

Chapter 7

Exploring the Use of Balanced Scorecard in Functional Departments: A Case Study of Kirin Brewery Company, Limited



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7.1 Introduction

The balanced scorecard (BSC) developed by Kaplan and Norton has evolved from a performance measurement system into a strategic management system (Kaplan & Norton, 2008). In previous studies, a strategic business unit (SBU) has been the basic unit for using a BSC (Hasegawa, 2004; Kaplan & Norton, 2001); hence, whether BSCs are utilized in functional departments—a lower level in the organizational hierarchy—remains somewhat unclear. However, since the functional departments, such as production, supply chain management (SCM), and sales, actually execute the business strategy that the SBU is responsible for, it is important to use a BSC to align them with the SBU's business strategy.

In this study, I developed hypotheses about the importance of using a BSC to align the functional departments with a business strategy by researching leading case studies of BSCs in functional departments.

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7.2 Research Framework

7.2.1 *Aligning Functional Departments with a Business Strategy*

Kaplan and Norton (2008) present a BSC-focused strategic management system with six major stages. Of these, the third stage is described as “aligning the organization,” in which an organization’s diverse organizational units and employees are aligned with its overall business strategy.

Kaplan and Norton (2008) consider the SBU as the basic unit for analysis of line operating departments.¹ To align the SBU with the overall strategy of the company or group for which the corporate division is responsible, they focus on cascading the SBU’s BSC, in addition to making vertical and horizontal alignment.

Thus, an SBU is considered a functional organization, and as Ito (2007) suggests, the employees of functional departments, which are further down in the organizational hierarchy, execute the business strategy. Therefore, functional department goals must be aligned with business strategies.

7.2.2 *Effectiveness of a BSC in Functional Departments*

Since an SBU’s BSC may be too abstract to be used by functional department employees, the SBU’s BSC may be cascaded to use BSCs for functional departments (Kaplan & Norton, 2001; Niven, 2006). However, there is debate about the effectiveness of using a BSC in functional departments.

Sakurai (2008) notes that while it is ideal to develop a BSC for every organizational unit, this poses an issue concerning cost effectiveness, and there is a risk that functional department’s BSC may be only partially optimized. In considering how to cascade an SBU’s BSC, Ito (2007) notes that it may be more effective to use Hoshin Kanri in departments that are lower (vs. higher) in the organizational hierarchy.

In addition, Grando and Belvedere (2008) considered the effectiveness of a BSC in operations departments such as manufacturing and logistics. Their case study revealed that the main findings of using a BSC in these departments were (1) the operations departments could adapt quickly to changes in management

¹Only the line operating department is the subject of the analysis. In addition, what is expressed as a “business unit” or “business division” in previous studies may be described as an “SBU” based on the author’s interpretation. In such cases, the expressions used in previous studies are noted in brackets. In previous studies, the actual use of BSCs in functional departments has been clarified to some extent in the context of the staff department. For example, Kaplan and Norton (2006) focus on three units: human resources, information technology, and finance, and consider the importance of a BSC in support units.

decision-making and (2) cooperation was promoted among all organizational units related to operations management.

According to these studies, although it is recognized that using a BSC in functional departments may be effective for aligning functional departments with the organization's overall business strategy, the specific method for doing so remains unclear.²

7.2.3 Research Questions

The following two research questions indicate the importance of using a BSC in functional departments.

The first research question concerns how an SBU's BSC can be cascaded to functional department BSCs to align functional departments with the business strategy for which the SBU is responsible. However, even within functional departments, there are many cases where there is a hierarchy in place, such as a unit that controls production and factories in the production department and a unit that controls sales and branch offices in the sales department. Therefore, this research question can be divided into two problems: cascading between an SBU and functional departments and cascading between higher and lower organizational levels within functional departments.

The second research question is how to use a BSC to align executing business strategies through collaboration between each of the functional departments, such as production, SCM, and sales. This issue is important because no functional department can execute the SBU's business strategy alone.

This study analyzes and considers the following to establish hypotheses to clarify these two research questions through case studies.

7.3 Research Method

Since there is ample scope for case studies in Japanese management accounting research to develop theory (Yokota et al., 2010), a case study was conducted to establish the hypotheses. The subject of the survey is BSCs for the functional departments of Kirin Brewery Company Limited (hereafter abbreviated as Kirin Brewery).

²The general method for cascading a BSC to departments below the SBU has been clarified in previous studies to some extent with case studies of Nova Scotia Power and Mobil NAM&R (Ito, 2007). However, few studies have clarified a specific approach to using a BSC in multiple specific functional departments such as production, SCM, and sales, as is done in this study.

Table 7.1 Outline of interview information (all job titles are as of the interview date)

	Survey date (time)	Interviewees	Interviewer
1st	October 30, 2008 (2 h)	Two people in charge of planning in the Planning Dept. at Kirin Brewery; one person in charge of the Corporate Planning Dept. at Kirin Holdings Company	Author, Eri Yokota (Professor, Keio University)
2nd	March 16, 2009 (1 h)	Two people in charge of planning in the Planning Dept. of Kirin Brewery; one person in charge of logistics and planning at the Logistics Dept. in the SCM Division	As above
3rd	April 30, 2009 (1 h 30 min)	Two people in charge of planning in the Planning Dept. at Kirin Brewery (one of whom was a member of the Sales Department in the Sales Division until March 2009)	As above
4th	August 24, 2009 (1 h 45 min)	One person in charge of planning in the Planning Dept. of Kirin Brewery; one department head at the Production Management Department of the Production Division at Kirin Brewery	Author
5th	December 29, 2009 (3 h)	Two people in charge of planning at the Planning Dept., Kirin Brewery	Author, Eri Yokota

Source: Created by the author

The reasons for choosing Kirin Brewery as the subject of this study are as follows. Kirin Brewery cascades its BSC to its functional departments of production, SCM, and sales. As will be described later, the purpose for this is clear, and some effect has been recognized by aligning the functional departments with the business strategy. The case of Kirin Brewery can be regarded as a leading case study of a BSC in functional departments.

The research was accomplished through interviews; the outline of the interview process is shown in Table 7.1.³

³A semi-structured interview format was used for all interviews; all interview contents were documented on the same day without a recording, except for the fourth interview. To clarify the content and process of the strategic management system centered on the BSC that is shared within the Kirin Group, prior to the interview with Kirin Brewery, interviews were conducted once with the Business Promotion Group, Group Strategy Department, of the former Kirin Brewery (March 6, 2007) before the pure holding company system was adopted, and twice with the Corporate Planning Department of Kirin Holdings Company (December 4, 2007 and July 29, 2008), for three interviews. Based on these three interviews, Senoo and Yokota (2009) clarified the overall structure of the strategic management system in the Kirin Group. Please refer to Senoo and Yokota (2009) for more information.

7.4 Case Study: The BSC in Functional Departments of Kirin Brewery⁴

7.4.1 Case Study Outline

Kirin Brewery is the core operating company of the Kirin Group, with Kirin Holdings Company, Limited (hereafter abbreviated as Holdings) as a pure holding company. The Kirin Group has implemented a strategic management system centered on a strategy map (BSC).⁵

Kirin Group has adopted a pure holding company system; considering it from the context of the normal BSC (Kaplan & Norton, 2001, 2006, 2008), Holdings corresponds to the corporate division and is responsible for group strategy, while the operating company, Kirin Brewery, corresponds to the SBU and is responsible for the business strategy. In Fig. 7.1, the units for developing strategy maps in the Kirin Group are illustrated based on the context. The dotted line between the corporate level and the SBU level shown in Fig. 7.1 indicates that the operating company's strategy map is not based on that of Holdings but on its own strategic policy.

Consequently, the strategy map of Holdings is abstract. In addition, since Kirin Brewery implements management by objectives at the individual level, a dotted line is also drawn between the functional department and on-site employee levels. However, since this study focuses on analyzing the BSCs in functional departments, the relationship between the company-wide strategy maps of Holdings and Kirin Brewery and management by objectives at the individual level are not included in the analysis.

⁴The purpose of this study is to establish hypotheses, add new information based on Yokota and Senoo's case study (2010a, 2010b), and focus the discussion on the case study. The main purpose of Yokota and Senoo (2010a, 2010b) was to describe this case study. Please refer to Yokota and Senoo (2010a, 2010b) for more information.

⁵The Kirin Group, which includes Kirin Brewery, uses various tools, such as index/objective entry sheets and performance evaluation tables that are centered on strategy maps, based on its medium-term management plan. A strategy management system called Kirin Innovative & Strategic Management Action Program has been implemented within the group, and the process of planning, monitoring, and evaluation is performed to execute the strategy. Referring to Hasegawa (2004), who asserts the theory that a BSC is a strategic management system that combines a strategy map and BSC in a narrow sense, this system as a whole can be interpreted more broadly as a BSC. In Kirin Brewery, a strategic management system is implemented for each organizational unit that creates a strategy map, and the main purpose of the strategy map is to specifically describe and clarify the strategy for achieving the future vision in the planning stage through the causal relationships of the four BSC perspectives. For details on the above, see Senoo and Yokota (2009) and Yokota and Senoo (2010a). In the explanation of the Kirin Brewery's case study, except for the description of the effect of the BSC, the term strategy map is generally used instead of BSC. In Kirin Brewery, the expression used is "strategy map of organizational unit manager," such as the strategy map of the president and sales manager. However, the expression used in this study is "strategy map of an organizational unit" to describe strategy maps for the entire company and the sales department to avoid confusion in terminology.

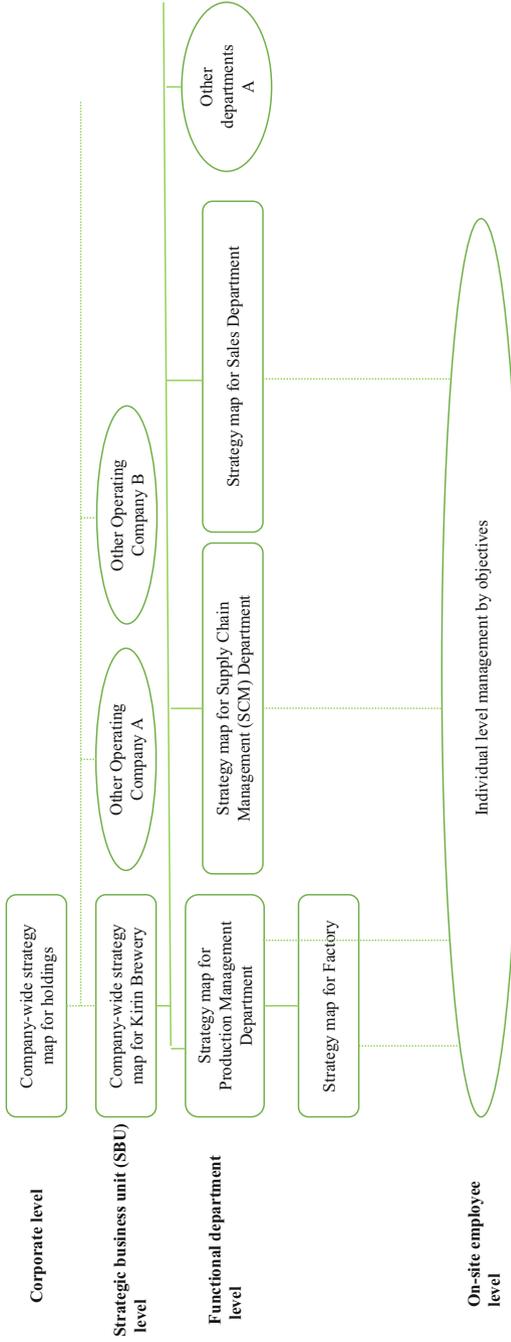


Fig. 7.1 Units for developing strategy maps in the Kirin Group. Source: Created by the author based on the descriptions in Senoo and Yokota (2009) and Yokota and Senoo (2010a)

Kirin Brewery's organizational structure and strategic management system are changed in detail every year to avoid losing substance. As of the end of December 2008, the scope to which Kirin Brewery's organizational structure and strategy maps are commonly used in each organizational hierarchy is shown in Fig. 7.2. This study analyzes the situation that existed when the strategy map for 2009 was developed.

As shown in the areas within the dotted lines in Fig. 7.2, the company-wide strategy map that describes the business strategy is commonly used by the president and general managers of the production division, SCM division, and sales division. Kirin Brewery's business is organized along functional lines, and these three divisions that oversee each functional department are at the highest level of the organizational hierarchy.

The company-wide strategy map is cascaded to the strategy maps of the functional departments such as production, SCM, and sales.⁶ The first purpose is to methodically increase customer awareness by developing a customer perspective in each functional department, as they tend to specialize in their own department's functions. Next, to clarify the fairness and responsibility of evaluations, the performance evaluation systems of all organizational unit managers should be unified across the company.

There are various sections in each functional department, and each section is a unit concerning developing strategy maps. To respond to this study's two research questions, the case studies are analyzed and assessed using the production management section and factory as the subject in the production department, the logistics section as the subject in the SCM department, and the sales section as the subject in the sales department, as shown within the framework of the dotted line in Fig. 7.2.

7.4.2 *Cascading the BSC*

At Kirin Brewery, on-site employees in each functional department are not very aware of the company-wide strategy map and are often aware only of the strategy map of the department to which they belong. Therefore, cascading its BSC is important for aligning the functional departments with the business strategy.

7.4.2.1 **Cascading the BSC from the SBU to Functional Departments**

Kirin Brewery has implemented the following three initiatives to cascade its BSC from the SBU to the functional departments.

⁶Kirin Brewery has cascaded the strategic map to staff departments such as human resources and public relations; this is not reflected in this study because its purpose is to analyze only the line departments of production, SCM, and sales.

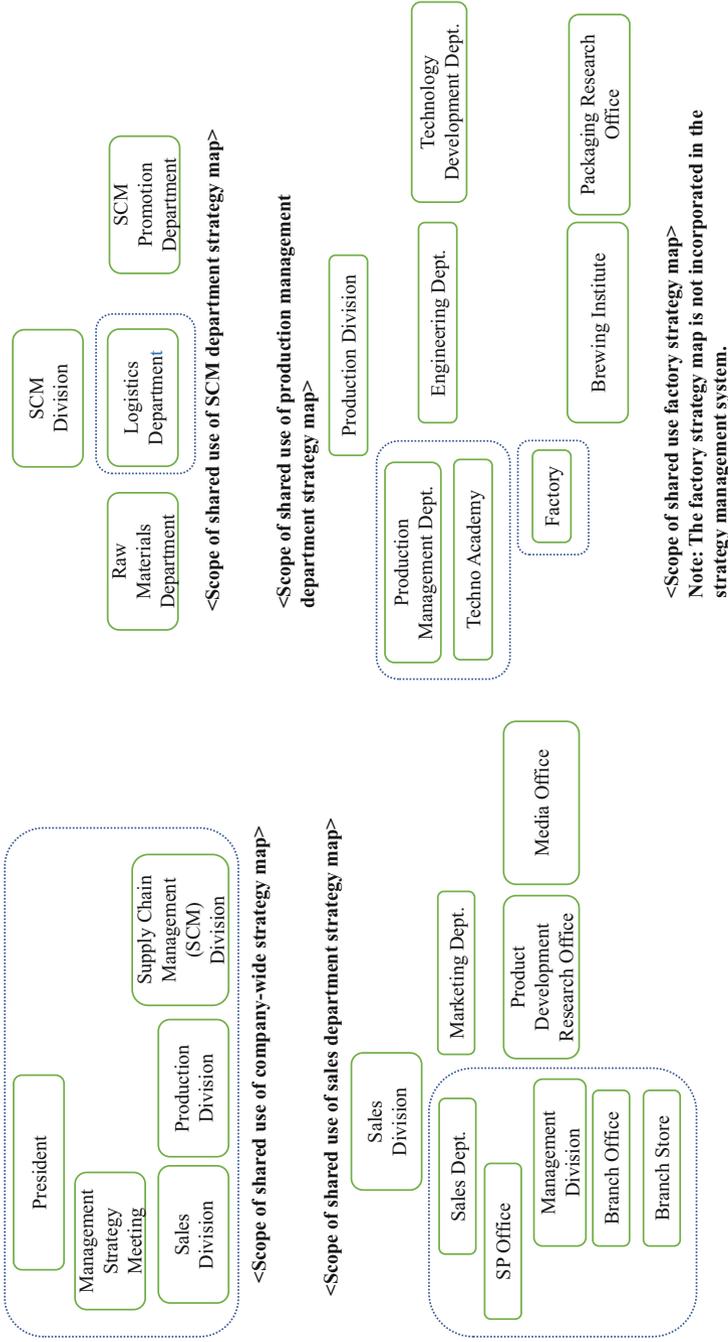


Fig. 7.2 Kirin Brewery organisational structure and scope of shared use of strategy maps (as of the end of December 2008). Source: Created by the author based on a section in Yokota and Senoo (2010a, p. 128)

The first initiative is cascading through strategic themes (Kaplan & Norton, 2008); the strategic themes show commonality with the strategy map of the entire company and the maps of each functional division. Figure 7.3 presents a conceptual diagram of the strategic map of Kirin Brewery's sales department. The four strategic themes of "strengthening customer relationships and technological capabilities," "improving CSR," "improving productivity and cost competitiveness," and "reforming the organizational culture" are the same as those described in the company-wide strategic map.⁷ This also applies to the production and SCM departments. Appropriate cascading is possible by describing the strategy maps based on common strategic themes.

The second initiative is to standardize the financial and customer perspectives. For example, in Kirin Brewery's sales department's strategy map shown in Fig. 7.3, the strategic objectives from the financial and customer perspectives are exactly the same as those of the entire company. This is because importance has been placed on the type of objectives that are independently set by the functional departments in the internal processes and learning and growth perspectives, in contrast to the financial and customer perspectives, which are company-wide objectives.

There is a high degree of discretion in setting key performance indicators (KPI) in functional departments from the internal process and learning and growth perspectives.⁸ This is done to improve the KPI for the financial and customer perspectives, which are recognized as the collective responsibility of the entire company, such as EVA; in the functional departments, emphasis is placed on the types of KPI that should be set from a perspective below the functions of individual departments.

The contrast between the KPI for the financial and customer perspectives, which are shared throughout the company, and KPI from the internal processes and learning and growth perspectives, which are unique to the functional departments, can be surmised from the weighting of the KPI in performance evaluations. Table 7.2 shows the weighting for each of the BSC perspectives for the performance evaluations of general managers and managers of each functional department. The general manager is allotted the same number of points as the president, and the weight of the financial and customer perspectives is high. For managers that are more involved at sites, such as the production and SCM departments, the points allotted to the weight of internal processes and learning, and growth are high. However, owing to the sales

⁷For a conceptual diagram of Kirin Brewery's company-wide strategy map, see Yokota and Senoo (2010a, p. 131). In Kirin Brewery, instead of "strategic themes," "strategic objectives," and "performance measures," which are usually used in the context of a BSC (Kaplan & Norton, 2001, 2006, 2008), unique terms such as "strategic stem," "strategic issue," and "results measures" are used. The former terms are used in this study to avoid confusion.

⁸However, there are performance measures unique to each functional department from the financial and customer perspectives, and there are performance measures shared among the entire company from the perspectives of internal processes and learning and growth. For specific examples of the BSC performance measures in each functional division of Kirin Brewery, see Yokota and Senoo (2010b).

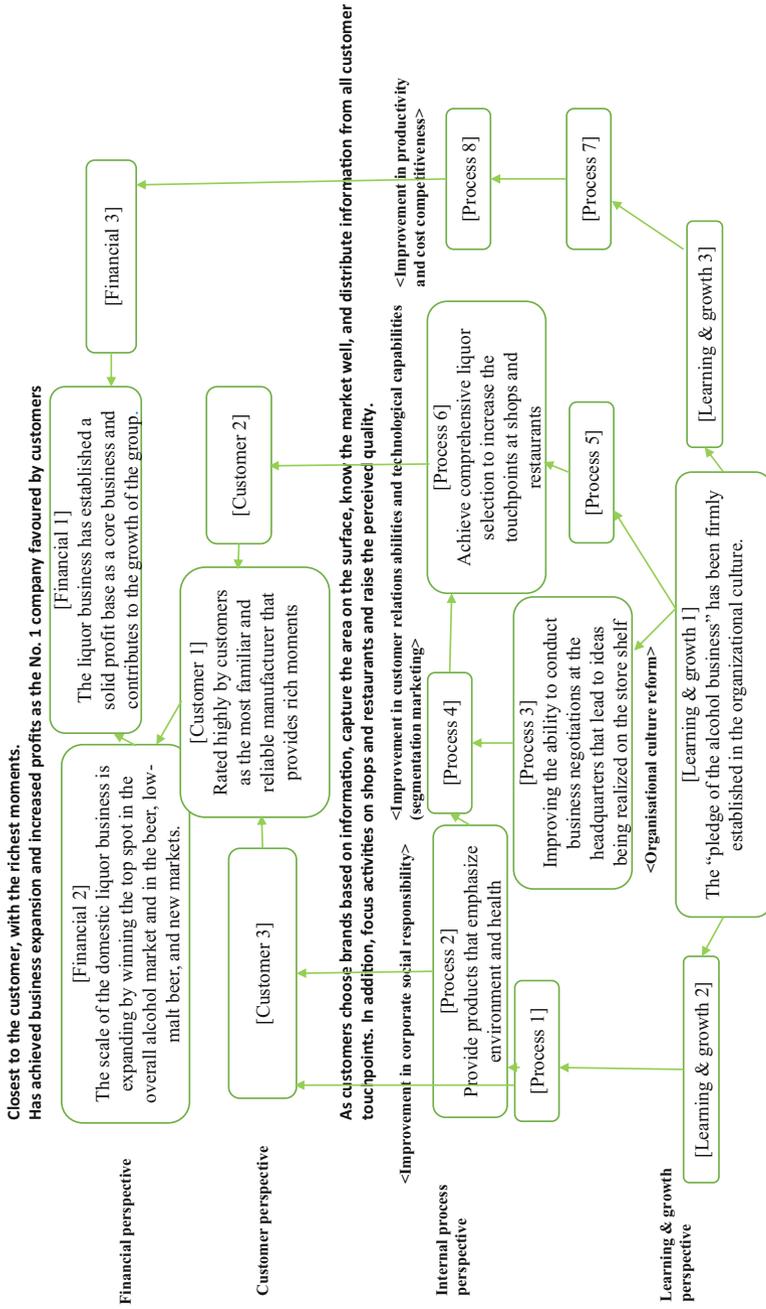


Fig. 7.3 Conceptual diagram of the strategy map of Kirin Brewery's sales department. Source: Created based on Kirin Brewery internal documents and partially modified by the author

Table 7.2 Weighting for each BSC perspective for performance evaluations of general managers and managers of each functional department

	Production Dept.		Supply Chain Management (SCM) Dept.		Sales Dept.	
	Production Dept. General Manager	Production Dept. Manager	SCM General Manager	Logistics Manager	Sales General Manager	Sales Manager
Financial	4	2	4	2	4	4
Customer	2	1	2	1	2	2
Internal processes	4	7	4	7	4	4
Learning and growth						

Source: Created by the author based on the description from Yokota and Senoo (2010a, 2010b)

function's characteristics, the points allotted to the sales department managers are weighted with an emphasis on results, as is the case with the general managers.

Standardizing the financial and customer perspectives can clarify the relationship between the financial and customer strategic objectives and performance measures, as these are the collective responsibility of the entire company. The strategic objectives and performance measures from the internal processes and learning and growth perspectives can be set at the discretion of the functional department to achieve its strategic objectives. Hence, this is believed to enable appropriate cascading.

The third initiative is frequent communication about strategies between the head office and functional departments. At Kirin Brewery, in response to the strategic objectives in the company-wide strategy map drafted by the head office's planning department, the organizational unit manager plays a central role, listening to the opinions of on-site employees and developing a strategy map for each functional department in cooperation with the head office planning department. In the cascading process, frequent communication between the head office planning department and functional departments is necessary to set, coordinate, and explain strategic objectives and to identify problems. This forms a connection between the strategic objectives of the entire company and the strategic objectives of individual departments, and importance is placed on ensuring the validity of the causal relationship between strategic objectives and performance measures on the strategic map in individual departments. Such discussions primarily deal with strategies. Engaging in frequent communication about strategy using strategy maps requires a great deal of time and effort. However, this process is believed to enable appropriate cascading.

7.4.2.2 BSCs Between Higher and Lower Levels of the Organizational Hierarchies in Functional Departments

Next, to examine the cascading of the BSC between the higher and lower levels of the organizational hierarchies in functional departments, I look at Kirin Brewery's sales and production departments.

As shown in Fig. 7.2, as of the end of December 2008, the sales department had not developed a strategy map for each management division or branch office, and there is shared use of the strategy map for the sales department. When the BSC was introduced in 2003, a strategy map was developed up to the branch office level. However, considering cost effectiveness and the amount of time and effort required to develop a BSC, there was only a small amount of variation in functions between each of the regional branch offices. Because time had passed since the introduction of the BSC, there was an advanced understanding of it even at the branch office level, and the entire sales department now uses a shared strategy map.

By contrast, a strategy map had been developed in the production department not only for the production management section but also for each of the factories. The factory strategic management system differs from the company-wide one; however, unlike the sales department, different strategy maps are used in the higher and lower levels of the production department's organizational hierarchy that have the same function. The reason for this is that the aim is to operate the management system consistently by connecting the business strategy and overall production department's strategy with the issues that should be dealt with by the factory using a shared mechanism.

In an interview with the planning department of the head office, the opinion was expressed that the same strategy map should be used if the functions are the same. Since there is little difference in how organizational units with the same function contribute to the business strategy and a great deal of time and effort is required to cascade the strategy map, my opinion is that the same strategy map should be used within the production department.

7.4.3 *Coordination Between Functional Departments Using the BSC*

Kirin Brewery highlights that each functional department collaborates to execute business strategies. Therefore, the following two initiatives have been implemented, using its BSC for coordination between functional departments.

In the first initiative, the respective general managers of the production, SCM, and sales divisions at Kirin Brewery share a company-wide strategy map, as shown in Fig. 7.2. Previously, a strategy map was developed for each division. One of the reasons this was discontinued was that the general managers of each functional

department shared a company-wide strategic map, which facilitated coordination between functional departments.

In addition, coordination between each of the functional departments in production, SCM, and sales is encouraged in the company-wide strategic map. Thus, it is conceivable that sharing the company-wide strategy map among the highest levels of the organizational hierarchy of each functional department and encouraging coordination since the strategy map makes it possible to coordinate between functional departments to execute business strategies.

In the second initiative, certain strategic objectives and performance measures are shared by functional departments. For example, the SCM department and sales department share performance measures related to “pallet collection.” While the SCM department oversees pallet collection because functional departments collaborate to execute business strategies, the sales department is in charge of negotiations with wholesalers (dealers) regarding pallet collection. Although there are a small number of shared strategic objectives and performance measures, this is considered to contribute to executing the business strategy through the collaboration of each functional department.

7.4.4 BSC Effects in Functional Departments

Kirin Brewery recognizes the following two points as the BSC effects on functional departments.

First, the relationships between the functions of each department and the business strategy have been clarified. As mentioned above, functional departments tend to specialize in the functions of their own department, but by cascading the company-wide BSC and developing BSCs for individual departments, the relationship with the business strategy has become clear.

In addition, since an individual department’s BSC describes the financial and customer perspectives, which are objectives shared by the entire company, there is strong awareness of how to contribute to achieving those objectives at the discretion of the individual department.

Next, the effect of facilitating coordination between functional departments to execute the business strategy was also recognized; however, it was noted that this was not solely owing to the BSC. The BSC is simply a tool for executing strategies and not something that on-site functional department employees are consistently aware of daily. Concerning daily activities, for example, a Total Cost Reform meeting, which is a meeting where staff from each department at the same site gather, is held every month to adjust. It was pointed out in the interviews that it is important for such activities to be consistent with the BSC.

7.5 Discussion

This case study of Kirin Brewery shows the importance of using a BSC in functional departments; thus, a hypothesis was proposed to clarify the two research questions posed in this study.

The first research question describes the problem of cascading a BSC. The case study suggests that cascading between the SBU and functional departments requires the three initiatives: functional departments can be aligned with business strategies through cascading using strategic themes, standardization of the financial and customer perspectives, and frequent communication regarding the strategies of the head office and functional departments.

The second question considers cascading between the higher and lower levels of the organizational hierarchies in functional departments. Kirin Brewery used one BSC for the same functions in the sales department, whereas the production department used different BSCs for the same function in the higher and lower levels of the organizational hierarchy. As previously mentioned, it is my opinion that cascading a BSC within the same functional department is not necessary, and thus I propose a hypothesis stating the same.

Regarding the problem posed in the second research question about coordinating between functional departments using a BSC, the following two initiatives are required. First, the highest level of the organizational hierarchy in each functional department can share the use of the SBU's BSC; second, the strategic objectives and performance measures can be shared among the functional departments to allow executing business strategies in a coordinated manner. When this is done, the BSC should be consistent with the daily activities of the SBU.

In this case study, use of a BSC in functional departments not only clarified the relationship between the functions of each department and the business strategy but was also shown to considerably contribute to the sharing of strategies between functional departments.

7.6 Conclusion

This study considered the importance of a BSC in aligning functional departments with business strategies through the study of leading cases and presented multiple hypotheses about the problems with cascading a BSC and using it to coordinate between functional departments.

In the future, I would like to conduct additional case studies addressing the hypotheses presented in this study and empirically verify them through quantitative field research with one or several companies as the subject.

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