

Understanding *Hoshin Kanri*

An Introduction by Greg Watson

Plans are nothing, planning is everything.
— Dwight D. Eisenhower

Approaching Business as a System

Much of Japanese quality thinking—if not the fundamental element underlying it — supports putting principle into practice. As this approach to managing is quite appropriate to any situation, its potential impact was recognized early in the Japanese culture. The importance of implementing this concept began sometime before 1645 when Miyamoto Musashi wrote *A Book of Five Rings* as a guide to samurai warriors. The basis of this philosophy was summed up in one word: *heiho*, or *strategy*. The word *heiho* is formed from two Chinese characters: *hei* meaning soldier and *ho* meaning method or form.

In this guide for kendo (or swordsmanship), Musashi said, “If you are thoroughly conversant with strategy, you will recognize the enemy’s intentions and have many opportunities to win.”¹ Not surprisingly, Japanese business principles, as well as their practices, are often analogous to the art of the samurai warrior. For instance, the seven tools of quality control are modeled after the seven weapons of Benkei, a samurai warrior in the twelfth century.

Similarly, *hoshin* is related to *heiho* in kendo, Musashi’s martial art of sword fighting with the katana. Like *heiho*, the word *hoshin*, is composed of two Chinese characters: *ho* and *shin*; *ho* meaning method or form, and *shin* meaning shiny needle or compass. Taken together the word “*hoshin*” means a “methodology for strategic direction setting.”

Hoshin provides a sound practice for Musashi’s principle: “Step by step, walk the thousand mile road.”²

Managing by a Step-by-Step Process

Hoshin kanri provides a step-by-step planning, implementation, and review process for managed change. Specifically, it is a *systems approach to management of*

¹ Miyamoto Musashi, *A Book of Five Rings*, translated by Victor Harris (Woodstock, N.Y.: Overlook Press, 1982), p. 74.

² *Ibid.*, p. 66.

change in critical business processes. A system, in this sense, is a set of coordinated processes that accomplish the core objectives of the business.

For every business system there are measures of performance and desired levels of performance. What hoshin provides is a planning structure that will bring selected critical business processes up to the desired level of performance. *Hoshin kanri* operates at two levels: First, at what Dr. Joseph Juran called "breakthrough" management or the strategic planning level; and, second, at the daily management level on the more routine or fundamental aspects of the business operation. *Hoshin kanri* has been called the application of Deming's plan-do-check-act to the management process.

The initial considerations in this approach to business system change are as follows:

- Measuring the system as a whole.
- Setting core objectives of the business.
- Understanding the environmental situation in which the business operates.
- Providing resources to perform business objectives.
- Defining processes that constitute the system — their activities, goals, and performance measures and performance feedback adjustments.

Measuring the Whole System

Critical to managing a system is creating a plan that manages the introduction of strategic change initiatives. This is essential because no one should expect to establish a "totally correct" initial direction for any business-system considerations. These business-system considerations include core business objectives, environmental conditions, resource availability, or definitions for all critical business processes.

Hoshin kanri encourages the ability to be adaptive. Since long-range planning is based on information monitored from the business system, the planning process itself must be adaptive and capable of response to changes in the business system. This means that management of the business system must include a regular review or assessment that indicates whether or not the system plan is faltering and must be adjusted or changed. This is achieved through regular reviews of both the planning-implementation progress, as well as the application of the planning methodology itself. Thus, *hoshin* becomes an enabling feature in the continuous

improvement of the company's management process, and serves as an information feedback loop that permits continuous responses to the winds of business change.

Setting Core Business Objectives

One premise of hoshin is that people who are charged with executing a plan should participate in the planning process itself. This premise is based on the concept that any plan that incorporates group dialogue will become a stronger plan. An analogy for this approach — which the Japanese call “catchball” — is that people participate in a dialogue in much the same way as a circle of young children play catch with a baseball. We sometimes call this technique “tossing an idea around.” The benefit of such activity comes from the fundamental belief that people want to do what they believe is right. Unless they participate in the broader dialogue of the company, they will not know what is right and will tend to sub-optimize, or do what is right according to the perspective of their own “egocentric” process. This parochial view of the “best” way to do something — and each of course having his or her own “best” way — is most often not optimal for the overall business system. The objective is to obtain alignment (or consistency) among all participating factions, and focus the business as a coherent whole system on its core objectives. The core objectives become those agreements that can be reached by consensus for the purpose of the business system. In many American businesses this is a process of “management visioning.”

Understanding the Environmental Situation

Achieving this goal means that a company's management team must have the ability, desire, and means to communicate, cooperate, and integrate its planning process with the entire business (corporate) structure. *Hoshin kanri* provides this ability by encouraging a dialogue in both the setting of objectives as well as the development of strategies and measures needed to achieve designated business objectives. Hence, the first step in *hoshin*, as is also true in Total Quality Management (TQM), is gaining an understanding of the needs of management's customers.

Satisfying management's customers — which include stockholders, the board of directors, business analysts, and employees, as well as external customers — is

Suppliers)

central to the *hoshin* method of continuous improvement. The first step toward this is performing an environmental analysis of the situation in which the business system functions. This includes the economic, market, political, technical, social, and legislative aspects of the company's business and how it performs relative to its competitors in these areas. Benchmarking is an important tool for the management team to use in understanding the boundaries of the business system environment.

Benchmarking can be used to help establish the targets used in *hoshin*. What matters most is not how a company is performing relative to its own historical trends, but rather how it is performing in relation to its current competitors. The Malcolm Baldrige National Quality Award (MBNOA) criteria emphasize this fact by seeking competitive information in almost every evaluated category.

Providing Implementation Resources

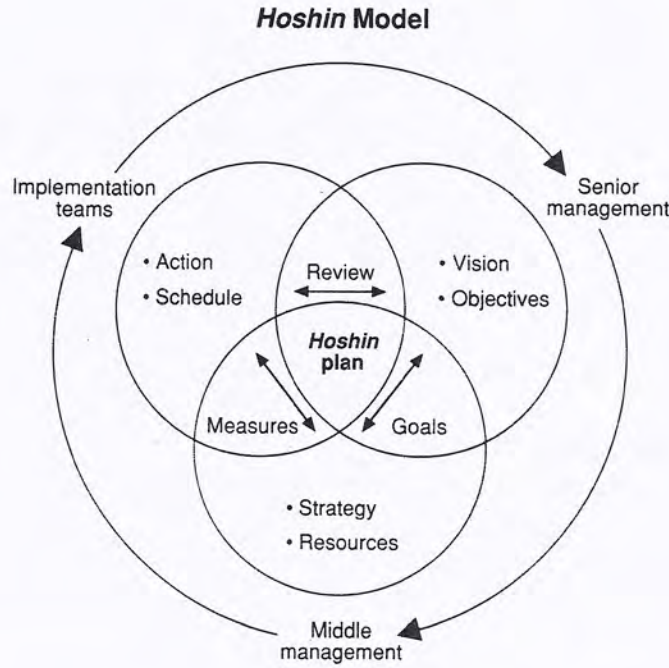
Hoshin kanri operates on two levels to manage continuous improvement — breakthrough or strategic objectives, and daily management control of the business fundamentals. Daily management (kaizen applied to the business process fundamentals) is the basic control process of a Japanese business, while *hoshin* is used to align and coordinate the business system for specific strategic change initiatives. In general, a company implementing *hoshin* manages no more than three-to-five major strategic change initiatives simultaneously. However, the amount of time dedicated to *hoshin* objectives varies according to job assignment and level within the company. Senior management may spend more than 80 percent of their time on *hoshin* breakthrough objectives while line employees spend less than 10 percent.

Daily control is part of *hoshin kanri* and cannot be ignored. It represents those "non-strategic changes" or fundamental business processes where change is of a more gradual "kaizen" nature. Therefore, as the objectives cascade down the organization into strategies, it is prudent to track the manpower required for appropriate implementation.

Defining System Processes

Hoshin provides management with an opportunity for consensus dialogue about significant system change. A model for this consensus planning and execution process is illustrated below:

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The general movement of the *hoshin kanri* process is from senior management to middle management to the implementation teams. The two-way arrows represent negotiated dialogue or "catchball" used among these three groups to establish and agree on the goals, measures, and review. Senior management is responsible for establishing the "what" of the business system — its vision and core objectives. Middle management negotiates with senior management regarding the goals that indicate completion of the core objectives and is then responsible for developing the "how" of the business system — the strategies for addressing the objectives and the management of the resources to accomplish the plan. Middle management then negotiates with the implementation teams regarding the performance measures that are used to indicate progress toward accomplishing the strategies. The implementation team is then empowered to manage the action and schedule their activities. Senior management then uses a review process to understand both the progress of the implementation teams and the success of their planning system.

The review phase represents what is called in Japan the "Presidential Audit," a quality management review by the senior management team. (This is one potential internal company application of the MBNQA assessment criteria.) It involves letting senior management observe firsthand the detail of the quality system implementation.

This model is a simplification of the methodology presented by Dr. Yoji Akao and his colleagues in this book. They present us with a unique insight into the Japanese method of applying *hoshin kanri*. Their approach provides an important understanding for senior Western managers, since this methodology forms the cornerstone of the Japanese management system.

Understanding Japanese *Hoshin*

Dr. Akao and his fellow authors have presented a wonderful book of fundamental knowledge of the Japanese *hoshin kanri* system. It is important to remember that there are many cultural and business distinctions between implementing a *hoshin* system in Japan and in Western countries. The following table presents some of the key concepts for the promotion (implementation) of the Japanese *hoshin kanri* method. These steps are described further in Chapter 2.

Plan
↓
Do
↓
Study/Check
↓
Act

1. Establish a company motto, quality policy, and promotion plan.
2. Devise long-term and medium-term management strategy.
3. Collect and analyze the information.
4. Plan the target and means.
5. Set the control items and prepare a control item list.
6. Deploy the policy.
7. Deploy the control items.
8. Implement the policy plan.
9. Check the results of implementation.
10. Prepare the status report for implementing *hoshin kanri*.

The first step of this methodology is unusual for a Western company culture. This step does not mean that management should create a catchphrase, rally round the troops, and shout or sing the company slogan. Indeed, the cross-cultural meaning is much more profound. What this first step means is that management needs to take a careful look at their business by conducting an environmental scan. This step in Akao's methodology is not stated strongly enough. The core objective that most businesses use is the "vision" of the management team, complemented by an understanding of the competitive situation, and joined together with the technological environment and resulting market opportunities available from the current situation. The following process helps to understand how a company would conduct such an analysis of its environmental situation in preparation for *hoshin kanri*:

1. Assessing the need for change.
2. Evaluating the business environmental situation (i.e., political, economic, social, technological, and cultural).
3. Understanding competitive trends by benchmarking, conducting industry analysis, and evaluating competitive intelligence.
4. Projecting trend information to develop alternative future scenarios.
5. Building mutual consensus among the management team on implications of observed and projected indicators.
6. Developing business objectives that address possible alternatives.
7. Identifying core objectives and gaining shared commitment within the business.

Beginning with the establishment of a company's business vision and its core business objectives, *hoshin kanri* focuses on making competitive change — the change required to gain or maintain market position. The core objectives thus reflect the underlying business purpose of the organization. As soon as an industry leader establishes the long-term market advantage of superior performance based on a particular performance indicator, then the rest of that industry will be at a competitive disadvantage. In summation, a successful corporate strategy typically begins with a realistic assessment of the current environmental situation, a coherent vision of the future, and the understanding of the transition required to bridge from the present to the future. *Hoshin* helps to sustain competitive advantage by providing a structure for linking the core objectives into the current competitive situation.

Observing the Benefits of *Hoshin*

Hoshin has been adapted to several major American companies, including Hewlett-Packard, Florida Power & Light, Procter and Gamble, Intel, and Xerox. These companies have recognized the advantages of *hoshin* over other planning systems. *Hoshin* is the application of plan-do-check-act to business process management. Comparing the Malcolm Baldrige National Quality Award evaluation method to *hoshin* results in an interesting observation: they are parallel planning and execution methodologies. While the Baldrige evaluates companies on their approach and deployment of quality throughout the company and observes the results from implementing the quality approach, *hoshin* provides a method for developing a companywide approach and deploying it for results. The advantages

most often cited focus on the communication improvement from a documented, open planning, implementation, and review system. Specific advantages include:

- Everyone knows how his or her work relates to the strategic (*hoshin*) and tactical (daily management) operation of the business system.
- Linked core objectives and implementation strategies clarify the communication among cross-functional activities and improve the buy-in among diverse business activities.
- Review of progress is structured to permit open discussion of the unfolding application of management's core objectives for business-system improvement.
- *Hoshin kanri* methodology is continuously reviewed to improve the operational planning system of the business rather than to leave an unquestioned, static, financially focused system in place.

Applying Hoshin Methods

Many of the American companies that have implemented *hoshin kanri* have shared their implementation methods in the public domain. The methods of Hewlett-Packard, Florida Power & Light, and Xerox have been combined into the following "idealized" *hoshin* system. This example consists of four related forms that help to manage the *hoshin* system implementation. These forms do not reflect accurately what any particular company uses in its current implementation, but were developed to provide a nonprescriptive "best practices" integration of the principles of *hoshin*. The purpose of presenting these four forms is to provide a more concrete example of the practice of *hoshin*.

1. Hoshin Plan Summary

A *hoshin* plan summary is used to present an overview of the entire *hoshin* plan. This form provides specific details for each core objective and complements the individual *hoshin* action plans for each objective. Some of the key features of this form include:

- Statement of core objectives with their associated owners, short-term and long-term goals, and their supporting implementation strategies with their targets and milestones.
- A matrix that describes the relationship between each of the *hoshin* implementation strategies and the company's Total Quality Management focus (the sample form indicates four key TQM focuses for continuous improvement — quality, cost, cycle time, and safety).

Hoshin Plan Summary

Core Objectives	Management Owner	Goals		Implementation Strategies	Target		Improvement Focus						
		Short term	Long term		Short term	Long term	Quality	Cost	Cycle time	Safety			

● Symbol indicates a strong relationship between improvement focus and a specific strategy

2. Hoshin Action Plan

Once the overall *hoshin kanri* approach for a company has been developed, it needs to be deployed. The first form used in this deployment process is a *hoshin* action plan. The action plan is used to record the detailed information that links a particular core objective to the implementation strategies. Some of the key features of this form include:

- Recording of specific administrative information regarding both the ownership of the core objective as well as its review status and progress against the goals and performance targets.
- Summary of the environmental situation that lead to the assessment of this particular objective being considered to be a core objective to the business system.
- Statement of the core objective.
- Recording of the agreed-upon short-term and long-term goals for the core objective.
- Description of the strategies that will be pursued for implementation of the core objective, identification of the strategy owners and the performance targets and schedule milestones that have been agreed upon for each strategy.

3. Hoshin Implementation Plan

The *hoshin* implementation plan is the document used for recording progress in the execution of the strategy. It includes a listing of implementation activities required to reach closure on the strategy and the current status of schedule milestones and performance results as compared to the initial projections. This Gantt chart format is typical of most *hoshin* implementation plans. By adding the actual schedule to the original schedule and actual performance to the target performance, this form supplements the *hoshin* implementation review form.

4. Hoshin Implementation Review

The *hoshin* implementation review form is used to record progress in the performance measure that represents the target for this strategy of the core objective. As indicated in the example, this form is one place where the company's performance relative to industry average and world-class benchmarks should be recorded. An additional feature of this form is the listing of the current status of the highest priority implementation issues, and the individual owner who is working to resolve each issue by the targeted resolution date.

Hoshin Action Plan

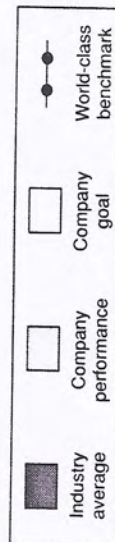
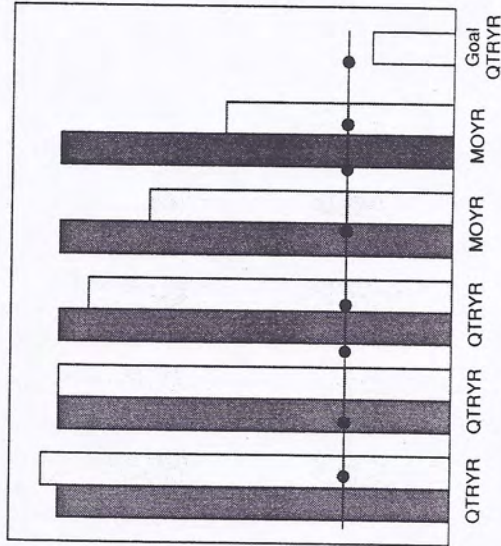
Hoshin Objective Title: Department/Location: Review Team:		Management Owner: Date: Next Review:
Environmental Situation Summary:		
Core Objective:	Strategy (Owner)	Targets and Milestones
Goals Short term: Long term:		

Hoshin Implementation Review

Hoshin Objective:
 Strategy Number:
 Strategy Owner:

Date Updated:
 Next Review:

Performance Status



Implementation Issues

Priority	Issue	Owner	Resolution Date

Closing Comment

Dr. Akao has done the professional quality community a great service by providing this gem. It is still a rough-cut stone from the perspective of a Western reader; however, it does provide valuable insights into some of the lessons learned by our Japanese counterparts. As with any quality principle being considered for practical application, we must consider the still sound advice of Dr. Deming and adapt those *hoshin kanri* principles that apply to our own particular business environment and not blindly adopt the *hoshin kanri* method. Benchmarking our current planning process against this Japanese methodology is a good place to start for developing an understanding of the performance gap that can be closed by using the *hoshin kanri* methods.

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Gregory H. Watson is presently a business advisor for major corporations in Europe, Latin America, and North America. He is a Director-at-Large of the American Society for Quality Control and a Certified Quality Engineer. He has served on the Board of Examiners for the Malcolm Baldrige National Quality Award, Texas Quality Award, New York State Excelsior Award, New Jersey Quality Achievement Award, and the American Productivity & Quality Center Benchmarking Award.

Greg has held executive positions as a quality officer at both Xerox Corporation and Compaq Computer Corporation. He was Manager of Quality Leadership Development at the Hewlett-Packard Company during the time that *hoshin kanri* was introduced. In addition to working on his organization's planning process as a divisional planning manager, Greg was a member of the development team for *hoshin* training. Greg has written several quality-related books: *The Benchmarking Workbook* (Productivity Press, 1992), *Strategic Benchmarking* (John Wiley & Sons, 1993), and *Business Systems Engineering* (John Wiley & Sons, 1994).