"Transform All Employees into Scientific Thinkers Connected to True North "

Dan Bergeron
President & CEO

Stéphane Dubreuil
V.P. of Operations

SIGMAPOINT TECHNOLOGIES INC

WHO WE ARE

SIGMAPOINT TECHNOLOGIES INC

Electronic Manufacturing (EMS)

Founded 1999 in Cornwall Ontario

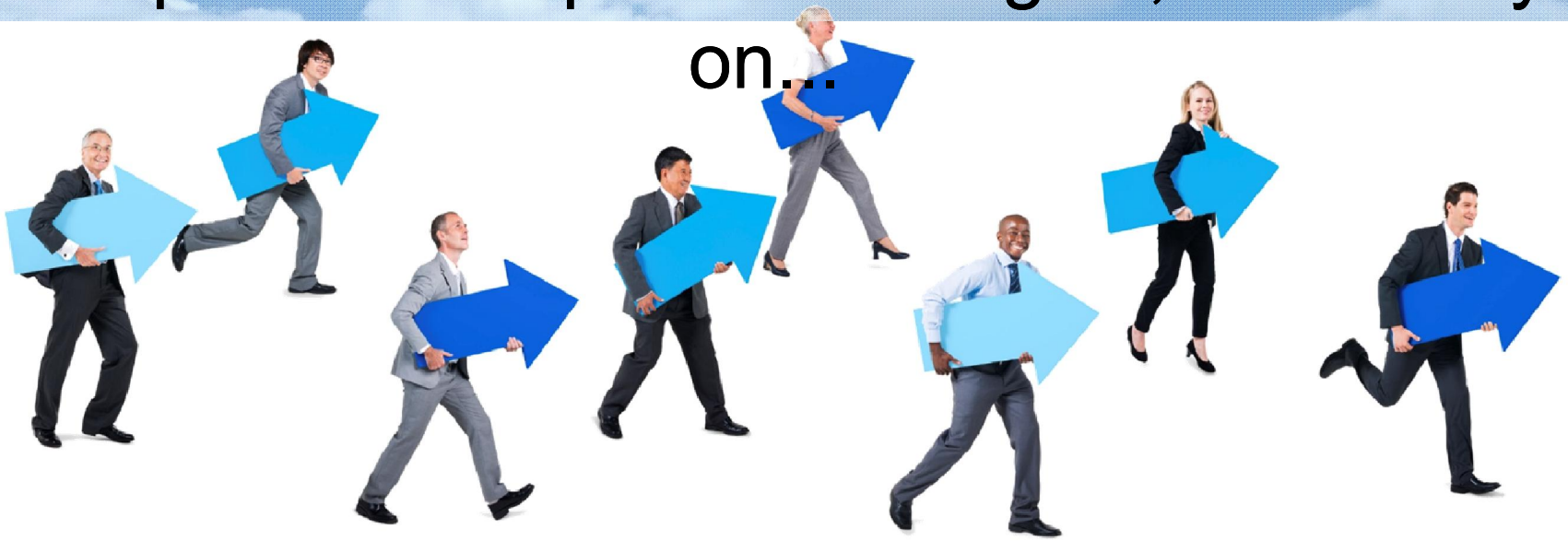
75 million revenue

300 employees

5 SMT lines 24 hours

WE HAVE A DREAM

To continually get better and faster
We are dreaming about not relying on experts to implement corporate strategies, but mainly on…



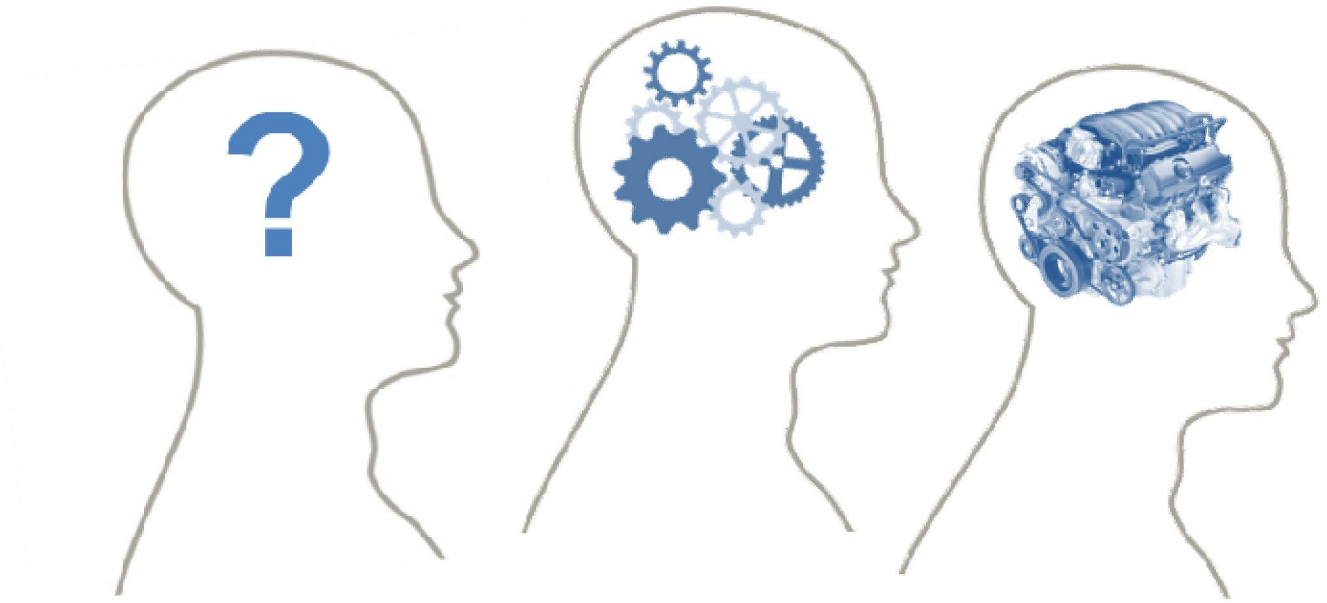
All of Us and Every Day

YOUR TAKE AWAY

Show you how we are learning to connect corporate breakthrough strategies to every employees'

HOW?

By practicing Kata to develop a CI engine in every process of our value streams



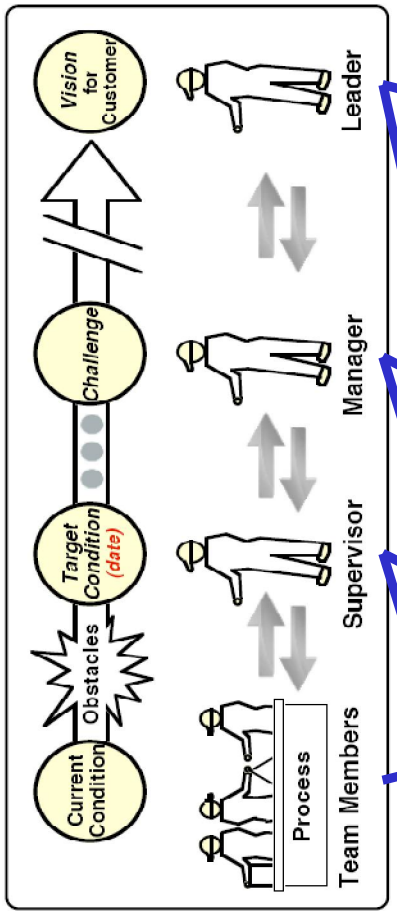
Executions

- An army of scientific thinkers
- In every cells
- Ready to act everyday
- With autonomy

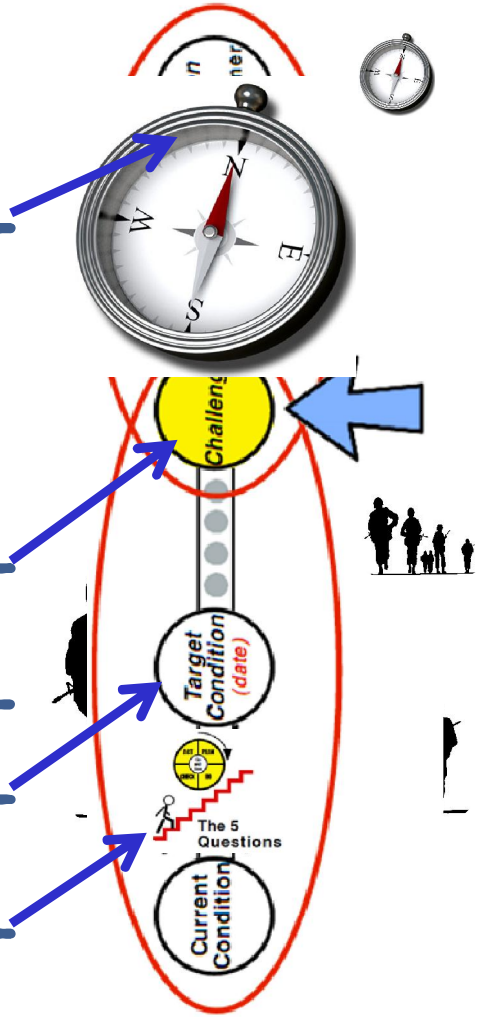
SEVEN LEVELS OF EXPERIMENTS

7 Experiments (PDCA)	
1	5-10 Years
2	3-5 Years
3	Annual BT 1-3 Year
4	First Year initiatives Future State Map VSM
5	(Kata Chalenge) 6 months
6	Kata Target Condition 6 weeks
7	Kata Daily PDCA

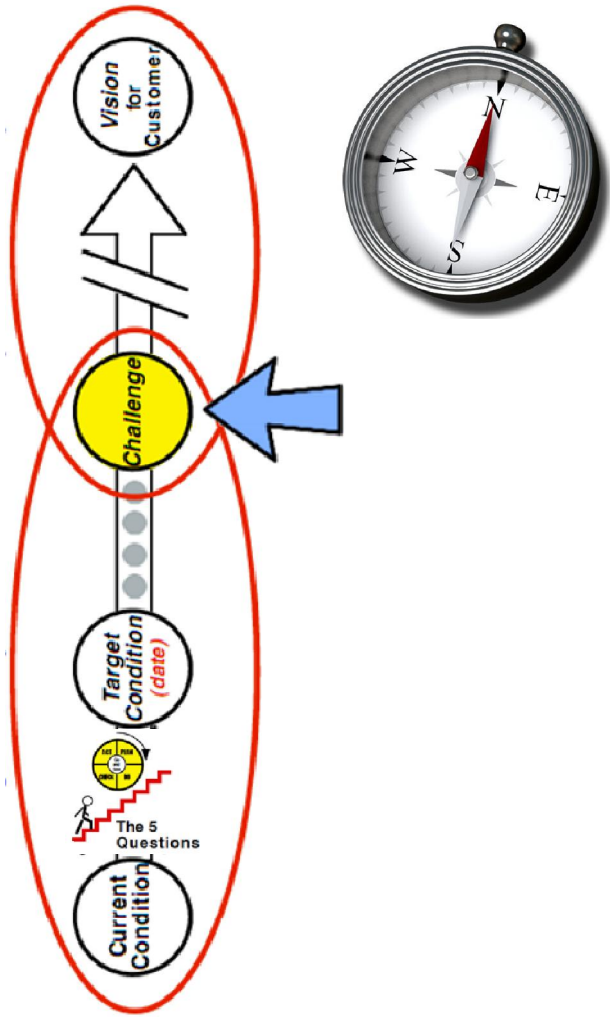
SEVEN LEVELS OF EXPERIMENTS



4 Teams		7 Experiments (PDCA)	
1	Hoshin Team	1	5-10 Years
		2	3-5 Years
		3	Annual BT 1-3 Year
2	Tactical Teams	4	First Year initiatives Future State Map VSM
3	Operational teams	5	(Kata Chalenge) 6 months
4	Action Teams	6	Kata Target Condition 6 weeks
		7	Kata Daily PDCA



VISION: HOSHIN TEAM



SigmaPoint Projects

VISION: HOSHIN TEAM

President CEO

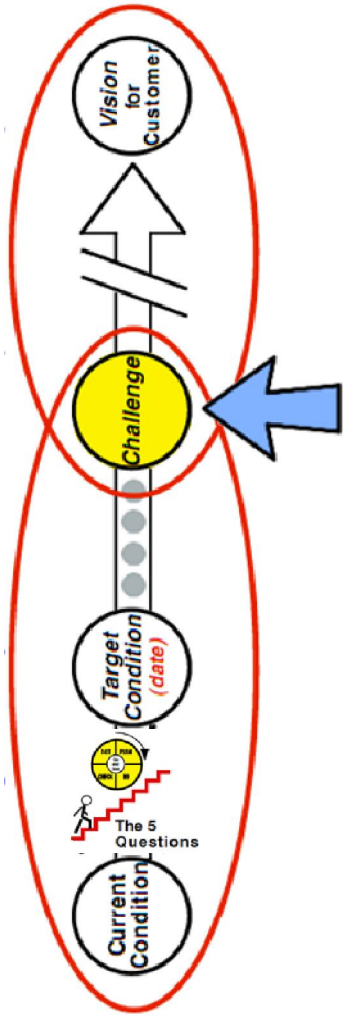
VP Operations

VP Engineering

SigmaPoint Management Process (Creating Strategics & Rapid Changes)				
4 Teams		7 Experiments (PDCA)		
1	Hoshin Team (executive) (Directors)	1	5-10 Years Long-Term Strategy (Executives Council)	True North
		2	3-5 Years Midterm Strategy (Executives Council)	Financial Targets and Process improvement. Scared the competitions
		3	Annual BT 1-3 Year Strategies (Hoshin Kanri team)	Highly concrete plan of action Developing competitive avantage

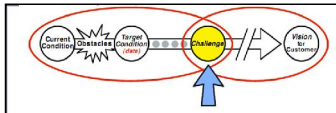
Many companies fail to effectively execute a corporate strategy that will differentiate their organization from its competitors.

CASCADE THE VISION DOWN



Tactical & Operational teams

Operations example: Cascade down (Kata)



SigmaPoint Management Process

(Creating Strategics & Rapid Changes)

4 Teams		7 Experiments (PDCA)		
2	Tactical Teams (Directors) (VS Managers)	4	First Year initiatives Annual Hoshin Future State Map VSM	Concrete initiatives Develop specific new capabilities on business processes
3	Operational teams (VS Managers)	5	Tactics/Process Base Initiatives (Kata Chalenge)	Concrete Projects of 3 to 6 months Apply New technologies & Methodologies to standardized processes of business functions
4	Action Teams (VS Coordonnator) (Grp Leaders)	6	Kaikaku (Kata Target Condition)	Concrete projects of 1 week to 6 weeks Undertaking to apply new tools and techniques in standardized daily work
		7	Kaizen (Kata Daily PDCA)	Problem-solving more or less real time to adress abnormalities that arise in the course of standardized daily work, as well as improvements resulting from employee suggestions

CHALLENGE

Wouldn't it be great if we could

- With the philosophy of "doing" as a form of learning
- Through people development and empowerment
- The organization enable a culture of "new scientists" that will create rapid change at all levels of the organization to meet company goals & vision (True North)

Daily KATA (process)

With the philosophy of "doing"

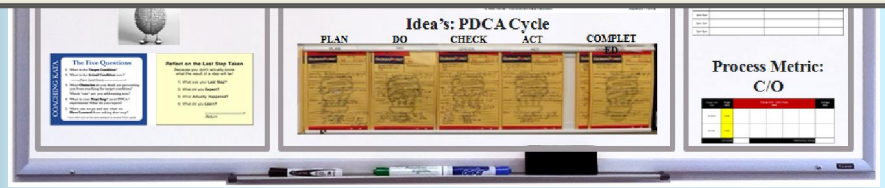
& Kata CI Structure
(6 Critical Elements)

Both Improving by Using

Scientific Thinking Pattern

+

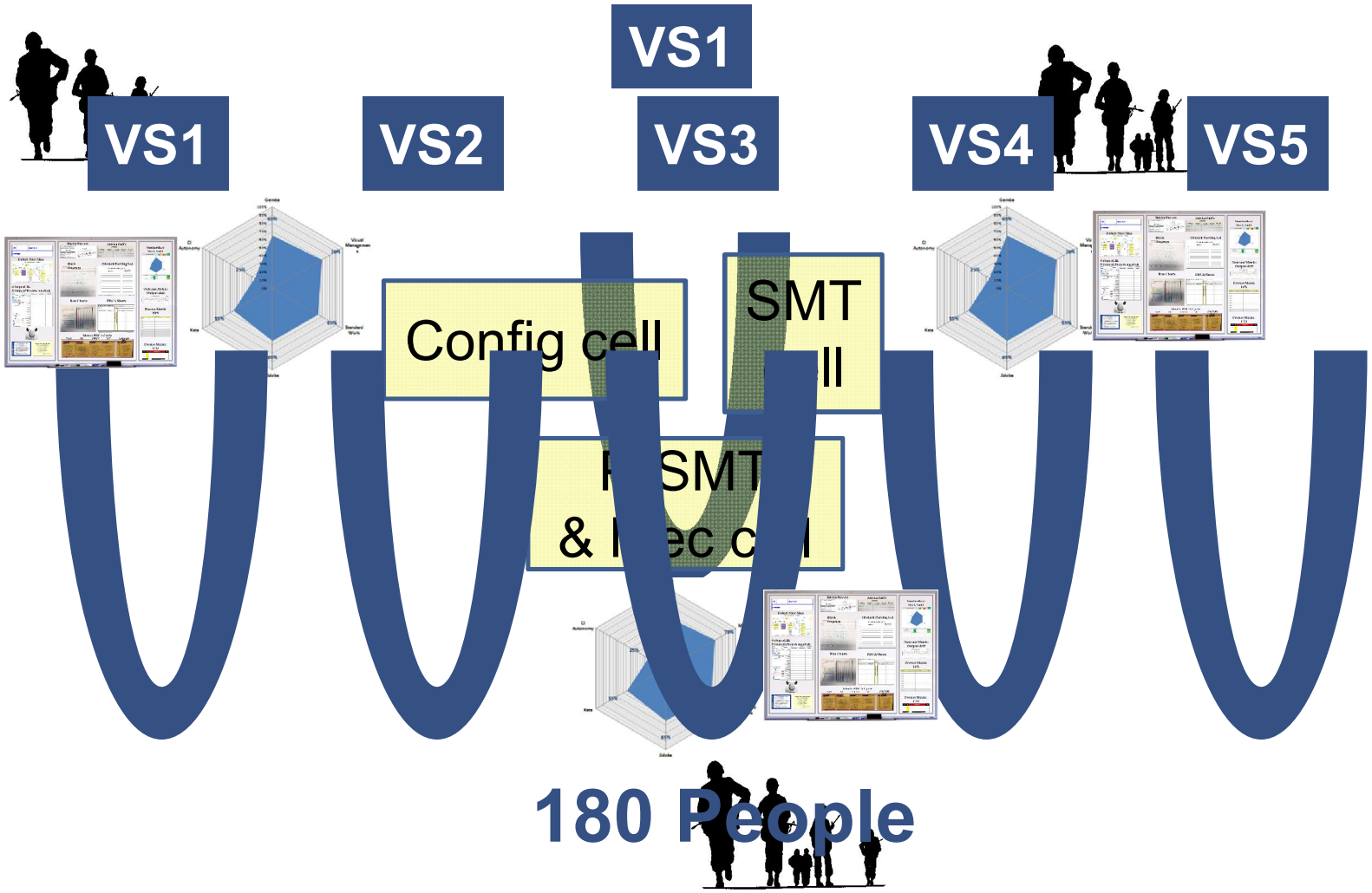
Deliberate Practice (Kata)



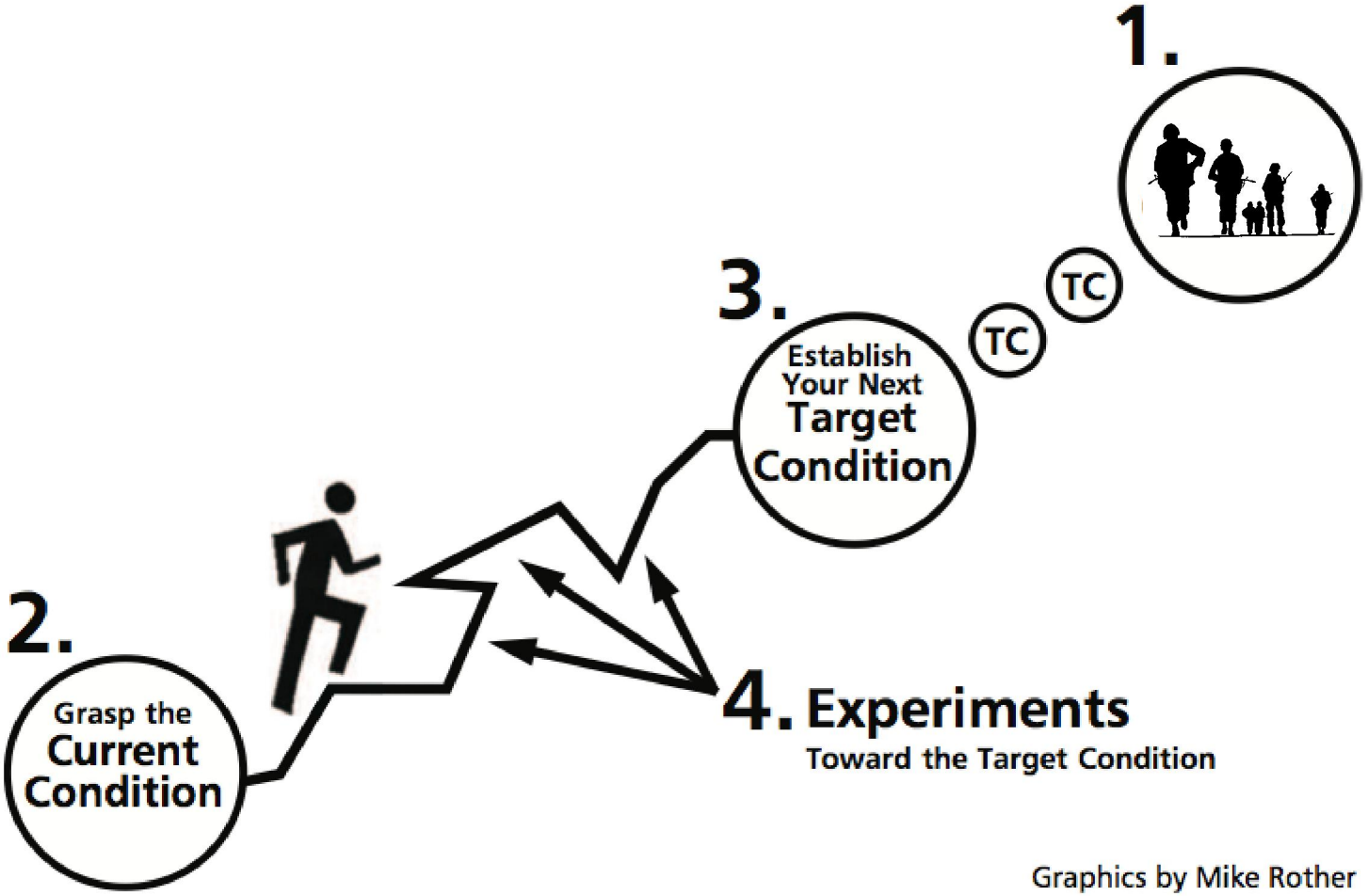
INGREDIENTS OF RAPID CHANGE

Gemba Mgmt. Structure	Do we have a CI management structure in place?
Standard Work	Are the work expectations well defined? Do we know what normal condition looks like?
Visual Mgmt.	Can we visually see the current state? Can we visually see if things are normal or abnormal?
Jidoka concept	Do the operators stop the process for any abnormalities / obstacles? Is the Gemba management team responding to the Jidoka process?
Kata	Do we have Procedural KATA being practiced daily? Has CK & IK expended to operators? Is procedural Kata is connected to True North?
CI Autonomy	Does the cell require external coaching to make all the above happen?

IK ON 6 CRITICAL ELEMENTS



How to create an army of scientific thinkers in every cells



Graphics by Mike Rother

HOW WE MEASURE IT?

WEEKLY AUDITS

AMEDALLAS2016

PDCA

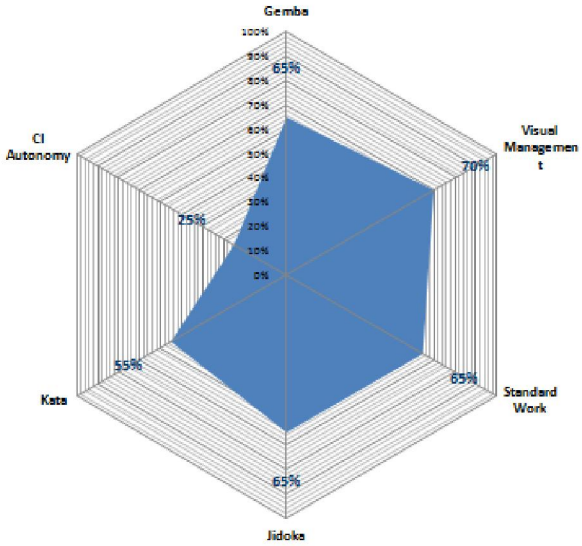
SCORE	SEC	Standardized Work – Cell Audit Shee	VS	1	Cell	Post SMT
			Owner	Fred G.	Date	13-Oct-15
	Level	Checking Item	■■	■■	Score	Suggestions for improvement
Gemba Management	L1	Gemba team in place (Day Shift - VS Manager, Coordinator & Group Leader)	■■	■■	■■	
	L2	R&R have been clearly define by functions (deployed)	■■	■■	■■	
	L3	Floor run's deployed - up to date	■■	■■	■■	■■ add quality & Cell throughput
	L4	Team actively using CI Tools (Visual Management, 5 gemba principles, Std. Work Package)	■■	■■	■■	5 Gemba Principles missing
	L5	Gemba Team actively coaching all levels including operators.	■■	■■	■■	Use PDCA cycles to coach operators
Visual	L1	Key points in cell requiring Visual Management identified	■■	■■	■■	Link floor runs to visual identification points
	L2	Visual indicators for key points in place	■■	■■	■■	
	L3	Visual indicators actively reviewed - normal from abnormal takt timer, material points, mach. indicators, safety, quality	■■	■■	■■	■■
	L4	Management regularly responds to visual indicators to achieve standard operating conditions	■■	■■	■■	
	L5	Cell auto responds to visual indicators to achieve standard operating conditions	■■	■■	■■	Standard Work required
Standard Work	L1	Takt units & time displayed in cell (Takt Time, # Shifts, # oper.)	■■	■■	■■	
	L2	Jobs are broken down into JIB and employee's trained. Training plan active with cross training targets (TRAINING MATRIX)	■■	■■	■■	
	L3	Current operating pattern has been established with standard work charts up to date.	■■	■■	■■	■■
	L4	Cell has been trained to standard and can identify when abnormalities occur (Jidoka & Visual Management)	■■	■■	■■	
	L5	Cell & group leader sustains Standard Work based on abnormalities and or opportunities identified	■■	■■	■■	
Jidoka	L1	All key visual management indicators are clearly visible in cell (Takt Timer, Kanbans, work sequence, safety checkpoints etc.)	■■	■■	■■	
	L2	Operators in cell demonstrate clear understanding of Standard Work and can identify abnormalities.	■■	■■	■■	
	L3	Cell regularly pulls card based on abnormalities (no problem is a problem)	■■	■■	■■	■■
	L4	Group leader regularly responds to card pulls and follow 5 Gemba Principles	■■	■■	■■	
	L5	Jidoka pulls are integrated into Kata practices with idea cards generated to solve abnormalities	■■	■■	■■	
		Procedural daily kata - Challenge (VSM) & Target Conditions				

VS1 - Post SMT

Key (Change font and shading)

On Track | <5% Miss | >5% Miss

Cell SCORE (Bauler): 58%



Obstacle / Action	Owner	Running Impact	Due Date	21	22	23	24	25	26	27	28	29	30	31	32	Status
Link visual indicators to floor run	Fred G	53%	01-Nov-15			X										On Track
Add quality & throughput to group leader floor run	Fred G	53%	01-Nov-15			X										On Track
Need updated standard work for ACC & KCI	Fred G	53%	01-Nov-15			X										On Track
Implement PDCA to operator buddy system	Fred G	53%	01-Nov-15			X										On Track

PDCA Check

SCORE	55%	Standardized Work - Cell Audit Sheet	VS		1		Cell	SMT
			Owner		Fred G		Date	04-Jan-16

	Level	Checking Item	0.25	0.50	0.75	1.00	Score		Suggestions for improvement (Actions)
Kata	L1	Procedural daily kata - Challenge (VSM) & Target Conditions defined	0.25	0.50	0.75	1.00	1.00		
	L2	Procedural daily kata - 5 Steps of process analysis in process	0.25	0.50	0.75	1.00	1.00		
	L3	Procedural daily kata - Step 4 of IK practice (Working through obstacles with PDCA iterations	0.25	0.50	0.75	1.00	1.00	80%	
	L4	Procedural daily kata- CI pull system in place at Kata board (JI, Std. Work & Jidoka)	0.25	0.50	0.75	1.00	0.50		
	L5	IK & CK kata expanded - Learner has extended IK & CK to operators	0.25	0.50	0.75	1.00	0.50		
Cell Autonomy	L1	Operators autonomously produces based on level load signals Example:(Heijunka, Lot formation, GOR etc.)	0.25	0.50	0.75	1.00	1.00		
	L2	GL & or Coordinator (cell first line of support) has exceeded 2.0 on the Improvement Kata Proficiency Assessement	0.25	0.50	0.75	1.00	0.50		
	L3	Operators & GL continously update all standard work & JIB in cell based on oppurtunities and obstacles learned (Jidoka)	0.25	0.50	0.75	1.00	0.00	30%	
	L4	Operators in cell conduct regular PDCA through the Kata / Idea cell board	0.25	0.50	0.75	1.00	0.00		
	L5	Operators in cell act as learners in the Kata coaching cycle with GL acting as coach's	0.25	0.50	0.75	1.00	0.00		

PDCA Ajust (act)

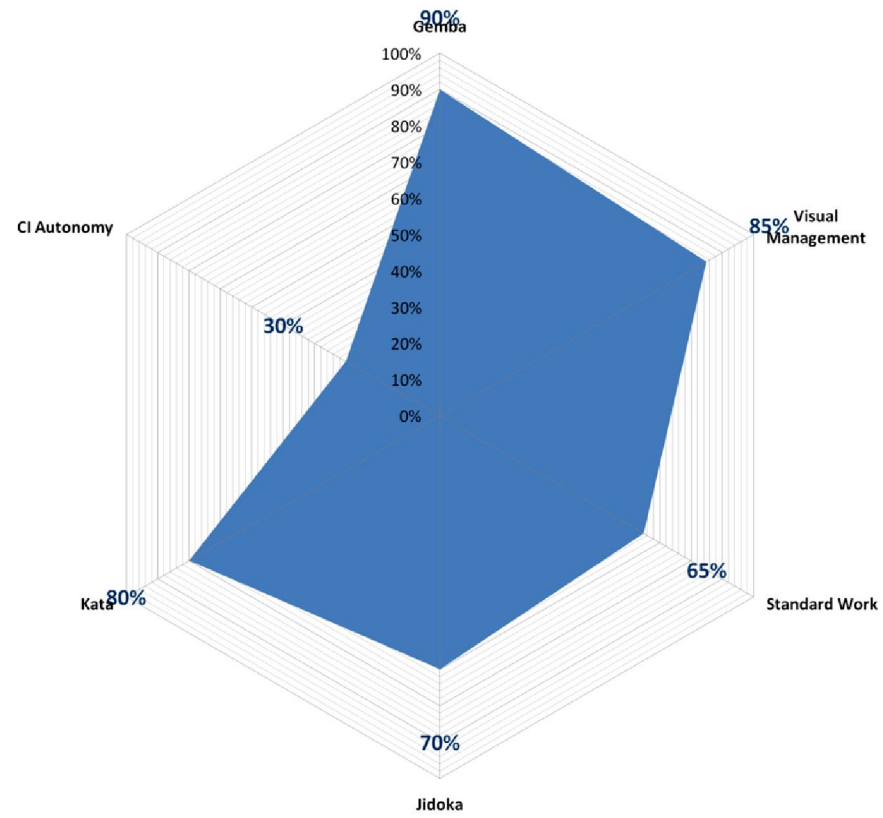
Policy Deployment Action Plan		Challenge	VS2 - Create/improve Full CI Structure in all Cells (Office , SMT, PSMT, Mec...cells)		
Owner	Nathalie Drennan	Organization	Operation VS2	Revision Date	January-19-16
Review Team	Nathalie, Jordan, Karen, Rob, Stephane			Next Review	?
Situation Overview	With the philosophy of "doing" as a form of learning, through people development and empowerment, the organization creates a culture of "new scientists" that will enable rapid change at all levels of the organization to meet company goals & vision (true north).				Status Key
					Not Started
Objective	Overall VS std work audit (Gemba, Visual Management, Std Work, Jidoka, Kata, Cell autonomy) result from 25% to > 60% by June 1, 2016				Completed
Overview	Cell Autonomy VS std work audit result from 25% to > 60% in by June 1, 2016				On Track
Notes	SMED down to 20 minutes, AB SMT utilization = 39% (from current 68%), AB Post utilization = 7% (from current 20%)				Behind
					Problem

Obstacles	Owner	Running Impact	Due Date	2016 Planned Date (Shade): Complete: X												Status
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
SMT - Involve operators in PDCA	Karen	35%		x												Completed
All cells - Operators are not always pulling the cord for all abnormalities	Karen	48%														On Track
All Cells - Standard Work Charts needed	Karen-Jordan-Nat	48%														On Track
Office - no audit being completed	Nathalie	48%		x												Completed
Breakout VSM - Map current state for office	Nathalie/Rob	48%	07-Mar-16													On Track
Define R&R for all office positions - Output = R&R checklist	Nathalie	20%	05-Feb-16													On Track
Post-SMT - Involve operators in PDCA	Jordan	30%		x												Completed

THE EXPERIMENTS

VS1 - SMT

Key (Change font and shading)			Cell SCORE (Bowler)	70%
On Track	<5% Miss	>5% Miss		

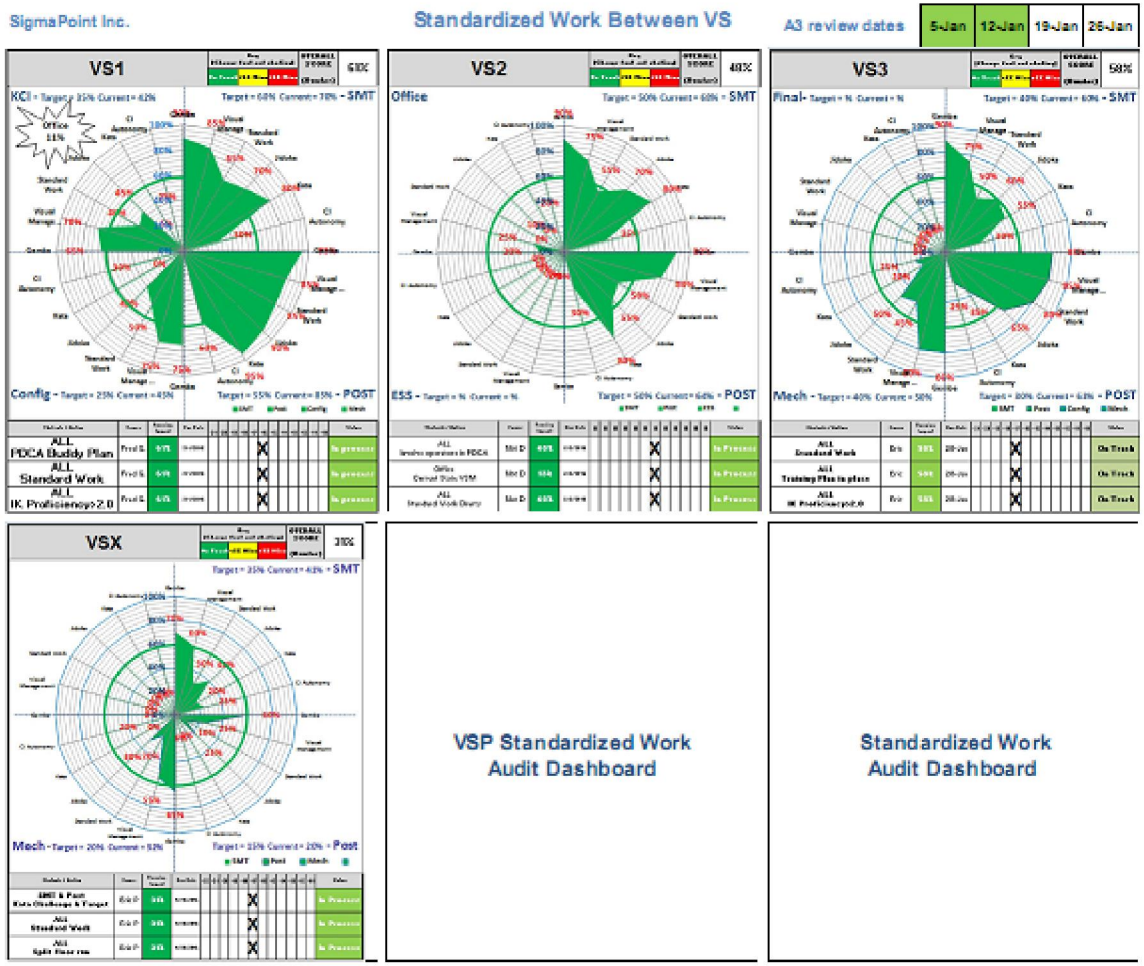


Obstacle / Action	Owner	Running Impact	Due Date	-19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	Status
Increase visibility of 5 Gemba principles From: Floor run protection To: Obstacle / PDCA	Fred G.	70%	01-Feb-16				X									In Process
Increase operator involvement in PDCA's Strict adherence to PDCA cycles	Fred G.	70%	01-Feb-16				X									In Process
Complete Standard Work Charts Zones & Part Exhaust	Fred G.	70%	01-Feb-16				X									in Process

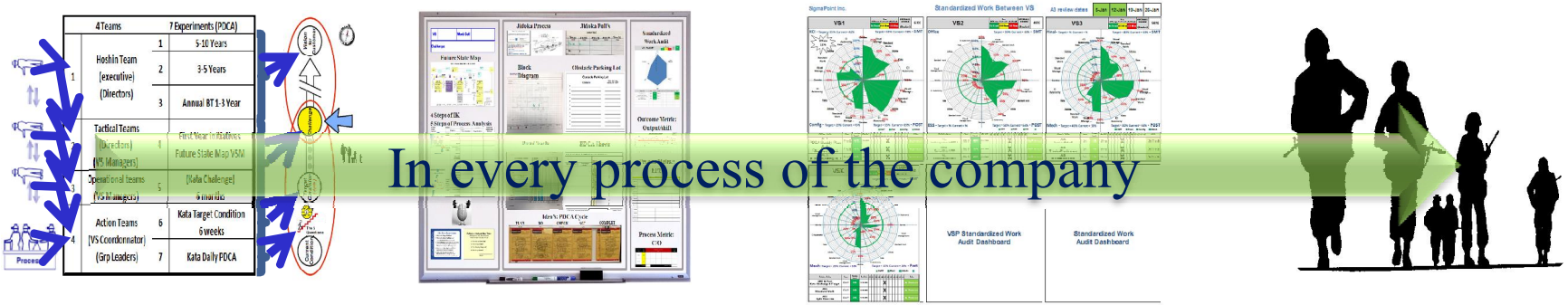
PDCA

Plan & Do

A3 review

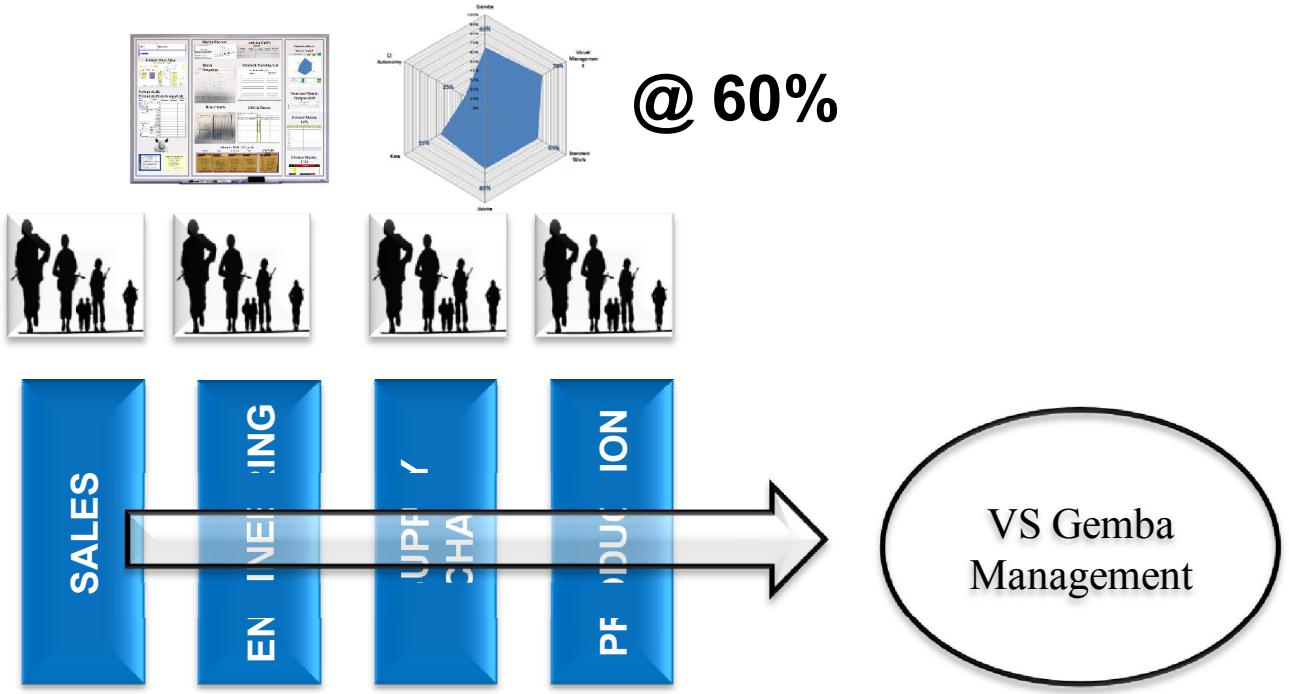

SigmaPoint Inc.
Standardized Work Between VS
A3 review dates
5-Jan
12-Jan
19-Jan
26-Jan
VS1
VS2
VS3
VSX
VSP Standardized Work Audit Dashboard
Standardized Work Audit Dashboard

Cultural Enabler



WHAT'S NEXT

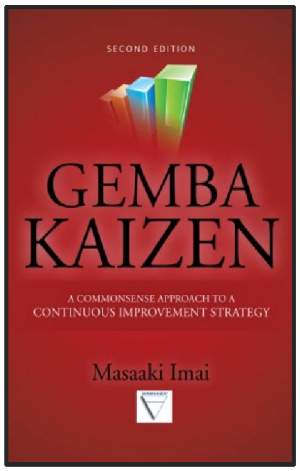
What our company plan to do next?

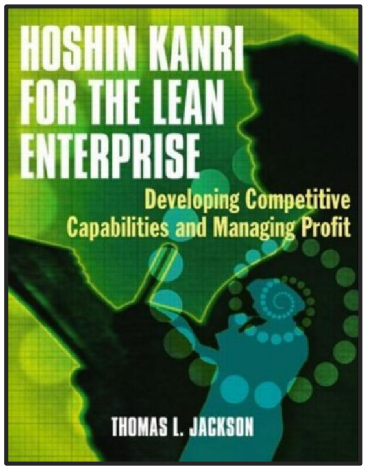


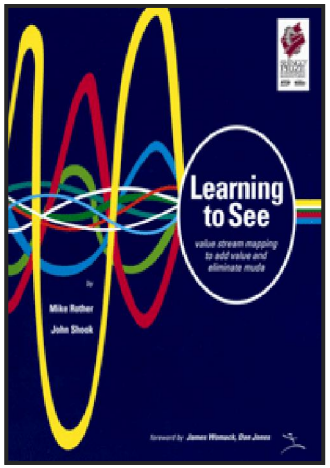
IN 12 MONTHS

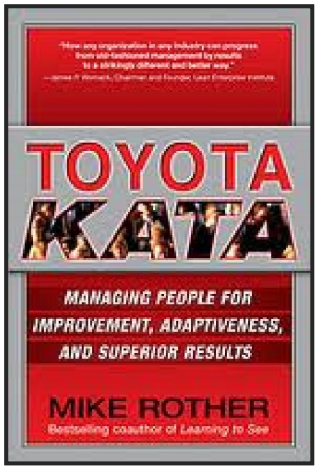
How connected Kata practice can affect your life?

SIGMAPOINT TECHNOLOGIES INC









Thank You!

Your opinion is important to us!

Please take a moment to complete the survey using the conference mobile app.

ThP/44

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Sdubreuil@sigmapoint.com