Abstract

This article is based on a review of the English language hoshin kanri literature and hoshin kanri research carried out at the Norwich Business School. The objective is to explain the hoshin kanri approach, and by so doing, to contribute an insight into the usefulness of the Deming cycle (PDCA) for managing the deployment of objectives in strategic planning. This principle is additional to the existing concepts discussed in the literature of managing by objectives and the balanced scorecard. A PDCA approach to managing the strategy process may not sit easily outside-in view of strategy thinking, but the conclusion of the article is that when strategy calls for an organization-wide effort, hoshin kanri is an effective and managed way to achieve this.

Introduction

This article examines the foundations for thinking about the scope and practice of hoshin kanri in English language publications since the late-1980s. A full annotated English language hoshin kanri bibliography of 130 publications has now become available for the first time (see Witcher 2013). The years, 1990-1995, saw a peak of publications that roughly corresponded to the high water mark of total quality management (TQM) in Western countries. Another peak came during 2006-2010; a time when the popularity of TQM revived and a general interest grew in lean production. Overall the content and context of the literature are little changed up until the present, and publications almost all fall within the quality management and operations literature, rather than in that of strategy and strategic management. While quality management emphasizes the strategic power of hoshin kanri, there are virtually no available sources within the mainstream strategy and strategic management canon about hoshin kanri.
Learning from the Japanese

The competitive success of Japanese companies during the 1980s saw the rise of new institutions that sought to learn about total quality. One of these was GOAL/QPC, a nonprofit educational institute, formed in 1978 as a community-based group to promote jobs (GOAL stood for the Growth Opportunity Alliance of Greater Lawrence). It took an early leadership position in advocating hoshin kanri (Cole 1998) and in 1988 formed a members’ research team to promote Hoshin Planning/Management by Policy. Members included Dow Chemical, Procter & Gamble, Hewlett-Packard, and IBM. It produced the first English language report about hoshin kanri (GOAL/QPC 1989). In the same year, Bob King, a GOAL/QPC executive, published his text, which was based on a visit to Japan by GOAL/QPC delegates the previous year (King 1989).

The GOAL/QPC report identified three areas for total quality: daily control, cross functional management, and hoshin planning. Daily control maximises an individual’s departmental performance, cross-functional management maximises coordination and cooperation among related functions, and hoshin planning maximises a focus extending from the CEO to line employees on strategic targets. Hoshin Planning is described as “simply PDCA applied to the planning and execution of a few critical (strategic) organizational objectives.” PDCA is the Deming cycle of phases needed to manage a business process: that is, plan the process, do the work to plan, check that the plan is being carried out effectively, and act if it is necessary to change the plan or to do things differently. A model is given of the ‘core hoshin planning process’ (see figure 1):

**Figure 1: The core hoshin planning process.**

While the model looks similar to any planning process, the difference lies in the application of planning tools with quality principles and tools; such as PDCA, a small number of focus points for
developing annual objectives (the Pareto principle), the strong customer focus, fact-based data, and root-cause problem solving. The last step in the model involves reviewing the hoshin process itself – this concern with process is unusual in conventional strategic planning.

The one year plan starts the ‘heart of hoshin planning process’. Annual objectives are developed out of vision and longer-term plans into a few key objectives that must be achieved during the year (step 3). The key departments/functions are then involved in the development of sub-objectives and plans. Coordination is worked out during deployment through a process of reaching agreements about how plans can be achieved; because this involves throwing possibilities to and fro between effected parties it is likened to a game of catchball (in step 4, figure 1).

The Bob King text reports on a visit to Japan by GOAL/QPC delegates, where they found hoshin kanri to be the only system common to the companies visited. “Hoshin planning helps to control the direction of the company by orchestrating change within a company. This system includes tools for continuous improvement, breakthroughs and implementation. The key to hoshin planning is that it brings the total organization into the strategic planning process, both top-down and bottom-up. It ensures that the direction, goals, and objectives of the company are rationally developed, well defined, clearly communicated, monitored, and adapted based on system feedback.”

King translates hoshin as policy or target and means, and kanri as planning or management. The term, hoshin planning, was used by Yokogawa Hewlett-Packard, and another name, policy deployment, was used by Florida Light and Power. These companies were the pioneers - Florida Light and Power was the first Western company to adopt hoshin kanri, and both companies were winners of the Japanese Deming Prize.

Management by objectives
A major theme that runs through the literature is to distance hoshin kanri as a deployment system different to management by objectives (MbO). The origins of hoshin kanri owe much to the adoption there of MbO ideas, but its development owed much to Schleh (1963), who advocated that the “specific accomplishment expected of each individual [should be accomplished] ...so that the work of the whole management group is soundly blended at a particular moment of time” (1963: 19). Objectives and means should be determined so it is to the advantage of one person to help another. Otherwise a strong drive toward one particular result may lead to an imbalance in the company; in particular, each objective should be carefully scrutinized to determine the optimal point beyond which the objective might be detrimental to the achievement of other objectives. This is discussed in Akao.

**Yoji Akao**

The most cited work in the English language is an edited text by Yoji Akao (1991). Published originally in Japanese (1988), its chapters were written by a group of Japanese academics. It is a difficult introduction for managers unfamiliar with quality management, but it is full of insight. The book explains the ‘impetus to systematize hoshin kanri’ noting the term appears first in an internal document in 1962 of the Bridgestone Tire Company. The formulation and implementation of strategies and plans had previously been understood as stand-alone management items rather than as an organization-wide managed business process. Akao outlines a ten step process, which is similar to that of GOAL/QPC. A diagrammatic definition of the hoshin kanri process is also given by Nomi (Akao et al. 1991: 22-23). This clearly shows how the steps relate to the overall PDCA cycle for the process, and for the overall annual management of annual priorities.

Much of the book is devoted to the relationship of hoshin kanri to cross-functional and daily management, in particular how the daily and cross-functional control items are used to manage policy. According to Nomi cross-functional management can be defined as control activities that
include planning for elements like quality, cost, delivery, and employees (QCDE). Daily management or departmental/functional management is defined as all the activities that each department must perform for itself on a daily basis, which are necessary to most efficiently achieve their business goals. He defines hoshin kanri “as all organizational activities for systematically accomplishing the long and mid-term goals as well as yearly business targets, which are established as the means to achieve business goals” (Akao et al. 47).

Nomi states that daily control is like paying attention to one’s health every day: this might include getting enough sleep, eating properly, drinking in moderation, and exercising. Hoshin kanri on the other hand, is paying attention to critical events, such as illness, and includes long-term health measures such as joining a health club. The same control items (typically categorised throughout the an organization under the QCDE objective scheme) are set up for daily control and hoshin management and are evaluated throughout the organization so that further action can be taken on them as required.

Sheridan (1993), a manager who worked in the management services department of Florida Power and Light, refers to the role of an executive-level policy committee to conduct the hoshin kanri process, and executive cross-functional committees, which oversee performance in the areas of QCDE. Cross-functional committees provide input to the policy committee and later to the quality committee to draft and check policies. The cross-functional committees review project work that relate to the QCDE areas and which is additional to routine work. The use of cross-functional committees is almost unknown in Western organizations. At the time when the Japanese were first introducing cross-functional structure in the 1960s, Western corporations were moving away from management by committee towards more devolved and divisional forms of corporate control (Jantsch, 1967).
Hewlett-Packard

Hewlett-Packard was influential for its standardised materials, including an annual hoshin planning table, implementation (Gantt style) table, review table, and a business fundamental table – this last one defined QCDE objectives (Witcher and Butterworth 2000). The hoshin plans and business fundamentals were kept separate; the former concerned with a very few breakthrough objectives, and the latter with more numerous key performance indicators (KPIs) for driving incremental improvement. This dual model provides a basis for the concepts explained on the web pages of Total Quality Engineering, which are explained more fully in Babich (1996).

The balanced scorecard

The division in thinking between breakthrough and improvement is evident in Kaplan and Norton’s discussions of the balanced scorecard. To ensure that scorecard objectives and measures remain low enough in number to be proactively manageable at a senior level, Kaplan and Norton argue that a strategic scorecard should be based on vision: a strategic change that moves the organization to a new position. This contrasts to a performance management scorecard, which relates to business fundamentals and KPIs that are used to monitor fitness for purpose – or the health of the organization to carry out its present mission. KPIs are diagnostic measures that involve a senior level only when significant corrective action is required. In this sense, a breakthrough policy is a scorecard strategic initiative to advance vision, which are likely to bring changes to the existing business model and may as policy is deployed require making changes to KPIs.

There are obvious linkages between the balanced scorecard as a strategic management system and hoshin kanri. Arthur Schneiderman developed the prototype scorecard in 1987 while Vice President of Quality and Productivity at Analog Devices Incorporated (Schneiderman 1999: 7). Analog is mentioned in the original Kaplan and Norton (1992) article and is the anonymous semiconductor company referred to as ECI. Hoshin kanri was used to deploy the scorecard at Analog. The balanced
scorecard’s four-part objective set is very similar to the cross-functional management of QCDE objectives: quality corresponds to the customer perspective, and the cost, delivery, and employee objectives correspond to the financial, internal business process, and learning and growth perspectives, respectively.

Since the 1990s there is little evidence to show that hoshin kanri has been used very much to deploy the scorecard. This could suggest that the two may be competitors as alternative ways of thinking about strategy: that is a Western and a Japanese way. The scorecard is centred on selecting and monitoring the right measures to drive change, while hoshin kanri is primarily focused on the capability of the organizational processes that deliver value to the customer. The balanced scorecard is strong on what should be done, but has little to say about how it should be done. There is an assumption with the balanced scorecard that an organization has the understanding of its processes to make sure of deployment and implementation.

**Strategic planning**

In an excellent paper by Kano 1993), giving a Japanese view of TQM in Western organizations, it is pointed out there are two categories of strategy implementation: one is effective immediately after decision making, such as involves personnel, budgeting, or mergers and alliances; and another that is effective only with an organization-wide effort such as hoshin kanri favoured by the Japanese. This difference is a reflection of two traditions in strategic management. One is a market-based view and the other a resource-based view of strategy. The most significant scholar of the last thirty years has been Michael Porter and his ideas place an importance on the external environment as a determining influence for successful strategy. The direction of influence is outside-in, see Figure 2.

Figure 2: Outside-in and inside-out influences on strategy.
The order of strategy thinking starts with the external environment, the determination of an industry’s attractiveness, the formulation of a strategy to achieve above-average returns in the chosen industry, and a value chain to manage organizational activities to sustain the chosen strategy.

The second strand of thinking in strategic management is centred on the internal, especially an individual organization’s strategic resources. This is an inside-out approach to strategy thinking. At its heart is the idea that strategic resources are not economic resources as such, but are organization-specific, which makes them difficult for rivals to understand and emulate. So the emphasis is on the internal rather than the external environment and the direction of influence on forming strategy is inside-out. The direction of managing strategy follows from understanding of an organization’s internal environment, the configuration and development of strategic resources, the integration and alignment of core processes and core competences, and development of dynamic capabilities. The purpose of inside-out thinking is essentially to build a framework for marshalling the learning abilities of an organization around those core business areas that are of most importance to the creation of value for its customers. The aim is to achieve an internal fit of strategic resources so that they sustain above average returns.

However, hoshin planning looks to an outsider to be systematized to a degree that is probably unprecedented for most organizations. Hoshin kanri texts in general introduce a world of management philosophies and business methodologies that seem to make for a mechanistic operational world, as some have put it, of ‘tool heads’. All this does mesh easily with thinking about strategic planning over the last fifty years, which has seen a retreat from formalization and long-term planning to favour a looser view of strategy formation as a creative, if an uncertain mix of strategy formulation and implementation. As a result, strategic planning as a detailed subject is rarely included in strategy and strategic management textbooks.
Yet an over-whelming number of organizations continue to use strategic planning and the current consensus among business people and consultants is that strategic planning should be tight enough to set direction and overall priorities, but loose enough to facilitate organization-wide learning and local initiative. However, from our research it is clear that hoshin kanri is often perceived by senior strategists as an activity for operations. In particular, organizational annual review and the need for senior managers to manage the strategic management process to PDCA principles, is not understood in Western circles. The adoption of related management philosophies and business methodologies as an integrated process exemplifies what is termed an autocatalytic process: that is, one that catalyzes itself in a positive feedback cycle, going faster and faster once it has started. This requires time, patience, and a long-term organization-wide ability to learn. A tipping point into holistic management has never really occurred in many industries.

Automobiles

Virtually all vehicle and car companies use hoshin kanri. This is partly a consequence of the success of companies such as Toyota and Nissan and their suppliers (Witcher and Butterworth 2001). However, the experience is patchy. For some companies, including Ford, there is little real organizational connection between business strategy and hoshin kanri being carried on plant level. Ford recently sold its British brands, Jaguar and Land Rover to India’s Tata Group, which has a very different approach to Ford. During the mid-1990s Tata Sons, the groups’ holding company, introduced a Brand Equity and Business Promotion Agreement, which requires the group’s companies to pay a percentage of their annual revenues for using the Tata name and brand. Companies must also apply the group’s code of conduct, which documents its general principles and its Tata Business Excellence Model (TBEM), which is based on the Baldrige Excellence Framework and used by Tata to deliver strategic direction and drive business improvement (Witcher and Chau 2014).
The TBEM is managed as an annual review process, which includes checking and assessing the core values of the Tata group, including business methodologies and management philosophies, such as customer driven processes, a long-range view of the future, and a systems perspective. A key part is the strategic planning process: how a Tata company develops strategy, including its strategic objectives, action plans and related human resource plans, and how plans are deployed and performance-tracked. The TBEM provides a framework for the Tata group to understand how strategy is being applied in the Tata companies and how it works at an operational level. Executives from other Tata companies participate in a company’s annual audit activity and play a part in assessing the extent to which a company like Jaguar Land Rover conforms to the criteria laid down in the group’s Brand Equity and Promotion Agreement. The feedback is used to promote best practice in the group at large through regional forums.

In fact Jaguar Land Rover does not use the hoshin kanri label and understands it only as a method for deploying its annual corporate scorecard. The scorecard objectives are deployed using a framework called the Value Triangle with twenty cross-functional objectives and targets. From these, priorities are determined and cascaded as projects for the whole organization to address. In the words of the senior manager who manages this process, hoshin kanri is now part of the company’s DNA, which makes it possible to ask fundamental questions about the business.

**The FAIR model for strategic management**

At Xerox UK, a service organization for Xerox Corporation, an approach was developed much more loosely to suit marketing people, rather than the parent company’s Management for Results, a name more in keeping with an engineering culture (Witcher and Butterworth 1999). This emphasized the steps in the process in terms of those principles that are central: the need to provide focus on a vital few policies (called programmes at Xerox); to align everybody’s plans and management systems with
the vital few through catchball; to integrate the PDCA principle in daily management, and to manage annual review as the check on the annual cycle. This is the FAIR model of the PDCA annual cycle, which on occasion has been called the British model (Cwiklicki and Obota 2011), see figure 3.

Insert figure 3: The FAIR phases for managing strategy as a PDCA annual process.

The complexity of associated ideas and the importance of taking an integrated approach to the management of processes, gives rise to issues of understanding and organizational culture. The adoption by Western organizations of Hoshin Kanri to a mature level of implementation is long-term, and any assessment of its impact on organizational strategy and organizational effectiveness is difficult to gage for what is really an adoption of an alternative organizational state of being. A key part of FAIR is the annual review and the involvement of senior executives. This is evident at Xerox and Tata, which both use a form of business excellence model after the European and American ones respectively.

Nissan uses a corporate business model that is comprised of thirteen core business areas or cross-functional capabilities (one of these is its hoshin kanri process itself) (Witcher et al. 2008). It also specifies seven corporate-wide core competencies: daily control, the determination of hoshins, the coordination of hoshin development and deployment, the establishment of control items (that is, functional-based incremental objectives), analytical and problem-solving abilities, check and action taken, and leadership and participation by high-ranking personnel. This last is important as it defines a form of leadership that involves understanding how strategy is implemented and executed.

Corporate headquarters reviews annually its subsidiaries to understand and to influence how its managers and other employees are developing and using their core competencies in the thirteen core business areas. The seven core competencies comprise the items for audit to enable them to
be appraised for their use in each of the thirteen capabilities. Afterwards, a two-page summary is issued across the corporate group as a whole that compares how the subsidiaries score in terms of the level of development they have reached in each of the core competencies. In this way the auditing activity is visible and acts to demonstrate a top-level commitment to the Nissan Way – a set of published cross-functional values that underpin the core competencies of the group as a whole.

**Varieties of capitalism**

Richard Whittington (2001), a strategy scholar from the UK, has written that for a period between 1960 and 1990, was an era of large scale mass-production of cars, consumer electronics, and chemicals, when economies were largely stable and strategic planning was important. The core strategic concerns of this period were continuous improvement in quality, cost, delivery, and employee development. This changed around 1990 (and probably until the onset of the global financial crisis in 2008), it looked “like the fast-moving, flexible and sometimes ruthless strategizing of the Anglo-Saxon economies is better suited to the emergent economic conditions of the twentieth-first century than the careful instrumentalism of Germany and Japan” (op cit.: 5).

There is perhaps an inbuilt bias in Western capitalism that favours outside-in thinking (Witcher and Chau 2012). The generality of strategic resources make them easier to switch between organizations than the more specific and sticky strategic resources of an organization and its industry where longer-term strategic planning is more important. Outside-in suggests it is easier to assemble, break up, and reassemble project teams, and chop and change structure. Companies may be acquired and divested speedily by organizations through equity markets, and venture capital is available to entrepreneurial scientists and engineers to start up new enterprises. A concentration of strategic decision-making in a few hands at the top of an organization, allows business leaders to implement decisions very quickly and any consequential reorganization is relatively straightforward to
implement. In terms of Kano’s two approaches for implementing strategy; it is the one that is effective immediately after decision making that is important rather than one which requires a company-wide effort such as hoshin kanri. In many organizations hoshin kanri is likely to be perceived as strategic operations; such as in a Ford case rather as in a Tata example.

This article has considered the English language hoshin kanri literature. In principle the approach is sound and it offers a participative form of management by objectives and a ready way to deploy balanced scorecard objectives. However, for many organizations a PDCA approach to managing the strategy process may not sit easily with an outside-in view of strategy thinking. This is a pity if one thinks that strategic management should be a managed process that requires an organization-wide effort from everyone. The hope here is that this article will go a little way to create a greater understanding for strategic performance management, of how hoshin kanri has the potential to close the often gaping gap between top-down strategy and its bottom-up realization.

References


Cole R. E. (1998), Learning from the quality movement: what did and didn’t happen and why?

*California Management Review, 41, 43-73.*


Figure 1: The Core Hoshin Planning Process
(Source: GOAL/QPC 1989, p. 13)

(1) Establish organization vision
(2) Develop 3-5 year plan
(3) Develop annual objectives
(4) Deployment/roll down to depts., to develop plans including targets and means
(5) Implementation
(6) Regular progress review – monthly + quarterly
(7) Annual review

PHASE 1: (1)(2) – Well done strategic planning
PHASE 2: (3)to(7) – Heart of hoshin planning process
Figure 2: Outside-in and Inside-out Influences on Strategy
(Source: Witcher and Chau 2012: Figure 1)
Figure 3: The FAIR phases for Managing Strategy as a PDCA annual process

(Source: Witcher and Butterworth 1999, Witcher and Chau 2014)