

QMD Managing for Quality Webinar Series Session #4

Conducting Executive Inquiry & Formulating Strategy



Gregory H. Watson, PhD.
April 28, 2020



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How will “Managing for Quality” change?

- Session 1 Making Quality-Based Executive Decisions
- Session 2 Leading Transformation – Managing Improvement
- Session 3 Designing Quality as an Inclusive Business System
- Session 4 Conducting Executive Inquiry and Formulating Strategy**
- Session 5 Understanding Japanese-Style Strategy Management
- Session 6 Learning to Lead Change – Triple-Loop Experience
- Session 7 Engineering Management – Designing Future Firms
- Session 8 Understanding the Financial Component of Quality
- Session 9 Reflecting on Strategic Implications of Attractive Quality
- Session 10 Discovering Profound Insights of Operational Excellence
- Session 11 Defining Quality to Apply to Everyone, Everywhere
- Session 12 Managing for Quality Amidst Digital Turbulence


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Summary of Session #4:

This webinar describes a **Western approach to the Japanese system called *hoshin kanri***. This process to strategy management will begin with an inquiry into strategic options, shifts toward formulation of strategy which is then structured into appropriate change management projects and deployed into daily management activities to create excellence. This webinar focuses on the front-end process which must be facilitated for senior managers. This is a role for quality executive. After strategy has been formulated and projects are structured, then deployment (including use of the X-Matrix for ***hoshin tenkai*** (rollout of change initiatives)) may be pursued. This subject will be covered in a follow-on webinar.

QM/OE Focus Areas:

- Leadership,
- Strategic planning,
- Management methods,
- Quality tools,
- Supply chain,
- Customer focus,
- Learning and development



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Abstract of Session #4:

This process of strategy management has three phases for planning and one for the execution of the strategy. The planning phases include; operational monitoring' strategy assessment; strategy search; and strategy formulation. The execution phase is the implementation of strategic plans for change and their deployment into the operational level as defined action plans that drive performance gains.

This webinar focuses on the front-end process and how a strategic approach to quality can facilitate this process for senior managers. This role is for a senior quality executive.

After strategy has been formulated and projects structured for deployment then these projects are deployed more familiar aspects of deployment (this includes the X-Matrix usage for *hoshin tenkai* (rollout of the change initiatives) may be pursued.

This webinar presentation is a prerequisite for the next one in the series which focuses on the system of strategic planning and its implementation in Japanese companies as a combination of a "system of systems" of managing for quality results.



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Learning Objectives for Session #4:

Learning Objective 1: Understand the pursuit of strategy

The process for learning about the strategic change that must be pursued in order to establish the desired future state may be facilitated by a quality professional.

Learning Objective 2: Discover how strategic quality pursuit operates

Strategic change develops the daily management system to enable it to perform with excellence in its future operation.

Learning Objective 3: Learn how the executive function drives its intent to improve

The mindset of the executive function and its commitment to the pursuit of quality outcomes for the organization drive identification and selection of strategic change projects to redesign its daily management system and enable it to operate with excellence in the face of uncertain operating conditions in its future.



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Conducting Executive Inquiry & Formulating Strategy

Part 1:

Management's Strategic Job is to Find the Future and Facilitate the Journey toward Achievement of its Objectives



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Deploying strategic vision requires consensus:

What happens when six blind men try to describe an elephant:



They do not gain a common perspective that permits achieving a shared vision of reality!

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Purpose of the next two QMD webinars:

- 1) Describe how strategic quality operates as a management system.**
- 2) Present the general theory of planning strategic improvement projects for any enterprise-wide business system.**
- 3) Provide insight to a “system of systems” approach to quality planning applied in major Japanese businesses.**



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Strategic quality is a relatively new concept:

The concept of “strategic quality” was initiated by Joseph M. Juran and developed by the quality professionals at JUSE.

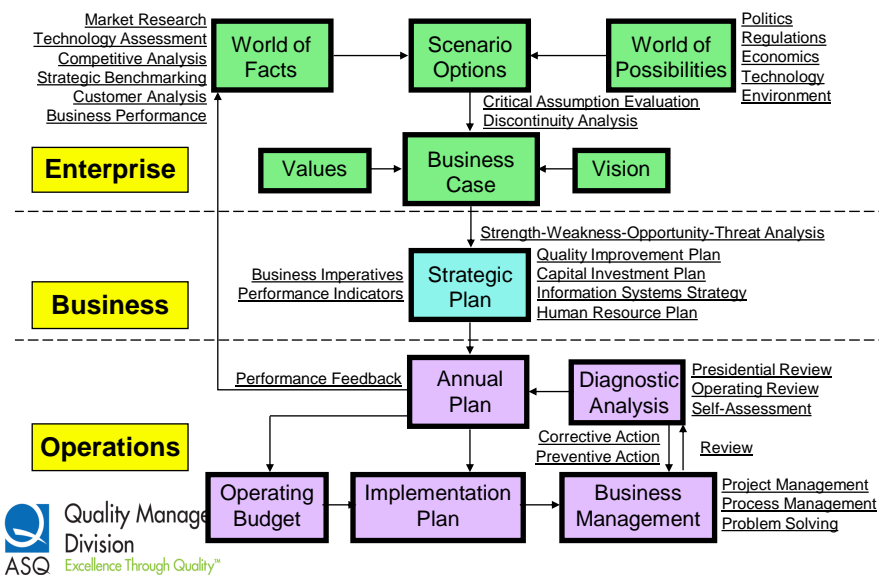
- **Juran on Managerial Breakthrough:** In 1964, Juran introduced the concept of “Policy” and differentiated “Breakthrough” from “Incremental” improvement.
- **Juran on “BIG Q” vs. “little q” Thinking:** Juran’s book on Quality Planning and Analysis in 1980 described the system for applying a quality way to implement organization-wide strategy planning.
- **Japanese Development of the System of Kanri:** In 1991 Yoji Akao published the edited version of a Japanese study describing core concepts of *hoshin kanri* as developed since 1964 with case study descriptions for several important Japanese companies.
- **JSQC Standards on Hoshin Kanri and Daily Management:** In 2003 the first editions for these two Japanese standards were issued.



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Business system to manage performance:



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Mental model of strategic quality activities:

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

**‘BIG Q’
PROCESS OF
MANAGING
FOR
QUALITY**

- Deploying strategy, objectives, and strategic projects
- Development of Products and Markets
- Strategic resource allocation and alignment

**STRATEGIC
CONTENT**

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

“Big Q” changes the daily management system:

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

- Implementation plan for strategic projects
- Project portfolios and team structures
- Systematic monitoring, measuring & review
- Meeting structure & annual business cycle
- Organizational self-assessment & review
- Detailed organization design & responsibilities
- Process structural design & ownership
- 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*

Management factors that link and align:

What the management system ingredients will create a "linked and aligned" organization?

- ✓ Shared Vision of the Strategic Direction
- ✓ Collective Core Culture and Operating Philosophy
- ✓ Standardized Risk Management System
- ✓ Integrated Performance Management System
- ✓ Unified Objectives Deployment Process
- ✓ Common Approach to Process Management
- ✓ Consistent Approach to Continual Improvement



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Vision Deployment: Driving Strategic Intent

Strategic plans deploy the vision of an organization into actions, so that its strategic intent is able to exist in the futures.

VISIONARY LEADERSHIP *finds* a competitive niche, *formulates* the plans to achieve that niche, and *facilitates* actions necessary to achieve this result and *funds* the pathway to obtain future results:

- **Find the Future:** Job of Gemba 3 – Set organization purpose, vision, strategic intent, and resources to support its deployment.
- **Formulate the Plan:** Job of Gemba 2 to develop the strategy into projects that may be completed.
- **Facilitate the Journey:** Job of Gemba 2 to assure that plans are implemented effectively, efficiently, and economically.
- **Funds the Pathway:** Job of Gemba 3 is to provide the strategic resources while the Job of Gemba 2 is to deploy these resources.

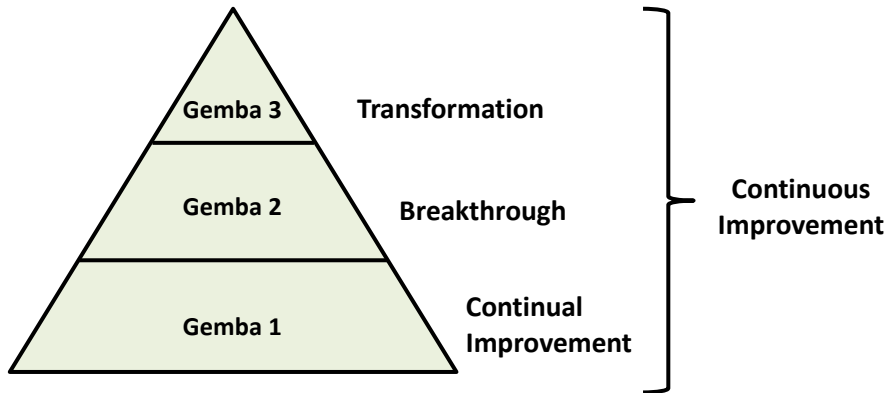


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Considering problems from all perspectives:

How does management implement its intent to effect improvement?



Collective activity across the organization is managing change!



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

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Observation notices the crux of an issue:



The "Spidey sense" is one of Spiderman's most important powers. It originates as small tingling sensation in the back of his head and provides him with a heightened awareness of the circumstances in his surroundings.

Spiderman notices things others don't. He recognizes meaning in the street noise – the unusual that implies something is not right and that he needs to be concerned.



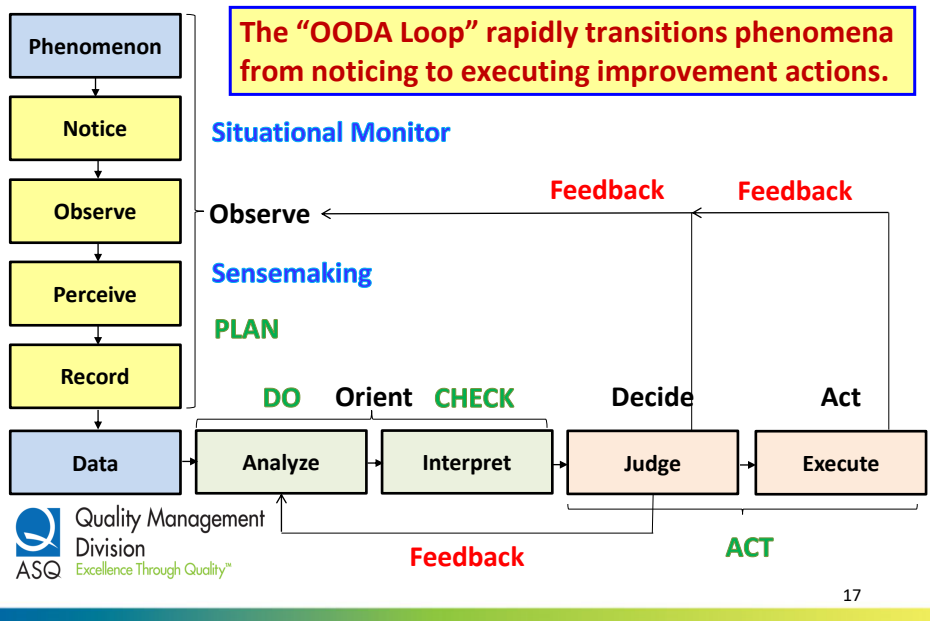
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He focuses on that issue and drills down to the detail of his sensation to discover the issue.

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Challenge of Inquiry: Opportunity for Results



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Situational Awareness: Sensing the Issues

Situational awareness constantly scans the environment to discover if there are any unusual circumstances existing in it.

What occurs during an environmental scan? How are issues first detected from "noise" that presents itself in the ebb and flow of the environment?

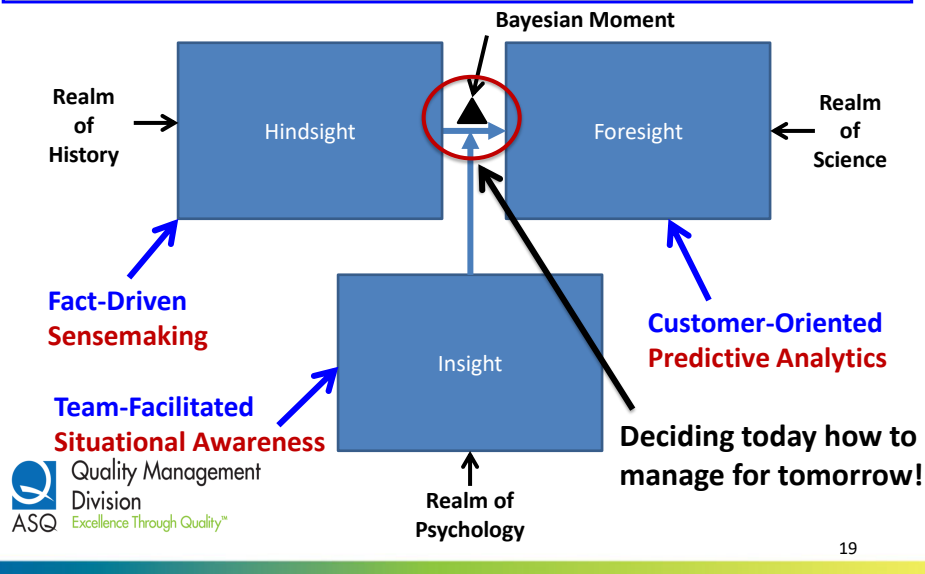
- **Monitoring the world of facts:** Looking for events beyond the realm of chance.
- **Considering a world of possibilities:** Seeking low probability stimuli that could upset the business homeostasis.
- **Assessing critical assumptions:** Testing assumptions to find any weakness or vulnerability in the business model.
- **Discovering discontinuities or disruptions:** Discerning events that have potential to create opportunities or catastrophes.

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Strategy specifies a path to achieve the vision:

Strategic management decisions occur in the Bayesian Moment.



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Sensemaking: External sources

Sensemaking seeks to understand conditions and factors that can create either discontinuities or disruptions of the desired results.

The external scan must focus on the full range of areas that could be influential on influencing or changing the business model or set of its operating factors such as shifts in:

- **Economy:** financial markets and availability of financing
- **Technology:** advances in product or process equipment
- **Environment:** shifts in external environmental surroundings
- **Competition:** strategic decisions and moves by rival forces
- **Politics:** variation in reigning political philosophy or principles
- **Regulations or Laws:** change in governing laws or regulations

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Sensemaking: Internal sources

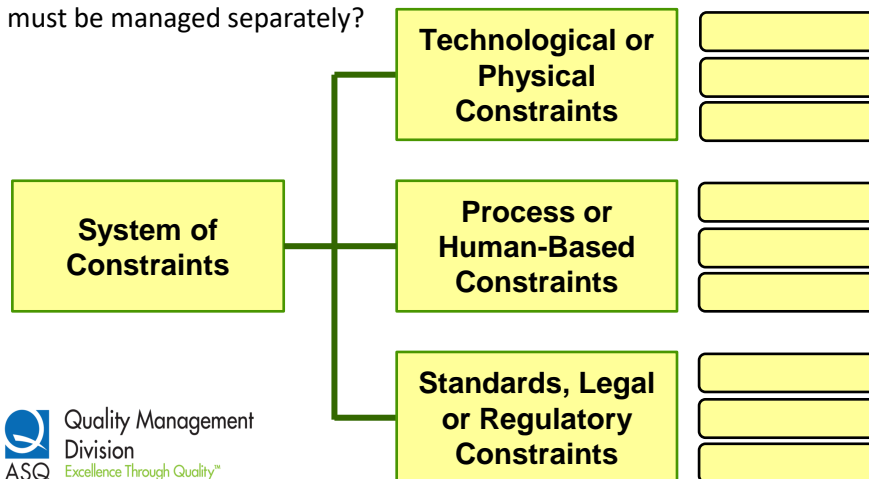
Sensemaking seeks to understand conditions and factors that can create either discontinuities or disruptions of the desired results.

The internal scan must concentrate on all factors that influence the way the daily management system operates to consistently deliver desired results from the productive system:

- **Delivered quality of resources:** induced change in supply chains
- **Development of skills and competence:** operational ability of key human resources to meet future business or technical challenges
- **Technological capability of production systems:** evolution of the core technology that obsoletes current production systems
- **Effectiveness of all business control systems:** implicit risk that is embedded in the production control mechanisms of the business

What constraints create your issues?

What is the system of constraints that limit the issue or create boundaries for the problem? Which of these also are outside worker control, and of those, which can be influenced by management and which are noise that must be managed separately?



Formalize the issue investigation:

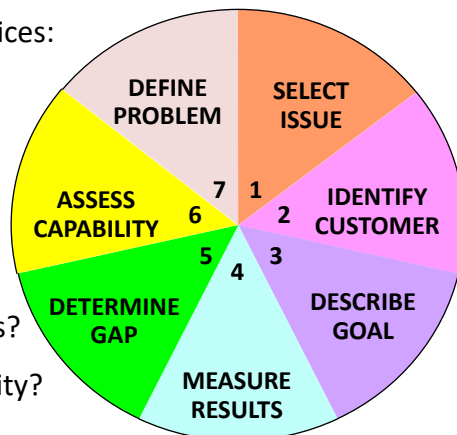
- **Identify the issue – what circumstance is out of control?**
 - Specify the performance indicator that needs to be addressed
 - What is the current state of performance? Any trends?
 - What is the desired state of performance? What is the gap?
- **Evaluate the elements involved in this issue:**
 - Who does it affect?
 - What would be the outcome if the this is not corrected?
 - Where is this taking place?
 - When does this need to be fixed (sense of urgency)?
 - Why is it important for this to be fixed?
- **Define the issue to be addressed as a problem statement:**
 - Specify the objective characteristic that needs to be improved
 - Activities to move toward improvement (reduce, increase, or control the performance indicator?)
 - Identify the location where the improvement is required

Confront your issues to define the problems:

Problem: Any gap between the current and desired results of work.

Examine your standard work practices:

- What has changed?
- When did it change?
- What else changed at that time?
- Why did it change?
- How does it affect our customers?
- How does it affect our productivity?
- How much does this cost?



Start by defining the issue as a narrative:

Problem Narrative:

Describes problem symptoms and business implications of an issue or concern that is confronting the organization. This narrative should identify the specific location or site where the situation was detected and the out-of-control condition (or other-than-expected performance event) that stimulated the inquiry and launched the project.

Rudyard Kipling, "Just So Stories" (1902)

*I keep six honest serving-men
(They taught me all I knew);
Their names are What and Why and When
And How and Where and Who.*

**These questions help organize thinking
about a problem, issue, or a concern.**



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The "5 W + 2 H" Method

What happened?
Who was there?
When did it happen?
Where did it happen?
Why did it happen?
How did it happen?
How much happened?

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Evolve issues into formal problem statements:

- Performance Measure:
 - Specifies a **quantitative** measure of performance
 - Indicator is **agreed by management**
 - Measure is used to set a target to defines a **successful outcome**
- Desired Direction of Change:
 - **Performance trend** is defined: e.g., increase, reduce, control
 - Degree of **desired change** may be indicated relative to potential capability for process performance (Cp or process capability)
 - Establishes **management expectation** for result
- Identification of Location:
 - Realistic **time limit** targeted for performance improvement
 - **Focus on organization or process** for project involvement

NOTE: a problem statement does not set the target for desired performance improvement or set solution expectations.



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Problem-solving is the way to achieve results:

“Problems breed problems, and the lack of a disciplined method of openly attacking them breeds more problems.”

~ Philip B. Crosby

- Proper definition of a problem often requires that multiple perspectives be considered – looking at an issue from all its appropriate angles.
- Problems should stand out from the context – they should be clearly different from history and reflect something more than a “chance” occurrence that the observed effect could have happened purely by coincidence.
- A problem’s magnitude the relative difference between an observed state and its expected event. **The magnitude of this difference is expressed using a Chi-squared statistic.**



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PRINCIPLE: Higher order problems breed lower order problems: they cannot be resolved if the higher order situation is not corrected first.

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Dedicated projects solve critical problems:

“All improvement happens one project at a time and in no other way.”

~ Joseph M. Juran

- **Management must address the priority problems:** All problems that are not priority should be managed within the organization.
- **Developing a Test for Criticality:** How far from expected desired or performance is the system operating?
- **Chi-Squared Statistic:** A ratio of observed state to the desired or expected state (how much larger is it observed than expected?):

$$\chi^2_{\text{Test}} = \frac{\text{Observed}}{\text{Estimated}} = \frac{\text{Actual}}{\text{Predicted}}$$

The larger this ratio the more unexpected the event:



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Formulate management-directed projects to improve based on the criticality of the issue that must be addressed.

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Conducting Executive Inquiry & Formulating Strategy

Part 2:

Strategic Management is a Disciplined Approach for Solving Future Problems

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Strategic Quality Planning:

Japanese professors translated ***hoshin kanri*** using ***policy deployment***; however, the word ‘policy’ does not conform to the Western meaning of this term. When Joseph M. Juran first lectured to JUSE on breakthrough in 1964, the senior Japanese leaders called it “a breath of fresh air” compared to the prior emphasis on statistical and operational methods and tools. Juran’s concept of ***managerial breakthrough*** was a methodology that was well-suited for executives to improve their ability to manage. Since there was no Japanese word to describe a strategic approach to management by planning to achieve quality, they used an ancient term ***hoshin kanri***.

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Etymology of Hoshin (方針) Kanri (管理)

Ho (方): method or form; discipline of soldiering. The name used to describe the second position in kendo; ready to engage and fully anticipating.

Shin (針): the illuminated compass needle that allows one to find “true north” on the darkest night.

Kanri (管理): a system of management.

Hoshin Kanri applies PDCA to management.



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What is the meaning of “hoshin kanri”?

Hoshin Kanri is a management system to set strategic direction and guide the change across an organization’s functions.

- “Top managers and middle managers must be bold enough to delegate as much authority as possible.”
- “That is the way to establish respect for humanity as your management philosophy.”
- “... management system in which all employees participate, from the top down and from the bottom up, and humanity is fully respected.”

Hoshin kanri is strategic direction setting combined with systematic improvement project execution.



Kaoru Ishikawa (1987), What is Total Quality Control? (New York: Prentice Hall).

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Strategic change applies SDCA cycles first!

Step 1: Understand & document – Are we doing the right things?

- Reduce fear of change and involve employees to develop shared understanding.
- Rationalize and document standard work processes.
- Develop a predictive work process measurement system.

Step 2: Simplify – Are we doing the right things right?

- Improve processes: reduce defects and cost, eliminate performance variation

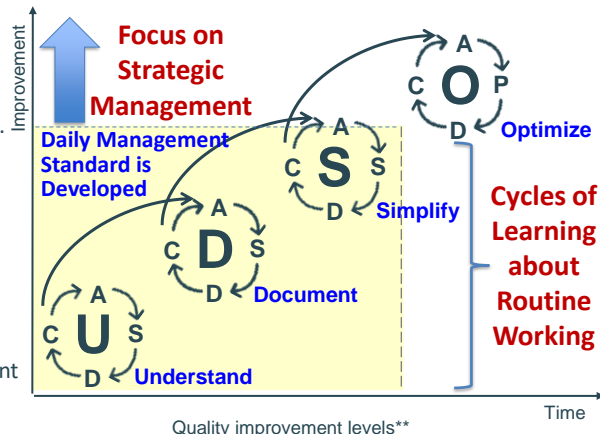
Step 3: Optimize – How do we decide what is right?

- Define purpose, set priorities, and link and align improvement effort.



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PDCA changes the way daily management systems work:



* G. H. Watson, Process Management to Enable Growth, 2011

** G. H. Watson, Business Systems Engineering, Wiley, 1994

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Understanding the strategic job of “check” ...

In SDCA-PDCA cycles “Check” is the crucial step:

Do we have control? Do we have sufficient resources?

“Check” is the pivot point between the standardization process (kaizen) and the process of change management (hoshin).

What happens in the “Check” step of SDCA-PDCA?

- **Performance is evaluated** against standards, historical records, and targets.
- **Reflection occurs** regarding learning how process performance really works.
- **Problem-Solving is conducted** to evaluate issue causality from measures.
- **Experiments are made** to define the performance boundaries and ability to meet expectations implicit in operational performance hypotheses.
- **Decisions are made** to start Improvement projects applying new resources.



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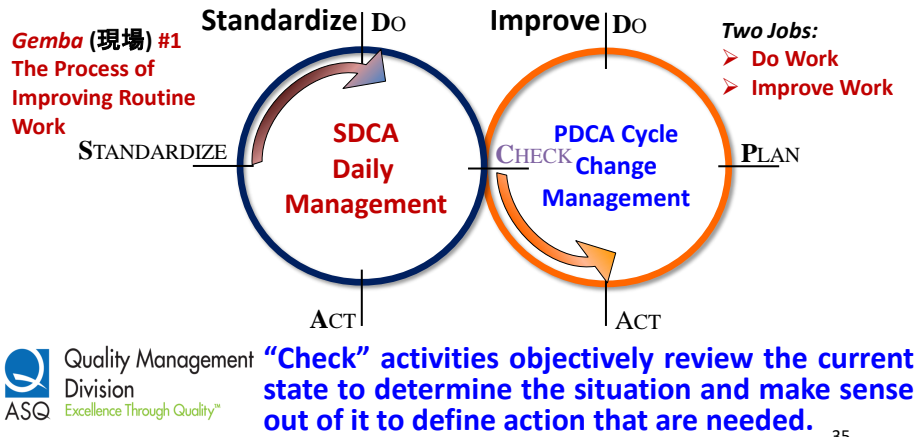
Check Defines Change Projects

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Japanese quality integrates SDCA and PDCA:

- Is change within our control; do we have resources?
- If the answers are yes, then the improvement is *kaizen*!
- If the answers are no, then the improvement is *hoshin*!



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Management chooses how to direct change:

Management concerns, business issues, operational problems, and customer situations should be attacked based upon a clear understanding of the circumstances within the Bayesian Moment, so that a consensus plan for change may be developed.

What is the current state?	Known Solution	Unknown Solution	
Known Root Cause	Just Do It (Quick Win)	Kaizen Event	Operational Process Change
Unknown Root Case	Stop Guessing!	Hoshin Project	Strategic Process Change

Projects → Kaizen or Hoshin

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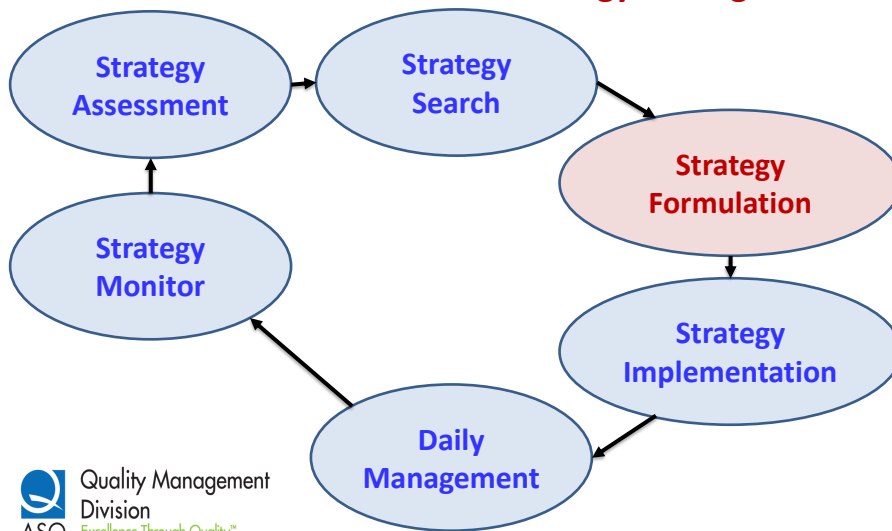
Conducting Executive Inquiry & Formulating Strategy

Part 3:

Executive Strategic Intent to Improve Drives Formulation of Strategic Projects

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Visualizing the managerial planning cycle: The Transformative Process of Strategy Management



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What is the process of strategic search?

Strategic search transitions a collection of challenging issues and seeks to filter them into opportunities for improvement that will reduce inherent vulnerabilities in the business system and create a prioritized portfolio of potential change management projects.

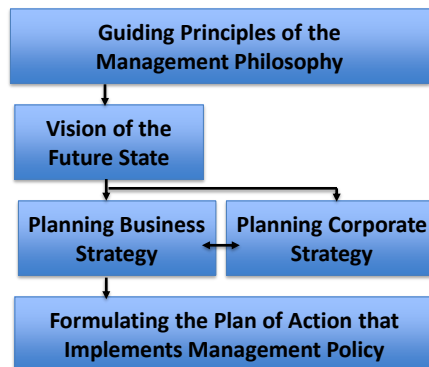
Strategic search:

- Determines the risk and cost-benefit of potential opportunities for improvement
- Evaluates organizational resources to determine what will be required to formulate an improvement project to address the challenge that is presented
- Sequences potential improvement project according to priority

SMBP: Strategic Management by Policy

"The process of policy formulation is unclear." ~ Hiroshi Osada

Managing the "fuzzy front end" of the Strategic Management Process:



SMBP focuses on top-down change while TQM drives change from the bottom-up.

SMBP Methods and Tools:

1. Environment Analysis
2. Product Analysis
3. Market Analysis
4. Product-to-Market Analysis
5. Product Portfolio Analysis
6. Strategic Elements Analysis
7. Resource Allocation Analysis

What is the meaning of the term “Policy” in Japan?



- System for aligning everyone to work toward same organizational ends.
- Direction must make sense and employees motivated to participate!
- Policy development requires engagement of the entire organization.
- Purpose of policy is improvement (quality, cost, time, breakthrough).
- Policy performance targets are for an enterprise not a single person.
- Performance targets must be analyzed for the system not set arbitrarily.
- How should management engage the workers in defining policy?
- How should management engage the workers in reviewing progress?



In Japan, the planning concept of “policy” is better translated as “strategy” so that Policy Deployment is the deployment of strategy.

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What is the process of strategy formulation?

Strategy formulation develops the set of change projects that will deliver the desirable future state of organizational performance.

This system of “policy deployment” or rollout of strategic change projects is called ***hoshin* (方針) *tenkai* (展開)** which describes rolling out an agreed-upon plan of action in concrete terms:

- **Slogan** – the “round words” that motivate employee action.
- **Issue** – the operational definition of the business issue to pursued.
- **End** – the final state to be achieved by this pursuit.
- **Means** – the approach agreed to be applied during this pursuit.
- **Target** – milestones showing progress toward the end.
- **Schedule** – timeline to be used along the improvement journey.
- **Responsible** – assignment of responsibility for leading the action.



Policy ≡ Strategic Plan

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Moving an organizations toward its vision:

What is necessary to achieve performance maturity in the daily management system of an enterprise?

- Discover how to manage cross-functional processes.
- Form a linked and aligned system of work processes.
- Create a sound metrics system linked to processes.
- Develop an evidence-based approach to working.
- Understand system integration effects of work processes.
- Stimulate employees' desire to work and engage them.
- Establish strategic pathway based on sound measurement.



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**Changes must improve results
delivered by daily management**

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Conducting Executive Inquiry and Formulating Strategy:

Take-away Lessons Learned



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The nature of professionalism:

Mary Parker Follett (1925): “the word profession connotes ... a foundation of science and a motive of service.”¹

Professionals work to advance their knowledge domain:
“for there is no one else in the world but yourselves to create the science, the art, the profession of management.”²

How will you develop your competence to a mastery level?

How will you contribute to the advancement of the quality profession?



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1. Mary Parker Follett (1925), “How must Business Management develop in Order to Possess the Essentials of a Profession,” *Dynamic Administration*, edited by Henry C. Metcalfe and Leon Urwick (London: Harper).
2. Mary Parker Follett (1925), “How must Business Management develop in Order to Become a Profession,” *Dynamic Administration*, edited by Henry C. Metcalfe and Leon Urwick (London: Harper).

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Critical take-away observations:

What can quality professionals do to increase company-wide performance results by applying strategic quality?

Strategic quality enables executive inquiry to discover its need for change, facilitates the search for opportunities to improve, and formulates a portfolio of projects that will deliver desired change into the daily management system of the organization.

This webinar addressed the following learning objectives:

- Understand the pursuit of strategy
- Discover how strategic quality pursuit operates
- Learn how the executive function drives intent to improve



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Thank you

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Future QMD Webinars – 6:00 PM ET

(unless noted otherwise)

[Managing for Quality Webinar Series by Dr Gregory H. Watson:](#)

- No. 5: "Understanding Japanese-style Strategy Management" May 19, 2020
- No. 6: "Organizational Learning – Triple-loop Experience" June 16, 2020
- No. 7: "Managerial Engineering – Designing Future Firms" July 21, 2020
- No. 8: "Understanding the Financial Component of Quality" August 18, 2020
- No. 9: "Strategic Reflections on Kano's Attractive Quality" September 15, 2020
- No. 10: "Insights into the Essence of Operational Excellence" September 29, 2020
- No. 11: "Defining Quality to Apply to Everyone, Everywhere" October 14, 2020
- No. 12: "Managing for Quality Amidst Digital Turbulence" November 17, 2020

Gary Cokins: "Strategy Management with a Strategy Map and its Balanced Scorecard" May 14, 2020



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