

Managing for Operational Efficiency:

# Understanding Japanese Management: A Tale of Three Gemba



Gregory H. Watson, PhD., EUR. Ing.

25 March 2021: 1500 CST



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# ASQ LED “Managing for Efficiency” Webinars:

Gregory H. Watson, PhD., EUR. Ing.

- **Understanding Japanese Management: A Tale of Three Gemba**  
Webinar #1: March 25, 2021, 1500 CST
- **Turning the SDCA Cycle for Daily Management**  
Webinar #2: April 29, 2021, 1500 CST
- **Exercising Management Roles of Front-Line Leadership**  
Webinar #3: May 27, 2021, 1500 CST
- **Elevating Individual Responsibility through Motivation**  
Webinar #4: June 24, 2021, 1500 CST
- **Building Cross-Functional Links to Align Objectives**  
Webinar #5: July 29, 2021, 1500 CST
- **Designing an Executive’s Quality Management System**  
Webinar #6: August 25, 2021, 1500 CST



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**Register at: MyASQ Website!**

# Understanding Japanese Management: A Tale of Three Gemba Abstract

The initial lecture in the series is foundational, describing the management approach of Japanese organizations steeped in a culture of continual work process improvement. Dr. Watson worked with Japanese quality leaders at Hewlett-Packard and for almost 40 years has been applying their methods for strategic management, change management, and daily management in organizations such as Compaq Computer, Xerox, Nokia Mobil Phones, and Toshiba. He was a leader in piloting *hoshin kanri* at HP in the late 1980s and, through the HP Industrial Applications Division, lectured nationally on how Japanese methods were used to improve HP's industrial efficiency. Dr. Watson authored the preface to the first book on *hoshin kanri* in 1991 and is the only Westerner to be Awarded the W. Edwards Deming Medal for Distinguished Service in the promotion and dissemination of Japanese-style Total Quality Management (TQM) by JUSE.



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# Learning objectives for this Webinar:

- 1. Discover how the operational gemba, administrative gemba, and governance gemba drive future direction and contribute to operational execution.**
- 2. Understand how the SDCA, PDCA, and PDSA cycles operate in a collaborative management system to holistically assure the simultaneous management of quality and cost.**
- 3. Learn how the Toyota Management System operates cross-functionally through integration of the Toyota Production System with the Toyota Sales System and the Toyota Design System.**



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# Discovering the Three-Gemba Organization

Discover how the operational gemba, administrative gemba, and governance gemba drive future direction and contribute to operational execution.

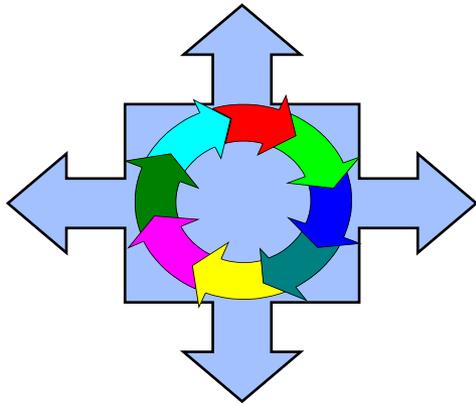


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# All Organizations Operate at Three Levels:



All organizations tend to operate at three unique levels of knowing and learning where they exercise leadership and management. Each of these organization levels has its own set of business objectives, different set of customers, different decision process and a different kit of analysis means = **Delivering Shareholder Value**.



- **Enterprise**: the viewpoint of the entire set of business areas and operations, e.g., the full business group = **Seeking Value**.
- **Business**: the viewpoint of a specific product line or service area, e.g., unit division or by product category. = **Capturing Value**.
- **Operations**: the viewpoint of a discrete business organizational structure, e.g., an R&D Center, Manufacturing Center, Sales Office, Distribution Center, or Service Operation = **Producing Value**.



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# Each Level Delivers Value in a Uniquely Way:

## Enterprise

Focus: management plans strategy using financial decisions for corporate planning horizon by applying judgment to determine architectural frameworks and strategic focus, in response to its primary customer - the shareholder.

## Business

Focus: management serves its customer-markets making business decisions within its annual business cycle by prioritizing investments of organizational energy and resources in response to its trade and consumer base of targeted customers.

## Operations

Focus: management executes work processes with an emphasis on improving the quality of its daily activities based on facts that describe business operations and answers to its primary internal “customer” -- the next person in their work process flow.



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# Each Level has its own Objectives:

## Enterprise

The objectives of the enterprise level are to establish the direction for the business and to choose where it will make its contribution by choosing the lines of business that the company will develop.

## Business

The objectives of the business level are to define the business area and to choose how to best develop this particular business.

## Operations

The set of objectives for the operations level are very straight-forward: conduct business operations with due diligence for managing effective, economic, and efficient work processes.



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# These Levels have Distinct Responsibilities:

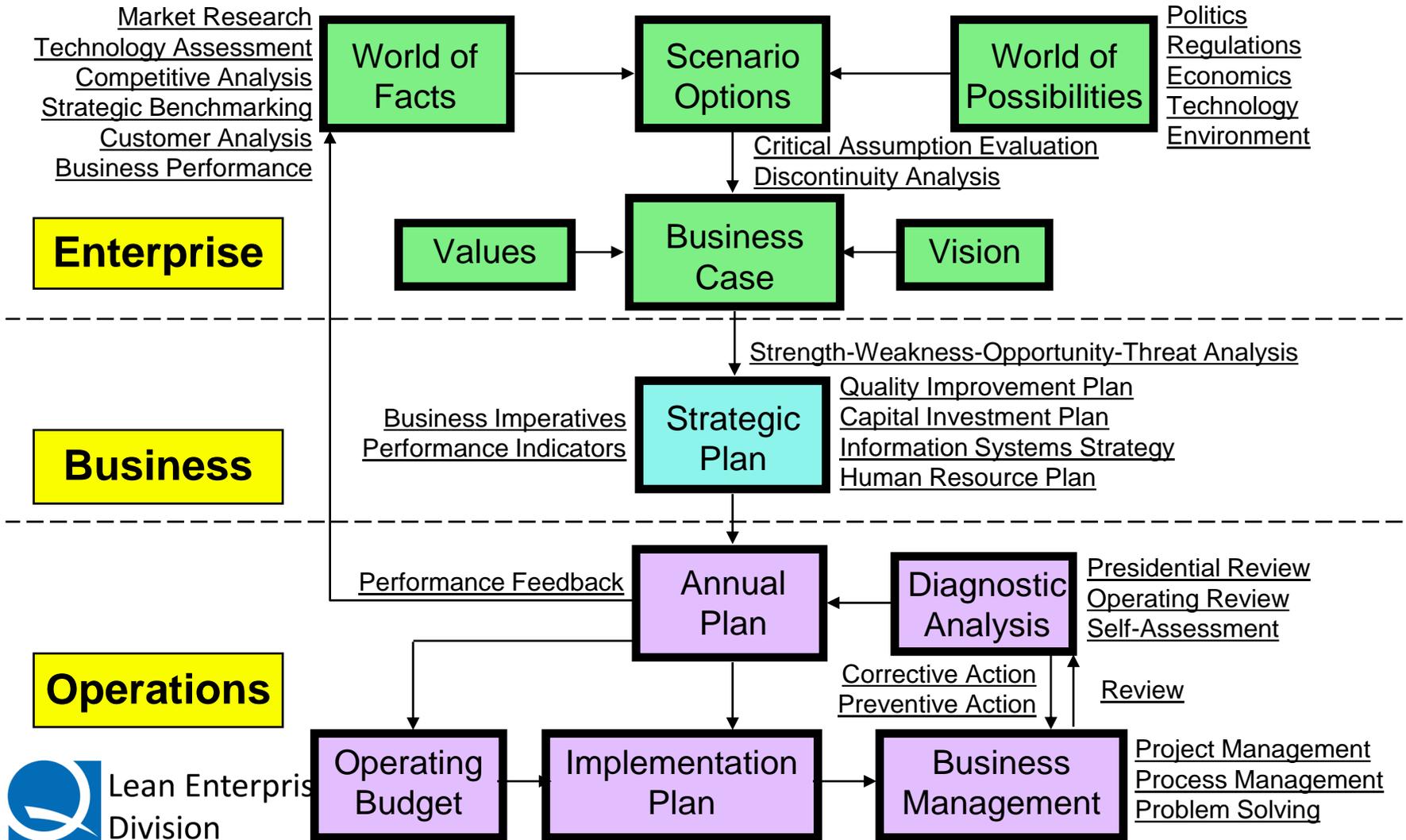


- **Senior Management:** Emphasizes achieving organization's mission in the short-term and preparing resources to gain possess strength and achieve its long-term vision.
- **Middle Management:** Focuses upon coordination of resources and collaboration with others to achieve the short-term objectives of the organization and completes special projects that will assure its long-term vision.
- **Operational Management:** Manages an organization's daily routine and identify opportunities for continual improvement of efficiency to obtain targeted levels of effectiveness.



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# Operating Collaboratively as a Business System



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# The Leadership-Management Interaction:

*What are the questions that you should be asking to achieve the results that are desired for your current objectives?*



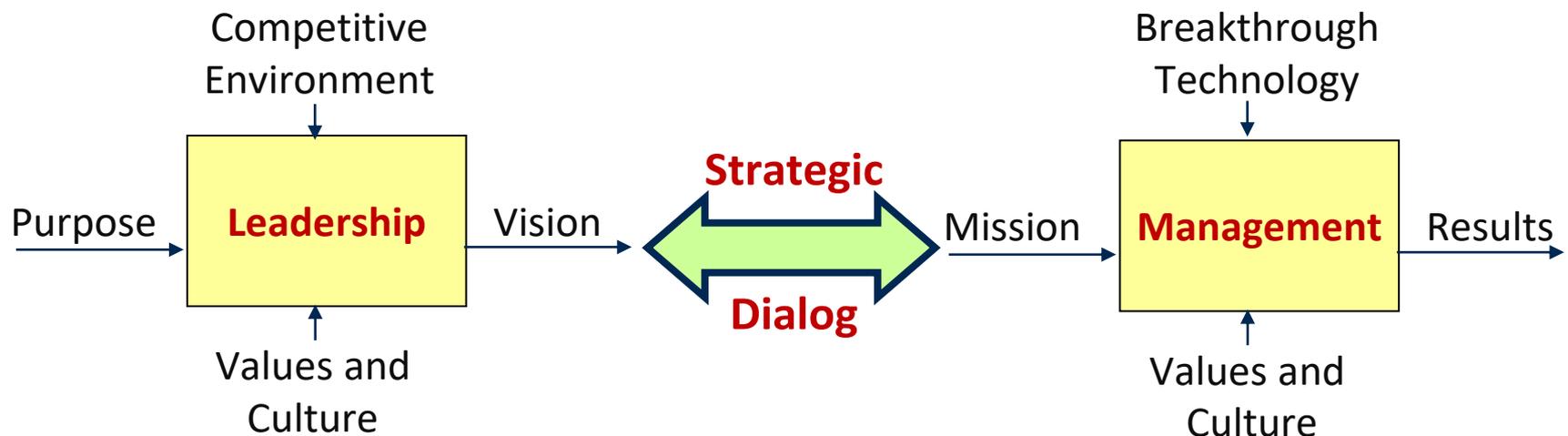
**Each measures performance but with differing measures that are not well-integrated!**



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# Inclusive Dialog Enables Strategic Direction:

**Strategic Dialog:** While **vision** provides motivating encouragement that will set long-term intent to achieve performance excellence; the **mission** describes the purpose or objective for which an organization exists. While vision is motivated by competitive environmental factors as well as internal values and culture, mission is enabled by managing change and introducing breakthrough technologies in a context of values and culture. Coupled together – they produce results.



**Effective communication and active listening are essential ingredients to build participative management processes.**



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# Mental Model of Leadership through Quality:

## Elements of a “Big Q” strategic quality system:

- Purpose, mission, vision, environment & values
- Management guiding principles & assumptions
- Top-level structural design & accountability
- Business system, core processes & ownership
- Business measures, benchmarks & targets
- Compensation structure
- Communication and education
- Deploying strategy, objectives, and strategic projects
- Development of Products and Markets
- Strategic resource allocation and alignment

‘BIG Q’  
PROCESS OF  
MANAGING  
FOR  
QUALITY

STRATEGIC  
CONTENT



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Collectively these activities should be called  
***“Strategic Quality.”***

# Integrating the Organization for Quality:

*Strategic quality introduces change into the system for daily management which is the operational quality system.*

1. Implementation plan for strategic projects
2. Project portfolios and team structures
3. Systematic monitoring, measuring & review
4. Meeting structure & annual business cycle
5. Organizational self-assessment & review
6. Organizational design & responsibilities
7. Process structural design & ownership
8. Competence awareness & development

**Gemba 2/3 – Business Leadership System**

*Business Excellence Enablers of execution*

Responsibility of the senior leadership team

**Strategic Dialog**

**Gemba 1 – Daily Management System**

*Execution Using ISO9000:2015*

Responsibility of the unit management teams



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**Organizational structure creates integration across the business operational levels.**

# Two-Gemba's – Operational and Productive:

“When I say “*gemba*” it is not just the production workplace but also the office or any workplace.”

Workplace Management, p. 103

“I have spoken about the “*gemba*” but you can view office work the same as the production floor where we make things. You can have the “*gemba* philosophy” for administrative work by identifying your **administrative *gemba***.”

Workplace Management, p. 87



*Workplace Management*  
(WM-1982)

*Toyota Production System*  
(TPS-1978 (Japanese/1988 English))



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**Taiichi Ohno identified two unique gemba and he left open an opportunity for more!**

# Visible and Invisible Gemba Organizations:

**Gemba #1:** *Tangible activities that produce value for customers – it is focused on managing the flow of work and observational data.*

## Workers Language is Physical:

The ordinary language of work is physical describing actual entities (or tangible aspects of work). Since it is relatively easy to count the physical items and keep track of their movement, workplace measures tend to have more integrity than financial measures.

**Gemba #2:** *Thought processes defining and coordinating work – it is focused on managing the flow of resources and information.*

## Management's Language is Monetary:

Business language is the language of money. Since it is not always clear how to count money in the real-world, this language will summarize data using averages, so it does not directly relate to the world of work.

**Business controls establish limits and desired range for operations using indicators of both time (schedule) and money (budget).**

# Two Distinctly Different Work Situations:

Commercial Financial

Touchpoint

Functions

Executive

Business

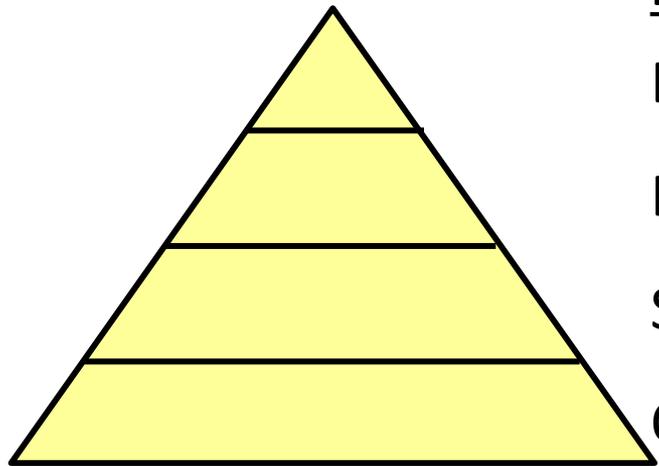
Supervisory

Operational

**Functional  
Structure of  
Management**

**Gemba 2**

**Gemba 1**



Consumer-User

Touchpoint

In Gemba 1 quality operates as a tactical action plan to create discipline. However, in Gemba 2 Quality operates as strategic enabler of long-term sustained performance.



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**Everyone has a job to do that creates quality.  
However, everyone's job contributes to quality  
in a different way.**

# What is the meaning of “*gemba*”?

Aristotle said excellence is the result of habit – doing routine work in the best possible way consistently over time.

Dissecting the meaning of “*gemba*” in Kanji: *Gemba* (現場)

## 5W + 1 H QUESTIONS:

## ANSWERS:

What happened? → Survey – conduct a detailed scrutiny

Who was there? → The King – executive function

When did it happen? → At Sunset – end of working period

Where did it happen? → At the point of doing the real work

Why did it happen? → To understand the real thing

How did it happen? → Personal activity required to notice



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**Constantly seeking opportunities to improve is a responsibility of the executive function.**

# Quality Characteristics of the two *gemba*:

Quality Characteristic	Gemba 1	Gemba 2
Dominant Entity Type	Tangible Work	Intangible Work
Measurement Type	Physical (Time)	Financial (Money)
Management Objective for Performance	Productivity Growth– Unit Volume Delivered	Economic Growth– Profitability
Efficiency Leverage	Flow Efficiency	Resource Efficiency
Quality Emphasis	Product Quality	Financial Quality
Leadership Initiative	Worker Decisions	Manager Decisions
Constructive Focus	Internalities	Externalities
Dominant Thinking Style	System 2 Thinking	System 1 Thinking
Improvement Emphasis	Continual/Incremental	Breakthrough/Change
Desired State	Stability/Regularity	Flexibility/Adaptability
Dominant Work Style	Operational Function	Executive Function
Dominant Learning Mode	Kinesthetic/Oral	Oral/Written
Communication Style	Informal/Conversational	Formal/Commanding
Communication Details	Crisply Specific	Abstractly Vague

# Responsibilities of the Working *Gemba*:

## GEMBA 1

- What is the responsibility of the worker?
- Learn how to perform own work to the level required for standard work.
- Expand work scope to the conduct of work in adjacent working areas.
- Perform work according to the standard requirements.
- Check the quality of incoming process deliverables and check quality of own work activities.
- Improve the efficiency of own work performance.
- Increase the integration of own work with the system of performance.
- Suggest system-level improvements that could increase effectiveness or efficiency of work processes (beyond group's scope of action).



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## Do Work – Improve Work!

# Responsibilities of the Supervisory *Gemba*:

## GEMBA 2

- Document process activities as standard work for flow and failure risk.
- Train the workers in performance of standard work and problem solving.
- Monitor process throughput for flow efficiency and task performance.
- Check worker performance against standard work requirements.
- Facilitate problem solving team activities with workers.
- Assure workflow balance and equity of operator tasking.
- Solicit task improvement ideas from workers.
- Conduct small-scale experiments to improve process performance.
- Recommend system-level performance improvements to management.
- Participate in system-level performance improvement projects.



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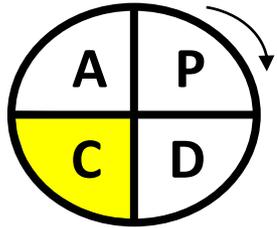
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## Train Workers – Manage Flow!

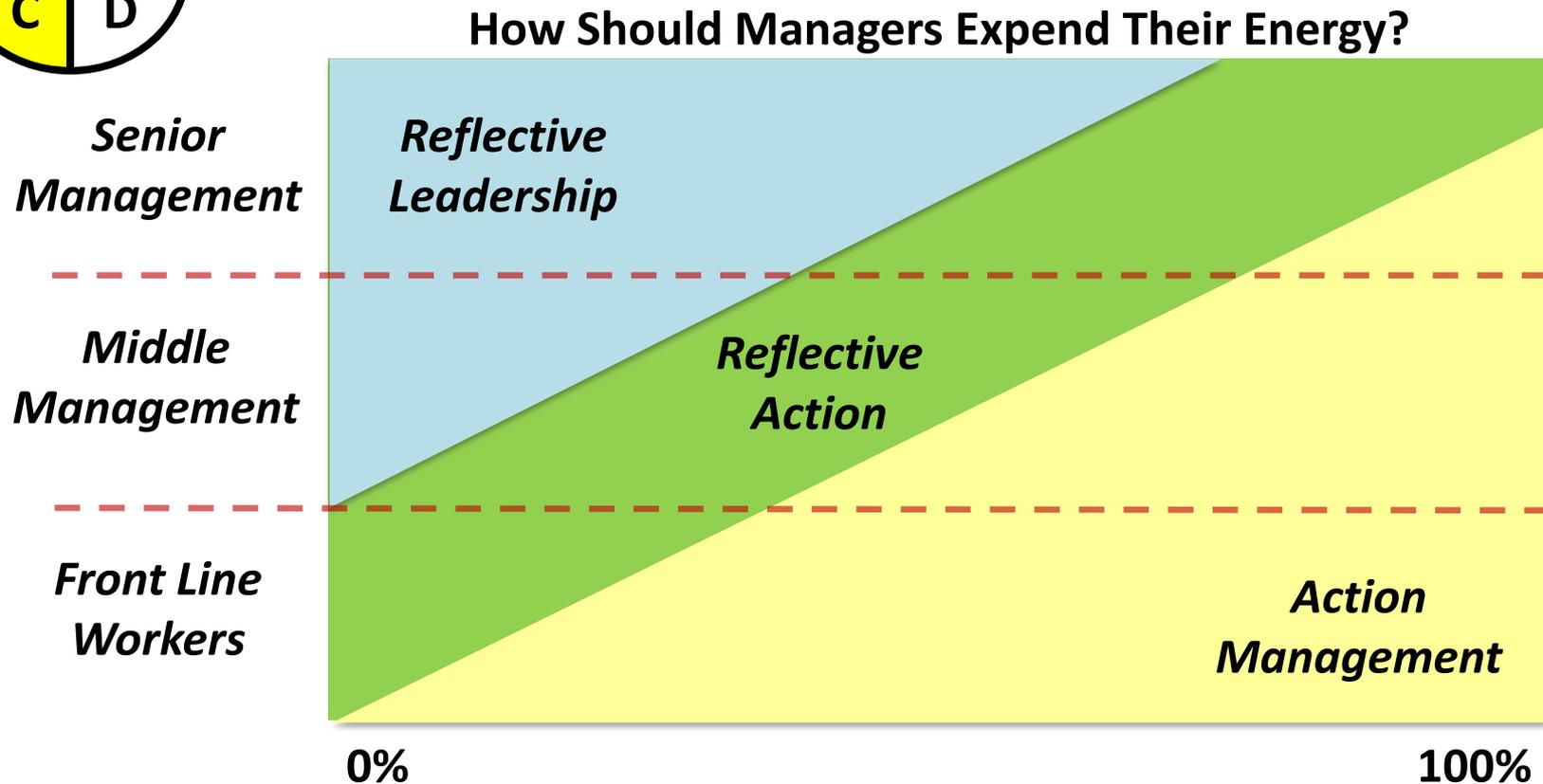
# Operating Characteristics of Gemba 1 and 2:

Characteristics	Operational Function Gemba 1	Executive Function Gemba 2
Value Proposition	Appreciated by Customers	Appreciated by Investors
Improvement Effort	Task-related activities	Supervisory activities
Economic Domain	Microeconomic	Macroeconomic
Primary Measures	Time, Defects, Cost	Productivity, Financial
Planning Horizon	Daily, Weekly, Monthly	Quarterly, Annually
Dominant Entity	Tangible - Concrete	Intangible–Abstract
Improvement Approach	Continuous Improvement	Continual Improvement
Method Transparency	Visible to Third Party	Invisible to Third Party
Inquiry Approach	Rational-empirical	Rational-phenomenological
Constructive Focus	Internalities of Process	Externalities in Market
Solution Approach	Factual Inquiry	Policy Advocacy
Quality Concept	Quality Strategy	Quality as Strategy
Causal Emphasis	Special Cause	Common Cause
Principal Focus	Control	Breakthrough
Process Emphasis	Do–Act	Plan–Check
Dominant Waste	Muda–Mura	Muri–Mura
Decision Initiative	Worker Decisions	Manager Decisions
Learning Mode	Kinesthetic and Oral	Oral and Written

# How Should Management Focus on Work?



Reflective leadership is required ... Check – Study:



**Think Ahead – Plan in Depth!**



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# Process vs. Function – What is the Difference?

**Distinctions in the responsibilities and accountabilities for process owners and functional managers:**

## Functional Manager:

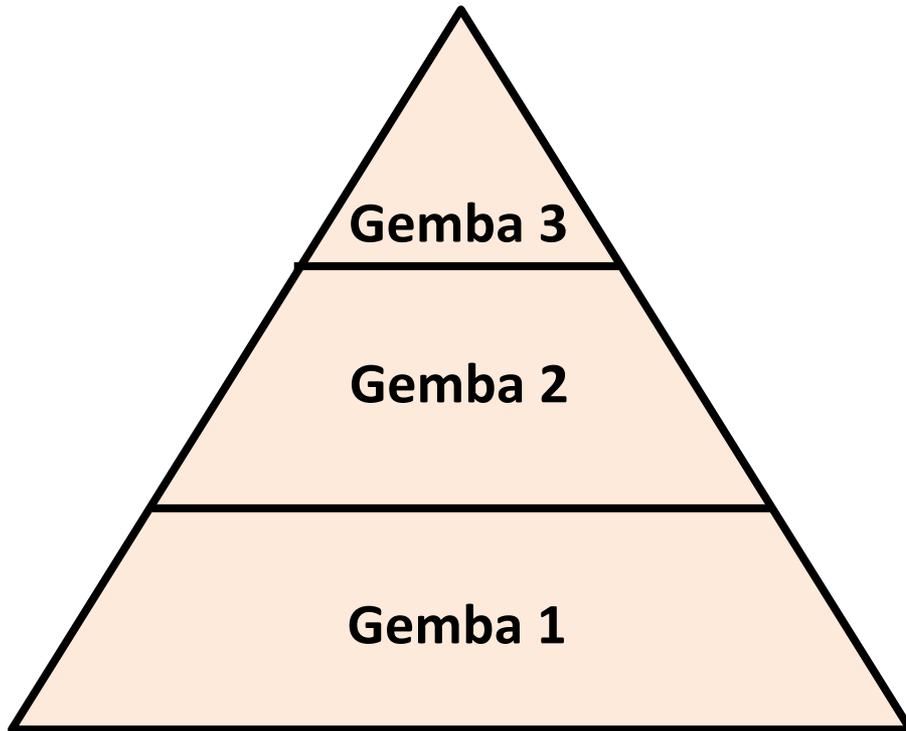
- **Manages resource flow**
- Develops competence
- Focus on people
- Skills development
- Education and training
- Career planning for people
- Manages budget and cost
- KPI measure: cost
- Responds to shareholders

## Process Owner:

- **Manages process flow**
- Develops capability
- Focus on system
- Performance outcomes
- Standardized work
- Continual Process improvement
- Manages process and quality
- KPI measure: throughput
- Responds to customer demand

# Structuring comprehensive change programs:

## Creating a pragmatic model for change management:



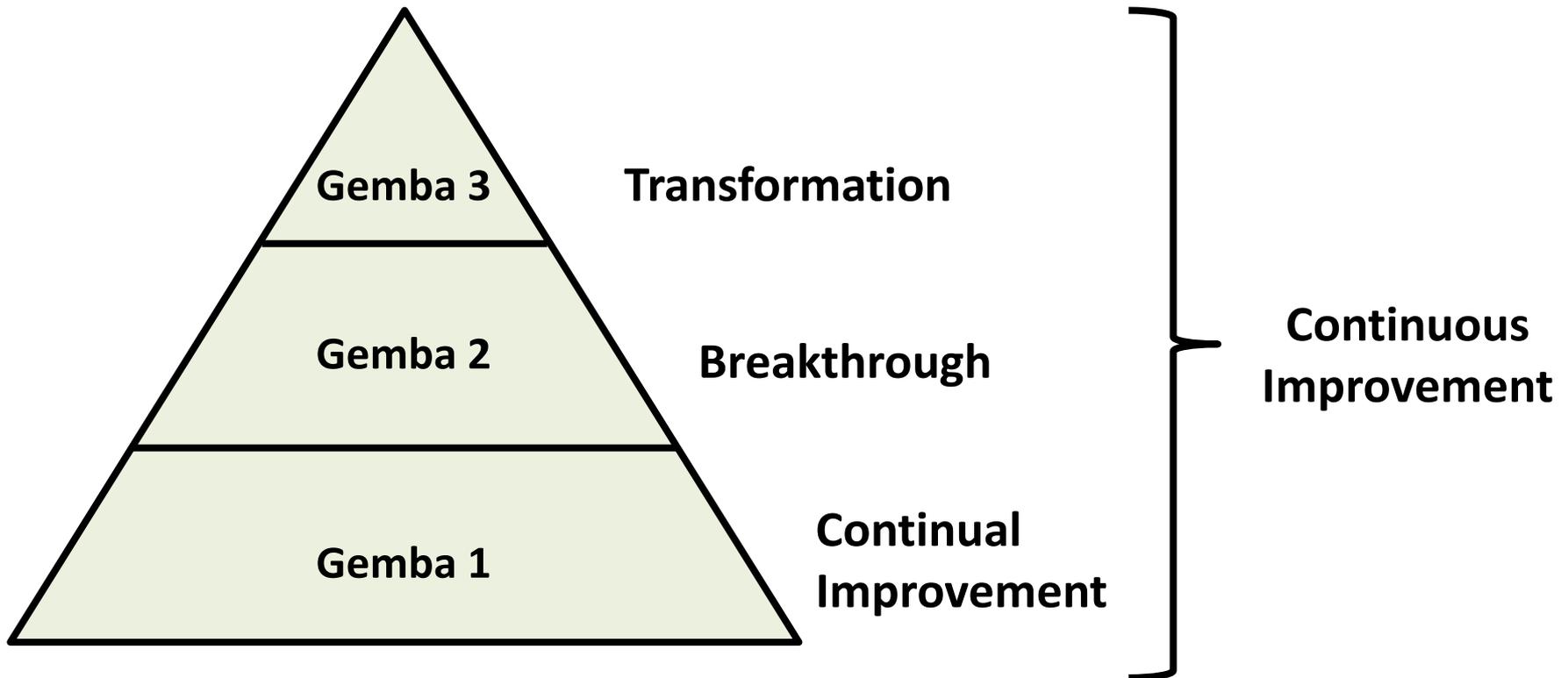
How does strategic change that creates improvement happen within and across these organizational levels?

Is the internal idea of change the same as the external concept?

Comprehensive change is integrated across the whole organization.

# Considering problems from all perspectives:

How does management implement its intent to effect improvement?



Collective activity across the organization is managing change!



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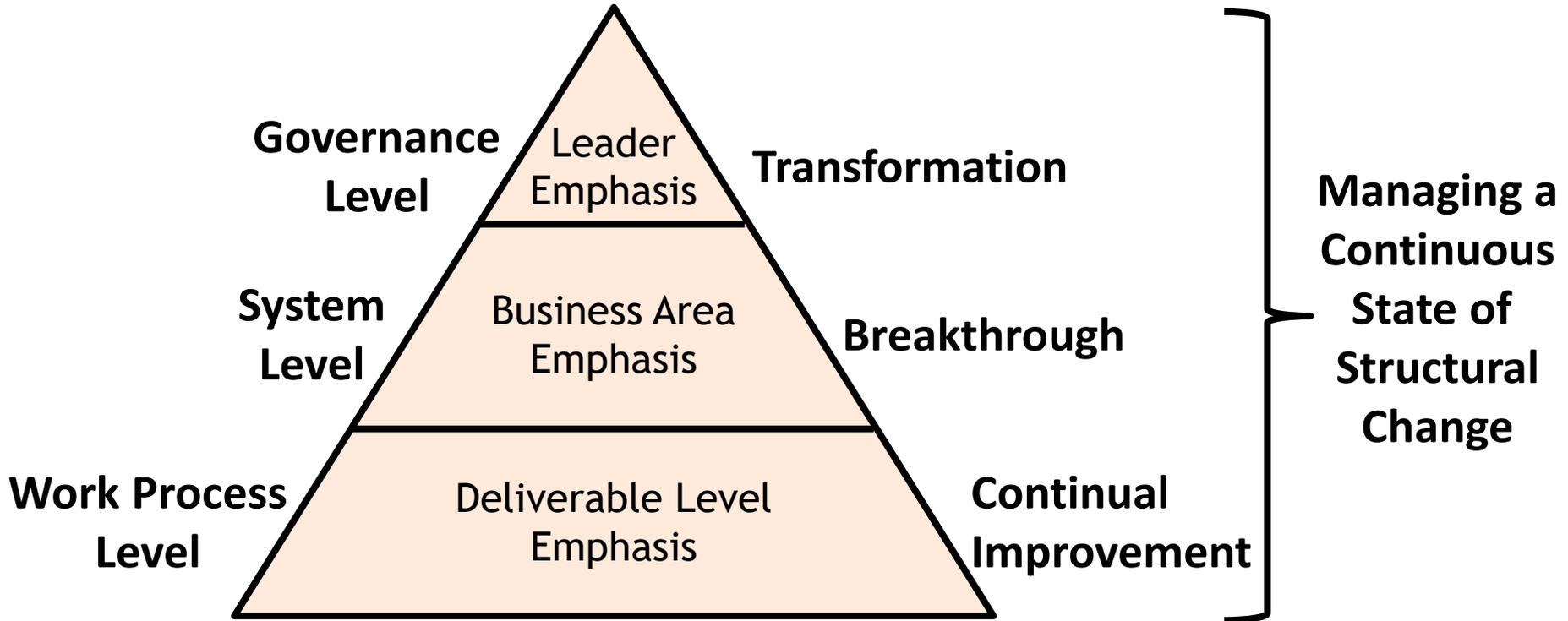
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First, identify the problem domain, second discover its solution space; third formulate a project aimed at delivering this solution.

# Coordinating a Portfolio of Change Projects:

In reality – there exists a **portfolio** of multiple-generation business improvement actions that must be coordinated to drive change.



Managers improve processes ...

... Leaders improve systems!

# Managing Across Organizational Gemba:

The nature and structure of each Gemba changes in both focus and content and must be improved in different ways!

Quality Characteristic	<i>Gemba</i> (現場) #1	<i>Gemba</i> (現場) #2	<i>Gemba</i> (現場) #3
Customer Focus	Workers	Customers	Owners
Work Objectives	Work Productivity	Work Priority	Work Profitability
Dominant Function	Perform/Operate	Supervise/Manage	Command/Control
Performance Focus	Flow Efficiency	Productivity	Resource Efficiency
Performance Approach	Quality/Efficiency	Productivity Growth	Financial Growth
Quality Mindset	Right the First Time	Serve the Customer	Get Business Results
Team Approach	Work Group/Circle	Program/Project	Committee/Council

Together this system of change projects appears, from an EXTERNAL customer perspective, as

**Continuous Improvement!**



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# Responsibilities of the Governance *Gemba*:

## GEMBA 3

- Study and evaluate business situation implications from externalities.
- Establish strategic direction for the organization.
- Craft a corporate culture that creates collaboration and cooperation.
- Manage the resource flow of the organization.
- Allocate decision rights and operational responsibilities.
- Assure balance in life is possible for all employees and develop people.
- Solicit investment funds to achieve business strategies and objectives.
- Communicate with owners and the public regarding corporate activities.
- Recommend governance policy to the governing body for approval.
- Participate in company-wide performance improvement projects.

# *Genichi genbutsu* (現地現物):

**Go to see for yourself:** Go to the real place (*gemba*) and observe the “**actual entity**” or the real thing (*genbutsu*) and get real facts (*genjitsu*). These “three gen’s” (現) are the way that a *genichi genbutsu* process works. During the process of “going,” managers should ask “why” five times to discuss issues with workers to discover the “gen” (原) reason for the visit and to obtain control.

*Gemba* (現場) – the real place

*Genbutsu* (現物) – the real thing

*Genjitsu* (現術) – the real facts

*Genri* (原理) – real reason

*Gensoku* (原則) – real control

The purpose of practicing the act of *genichi genbutsu* is for a manager to understand what is the real reason (*genri*) for the situation and to develop ideas to gain real control (*gensoku*) of the situation so that standard work can be improved (*kaizen*).

***Kaizen* (改善) is the incremental act of making things continually better.**

# Advice on “looking to see for yourself!”

“If you are out there observing the *gemba*, do something for them. If you do, the workers will think, “He’s watching us, but he comes up with some good ideas.” That way when the workers see you, they will look forward to your help again, and as a result they will begin telling you what makes the work hard to do and ask you to think of ways to make it better.”

“When you enter the factory, you should walk in a way that takes you hours to go 100 meters. If it takes you no time at all to go 100 meters, that means no one is relying on you.”



Taiichi Ohno  
1912-1990

*Workplace Management*  
(WM-1982)  
*Toyota Production System*  
(TPS-1978 (Japanese)/1988 English)

Workplace Management, p. 109

**The Gifts of Management: Decision Rights Workers – Process Resources!**

# Everyone Contributes to Group Performance!

Organization Level	Objective	Quality Emphasis	Type of Waste	Improvement Projects	Methods
Senior Executives	Agility	Policy	Muri	Hoshin Kanri	Presidential Review S-7 Strategic Methods Cross-Functional Teams
Cross-Functional Management	Harmony	Flow	Mura	Kaizen Kanri Hinshitsu Kanri	Gemba Walk 5-S for Managers Project Teams
Front-Line Workers	Discipline	Perfection	Muda	Nichijo Kanri Hinshitsu Kanri	Self-Inspection 3-S for Workers Quality Circles

## Areas of Emphasis:

**Workers:** Mistake-proofing standard work and reducing the seven wastes.

**Managers:** Managing improvement experiments and streamlining the seven flows.

**Executives:** Directing strategic change and assuring long-term financial strength.



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***Kaizen* (改善) is the incremental act of making all things continually better and engages all people as active participants.**

# Purveyors of 4<sup>th</sup> Generation *Sushi*:

## How deeply have we really learned about the way we work?

This story from Noriaki Kano provides us with a humorous warning that we must be alert to the source of information that we use to discover all the “facts” about how things “really” work.

- First generation *sushi* was prepared by a Japanese chef in Japan.
- Second generation *sushi* was prepared by a Japanese chef in America.
- Third generation *sushi* was prepared by an American chef in America.
- Fourth generation *sushi* is prepared by an American chef in Japan but using with beef instead of fish!

**First, seek to understand, then you can adapt.**

**Don't Copy – Adapt!**



# Managing Organization-Wide Improvement

Understand how the SDCA, PDCA, and PDSA cycles operate in a collaborative management system to holistically assure the simultaneous management of quality and cost.



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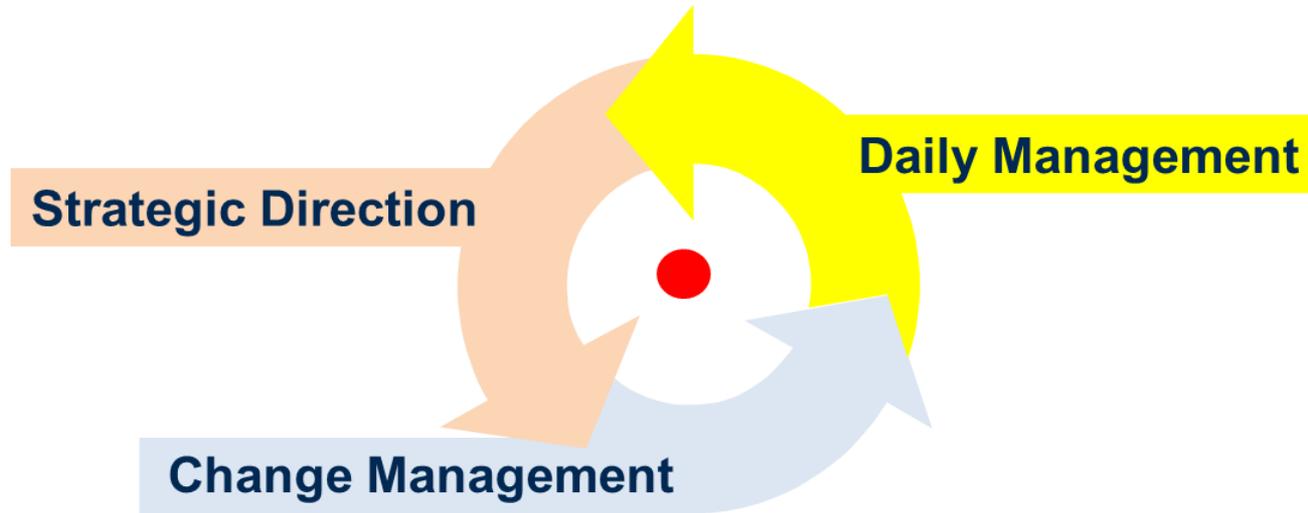
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# Integrating Effort to Achieve Purpose:

Collaborative planning, execution and reporting ...

... in a cooperative, cross-functional working environment!



... moving the organization's aim onto target and keeping it there!

**Requirement: An integrated system  
for managing value-producing work.**



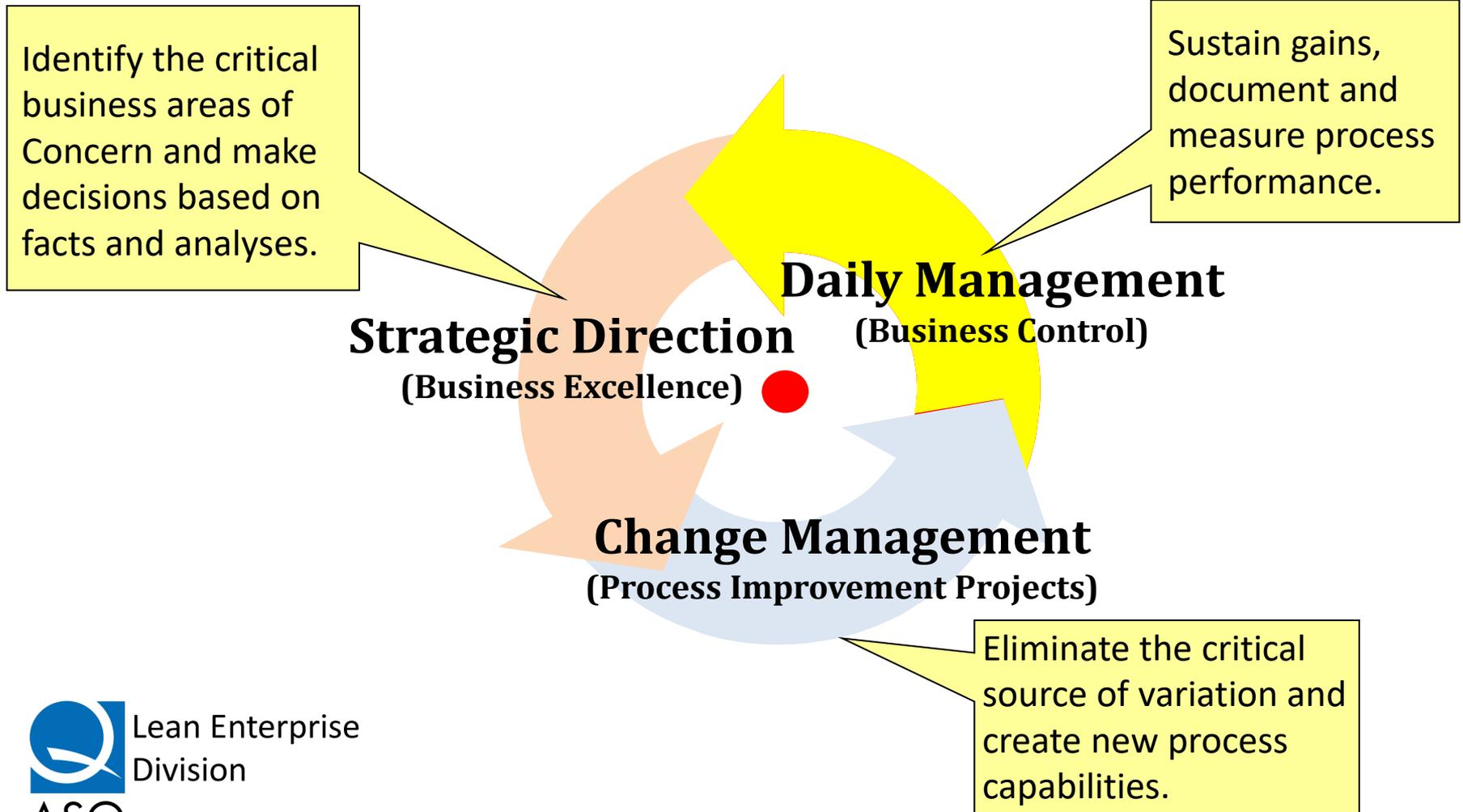
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# How to Lead Company-wide Improvement?

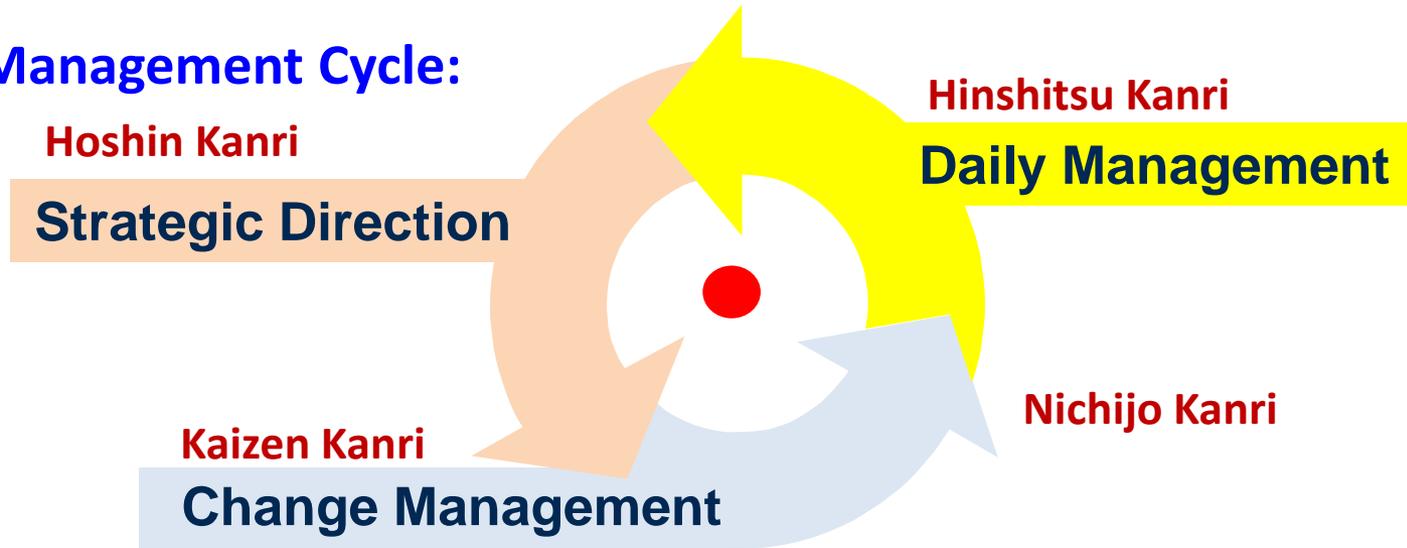
Integrate the improvement cycle elements and processes!



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# Coordinating Company-wide Change Processes:

## The Management Cycle:



At the front-end of the process of management are a need to establish the content of the strategy (as defined by single vision, strategic direction and strategic imperative) and supported by a self-assessment process, strategic benchmarking process within context of an integrated planning, execution and review process. Business excellence does not occur by accident, it must be planned and executed with diligence.



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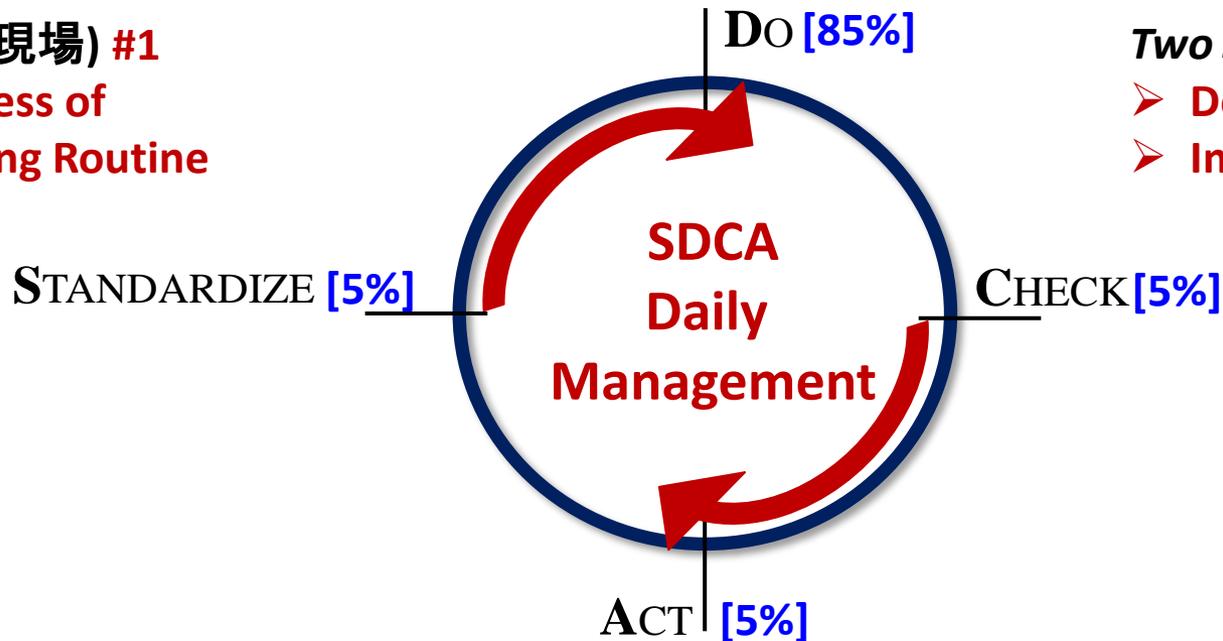
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# SDCA – Develop Standard Ways of Working:

“Without a standard there can be no improvement.”

~ Joseph M. Juran

**Gemba (現場) #1**  
The Process of  
Performing Routine  
Work



**Two Jobs:**

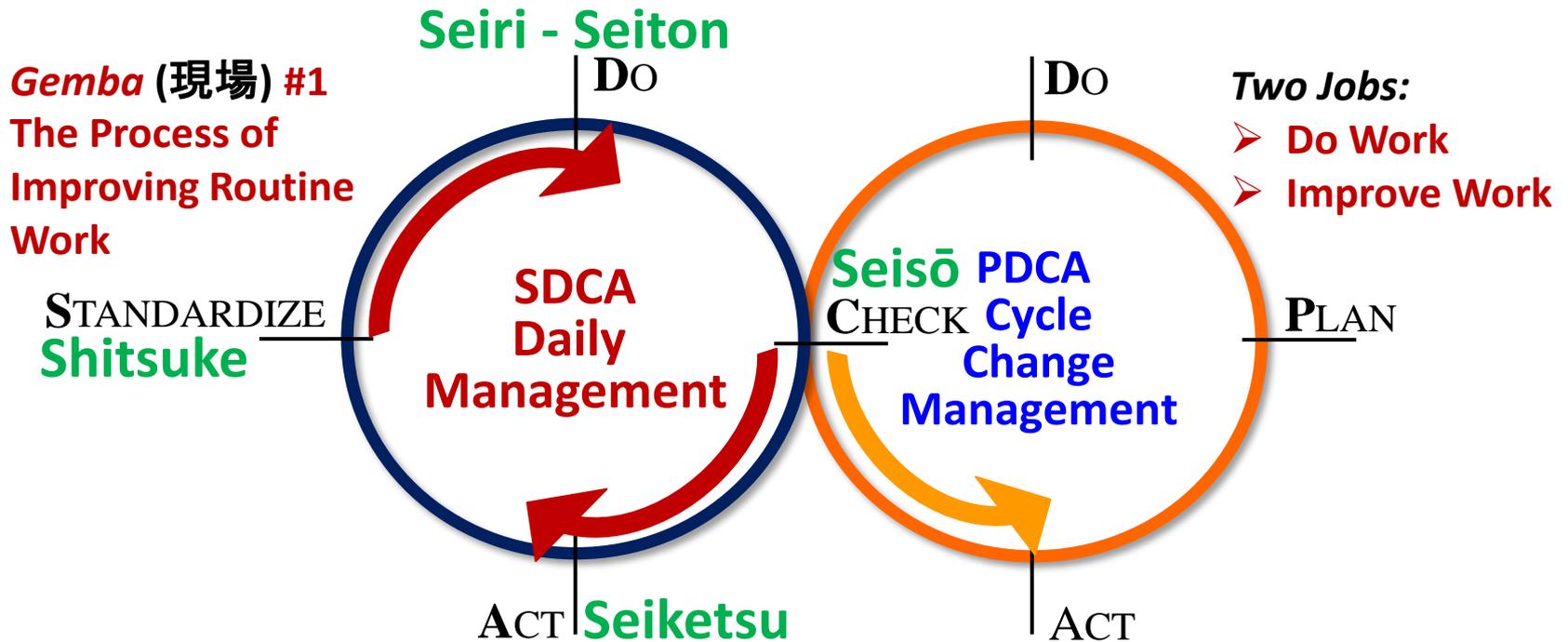
- Do Work
- Improve Work

<b>Activities</b>	Perform Work – Improve Work
<b>Controls</b>	Work Standards – Worker Training – Self-Inspection
<b>Measures</b>	Input Quality – Workflow – Output Quality Worker Safety – Transaction Cost

# PDCA – Managing Organizational Change:

“All change occurs one project at a time, and in no other way.”

~ Joseph M. Juran



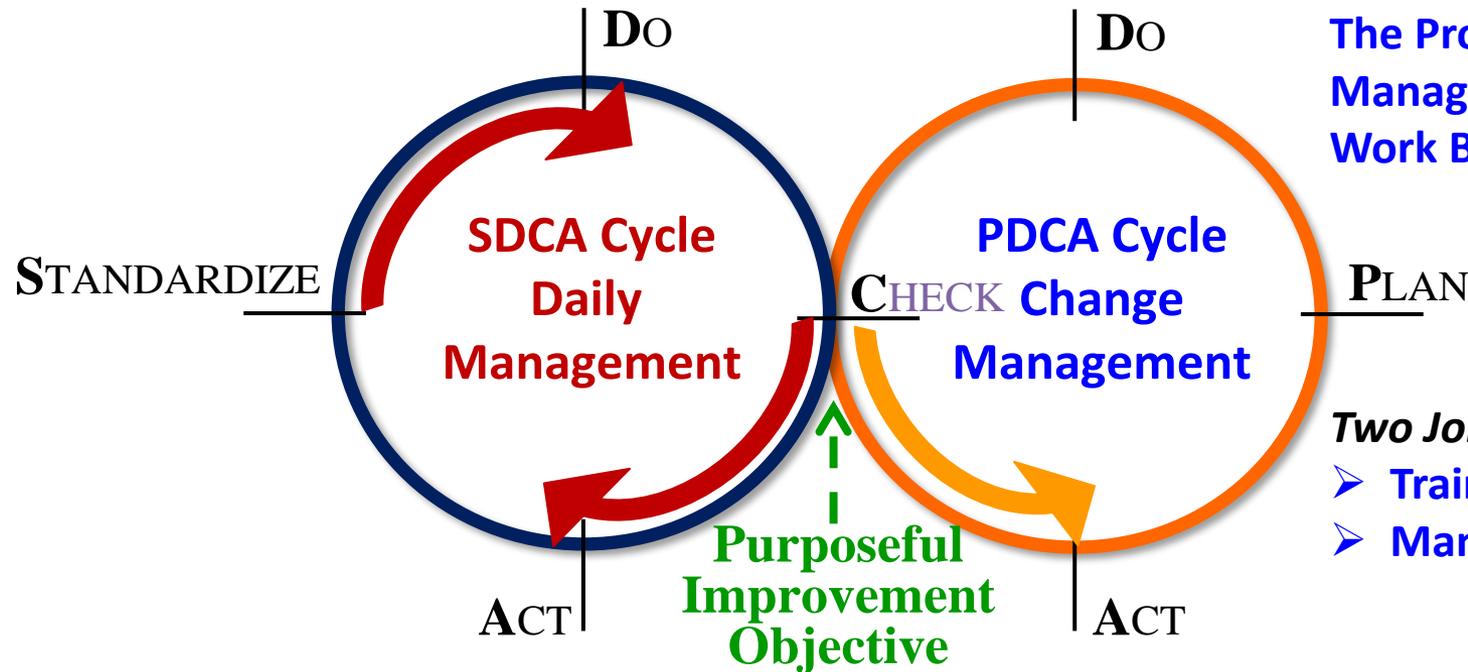
Activities	Facilitate Team – Lead Analysis
Controls	Work Review – Waste Identification – Team Action
Measures	Work Balance – Flow Productivity

# Applying Profound Knowledge for Change:

“One is born with a natural inclination to learn. Learning is a source of innovation.” ~ W. Edwards Deming

*Gemba* (現場) #2

The Process of Managing Projects for Work Breakthroughs



*Two Jobs:*

- Train Workers
- Manage Flow

**Activities** Choose Solutions – Build Competence – Assign Tasks

**Controls** Resource Review – Responsibility Analysis

**Measures** Output Productivity – Customer Satisfaction – Finances



# Strategic Steering for Profound Knowledge:

“Leadership takes a major step forward when they stop asking for explanations of random variation.”

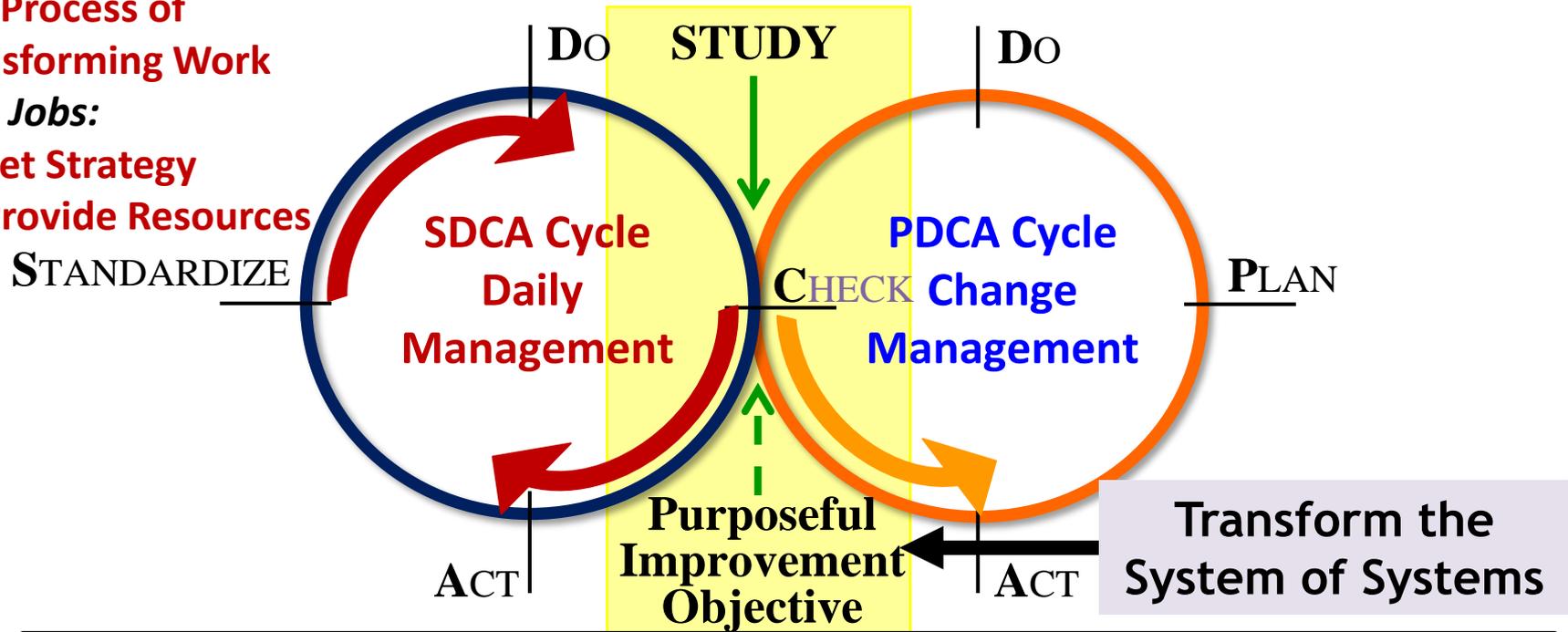
~ W. Edwards Deming

**Gemba (現場) #3**

**The Process of Transforming Work**

**Two Jobs:**

- **Set Strategy**
- **Provide Resources**



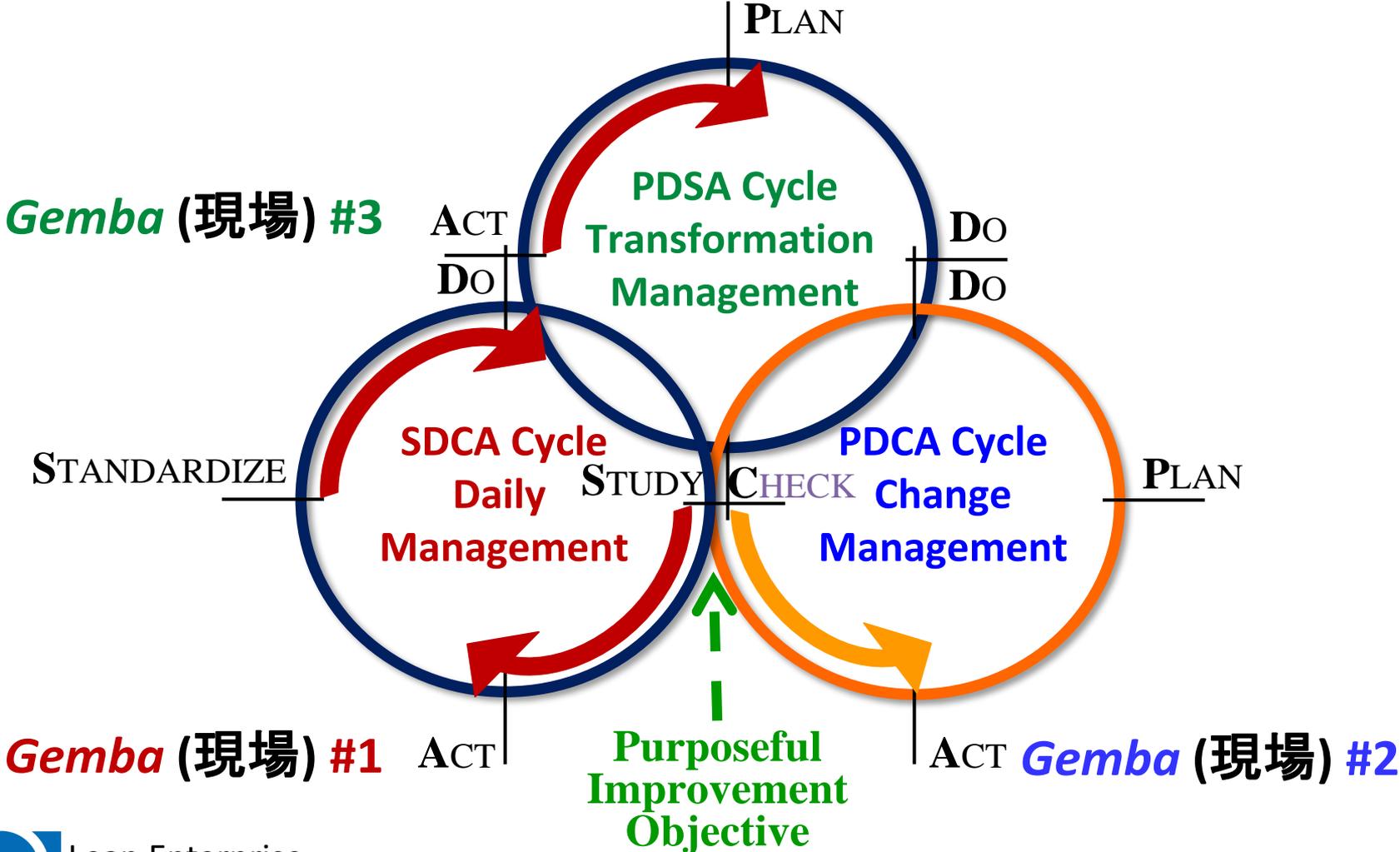
**Activities** Analyze Environment – Make Sense – Create Purpose

**Controls** Assign Decision Rights – Initiate Projects – Allocate Resources

**Measures** Profitable Growth – Productivity – Shareholder Value



# Integrating the System Improvement Cycles:



These three “cycles of improvement” define an overlapping action reinforcement program.

# Implementing an integrated approach:

**Strategic linkage** → **Business Excellence**

Aspiration Level

Planning Process

Benchmarking → Self-Assessment

## Six Sigma Projects

Benchmarking → Self-Assessment

Benchmarking → Self-Assessment

Compliance Level **Quality System** ← **Operational linkage**



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# Understanding the Toyota Management System

Learn how the Toyota Management System operates cross-functionally through integration of the Toyota Production System with the Toyota Sales System and the Toyota Design System.



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# Ohno's Advice: Pay Attention to Standard Work:



“People need to follow the standards.”

Workplace Management, p. 15

“Insufficient standardization and rationalization creates waste (*muda*), inconsistency (*mura*), and unreasonableness (*muri*) in work procedures and work hours that eventually lead to production of defective products.”

Toyota Production System, p. 41



*Workplace Management*  
(WM-1982)

*Toyota Production System*  
(TPS-1978 (Japanese/1988 English))

“Lowly work instructions” manage all change processes at Toyota.



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# Four “Rules” in the DNA of Toyota:

What is the way that the Toyota Management System works? How does it operate in reality. There are four rules governing daily management of Toyota:\*

1. All work shall be highly specified as to content, sequence, timing and outcome. **The Daily Management System!**
2. Every customer-supplier connection must be direct, and there must be an unambiguous yes-or-no way to send requests and receive responses. **Clear Communication Channels!**
3. The pathway for every product and service must be simple and direct. **Managing the Flow of Activities!**
4. Any improvement must be made in accordance with the scientific method, under the guidance of a teacher, at the lowest possible level in the organization. **Structured Team Problem Solving!**



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\* Steven Spear and H. Kent Bowen (1999), “Decoding the DNA of Toyota Production System,” *Harvard Business Review*, September-October.

# Birth of a Toyota Management System:

Interview by Gregory H. Watson:

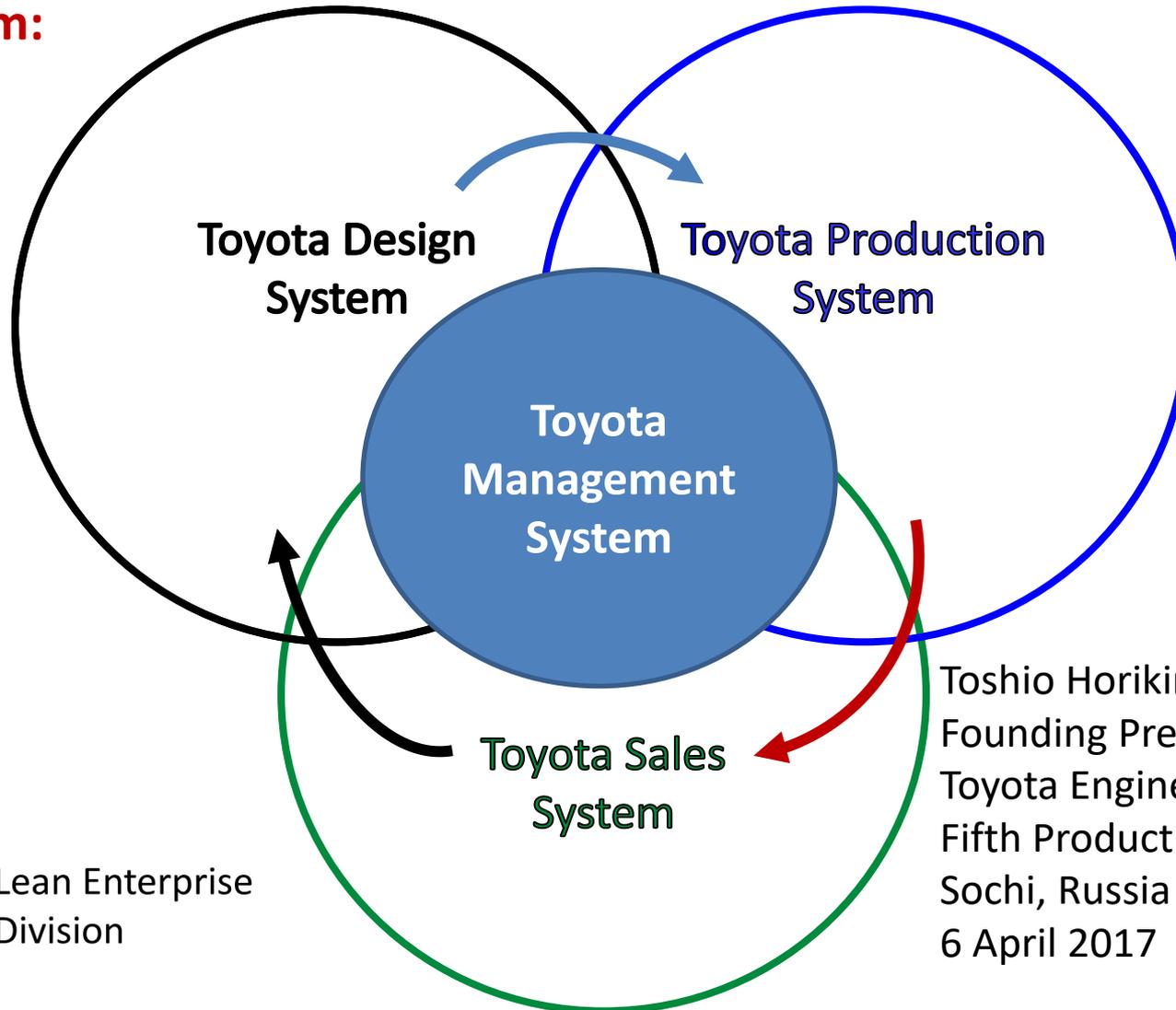
When I asked Dr. Toyoda what happened at the first meeting of his cross-functional quality steering meeting in 1963 and how it proceeded, he commented:

“That Taiichi Ohno was very difficult. He said that we must have the Toyota Production System deployed into all areas of our business. I replied: Dame, Dame Taiichi! Yes, we must have the Toyota Production System in Production but throughout all business areas we must develop a Toyota Management System.”

Dr. Shoichiro Toyoda in Tokyo  
28 September 2015

# The Toyota Management System Architecture:

Toyota's Management System (TMS) is more than the Toyota Production System:

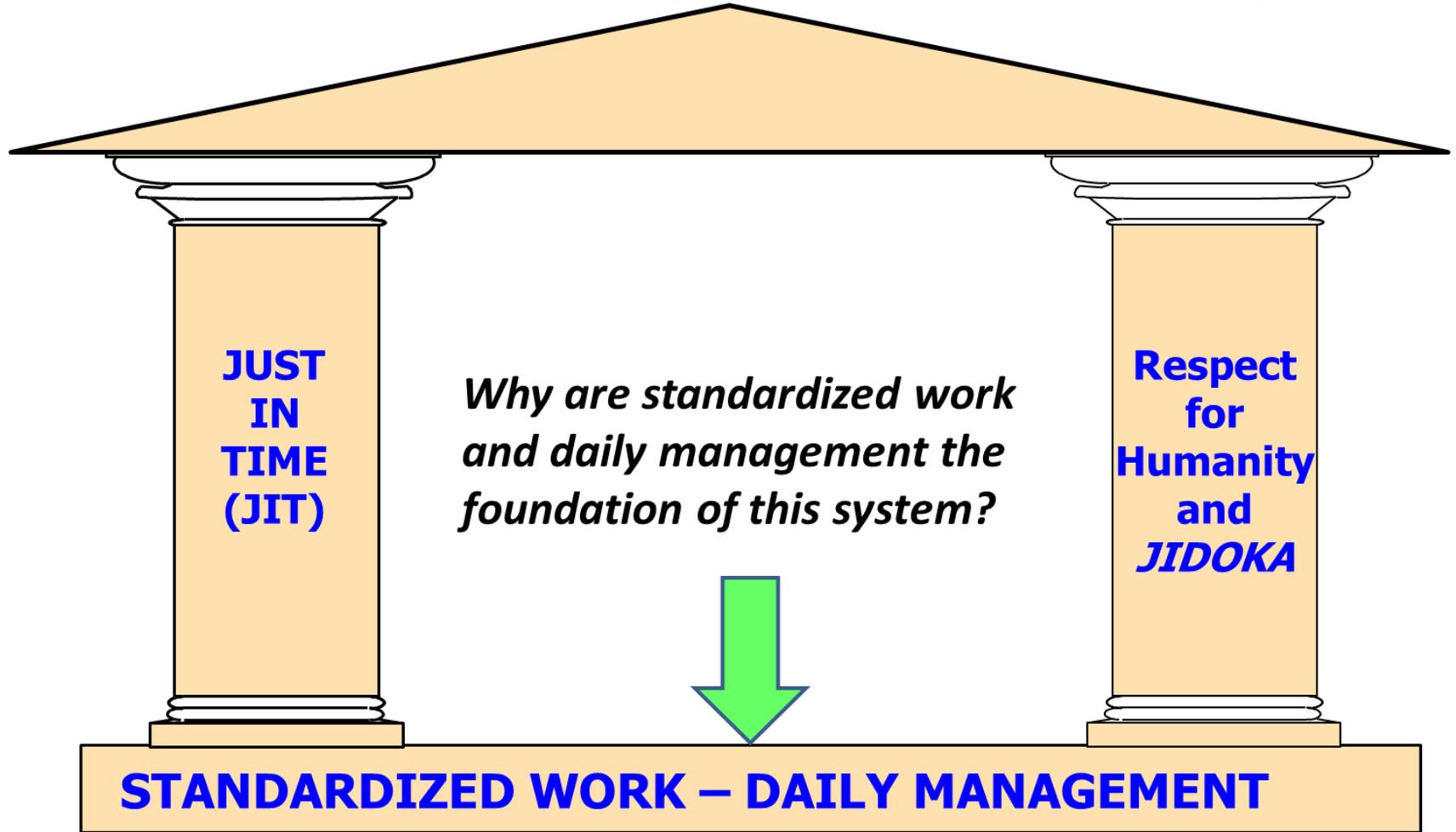


Toshio Horikiri  
Founding President  
Toyota Engineering Corporation  
Fifth Production Systems Summit  
Sochi, Russia  
6 April 2017



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# The “House” of the Toyota Production System:



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**The foundation of TPS is in its routine management of standardized work.**

# People-Oriented Production Processes:

The cultural value of Toyota's Production System that has been translated as "respect for the individual" is better translated as the **"respect for humanity"** (人間性尊重) which affirms a need to value the contributions of all individuals combined with an attitude of personal humility which creates a working atmosphere of mutual respect – this atmosphere is a strong motivator for positive change. Emphasis should be placed on taking full advantage of the unique capabilities that people have to contribute to improve the way an organization works so together it may achieve **wa** (倭) (**harmony, peace or balance**).

**The role of "leadership" in this environment is to delegate decision rights and capacity to act and facilitate the engagement of workers in their progress along the improvement journey.** Self-control and responsibility for quality performance encourage workers to make a constant effort at continual improvement of their work.



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**A supervisor's responsibility is to engage, enable, encourage workers so they come to be enthusiastic participants.**

# Dissecting the Toyota Management System:

## Management

Effectiveness means being able to respond to external change while achieving a company's objectives in an efficient, waste-free manner.

Toyota has a unified system of business management for promoting its pursuit of perfection in effectiveness based on sub-systems for:

### Quality Assurance

- Assure that the quality of the product promotes satisfaction, reliability and economy for the consumer.

### Cost Assurance

- Assure that the cost to develop and perform activities attain the profit goals at introduction of a product and throughout its life cycle.

**GOAL**

**Waste Reduction**

**GOAL**

**Cost Reduction**



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**Cycle time is a PROXY performance measure for both product quality and production cost!**

# Functional Management Within Toyota:



## Business Policy

### Fundamental Policy

- Long-range planning
- Long-term goals
- Long-term policy

### Annual Policy

- Annual Slogan
- Short-term planning
- Annual functional goals
- Annual functional work plans

## Executive Level

Improvement of both quality and cost assurance are emphasized through deployment of business policy.

## Toyota Production System!

### Cross-Functional Level

#### Functions:

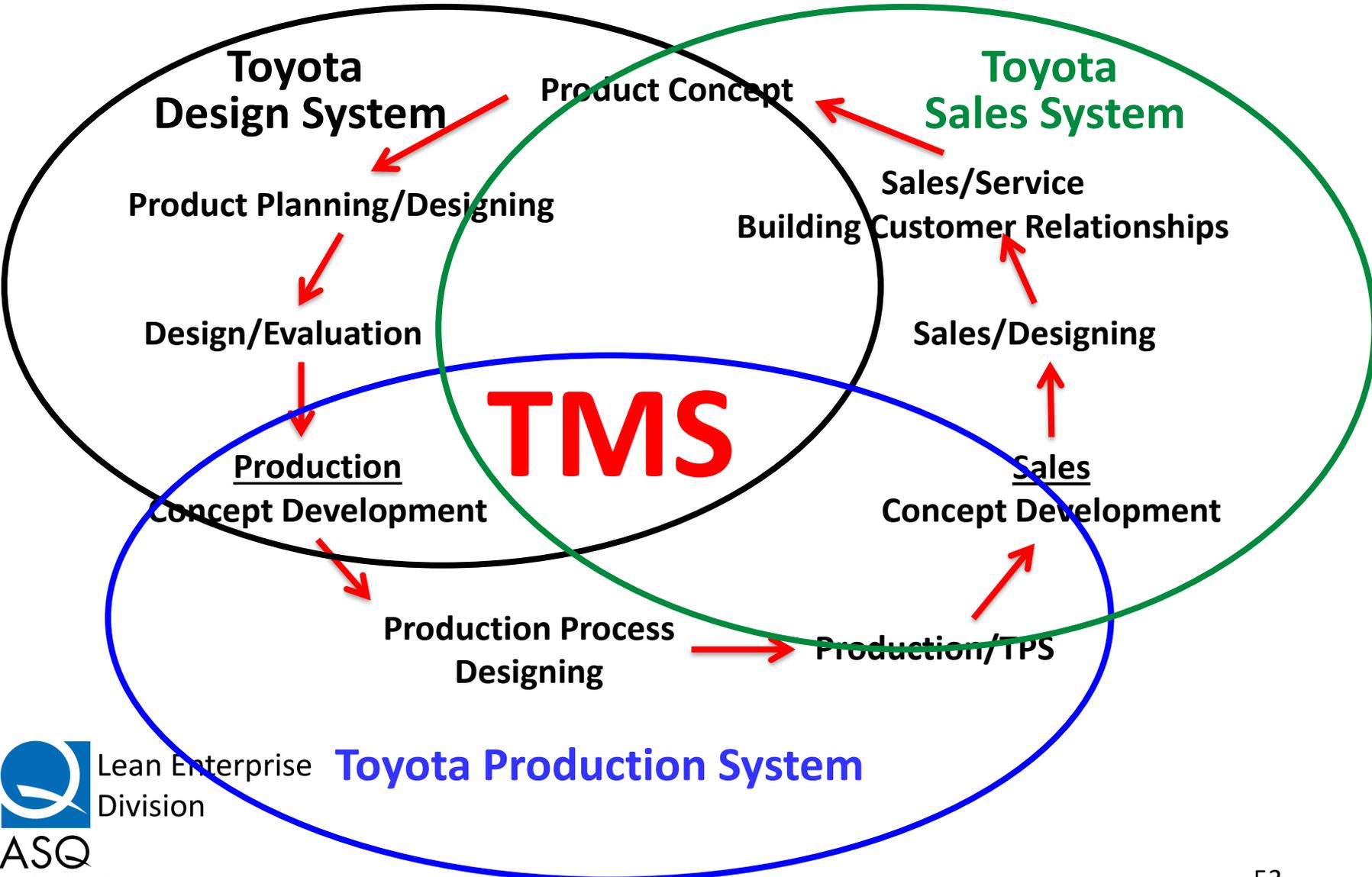
- Administration
- Production
- Quality
- Cost
- Safety
- Sanitation
- Environment
- Planning
- Purchasing
- Sales
- Information Technology
- Communications

Functions are arranged into Operating Departments to perform the routine work of daily management.



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# Toyota's Management System Operating Cycle:



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**Toyota Production System**

# Workplace Vitalization – Humanizing Work:

## Applying the TMS Management Framework:

Workplace Vitalization (this is real management of the workplace (*gemba kanri* (現場管理)) is embedded into TMS deployment. Each worker is encouraged to create unique ideas to motivate a positive sense of accomplishment which improves vitality in both the workers and the organization. This develops a virtuous cycle to strengthen productivity and reduce indirect cost.

## TMS Characteristics make it fit for continual Kaizen activities:

1. Visualizing action for policy, routine management and task administration.
2. Creating a better workplace (leadership and Communication).
3. Creating value (customer first and commitment to outcomes.)
4. Emphasizing a kaizen mindset (waste reduction, organizing *jishuken* teams, and problem-solving).
5. Emphasizing work quality (statistical thinking and process ownership (JKK)).
6. Creating profits (system to produce profit and increase productivity).

# Team-based Methods in Administrative TMS:

Toyota's improvement methods evolved over a 70-year period and have been recently "revitalized" for more current applications:

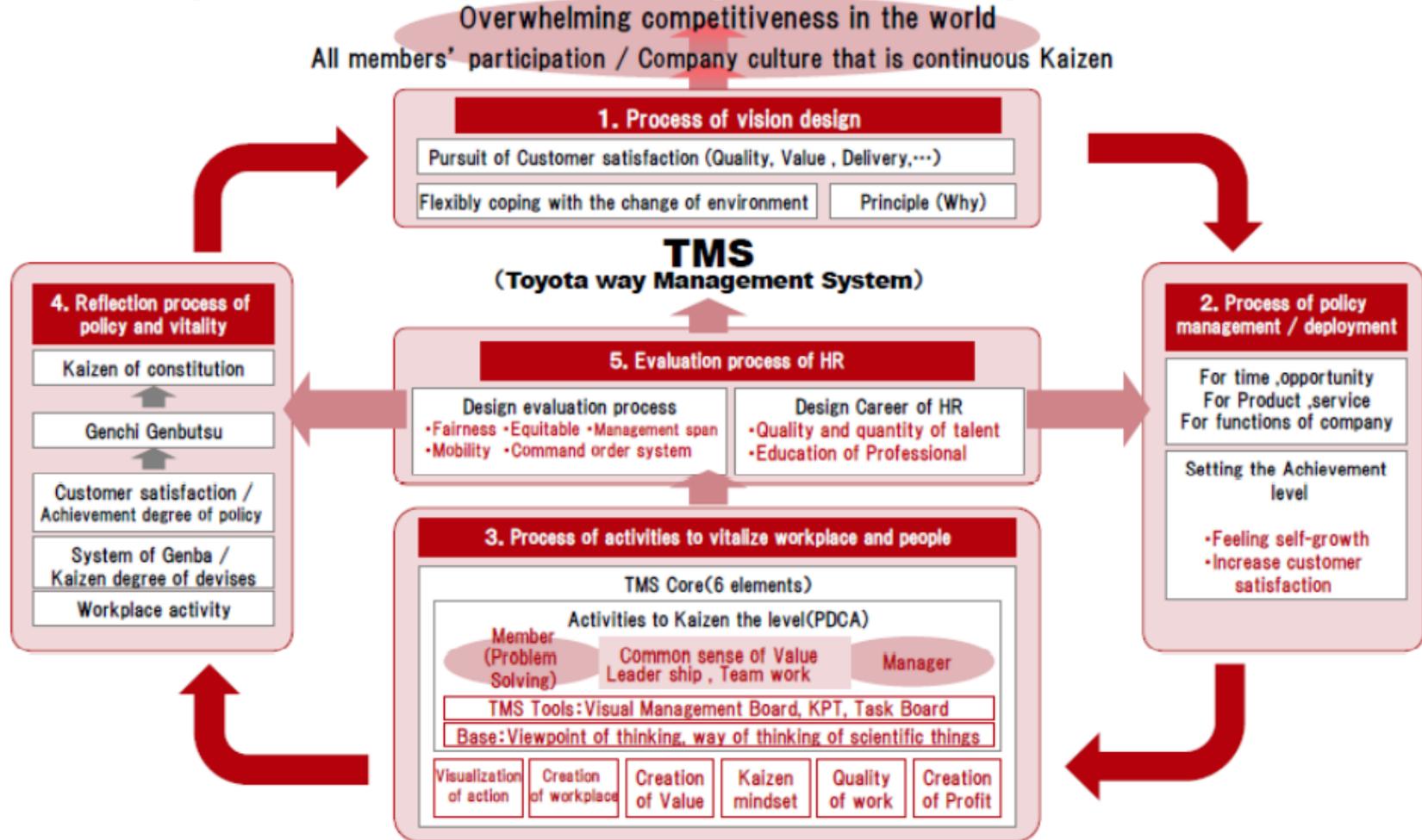


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**“Everyone is trained on-the-job in the use of statistical methods – it is mandatory!”**  
~ Shinichi Sakachi, Toyota Board

# The Toyota Way Management system:



All elements of the Toyota Management System are integrated as a flow to realize new products. Car product lines flow in this process cycle.



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# Take-Away Learning Summary

“The key to the Toyota Way and what makes Toyota stand out is not any of the individual elements ... But what is important is having all the elements together as a system. It must be practiced every day in a very consistent manner, not in spurts.”

~ Taiichi Ohno



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# Summary of Lessons Learned:

## Lecture Series Introduction:

Establishing an understanding of three-gemba management.

1. Discover how the operational gemba, administrative gemba, and governance gemba drive future direction and contribute to operational execution.
2. Understand how the SDCA, PDCA, and PDSA cycles operate in a collaborative management system to holistically assure the simultaneous management of quality and cost.
3. Learn how the Toyota Management System operates cross-functionally through integration of the Toyota Production System with the Toyota Sales System and the Toyota Design System.



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**Next:**

**A Deep Dive into how to establish an SDCA Cycle.**



**Thank you!**

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