Significance of Hoshin Kanri in Management Accounting

— the Linkage between the Balanced Scorecard and Hoshin Kanri —

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ABSTRACT Some insist that the origin of BSC is Hoshin Kanri (HK) because BSC and HK have similarities. We need to discuss deeply whether BSC is a kind of HK or completely different approach. However, there are many prior researches on BSC, but limited previous research on HK in the management accounting. For example, management control systems (MCSs) is an important concept of management accounting; and HK is closely related with MCSs. Despite this, it cannot be said that HK has been analyzed in recognition that it is part of MCSs or the management accounting system. Therefore, I would like to consider HK from the viewpoint of management accounting in this paper. I discuss the relationships the linkage of BSC and HK. This study is based solely on the literature; it is necessary to observe actual practice. The HK practices of Japanese companies are diverse, and the degrees of balance with the BSC are thus also likely to be diverse. It is necessary to consider those facts while carefully investigating whether the theories presented in this paper can be applied to corporate practice. Key words: BSC, Hoshin Kanri, Policy Management, Policy Deployment, MCSs

1. INTRODUCTION

1. 1 Background

According to a survey by Bain & Company, the balanced scorecard (BSC) boasted high utilization rates, ranking as the 6th top used tool in 2008 and the 5th top used tool in 2010. On satisfaction, it ranked 5th in 2008, 6th in 2010, and 3rd in 2012¹. The BSC is perceived positively

by Japanese management accounting researchers as an effective strategic management system (SMS), yet its penetration in Japan is low. One reason given for these low introduction rates is the availability of similar Hoshin Kanri (HK), which presumably makes the introduction of the BSC superfluous². 21.9% of businesses cited the existence of similar tools as a reason for not introducing the BSC³.

1. 2 Objectives of the Study

Is HK inhibiting the BSC? A longstanding track record of HK has helped to realize the smooth introduction of the BSC, which involved fostering the acceptance of strategy maps without any significant resistance⁴. The BSC involves an efficient strategy execution process similar to that of HK, and it is increasingly proving to be a useful method of HK⁵ and multilateral firm evaluation⁶. Its evaluation processes are consistent with the concept of TQM (Total Quality Management) and, because it is easy to understand, many companies have introduced it as an evaluation method⁷. By improving management quality, HK may prove to be a factor for the promotion of the BSC.

In fact, many companies practicing HK and Management by Objectives (MBO) have either introduced BSC or are implementing it concurrently with HK and/or MBO⁸. 50% of companies that were introducing the BSC were implementing HK, and 59.1% were engaged in MBO. Out of 87 companies that were introducing the BSC, 77 (88.5%) were using HK⁹. The researchers found that 64 out of 74 companies (86.5%) that were practicing the BSC were using it together with HK¹⁰.

HK implementation may encourage BSC usage. There are two possible reasons for this: introducing the BSC reduces costs and helps to overcome the operational problems of HK¹¹. It was showed that HK practitioners added BSC implementation when the necessity of internal communication and non-financial performance indicators increased. Thus, it can be said that HK does not sufficiently fulfill role expectations¹².

In addition to the abovementioned reasons why the necessity of the BSC was not acknowledged, it was pointed out that the BSC may not have been known as such and that systems similar to the BSC were not referred to as "BSC" ¹³. It is therefore necessary to consider the differences between the HK of Japanese companies and the BSC. The existence of a "hidden

BSC" that incorporates BSC thinking and methods has been identified¹⁴. Furthermore, when introducing BSC, it is necessary to consider whether existing HK is to be 1) abolished, 2) modified, or 3) incorporated into the BSC¹⁵.

Regarding the similarity between the BSC and HK, the question of whether the BSC originated in HK has been debated¹⁶. Given that the corporate scorecard of Analog Devices, Inc., which has become a major player in this area, is an imitation of HK, it is no wonder that it has been influential¹⁷. The question of whether to consider the BSC as an extension of HK or as a completely different approach is worthy of a deeper discussion¹⁸. Some researchers have recommended using the BSC and HK together¹⁹.

However, while there are many studies on the BSC, research on HK for management accounting is limited. For example, a close relationship exists between HK and management control systems (MCSs), which is an important concept supporting management accounting. Despite this fact, HK has not been analyzed as a component of a management accounting system²⁰.

Therefore, I consider HK from a management accounting perspective. After discussing its relationships with BSC and MCSs, I define the form that the link (i.e., cooperation) between BSC and HK should take. In Section 2, I review the HK research in managerial accounting studies that focus on MCSs. Section 3 describes the current state of HK, while Section 4 discuss about the BSC and HK. Section 5 is conclusion.

2. HOSHIN KANRI IN MANAGEMENT ACCOUNTING RESEARCH

2. 1 Current State of HK Research in Major Accounting Journals

A search using the keyword "Hoshin Kanri" in Japanese on Cinii (Japanese databases), excluding magazines for practitioners and changes in HK research, produced the results shown in Figure 1. The peak occurred from 2001 to 2005, which is consistent with the era during which the BSC became popular in Japan.

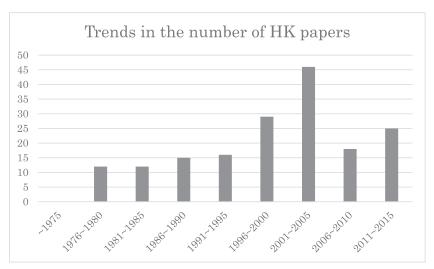


Figure 1: Trends in the number of HK papers

2. 2 Studies Concerning HK as a Management Control Systems

In the Guidelines for HK of the Japan Society for Quality Control (2016 edition), HK is defined as "activities that aim to achieve priority under the participation of all divisions at all vector levels". HK has two objectives²¹: (1) to clarify priority issues and implement measures in order to efficiently achieve the project plan, and (2) to utilize QC problem-solving techniques to solve key issues by establishing efficient problem-solving methods in practice. (1) indicates the execution of a business plan including its strategy and (2) indicates QC tool usage and the proficiency required for problem solving.

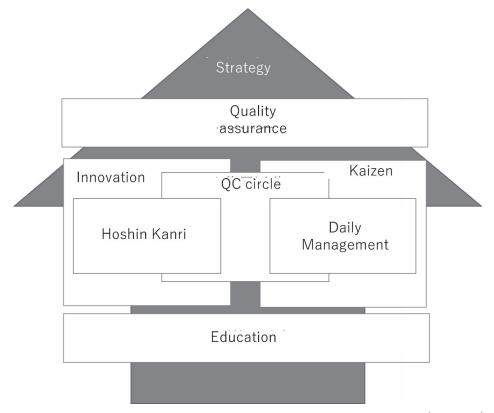
Let us first consider (1). HK is performance management systems that uses diverse forms of sophisticated non-financial indicators for each organization; these management control methods are unique to Japan²². Therefore, HK is an important MSCs discipline. Even without the introduction of BSC, one should recognize functions that are equivalent or superior to the BSC, which are to be demonstrated in HK or MBO²³.

Let us next consider (2). In HK, QC problem-solving methods that make use of QC tools are utilized. The main purpose of HK is task control (TC). In policy development, the aim is to efficiently and effectively carry out a specific task by emphasizing process²⁴. The BSC, on the other hand, leaves selection/implementation to the local site; it does not involve methods that,

like HK, are established in detail in advance.

Total Quality Management, a basic concept of HK, comprises a collection of tools. Therefore, HK that emphasizes the use of tools tends to involve a tactical approach. The BSC is a more flexible tool that allows for a more strategic approach. Even with the same MCSs tool, HK tends to fall on the TC side, while BSC tends to favor strategic formulation (SF). Thus, implementing both allows the potential for different ways of thinking.

In TQM implementation, HK is usually introduced. Implementing TQM requires engaging in quality assurance, daily management, HK, QC circle (small group activities), and quality control education²⁵. Quality assurance is a systematic organizational activity designed to meet the needs of customers and society. It is a broad concept that includes the maintenance of business processes and new product development and management, going beyond mere examination. Daily management involves all the activities necessary for achieving daily operations efficiently. Normally, the concept of "HK" assumes or includes daily management. Small group activities are designed to solve problems that became clear as a result of HK using a small number of people. The QC circle is representative of this. Quality management education is a human resource development and maintenance activity through which employees acquire the values, knowledge, and skills necessary for TQM activities. Figure 2 illustrates these points. When making selections from the customer's point of view of quality assurance, from the internal process perspective of small group activities, or from the perspective of quality management education learning and growth, it is understood that this is similar to the BSC system. On the other hand, BSC does not distinguish between daily management and HK and covers the entire strategies²⁶.



Note: Created by the author based on the Japan Society for Quality Control (2016, p. 9)

Figure 2: The position of TQM activities

From the above, it is clear that HK is (1) an MCS tool and (2) a TC-oriented tactical approach with (3) a TQM system that is similar to the BSC.

2. 3 Significance of Considering BSC and HK Together

It has been repeatedly pointed out that the BSC and HK are similar. As mentioned in 1.2, they tend to also be used in combination. Both are MCSs tools. However, coordination between them is inadequate²⁷. Furthermore, the question also arises as to whether HK is a strategic management system that goes beyond MCSs²⁸. HK emphasizes working in lockstep with medium-term management plans or strategies. It is implemented as a control measure to expand the policies derived from it²⁹. HK and the BSC can both be thought of as management systems used to formulate and implement strategy³⁰.

The BSC has also evolved from a performance evaluation tool to SMS. Some stated that the BSC and strategic HK are similar and that it was intriguing that they were being developed and implemented at almost the same time³¹. It is worth considering HK (strategic HK) and the BSC together here. However, although they share SMS, their development directions differ. Strategic HK has moved toward the formulation (planning) of strategy³². Meanwhile, the BSC has advanced in the direction of managing strategies over the long term³³. The presence or absence of double-loop learning is representative of this.

In strategic HK, seven methods have been proposed as strategy formulation tools: environmental analysis, product analysis, market analysis, product/market analysis, product/portfolio analysis, strategic factor analysis, and resource allocation analysis. There have also been calls to systematically summarize and evaluate these as tools for formulating strategy³⁴. In particular, it can be said that strategic factor analysis has originality. Strategic factor analysis is a method of objectifying a strategy by associating the management factors of QCDSE (quality, cost, delivery date, safety, environment) with the value chain³⁵. Broadly speaking, QCDSE has a somewhat more strategic theme than Strategy maps of the BSC. It is possible to derive the strategic objectives each department (e.g., manufacturing, personnel affairs) is in charge of for each strategic theme. This tool is similar to a strategy map.

However, it has problems as a strategy-development tool. First, it is difficult to formulate strategy by gathering up the existing tools. I have proposed seven tools for strategy development, but the term "seven tools" refers to the seven QC tools. The QC method seeks a uniform way to fairly evaluate small groups. Miscellaneous activity report formats cannot be evaluated. Therefore, in using horizontal tools such as QC 7 tools, the focus is more on efficiency than on differentiation. In that sense, strategic HK that cannot be differentiated from the concept of QC involves a very tactical approach. Since the strategy (policy) is formulated using QC tools, a management strategy perspective is lacking. The BSC, on the other hand, is an SMS, but it does not use BSC-specific techniques such as strategy maps to develop strategies.

Second, top policies such as strategies and the president's policy may be related, but, when developed at lower levels, this connection is severed. In the policy development of such strategies as are formulated, the lower the level, the more the organization must pay attention to format and be aware of strategy. In particular, as little consideration is given to stakeholders

(e.g., shareholders), the organization has no choice but to focus on improvement tasks corresponding to internal BSC processes.

HK and the BSC both evolved into SMS, but their directionality differed. HK has moved toward strategy formulation while BSC has approached something akin to strategic management. As a backdrop to strategic HK, it seems that circumstances unique to Japan created the need for strategy formulation. Japanese companies have a reputation for lacking strategies³⁶ and seem to be attempting to address this. Japan is also seeing a trend, as indicated by some researchers³⁷, in which strategy map creation is positioned as strategy formulation. Moreover, introducing the BSC has the side effect of highlighting a lack of vision and strategy. However, it was stated that strategy maps are useful for transforming, communicating, and measuring strategies³⁸. Strategic HK and the BSC are similar tools that emerged at about the same time. As Japanese companies tend to use both, both need to be considered to create better theories.

3. HISTORY AND PROBLEMS OF HK

3. 1 History

HK was born out of practice in Japanese companies. In the process of promoting TQC, the Bridgestone tire had used "Policy Kanri" in 1964, Komatsu Manufacturing Co. had used "flag management" in the same year. The Toyota Motor had used "HK regulations" in 1965. Especially in the QC world, it gained popularity since Bremenstone Tire won the Deming Prize in 1968. From 1965 to the beginning of 1980 was the establishment, penetration and deployment period of TQC. The QC circle activity was a bottom-up activity that respected the voluntary participation of the site. Therefore, there is a possibility of doing activities that do not conform to corporate policy. HK is aimed at spreading management policies to QC circle activities. HK was "a method that forms the core of the TQC that contributed to supporting the growth of Japanese companies and enhancing their competitiveness to the international level".

3. 2 Definition

As a definition of HK, a summary of Nikka Gijutsu MC Terminology Review Subcommittee has been widely accepted. According to its definition, HK means "Activities in cooperation with the whole enterprise organization for establishing and achieving efficiently long (medium) term management plan and short-term management plan based on the basic management policy".

As a purpose of HK, it gives two reasons³⁹. First, to achieve business goals, they need to clarify the issues to be truly emphasized and the strategies to achieve. Then, they can do a reliable and efficient achievement of business objectives. Second, they can proceed using QC problem solving method to promote the resolution of priority issues. Therefore, they can improve how to solve problems efficiently and how to proceed with work and establish them in practice.

HK has three characteristics, (1) linkage with the comprehensive management system, (2) utilization of the concept and method of QC, (3) concept and method of QC, HK intended to manage QC circles, so it cannot ignore the relationship with small group activities. In Japanese companies, cost reduction targets are allocated top-down by HK. At this time, "participation by all members" including of the QC circle is executed. Employees' voluntary participation and sense of belonging to the company must be high in order to realize improvement activities by "participation by all members" with joint responsibility.

Furthermore, the high cost of change in jobs as seen in employment practices of Japanese companies behind long-term employment has raised the premise that "there is the only one thing to be here".

3.3 Problems

It is pointed out that HK may not contribute to corporate performance. It is argued that the source of the competitiveness of Japanese companies is GEMBA (e.g. shop floor workers), and it can not be said that HK necessarily contributed. HK is also degenerating in practice. It is becoming just a mechanism and becoming a mere piece. It is a point that there is a process but there is no content⁴⁰.

Also, HK has few cases to update / modify the mid-term plans. Strategies are given and fixed in HK. The process of formulating the strategy is never specified⁴¹. When its strategy has also

been realized up to the level of department, it can go somewhat successfully, but it is difficult to link with individual goals⁴². it was pointed out three problems.

- (1) How top policies are formulated is difficult to understand below the middle. In other words, compared to policy development, the process of policy making was uncertain.
- (2) The top policy is based on the company's business strategy and mid- to long-term plans. However, they cannot know whether the business strategy and the mid- to long-term plan are appropriate. If policies based on inappropriate business strategies are formulated, subsequent policy development will be useless.
- (3) There are three problems in formulating business strategies. Firstly, it is difficult to predict changes in the business environment and uncertainty, and there is no prospect. Secondl, the current positioning is not done objectively. In other words, it is unclear whether it can be said that the strategy, direction and goal of the project are established. Third, there are not a few companies in which only management and staff are involved in policy formulation. It is hard to say that the entity on the site is necessarily reflected in the policy. The strategy formulation is also required not only at the top but also at various departments and levels such as sales and manufacturing. It is also important that managers understand and execute strategies as organizations flatten. The above should be considered in policy development.

Since HK appeared in the 1960's, it has passed almost 50 years. Even though it is going well at first, there are times when it is becoming a formless form. In HK, top policy can be developed to the bottom. However, the process of formulating the top policy is unclear, so employees can not understand the strategy. If you can not understand the strategy, you may not be able to set an appropriate goal.

3.4 Development

HK is very popular in Japan. Overseas, the process goes by such names as "HK," "policy deployment," and hoshin kanri⁴³. Xerox, AT&T, and Motorola are engaged in policy deployment while Exxon Chemical and others are engaged in goal deployment⁴⁴. However, the manner of deployment and the definition of "HK" are not uniform, varying from company to company. In introducing TQC from Hewlett-Packard's Japanese branch, the US parent corporation has accepted HK under the name hoshin. For the overseas literature, It was provided a

comprehensive review of overseas HK research.

On the other hand, it has also been pointed out that HK is being reduced to a mere formality. HK has stagnated since the 1990s because it was misconstrued as having been completed⁴⁵. During this same period, strategic HK was devised, but few of the discussions—including those related to management upstream—seem to have led to improvements in HK.

4. DISCUSSION REGARDING BSC AND HK

4. 1 Similarities between BSC and HK

It was summarized the similarities between HK and BSC, dividing them into six areas⁴⁶. I will provide an explanation by looking at a few considerations. First, I have strategy-based downward development. In the BSC, this downward development is called "cascade"; in HK, it is referred to as "policy development." Both are intended to carry out the strategy through downward deployment with the strategy as a starting point.

Second, challenging goals are established. Goals and policies are all top—down. As a result, as long as the strategy is challenging, downwardly developed targets and policies will also be challenging. Third, it is important that the top and bottom (vertical) and the left and right (horizontal) match. In the BSC, this is referred to as "alignment"; in HK, it is referred to as the "catch-ball process."

Fourth, I have the development of goals and measures. In HK, goals and measures go together to create a policy. With the downward development of the policy, a strategy for achieving goals becomes a subordinate goal, and measures for achieving the subordinate goals in turn involve Z deployment, where these are linked to, and transformed into, even more subordinate goals. Therefore, policy becomes more straightforward as one moves downward. The BSC, on the other hand, establishes performance drivers as process indicators for grasping the progress status of strategic goals. This performance driver is an indicator used to realize policy (i.e., an action plan). In other words, goals and measures go together. The BSC does not involve Z deployment, but it is similar to HK in the sense that the policy is clarified.

Fifth, the aim is to abandon the status quo, the point of which is to distinguish it from daily

management. HK should not be executed in the daily management cycle, which is aimed at maintaining the status quo, because the indexes requiring control are enormous in daily management and are not compatible with HK's focus on priority items. As mentioned in 2.2, HK and daily management must be managed as if they were two wheels on a car. Meanwhile, there is no mention of daily management in the BSC. It can be thought of as being similar to HK, however, in its focus on a small number of KPIs. Sixth, the BSC and HK will also drive the PDCA (Plan-Do-Check-Action or Plan-Do-Check-Act) cycle while being integrated with the profit plan⁴⁷, Thus, MCSs can be thought of as the same as SMS when taking strategy into account.

4. 2 Differences between BCS and HK

There are six differences between HK and the BSC. First, the goals are different. HK is based on the concept of TQC (TQM) and focuses on quality assurance⁴⁸, whereas the aim of the BSC is to create corporate value⁴⁹. Second, the way of thinking about stakeholders differs between the two. The BSC considers multiple stakeholders such as shareholders and customers in a balanced manner. HK, on the other hand, does not take into account stakeholders, especially shareholders⁵⁰.

Third, their methods of downward development differ. In the BSC, subordinate organizations are assigned tasks designed to achieve higher strategic goals. That is to say, the subordinate organization selects tasks based on the top strategic goals and then sets its own strategic goals. In HK, by expanding Z, the upper goal is connected to lower measures even as the standard is changed. In other words, top measures are incorporated into the lower targets. However, this also has the disadvantage of passing on the responsibility for meeting the target to the subordinate organization. In other words, in the BSC, where only targets are deployed, HK integrates goals and measures prior to deployment⁵¹.

Fourth, there is a causal relationship. The BSC has a vertical causal relationship based on four viewpoints, whereas there is no concept of a systematic causal relationship in HK. For example, in HK, target identification is performed using characteristic factor diagrams, but each goal is independent, and causal relationships cannot be observed during this time⁵².

Fifth, strategic learning systems differ. Although it is reflected in the policies of the next fiscal year, HK is a single-loop learning process that does not update strategies such as medium-term

management plans⁵³. Therefore, HK does not have a mechanism for modifying a strategy, and the strategy thus cannot be changed. The BSC, on the other hand, is a double-loop learning system that allows for the updating of a strategy.

Lastly, there are differences in strategic approach. HK lacks a strategic perspective, as policy is formulated through the use of QC tools. The strategic HK proposed to be aimed at contributing to the formulation of strategy. It served as a way to make full use of the tools of strategy formulation. On the other hand the BSC has aspects of both a methodology and a framework⁵⁴. The manner of thinking given these aspects is vital and does not require an implementation method. Rather, the need to understand the correct strategy theory is the biggest BSC issue⁵⁵. Basically, the BSC is a tool for supporting strategy implementation, not a way to formulate the strategy itself⁵⁶. HK is a systematic evaluation approach, while the BSC can be thought of as a relatively flexible evaluation approach that emphasizes viewpoints⁵⁷. Moreover, the top policy of HK is a single-year plan, which is different from the business strategy targeted by the BSC.

Similarities	Differences
1. Downward deployment	1. Goal
2. Stretch targets	2. Stake holders
3. Vertical and horizontal match	3. Methods of downward deployment
4. Development of targets and measures	4. Causal relationships
5. Not daily management	5. Learning systems
6. PDCA cycle	6. Strategic apploaches

Pennell; The similarities and differences between the BSC and HK

4. 3 Integration of Management Systems Significance of Considering BSC and HK Together The BSC has no fixed definition, and the concept continues to evolve⁵⁸. Originally, the BSC had the potential to sublimate not only the areas covered by simple performance evaluation systems but also more ubiquitous management systems. It was argued that, while companies have numerous strategic tools and business tools at their disposal, they have no theory or framework

by which to integrate them⁵⁹. In addition, they also advocate for an SMS focused on the BSC. Japanese companies may need to have SMS, or "Japanese type BSC" which is learned from HK.

5. CONCLUSIONS

5. 1 Contributions

The resources of an organization are limited. If they attempt to make effective use of limited resources, they must differentiate between them using BSC functions. This differentiation function is rare in HK, probably because the main objective of this foundational TQM is to improve the efficiency of waste elimination. I therefore considered linking with HK from the standpoint of the BSC.

5. 2 Limits of This Study

This study is based solely on the literature; it is necessary to observe actual practice. The HK practices of Japanese companies are diverse, and the degrees of balance with the BSC are thus also likely to be diverse. It is necessary to consider those facts while carefully investigating whether the theories presented in this paper can be applied to corporate practice.

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