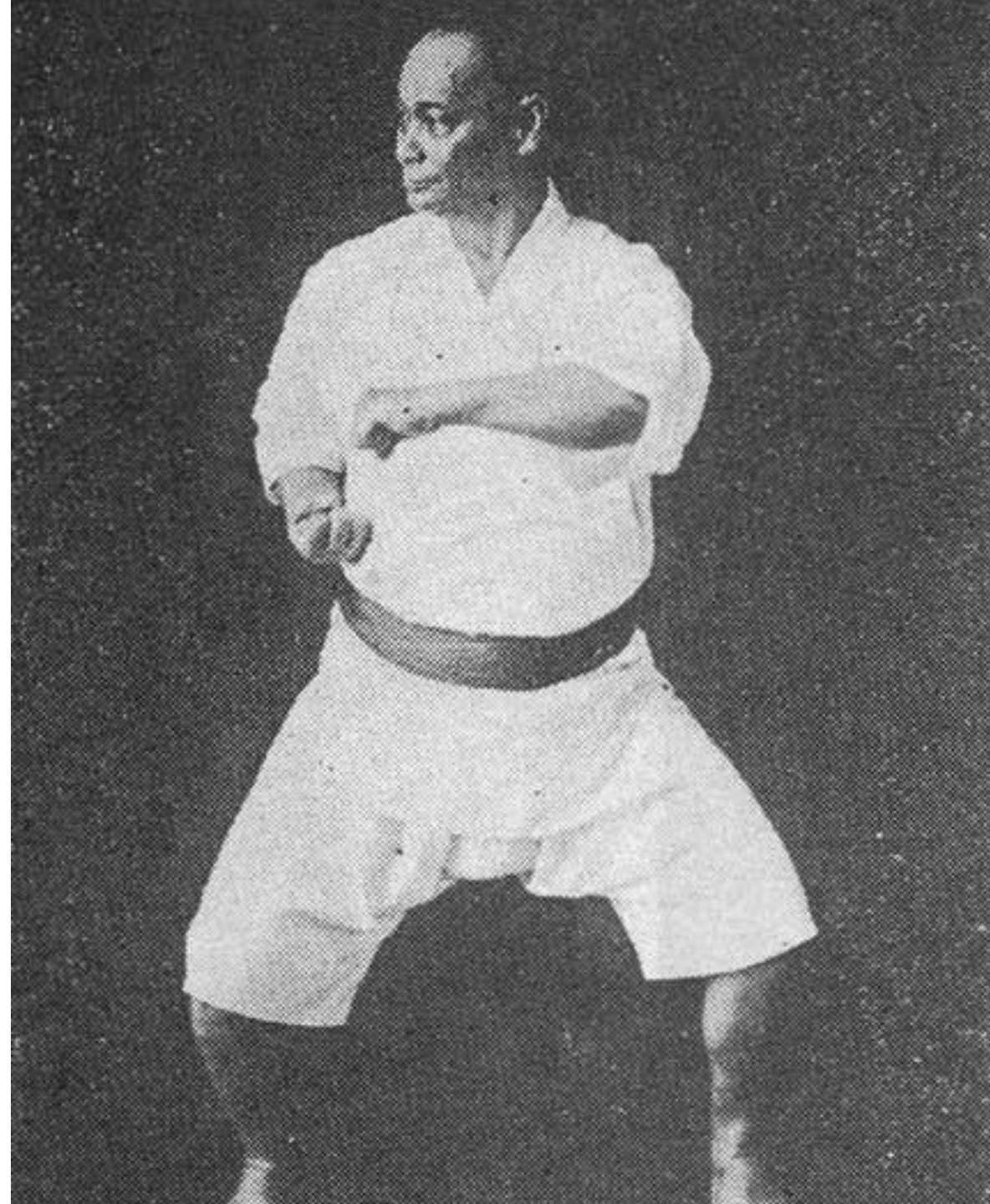


KATA FOR KANBAN

Supercharge your Kanban practice with the use of Toyota Kata



MICHAEL BLAHA

Practicing Kanban for since 2011

Change Catalyst

1800 + Practitioners

All Levels of Kanban Maturity

Tell me more about
your feelings...



GRAND VISIONS OF SUCCESS

High Performance

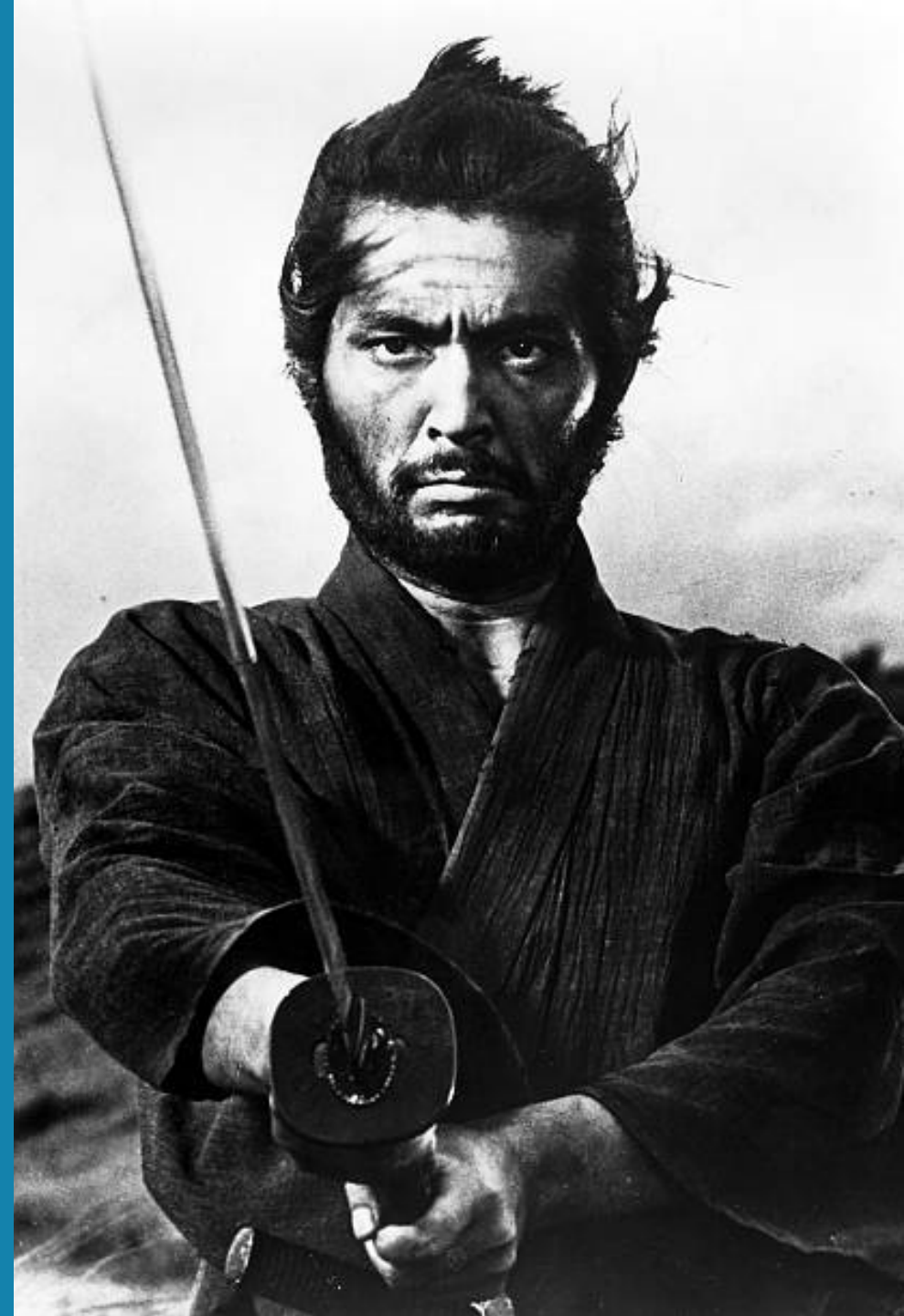
High Output

Increased Employee Engagement

Increased Innovation

Delivery Zen

Fit-For-Purpose



WHAT HAPPENED???



COMMON FEEDBACK

“Lack of engagement”

“We plateaued at visualizing work”

“Poor data quality”

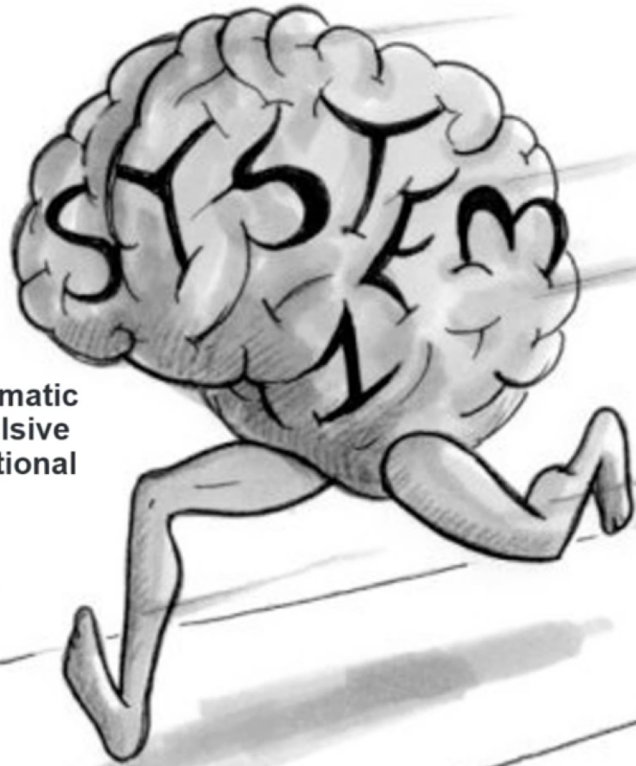
“Lack of leadership buy-in”

“Kanban became a work categorization tool”

COMMON CAUSE?



Fast
Automatic
Impulsive
Emotional



Slower
Conscious
Analytical
Rational



KAHNEMAN'S THINKING SYSTEMS

$x^2 + x^2 + y^3 + 2^3 + xy^2 - 6 = 0$
 $g \cdot \text{odf} = \left(\frac{\partial f}{\partial x}, \frac{\partial f}{\partial y} \right)$
 $\text{tg } x \cdot \text{cotg } x = 1$
 $2x^2 \cdot yy' + y^2 = 2$
 $x_1 = -1p, x_2 = -p, x_3 = 7p, p \in \mathbb{R}$

$Y_{i+1} = Y_i + b \cdot k_2$
 $B = \begin{pmatrix} 2 & 1 & -1 & 0 \\ 3 & 0 & 1 & 2 \end{pmatrix}$
 $a^2 = b^2 + c^2 - 2bc \cos \alpha$
 $\text{tg } \frac{x}{2} = \frac{1 - \cos x}{\sin x} = \frac{\sin x}{1 + \cos x}$

$\sum_{i=0}^n (p_2(x_i) - y_i)^2$
 $\text{tg } 2x = \frac{2 \text{tg } x}{1 - \text{tg}^2 x}$
 $\text{tg } x = \frac{\sin x}{\cos x}$
 $\lambda x - y + z = 1$
 $x + y + z = 2$
 $x + y + 2z = 2$

$\lim_{n \rightarrow \infty} \frac{\sqrt{n^3 + 1} + n}{\sqrt[3]{3n^2 + 2n - 1}}$
 $\frac{a}{\sin \alpha} = \frac{b}{\sin \beta} = \frac{c}{\sin \gamma}$
 $y = \sqrt[3]{x+1}; x = \text{tg } t$
 $(1 + e^x) \cdot y' = e^x$
 $y(1) = 1$

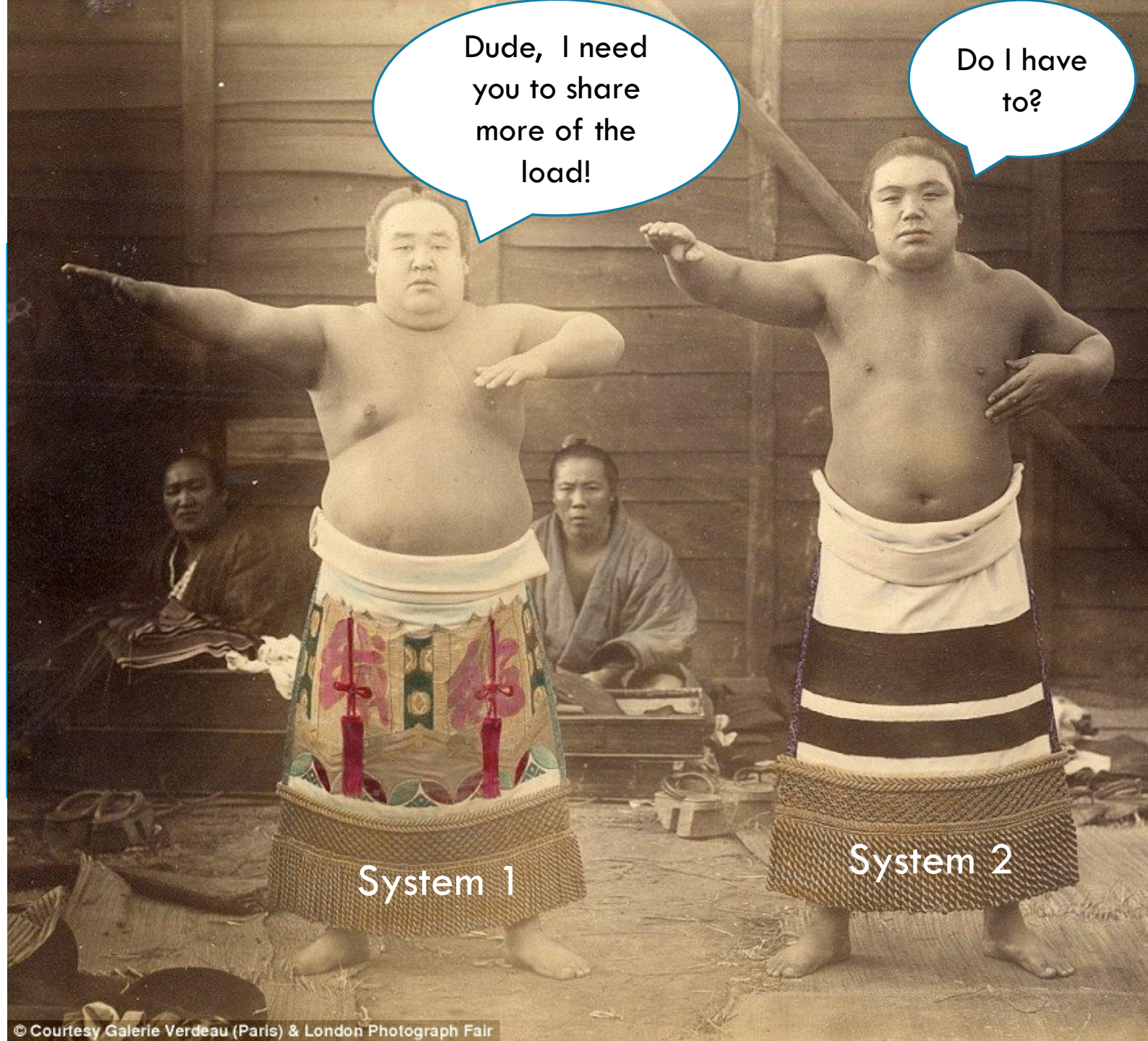
$\int \int \int_M z \, dx \, dy \, dz = \int_0^{2\pi} \int_0^{\pi} \int_{\frac{1}{2}}^1 r \, dr \, d\theta \, d\varphi$
 $2 \arctg x - x = 0; I = (1, 10)$
 $\int_{-1/2}^{1/2} \sin 4x \cdot \cos^3 x \, dx$
 $\cos^2 \alpha + \cos^2 \beta + \cos^2 \gamma = 1$
 $\frac{\partial z}{\partial x} = 2; \frac{\partial z}{\partial y} = 0$
 $\vec{n} = (F_x; F_y; F_z)$
 $\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 0$
 $\sin 2x = 2 \sin x \cdot \cos x$
 $|\vec{z}| = \sqrt{a^2 + b^2}$
 $\frac{\partial f}{\partial x} = 16 - x^2 + 16y^2 - 4z > 0$
 $\int 3x^2 + 16x^{-0.12} \, dx$
 $\lim_{h \rightarrow +\infty} \left(1 + \frac{2}{h}\right)^h$

$\Delta(p_2) = \sqrt{9,16}$
 $C = \begin{pmatrix} 0,1 \\ 1,0 \end{pmatrix}$
 $\alpha, \beta, \gamma \in \mathbb{C}$
 $f(x) = 2^{-x} + 1, \epsilon = 0.005$
 $e^z - xy = z = e; A[0; e; 1]$
 $\lim_{x \rightarrow 0} \frac{e^{2x} - 1}{5x} = \frac{2}{5}$
 $b| + |b| \neq 0; \neq 0$
 $\sin(x+y) = \sin x \cos y + \cos x \sin y$
 $\frac{2x}{x^2 + 2y^2} = 2$
 $z = \frac{1}{x} \arcsin \frac{\sqrt{z}}{z}$
 $\eta = \lambda^2 - 3\lambda + 1 \neq 0$
 $A = \begin{pmatrix} x, 1+x^2, 1 \\ y, 1+y^2, 1 \\ z, 1+z^2, 1 \end{pmatrix}; x=0, y=1, z=2$
 $A = [1, 0; 3]$
 $y' - \frac{\sqrt{y}}{x+2} = 0; y(0) = 1$
 $\cos \varphi = \frac{(1, 0) \cdot (\frac{1}{\sqrt{12}}, \frac{1}{\sqrt{48}})}{\sqrt{\frac{1}{12} + \frac{1}{48}}}$

$x_1 = \begin{pmatrix} 2p \\ -p \\ 0 \end{pmatrix}$
 $F_2 = 2x \cdot yz - 1 = 1$
 $y = x^3$
 $y = x^2$
 $\cos 2x = \cos^2 x - \sin^2 x$
 $A+B+C=8$
 $-3A-7B+2C=-10,3$
 $-18A+6B-3C=15$
 $\int x(x \cdot \sqrt{\frac{ax+b}{cx+d}}) \, dx$
 $\frac{\sin x}{x} \leq \frac{x}{x} = 1$

STARTING KANBAN IS HARD.

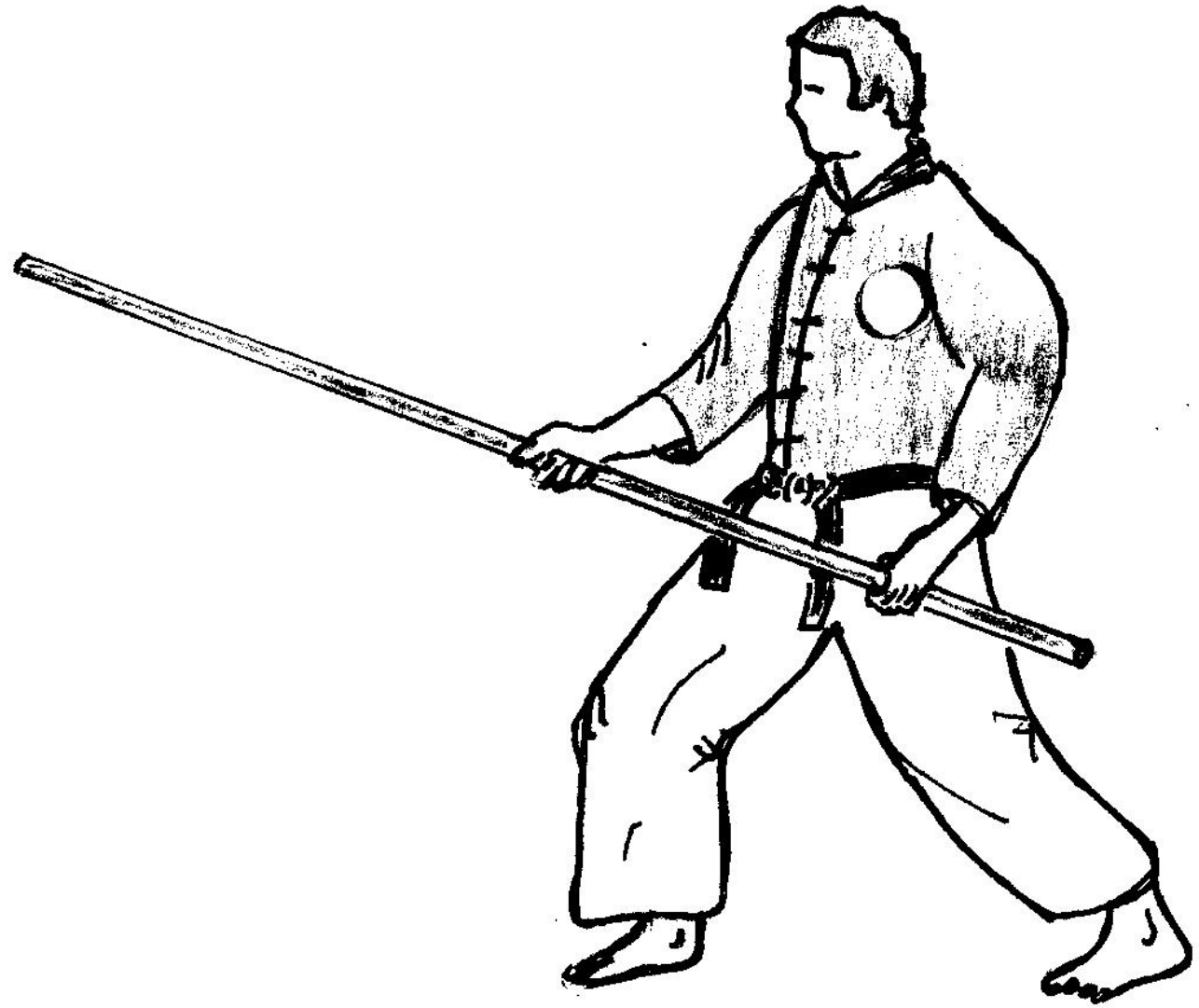
RE-TRAIN



System 1

System 2

TOYOTA KATA





KATA

...detailed choreographed patterns of movements practiced either solo or in pairs.

TOYOTA KATA

“Frequent practice of the scientific method so as to infuse it’s practice into the culture of the organization.”

NEUROPLASTICITY

The Ability of the Brain to Reorganize Itself,
Both in Structure and How It Functions

HOW THE BRAIN CHANGES



NEUROGENESIS

Continuous generation
of new neurons in
certain brain regions



NEW SYNAPSES

New skills and
experiences
create new neural
connections



STRENGTHENED SYNAPSES

Repetition and
practice strengthens
neural connections



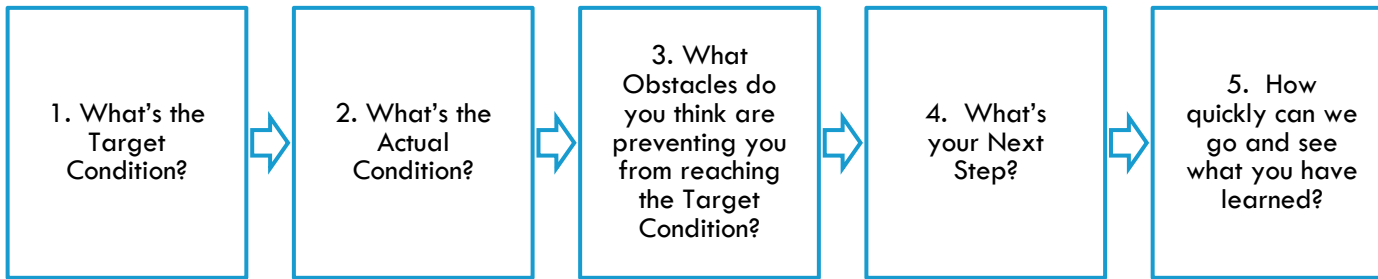
WEAKENED SYNAPSES

Connections in the
brain that aren't used
become weak



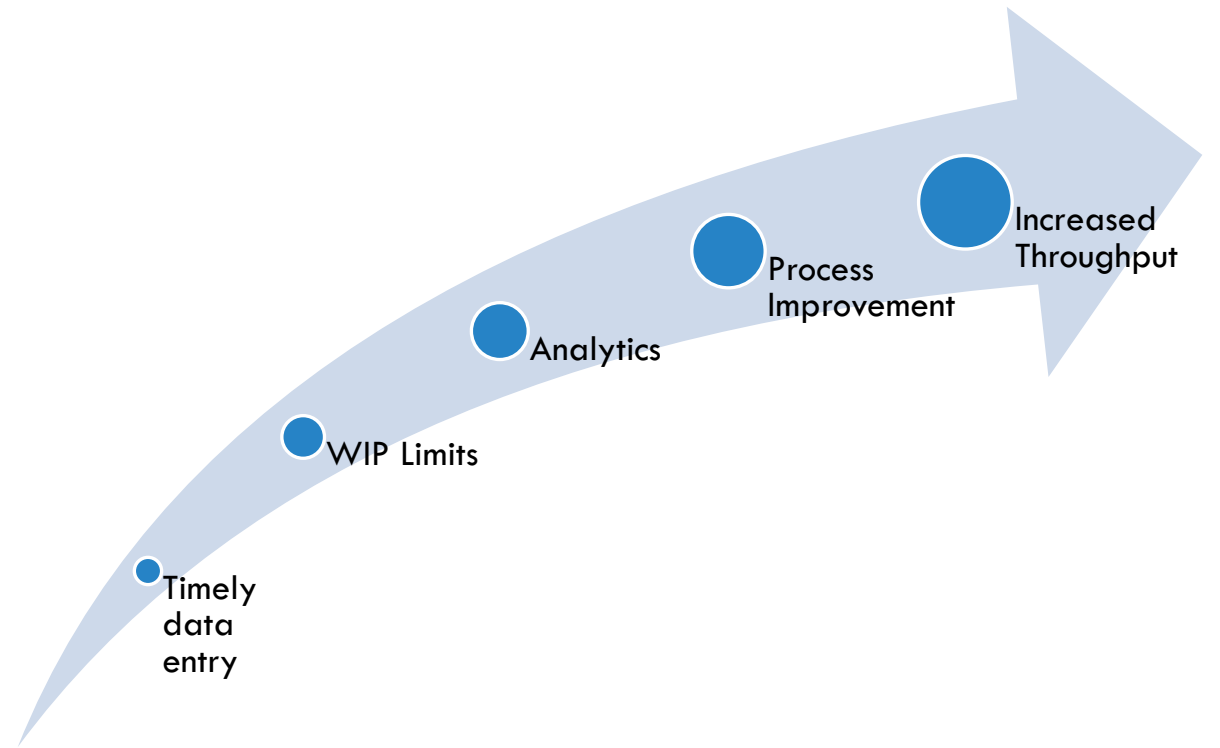
KATA AUGMENTS KANBAN

1. Discipline
2. Discovery
3. Trust



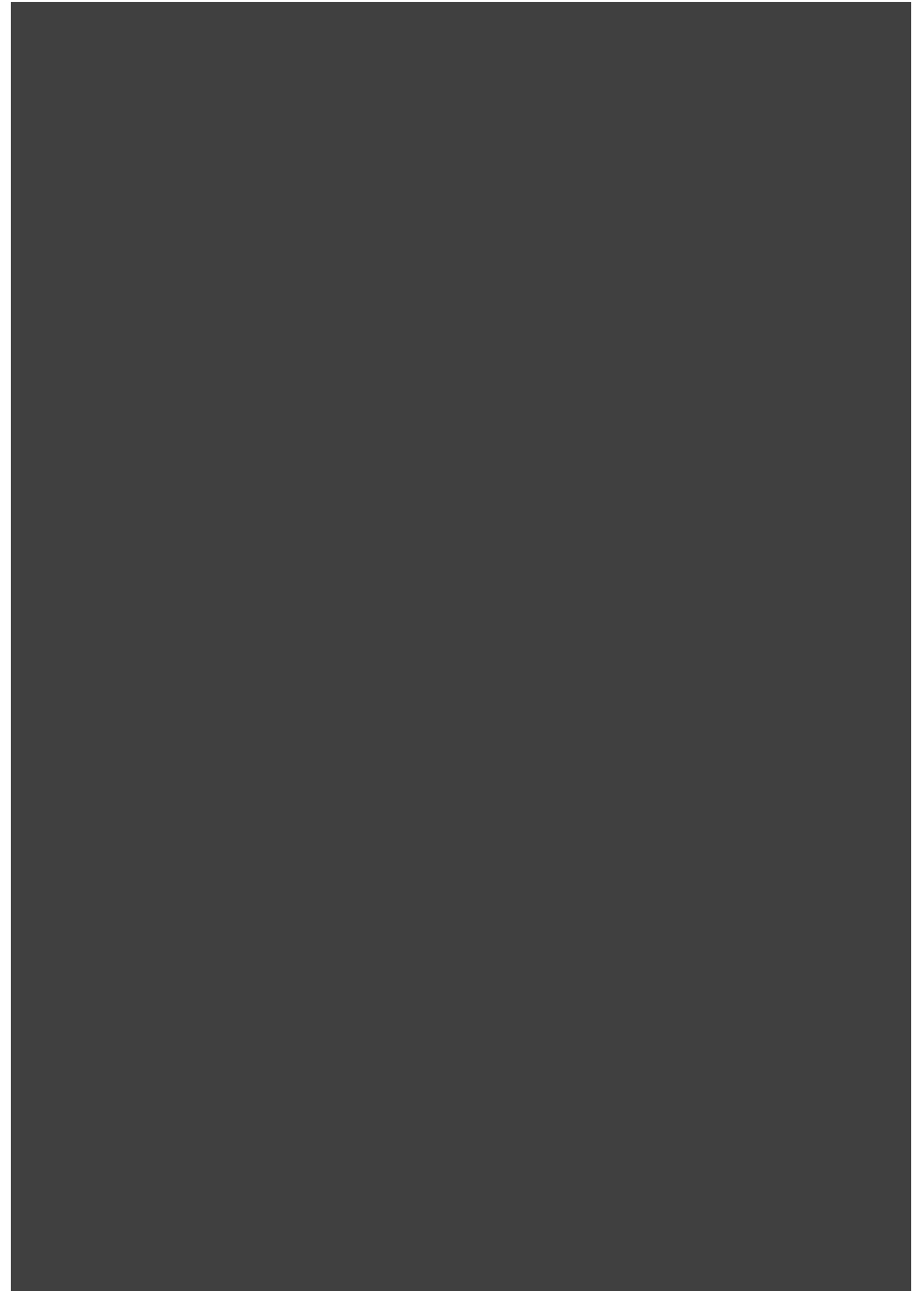
COACHING KATA - DISCIPLINE

COACHING FOR KANBAN IMPROVEMENT





ITS META!





DISCOVERY



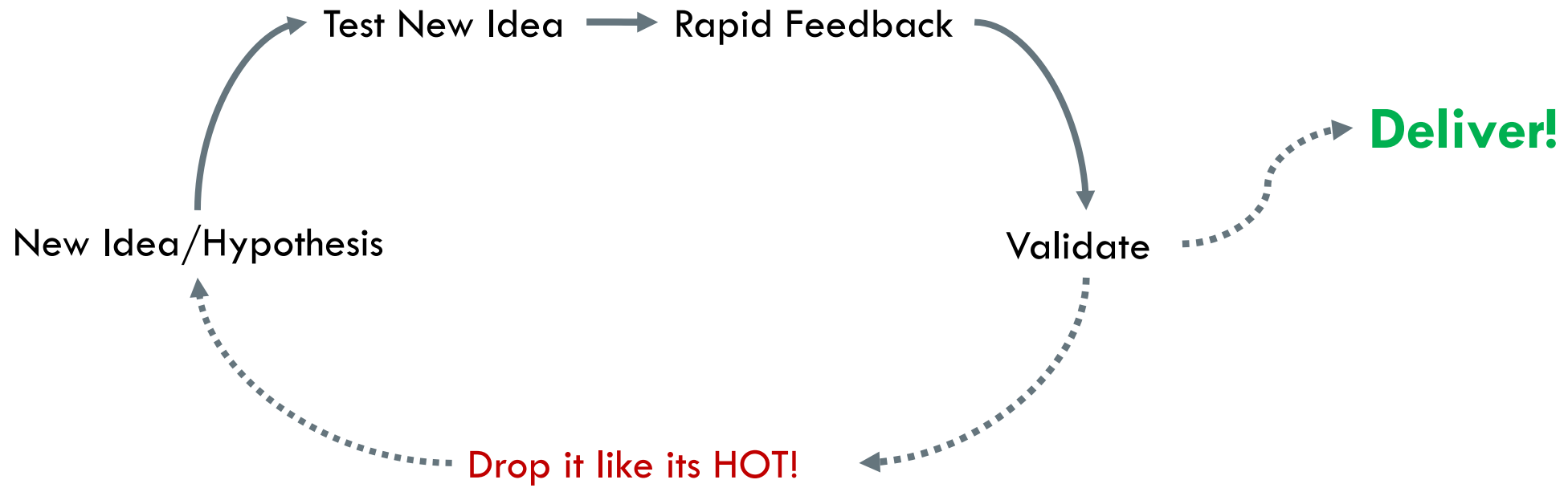
LEARNING

“How do we inject learning into our culture?”

CREATING A CULTURE OF GROWTH

1. An environment that feels **safe**, fueled first by top by leaders willing to role model vulnerability and take personal responsibility for their shortcomings and missteps.
2. A focus on continuous **learning** through inquiry, curiosity and transparency, in place of judgment, certainty and self-protection.
3. Time-limited, manageable **experiments** with new behaviors in order to test our unconscious assumption that changing the status quo is dangerous and likely to have negative consequences.
4. Continuous **feedback** – up, down and across the organization – grounded in a shared commitment to helping each other grow and get better.

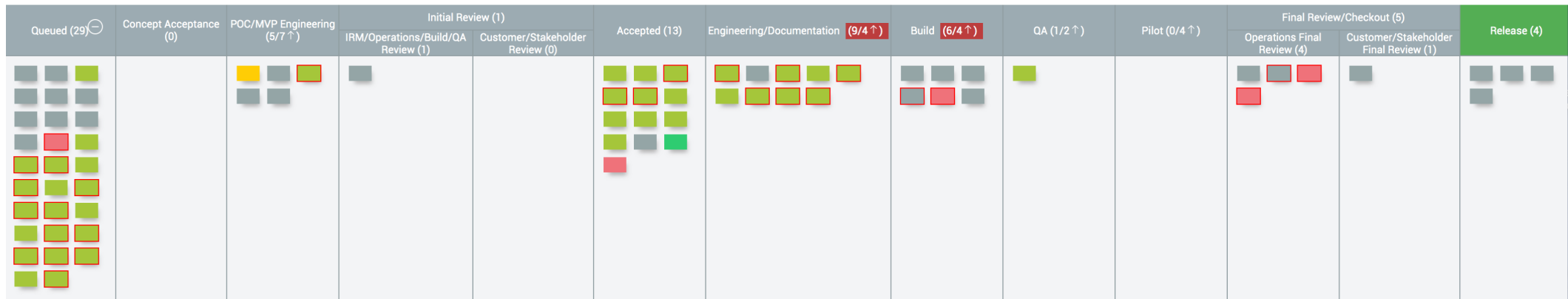
DISCOVERY IS CORE TO INNOVATION



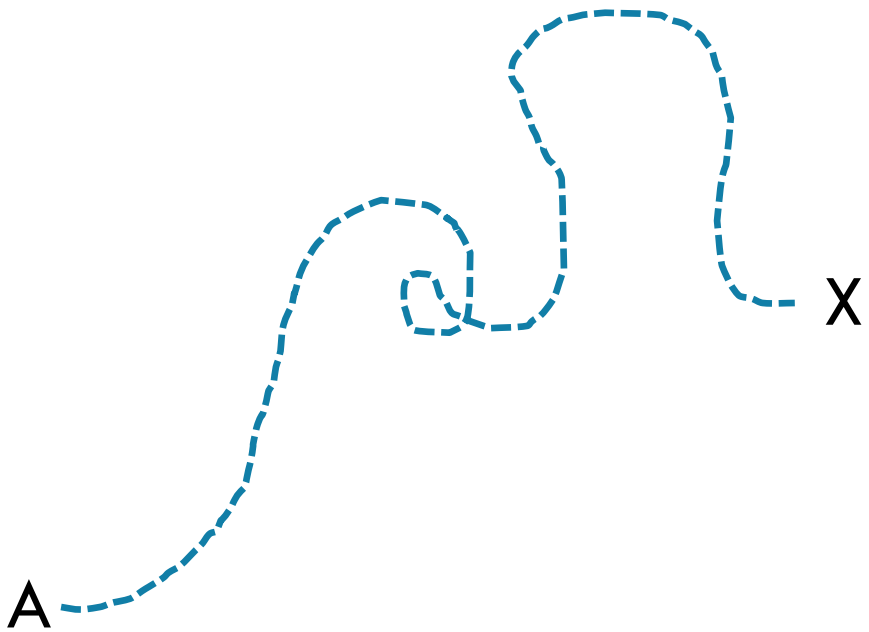
DISCOVERY KANBAN

Discovery

Delivery



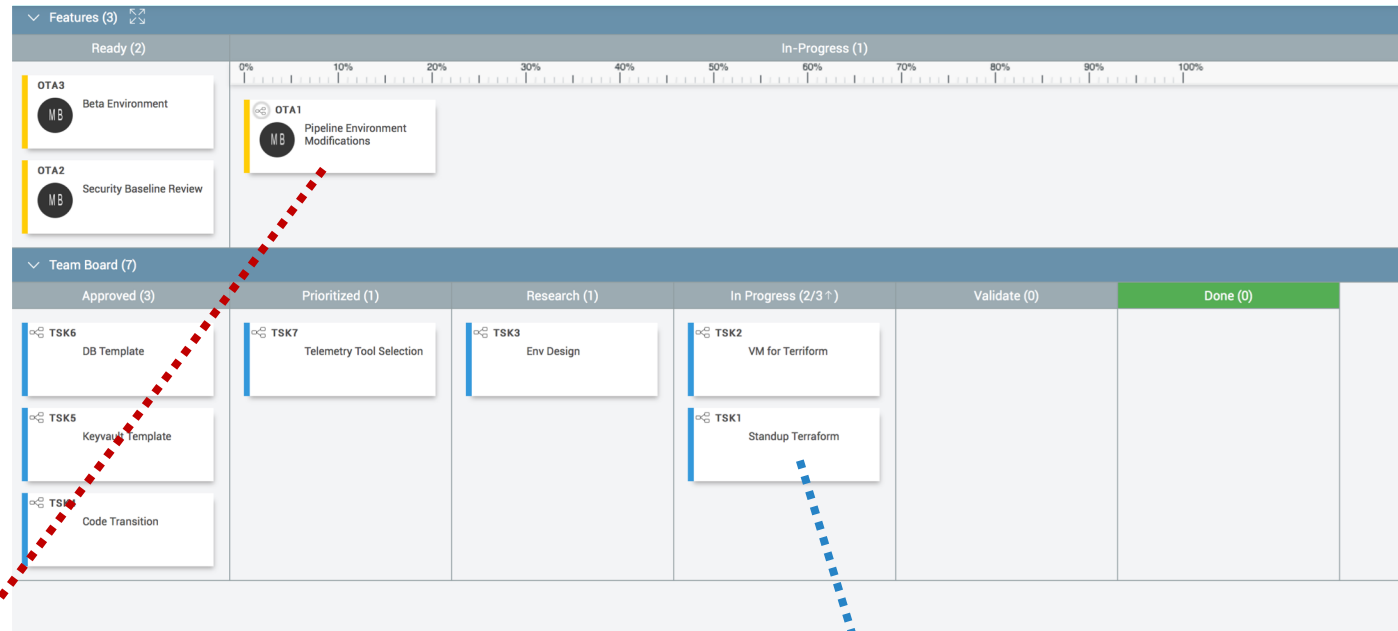
MISSING NARRATIVE?



Goal:	Target Condition:			
<i>This is my overarching goal that I need to attain.</i>	<i>This is the incremental target condition that I need to arrive at.</i>			
Current Condition	Obstacle	Step	Expected	Learned
<i>My current state. What I do know at this time.</i>	<i>Something which is preventing me from getting to my target condition</i>	<i>The step I'm going to take to overcome my obstacle.</i>	<i>What I expect will be the outcome.</i>	<i>What I've actually learned from taking this step.</i>

PRODUCT KATA FOR DISCOVERY

IN PRACTICE



Goal:	Target Condition:			
<i>This is my overarching goal that I need to attain.</i>	<i>This is the incremental target condition that I need to arrive at.</i>			
Current Condition	Obstacle	Step	Expected	Learned
<i>My current state. What I do know at this time.</i>	<i>Something which is preventing me from getting to my target condition</i>	<i>The step I'm going to take to overcome my obstacle.</i>	<i>What I expect will be the outcome.</i>	<i>What I've actually learned from taking this step.</i>

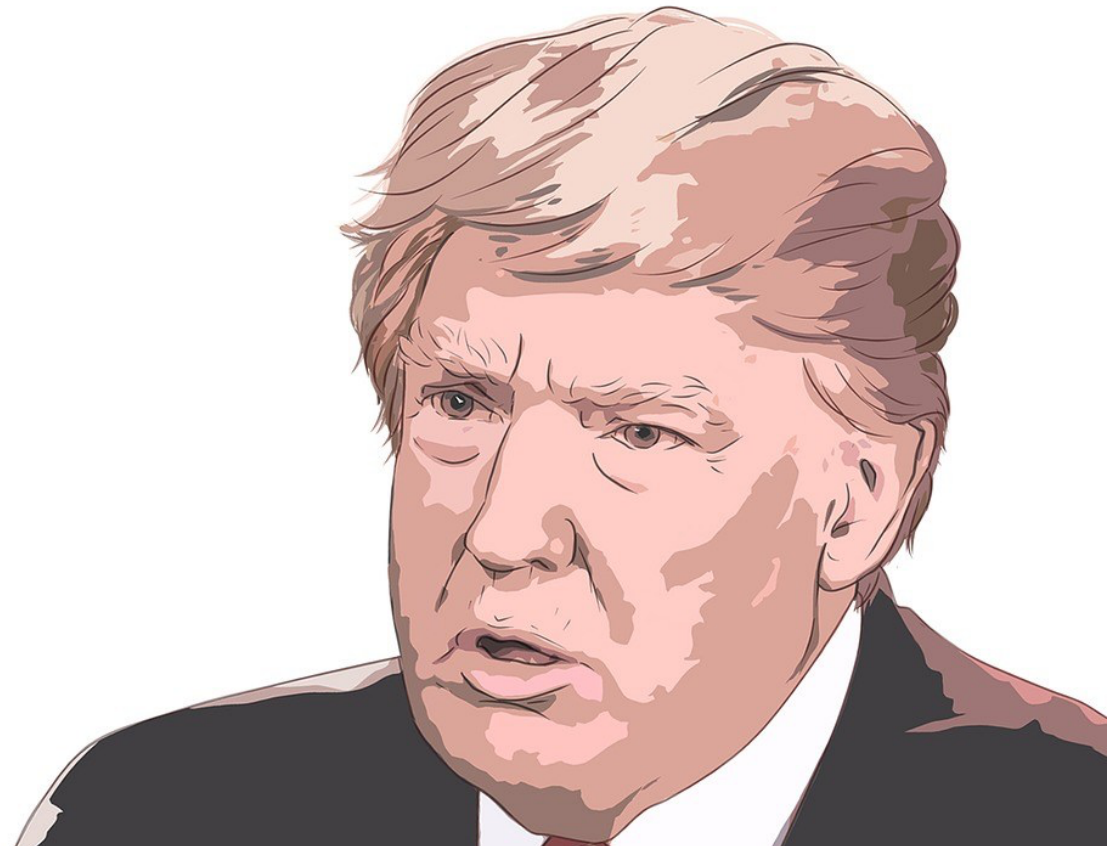
IN PRACTICE

Goal	Target Condition			
X-Large VMs shouldn't cause performance issues	Problem free XL VM sizes made available to requestors			
Current Condition	Obstacle	Step	Expected	Learned
	The customer's use cases are legit.			
	We're going to need a new platform.			
	We've discovered the right platform!			
	Instead of just XL VMs we should host ALL sizes of VMs on this platform!			

PREDISPOSED DISCOVERY



THE LEADERSHIP PATHOLOGY



LEARNING LEADERS



LEADERS LIVE HERE

Goal:	Target Condition:			
<i>This is my overarching goal that I need to attain.</i>	<i>This is the incremental target condition that I need to arrive at.</i>			
Current Condition	Obstacle	Step	Expected	Learned
<i>My current state. What I do know at this time.</i>	<i>Something which is preventing me from getting to my target condition</i>	<i>The step I'm going to take to overcome my obstacle.</i>	<i>What I expect will be the outcome.</i>	<i>What I've actually learned from taking this step.</i>

FEEDBACK

“Thanks so much for posting that Kata! In 20min I was able to get up to speed with why your team made the decisions it did so I could speak in an informed way with my VP on our progress.” – Sr. Director of Cloud Infrastructure

CONCLUSION



FURTHER READING

“Thinking, Fast and Slow” by Daniel Kahneman

“Toyota Kata, Managing People for Improvement, Adaptiveness and Superior Results” by Mike Rother

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

<https://melissaperri.com>

<https://cognitivebreadcrumbs.com>

<https://hbr.org/2018/03/create-a-growth-culture-not-a-performance-obsessed-one>