Philosophy to Strategy: A Framework for Developing Business Strategy Based on Corporate Philosophy

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ABSTRACT

The pressure on companies regarding social responsibility is increasing. In particular, public attention regarding the sustainable development goals (SDGs) is indicative of a shift in society's expectations of companies to move from a pure profit focus to demonstrating concrete contributions to addressing social problems. In light of this, greater emphasis is being placed on corporate philosophies as companies' raison d'être. This study constructs a framework for drafting business strategies based on corporate philosophies by adopting an interdisciplinary approach called Systems Engineering. It is based on the corporate philosophy data of 300 smaller representative Japanese companies, as collected by the Small and Medium Enterprise Agency of Japan. These data were used for functional and physical design, and the results were summarized using the Enabler Framework, a framework for relationship building. A framework for drafting business strategies based on corporate philosophies was constructed using four identified factors. The study found that the framework had two potential patterns (six potential patterns by detailed classification), depending on the combination of the factors, and that the patterns varied depending on companies' attitudes. A questionnaire survey (n=33) regarding the framework confirmed its usefulness.

Keywords: Corporate Philosophy, Management Strategy, Systems Engineering, Interdisciplinary Approach

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1. INTRODUCTION

1.1 Background

There is an increasing emphasis on corporate social responsibility (CSR). Concepts such as CSR, creating shared value (CSV), and social impact bonds (SIB) have been used widely in contemplating how the relationship between corporations and society can be strengthened. According to Michael Porter (Porter & Kramer, 2014), "the

concept of shared value refers to an approach to address social needs and create social value while creating economic value." Meanwhile, the Japanese Association of Corporate Executives advocates the importance of the CSR concept, according to which companies should proactively adopt their social responsibilities (Japan Association of Corporate Executives 2011). This clearly shows that companies are part of the social system, rather than being entities that exist separately from society. The concept of SIB has also emerged. The Global Impact Investing Network, a global network related to SIB, defines it as "an investment intended to create social and/or environmental impact along with financial returns" (Global Impact Investing Network 2015). It attempts to balance the social and economic aspects of investment by basing the investment decision not only on financial evaluation, but also on social impact evaluation (Griggs et. al., 2013).

Furthermore, society has been directing its attention to the sustainable development goals in recent years, and has been shifting its expectation of companies from merely generating profits to demonstrating specific contributions and resolving social issues （Ouchi, 1981; Peters & Waterman, 1982).

Due to these circumstances, the importance of corporate philosophy, which defines the meaning of corporate existence, is increasing. There are numerous previous studies on corporate philosophy and, particularly, many studies on the relationship between corporate philosophy and functional classification, as well as the penetration of corporate philosophy among employees. In practice, an organizational development approach is often taken as the methodology to execute corporate philosophy in corporate management. However, those studies hardly secure the reproducibility of the process by which organizations incorporate corporate philosophies in their business management, and realize it as their business outcome.

Meanwhile, changes in the management environment, including those in the relationship between companies and society, are evident in the changes in management strategy. The latter was first conceptualized through typifying of systemized business administration by Taylor (1914) and Fayol and Coughbrough (1930), followed by the definition of business strategy by Porter (1989) and Barney (1992), and the subsequent characterization of open innovation by Chesbrough (2006) and Ries (2011). These changes are indicative of the fact that the boundary that companies should consider in managing the business is widening. In other words, the uncertainty of management is increasing. As companies attempt to balance social and economic aspects, corporate philosophy (the objective of corporate management) and management strategy (the methodology) increasingly need to stay consistent. However, the respective studies are not linked; to realize corporate philosophies in businesses, management strategies and philosophies should be consistent. However,

corporate managers and strategists do not have any method to connect these two elements in practice.

1.2 Purpose of the Study

This study aims to structuralize corporate philosophy to extract viewpoints for formulating management strategies, and to construct a framework for designing management strategies based on corporate philosophy. With this framework, companies will be able to choose from many management strategy options and tailor them to their own corporate philosophy.

2. LITERATURE REVIEW

2.1   Previous Studies

2.1.1 Philosophy

Given that many studies have been conducted on corporate philosophy, one can say that studies regarding its objective, significance, and functions are quite advanced. The importance of corporate philosophy is described in *Built to Last: Successful Habits of Visionary Companies* (Collins & Porras, 2004), which outlines a study of the criteria of companies that are continuously top-rated. According to Collins and Porras (2004), a vision (i.e., a company's core value and purpose) that goes beyond merely making money is the key factor in realizing the vision. They define the vision as follows (Collins & Porras, 2004):

Vision = Core value + Purpose

Core value = Essential and immutable principle for the organization

Purpose = Fundamental reason for the company's existence

Corporate philosophy has also been defined as "corporate value, objective, and instruction philosophy identified through the interaction of three factors including the personal beliefs of the business manager, desire and motivation of the employees, and demand by the social environment" (Shimizu 1996). Corporate philosophy is further categorized as follows (Toba & Asano, 1984):

(1) Three types: "self-discipline," "norm," and "policy."
(2) Four content elements: "objective," "goal," "means," and "social recognition."

Although these studies describe what corporate philosophy is, they do not provide the means to examine what should be done to engage in corporate activities, with corporate philosophy as objective.

2.1.2 Strategy

A management strategy is a methodology by which a company can realize its strategic management. The latter is an "ongoing process that evaluates and controls the business and the industries in which the company is involved; assesses its competitors and sets goals and strategies to meet all existing and potential competitors; and then reassesses each strategy annually or quarterly to determine how it has been implemented and whether it has succeeded or needs replacement by a new strategy to meet changed circumstances, new technology, new competitors, a new economic environment, or a new social, financial, or political environment" (Lamb, 1984). This activity has a broad scope, including consideration of every pro and con related to the company and the controlling risks.

However, although this management strategy theory generally and decisively impacts corporate management, there exists a dilemma wherein the overall picture cannot be understood because corporate management itself is studied by dividing it finely into multiple disciplines (Barney, 2001).

As mentioned in Section 1.1 of the Introduction, management strategy changed considerably in terms of its objective and applicable scope over time. For this reason, the definitions of management strategy vary widely. In this context, Minzberg (1998) deemed it unrealistic to define strategy by means of short phrases, and instead identified the following five elements of strategy: (1) Plan; (2) Pattern; (3) Position; (4) Perspective; and (5) Ploy.

This implies that the nature of management strategy is multifaceted. Furthermore, it is not versatile in all situations, as there are always advantages and disadvantages. As a strategy is perfected, its disadvantages become evident along with the advantages, and the gap increases (Chaffee, 1985).

2.2 Philosophy or Strategy

As described earlier, studies on corporate philosophy and management strategy have developed specifically and independently from each other, and no interface exists to connect those study results. For this reason, both corporate philosophy and management strategy exist as independent research streams, and their knowledge and wisdom are rarely shared.

Therefore, the impact of corporate philosophy on corporate management is both realistic and spiritual. Management strategy has also become a tool to realize shareholder value rather than corporate philosophy.

Corporate managers perceive a trade-off between corporate philosophy and profitability, and seek a compromising plan (Robert, 1995). If a company truly seeks to assume its social responsibility, it must have management strategies that are consistent with its corporate philosophy. This study constructs a framework that would work as an interface to connect corporate philosophy and management strategy (Fig. 1).
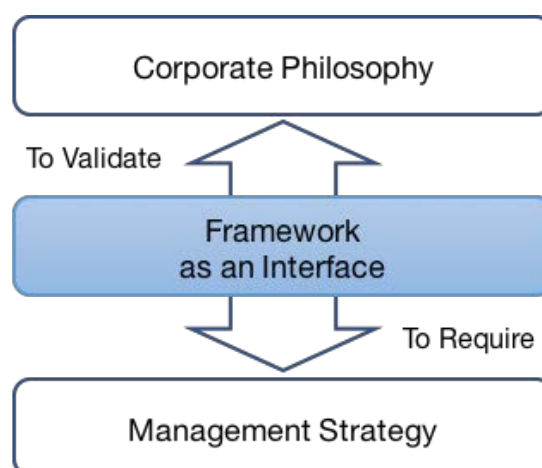

Fig 1. An Interface to Connect Corporate Philosophy and Management Strategy

3. MATERIALS AND METHODS

3.1 Scope

This study considers small and medium-sized companies as defined by the Small and Medium-sized Enterprise Basic Act in Japan (The Small and Medium Enterprise Agency, 2017). There are two reasons for this:

(1) The social impact of such companies is large, since they comprise approximately 99% of all companies and employ approximately 75% of Japan's working population (The Small and Medium Enterprise Agency, 2017).
(2) In Japan, a business office comprises on average 10 people in all industries, and even large companies often have small teams in practice (Ministry of Internal Affairs and Communications, 2010).

Considering this background, this study constructed a framework and evaluated its effectiveness based on a study of small and medium-sized companies.

3.2 Objective

The study subjects were obtained from the database of "Genkina monodzukuri

chūshōkigō 300 sha (300 energetic small and medium-sized manufacturing companies)," selected by the Small and Medium Enterprise Agency. The reasons for choosing manufacturing companies in this study are as follows:

(1) Small and medium-sized enterprises achieved the worst ratings in the survey on business sentiment, and their management environment is deteriorating (Cabinet Office, 2007).

(2) The degree of difficulty in managing manufacturing businesses is higher compared with other industries, because their capital investment is larger and the payback period is longer.

In other words, since managing small and medium-sized manufacturing businesses is more difficult than businesses in all other industries, an analysis of companies that fall in this category—that have relatively better management situations and that have positive future prospects—should generate insights for all industries.

The following criteria of the Small and Medium Enterprise Agency were used to select small/medium-sized energetic manufacturing companies:

"Given that sophisticated manufacturing technology has become a source of economic vitality to support the international competitiveness of Japanese industries, companies that are contributing to the local economy through manufacturing and pioneering new areas by addressing social issues are selected, even if their scale is small" (The Small and Medium Enterprise Agency, 2017).

In other words, because the agency selects small and medium-sized companies that are internationally competitive, have steady business revenue, and develop their business with the aim to resolve social issues, their selection matches the intention of this study.

3.3 Methodology

3.3.1 Systems Engineering Methodology

In this study, a highly reproducible engineering approach, that uses the systems engineering methodology—a cross-functional approach to successfully realize large, complicated systems—was used to construct a framework to develop management strategies based on corporate philosophy.

Systems engineering concepts (such as lifecycle) are used for product design (Sampurno, 2012). The International Council on Systems Engineering (INCOSE) defines systems engineering as an aggregate of best practices regarding the design of large, complex systems; further, it is an approach by which to lead a project to success while considering quality, cost, and delivery (INCOSE, 2010). It is composed of

methodologies for thinking about complex issues and developing solutions and techniques for executing those methodologies; it has been systemized by the International Organization for Standardization (ISO) and others as a methodology to maximize the application of diversity in various areas (INCOSE, 2010). Based on these characteristics, this study considered systems engineering as appropriate for the construction of a framework.

Checkland, a researcher of social systems (including organizations), discussed the social system from two perspectives. The first is the perspective of artificial systems such as automobiles, computer programs, law, and mathematics, which are easily recognized as systems in general. The second is the perspective of the human activity system, in which people in the society engage in activities (Checkland, 1990). From the latter perspective, the social system can be denoted as "human activities" and "their reciprocal relationship." The areas of application of systems engineering is not limited to engineering; it can be applied to any problems that have the characteristics of a system. Further, it is believed to be effective for designing a social system intermediated by humans, such as an organization (INCOSE, 2014). Therefore, we can integrate systems across areas by using the systems engineering methodology and, as an effect, expect even people who do not have much design experience to be able to design a solution (INCOSE, 2010). Thus, this study constructs a framework by taking advantage of the characteristics of systems engineering methodology, and by using its detailed design process (Arnold, 2002; The International Organization for Standardization, 2008). In particular, the framework is developed by utilizing an enabler framework, which is a methodology for constructing a cross-functional framework.

3.3.2 Enabler Framework

Three perspectives are considered when understanding an aggregate composed of multiple factors, namely, the operational view, functional view, and physical view (Institute of Electrical and Electronic Engineers, 2005). Accordingly, the enabler framework focuses on the relationships among these three viewpoints (Shirasaka, 2010). It is a general-purpose effective framework that focuses on the relationship between "enable" and "utilize," and that defines the connection between viewpoints using this relationship, to construct a framework. The enabler framework takes factors that realize (enable) superordinate concepts and places them at a lower level (Fig. 2). For example, when you consider the commonly identified operational, functional, and physical viewpoints, operational factors are realized by functional factors, while functional factors are realized by physical factors. In other words, we can consider these three viewpoints as being in an enabler relationship. An enabler can be thought of as something that you must have to realize a superordinate concept.
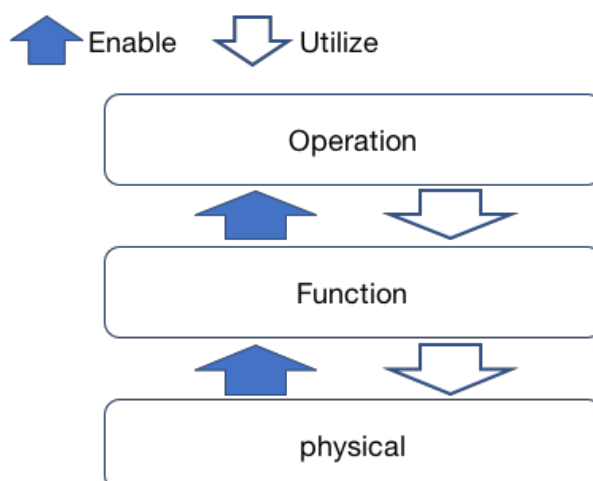
Fig 2. An Example of Enabler Framework

In this study, the enabler framework was used to structuralize the factors extracted from corporate philosophy, and to design a framework that will function as an interface that asks for a management strategy.

The methods used for each of the steps of the framework development and evaluation processes are described in Sections 4 and 5.

4. FRAMEWORK DEVELOPMENT

4.1 Definition of a Framework

To lay out the process of designing a framework, "the architecture description methodology for conceptual framework," standardized by the ISO/IEC/IEEE 42010, was used (Institute for Electrical and Electronic Engineers, 2011). An important aspect when constructing a framework is to extract a viewpoint regarding how the subject is understood according to the framework's objective. According to ISO/IEC/IEEE 42010, a framework is necessary and should have sufficient viewpoints for realizing a specified objective and their relationship. This is shown by the aggregate of exactly the right set of viewpoints for the objective, related to the interest or issue of stakeholders involved in the subject of design (Institute for Electrical and Electronic Engineers, 2005).

4.2 Framework Design Process

According to ISO 42010, the framework design process comprises the following:

(1) Stakeholder Analysis

(2) Stakeholder Concern Analysis

(3) Classification of Viewpoint

(4) Framework Design

This study also refers to the above ISO process to construct a framework.

4.3 Stakeholder Analysis

The stakeholders that are related to the framework to be constructed were analyzed. When analyzing the corporate philosophy and management strategy at a highly abstract level, stakeholders can be divided into individuals and corporations. Furthermore, each group can be divided into internal and external stakeholders. Assuming that this framework is used internally in corporations, the scope of stakeholders to be considered is limited to internal individuals and corporations.

An "internal individual" primarily refers to management team members who use the framework to formulate strategies, while "internal corporation" refers to the corporate organization itself that has the corporate philosophy. These two types of stakeholders were analyzed.

4.4 Stakeholder Concern Analysis

4.4.1 Management Concern Analysis

When one tries to resolve social system concerns comprehensively without being limited to corporate management, one needs to first define the boundary of the matter to be resolved, and identify the issue specific to the social system (Bots, 2002). In this section, a concern analysis on corporate management is conducted, and the boundary of the matter to be resolved is defined to obtain the material for constructing a framework.

4.4.1.1 Survey Objective

Based on considerations in previous studies, an attitudinal survey of the elements and the way of thinking required for corporate management was conducted among those who are engaged in hands-on management of the company, or who are involved in management as management support professionals. Since corporate management is a social system, the attitude of individuals who develop and operate it as a social system becomes important when constructing a system. Furthermore, it is quite meaningful to know what is happening at the front line of corporate management, considering that its objective has diversified and companies are not aiming to maximize the profit today, as already described. Therefore, this survey aimed to reveal the concerns of management.

4.4.1.2 Survey Method

The survey was conducted in the form of group interviews with corporate managers and management support professionals. A two-hour group interview was conducted three times among eight participants, and transcriptions were prepared.

The demographics of the interview participants are as follows:

- Chief executive officers: 3
- Management consultants: 2
- Management staff: 3

The interview themes are as follows.

- Things that are happening at the front line of management
- Management theories in the past, and management theories required in the future
- Companies that will be sought in the coming era

Interviews were conducted in a unstructured format to gather unrestricted and fundamental opinions. While there were remarks on topics that were seemingly unrelated to the main subject during the interview, the interview was continued without specifically correcting the discussion topic, so as to create an environment for free discussion.

4.4.1.3 Analysis of Interview Results

Text mining was performed on the interview results, after which the results were classified by using the affinity diagram method. The overview of the analysis is as follows:

Number of characters analyzed: 208,771

Analytic software: Tiny Text Miner

Analytic method: Set the minimum number of characters for frequent occurrence to 10 characters.

Extract only nouns, verbs, and adjectives after the entire text was processed.

Eliminate parts that are unrelated to the theme.

The results of the analysis of interview results are shown in Table 1.

TABLE 1: THE 20 MOST FREQUENTLY MENTIONED NOUNS INDICATE THE CHANGES IN THE CORPORATE MANAGEMENT ENVIRONMENT

Adjective	Number of occurrences	Verb	Number of occurrences	Noun	Number of occurrences
new	22	aim	41	Customer | Customer	97
rich	17	To think about	25	society	76
high	15	To contribute	56	Company | Company	70
important	14	Through	24	Product	60
		provide	35	we	53
		To contribute	22	Technology	51
		pursue	12	Man	41
		answer	11	Trust	30
		To do	10	service	26
		serve	11	development	25
				quality	24
				satisfaction	23
				Creation	22
				world	22
				environment	21
				Realization	21
				needs	21
				Age	20
				development of	19
				Product	18
				Our company	16
				Possibility	15
				Employee	15
				Sincere	14
				effort	14
				dream	14
				necessary	13
				Improvement	13
				people	13
				work	13
				we	12
				Japan	12
				challenging	12
				heart	12
				we	12
				happiness	11
				Nature	11
				Manufacture	11
				Employee	10
				Things	10
				safety	10

4.1.4.4. Identifying Requirements

Based on the text mining results, the following seven points were extracted as elements required for corporate management.

(1) Diversification of the management objective;

(2) Open innovation that goes beyond the traditional framework;

(3) Conscious growth-oriented organization and individuals;

(4) Need for dialogue;

(5) Level of happiness and satisfaction of stakeholders;

(6) Balance of personal and organizational growth; and

(7) Corporate management for sustainable society.

In this part of the study, interview surveys and text mining analysis were conducted to reveal the attitude of corporate managers and management support professionals toward corporate management. Furthermore, elements required for corporate management were identified. It also became clear that the desirable state for the management team is to realize these elements in actual corporate management.

4.4.2 Corporate Organization Concern Analysis

Given that a company's corporate philosophy reflects the reason for its existence, this philosophy should be the highest concern of a corporate organization. In this section, a corporate organization concern analysis is described; it was conducted to obtain materials for constructing a framework and clarify the boundary of the framework to be constructed.

4.4.2.1 Objective of the Study on Corporate Philosophy

Before structuralizing corporate philosophy, the type of value hierarchies that create a corporate philosophy was visualized. As stated by Shimizu (1996) and Collins et al. (2010), corporate philosophy is composed of a myriad of aggregated values. Complex and diverse values at each company are combined to create its corporate philosophy. In this section, corporate philosophy is structuralized by focusing on its structure.

4.4.2.2 Method of Study

The corporate philosophy data of 300 leading small and medium-sized companies in Japan, collected by Japan's Small and Medium Enterprise Agency, were used. Text mining of the data was done, and the results were used to extract the keywords that comprise corporate philosophy.

Subject of analysis: Corporate philosophy of 300 energetic manufacturing companies
Analytic software: Tiny Text Miner
Analytic method: Set the minimum number of characters for frequent occurrence to
　　　　　　　　10 characters
　　　　　　　　Extract only nouns, verbs, and adjectives after the entire text has
　　　　　　　　been processed

4.4.2.3 Analysis of Study Results

The analysis of the data yielded 1,471 nouns, 118 adjectives, and 611 verbs. Words that appeared 10 times or more in the above results are summarized in Table 2:

TABLE 2: WORDS THAT APPEARED 10 TIMES OF MORE FORM THE TEXTS ON CORPORATE PHILOSOPHY

Adjective	Number of occurrences	Verb	Number of	Noun	Number of
Good	326	say	2255	something	478
Very	147	Wrong	189	myself	413
Amazing	142	I do not unde	163	now	355
Often	57	to see	126	Talk	343
successfully	52	Be able to	116	A human	313
interesting	49	Understand	103	flow	304
very well	48	Idea	95	State	163
Terribly	33	Listen	93	Company	146
the same	30	go	74	Organization	144
close	27	To connect	68	Pieces	120
difficult	27	Changed	63	meaning	114
high	20	A pair	62	zone	80
What	19	Thought	55	Qi	79
This	19	Share	52	moment	76
large	18	come	46	problem	75
No good	17	appear	40	Reverse	72
bad	16	create	40	laughter	71
Like	14	Draw	38	Awareness	61
various	14	change	38	story	59
The best	13	go	37	sense	53
dangerous	13	Had made	37	goal	46
A little	13	write	37	necessary	46
Perfect	12	Ask	36	result	44
Many	11	Return	35	Place	43
Awesome	11	Occur	34	the first	41
big	11	Get up	33	The entire	41
strong	11	went	30	Rule design	40
Painful	10	To prove	28	value	39

4.4.2.4 Identifying Requirements

The affinity diagram method was used to classify the results of text mining. The extracted words' relationship with the preceding/following contexts, as well as with the overall meaning, were considered during classification. As a result, four factors became evident as the structural characteristics and components of corporate philosophy. This indicated that the structural objective of corporate philosophy is an aggregate of elements representing the change from one state to the other, and that there are four components of the philosophy: the (1) subject; (2) factor; (3) object; and (4) ideal world.

4.5 Classification of Viewpoints

The details of each of the four factors that comprise corporate philosophy are

described below:

(1) Subject: Who initiates the change?
    This refers to the primary initiator of the change. In most cases, the company itself upholds the corporate philosophy.
(2) Factor: What type of technology or service triggers the change?
    This refers to the type of factors that initiate the change, or the factors that mediate the change.
(3) Object: Who/what must be changed?
    This is the subject to be changed. Not only people and things, but also social value and the business model, can become a subject to be changed.
(4) Ideal World: What type of world should be created?
    This refers to the type of ideal state that occurs after the change takes place, or the type of ideal state that is desired.

A case analysis of the corporate philosophy at NTT Data Corporation (NTT Data Corporation, 2018) is described below. Their corporate philosophy is as follows:

NTT Data Corporation uses information technology to create new paradigms and values, which contribute to a more affluent and harmonious society.

This philosophy is divided into four factors, as shown in Fig. 3.

Fig. 3. Four Factors of the Corporate Philosophy of NTT Data Corporation

This breakdown of the corporate philosophy into factors by using the systems engineering methodology enables its structuralization. By doing so, the preparation for constructing a framework can be done.

4.6 Framework Design

The framework was constructed by using the abovementioned four factors, and by defining each relationship. The enabler framework, which is a relational construction framework, was applied. As a result, a framework to formulate management strategies based on the corporate philosophy was constructed by using the four factors. The framework includes two basic types, from which companies can select one, based on their policy (Fig. 4).
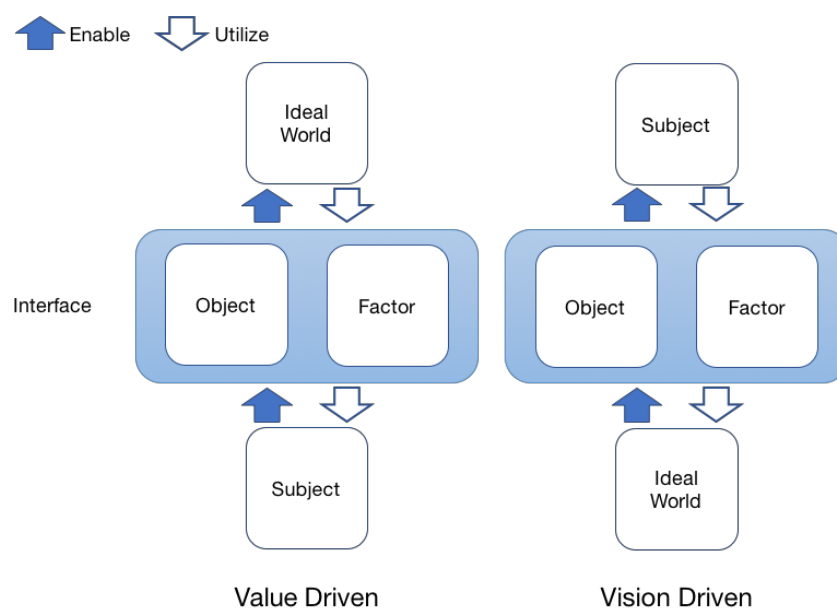

Fig. 4: Two basic types of the framework combining four factors

The first basic type is the value-driven framework type, which begins with the corporate values. The second is the vision-driven type, which begins with the societal ideal. The value-driven framework type starts with the Subject, which enables the Interface, which in turn enables the Ideal World. The vision-driven type of framework starts with the Ideal World, which enables the Interface, which in turn enables the Subject. The Interface is composed of the two factors of Object and Factor. These two factors are in a complementary relationship. For example, the Object could enable the Factor, and the Factor could enable the Object. The company can also make this policy decision based on the results of external and internal environmental analyses.

4.7 Strategy Pattern

Based on the combinations of four factors, the constructed framework includes six strategy patterns (including the two basic types); this shows that the strategy patterns that companies choose may vary. For example, when the value-driven type is chosen, the company would generate ideas based on their own situation, or the Subject.

Therefore, based on the external/internal environmental analyses, they would review the difference in positioning compared with competitors and the strategies they should take according to their own capability. They would then strive to realize the Ideal World by engaging in the Object and Factor that they should review. On the other hand, when choosing the vision-driven type, the company would generate ideas based on the society that they want to realize as the Ideal World. Therefore, they would review the strategies that they should take based on social considerations and back casting rather than on their own analysis. Then, they would aim to realize the Subject as the state to which they aspire by engaging in the Object and Factor that they should review.

In other words, using this framework enables companies to choose the strategy pattern that they should review.

5. EVALUATION

5.1 Purpose

The objective of the evaluation is to examine the framework in terms of its ease of understanding, ease of use, and effectiveness of the result.

5.2 Method

The framework was examined by basing it as much as possible on the reality of corporate activities, with a focus on its use as a focal point in strategy formulation. First, structured interviews were conducted with two business managers. Next, the framework was verified through a questionnaire survey among 33 management support professionals, including corporate managers, certified public accountants, and management consultants. In addition, the framework was used to examine the results of a company, as case study.

When the number of observations used in the analysis units, as well as the nature (quality and quantity) of the data used in this study are reviewed against the classification by Tamura (2006), the study can be positioned approximately in the middle, but closer to a qualitative study, on a spectrum of quantitative and qualitative studies. This method of examination was selected, since the study aims to establish new hypotheses or consider a new examination method if a larger number of observations or quantitative data are obtained in the future.

5.3 Interview Survey

5.3.1 Method and Subject of Interview

Structured interviews were conducted with two business managers, each with a duration of about 30 minutes. The demographics of the interviewees are shown Table 3 below.

TABLE 3: DEMOGRAPHICSS OF INTERVIEWEES

	Industry sector	Annual sales	Number of employees	Years since the founding
Mr. A	Retail	150 million yen	24	6 years
Mr. B	Manufacturing	250 million yen	22	49 years

5.3.2 Interview Questions

Each structured interview commenced with an explanation of the framework. The interview questions assessed the level of understanding, ease of use, and effectiveness of the framework. The results of individual interviews with Mr. A and Mr. B are summarized as follows:

(1) The process to structuralize corporate philosophy and turn it into a management strategy sounds promising;

(2) For using the framework, appropriate support will be necessary at the beginning; and

(3) In general, the framework seems to be quite effective.

5.4 Questionnaire Survey

5.4.1 Method and Subject of Survey

To quantitatively examine the level of understanding, ease of use, and effectiveness of the framework, a survey was conducted among management support professionals, such as corporate managers, certified public accountants, tax accountants, and management consultants using a seven-point scale. The demographics of the survey respondents are shown in Table 4.

TABLE 4: DEMOGRAPHICSS OF SURVEY RESPONDENTS

Demographics	Business manager	Certified public accountant	Management consultant	Other	Total
N	20	2	4	7	33

5.4.1 Survey Results

The results of the questionnaire survey are shown below.

5.4.1.1 Level of Understanding

When combining the responses of "easy" and "very easy" to the question regarding the level of understanding of this framework, 60.6% of the respondents indicated that it was easy to understand. When including "somewhat easy," 78.8% of the respondents had a positive answer regarding their level of understanding (see Table 5).

TABLE 5: A POSITIVE ANSWER REGARDING RESPONDENTS' LEVEL OF UNDERSTANDING

Very difficult	Difficult	Somewhat difficult	Neither	Somewhat easy	Easy	Very easy
0%	0%	9.1%	12.1%	18.2%	24.2%	36.4%

5.4.1.2 Ease of Use

When combining the responses of "easy" and "very easy" to the question regarding the ease of use of this framework, 66.7% of the respondents indicated that it was easy to use. When including "somewhat easy," 94% of the respondents had a positive answer regarding ease of use (see Table 6).

TABLE 6: A POSITIVE ANSWER REGARDING RESPONDENTS' PERCEPTION OF EASE OF USE

Very difficult	Difficult	Somewhat difficult	Neither	Somewhat easy	Easy	Very easy
0.0%	3.0%	0.0%	3.0%	27.3%	27.3%	39.4%

5.4.13. Effectiveness

When combining the responses of "effective" and "very effective" to the question regarding the effectiveness of this framework, 69.4% of the respondents indicated that it was effective. When including "somewhat effective," 94% of the respondents had a positive answer regarding the effectiveness (see Table 7).

TABLE 7: A POSITIVE ANSWER REGARDING RESPONDENTS'
PERCEPTION OF EFFECTIVENESS

Not at all effective	Not effective	Not really effective	Neither	Somewhat effective	Effective	Very effective
0.0%	0.0%	3.0%	3.0%	27.3%	33.3%	36.4%

5.5 Case Study

A case study was conducted on the level of understanding, ease of use, and effectiveness of the framework. Company A was selected as the subject for examination, and the framework was used to structuralize its corporate philosophy, and formulate management strategies based on the results. Then, a questionnaire survey and an interview was conducted with employees at Company A.

5.5.1 Overview of the Subject Company

The overview of company A is as follows:

Industry sector: Retail
Annual sales: Approximately 200 million yen
Number of stores: 2
Number of employees: 24 (20 of them participated in the examination)
Years since establishment: 6

5.5.2 Overview of Experiment

An explanation was provided and management strategy planning was done with the company president and 20 staff members in a workshop. First, the general purpose was explained, and their corporate philosophy was structuralized. Then, the resources were identified, the constraints were assessed, the goal was set, and action plans were formulated. The demographics of the examination participants are as follows (see Table 8).

TABLE 8: DEMOGRAPHICSS OF EXAMINATION PARTICIPANTS

Demographics	CEO	Officer	Manager	General staff	Total
N	1	2	5	12	20

5.5.3 Method of Examination

The framework was examined by basing it as much as possible on the practical

reality of corporate activities, with a focus on its use in strategy formulation. First, a survey was conducted among 20 participants by using a seven-point scale. This was followed by unstructured interviews with all examination participants.

5.5.4 Results of Examination

The results of questionnaire survey and interviews are as follows.

5.5.4.1 Results of the Questionnaire Survey
5.5.4.1.1 Level of Understanding

Of the respondents, 40% responded "neither" to the question regarding the level of understanding of this framework. When combining the responses "somewhat easy," "easy," and "very easy", the results indicate that 40% of the respondents perceived the framework as easy to understand (see Table 9).

TABLE 9: A POSITIVE ANSWER REGARDING RESPONDENTS' LEVEL OF UNDERSTANDING

Very difficult	Difficult	Somewhat difficult	Neither	Somewhat easy	Easy	Very easy
0.0%	0.0%	20.0%	40.0%	15.0%	15.0%	10.0%

5.5.4.1.2 Ease of Use

Of the respondents, 55% responded "neither" to the question regarding the ease of use of this framework. When combining the responses "somewhat easy," "easy," and "very easy", the results indicate that 35% of the respondents perceived the framework as easy to understand (see Table 10).

TABLE 10: A POSITIVE ANSWER REGARDING RESPONDENTS' PERCEPTION OF EASE OF USE

Very difficult	Difficult	Somewhat difficult	Neither	Somewhat easy	Easy	Very easy
0.0%	0.0%	10.0%	55.0%	25.0%	5.0%	5.0%

5.5.4.1.1 Effectiveness

When combining the responses "effective" and "very effective" to the question regarding the effectiveness of this framework, 45% of the respondents perceived the framework as effective. When including "somewhat effective," 75% of the respondents had a positive answer regarding the effectiveness (see Table 11).

TABLE 11: A POSITIVE ANSWER REGARDING RESPONDENTS' PERCEPTION OF EFFECTIVENESS

Not at all effective	Not effective	Not really effective	Neither	Somewhat effective	Effective	Very effective
0.0%	0.0%	5.0%	20.0%	30.0%	30.0%	15.0%

5.5.4.2 Results of the Interview

The results for each of the aspects explored during the interview are summarized below, expressed in the words of participants:

5.5.4.2.1 Level of Understanding

- "I was initially confused about the technical terms."
- "I was able to understand once explained; however, I felt it was difficult to understand on my own."

5.5.4.2.2 Ease of Use

- "It's difficult to drive the entire process without getting professional training."
- "What used to be vague became organized, and the idea became clear."
- "Although it's difficult to use it on my own, I felt it was relatively easy when I used it while discussing with everyone."

5.5.4.2.1 Effectiveness

- "Although it's confusing since it's quite different from the traditional method, I feel we can create more effective strategies compared with the past."
- "I don't see a clear advantage in using this type of framework."
- "Once you go through the process, the transformation from the philosophy to strategies is consistent, and the strategies planned are very reasonable."

6. DISCUSSION

While the responses regarding the level of understanding, ease of use, and usefulness of the framework were generally positive, interesting points became clear during analysis. Although positive responses were obtained through the questionnaire survey (which was conducted among management support professionals such as corporate managers, certified public accountants, tax accountants, and management consultants), less positive responses were obtained in the questionnaire survey that was conducted as part of the case study. It can be deduced that users of the framework will be limited. This follows because the case study questionnaire survey and interviews included not only managers but also general staff; since strategy planning

is not usually the responsibility of general staff, they are not in the position to judge the framework's effectiveness. This is emphasized by the fact that the chief executive officers and officers of the case study company provided the highest ratings in the questionnaire survey. In other words, this framework seems to have a certain level of effectiveness for those involved in corporate management.

7. CONCLUSION

This study structuralized corporate philosophy, and constructed a framework for designing management strategies based on corporate philosophy. Using the systems engineering methodology, a framework was constructed by identifying four components of corporate philosophy and defining the relationship between those components. The constructed framework was examined quantitatively and qualitatively. As a result, the effectiveness of the framework could be confirmed.

While the effectiveness of the framework is evident, the range of its application is limited. For example, although the framework promotes highly abstract discussions, it does not deal with the details of strategies. In addition, individuals who are in the position to use this framework are limited to business managers or those involved in management. Furthermore, since this study focused on small and medium-sized companies, its applicability to large or start-up companies will depend on future studies.

Future works should include a statistical analysis of the patterns of the framework. This would enable a quantitative understanding of the level of impact between components, and enable formulation of a more detailed management strategy.

Each field in business administration has evolved separately. While this separate evolution promoted each field's advancement, it discouraged people from thinking about management in a unified manner. By bridging studies on corporate philosophy and management strategy, this study should expand the value of studies from each field. The author believes that it can potentially contribute as an approach to integrate multiple fields of business administration and promote a systems understanding, thus enabling integrated strategy formulation.

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