



# Toyota's Obeya Management System Day 1

*TOYOTA'S ENGINE FOR LEADERSHIP  
& OPERATIONAL EXCELLENCE*

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## WHAT WE WILL COVER IN OUR TIME TOGETHER TODAY

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- **Introductions and Objectives**
- **The Philosophy behind Toyota Management Approach**
- **Management by Objective vs. Management by Exception**
- **Abnormality Management**
- **Leadership Roles Ideal Daily Management**
- **True North, Standards, Problems, Kaizen and Hoshin**
- **The Four Types of Problems**
- **Introduction to Obeya Management**
- **Obeya Culture**
- **Types of Obeya**
- **Obeya Layouts**
- **Obeya Management and Visual Management**
- **Your Questions**
- **Reflections**



# Understanding Toyota's Management Philosophy



## A Company in Crisis 1950

- Large numbers of employees were laid off due to the worst sales in Toyota's history
- Labor unrest and conflict with management
- Kiichiro Toyota, the Founder of Toyota Motors, resigned and handed over control to Taizo Ishida.
- Toyota had to rebuild mutual trust through one-on-one communication between management and team-members



**Workers rally in front of the former head office**

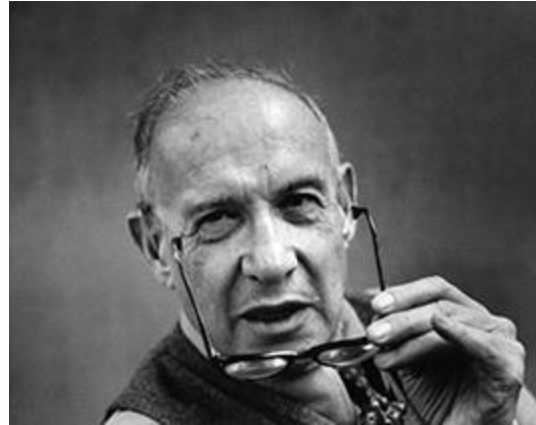


## Kiichido Challenges Eiji Toyota

- During WWII, Kiichiro's JIT Flow production system was completely dismantled by the government
- Following the WWII and prior to the outbreak of the Korean War, Eiji Toyota was brought over from Toyoda Boshoku (Toyoda Automatic Loom Works) to take over and revive the Toyota Motor Manufacturing Corporation
- While working in the machine shop, Eiji recruited Taiichi Ohno to work under him to improve the efficiency of operations in order to meet challenge of productivity.
- Eiji studied the Ford Production System under Henry Ford II around 1950.
- "Bring up Toyota's workers to American Standards of Productivity."  
Kiichiro's
- Taiichi Ohno used Industrial Engineering methods introduced to Japan by Ueno Yoichi and pioneered by Frank and Lillian Gilbreth and to discover that the difference is that Japanese workers and American workers, is that they have too much waste in their work!



## Drucker on Profit

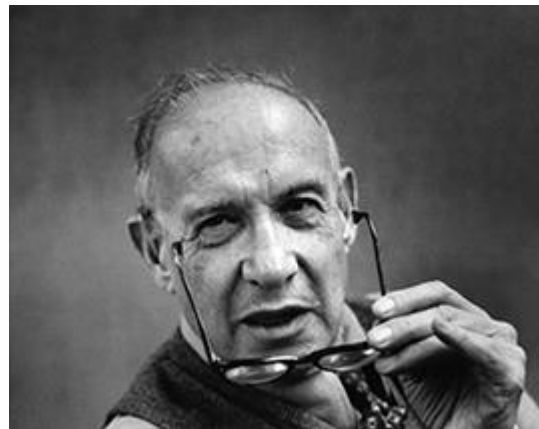


**“The Purpose of a Business is to create a customer.”**

**“A business must make a Profit in order to survive.”**



## Dr. Peter Drucker on Value



**“A product is not quality or of value because it is hard to make and cost a lot of money. Customers pay only for what is of use to them and gives them value. Nothing Else Constitutes Value!”**





**Customer First;  
Built-in Quality with Ownership**

**DNA = “Quality Must Be Build-  
in at Every Process”**

**JKK Mandate: Build an Operational Structure  
that Guarantees Quality is Created by  
Every Process**



# The Basic Purpose of Toyota's Management was Formed on the Foundations of TPS, TWI, & TQM



- Because of the devastating events of the 1940's and 50's, for Toyota, survival is their number one priority.

***We are reminded by Dr. W. Edwards Deming that “change is not mandatory and survival is not essential.”***

- 1. The Company:** *Toyota must make a profit in order to continue to exist.* After the post-war bankruptcy, Profitability in order to secure Toyota's survival became a core value in its culture
- 2. The Employees:** Security for the Workforce
- 3. Society:** Contribute to the betterment of the community and country you are located in. Strive to become a “beloved” part of the community
- 4. The Dealers and Customer:** Provide our customer the Highest Quality product, at the lowest possible cost, in the shortest possible time



## Our Strategic Pillars – Culture of Collaboration





## Toyota's Profit Formula

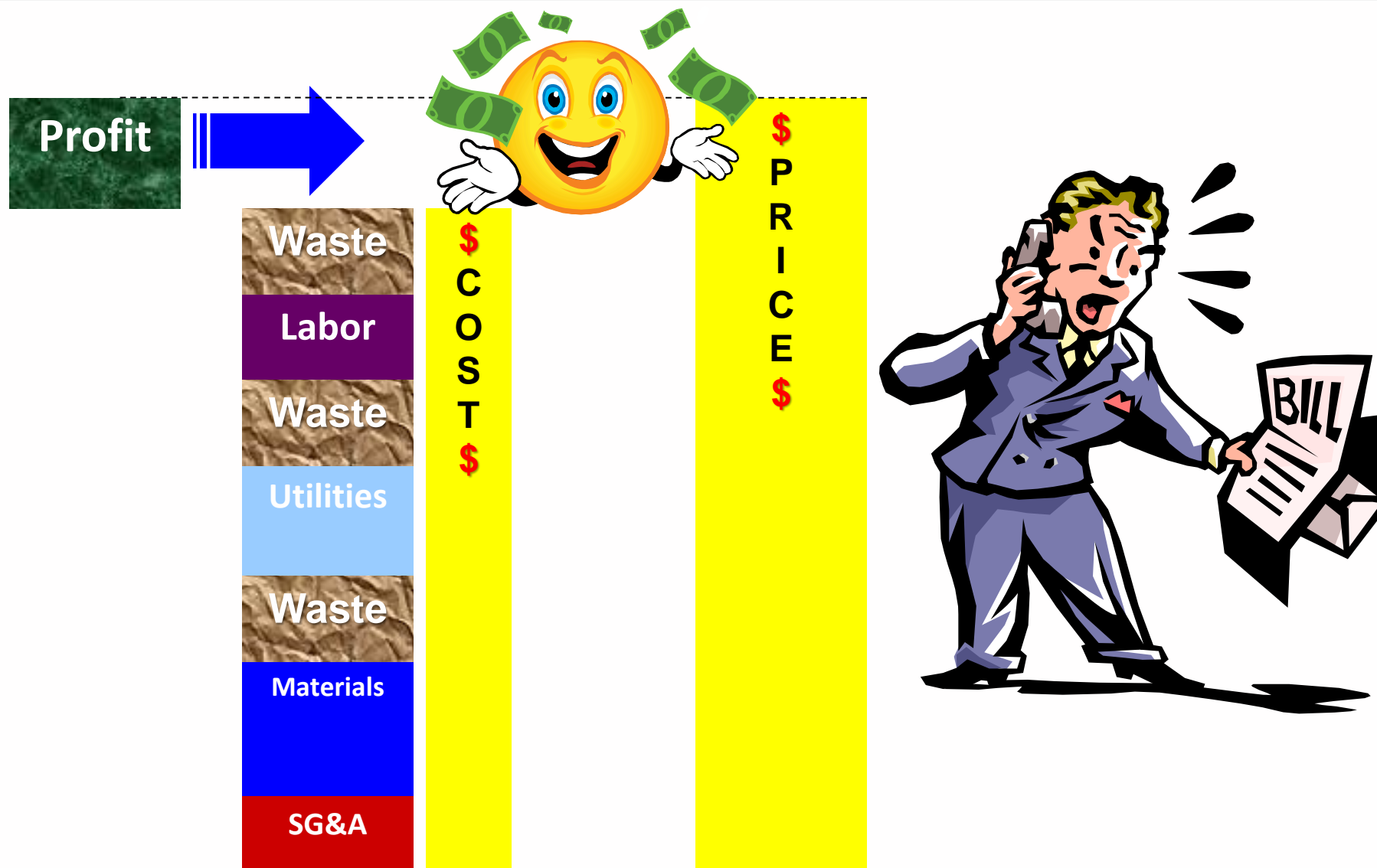
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$$\text{Profit} = (\text{Sales Price} - \text{Cost}) \times \text{Volume}$$

- The sales price of a product is determined by the customer and market. In addition, customers demand yearly price reductions and have come to expect special incentives.
- In order to maintain margins and profits and acquire new customers, we must master this formula.
- If we do not, we will price ourselves out of our market and threaten our survival as a company.



# Cost Plus: Price = Cost of Goods Sold + Profit

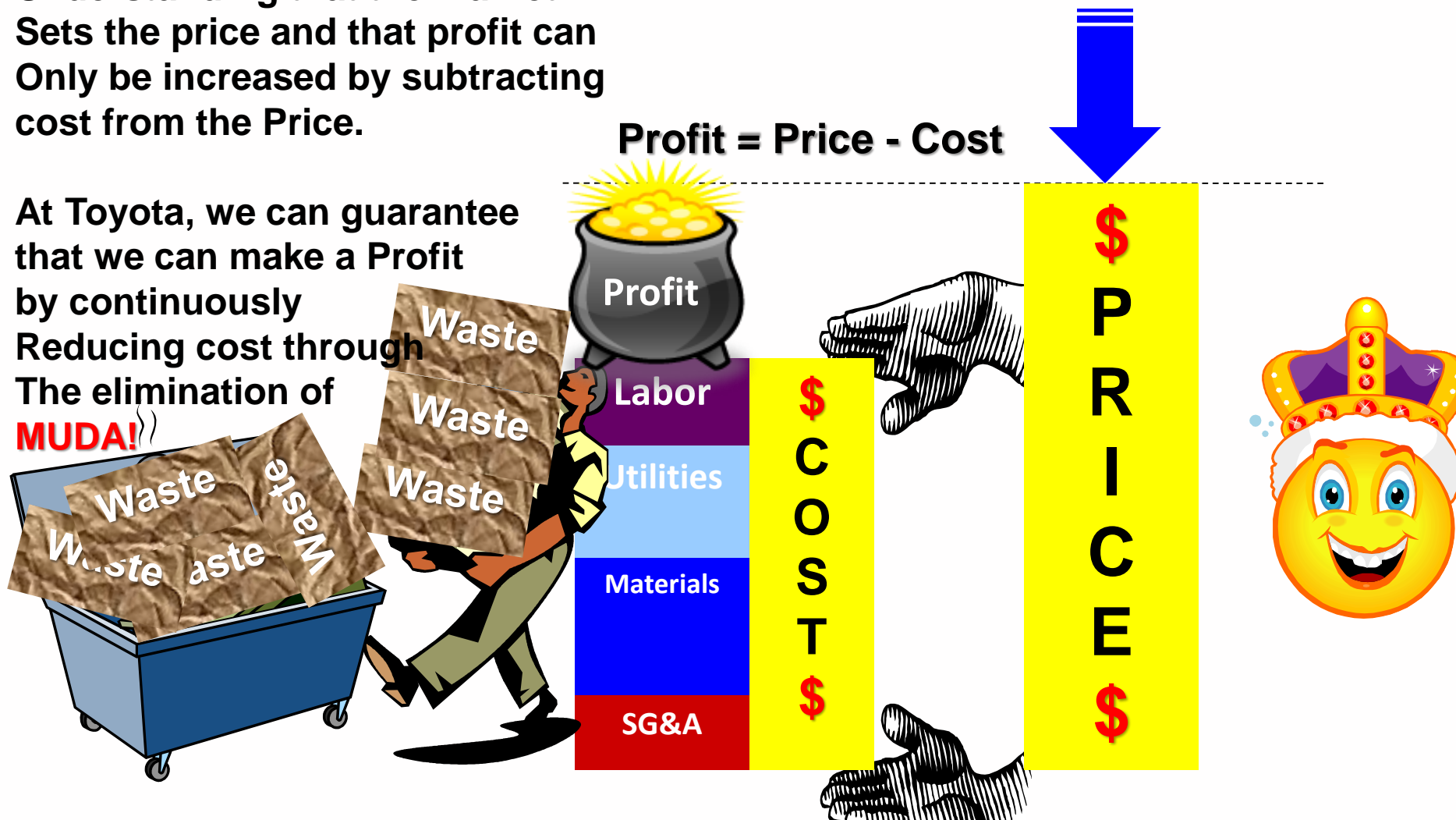




## Toyota Operates from Price Minus

Price – cost thinking begins by Understanding that the market Sets the price and that profit can Only be increased by subtracting cost from the Price.

At Toyota, we can guarantee that we can make a Profit by continuously Reducing cost through The elimination of **MUDA!**



**Toyota believes the Waste Elimination is the way to  
Increase Profit**

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**Toyota believes:  
‘Without Waste Reduction  
there cannot be **true** cost  
reduction. Without cost  
reduction there cannot be a  
**profit increase!**’**

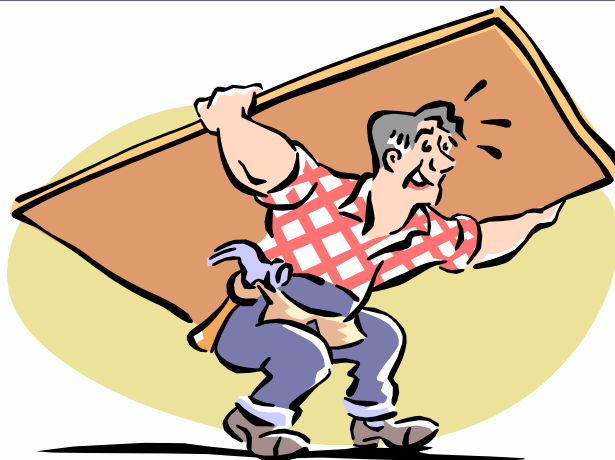


## Muda, Muri, Mura

**Muda:** Any form of waste in the

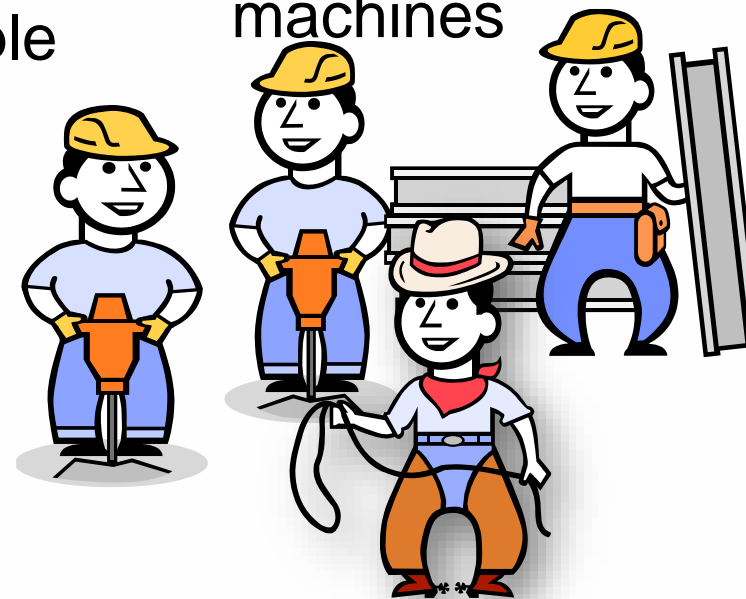


**Rejects**



**Muri:** Unreasonable burden on people or machines!

**Mura:** Uneven or unlevel workloads across people or machines







## The Three Levels of Muda

The Japanese language has four written alphabets: Romaji (English characters); Hiragana; Katakana; and Kanji.

- **Muda expressed in Hiragana** is considered **work-level** waste and should be eliminated through “point kaizen”
- **Muda expressed in Katakana** is process and **system level** waste and requires root cause investigation and deliberate recurrence prevention countermeasures to eliminate the waste.
- **Muda expressed in Kanji** is **Management Waste!** This is waste created by poor leadership, poor decisions, and poor policies. This form of waste requires deep Hansei and recurrence prevention countermeasures to eliminate this Chief Form of Waste. ***Remember, the shop-floor is a reflection of this form of waste!***



## Waste Reduction is Lead-Time Reduction

- Toyota defines Lead-time from the time when the customer places the order, this includes production planning, manufacturing, logistics, and receivables processing, and ends when payment is received and posted in Toyota's account.
- Lead-time is made up of two components:
  - **Processing Time** which adds value
  - **Stagnation Time** which adds cost, ties up cash, and erodes customer satisfaction
- Reducing stagnation time is the key to reducing Lead-time



## Ohno on Lead-time Reductions as a Strategy

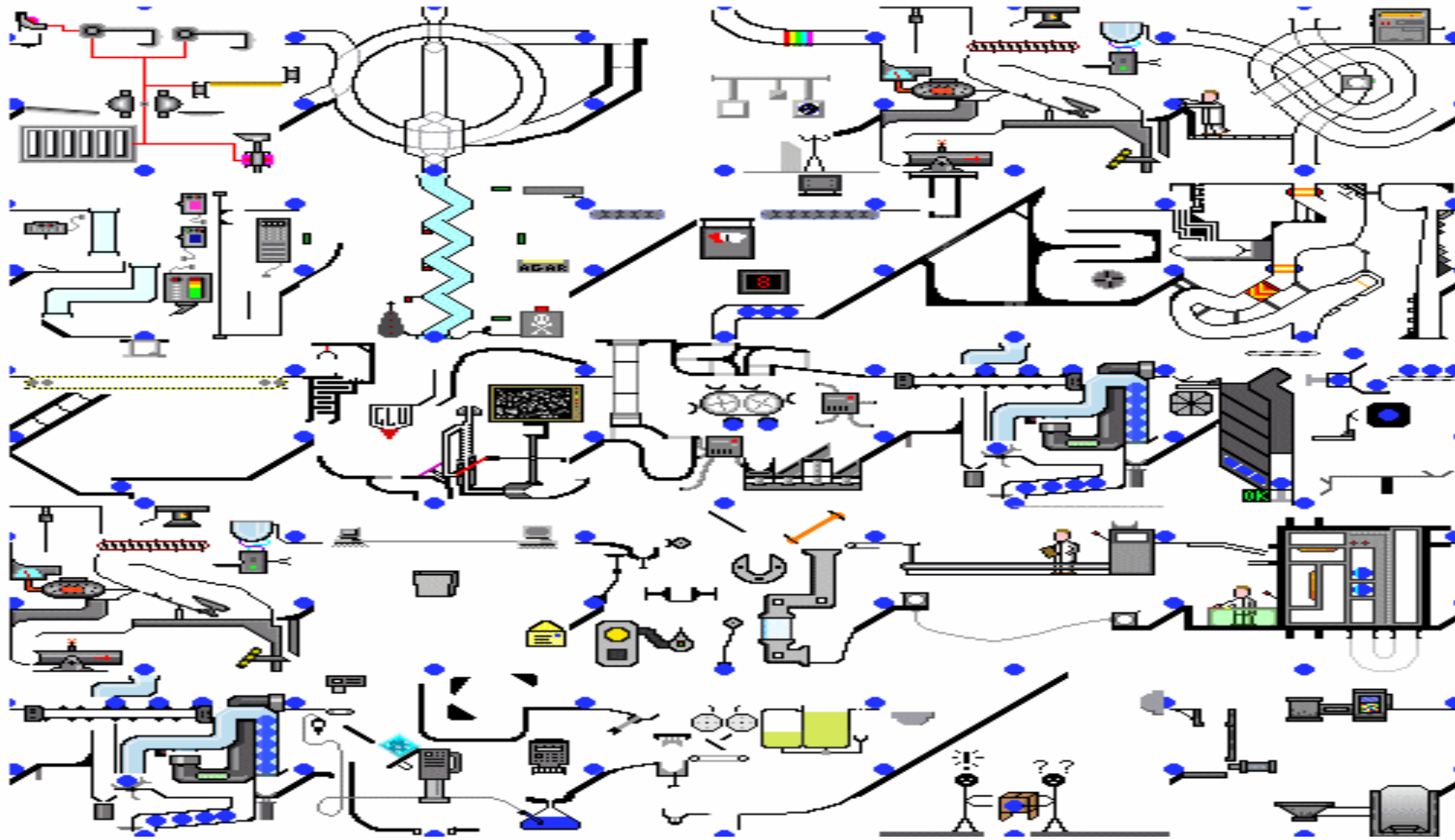


**Taiichi Ohno, founder of TPS, said it even more succinctly:**

*“All we are doing is looking at the time-line from the moment the customer gives us an order to the point when we collect the cash. And we are reducing that time-line by removing the non-value-added wastes.”*

— Taiichi Ohno, 1988

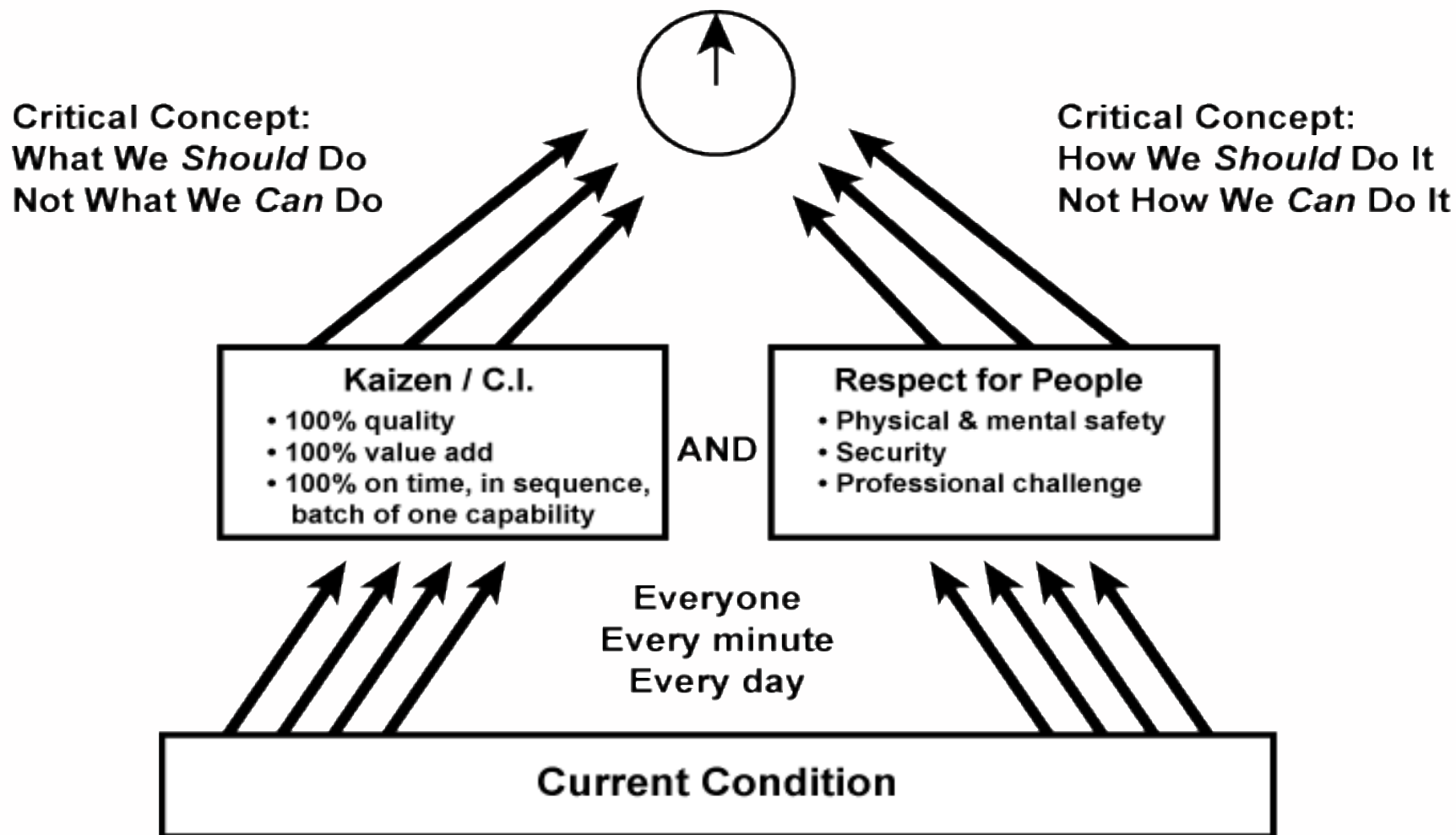
# And Toyota assumes that there is Muda, Muri, and Mura Everywhere!





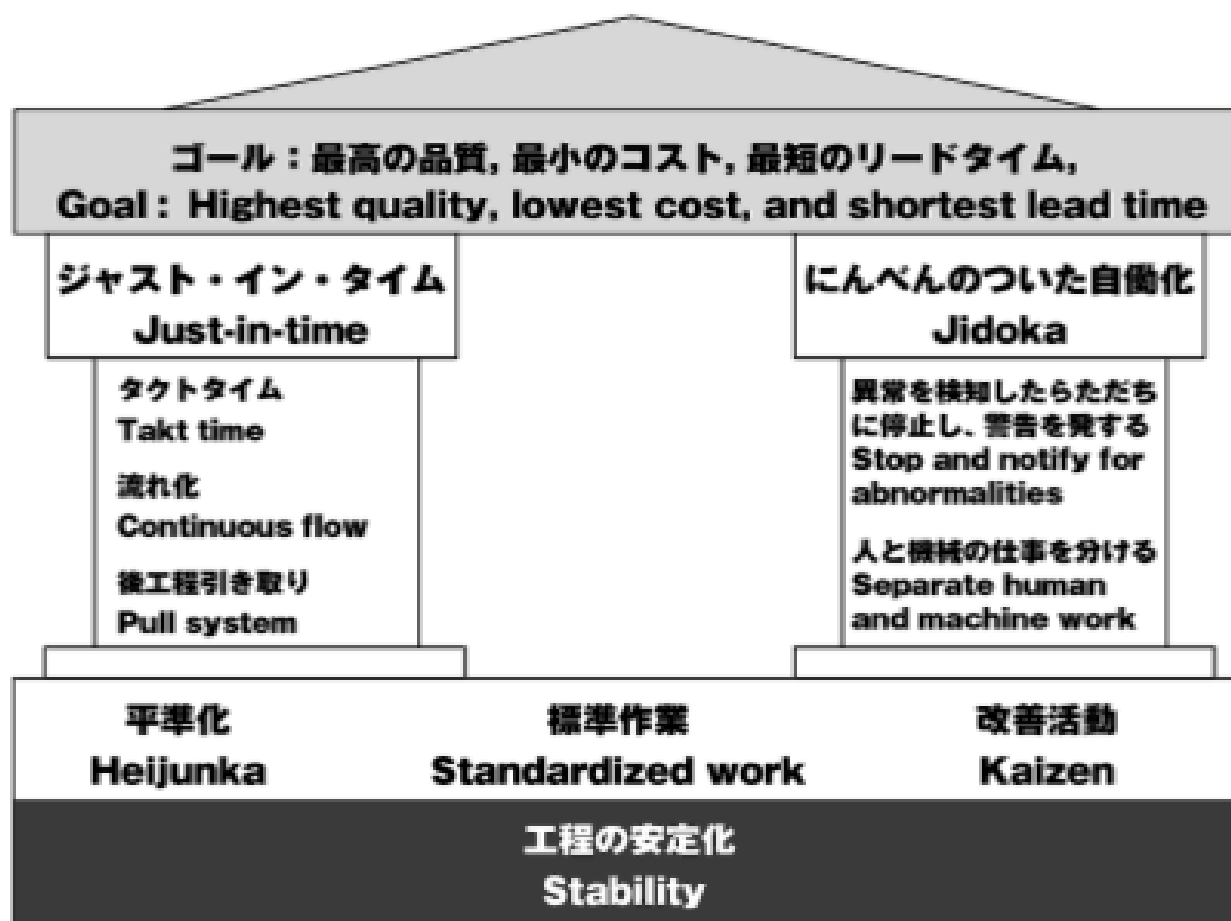
## So What is True North? Is it Hoshin?

### *Arubeki Sugata / Ideal State*





# TPS – Toyota's Operation System



トヨタ生産方式の基本のイメージ：TPSハウス

Basic Image of the Toyota Production System: the TPS House



## Learning To See

In order to eliminate waste, **You need to change how you look at things;** you must develop eyes to see waste.

**You must change the way you think.** Think of how you can “relentlessly” eliminate the waste that you see. Eliminate Muda, Muri, and Mura Completely.

**You must continuously repeat this process, forever and ever, neither tiring nor ceasing.”**



**Taiichi Ohno – Father of the Toyota Production System**







## The Obeya and the Leader's Role in Creating Culture

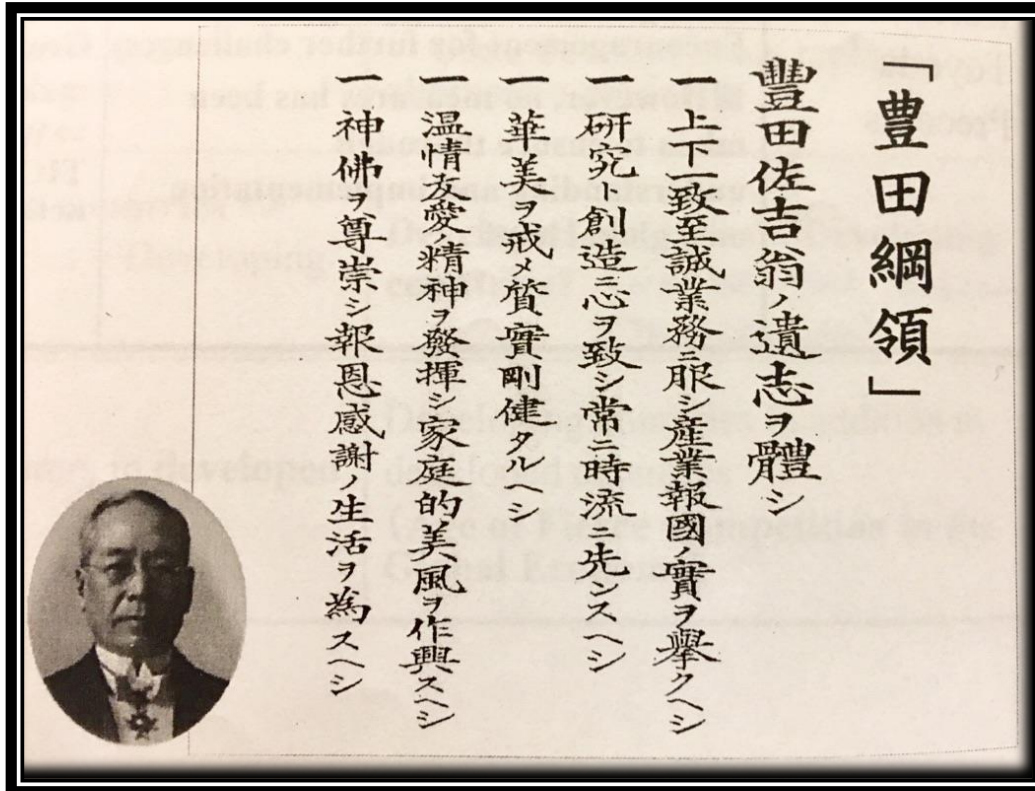


***“The most important work a leader will ever do, one which cannot be delegated, is to build a sustainable culture of excellence, based on principles.”***

***- Robert Miller  
Principle Advisor, Arches Leadership LLC***



## Founder, Sachichi Toyoda's Five Precepts



1. Always be faithful to your duties; thereby contributing to the Company and to the overall good.
2. Always be studious and creative, striving to stay ahead of the times.
3. Always be practical and avoid frivolousness.
4. Always strive to build a homelike atmosphere at work that is warm and friendly.
5. Always have respect for God and remember to be grateful at all times.



# The Toyota Way Of Management




# Toyota's Global Management Philosophy and Approach

## Toyota's Management System

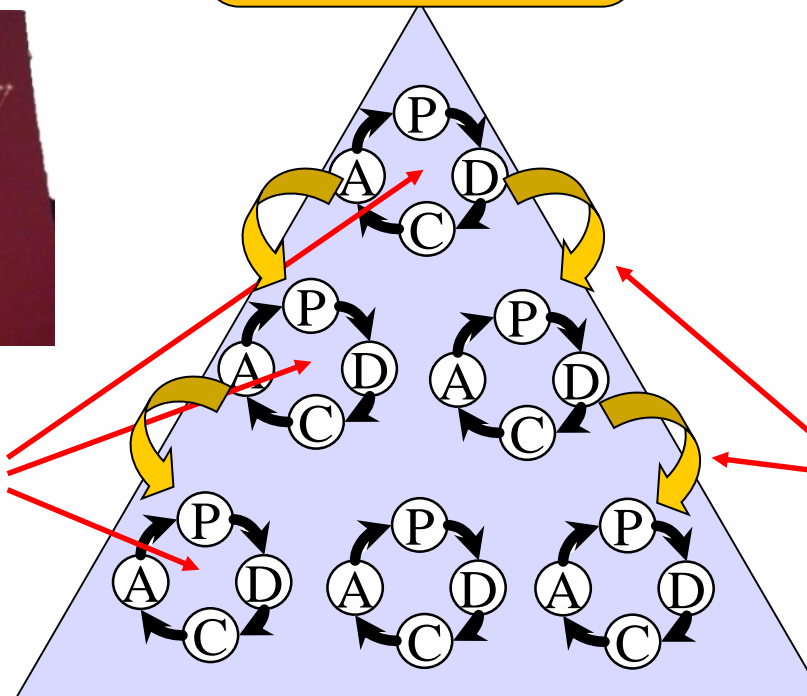


2. Toyota Business Practices (TBP)

3. Hoshin Kanri

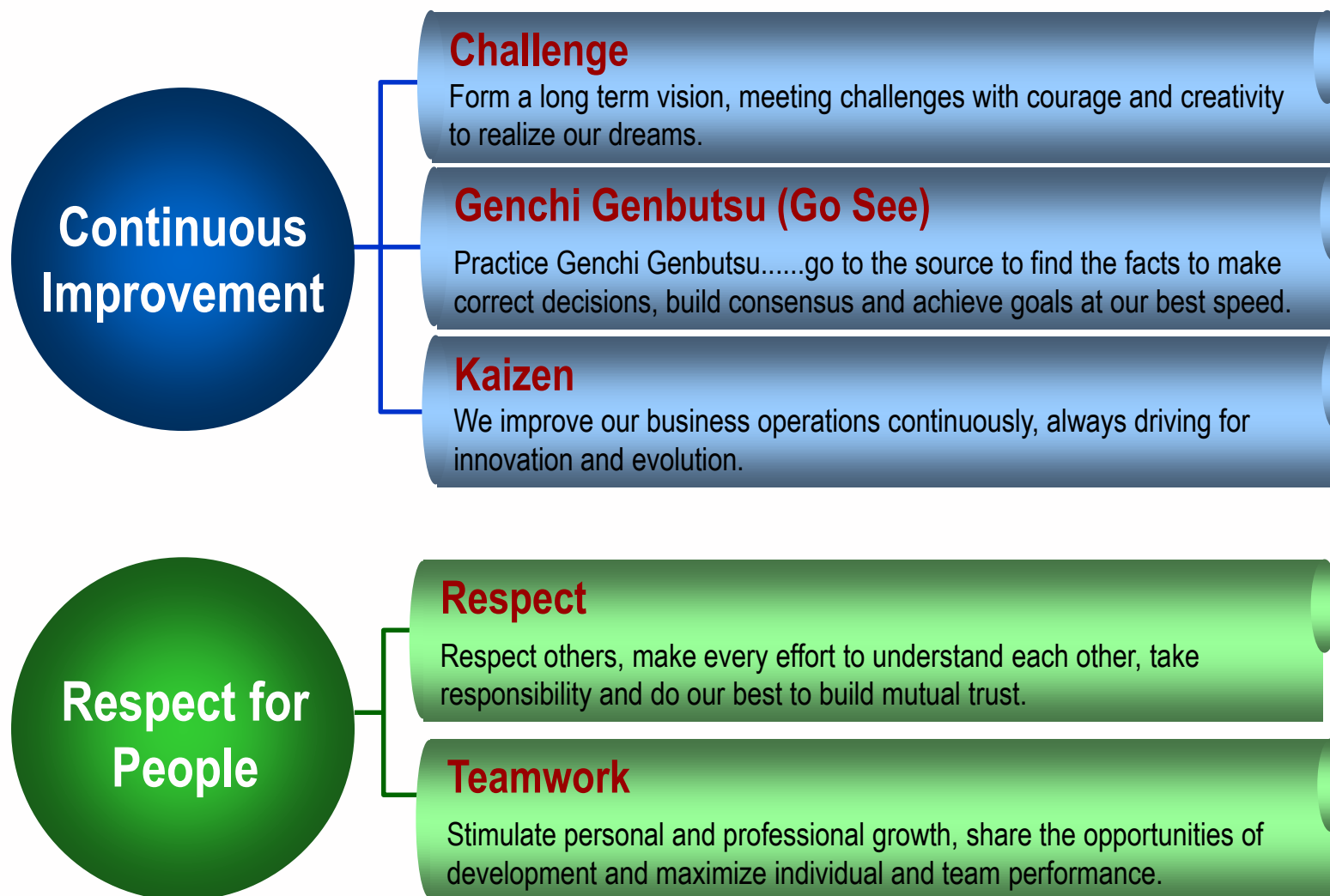
4. On-the-Job Development (OJT)

1. Toyota Way 2001



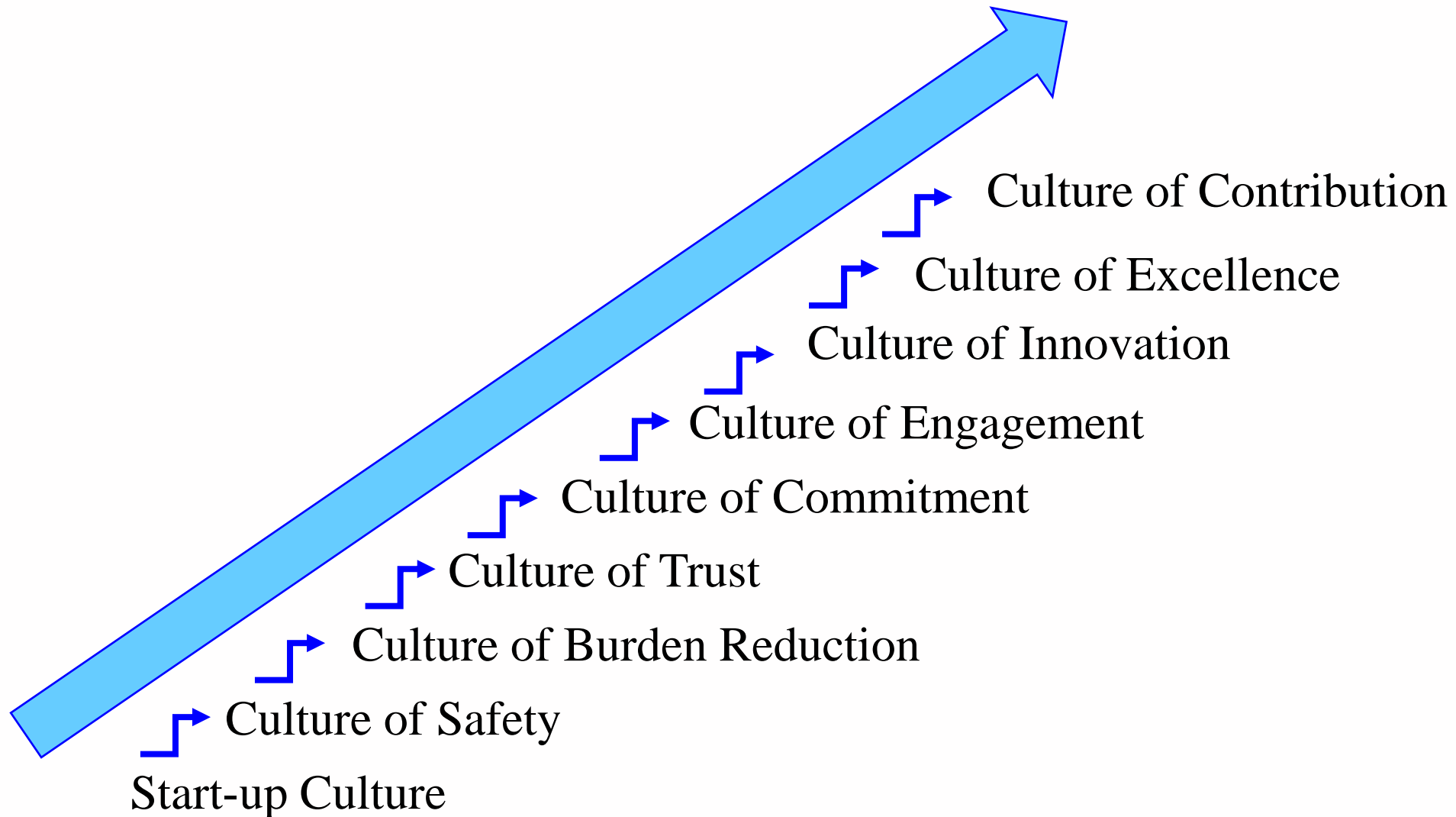


# The "Real" Toyota Way Starts with Our Core Values





## Use the Obeya System to Build Your Culture







## Leading the Toyota Way

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**“Our basic pillars of the Toyota Way is Respect of People and Continuous Improvement and that’s really the foundation we do our daily work from.”**

**Jeff Hurst, Manager, Powertrain, TMMK**



# The Toyota Way and Sakichi's Precepts Redefined at TIEM

## TIEM CORE VALUES

- 1 Respect for People**

Associates: Our associates are our most valuable and appreciable assets.  
Safety: Our priority is protecting the safety of our associates and customers.  
Develop: It is our responsibility to provide development and growth opportunities for our associates.  
Diversity: We believe that diverse backgrounds and perspectives spark innovation.  
Community: It is our privilege to be a responsible and active member of our community.
- 2 Customer Focused**

Expectations: It is our passion to exceed our customers' expectations internally and externally.  
Quality: We are committed to producing the highest quality products.
- 3 Embrace and Drive Change**

Challenges: We are never satisfied with the status quo and welcome new challenges.  
Passion: We view change positively, and we are passionate about constantly moving forward.
- 4 Teamwork and Family Spirit**

Collaboration: We believe that success is exponential through collaboration.  
Atmosphere: We believe that peoples' best work is cultivated in an atmosphere that is warm and friendly.  
Humility: We will always demonstrate humility through our words and our actions.  
Partnership: We regard our suppliers as essential members of our team.
- 5 Professional Excellence**

Commitment: It is each associate's pledge to fulfill their duties with excellence.  
Grow: We expect that each associate will seek to constantly grow and improve.

**TOYOTA**  
INDUSTRIAL EQUIPMENT

## TIEM CORE VALUES

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**Teamwork and Family Spirit**

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**Professional Excellence**

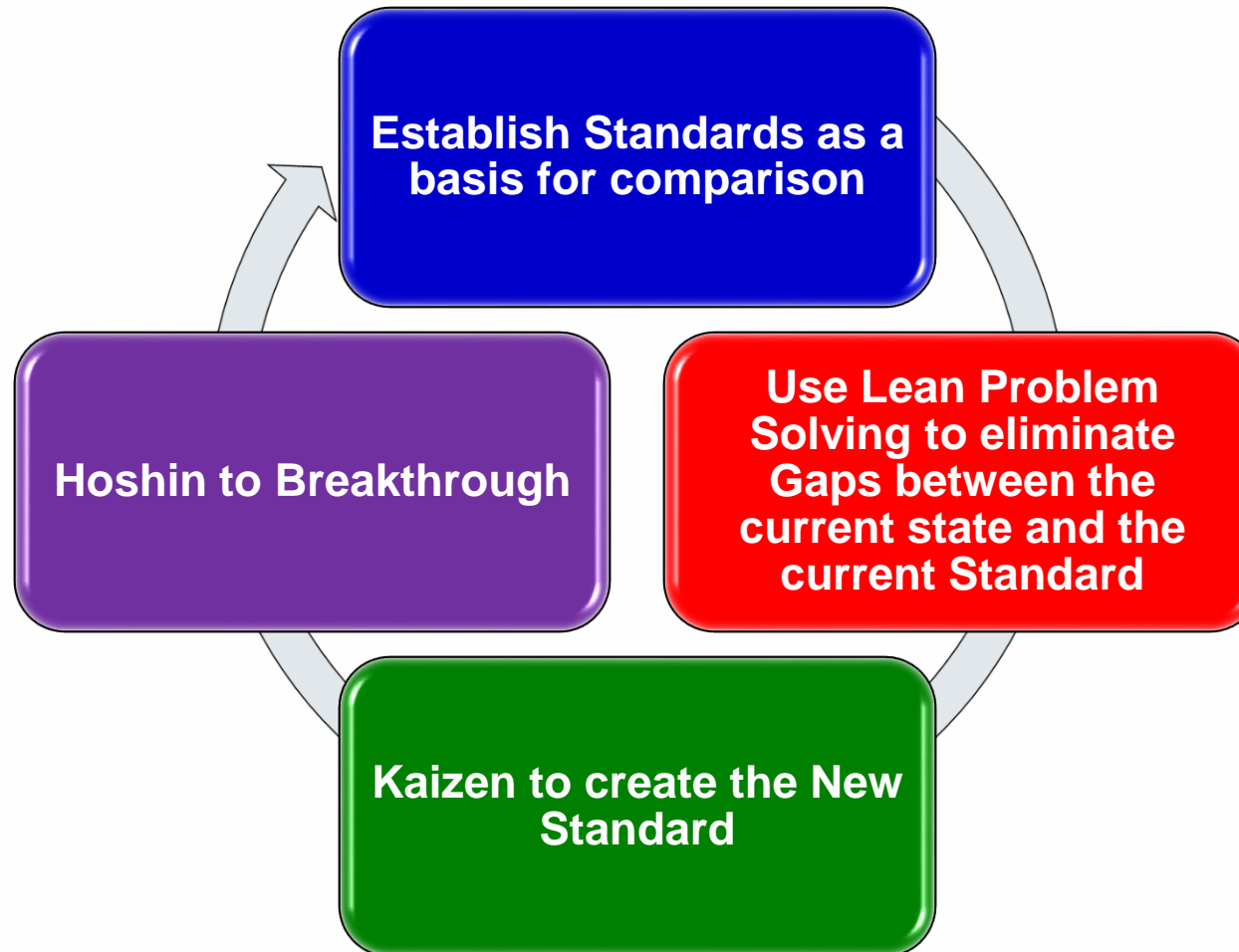
- **Commitment:** It is each Associate's pledge to fulfill their duties with excellence.
- **Grow:** We expect that each Associate will seek to constantly grow and improve.



**Now, It's Your  
Turn**

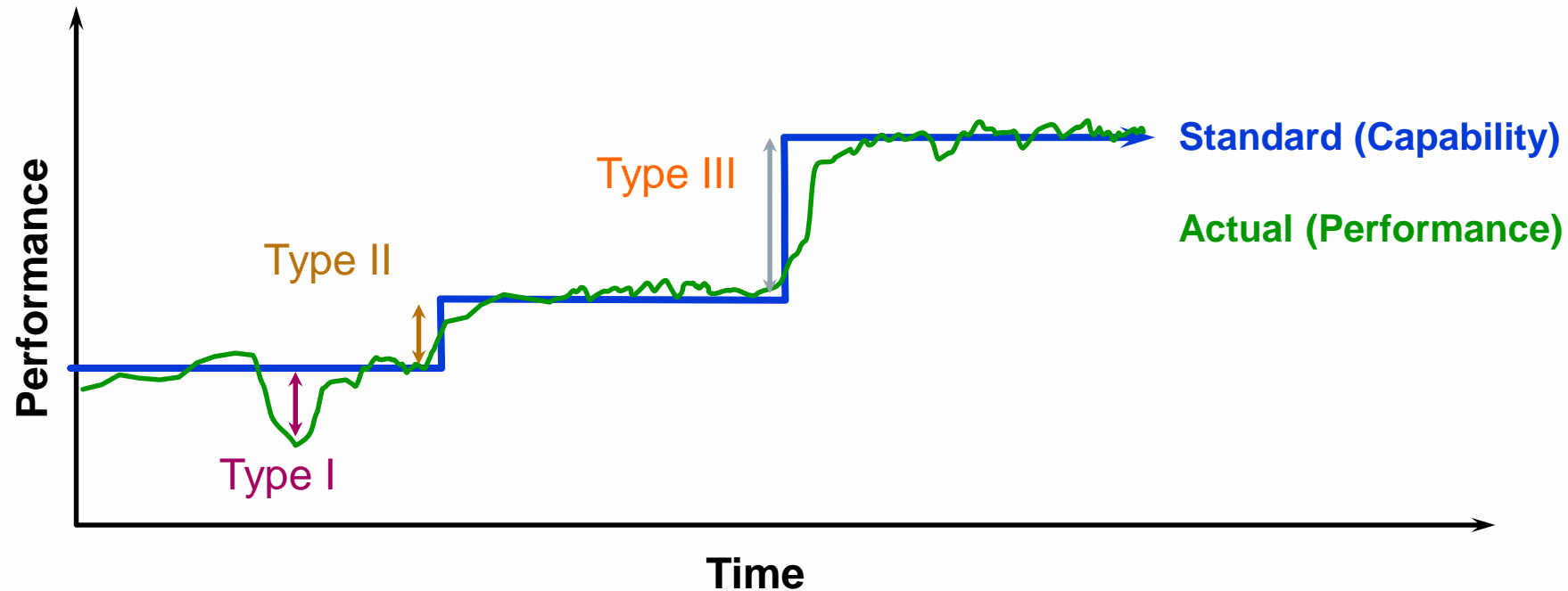


# Toyota's Cycle of Continuous Improvement and Evolution





## Continuous Improvement (3 Types of Problem Solving)



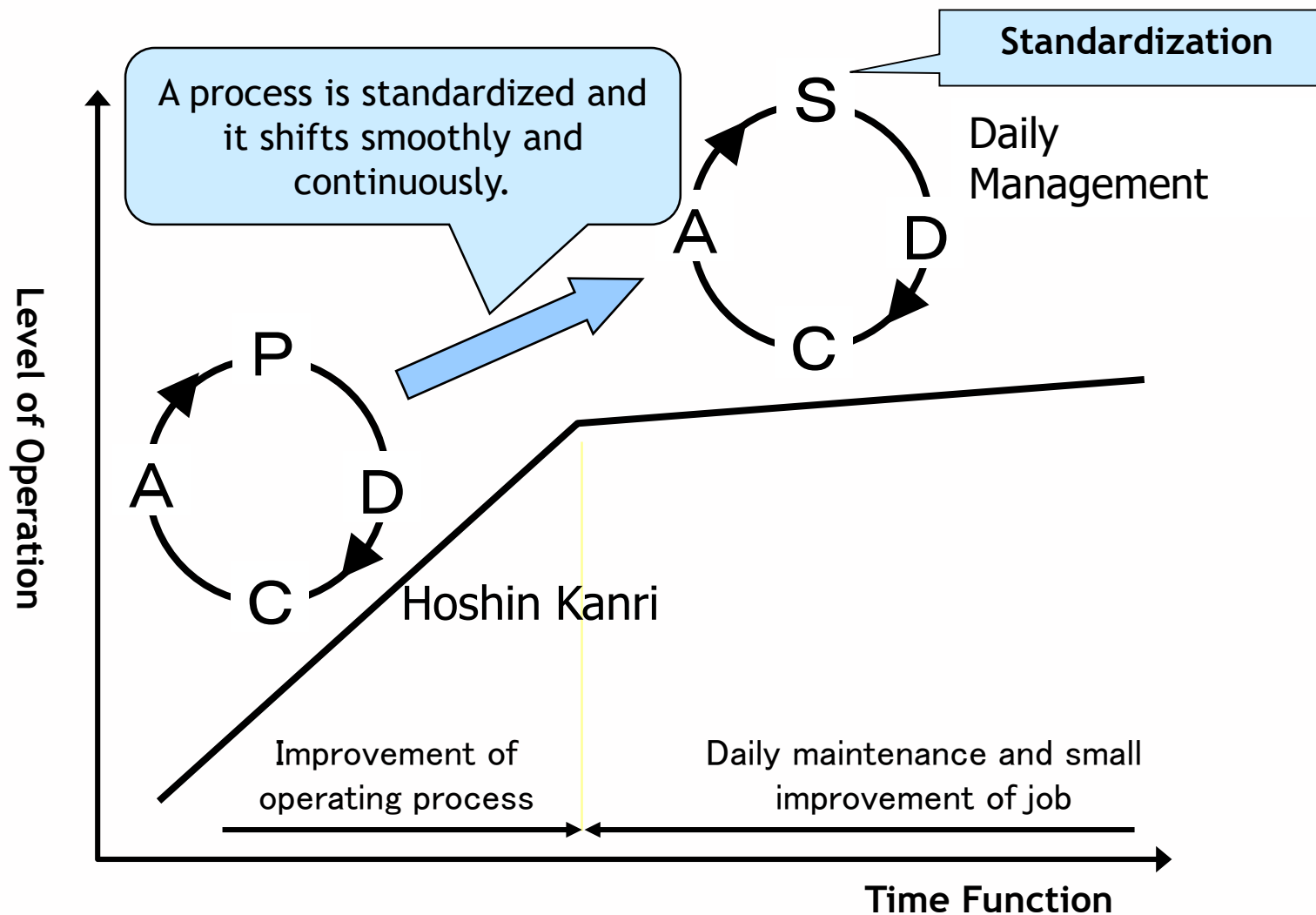
**Type I:** Actual performance has fallen below proven standard (capability)

**Type II:** Develop a better method to perform work repeatedly

**Type III:** Breakthrough or major system advancement



# At Toyota, Everything Starts with Standards







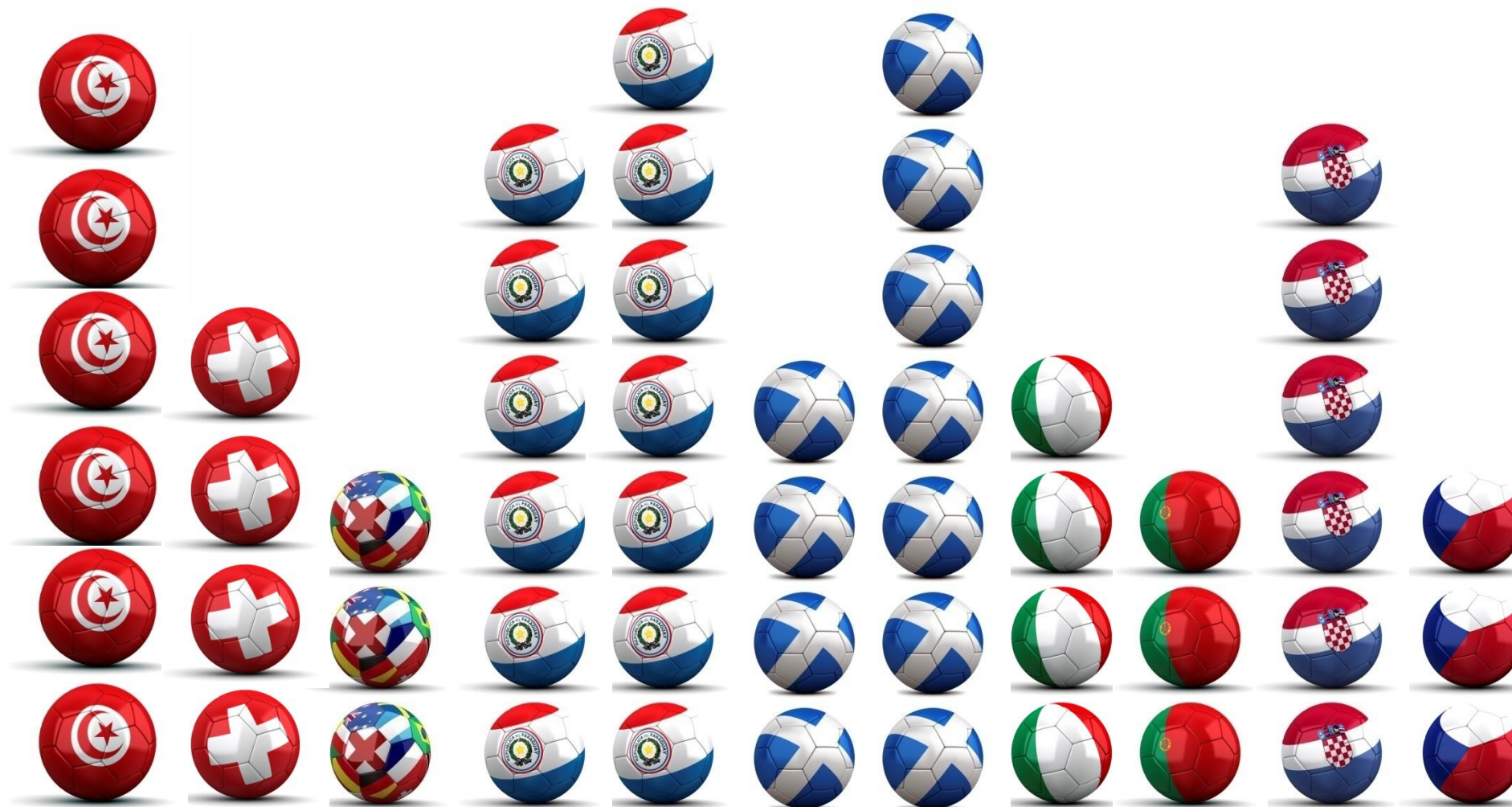
## How Can We Tell Normal from Abnormal...Quickly?







## Can We Still Tell Abnormal from Abnormal?





## Can We Still Tell Abnormal from Abnormal?

### No organization

#### Inventory

- Good or bad?? Unclear
- No standard or basis for comparison

### Now We Know What "Right" Looks Like!

	Type W	Type X	Type Y	Type Z
Max.	Min = 1 Max = 4	Min = 1 Max = 3	Min = 1 Max = 3	Min = 1 Max = 2
Min.				

- Normal vs. Abnormal clear
- Standard basis for comparison



## Understanding Toyota's Obeya Management Principles

**Management  
By Objective**

=

**Command  
&  
Control**

**VS.**

**Management  
By Exception**

=

**Focus on Problem Solving  
the Ideal Situation  
And the Current Situation**



# Management by Objective





## MBO



Sometimes, MBO can be too top down driven and Command and Control, regardless of the indicators





# Management by Exception



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## Management by Objective vs. Hoshin Kanri

	Typical MBO	Hoshin Kanri of Toyota Group
Object of Assessment	Result	Result and Process
Indicators of Assessment	Financial Indicator Quantitative Indicator	Financial & Non-financial Indicator Quantitative & Qualitative Indicator
Viewpoint of Assessment	Mainly short term	medium & long term
Mgmt Approach	Usually Top-down	Integration of top-down & bottom-up, Involvement of all members
Activity Style	Start from scratch generally / Cycle of PDC	Continuous Kaizen Cycle of PDCA



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**Abnormality Management  
Is  
Problem Solving Management!**





# Ideal Daily Management Process

## From the Genba to the C-Suite

### Ideal Daily Management Process by Management Level

		PLAN		DO	CHECK	ACT	
<b>Role Relationship</b>	<b>Manager</b>	Secure Conditions for Ideal Production	Production Management	Hoshin Mgmt	Strategic Activity	Abnormality Management	Follow-up Coach, & Communicate
	<b>Asst. Manager</b>	Secure Conditions for Ideal Production	Production Management			Abnormality Management	Support Group Leader and Mgr
	<b>Group Leader</b>	Ensure Basic of TPS	Secure conditions for Ideal Production	4M Change Point Management	Standardized work Management	Abnormality Control	Follow-up
	<b>Team Leader</b>	Secure Pre-Conditions for Ideal Production	Maintain Ideal Production	Ensure Standardized Work	Three Pillar Mgmt	Abnormality Control	Support Group Leader and Team
	<b>Process</b>	Align Ideal Processes	Determine Knowledge and Skill	Practice Role Skill with OJD	Assess	Counter-measure for Problems	

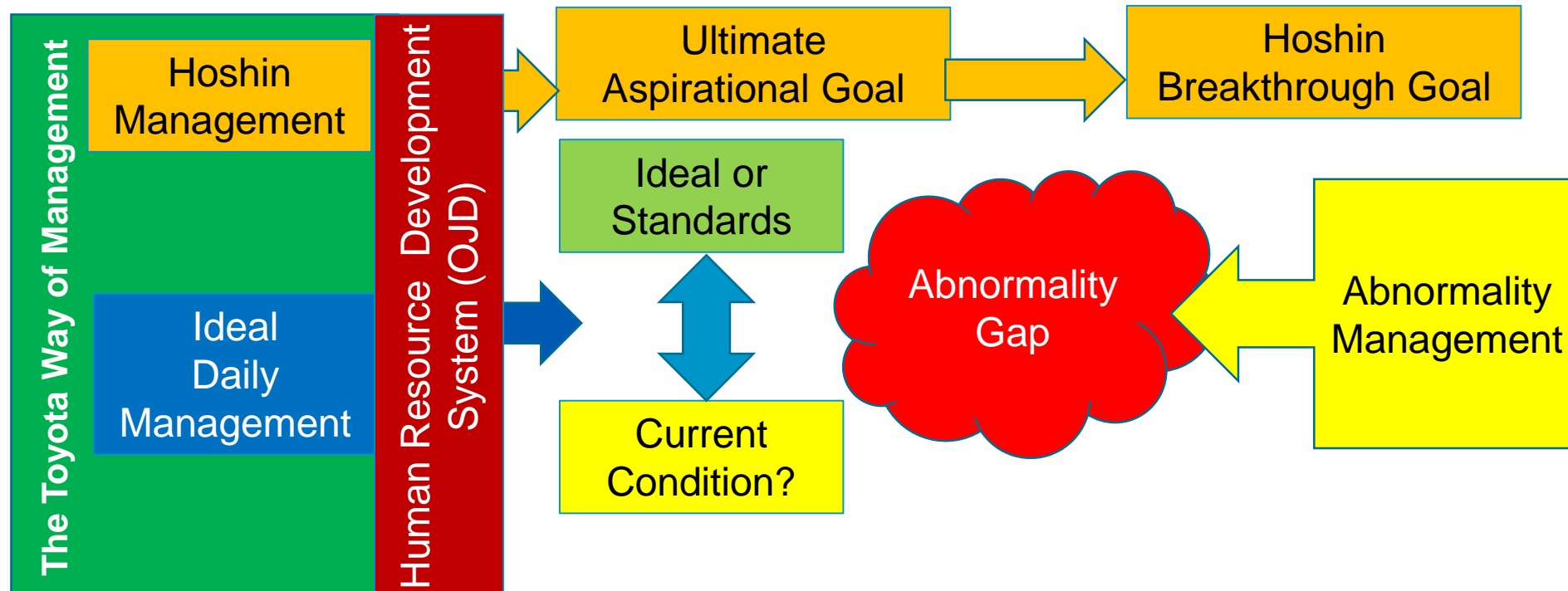


# Management of Abnormality

**The Toyota Way of Management is Abnormality Management:**

**3 Subjects for Abnormality Management are:**

1. Physical Environment through 5S Control and Visual Standards
2. People and Processes through Standardized Work
3. Information and Management through Progress to Targets





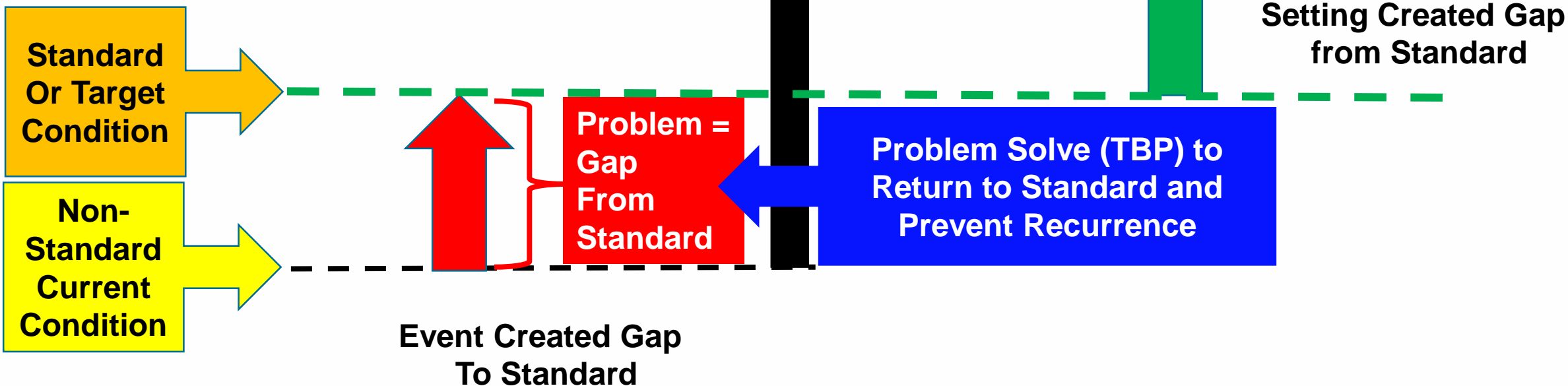
# Problem Solving versus Kaizen – There is a difference

## Corrective Activity

Vs.

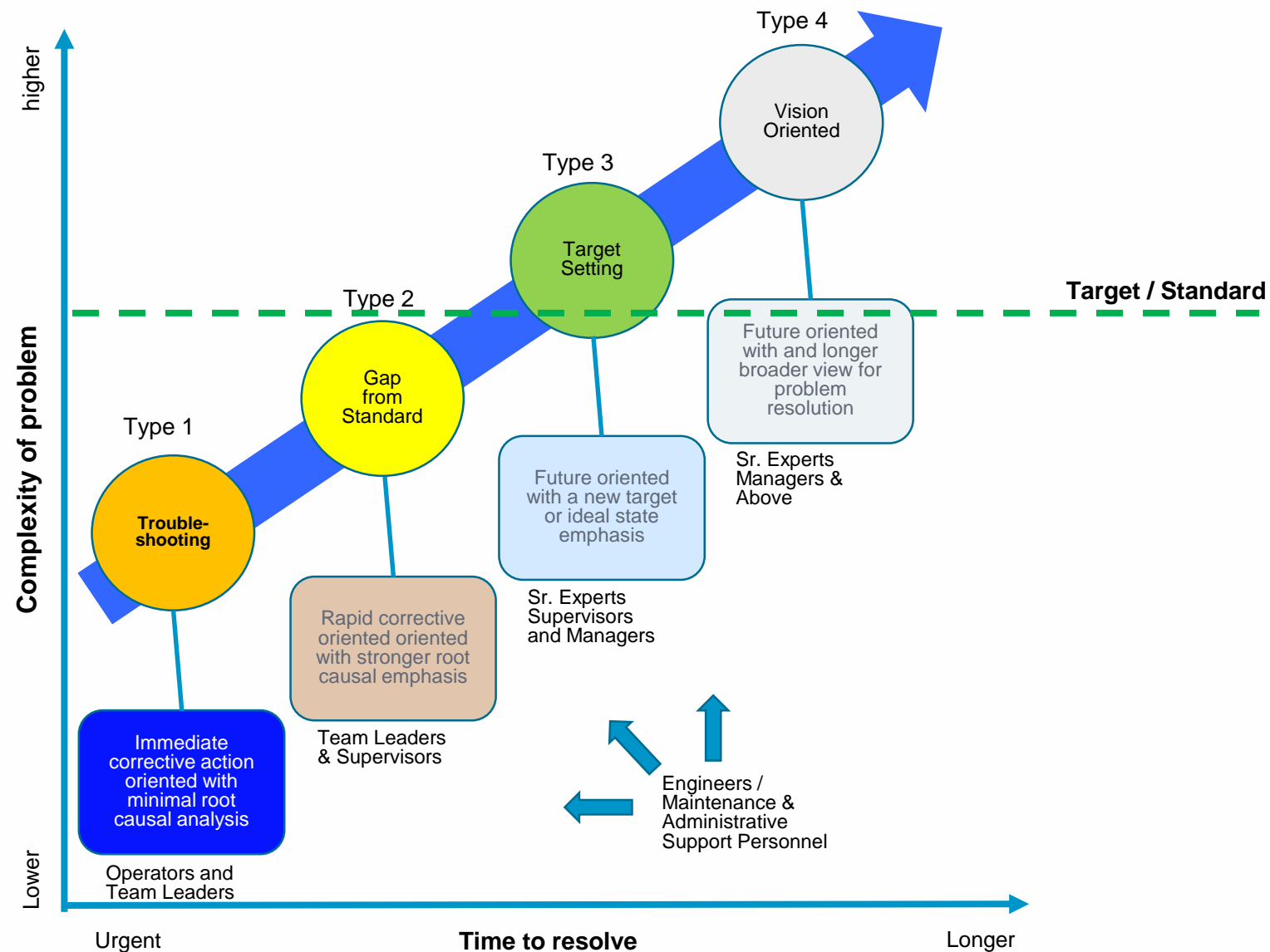
## Proactive Activity

**Kaizen  
To Set New  
Standard**



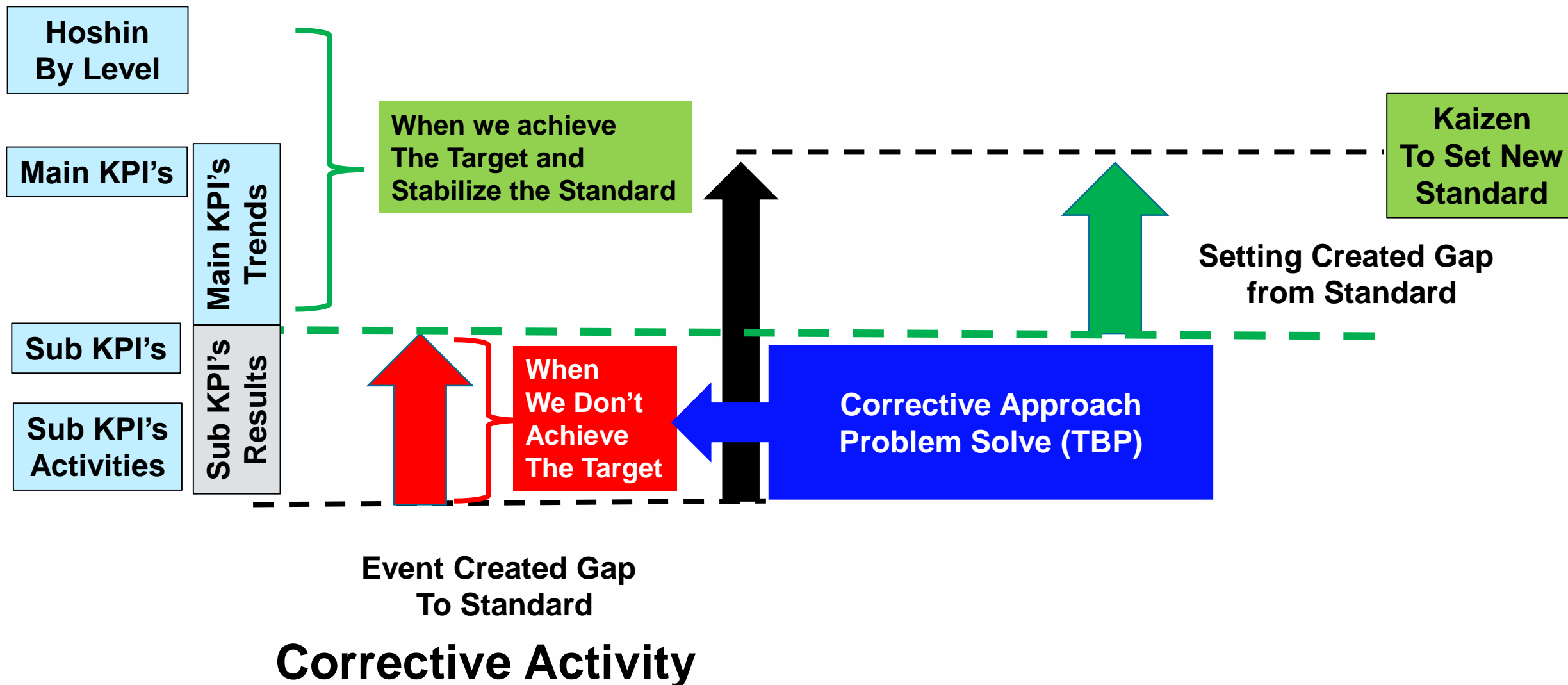


# The Four Types of Gaps: Problems vs. Kaizen vs. Hoshin



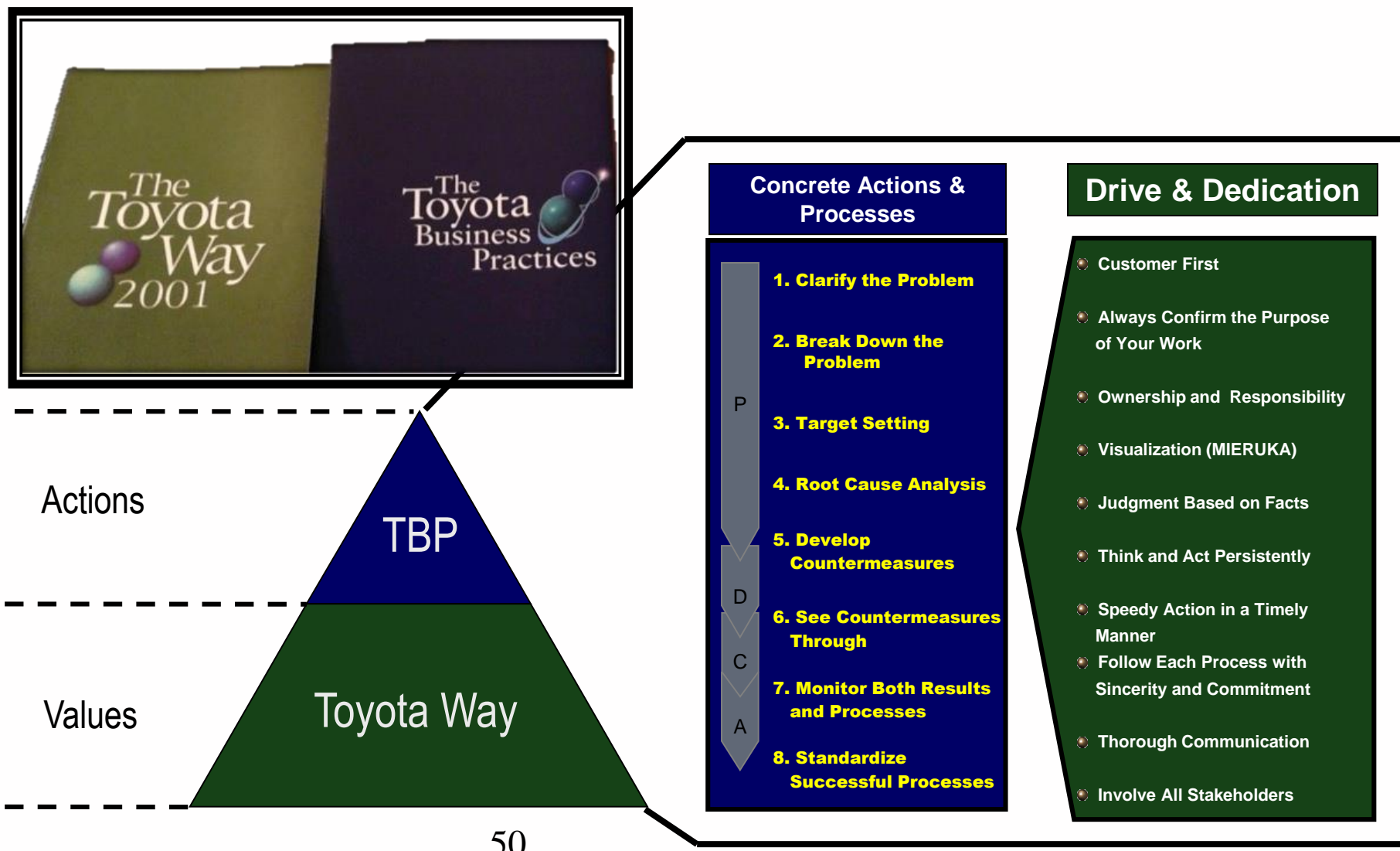


## Problem Solving versus Kaizen – There is a difference



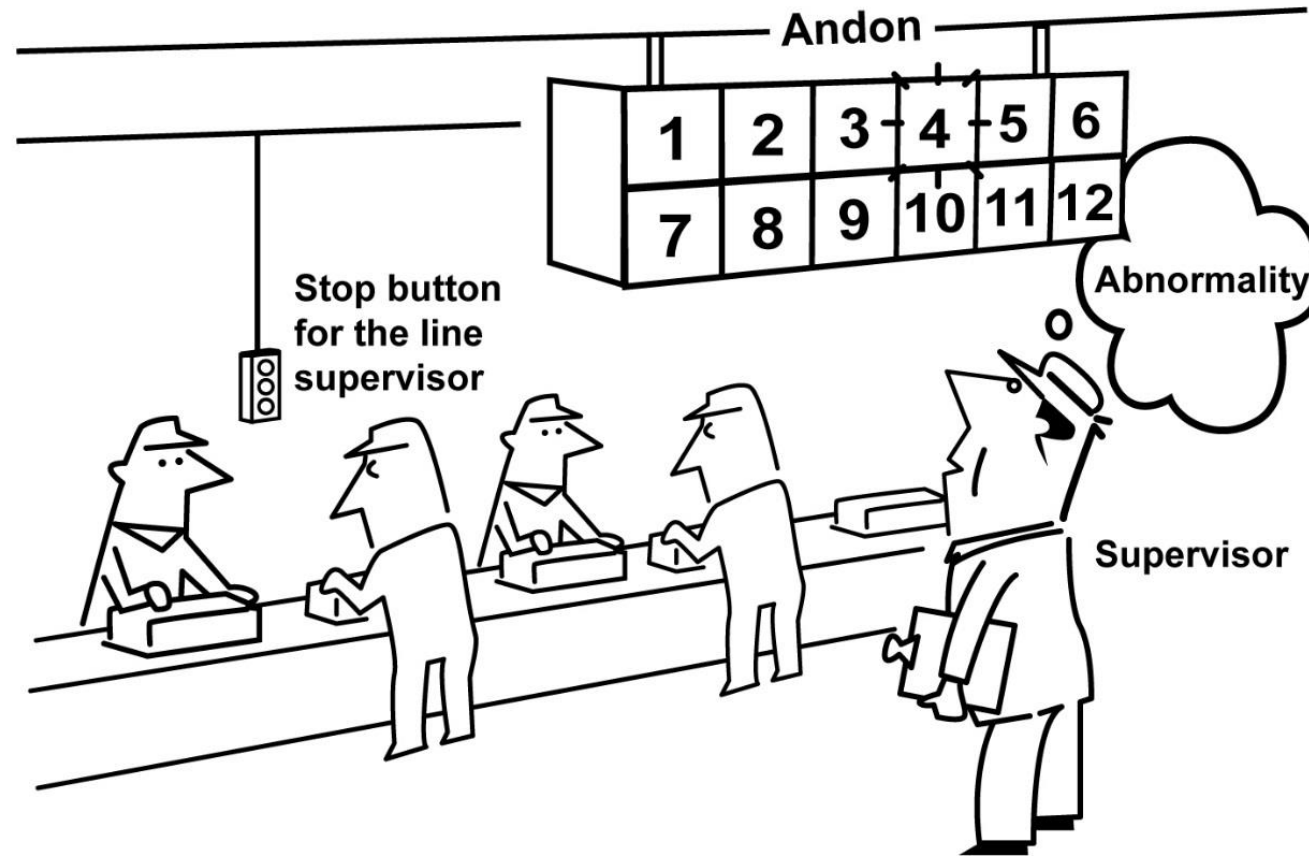


# Leading Toyota Business Practice In the Obeya



# Abnormality Management and Control

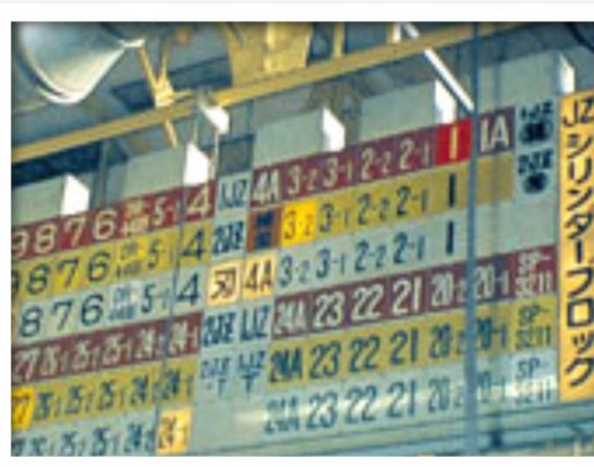
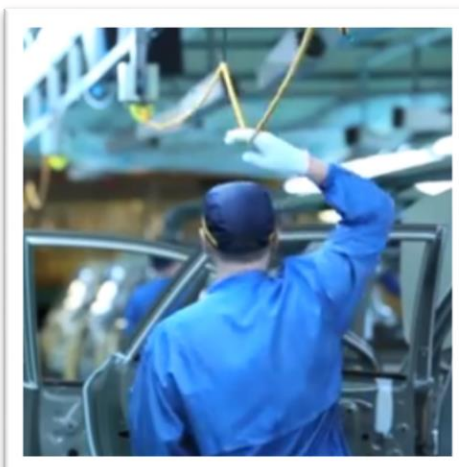
## What Happens When There Is a Problem





# Shop-Floor Management is Problem Solving Management

	<u>Level</u>	<u>Area "Problem Rate"</u>
組長	Group Leader	25 ~ 125+ Per Day
班長	Team Leader	5 ~ 25+ Per Day
技能員	Team Member	1 ~ 5+ Per Day



LINE PRODUCTION INFORMATION BOARD			
PANEL NO:	EFF.(TAR)	940 %	DATE
0576 11	EFF.(ACT)	100 %	2303
GSPH	TAR.	0464	CYCLE TIME (SEC.)
	ACT.	0520	TAR. 645
TOTAL STROKE	AVE.	4304	ACT. 608
	TAR.	0240	A D C (MIN.)
	ACT.	0178	TAR. 347
			ACT. 268
			L.STOP (MIN.)
			TOT. 402



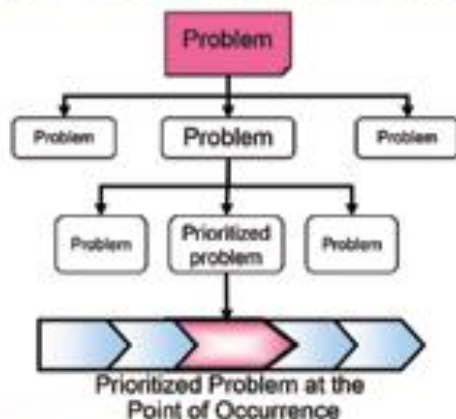


# Toyota Business Practice: Building People; Closing Gaps

## Step 1. Clarify the Problem



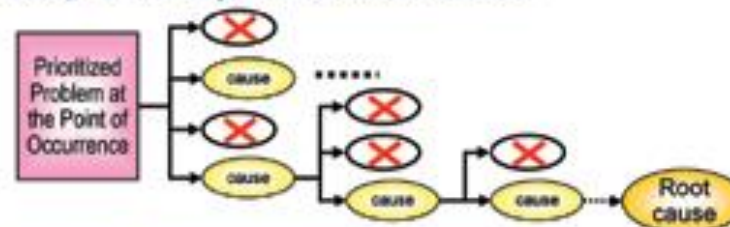
## Step 2. Break Down the Problem



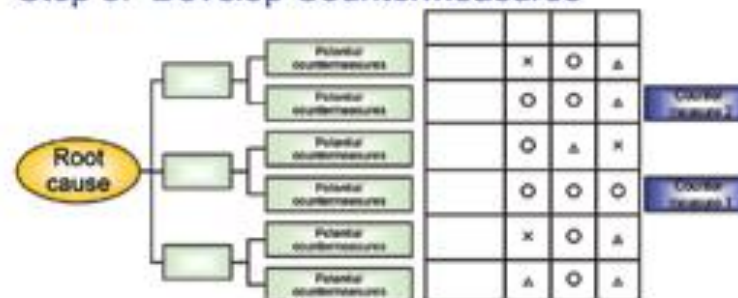
## Step 3. Set a Target



## Step 4. Analyze the Root Cause



## Step 5. Develop Countermeasures



Countermeasure	Tests	PKC	Due	Schedule
Countermeasure 1	.			
Countermeasure 2	.			

## Step 6. See Countermeasures Through

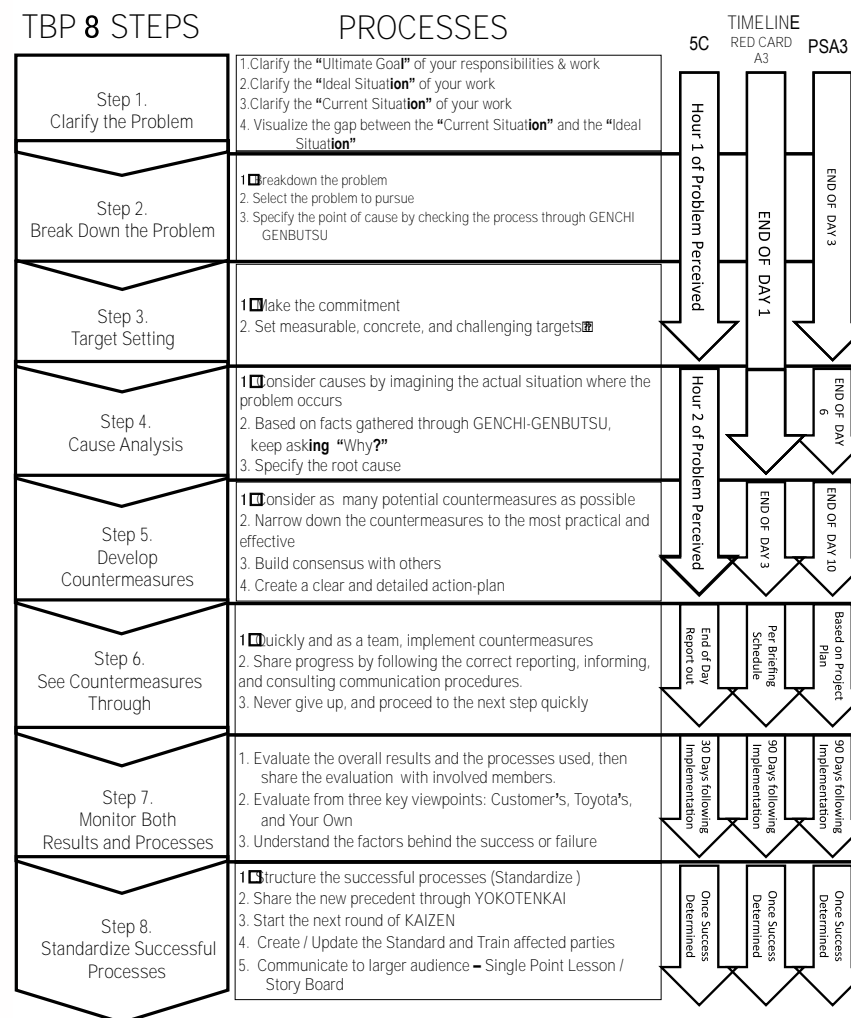
## Step 7. Evaluate Both Results and Processes



## Step 8. Standardize Successful Processes



# Problem Solving Management in the Obeya



**If any part of the Defined Timeline for Problem Solving is missed, 5C must be completed and approved by Supervisor and Operations Control Center Director.**



