Driving Strategy with Quality: A Useful Insight

Excellence is Born out of Effective Strategic Deployment: The Impact of Hoshin Planning

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Abstract

One of the key miracles of Japan's success in dominating international markets for such a long period of time is their approach to strategic planning. Hoshin Kanri (Planning) has served Japanese corporations extremely well and has proven to be a well disciplined, systematic, fully integrated approach to implementing strategies. This was happening at a time when there has been so much criticism of the Western approaches to strategic formulation and implementation.

The spread of Hoshin Planning from Japan to the US has been well documented (King, 1989; Babich, 1996; Colletti, 1995; Quest Worldwide Education Ltd, 1997). The uptake of Hoshin in the West seems on the whole to be associated with organisations that are advocating the use of Total Quality Management. This is an 'implicit' consideration that Japanese corporations make, having always based their approach to doing business on the use of quality methods and techniques.

This paper discusses the meaning and origins of Hoshin and how it works in practice. Several case studies of the successful implementation of this pioneering concept are illustrated and a proposed roadmap of Implementing Hoshin Planning is discussed. The roadmap is meant to assist organisations of different sizes and from different sectors, manage their strategic thinking more effectively.

Key Words: Strategic Planning, Hoshin Planning, Hoshin Kanri, Policy Deployment, Benchmarking, Quality Management, Goal Cascade

Hoshin Kanri: its origins

Hoshin Kanri was developed in Japan to communicate company policy to everyone in the organisation. Hoshin's primary benefit is to focus activity on the key things necessary for success. Japanese Deming Prize winners credit Hoshin as being a key contributor to their business success. Progressive US companies, like Hewlett-Packard and Xerox, have also adopted Hoshin as their strategic planning process. Hoshin meets the intent of the Malcolm Baldrige National Quality Award criteria for Planning. Simply put, Hoshin is a system of forms and rules that encourage employees to analyse situations, create plans for improvement, conduct performance checks, and take appropriate action.

Hoshin Kanri is an organising framework for strategy management. It is concerned with four primary tasks and the cycle is an annual one (see figure 1 below). First it focuses an organisation’s attention on corporate direction by setting, annually, a vital few strategic priorities; secondly, it aligns these with local plans and programmes; thirdly, it integrates them with daily management; and finally it provides for a structured review of their progress. Thus it is Focus – Alignment – Integration – Review (FAIR) (Witcher, 1999).

Little is known on how Hoshin Kanri works, but interest is growing. A small number of firms in the west adopted the approach like Hewlett-Packard who call it Hoshin Planning, Texas Instruments who label it Management by Policy, and Xerox who call it Policy deployment (Witcher, 1999).
It is argued that Hoshin Kanri provides and organisational architecture and transparency which is necessary if strategy and daily management are to combine in their use of TQM (Witcher, 1999).

The PDCA Cycle for the Hoshin Kanri form of strategic management (Witcher, 1999):

![PDCA Cycle](image)

**Figure 1: Hoshin Planning Through the PDCA Cycle**

Hoshin Kanri is about a deliberate top-down deployment of annual programmes, where employees are expected to find the means to implement them. Strategy is deployed as strategic intent and corporate strategy is (presented as statements which are very limited in number and which are designed for a participative form of alignment. There is no elaborate formulation of actions and targets for others to achieve. The approach is organic and is based on continuous improvement and breakthrough change, which is rooted in what is possible and open to discussion. In terms of core competencies, Hoshin Kanri provides a core capability, or architecture, for strategic responsiveness. Thus a core competency, such as an ability to find solutions for customers and to build loyalty, may be developed and sustained over time through vital few programmes, which everybody in the organisation must address and accommodate. Hoshin Kanri can provide capability (Witcher, 1999).

Of special importance are the ‘vital few’. Too many programmes can lead to a loss of focus. They should also be transparent and translatable for everybody. They are not prescribed detailed policy for everybody, but rather a specified corporate challenge for all. And there must be room for accommodating local unit objectives (Witcher, 1999).

**Hoshin in the context of Strategic Management and TQM**

Hoshin, as a tool for setting direction, aligning the organization and moving it towards the chosen direction, could be seen as a modern derivative of Strategic Planning. Since Strategic Planning has been practised by ‘Western’ organizations since the 1960’s (Ansoff, 1968), a comparison between Hoshin and what has come before provides a useful starting point.
However, Hoshin is also a quality management tool and has its roots in holistic quality thinking. To understand the power of Hoshin one must also understand the fundamentals and limitations of TQM. A comparison here is therefore also essential.

**Hoshin in the Strategic Management context**

Igor Ansoff, in his 1988 revision of the seminal work, *Corporate Strategy* describes three broad ‘Modes of Strategic Behaviour’ and attaches some time lines to them.

**Reactive Mode**

This was the predominant operating mode prior to the 1960’s. In this mode, Management minimize strategic changes and are ill equipped to deal with change. Losses of expected growth or profits are assumed to be due to operating malfunctions and are dealt with by operating responses, e.g. price cutting, cost reduction.

When these no longer work some strategic measures are taken but these are of an incremental nature. Discontinuous strategic measures are avoided.

When real crisis looms, panic sets in. A saviour solution is sought and, if it works, the company recovers. Successive failure of saviour solutions leads to bankruptcy.

Ansoff believes this is the success mode for companies in an environment which demands standardized, low cost products or services and remains a suitable strategy for companies operating in these environments today.

**Proactive/as hoc**

This mode began to emerge as early as the 1940’s but has been seen mainly since the 1960’s. In this mode, the company actively pursue incremental strategic changes but there is no centrally guided, planned approach.

Changes are generated by R&D or innovative marketing and are episodic, almost random. Changes are logical and incremental (described by James Quinn as Logical Incrementalism, (Mintzberg, Quinn and Ghoshal (1998)).

Management have experience of some degree of change and are more likely to see forthcoming crisis and react in a planned manner. The solution is however, reactive through trial and error.

This style of management is the dominant mode of behaviour among progressive firms with strong R&D and Market-development departments. It has produced many outstanding successes and was most famously advocated in Peters and Waterman’s book, *In Search of Excellence*, where they called logical incrementalism ‘sticking to your knitting’.

It will continue to produce success for those companies which operate in an environment where the demand and technology continue to evolve incrementally, strategic discontinuities are few and the rate of change does not exceed the firms speed of response. Where any of the above aren’t true,
the company will become ‘unstuck’ as happened to several of the companies Peters and Waterman cited as role models.

In recognition of this, modified approaches to Proactive/adhoc management emerged in the 1970s as Issue Management and in the 1980s as Crisis Management. Both these approaches worked on the basis that adhoc management works in most environments where there are only occasional discontinuities.

Planned/Systematic

This mode emerged in the 1970s as Long Range Planning (LRP) and evolved through Strategic Planning into what is today recognized as Strategic Management.

LRP assumes that the future environment will develop in a logically incremental manner and provides a basis for explicit, guided and co-ordinated incremental strategic development.

Strategic Planning, however, challenges the historical logic of strategic evolution, shifting the attention to the systematic management of discontinuous change. This begins with strategy formulation.

For some companies the process stops there if strategy can be implemented using the firms’ historical strengths, i.e. no significant change in approach needs to be deployed to make the strategy work.

Where historical capabilities are inadequate to drive the change, Strategic Planning develops further into Strategic Management. The latter adds to Strategy Formulation the elements of Capability Planning and Change Management, i.e. Implementation.

The three modes outlined above describe an evolution from no strategy and no planning to a combination of strategy formulation and planning for implementation. It is in the area of implementation that this paper focuses, on the premise that Hoshin provides a more rigorous and ‘real world’ system for strategy implementation.

There is clear evidence that Strategy thinkers do understand the critical need to focus on implementation issues. Ansoff, in revising his seminal work, Corporate Strategy, in 1988, noted the need to add to Strategy Formulation, the implementation issues of developing the capability to pursue the strategy and the capability to manage the discontinuous change internally as the organization seeks to acquire and use its new capabilities. It is possible to conclude that what Ansoff called Strategic Management (Strategic Planning + Capability Planning + Change Management) is Hoshin, although, unfortunately, the detail is missing.

Anthony, in his 1965 work, Planning and Control Systems, A Framework for Analysis, argued that planning and control were a single process.

As far back as 1972, G.A. Steiner, in Pitfalls of Comprehensive Long Range Planning, cited ten reasons why planning systems fail. These included the linkages between planning and implementation, the very area where Hoshin appears to have greatest focus.
Lorange and Vancil, in their 1977 work, *Strategic Planning Systems*, make useful definitions of Strategy, Objectives and Goals and put forward ‘Five Pillars for Your Planning’, which include:

1. Planning system should help to formulate strategic choice
2. Plans must be understood at all levels, communication, opinion, interaction and iterations are to be stressed
3. Plans must be consistent in formats, methods, deadlines so that confusion in Planning reviews and consolidations can be minimized
4. Planning system should be integrated with other management systems
5. Line managers must be centrally involved in planning, otherwise the necessary commitment to carry out the planning decisions will not be achieved

The above points show an understanding of the need to consider down-stream issues during the strategy development process. The recognition of the need to involve, communicate, iterate and review is particularly interesting since they are some of the basic building blocks for successful implementation of the Hoshin approach.

Unease about the western approach to strategy has been building for many years. Burton (1990) quotes Henry Mintzberg as saying “Strategic Planning is to managers what Taylor’s approach was to workers. It is analytical and very mechanical but it lacks creativity. It prevents middle managers, for example, from adding their experience to the decision-making process, despite their close contact with customers and production”. In his 1994 book, *The Rise and Fall of Strategic Planning*, Mintzberg notes that

“several decades of experience with strategic planning have taught us about the need to loosen up the process of strategy formulation”.

The work of Hamel and Prahalad (1989) makes the comparison between Japanese and Western forms of management. The key difference that they describe is in the degree of detail in the senior management planning process, with Japanese management adopting the technique of setting ‘Strategic Intent’ rather that undertaking a cumbersome process of strategic planning. Although they do not link this to the Hoshin approach there are clear similarities, which is unsurprising when one reads their case studies of companies known to be users of Hoshin

1990’s works on strategic management recognize the need to adopt a new management paradigm - to set the direction but debate the means with the workforce. Where all the reviewed strategic planners fail, however, is to put forward a practical system for managing implementation. Even very recent works in Strategic Management provide little in the way of guidance for implementation.

Perhaps there has been an assumption among all strategy thinkers that a good strategy implements itself, or can be implemented via existing mechanisms. Perhaps they feel that implementation is so complex and case specific that a common model cannot be developed. Whatever the reason, the lack of attention to this issue will continue to restrict the impact of strategic thinking.

Linked to strategic management, there is much attention given to the role of the ‘new manager’. Davidson (1995) describes the differences between the old paradigm of ‘Command and Control’ and the new paradigm of ‘Managing Change’. In Davidson’s thinking, Change Management has its basis in leadership, shared purpose and
values and the role of the manager as facilitator and coach. Davidson is one of the few Strategy thinkers to describe a change orientated management structure recognizing the existence of three roles and three key tasks.

**Figure 2**: Tasks and Roles of the ‘New Manager’

![Diagram of Tasks and Roles of the 'New Manager']
**The Link between Hoshin Planning and Performance Measurement**

Hoshin Planning is the necessary trigger for processes to perform well and for goals to be achieved. It is the mechanism by which the quality effort is cascaded down throughout the organisation. HOSHIN is a top-down approach and as such tends to be the responsibility of senior managers. Process improvement and measurement is a horizontal effort and quality deployment is a vertical (top-down) approach. As Figure 3 illustrates, quality improvement is a continuous effort and as such is not finite. However, quality effects have to be measured and quantified against set targets (Yoji, 1990).

**Figure 3** The quality deployment process

Hoshin Planning is not merely a good communication process, it is a dynamic process where performance measurement is an integral part and where goals are translated into actions throughout the various activities. Quality function deployment is the horizontal process which ensures that performance will ensue from the goal communication effort.

The Deming cycle of Plan-Do-Check-Act (PDCA) can be applied in the context of HOSHIN (i.e. strategical continuous improvement). As Figure 4 illustrates (American Supplier Institute, 1989) the PDCA can drive the strategy and ensure that goals are achieved, that adjustments are made as and when necessary and that learning takes place continuously.
The conventional methods of strategic planning and strategic implementation tend to be marred with problems. Many strategies fail to deliver for a variety of reasons including, amongst others:

- Poor communication of goals – people working in total darkness.
- Moving the goal post – too many disruptions and changes in direction.
- Pursuit of pet projects – short-term goals to the detriment of long-term competitiveness.
- Cost is the key driver for results at the expense of real improvement opportunities.
- Goals developed in remoteness from the process.
- Voice of customer not really captured.
- Achievements are not sustainable.

On the other hand, HOSHIN is focusing on sustainability and building strengths for increased competitiveness. While this process focuses on results, it only does so by continuously improving the processes concerned so that repeatability of performance and consistency can be ensured.

HOSHIN introduces discipline, conveys the same goal at all levels and ensures goal congruence or real alignment. Unlike management by objective (MBO), which focuses on individual performance and follows a rigid hierarchical route of line of authority and responsibility, HOSHIN follows a process route and measures team performance. Unlike MBO, HOSHIN is not concerned with the “one leap at a time” type of approach, the effect is to focus on continuous improvement to optimise process capability, to learn from mistakes, to capture winning practices and ideas and to manage quality pro-actively.

The relationship between HOSHIN and performance management is better illustrated in Figure 5. Perhaps the best description of Hoshin Planning is the process by which congruence can be achieved and the “what to do” and “how to perform” questions can be answered. Performance measurement on the other hand measures motion, action and value added contributions. The business delivery process (BDP) reflects all the recommended effects which add value to the end customer, driven by a thorough understanding of customer requirements and process capability.
Figure 5 on the other hand describes the two activities of HOSHIN and performance measurement in terms of:

1. **Process management**: this is a senior management responsibility, deciding on the right things to do, developing the right objectives and communicating them at all levels in the right way.

2. **Performance measurement**: quality improvements take place through team efforts and a multi-functional approach. Performance measurement therefore becomes the responsibility of process workers who have the ultimate task of carrying out the necessary improvements.

Figure 6 also highlights the fact that Hoshin Planning and performance measurement have to focus not just on deficiency areas and negative gaps but also on pro-active quality and the protection of competitive advantages. Benchmarking therefore becomes very relevant at two levels:

1. **Strategic benchmarking**: to develop goals and critical success factors (CSFs) through a thorough understanding of customer requirements and process capability.

2. **Operational benchmarking**: to optimise process capability at all levels through the introduction of new practices, methods learned from leading organisations.

**An example of a Hoshin Planning process**

This is a process described in Hronec (1993) who presents HOSHIN as a model of seven key elements:

1. **Strategy** – its development and communication supported by having the right reward mechanisms in place, training and also reliance on benchmarking for doing the right things in the right way.

2. **Goals**.

3. **Critical processes**.

4. **Output measures**.

5. **Key activities**.

6. **Process measures**.

7. **Implementation**.
**Figure 5** Integrating the voice of the customer with the voice of the process for goal congruence

**Figure 6** Integrating process management and performance measurement
The "quantum performance measurement model", as it is referred to, is dynamically driven by continuous improvement (i.e. PDCA cycle). As Figure 7 illustrates, the corporate objectives could be to maintain customer loyalty through rapid product introduction.

The goals/CSFs could be to:

- Increase speed to market by 50 per cent over the next two years.
- Develop two new products each year.
- Get 25 per cent of company profits from new products in two years.

These goals are then cascaded down to all key activities and critical processes. Performance measurement and improvement start, therefore, once key performance measures have been developed (i.e. to capture core activity and high leverage in areas which impact most on customer satisfaction).

Soft measures, which are people related, could also be used to ensure that the right people with the required skills are used in the right way for all key processes.

**Figure 7** Example of Hoshin Planning process

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**Defining Hoshin Planning**

Policy management is the vehicle by which business plans are put together and communicated at all levels of the organisation. Policy management is the translation of *hoshin kanri* as it is known in Japan: *hoshin* means direction; *kanri* means deployment/administration/management.
Rank Xerox defines policy deployment as follows:

A key by which Rank Xerox can articulate and communicate the Vision, Mission, Goals and Vital Few Programmes to all employees. It provides the answers to the two questions: “What do we need to do?” and “How are we going to do it?”

At Rank Xerox, quality policy is used as a process by which company values and goals are translated into activities which, when carried out, can achieve the desired results.

Policy deployment is the propagation of a cycle where “whats” and “hows” are worked out at a very senior management team level (e.g. “What” = CSF = Be No. 1 supplier to major retailers by 1995; “How” = by focusing on on-time delivery, speed/quality of response, level of service). The “hows” can then become “whats” at the next management level, and so on. In this way performance measurement becomes an application which can be seen at major process level, sub-process level, activity and task levels.

**Examples of Hoshin Planning models**

**Procter and Gamble**

The company, which was founded in 1837 by William Procter and James Gamble, is a global leader in areas such as health care, food, beverage, laundry, cleaning and beauty care products, amongst others. It employs over 100,000 people world-wide and has operations in 53 countries.

Procter and Gamble adheres to the TQ principles. It started implementing TQM in 1983 through a bottom-up approach. TQM is, however, endorsed by senior managers at the highest level, including the chairman and chief executive who argues that (Bemowski, 1992):

> Total quality, because of its focus on benchmarking customer and consumer satisfaction, is basically an insurance policy for sustaining competitive advantage over the long term, even when a company might not, at any given time, have a blockbuster advantage over the others. Total quality is the very essence of our long-term growth strategy.

P&G recognises that strategy development and implementation is a serious business. There is awareness of the various pitfalls of strategic implementation, reported by a 1989 Booz Allen study of strategy development and implementation (Huston, 1992). The study concluded that, of the respondents:

- 73 per cent of managers believed that implementation is more difficult than development;
- 72 per cent thought that it would take more time;
- 64 per cent believed that it impacted more on performance;
- 64 per cent of management lacked implementation skills;
- 75 per cent stated that employees misunderstood roles;
- 75 per cent maintained that groups did not co-ordinate;
• 48 per cent criticised inadequate measures for strategy achievement; 
• 45 per cent said there was internal competition; 
• 40 per cent stated there was insufficient employee involvement and commitment; and 
• 85 per cent thought that implementation was the part of the strategy over which managers had least control.

As Figure 8 indicates, P&G is very serious about how they implement strategy. They use a four-stage approach. The process itself covers five key elements which include:

1. Strategic intent. 
2. Year targets. 
3. Annual deployment plans (based on each year’s objectives, goals, strategies and measures (OGSM)). 
4. Management reviews. 
5. Results feeding back to learning.

The whole process of strategic deployment is reinforced by a positive deployment of TQM. It is, however, recognised that TQM by itself does not lead to the production of winning strategies. There has to be a strong presence of management leadership. This was highlighted by P&G’s chairman and CEO, who argues that (Bemowski, 1992):

Total quality does not guarantee that companies will produce winning strategies. Winning strategies have to come from the minds of the leaders.

**Figure 8** A four cycle approach to implementation of strategy

![Diagram of four cycle approach to implementation of strategy]

- **Visualisation/Vision**: Market place focus
  - Clear, consistent strategic intent

- **Formalisation**: Translation of vision into measurable targets
  - Planning and deployment

- **Individualisation**: Goal translation at individual level
  - Relying on feedback on process towards goal

- **Socialisation**: Creation of shared value
  - Goal congruence
An example of quality deployment at P&G. Figure 9 illustrates Hoshin Planning (HOSHIN) at the Soap Sector of P&G. The process consists of three stages:

1. the long-term vision;
2. strategic development; and
3. strategic deployment.

The third stage (strategic deployment) is perhaps a revolutionary addition from conventional methods of strategy implementation. In addition to clearly specifying how goals are to be measured, how competitive advantages are measured and how progress is tracked, a shadow set of questions are asked to ensure that organisational capability is strengthened through the deployment process and that lessons learned are used to ensure more effective strategic deployment. Organisational capability is achieved through management reviews and visits conducted for purposes such as ensuring the quality of results, to assess strengths and weaknesses of organisation capability, to ensure that there is a goal congruence and total alignment within the organisation and finally to use the learning captured for future strategic planning.

**Figure 9 Hoshin Planning**

<table>
<thead>
<tr>
<th>Long Term Vision</th>
<th>Strategic Development</th>
<th>Strategic Deployment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUSINESS STRATEGY</strong></td>
<td><strong>ORGANISATION STRATEGY</strong></td>
<td></td>
</tr>
<tr>
<td><strong>PURPOSE</strong> (Why we are in the business)</td>
<td><strong>VALUES</strong> (What we believe in)</td>
<td><strong>PURPOSE</strong> (Why we exist as an organisation)</td>
</tr>
<tr>
<td><strong>VISION</strong> (What we want)</td>
<td><strong>OBJECTIVES</strong> (What we want to achieve)</td>
<td></td>
</tr>
<tr>
<td><strong>GOALS</strong> (How we will measure progress towards objectives)</td>
<td><strong>STRATEGIES</strong> (How we will build capability to achieve objectives)</td>
<td><strong>STRATEGIES</strong> (How we will achieve competitive advantage)</td>
</tr>
<tr>
<td><strong>MEASURES</strong> (How we will measure progress on strategies)</td>
<td><strong>MEASURES</strong> (How we will measure progress on strategies)</td>
<td><strong>ACTION PLANS</strong> (Specific activities)</td>
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<tr>
<td><strong>ACTION PLANS</strong> (Specific activities)</td>
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Source: Saxton and Locander

**Komatsu Ltd**

This company is one of the world’s leading producers and suppliers of industrial machines. The product range includes over 300 different types and the market
served represents a wide variety of customers including construction and industrial machinery. The Osaka plant which won the Deming prize back in 1964 employs 2,000 people and manufactures bulldozers, hydraulic excavators and underground machinery.

Figure 10 illustrates Hoshin Planning at Komatsu Ltd (Catherine and Daniel, 1991).

**Figure 10** Quality deployment process

Excessive effort is placed on planning in a rigorous manner, this is the key to successful goal translation. Quality policy in this context is very similar to previous cases analysed in that the PDCA cycle tends to be used extensively:

1. **Plan stage**: establishing policies and deployment of various objectives to all functions. This is done through a focus on external customers and the translation of their needs into tangible goods and services.
2. **Do stage**: the translation of company goals at all levels in the organisation, including individual employees.
3. **Check stage**: regular monitoring of progress and performance checks to ensure that goals are still achievable.

4. **Act stage**: feedback from performance and results achieved, including new learning that can be used for the development of the next batch of goals.

**Hewlett-Packard**

This company manufactures and sells electronic products which are used in the computer industry and also for measurement purposes. The products manufactured are widely used and include hardware equipment, peripheral equipment, printing equipment and software systems including networking.

Quality at H-P started in 1978, an inspiration coming from Japan, at the Yokagawa H-P Plant, a joint venture with Japan. The Yokogawa H-P Plant won the Deming Prize in 1982 as a result of its excellence in quality. At the heart of the quality drive with H-P is measurement in all areas. Some of the customer related measures include (Carter and Edmonds, 1988):

- Response time: the time from the first customer call to the arrival of the customer engineer at the customer’s site.
- Repair time: the time it takes the engineer to repair the customer unit.
- System downtime: the total elapsed time from the customer call to the unit being repaired.
- Turn around time: the elapsed time from the unit arriving at the service centre to it being repaired.

Managing quality at Hewlett-Packard takes place through *hoshin kanri* (a literal translation is “shiny metal pointing direction”). As illustrated in Figure 11 the process uses the PDCA cycle and goal translation takes place through various stages.

The benefits of HOSHIN include:

- Relying on HOSHIN gives senior management a disciplined approach to planning and highlights the importance of goals and measures.
- It encourages regular reporting and provides managers with the right documentation that enables them to set future plans, implement them and review their outcomes.
- *Hoshin kanri* ensures that TQM implementation succeeds and the various efforts deliver.
- It constantly reminds people of the importance of customers and relying on measurement and action.

The motto at Hewlett-Packard is “That which is measured gets better, but that which is measured and reported gets better faster”.

**Rank Xerox Ltd**

*Hoshin kanri* is a key process at Rank Xerox Ltd. It is used for creating synergy among the various functional areas and, hence, optimise capability to deliver, but also to convert all customer needs (explicit and non-expressed) into value added contributions.
Rank Xerox deploys quality policy at all levels of the organisation and integrates HOSHIN with employee appraisal.

Although the process is deployed in a top-down fashion, there is active participation at all levels, to ensure that goals are delivered. In order to gain company wide commitment, Rank Xerox relies on a process called “catchball”, which essentially means that there is negotiation using facts and hard data to resolve differences and disagreements during the deployment of company goals. Like playing “ catch”, employees and managers can throw data and information at each other so that goals are accepted and people are committed to delivering them.

Figure 12 illustrates Hoshin Planning at Rank Xerox Ltd. Similarly to previously discussed processes, Rank Xerox used the PDCA cycle for planning, implementing and taking necessary actions.

**Figure 11** Hoshin Planning process at Hewlett-Packard

Quality Policy Deployment at Hewlett - Packard Co.

- Higher Objectives
- Strategic Direction
- Customer Surveys
- Mission Statement
- Evaluation of Previous Fiscal Year Objectives
- Identify Key Issues
- Develop Objectives / Strategies
- Develop Action Plans
- Implement Plans
- Results
- Analysis
- Counter Measures
- Unexpected Result
- Evaluation
- Planned Periodic Reviews
- Annual Review
- Expected Result
- Continue Implementation

Source: Carter and Edmonds (1988)
Florida Power & Light

The first non-Japanese company to have won the Deming Prize, in 1989, FP&L employs over 14,000 people and has over three million customers. FP&L uses Japanese techniques very extensively to deploy the quality effort.

FP&L used the techniques of Japanese quality gurus such as Dr Asaka who, in 1985, made the management realise the importance of Hoshin Planning. The Japanese have always believed that quality has to be managed strategically and unless all the efforts are deployed for the same goals and in the same direction, there will be very little impact. Goal congruence is therefore a vital task for managers to achieve in their quest for directing people towards successful performance standards.

Table 1 illustrates the way HOSHIN is deployed at FP&L. First, it was determined that the vital priorities needing improvement were:

- sales and service quality;
- delivery;
- safety; and
- price.

FP&L has developed a set of objectives, indicators and improvement targets for each measure. Similar to Rank Xerox, FP&L uses “catchball” to communicate and ensure commitment. The process is cascaded down to all levels, function-department-section-individual. The power of HOSHIN at FPL is seen in its ability to instigate discipline in planning and in taking action to ensure that goals are achieved.
<table>
<thead>
<tr>
<th>Objectives</th>
<th>Indicators</th>
<th>Quality categories</th>
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<tr>
<td></td>
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<td>Sales and service</td>
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<td>Pric e</td>
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<td>1.1 Improve the cost of electric service</td>
<td>a. Distribution service availability (customer minutes)</td>
<td>8</td>
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<td></td>
<td>b. Transmission service unavailability (customer minutes)</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>c. Substation service unavailability (customer minutes)</td>
<td>9</td>
</tr>
<tr>
<td>1.3 Improve customer satisfaction</td>
<td>Number of customer complaints to the FPSC/thousand customers (excluding current diversion)</td>
<td>12</td>
</tr>
<tr>
<td>2.1 Improve the safety and competitiveness of nuclear power</td>
<td>a. Automatic trips (1991 St Lucie only)</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>b. Equivalent availability (1991 St Lucie only)</td>
<td>13</td>
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<tr>
<td></td>
<td>c. Turkey Point dual unit outage duration (days)</td>
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<td></td>
<td>d. O&amp;M cost variance to budget</td>
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### 3.4 Improve employee safety

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<td>e. Capital expenditure variance to budget</td>
<td>N/A</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td></td>
<td></td>
<td>0</td>
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3.4 Improve employee safety

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<thead>
<tr>
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<tbody>
<tr>
<td>a. Number of lost time injuries per 100 FPL employees</td>
<td>19</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>b. Number of doctor cases per 100 employees</td>
<td>13</td>
<td>0</td>
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### 4.1 Improve O&M cost per PWH and achieve budget security and quality

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<tbody>
<tr>
<td>a. O&amp;M C/h WH</td>
<td>N/A</td>
<td>0</td>
<td></td>
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<tr>
<td>b. O&amp;M cost variance to budget</td>
<td></td>
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### 4.3 Establish fossil unit reliability, availability and maintenance targets and develop programmes to achieve those targets

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<tbody>
<tr>
<td>Equivalent forced outage rate (%)</td>
<td>18</td>
<td>0</td>
<td>0</td>
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### 4.4 Provide adequate energy supply capacity and maintain the energy of the delivery system during the Turkey Point emergency diesel generator (EDG) outage in an economical manner

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<tbody>
<tr>
<td>MW required to ensure reserve margin 18&gt;15%</td>
<td>N/A</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
A Common Model for Implementing Hoshin

The following section is based on a benchmarking analysis of several applications of Hoshin Planning in the UK and Europe. The analysis has helped distil out distinctive features and common generic practices which have formed the basis of identifying what the critical factors of implementation are in so far as Hoshin Planning is concerned. These factors are therefore important rules that need to be adhered so that the benefits promised by Hoshin can be achieved.

Starting with a Vision of the future

Most cases describe some form of Visioning as the start point for implementation and virtually all the companies reviewed took this approach. This is consistent with the long-term approach to business reported by observers of Japanese business practice where plans stretching in excess of twenty years are not uncommon.

Having this clarity of direction is essential to the successful implementation of Hoshin, since the annual Vital Few goals are selected on the basis of moving the company in the overall direction indicated in the Vision. Using the remaining elements of Hoshin without this Vision in place is likely to reduce the strategic impact of the approach, down-grading it to an annual implementation tool rather than a long-term change tool.

Using Hoshin to drive change, not as a general management tool

This critical aspect of Hoshin is promoted most strongly by Hewlett Packard but also supported by many of the smaller companies. Hewlett Packard’s approach of developing a ‘Business Fundamentals’ table has found its way into several other companies and this reflects their international standing as a company to study when seeking best practice. Others appear to run their Hoshin and general management systems close together. and this reflects their realistic view that, given finite human resources to work on non-client issues, they must be sure that the business remains broadly under control while change projects get special attention.

Using Hoshin for annual strategic planning alongside business planning

Most companies have some form of annual business planning process and Hoshin does not replace this in any of the companies reviewed. It is seen to be practical by most of the companies, however, to run the two systems as parallel annual cycles. In some cases, the Vision contains clear direction for the growth of the company in terms of revenue and this drives an annual process of agreeing revenue targets for their five operational profit centres. This is not, however, considered to be part of the Hoshin process. Hoshin is brought to bear once the annual targets have been agreed and is used to identify the changes that must be made above and beyond what the company did last year so that the improved performance levels are reached.
Whatever its position, Hoshin is clearly seen as a cyclical process, with all of the companies following a recognisable Think, Plan, Implement and Review pattern which can be likened to the Shewart/Deming PDCA cycle. The difference between Hoshin and less strategic Quality Management approaches is in the extent to which this annual planning activity is guided by the long term Vision for the business. A key test as to whether a goal should be selected as a Vital Few is in the strength of its support for the strategic intent of the business.

**Identification of a limited number of Vital Few goals**

This element of Hoshin comes out strongly in all of the research companies, particularly the language of the ‘Vital Few’ (or Critical Success Factors in the case of Exxon). It is commonly reported among the companies that there is a tendency to pick too many Vital Few goals, particularly in the first year and many have had to reduce the number selected.

**Definition and prioritisation of the Vital Few via Catchball**

This practice shows more variation between the cases considered, although is recognised by all as a critical requirement if the full benefit of Hoshin is to be felt. Xerox has a sophisticated and well developed system for catch ball.

**Use of Cause and Effect thinking in establishing implementation programmes**

The concept of Cause and Effect is one of the elements of Hoshin that link it closely with TQM and it is apparent that the users appreciate this as a strong driver of meaningful change. All of the cases analysed make use of TQM style quality tools and techniques when building their Hoshin plans and these include Affinity diagrams, Fishbones, ‘5-Whys’, Relationship charts and force-field diagrams. All of the cases do also place strong emphasis on ‘Management by Fact’ and the process of setting goals and picking key projects is fed with extensive real data on external market conditions and internal performance.

**Method and scope of deployment**

There are clear differences between some of the cases studied in terms of their approach to implementation deep into their organisation structure.

Perhaps unsurprisingly, there does appear to be a link between the size of the company and the extent to which multi-level catchball and deployment are practised. Xerox for instance report extensive efforts in deployment, brought to life through the ‘Blue Book’ which contains objectives for all four levels of the business, from corporate, through unit and department to team and individual. Smaller businesses appear to take a less formal, hierarchical approach to deployment.

**Team based implementation**
Another stated similarity between TQM and Hoshin is in the extent of teamwork. Teams are clearly an important element of the real business of implementation in all of the cases covered. The use of teams is recognised also as an important factor in the softer ‘change management’ elements of Hoshin. Successful implementation is not just a matter of clear objectives and adequate resources but is perhaps most dependent on the commitment of the people responsible for making the changes. Involvement in these teams both at the levels of goal setting and implementation planning encourages commitment and has brought many reported benefits to the companies using this aspect of Hoshin.

Monitoring progress through measurement and review

This is one of the strongest features of the Hoshin approach among all the cases concerned. Each has developed their own system for tracking and reviewing progress but all nevertheless attach a high priority to it. For many, the Deployment Matrix is used as the core basis for review and the ‘Red, Amber, Green’ or ‘Traffic Light’ system is in common use across the companies. This system can be applied directly to the Vital Few and their supporting projects since all these elements are assigned measures and targets when they are initially developed.

Many of the cases have taken this approach further by developing Visual Management techniques allowing everyone in the company to see clearly where progress is and is not being made.

Conclusions on the role of Hoshin as a Strategi Planning Viable Alternative

Hoshin is not an all-encompassing management system, rather Hoshin is about change. To quote Bob King, “it is the system that orchestrates continuous improvement and breakthroughs”. Hoshin therefore does not have a role to play in day-to-day management and control, this is done via ongoing process standardisation (albeit with some incremental improvement) and the maintenance of a company wide management system

The link between Hoshin and Daily Management can be described as a move from Plan, Do, Check, Act (PDCA) to Standardise, Do, Check, Act (SDCA). PDCA is about improvement. Once that improvement has been achieved (i.e. the PDCA cycle has generated the required performance for the process) then the new level of performance should be maintained via the SDCA cycle. The process is question will stay in the SDCA cycle until such time as a further improvement in its performance is required

Issues addressed within the Hoshin plan one year move back into the daily management process the next and may stay there for several years until next in need of focused attention, as expressed in the following diagram (figure 13)
There is a clear need to recognise Hoshin not as a general management tool but as a means to manage change. It is a powerful but resource intensive tool and so must be used sparingly.

The position of Hoshin as a practical activity relative to strategic planning and daily management (Business as Usual – BAU) can be seen in the following chart (figure 14):
Figure 14

An Integrated Management Model
Incorporating Strategic Planning/Management with Hoshin and TQM

- Vision And Mission
- Values
- Balanced Scorecard/key measures
- 5 Year objectives
- Annual Planning
- Vision Element
- External Analysis
- Internal Assessment

EFQM and other Benchmarks

Strategic Planning Zone

Single Year Objectives (Scorecard)

Hoshin Zone

Hoshin Management
- Process Redesign & Reengineering
- Fundamental NPI
- New Market Entry
- Competitor destruction
- Acquisition
- Re-skilling

TQM Zone

Non-Breakthroughs
Incremental or no change

Process or Functional Management (BAU)

Reviews

Process up to 3 breakthroughs

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In conclusion, Hoshin is a valuable addition to the arena of Strategic Change Management. As such, it encompasses many ‘traditional’ approaches to strategic analysis and the formulation of the organisation’s strategic response to that analysis. Hoshin brings value to this management arena in the degree to which it supports implementation as well as formulation and it is particularly powerful in creating alignment to ensure that the whole organisation is working towards the same strategic goals.

Hoshin’s link with the arena of TQM is strong in the sense that it makes use of well-established TQM principles but applies these in a more strategic context than many TQM users have previously been able to achieve. In particular, the principles of employee involvement, cause and effect analysis, establishing measures and setting targets and the concept of deploying the needs of the customer through techniques such as QFD (matrix deployment) and Kano analysis all link Hoshin to TQM and increase the power of the Hoshin approach.
References


Povey, B. (1998), IBM Case Study Presented to Part-Time MBA Programme, Bradford Management Centre.


