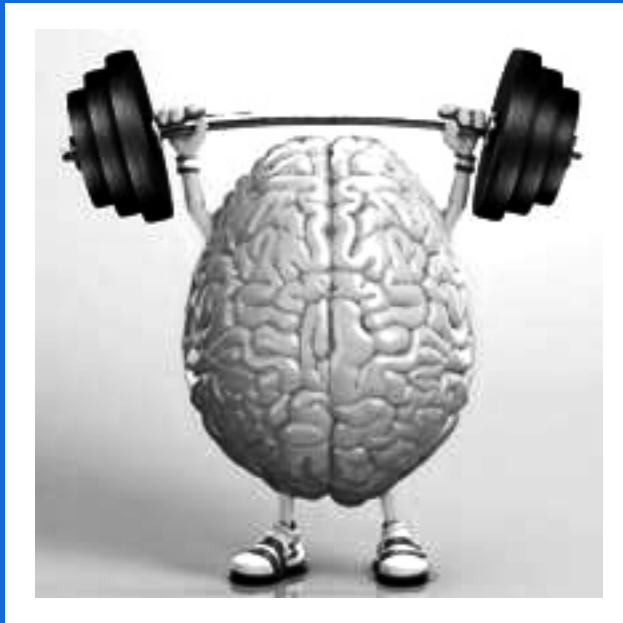


INTRODUCTION





The routines in this handbook will make you, your team and your organization better at attaining what you set out to do

The Improvement Kata and Coaching Kata are about *goal-oriented creativity* in teams and organizations. By practicing these two kata, teams become united by challenge, a way of working, and, ultimately, a way of thinking.

**This Handbook is about a way of operating...
...to develop a way of *thinking***

CONDITIONS AROUND US ARE COMPLEX & DYNAMIC (Interconnected and Unpredictable)

The ability to meet challenges and improve -- to learn, adapt, grow and evolve -- is a critical task in a complex, changeable world.

- **Conditions are always changing**
- **It's impossible to know how they will develop**
- **If you fall behind it can be difficult to catch up**



We can train ourselves to execute successfully in this environment.

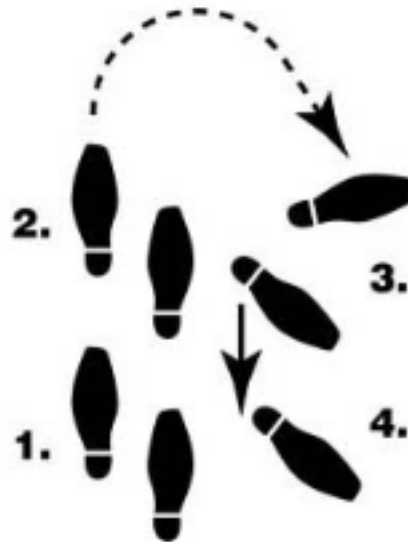
There's a kata for that!

An organization should be both consistent enough to deliver what it promises, and adaptive enough to keep moving forward. Sooner or later things change, so part of the strategy for an organization that wishes to survive long-term is to build capability for continuously improving and evolving.

However, since it's impossible to know what products and services will be important in the future, the capabilities you teach should apply to any situation. This Handbook is about exactly this kind of meta capability, and how to build it in your organization.

WHAT IS A KATA? IT'S A PRACTICE ROUTINE!

It's how you start. A kata is a structured routine you practice deliberately as a beginner*, so its pattern becomes a new habit.



Through practicing, the pattern of a kata becomes second nature; done with little conscious attention. The goal is not the kata itself, which gets used less and less as you become more and more proficient, but the habits of thinking & acting that practicing the kata leaves behind.

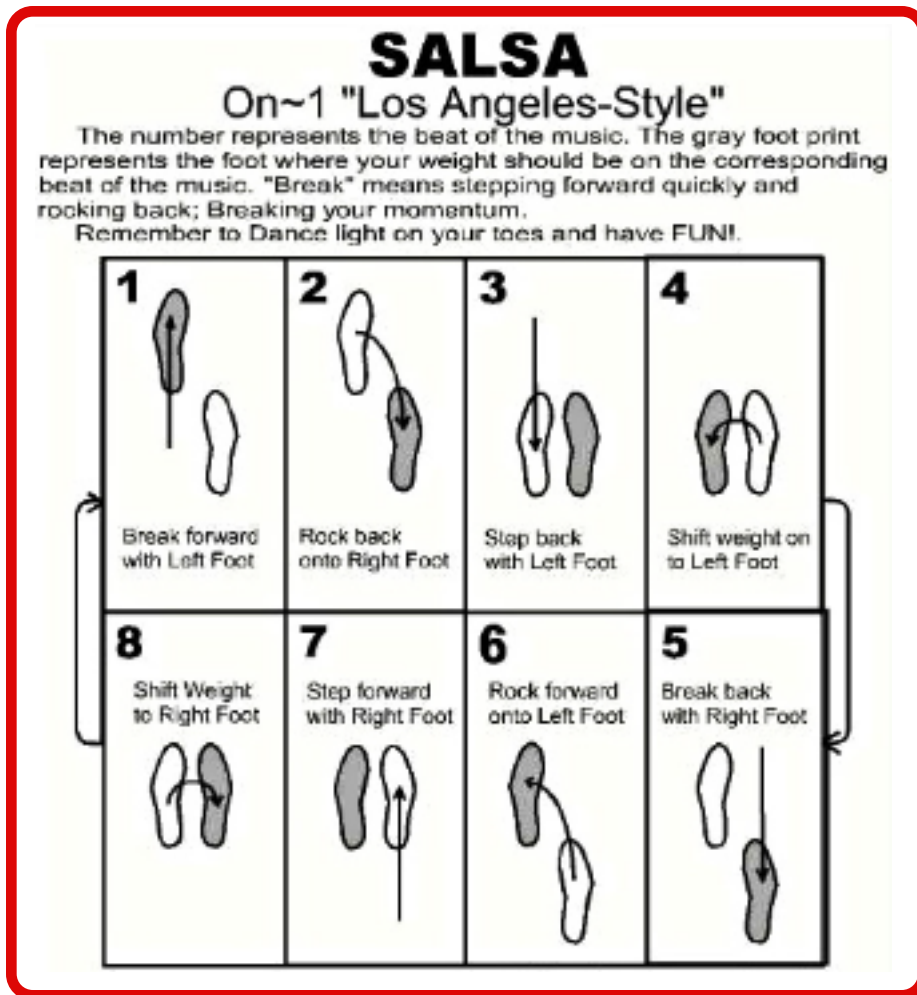
An example is practicing to learn to drive a car. Once you can drive you don't think much anymore about how to use the car's controls and instead can focus your attention on the situational aspects of navigating the road.



***Whenever you start learning a new skill you're a beginner**

Why does a kata matter? It's a way of transferring skills and developing mindset. Kata help translate concepts into practical reality.

THIS IS AN EXAMPLE OF A KATA



It's a structured practice routine -- an aid -- for beginning to learn a targeted new skill.

At the start of your practice you follow the kata exactly. As your skill develops you don't need the kata so much anymore.

The goal is the skill, not the kata.

Whenever you want to train a beginner, or want to refresh some basics, you go back to the kata.

Someone who has developed proficiency with the target skill no longer uses the kata aid so frequently and rigidly. But you first have to get to that skill level, usually by practicing deliberately.

WHAT PATTERN (KATA) SHOULD YOU TEACH & PRACTICE IN YOUR TEAM OR ORGANIZATION?



--> **It should be practiced in normal daily work throughout the organization.**

To lead to the development of new skills, mindset and culture the pattern should be an integral part of how work is normally done, not separate.

--> **It should be suitable for any goal or problem (a *Meta Skill*).**

Since we don't know what the future will bring, the pattern we practice should be content-neutral; i.e., applicable in any situation. The form that our behavior and thinking should take is prescribed, but the content is not.

--> **It should be based on the scientific way of working.**

Since human perception is biased, the pattern should rely on facts and data, not our impressions.

--> **It should include detailed practice routines for beginners.**

Concepts or coarse steps alone don't change mindset and behavior.

THE **IMPROVEMENT KATA** FITS THESE REQUIREMENTS PERFECTLY

DEFINITION

The IMPROVEMENT KATA is a four-step pattern that models a scientific way of thinking and acting so that, with practice, anyone can learn it.

The Improvement Kata is a universal, repeatable pattern for improving, adapting and innovating -- for achieving challenging objectives in complex situations -- by working systematically and scientifically. It uses systematic, scientific experimentation to strive for successive target conditions on the way to a longer-term challenge.

The Improvement Kata models the human creative process; i.e., what a person or team that is being creative does. It's a framework of thinking and acting that allows teams to face evolution and change with a positive sense of *we can do it*.

The purpose of practicing the Improvement Kata pattern is to make scientific thinking and working habitual. This helps teams and organizations be more effective because it allows them to direct their conscious attention and ingenuity to the situational details that require deliberate thought, yet to still operate scientifically.



WHAT IS SCIENTIFIC THINKING?



Scientific thinking is the intentional coordination of theory and evidence, whereby we encounter new information, interpret it and, if warranted, revise our understanding accordingly. This pattern is in contrast to relying on already-held beliefs to explain causality. Scientific thinking gives us the ability to look beyond our preconceptions and see the world and ourselves in a truer light.

What's important about scientific thinking is not just whether we decide to revise beliefs based on new information, but that practicing it helps us reshape *how* we think... moving away from relying on an artificial sense of certainty and linear/mechanistic mental models. Happily, humans are equipped to think about how they think, which is called "metacognition," and to change how they think through personal experience (practice)!

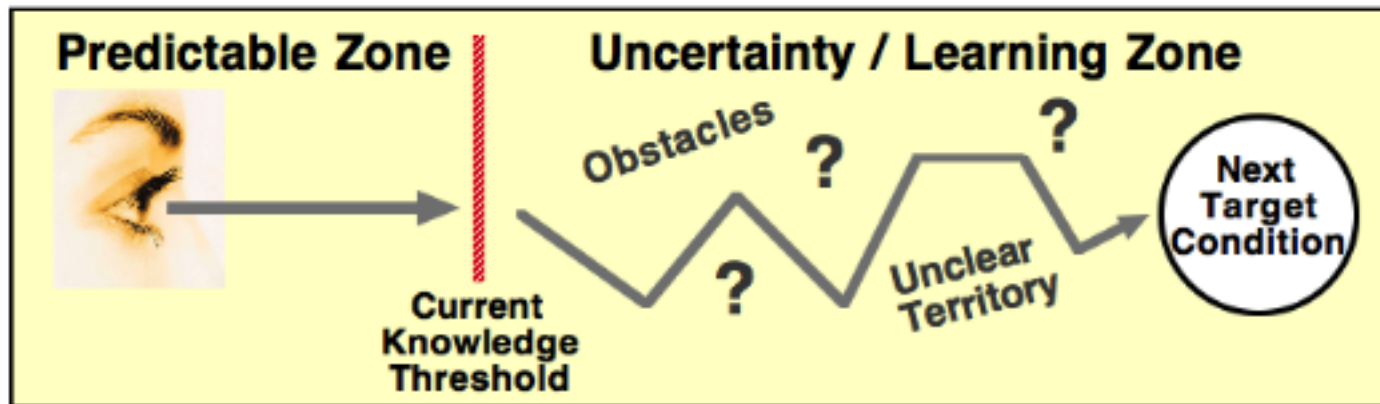
A main premise of this Handbook is that scientific thinking is an essential and widely-applicable life skill that anyone can develop by practicing the Improvement Kata pattern.

THE IMPROVEMENT KATA IS ABOUT THE ***“THRESHOLD OF KNOWLEDGE”***

The Threshold of Knowledge is the point at which you have no facts and data and start guessing. The Improvement Kata is a systematic, scientific routine for groups of people to successfully navigate beyond the threshold of knowledge.

Reality is complex and dynamic, which means the way forward can't be fully determined in advance. Reaching a challenging goal involves iteration and experimentation that's aimed at a desired condition (which we don't yet know exactly how we will achieve.) We don't know exactly what's going to happen and no plan will cover everything.

But that's OK, because we can practice and learn a pattern of scientific thinking that helps us to successfully navigate that territory. Simply put, practicing the Improvement Kata pattern makes you more able to acknowledge and be comfortable with Knowledge Thresholds.



THE **COACHING KATA** HELPS YOU TEACH THE IMPROVEMENT KATA

DEFINITION

The **COACHING KATA** is a routine for teaching the Improvement Kata pattern in daily work.

The Coaching Kata is a set of teaching routines for facilitating Improvement Kata skill development in daily work. The Coaching Kata gives managers and supervisors a standardized training approach and helps them develop effective coaching habits.

The purpose of the Coaching Kata is to teach the Improvement Kata pattern through deliberate practice, while using real-world goals and problems.



THE IMPROVEMENT KATA & COACHING KATA INCLUDE PRACTICE ROUTINES



**Practical
Application**

These kata not only model a way of working, but they also have structured practice routines for beginners, to make their pattern teachable.

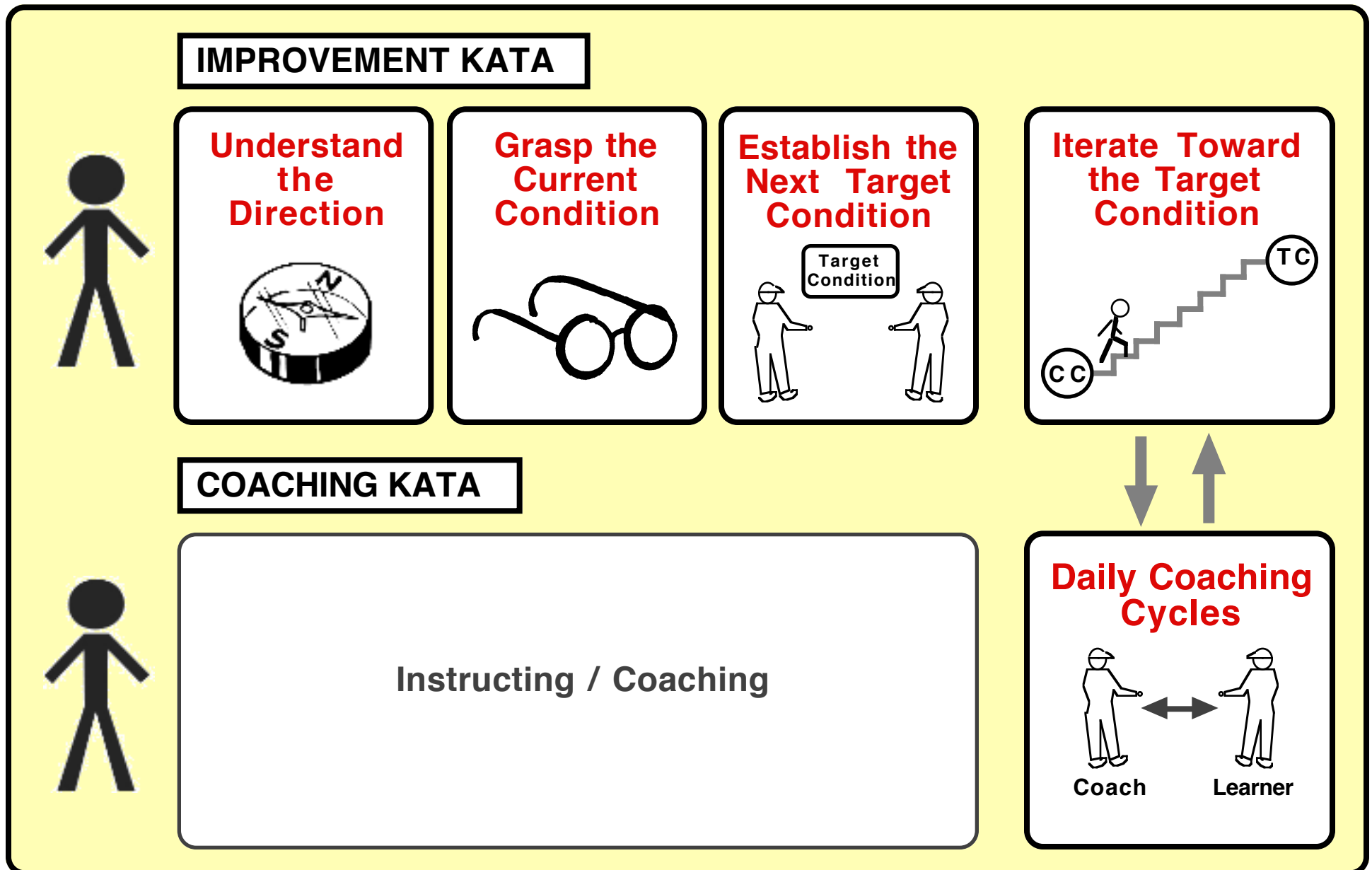
That second element is what makes the Improvement Kata and Coaching Kata different from other management concepts. Those concepts may be correct, but they lack a way of operationalizing them through deliberate, learn-by-doing practice.

Knowing a bunch of things about the Improvement Kata and Coaching Kata is not the answer. What's important is internalizing their patterns so you can then apply them in a variety of unrelated situations.

This Handbook shows you how to practice and internalize the Improvement Kata and Coaching Kata patterns in everyday work life. The pattern of the Improvement Kata can be taught to anyone, but to learn it you have to practice it.

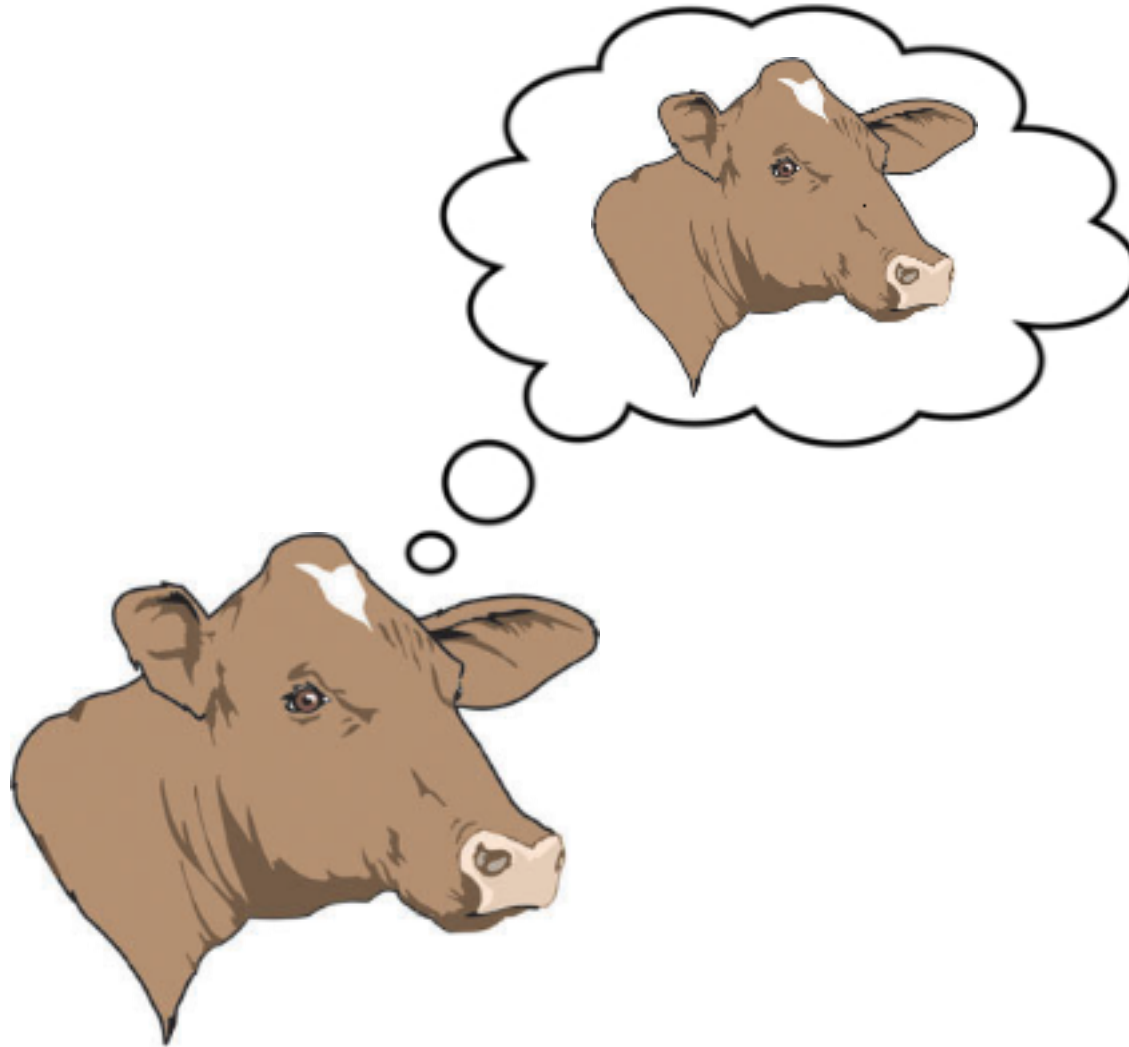
THE TWO KATA

This Handbook provides practice details for the following elements



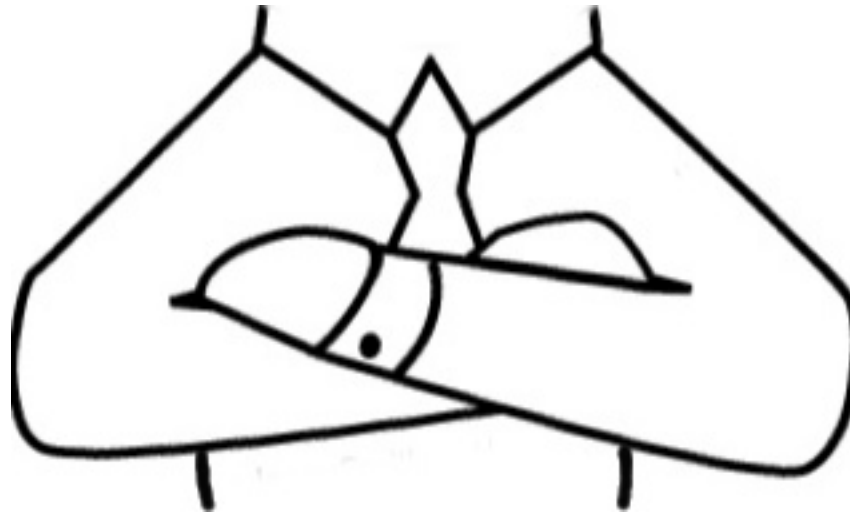
LET'S START WITH A BIT OF *METACOGNITION* *

* (A big word for *thinking about how you think*)



A QUICK EXPERIMENT

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



How did it feel the second time compared to the first?



For most of us the second time feels odd. You have to consciously think about it and be more deliberate.

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.

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.

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.



OUR UNCONSCIOUS HABITS ARE FAST & POWERFUL

Our brain avoids conscious, deliberate thinking if it can, because that kind of processing consumes more resources and has a slow reaction time. Unconscious thinking is fast and instinctive, while deliberate thinking is slow and intentional.

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



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



WE HAVE MENTAL STUMBLING BLOCKS!

We have a natural, subconscious tendency to draw incorrect conclusions in certain circumstances based on cognitive factors rather than evidence

JUMPING TO CONCLUSIONS



JUMPING TO CONCLUSIONS

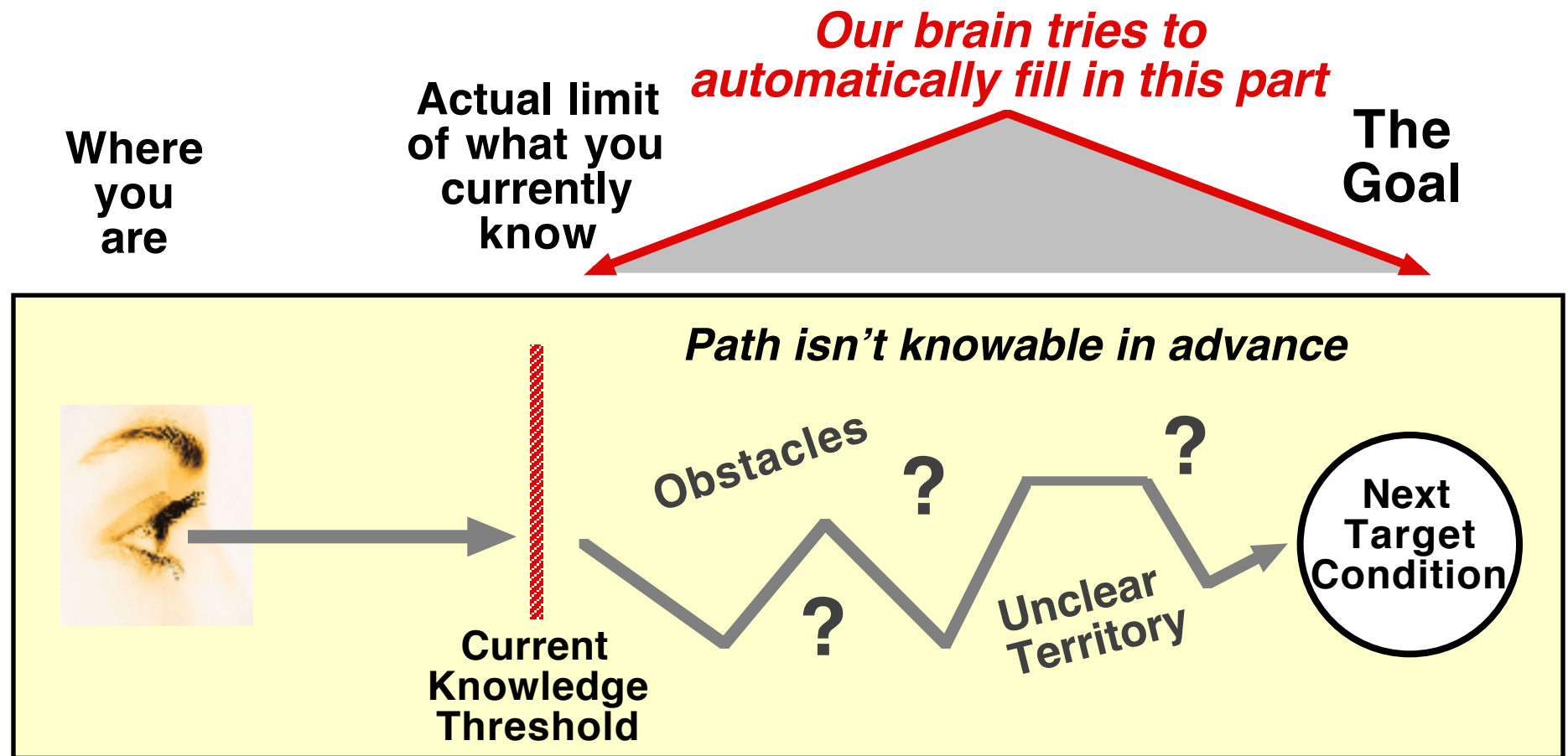
Our habits work well under many circumstances, but in certain cases they lead to errors known as *cognitive biases and logical fallacies*.

To navigate the world our brain tries to create a coherent interpretation of reality from the inputs it receives, but it hides from us the inferences it's making.

We have a blind spot when it comes to our habits of mind. Since our unconscious responses are automatic, hidden from us, and potentially biased they may not always lead us where we would like to go.

EXAMPLE: A NATURAL MENTAL SHORTCUT THAT THE IMPROVEMENT KATA COUNTERACTS

The Threshold of Knowledge is difficult to spot because we don't realize our brain is automatically filling in our knowledge gaps. We often try to determine our path in advance through logic and debate, but that's not effective in complex, dynamic conditions. Once you hit a knowledge threshold you see further by conducting an experiment, not by deliberating.

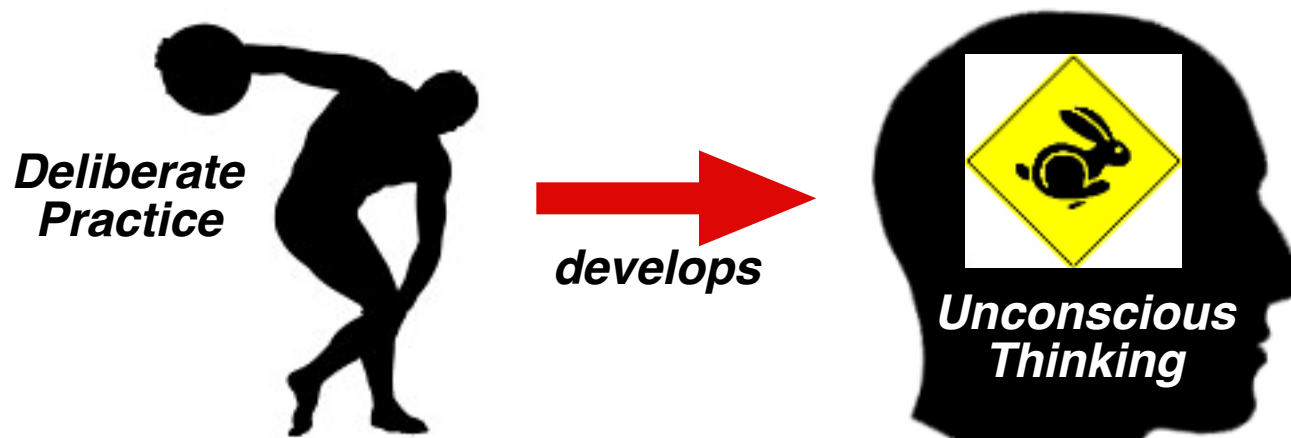


FORTUNATELY, WE HAVE THE ABILITY TO CHANGE OUR AUTOPILOT

**Humans have the power to develop new habits.
That's what the Improvement Kata & Coaching Kata are about.**

The brain is *plastic*, meaning it can be molded and formed, which allows you to learn throughout your lifetime. You can rewire your thinking and habits by deliberately (consciously) practicing a different behavior pattern.

Because initial practicing is deliberate it uses your slower conscious mind. But once the pattern you're practicing enters your unconscious it gets smoother and faster and becomes the normal, habitual way you operate.



With the right kind of practice this is a way you can change the culture of an organization, and even an entire society

MANAGERS ARE THE TEACHERS

Through its managers, a team or organization's culture perpetuates itself every day

Note: This suggests that whatever new work habits you want to deliberately develop should over time be spread across the entire team or organization.

If you try to develop a new work habit only in certain areas or projects, the prevailing culture (current habits) will tend to dominate.

Managers automatically teach and reinforce the prevailing culture



Team or Organizational Culture
Routines
Habits
Rituals
Norms

Teaches

Mindset and behavior

Every time we do something, we're more likely to do it again

KATA GET PRACTICED IN ORDER TO SHAPE A NEW CULTURE



Here the manager
is a coach deliberately
teaching a way of
thinking & acting



KATA
Is Used Here

What organizational
culture, mindset and
behavior do you want?

What do you want
managers to be
teaching / coaching?

WE CAN DEVELOP NEW SKILLS & MINDSET

We may have grown up thinking all skill and behavior is innate -- that you're either born with it or not -- but that's not 100% correct.

Much of what happens in organizations and society is a consequence of the habits people acquire through practice, whether deliberately or by happenstance.

***Constantly
under
construction***



DEVELOPING EFFECTIVE HABITS FOR IMPROVEMENT, ADAPTIVENESS AND INNOVATION

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

The book *Toyota Kata* and the *Improvement Kata Handbook* are about working scientifically to counteract potentially harmful unconscious heuristics (rules-of-thumb), cognitive biases and logical fallacies that we automatically tend to use when dealing with problems, challenges and change.

Any team can work scientifically to successfully adapt, achieve goals and meet challenges along uncertain paths with confidence, if they've practiced and learned a way of doing that.

The trick is to develop well-worn mental circuits not for solutions, but for a systematic, scientific way of *developing* solutions. **That's what practicing the pattern of the Improvement Kata is about.**

This content-free meta skill can then be applied to an endless number of situations. That's important because we don't know what challenges are coming in the future.

The Improvement Kata and Coaching Kata



**Three Key
Points for
Managers**

(1) THE IMPROVEMENT KATA + THE COACHING KATA ARE A WAY OF MANAGING

This Handbook is about a different approach to management. The 20th Century management approach of predicting, planning and monitoring doesn't work well in complex, dynamic systems.

Although the Improvement Kata and Coaching Kata describe a routine for improvement, adaptation and innovation, they are actually a way of managing people every day. There's no separation between the Improvement Kata / Coaching Kata and managing.

The focus here is on building the Improvement Kata and Coaching Kata into the normal daily work of managers and supervisors. Managers and supervisors are thereby doing two things simultaneously... making their teams better at achieving goals as they guide their teams in working on achieving real goals.

Working on real goals is the environment for practicing, coaching and developing people that underlies this handbook. It's not about an extra training program. It's like free training.



Managers here have two interrelated goals:

- > Have their team achieve an objective using the Improvement Kata pattern**
- > Develop skill within Learners, for applying the Improvement Kata pattern**

THE IMPROVEMENT KATA / COACHING KATA DEFINITION OF *MANAGEMENT*

“The systematic pursuit of desired conditions by utilizing human capabilities in a concerted way”



(2) IT'S DECENTRALIZED BUT ALIGNED STRIVING

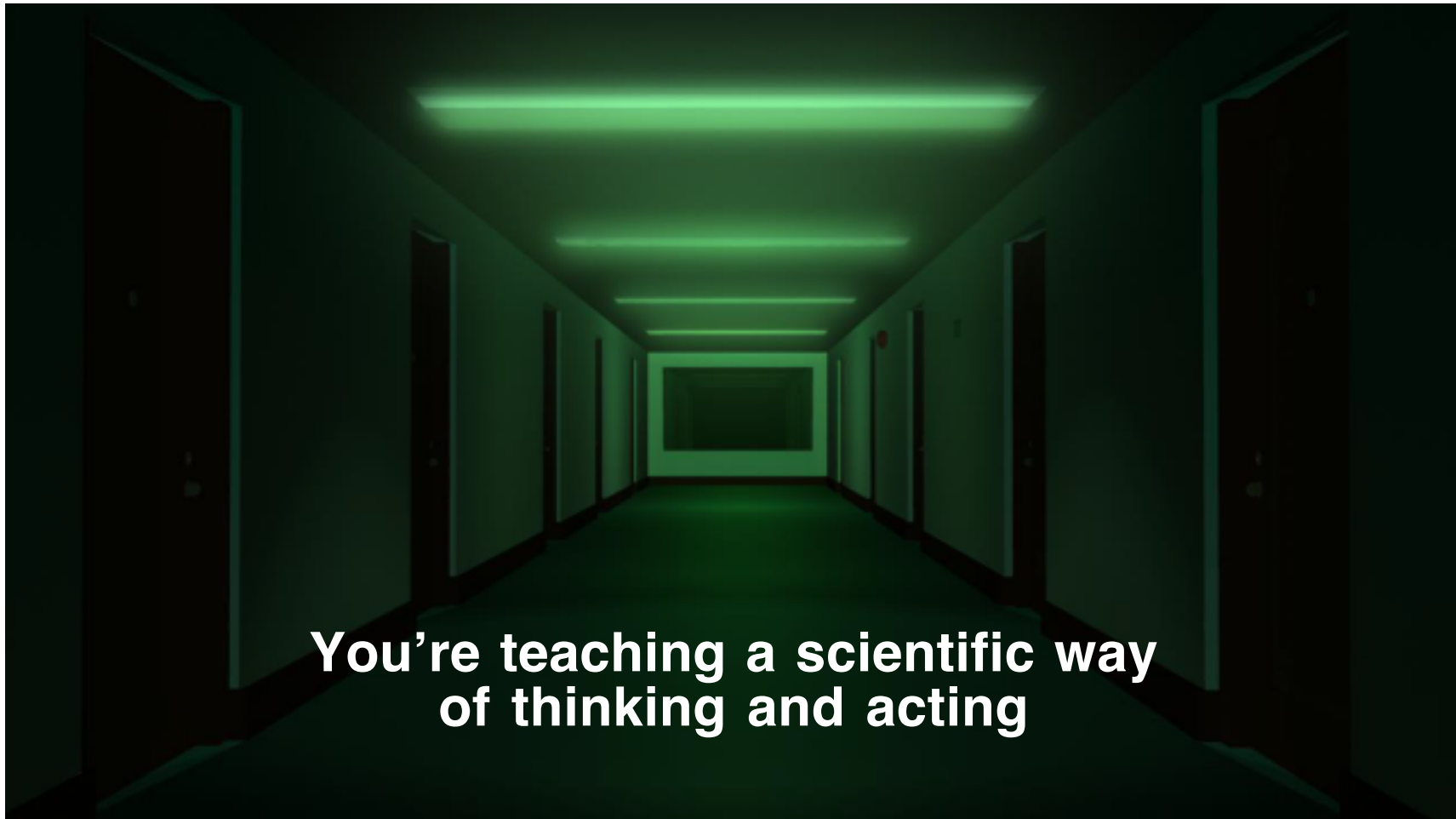
The activity that produces improvement, adaptiveness and innovation in an organization is decentralized, i.e., it takes place at individual processes. Navigating complex, constantly changing conditions involves cycles of iteration that are distributed across an organization's various processes. A small group at the top doing all the planning isn't effective anymore.

However, this sort of delegation and empowerment doesn't work well if individual teams in the organization are operating independently and unsystematically.

The Improvement Kata and Coaching Kata handle the dilemma. Managers in the organization coach their teams in a **common, scientific way of working** (the Improvement Kata) that teams apply toward a **strategic challenge**. Alignment and speed result.

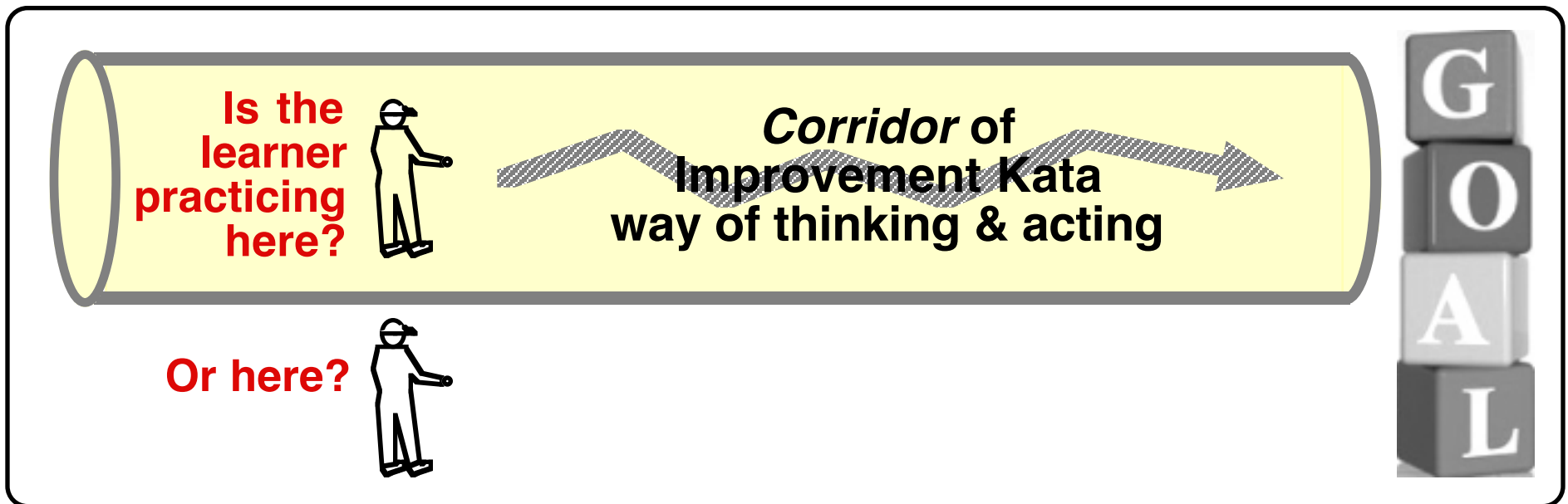


(3) THE MANAGER'S (COACH) JOB IS TO TEACH THE LEARNER TO WORK INSIDE THE “KATA CORRIDOR”



WHAT YOU'RE DOING AS AN IK COACH

Your task is to determine whether or not the Learner is practicing within the scientific and systematic **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 either provide a procedural input right away, or allow a small failure to occur and then provide the input.

CORRECTING THE LEARNER

It's not *practice makes perfect*, it's correct *practice makes perfect*

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 so that it becomes a habit that is readily available.



Of course, this requires that the Coach (manager) has first learned how to apply the Improvement Kata him- or herself, through practice.

Photos from "The Karate Kid," 1984

THE INTENTION OF THIS COACHING IS NOT AUDIT AND COMPLIANCE

It's this...



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

...not this



DEVELOPING A META SKILL THROUGH PRACTICE

WHAT you're working on: The focus process provides the content

HOW you're working: The Improvement Kata provides the form

The content and obstacles the Learner works on, the *WHAT*, are situational & vary

