

# *Creating Improvement Culture with the Improvement Kata*



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**November 2012**

# WHAT I'D LIKE TO FOCUS ON TODAY

## **Visible**

Lean solutions (tools, techniques and principles) to improve quality, cost, delivery



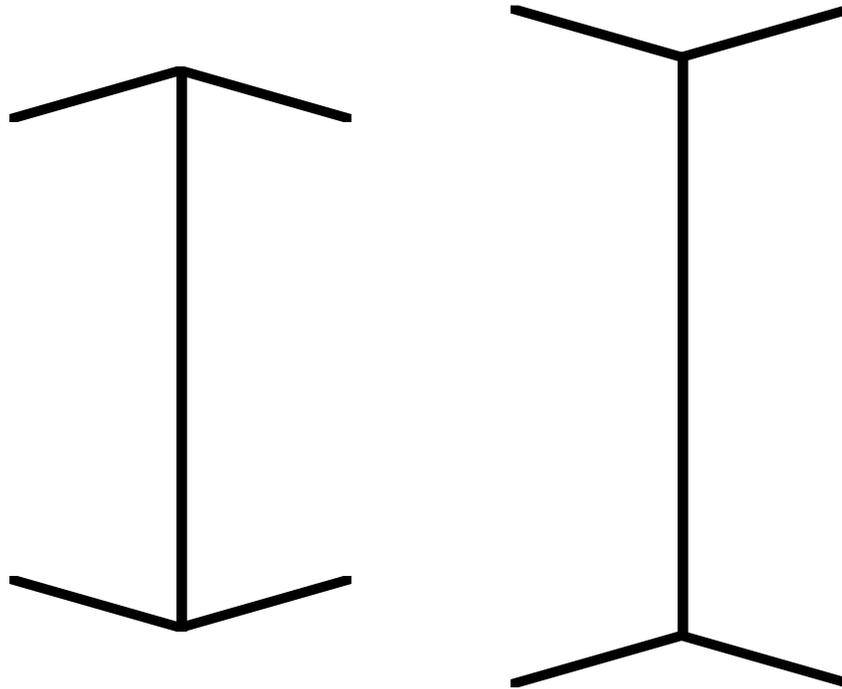
## **Less Visible**

- **A systematic, scientific routine for achieving challenging goals**
- **Managers as daily teachers of that routine**



***I want to propose that this is something middle managers should spend more time on***

# A FAMILIAR ILLUSION



# ANOTHER FAMILIAR ILLUSION



**Visible**

We may know how a kanban system works

*Important and necessary, but...*

**Less Visible**

But we **don't know** what will make your kanban system work



***Which of these is the Lean community teaching?  
What mindset is the Lean community creating?***

# WE LIKE TO BE CERTAIN IN OUR VIEW

Because that's the way our brain works

***“Certainty is a mental sensation arising out of involuntary brain mechanisms, rather than evidence of fact.”***

~ Robert Burton



***“Declarations of high confidence mainly tell you that an individual has constructed a coherent story in his mind, not necessarily that the story is true.”***

~ Daniel Kahneman  
Thinking Fast and Slow

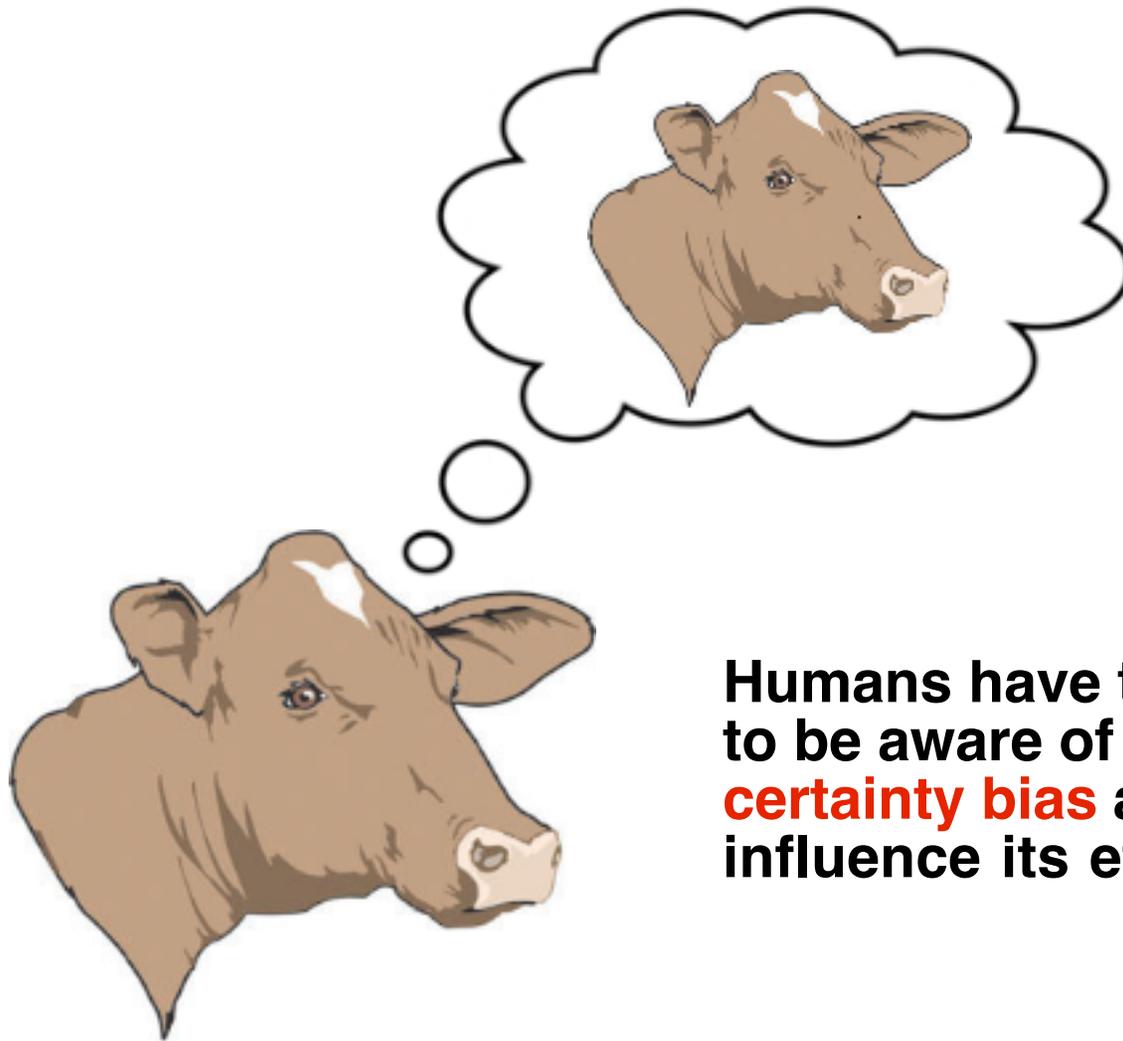
**But... once we think we know, we set a course and go, rather than submitting our ideas to testing, learning and adapting. That's where trouble begins.**

# WHAT IS METACOGNITION?



# METACOGNITION

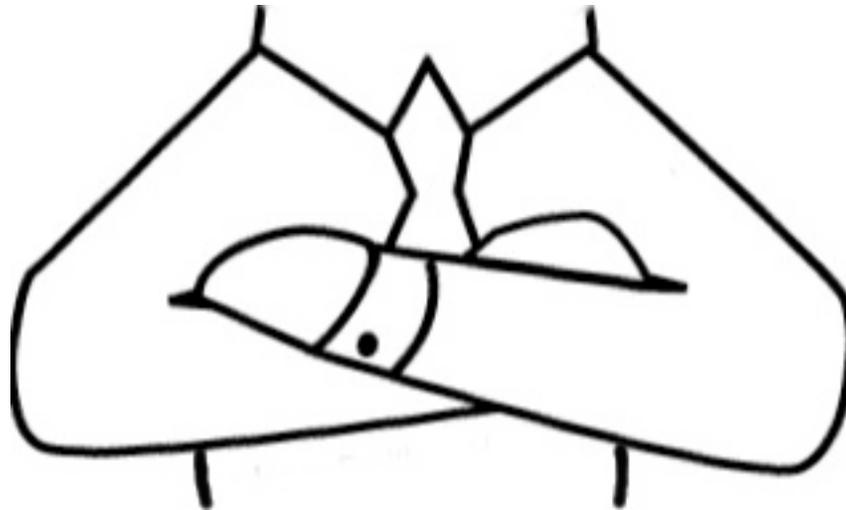
It's a big word for *thinking about how you think*,  
i.e., analyzing your own cognitive processes



Humans have the ability  
to be aware of their brains'  
**certainty bias** and can  
influence its effects

## A QUICK EXPERIMENT

Take a moment... please cross your arms.  
Then re-cross them the other way.

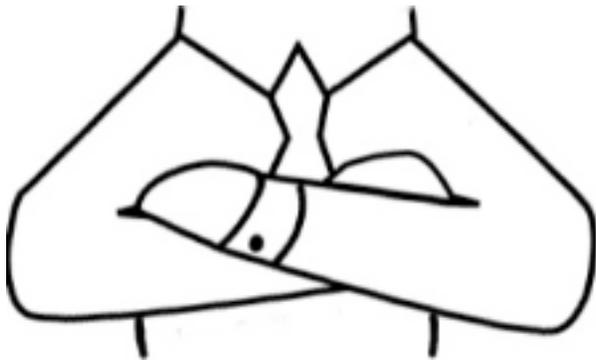


# QUICK EXPERIMENT

Please clasp your hands.  
Then clasp them the other way.



***In each case, how did it feel the second time compared to the first?***



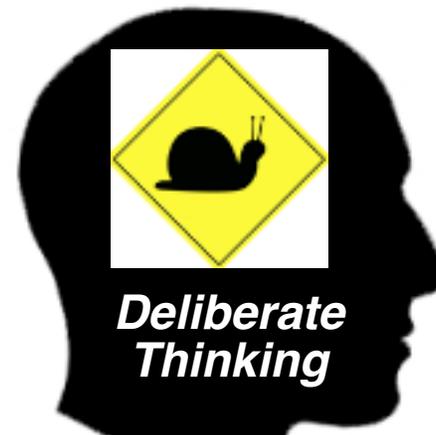
**For most of us the other way feels odd.**

**You have to consciously think about it and be more deliberate.**

# OUR UNCONSCIOUS HABITS ARE FAST & POWERFUL

**Our brain creates habits for efficiency; to free up capacity for when deliberate decision making is necessary. Unconscious thinking enables you to get through the day by taking care of routine decisions with minimum fuss.**

**Unconscious thinking is fast and instinctive, while deliberate thinking is slow and intentional.**



**The subconscious is powerful because it can process billions of bits of information per second, while our deliberate mind can only process a few thousand per second.**

# MUCH OF WHAT WE DO IS HABITUAL

Like crossing our arms, performed almost without thinking

Habits are behaviors that have been repeated regularly and occur unconsciously. The repeated behavior develops neural pathways in the brain, making the behavior easier to complete.

Much of what happens in an organization is a consequence of the habits that people in the organization have learned through practice, whether deliberately or by happenstance.



*However, a pitfall of many habits is that the past experiences that created them do not necessarily represent future situations*



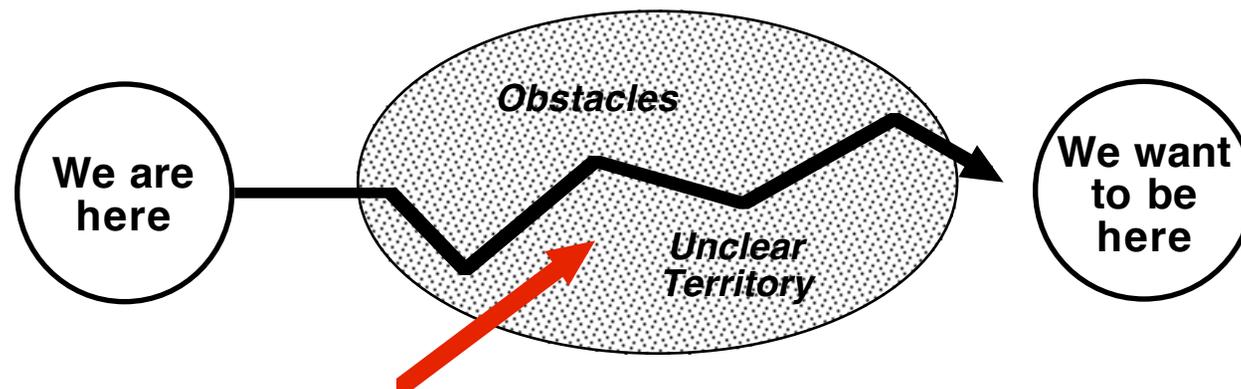
# SO ORGANIZATIONS ARE FACED WITH A **DILEMMA**

(A) Our brain favors existing neural pathways (comfort zone)

Our brain prefers familiar patterns. We naturally and automatically prefer routine, familiar activity in the apparent certainty zone.

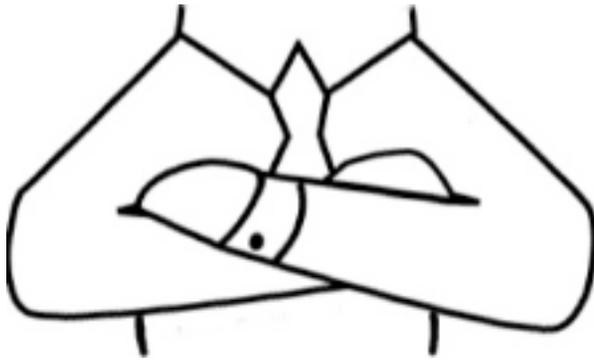
(B) Meeting challenges - improving, adapting and changing - arouses fear responses and involves weaving new neural circuits (learning)

It's impossible to remove uncertainty from the process of improvement, adaptation and creation. The way forward lies outside our current knowledge threshold.



**How do we get more comfortable & skillful  
with this uncertainty zone?!**

***What would happen if you practiced folding your arms the other way every day?***



**It would become normal; something you can do without thinking about it**

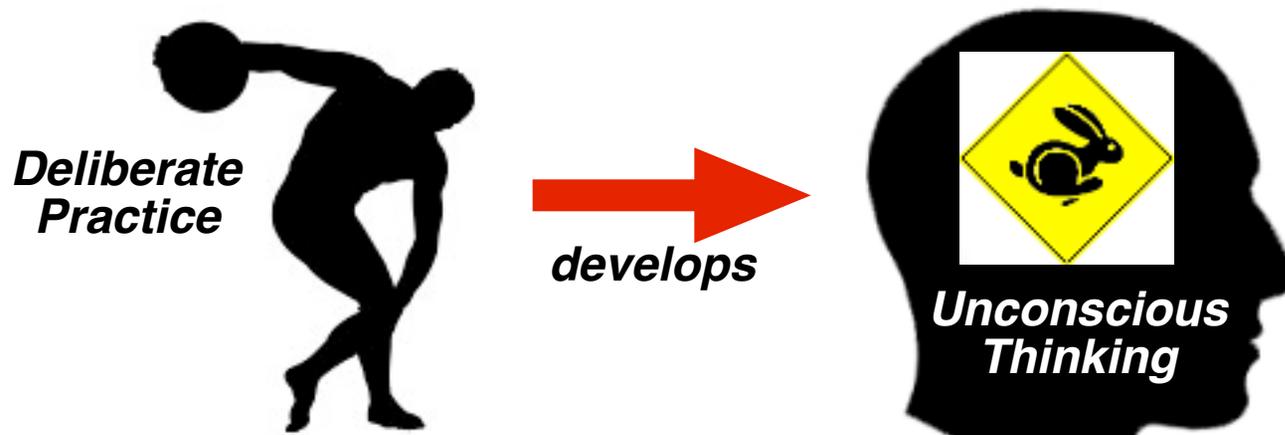
# WE CAN CHANGE OUR AUTOPILOT

**Humans have the ability to deliberately develop new habits!**

We may think that all skill is innate -- that you are either born with it or not -- but that's not 100% correct.

You can rewire your thinking and habits by deliberately (consciously) practicing a targeted behavior pattern.

Once the pattern you're practicing enters your unconscious it gets smoother and faster and becomes the normal, habitual way you operate.



***You can change the culture of an organization,  
and even an entire society, this way.***

# A SOLUTION TO THE **DILEMMA!**

How can we be creative and effective in dynamic conditions if we tend to automatically apply old solutions to new situations?

The trick is to develop well-worn mental circuits not for solutions, but for a *means* of developing solutions along uncertain paths.

This is like training in sports: To prepare for contests with unpredictable solutions, the focus of the training is not solutions, but practicing **how to play**.



*People can handle uncertainty, work iteratively, adjust and adapt...*

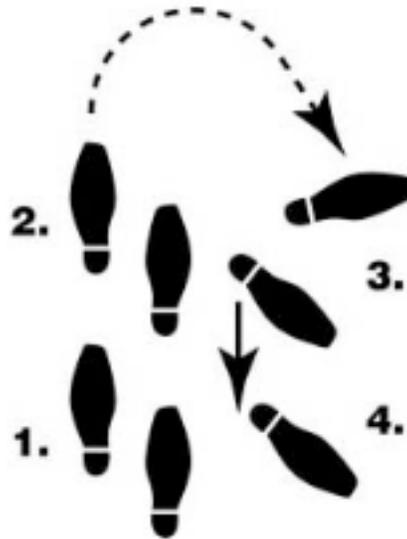
*...if they have practiced and mastered a way of doing that.*



That's exactly what the Improvement Kata is

# WHAT IS A KATA?

**A kata is a routine you practice deliberately so its pattern becomes a habit**



**Through practicing, the pattern of a kata becomes second nature - done with little conscious attention - and readily available.**

**Examples include riding a bicycle, driving a car, typing. Once you've learned to drive you don't think much about using the car's controls and can focus your attention on the situational aspects of navigating the road.**

# LEADERS & MANAGERS ARE TEACHERS, AND THEIR ACTIONS DETERMINE COMPANY CAPABILITY

Whether consciously or not, with their everyday words and actions all leaders and managers are teaching their people a mindset and approach.



***So it makes sense to ask: “What patterns of behavior and thought do we want our managers to be teaching in our organization?”***

# DELIBERATE versus AUTOMATIC TEACHING



Here the manager is a coach who deliberately teaches a new way



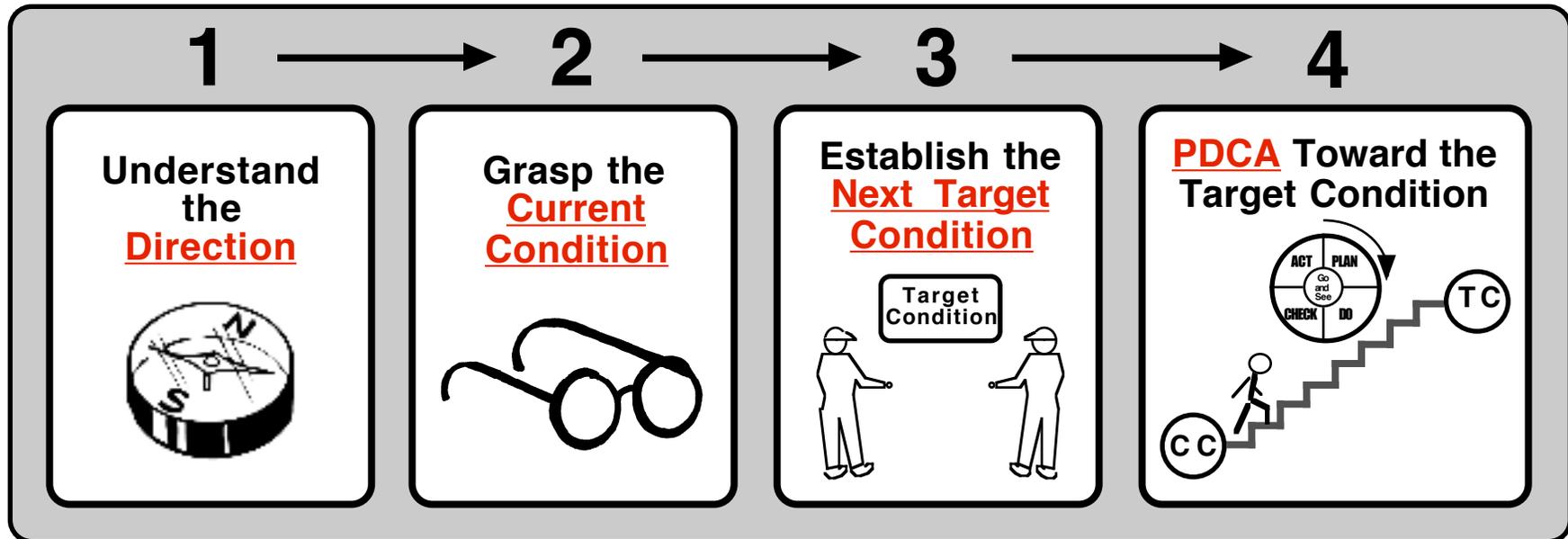
Here the manager automatically teaches the prevailing culture



**KATA**  
Is Used  
Here

# Practice Pattern 1: THE IMPROVEMENT KATA

This is the fundamental pattern that Toyota teaches



The Improvement Kata is for advancing toward something beyond your threshold of knowledge in a systematic, scientific way.

Practicing the Improvement Kata develops increasing mastery of improvement, adaptiveness and innovation.

# Practice Pattern 2: THE COACHING KATA

## This is a pattern for teaching the Improvement Kata

The Coaching Kata is a set of coaching routines to practice in order to develop effective coaching habits. It's a coaching pattern to help you teach the Improvement Kata thinking pattern.

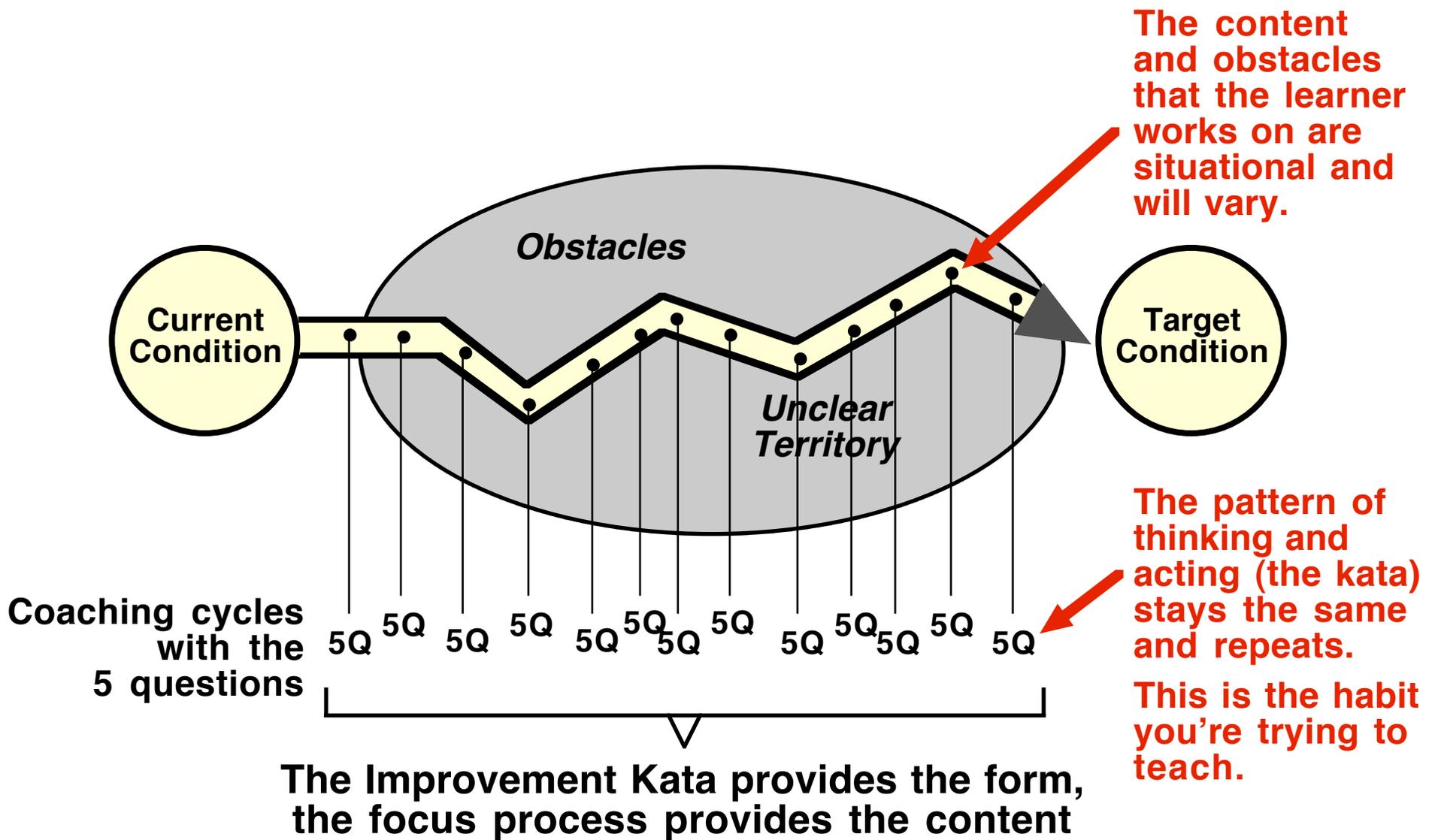
The Coaching Kata gives managers and supervisors a standardized approach to facilitate Improvement Kata skill development in daily work.



***The manager / coach needs to know both  
the Improvement Kata and the Coaching Kata!***

# DEVELOPING A META HABIT THROUGH PRACTICE

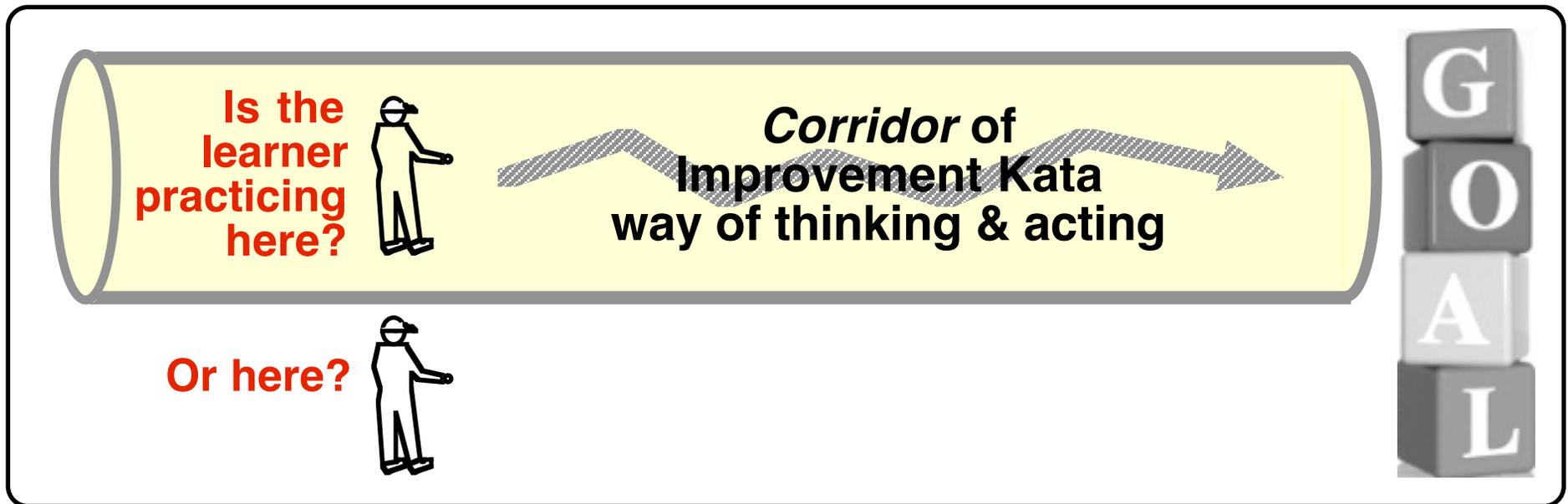
## What the coach is doing



# THE COACH'S TASK

The task is to determine whether or not the learner is practicing within the corridor of thinking and acting specified by the Improvement Kata, and to introduce procedural course corrections as necessary.

When the learner gets outside the Improvement Kata corridor the potential for learning (for increasing the learner's IK skill) is great. In this case you can either provide a procedural input now, or allow a small failure to occur and then provide the input.



# CORRECTING THE LEARNER

The learner will naturally default back to his or her existing ways of thinking and acting. The coach is ensuring that the learner practices the right pattern the right way.



Photos from "The Karate Kid," 1984

# THE INTENTION IS NOT AUDIT AND COMPLIANCE

**It's this...**



**Teaching the learner how to play  
the continuous improvement game**

**...not this**



# IT'S A "1-2-3" PATTERN OF TEACHING

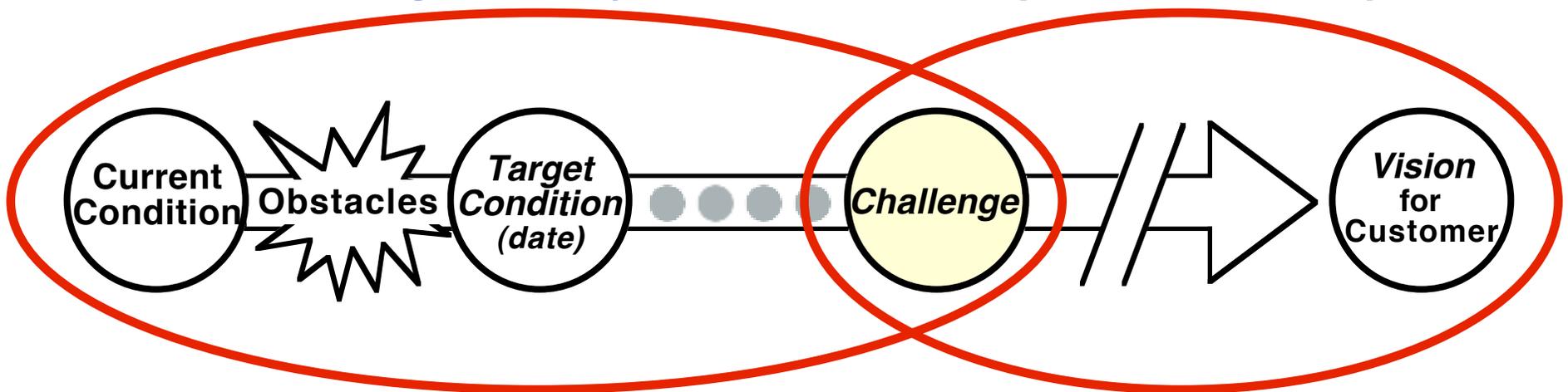
- 1** Try to understand how the learner is thinking.  
(Coach is in an observing / questioning mode)
- 2** Compare this to the desired pattern -- "the corridor" -- specified by the improvement kata.  
(Coach is in a judging mode)
- 3** Introduce a course adjustment if necessary.  
(Coach is in an instructing or guiding mode)



# IT'S A TASK FOR MIDDLE MANAGERS

*Teaching the Improvement Kata is middle management's job*

*Establishing direction is part of leadership*



**It will be the manager's job to develop the team's skill, by coaching the team in practicing the Improvement Kata**

*If you're in Lean staff, don't worry.  
Someone has to coach the managers.*

# ONE CONCLUSION IS BECOMING CLEAR

We're not going to be successful by copying Toyota's solutions



We should be copying how Toyota develops solutions.

(Which is a universal, not Toyota-specific, science-based approach.)

The **Improvement Kata** and **Coaching Kata** are practice routines for teaching and transferring that approach.

Once you develop proficiency with the Improvement Kata and Coaching Kata you can evolve them into kata that suit your organization.

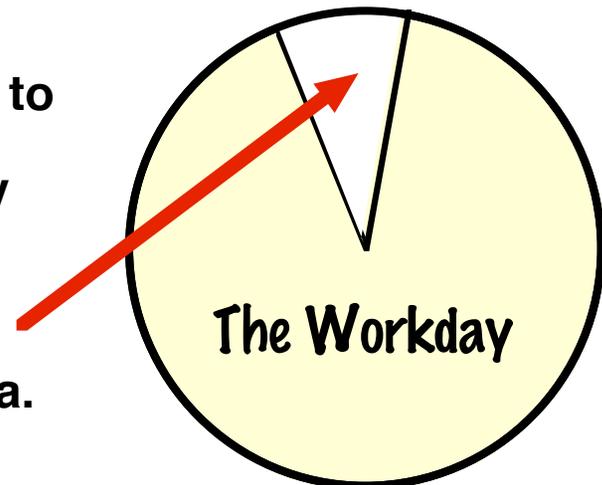
# ANOTHER CONCLUSION

If you only periodically conduct a training event or only episodically work on improvement -- and the rest of the time it's business as usual -- then what you're actually teaching is *business as usual*.



If we want a Lean revolution, then we need to shift emphasis from staff-led, episodic improvement efforts, to daily efforts led by line managers.

A slice of each day should be focused on applying & coaching your improvement kata.



**The Toyota Kata Message:**  
**WE CAN MEET THE CHALLENGES FACING US**

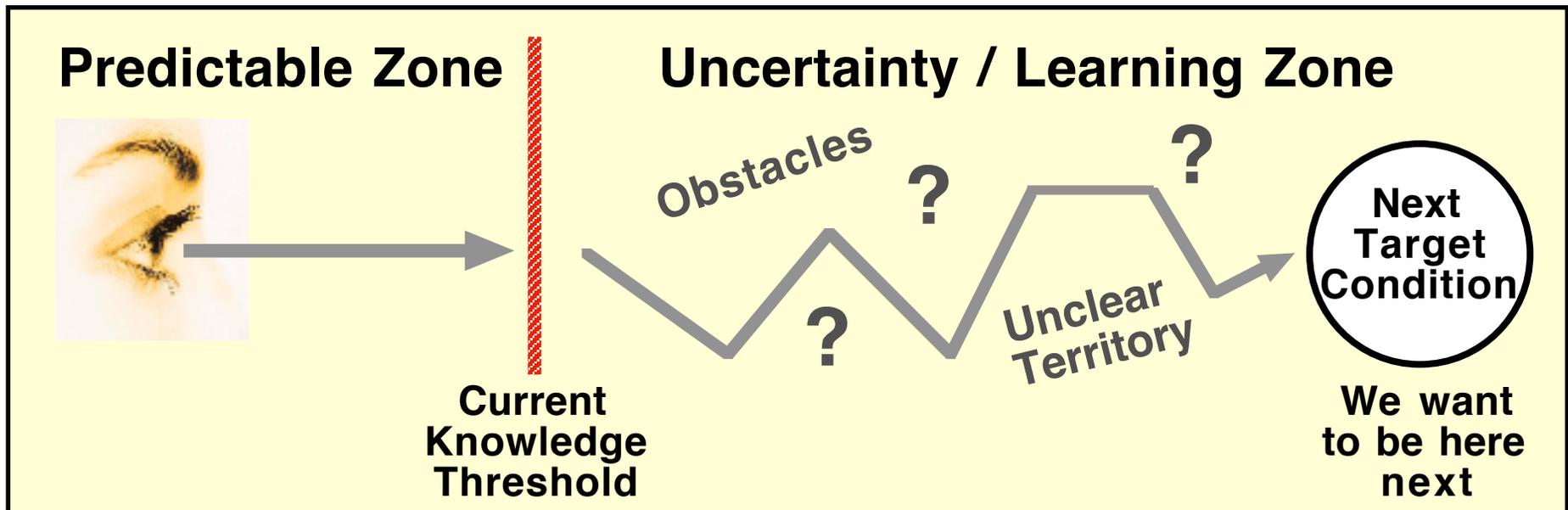


**If we practice and learn an effective way of doing that. It's not the normal way for adults.**

# THE SKILL PATTERN WE'RE TRYING TO TEACH AND LEARN

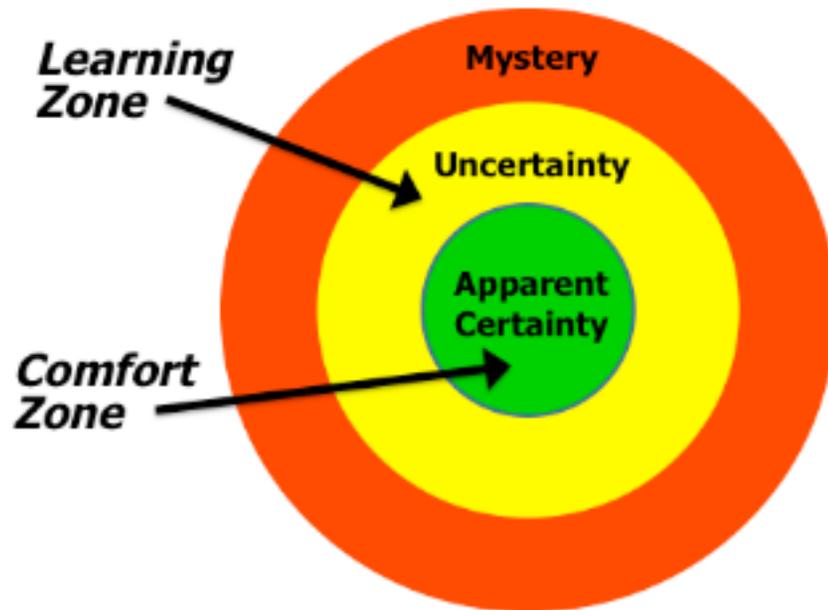
- *How will you make your kanban system work?*
- *How will you achieve 1x1 flow?*
- *How will you achieve shorter value-stream lead time?*
- *How will you achieve your objective?*

The way forward is iterative & experimenting, aimed at a desired condition that we **don't yet know** how we will achieve



# THE IMPROVEMENT KATA GIVES US SOMETHING TO HANG ON TO IN THE UNCERTAINTY ZONE

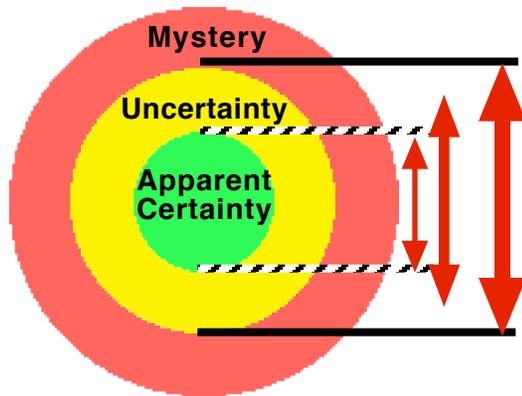
It's a kind of security blanket for the unpredictable zone



The Improvement Kata gives us a way of having more confidence while navigating unclear territory. *"I've never done that before, but I know how to figure it out and find the way."* It helps us experience uncertainty more as an opportunity.

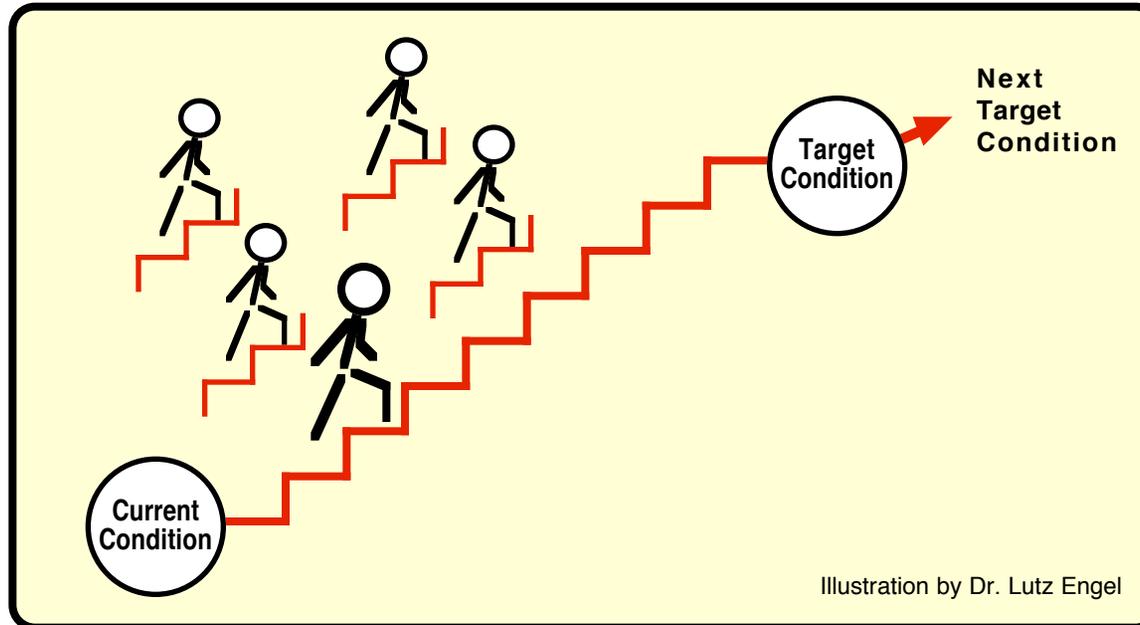
# DEVELOPING ORGANIZATION CAPABILITY AND COMPETITIVE ADVANTAGE

Practicing the Improvement Kata = expanding people's comfort zone



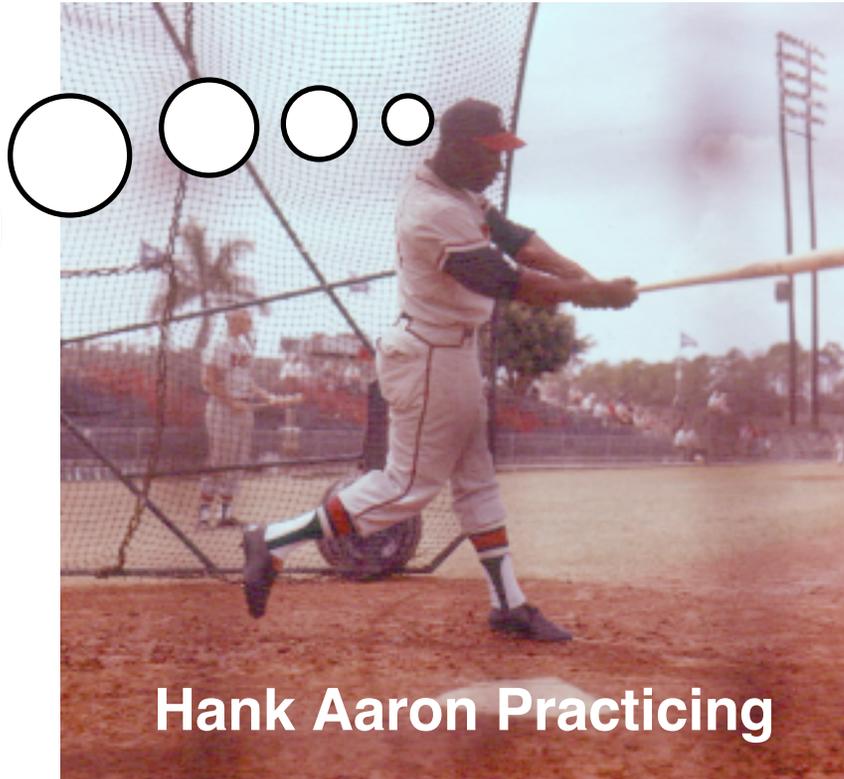
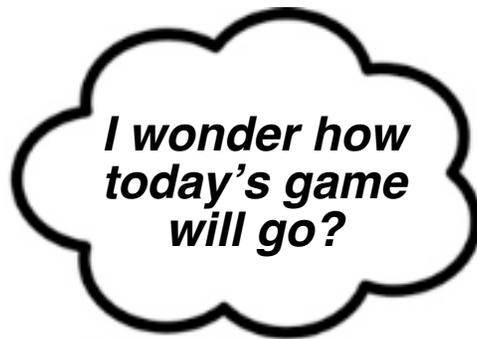
The more people in an organization who get to higher skill levels with the improvement kata:

- The more challenges the organization can take on
- The bigger the challenges it can take on
- The more knowledge it can build
- The faster it can move ahead



# DELIBERATE PRACTICE FOR SKILL DEVELOPMENT

It's normal in sports and music,  
why not also in business!



# MANAGING FOR IMPROVEMENT, ADAPTIVENESS AND SUPERIOR RESULTS

Coaching and practicing the Improvement Kata  
gives you an advantage



*“In times of change the  
**learners** will inherit the  
earth; while the **learned** find  
themselves beautifully  
equipped to deal with a  
world that no longer exists”*

~ Eric Hoffer

**The ability to meet challenges and improve -- to learn,  
adapt, grow and evolve -- is a 21st century task**

# TWO WEBSITES FOR MORE INFORMATION

[Verbesserungskata.de](http://Verbesserungskata.de)



[The Toyota Kata Website](http://The Toyota Kata Website)

TOYOTA KATA HOME	1. Improvement Kata	2. Coaching Kata	3. Kata Creates Culture	4. Getting Started	5. Challenge	 169
	Materials to Download	News and Links	Presentations	Value Stream Mapping	Extras	What is a Kata?  

Managing is challenging. Be awesome!



