routine modeled to around scientific thinking to bring incremental improvements.

Coaching Kata – A repeating routine for leaders to teach the Improvement Kata and scientific thinking across an organization.

**Vision** – Long term organizational goal (3 years or more), a company's "true north".

Challenge or Direction – Mid range goal connecting action to the long-term vision (6 months – 3 years).

**Current Condition** – The current state of the process, should be based in facts, include data, outcome and process metrics.

**Next Target Condition** – The next short-term goal in a series of short goals.

Coaching Cycle – One sequence of Improvement & Coaching Katas

# References

Toyota Kata - Mike Rother. McGraw Hill, 2010

Toyota Kata Culture - Mike Rother & Gerd Aulinger. McGraw Hill, 2017

Toyota Kata Practice Guide – Mike Rother. McGraw Hill, 2018

Scrum: The Art of Doing Twice the Work in Half the Time – Jeff Sutherland. Currency, 2014





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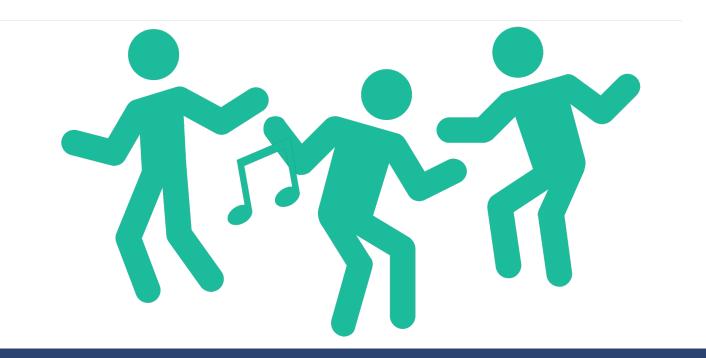
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Thank you for attending this presentation. Enjoy the rest of the 22<sup>nd</sup> Annual LCI Congress!

