Visionary knowledge management: the case of Eisai transformation

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Abstract: In many companies, the implementation of Knowledge Management (KM) practices amounts to upgrading information technology. We propose that a successful movement to KM practices requires more: the dynamic synthesis of visions, driving objectives, dialogues, practice, supporting contexts (ba), and phronetic leadership. Our case study of a pharmaceutical company, Eisai Co., Ltd., shows that it is visions aimed at the ‘common good’, in combination with phronetic leadership and appropriate enabling processes, that increase employee commitment to organisational knowledge creation rather than those based on objective market analyses and top-down-implemented KM practices.

Keywords: vision; driving objectives; dialogue; practice; Ba; phronetic leadership; knowledge creation.


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1 Introduction

Knowledge Management (KM) has been gaining popularity since the early 1990s, as
witnessed by the many articles appearing in academic and professional journals and the
growing number of organisations that have attempted to implement KM practices. While
scholars have emphasised the importance of value-based leadership and enabling contexts
as conditions for inducing employee commitment to knowledge creation (Nonaka, 1994;
Nonaka and Takeuchi, 1995), the implementation of KM practices in organisations
frequently amounts to little more than the updating of Information Technology (IT). As
IT-based solutions have not provided the expected results (see e.g., Damodaran and
Olpert, 2000; Cross et al., 2001; Kraut et al., 2002; Malhotra, 2004), discontent with the
KM theory-practice linkage has emerged.

We believe that one reason for the failure to effectively implement KM practices is
incongruence between top management visions and employee actions and commitment.
As organisational knowledge creation requires the commitment of all employees, KM
practices can only be implemented successfully when there is coherence among visions,
driving objectives, dialogues, practice, ba (Nonaka et al., 2005; Nonaka and Toyama,
2005), and phronetic leadership. Instead of creating visions based on objective market
analyses and implementing KM practices through top-down hierarchies, companies need
to involve their employees as the adopters and developers of knowledge-based practices
(Nonaka et al., 2000; Nonaka and Toyama, 2005).

The purpose of this paper is to describe how a Japanese pharmaceutical company,
Eisai Co., Ltd. (Eisai), has implemented unique KM practices. Eisai was selected as a
case company for two reasons. First, it has promoted KM practices since 1989 through its
hhc (human healthcare) concept, making it a good example of how KM practices
are successfully implemented and incorporated into daily organisational reality. Second,
the case shows how KM practices were adopted through visions and enabling processes,
providing an incremental but systematic way to reinforce employee involvement. Instead
of trying to implement KM practices through top-down objective goals, Eisai
management has provided idealistic visions in the prevention and cure of illnesses and in
the healthcare and well-being of people worldwide.

The rest of this article comprises four sections. The first section begins with a
description of the theory of the knowledge-creating firm, covering shared context in
motion (ba), visions, driving objectives, dialogues, practice, and phronetic leadership.
The second section describes the implementation of KM practices at Eisai. The third
section discusses findings and builds a theoretical discussion. The final section presents
conclusions and deals with limitations.
2 Organisational knowledge creation

The knowledge-creating theory is based on the belief that knowledge inherently includes human values and ideals (Nonaka, 1994; Nonaka and Takeuchi, 1995; Nonaka et al., 2000; 2005; Nonaka and Toyama, 2005). The knowledge creation process starts with the accumulation of personal, hard-to-externalise, subjective, and contextual tacit knowledge, which is then converted through the phases of Socialisation, Externalisation, Combination, and Internalisation (SECI) into more objective explicit knowledge (Nonaka, 1991; 1994; Nonaka and Takeuchi, 1995). In the theory, knowledge is neither absolutely subjective nor objective, as illustrated by the coin metaphors used in KM publications (e.g., Tsoukas, 1996; 2003; Cook and Brown, 1999; Brown and Duguid, 2001). Instead, the notion of knowledge as a continuum emphasises the contrasting natures of tacit and explicit knowledge, and their interaction.

In recent extensions (Nonaka et al., 2005; Nonaka and Toyama, 2005), knowledge creation is described through the shared context of interaction (ba), visions, driving objectives, dialogues, and practices (Figure 1). In the present paper, these dimensions are closely linked with phronetic leadership.

**Figure 1** Basic components of the knowledge-based firm

In this model, the SECI process of knowledge conversion occurs through interaction between dialogues and practice. Phronetic leadership, although not indicated in the figure, influences organisation-wide activities.
2.1 Vision

An important role of top leaders is to link practices with goals by creating idealistic visions of human ontology (Nonaka et al., 2005). In contrast to economic-based strategies (Porter, 1980), knowledge-based vision, which determines a firm’s ideal mission and domain, is rooted in the essential question of ‘what does a company exist for?’ According to Heidegger (1962), the only certainty in the future is death. Time does not present a past-present-future causality; all things are temporary or in a state of flux. The most important dimension of temporality is the future as it presents the potentiality-for-being. As we project our future in the present, we can see our present existence and past experiences in a different light. The world opens up only thanks to the past and the future. Similarly, managers involved in vision creation need to constantly look back, attending to the products and processes of the past, while also gazing forward in the process of creating knowledge.

Knowledge-based visions, which both result from and inspire dialogues throughout organisations, need to be internalised by all employees. The task of building a shared vision is part of developing the governing ideals for the enterprise (Senge, 1990). According to Hussey (1998), there is a connection between these governing ideals and the CEO’s ethical viewpoint. Top leaders set the moral tone of an organisation and are responsible for its moral climate. A sense of mission and clearly communicated core values are important parts in the process of creating knowledge-based companies. Nonetheless, problems frequently occur in the creation of a vision/action linkage owing to discrepancies between what top leaders profess and what they actually believe. In fact, worker cynicism regarding the intentions of top leaders has risen in recent years following a series of corporate scandals (Bommer et al., 2005).

Knowledge-based visions that emphasise the ‘common good’ increase both employee commitment to organisational change and active employee involvement in that change. The linkage between employee commitment and knowledge creation has been established in KM literature (Alvesson, 2001). The flexible distributed leadership of knowledge-creating firms is more efficient than leadership based on fixed control, which features little direct CEO contact with most employees (Nonaka and Toyama, 2005). As knowledge creation requires the active commitment of all employees, middle-up-down management is important for knowledge-based visions to work efficiently (Nonaka and Takeuchi, 1995). In such companies, middle managers break down the vision into concrete concepts or plans, build **ba**, and lead dialogues and practices.

2.2 Driving objectives

Driving objectives, actualised in concepts, numbers, and collective discipline, orchestrate the visions, dialogues, and practices into a dynamic coherence (Nonaka et al., 2005). This link is necessary because self-actualising actions need to be tied to both future aspirations and present reality. That is, companies need to generate profits to fund knowledge creation. Management can facilitate insights with a single economic denominator or a principle that embraces market knowledge for anticipating emerging customer demand (Collins, 2001).
Driving objectives trigger knowledge creation by questioning the essence of things (Nonaka and Toyama, 2005). While objective goals, such as ‘increase market share by 10% in the next fiscal year’ are clear, they are unable to stimulate changes in thought and action. To initiate constant upward spiralling knowledge creation, driving objectives must be subtle, sometimes to the point of transparency, so that the new reality can emerge through reflection and social interaction. These idealistic, unattainable driving objectives help companies in their relentless pursuit of perfection. While the goal of attaining the ‘unattainable’ seems hopeless, it plays a kind of regulatory role in driving the organisation by preventing it from becoming preoccupied with imperfect realities (Rescher, 2003).

2.3 Dialogues

Dialogues enhance intersubjectivity by linking ba within and beyond the firm’s boundaries. To create a free flow of ideas, dialogues should be based on empathy, reciprocity, involvement, and openness (Buber, 1923). People need to express their feelings and suspend their prejudices to view the phenomena from multiple angles at the same time (Depraz et al., 2003). A stream of open-meaning flows provide space in which participants can reflect on the functioning of feelings, beliefs, ideas, and thought. Dialectics of language, therefore, is more than the logical verbalisation of thoughts in which no middle point exists between two propositions.

In dialogues, created meanings are more important than logical coherency. A comparison of theoretical and practical syllogisms shows the differences between logical causality and meaning creation. While a deductive logical syllogism (major premise => minor premise => conclusion) is valid, it fails to initiate action. In contrast, the result of a practical syllogism, in which the major premise presents the potentially motivational orietic state of the agent and the minor premise presents those aspects of the agent’s situation in which s/he is attentive, is the action itself, not a statement about the world (Anscombe, 1985; Dunne, 1993). In a practical syllogism, the determination of the minor premise is the first step, and people with practical wisdom are able to select which rules are appropriate in given situations (Halverson, 2004). When deciding how to act, people do not reason deductively, but start with intentions, balancing them against the set of circumstances in play to produce actions that take into account the purposes and state of affairs. They use both/and dialectic means rather than either/or logic to express and exchange their ideas (Lakoff and Johnson, 1980).

2.4 Practices

Practices are ‘dialectics in action’ processes in which people reflect the acquired knowledge and skills based on self-transcending action (Nonaka and Reinmoeller, 2002; Nonaka et al., 2005). Part of the action is inherently tacit, causing our perception of practices to deviate from the traditional conceptualisation of organisational routines as the collective capacity to perform recognisable patterns of action (Nelson and Winter 1982). Knowledge-based practices can be equated more with the traditional Japanese concept of kata (creative routine), an ideal style of action and practice composed of a continuous cycle of learning (shu) => breaking (ha) => creating (ri). People achieve this ideal form by reflection through practical involvement (Schön, 1983) or temporal suspension in action (Heidegger, 1962).
In organisations, driving objectives, apprenticeships, training, and mentoring arrangements are effective ways to help new employees refine and internalise new practices. In particular, driving objectives in forms of guiding collective principles help employees to develop practices in action. Once practices are shared and systematised throughout the company, they become part of the company’s knowledge assets. Being mostly tacit, they are hard to imitate by other companies and thus provide a knowledge-based competitive advantage.

2.5 Ba

Japanese philosopher Nishida (1921) developed the concept of *ba* (which roughly means ‘place’ in Japanese) to discuss the problems of meaning creation and the nature of objects and knowing subjects. This phenomenological concept has been extended and used as the foundation of knowledge creation by Nonaka and associates (Nonaka and Konno, 1998; Nonaka et al., 2000; 2005). *Ba* is defined as a ‘shared context in motion’, because it is constantly evolving (Nonaka and Toyama, 2005).

The essence of *ba* is the context and the meanings that are shared and created through interactions that occur in a specific time-space and history, rather than in a space itself. Nishida (1921) suggested that the essence of *ba* is nothingness. Within *ba*, one can be open to others by forgetting oneself; that is, abandoning one’s preconceived notion of what is absolutely true for oneself. One can see oneself in relation to others through this process, and accept their views and thereby understand and share their values so that subjective views are understood and shared. Leaders can energise *ba* and therefore facilitate movement toward knowledge-based practices by providing physical space (*e.g.*, meeting rooms), cyberspace (*e.g.*, computer networks), and mental space (*e.g.*, common goals). Organisational structures and management systems (*e.g.*, career systems and franchising systems) also energise *ba*.

*Ba* exists on various levels, as individuals form the *ba* of teams, which in turn forms the *ba* of the organisation, etc. Interactions in overlapping *ba* enable employees to locate, share, link, retrieve, and disseminate knowledge, referring to knowledge networks. In organisations, middle managers who connect top managers and lower-level employees, play key roles in energising *ba* and in locating knowledge and linking *ba* into larger knowledge systems. Middle managers occupy a crucial position, like connectors or tipping points in a small world network (Watts, 2003), to spread knowledge-creating practices in organisations. Furthermore, a *ba* needs to have permeable boundaries to allow linkages among relevant knowledge domains. Linkages among *ba* within and beyond the boundaries of the organisation facilitate the flow of knowledge, an increase in innovation, and problem identification.

The organic configuration of *ba* extends beyond the boundaries of a firm determined by ownership. The view of a firm as multi-layered *ba* synthesises the view of a firm as subjective processes and objective structures (Nonaka et al., 2000). The subjective-objective synthesis means that we have to examine not only the objective structure of the firm, but also the subjective meanings that are created in *ba*, and the relationships among them. While subjectivity is important in knowledge creation, objectivity is linked to the efficient implementation of knowledge. This combination of subjectivity and objectivity makes it possible to shed light on the paradox of organisational structures suited to both routine and non-routine tasks (Thompson, 1967).
2.6 Phronetic leadership

Phronetic leadership explains why some companies are able to create and install absolute values based on goodness in their practices. According to Aristotle (1941), phronesis is the virtuous habit of making decisions and taking actions that serve the common good. Shown in moral character and acquired through experience, phronesis, as a combination of the knowledge of particulars and universals, enables people to ask penetrating questions, provide insights into the implications of actions and events, and to advise appropriate courses of action. In profit-making organisations, this includes understanding that a firm’s primary objective is not to pursue profits per se, but to attain the greatest happiness for the greatest number of people both within and beyond organisational boundaries. Phronesis flows from a vision of good.

Phronetic leaders aim for the good of a community and those they lead (Aristotle, 1941). Leaders apply phronesis based on contextual demands in particular situations, helping them to understand how complex situations are related, as well as to discern the affordances whereby appropriate actions might be founded. Leaders with phronesis are ethical and virtuous, able to create a coherent linkage between words (the ‘talk’) and actions (the ‘walk’); phronetic leaders are able to ‘walk the talk’ (Halverson, 2004). They are able to ‘size up’ a situation and develop and execute an appropriate action that takes into account both local constraints and larger unifying principles.

Although phronesis has traditionally been considered the property of individuals, scholars have recently proposed that leaders, through ethical visions and distributed leadership, can create a collective phronesis in organisations that will guide practices and allow employees to combine general knowledge with the particular knowledge of concrete situations (Halverson, 2004). The social and situational distribution of leadership practice in companies implies that phronesis is more than the possession of a particular individual. Instead, it can be understood as a collectively shared way to frame problems and execute tasks. Phronetic companies are socially constructed entities in which distributed leadership plays the strategic role of connecting various ba to dynamic knowledge-creating coherence.

3 KM practices at Eisai

The case study of KM practices at Eisai is divided into seven parts: company information, the history of hhc practices at Eisai, vision, Eisai Innovation (EI) managers, driving objectives, dialogues and practice.

3.1 Company information

Japan’s fourth largest pharmaceutical company, Eisai, was established as Nihon Eisai Co., Ltd., in 1941. Unlike most Japanese pharmaceutical companies that arose from wholesale businesses, Eisai was founded as a research-based entity. Its overseas operations were started in 1970 with the establishment of a sales and manufacturing company in Indonesia. Employing 8295 people in fiscal 2004 (ending 31 March 2005), Eisai had 38 subsidiaries, including five in the USA, four in the UK, two each in Germany and Taiwan, and one each in France, Holland, Spain, Italy, Thailand
the Philippines, India, Indonesia, Singapore, Malaysia, Hong Kong, China and South Korea. Eisai is a publicly traded company in the Tokyo Stock Exchange and the Osaka Securities Exchange.

Eisai’s primary business activities are the manufacture and sale of pharmaceutical drugs, quasi-drugs, cosmetics, reagents for tests, and pharmaceutical production systems and equipment. Its prescription drugs, accounting for about 90% of overseas sales, are led by Aricept for treating Alzheimer’s disease and Pariet/Aciphex for gastric acid-related disorders. In fiscal 2004, Eisai’s revenue was 4,981.4 million dollars and net income was 518.7 million dollars. R&D investment was 14.7% of sales. The current President and Chief Executive Officer (CEO), Mr. Haruo Naito, succeeded his father, Yuji Naito, in 1988.

3.2 History of hhc practices at Eisai

The history of hhc practices can be divided into three phases in line with Haruo Naito’s decision to conduct hhc activities in five-year plans (Figure 2).

**Figure 2** History of hhc

<table>
<thead>
<tr>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
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<tbody>
<tr>
<td>Formulating and introducing the hhc concept</td>
<td>Dissemination of the hhc concept</td>
<td>Realisation of global hhc</td>
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<tr>
<td>Innovation declaration</td>
<td>EI managers</td>
<td>Knowledge Creation Department</td>
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<td>CEO Naito’s declaration of the hhc concept</td>
<td>hhc projects</td>
<td>Knowledge creation surveys</td>
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<td></td>
<td>Training programmes</td>
<td>Global promotion of the hhc concept</td>
</tr>
<tr>
<td></td>
<td>Dissemination of the hhc concept</td>
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During the first period (1987–1991), the hhc concept was formulated and introduced. Important in the creation of the context for KM practices were the EI managers whose tasks were to disseminate the hhc concept and start hhc projects. In the second period (1992–1997), the concept was implemented and systematised through training and hhc projects. During the third period (1998–2001), the hhc concept was extended to overseas operations. Global expansion, a combination of Eisai’s ‘go-it-alone’ philosophy and practical partnering, was accomplished without mergers or acquisitions. According to Naito, “we preferred to build them [overseas operations] ourselves […] because we believe it is important to maintain our own style. We want to employ people who can understand and implement our hhc concept and culture at the local level.”

Eisai’s goal since 2002 has been to lead the industry in terms of contributing to patient healthcare, and to instill the hhc concept throughout the company as part of daily activities. As a bi-product of company employees seeking to realise the hhc vision through organisational knowledge creation theory, the company makes sales and profit. While goals and results are equally important, they are different. Employees are encouraged to realise goals rather than results, as the results give sufficient resources for
further pursuing the realisation of the goals through the improvement of quality and expansion of physical equipment and facilities. Based on Naito, “profits, which are the fruit of corporate activities, result only from improving the benefits of our customers and incorporating their knowledge as an integral component of our activities”.

3.3 Vision of goodness

Eisai’s vision is a commitment to viewing healthcare from not only the standpoint of the healthcare professional, but also from that of the patient. The implementation of this vision in 1989 marked a shift in thinking in the Japanese pharmaceuticals industry, which was more focused on doctors and pharmacists than on patients. With this reorientation, Naito focused on improving the overall quality of life. In contrast to objective strategies that position a company against its major competitors, the focus was also directed inside the company, linking practices to the changing external reality, as external standards would help guide operations or provide meaning to employee’s daily work. The creation of this vision was not a straightforward process, but rather the result of Naito’s experiences at Eisai.

3.3.1 From experiences at the research institute to innovation declaration

Having joined Eisai in 1975, Naito participated in various aspects of the pharmaceutical process chain, including marketing and sales, product management, and management planning. He regards his experience between 1983 and 1986 as the Head of the Research Development Division at the Tsukuba Research Institute as key to this strategic re-orientation. While not trained as a scientist, he frequently discussed with researchers their ideas and current projects. Naito recalls, “I stayed inside the lab, practically living there 24 hours a day with the scientists”. For him, more critical than understanding the significance of research in the pharmaceutical industry was realising the importance of personal commitment in innovation. The development of the Alzheimer drug, Aricept, made a strong impression on him. The process started when its developer, Dr. Hachiro Sugimoto, whose mother suffered from dementia and for whom he cared until her death, vowed to make it his life’s work to find a drug for dementia. After 15 years of effort, Dr. Sugimoto and his team were able to create a drug that slows the progress of Alzheimer’s in its early stages. Experiences like this convinced Naito that bottom-up involvement and committed employees were the most important parts of sustainable corporate success.

After becoming vice-president in 1987, Naito started to seek future directions for Eisai. While Eisai and other Japanese pharmaceutical companies had enjoyed steady growth during the post-war period, the healthcare sector started to undergo changes in the late 1980s, including the increased presence of international pharmaceutical companies, the diversification of patient needs, changes in the distribution system, decreases in officially established drug prices, and higher R&D costs. Japan’s ethical pharmaceutical market, while second largest in the world, faced price-cutting implemented by the Ministry of Health and Welfare and enforced through the national health insurance system. The market began to move away from its focus on prescription medicines as elderly people (about to become the largest market segment) increasingly sought healthcare in a form that featured neither ethical drugs nor medical treatment.
Following his leadership principle of simultaneously focusing on seemingly meaningless things and big issues, Naito realised that market positioning would not be a successful strategy in the long-run. The company and its employees had to change. He was convinced that employee commitment and corporate long-term vitality were linked to innovations that provided value to patients and society. In 1990, Naito made an innovation declaration in which he proclaimed:

“Eisai regards the patient, his family and moreover, people in general as the most important ‘participants’ in the healthcare process. [...] Eisai’s goal of playing a unique role in society can only be accomplished by pursuing the ‘Eisai Way,’ that is, fostering entrepreneurship among its employees. [...] Society expects us to be an innovator. [...] To meet this challenge, every element of our organization, including our employees, our corporate atmosphere and emphasis, and our style of doing business, must continually renew itself. This is ‘Eisai Innovation’.”

Instead of focusing solely on physicians and hospitals, the declaration gave first thought to patients and their families, recognised as the most important participants in the healthcare business. In attempting to change Eisai, Naito had to consider the deeply traditional mindsets of Eisai’s conservative managers. His solution was a vision called Human Health Care (hhc).

3.3.2 Ethical vision of Eisai as a human healthcare company

The innovation declaration was the first step in making Eisai a human health care company. The hhc vision was supported using the metaphor of Florence Nightingale (1820–1910), who devoted her life to caring for others, never failing to listen to her patients. She believed that nursing started with taking the patient’s viewpoint. (This is why the hhc logo was designed based on Florence Nightingale’s handwriting.) Similarly, Eisai should contribute to society by considering customer needs. The objective behind this vision was to create an hhc company capable of making a meaningful contribution to any healthcare system while observing the highest legal and ethical standards in its business activities.

For the hhc vision to become a shared reality, all employees would need to internalise and apply it in their daily activities. The move towards a knowledge-based company was initiated with the distribution of the innovation declaration in which Naito introduced the new corporate thinking and encouraged employees to develop and exhibit their abilities to the fullest extent. In this message, the question ‘the world is changing; can you?’ was used to promote reflection and commitment to the new concept. Employees were encouraged to understand the joy, anger, sorrow, and happiness of patients and their families and evaluate whether they were making the maximum contribution to the well-being of healthcare patients.

While the hhc vision is part of Eisai’s organisational reality today, the move toward KM practices in the early 1990s was initiated by creating a supporting context for change and an incentive for employees to try something new – without disrupting the entire company. The challenge was to encourage entrepreneurial and innovative activity and create a context in which such efforts would be accepted and rewarded. Instead of providing clear objectives, Naito intentionally left the hhc vision vague enough for employees to be able to add meaning to it. According to Naito, “we like all employees to
have their own values so that the company can be a vehicle for individuals to realize their own genius or ability”. For the hhc concept to become a shared reality, Naito knew that employees would have to participate in crystallising the concept.

3.4 EI managers – the creators of collective phronesis

In 1990, a group of 103 EI managers was selected to develop collective disciplines and spread the hhc concept throughout the company. These young middle managers internalised the hhc concept through participation in the Gotemba Conference, practical training in the wards of Ome Keiyu Hospital, individual training at healthcare facilities, and participation in the Koishikawa Conference.

During the weeklong Gotemba Conference, case studies and lectures were used to teach the importance of innovation and personal responsibility in innovation. After the conference, the managers participated in a two-day practical training session at a hospital for elderly patients requiring medical treatment and nursing care. At the hospital, the managers acquired experience in practical care, helping patients bathe, assisting with meals, and changing diapers, for example. One EI manager reported his experience at the hospital in this way:

“I recognized that medicine was only a subsidiary tool for making the lives of elderly patients comfortable and hopeful. I sometimes have the illusion that the only purpose of my work is to invent a new medicine in a laboratory, but that is just a starting point. We need to be conscious of the situations in which patients live. Our development style may change with this point of view.”

The objective was to get the managers to think about healthcare from the point of view of the patients. As one EI manager reported, “Until this experience, I had dealt with healthcare and patients only through drugs. I realize now that there is yet another dimension in healthcare.”

The following four-day individual training period included hands-on experience in front-line medical treatment. During this time, the managers experienced medical treatment at patient-oriented medical institutions, emergency treatment sites, and clinics on isolated islands and in mountainous areas. In addition to seeing on-the-spot reality, they were able to realise the differences in the healthcare profession. During the Koishikawa Conference at headquarters, each manager presented a plan to Naito and Eisai’s executive management on how both they themselves and Eisai should change.

These experiences enabled the EI managers to internalise the hhc concept and share it in their departments. Personal experiences in healthcare contributed to the understanding of and commitment to Eisai’s vision as a company that cares for the patient. In addition to gaining high-level support, the proposals publicly presented at the Koishikawa Conference increased the EI managers’ commitment to act as knowledge agents. The hhc vision has consequently been spread throughout the company, mainly by highly committed and empowered EI managers. The process, while guided and nurtured by top management, has been implemented by middle management, and thus executed bottom-up.

The initial 74 hhc projects conducted by EI managers played important roles in increasing employee commitment to the hhc vision. The first group of EI managers was given the freedom to operate outside the normal organisational structure and the company’s cultural boundaries. They started to design new products and programmes and
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put together multidisciplinary teams to develop their ideas, drawing new participants of their own choice into the change initiative. The EI managers reported directly to Naito, who evaluated their performance and the contribution of the individual projects to the vision. This gave junior employees opportunities to shape the development of Eisai’s vision and practices.

The visibility of senior management and their support for the first projects generated widespread enthusiasm at Eisai for participating in the new movement, thereby contributing to the realisation of Naito’s goal of making activities an everyday reality. Cross-functional teams established employee ownership of the vision, which rapidly started to take on a life of its own. An example of an early project was the creation of a 365-day customer hotline to respond to queries and promote proper product use. Although customer hotlines are standard services provided by pharmaceutical companies today, they were almost non-existent until they were established at Eisai in 1992. Another project in the early 1990s brought customers and medical professionals together at conferences to discuss healthcare needs. Increased attention to customer preferences also led to improvements in the packaging and delivery of medication.

Direct interaction with patients during practical training sessions has also sparked other projects. For example, interaction with elderly patients made the initial group of EI managers realise that these patients have problems swallowing standard tablets due to reduced saliva secretion. One manager revealed his observation:

“I encountered elderly people who choked even on water and could not get their medicine down […] I thought that taking medicine would be less troublesome for them if the medicine turned into jelly when dissolved in water.”

This observation was shared and developed in meetings and projects. It prompted Eisai to develop drugs targeted at elderly patients. In 1996, Elmed Eisai Co. was established to offer drugs that completely dissolve in about ten seconds in just a small amount of water and thus meet the healthcare needs of elderly patients. Manufacturing these tablets included hurdles that required improving existing production equipment and developing new machines. Numerous other measures were taken, such as masking the bitter taste of the medicine to eliminate the aftertaste when it dissolves in the mouth and making dosage forms smaller so that patients can carry their medication conveniently. Through these activities, which promote employee understanding of the feelings and desires of patients, medical professionals, and customers, Eisai has been able to actualise its vision.

3.5 Knowledge creation as driving objective

The driving objective of Eisai is to create knowledge in order to increase the benefits for patients and their families. According to Naito (2001, p.274), “all of Eisai’s corporate activities are planned and conducted on the basis of whether or not they contribute to this goal”. As for method, Eisai has applied Nonaka’s theory of knowledge creation in its activities, introducing it through training programmes and corporate communication. For example, the theory has been disseminated through lectures and on the intranet homepage, Chi-no-Hiroba (the Knowledge Forum). Moreover, knowledge creation was
used in the title in Eisai’s 2000, 2001, and 2002 annual reports in order to formally promote the concept across the organisation and to stakeholders. In the 2002 annual report, it was stated that:

“Eisai has been promoting knowledge creation activities for approximately 14 years. Knowledge from the individual is transferred to the organization and vice versa. Corporate activities are structured to foster an ever-increasing level of knowledge creation to produce continuous innovation.” (Eisai, 2002, p.49)

In 1997, a knowledge creation department was established to promote and support hhc activities and organisational knowledge creation. Under Naito’s direct supervision, 11 carefully selected veteran employees in the department are responsible for ensuring that the hhc vision is internalised and adopted in daily practices. The head of the department, Mr. Norikatsu Yasuda was the first chief knowledge officer in Japan. According to Yasuda, the mission of the knowledge creation department is:

“To promote the creation of knowledge based on the theory of knowledge creation at all levels of the company, working towards the realization of global hhc. That is, to foster innovation and support the creation and sharing of knowledge.”

The department is responsible for spreading the hhc concept globally and initially assigned one of its staff members to each division in order to support daily hhc activities. The permanent tasks of the department have been to cultivate knowledge creation, for example, by collecting best practices in each division and disseminating them companywide, planning and promoting hhc training, and acting as a liaison for global personnel exchanges and projects spanning different organisations.

In order to determine how hhc activities are changing and promoted in Japan and overseas, the department has conducted knowledge creation surveys every two years since 1997. These surveys consist of 200 questions and are sent to all employees. The results have provided information that has been useful in reconstructing organisational activities (Figure 3).

**Figure 3** SECI survey results
Conducted in 1997, the first survey revealed that employees’ Internalisation score was high regardless of age or job rank, while the scores for Socialisation, Externalisation, and Combination were average. Such a situation is likely to occur in companies where employees follow orders but lack entrepreneurial spirit. The 1999 and 2001 surveys indicated that this situation was changing and that Eisai was steadily becoming a knowledge-creating company. The latest survey in 2003 showed that knowledge creation had become part of the daily routine, a collective phronesis, at Eisai.

3.6 Spreading and developing the hhc vision through dialogue

Eisai has emphasised open and free communication, within and beyond divisional and organisational boundaries as part of the hhc concept. The hhc vision was disseminated and has been refined by committed middle managers, who have changed from being administrators to being knowledge agents. Moreover, Naito engages in interactive dialogues with as many employees as possible to define, achieve, and implement Eisai’s mission. To facilitate dialogues both internally and externally, the company uses training programmes, meetings and incentives, and leverages front-line employees for knowledge creation.

3.6.1 Training employees to self-actualise the hhc vision

Training programmes are used to actualise the hhc vision. For example, in 1993 a cross-divisional communication training was initiated to stimulate cross-divisional interaction, which is infrequent in most pharmaceutical companies. Because of their specialisation and large size, functional divisions frequently develop separate mindsets and tend to operate in isolation. At Eisai, emphasis was placed on increasing overall awareness of each department’s role in the wider organisational network and on strengthening synergies and interactions between functions. For example, interaction between the R&D and production departments led to the development of drug formulations that are easier to produce and attract more market demand. Growing awareness of roles and increases in cross-divisional interaction through training has enabled each department to realise the hhc concept. About 1700 employees have participated in such training to date.

Training programmes are designed to allow employees with varying lengths of service to choose freely from a variety of opportunities based on their strengths and goals, job assignments, and motivation. In 1999, the number of training programmes exceeded 100. The Gotemba Conference has evolved into a new knowledge creation conference. Furthermore a knowledge leader training programme was started in December 2004. The goal of this programme is to familiarise 3000 employees in sales, production, and research and development with the hhc concept. Before the training, employees visit drugstores to experience their profession from the customer’s viewpoint. During the training, they care for patients in elderly care facilities. To help trainees experience the challenges faced by elderly patients, Eisai has incorporated some innovative training methods. For example, weights are attached to trainees’ bodies to make movement more difficult and glasses that reduce the wearer’s field of vision are used. Extensive group work also helps trainees internalise the hhc concept. About 1100 employees had participated in this training by December 2005.
These programmes have helped create a corporate culture in which each individual has a sense of entrepreneurship and everyone shares the mission of making a meaningful contribution to patients, their families, and members of society. As Naito noted, “even our accountants have contributed to the healthcare of patients by volunteering on weekends to assist caregivers in geriatric hospitals or similar settings”.

3.6.2 Meetings and incentives as motivational enablers

Naito uses meetings for direct, interactive dialogues to increase publicity and disseminate the hhc concept. For example, he promotes hhc activities by describing knowledge in terms of dreams that Eisai would like to realise through its daily activities, and explaining that such knowledge is basic to the hhc concept. In addition, in 2002 he established the hhc initiative as an annual event for recognising outstanding hhc projects and rewarding their participants. The year’s best projects are announced at an annual gathering and participants given awards by Naito. Winning themes have included ‘supporting Alzheimer patients and their families through Aricept’ in Japan, and ‘making a training manual for preparing volunteers to assist caregivers of older adults’ in the USA. At this annual event, participants acquire new knowledge and share it with each other, thereby helping to promote the hhc vision globally.

In the USA, employees are encouraged to participate in community activities through the hhc Award, which is given to employees for their extraordinary contributions to their communities. In 2004, the award was given to Medical Representative (MR) Suzan Graves in Mississippi. MRs value the patient-oriented approach. According to an American MR, Michele Hoffman, “If we focus on just the numbers, we lose sight of the real goal. And you have a tendency to get burned out with that approach.” The hhc concept was one reason that high-quality MRs were attracted to Eisai during its early years in the USA, showing that people in the industry seek organisations that attempt to generate something ‘good’. Ms. Hoffman noted, “true compassion for the patient is obvious and lends more credibility; it is not hard to sell”. Instead of focusing only on sales numbers, Eisai has emphasised the role of educators for MRs.

3.6.3 Customer interaction in social knowledge creation

Eisai uses constant communication cycles with customers to improve products and services. Rather than limit KM practices to knowledge-intensive workers, such as those in R&D, hhc activities aim to motivate all employees to create individual knowledge and share it with their colleagues. Front-line employees have an important role in knowledge creation. In Japan, customer hotlines have increased both interaction with the customer and the usage of acquired knowledge to develop products and services. Knowledge is converted into output through a cycle of customer contact => analysis and investigation of customer opinions and comments => decisions on improvement plans => implementation of improvement plans => improved products and information for customers. Examples of product improvements include a spray container that does not require the user to measure the dosage, and transferable labels for syringes to prevent medical errors related to injections.

In Japan, approximately 1000 MRs make it possible to process knowledge gained from customer interface in an efficient way. These MRs provide product information to physicians and pharmacists, and plan and hold forums in collaboration with physician
organisations, patient groups, and local governments to educate the general public. Knowledge gained through interaction with medical professionals is shared and processed throughout the company. It is interesting that employees are not assigned any tangible top-down goals in knowledge creation activities. Instead, the *hhc* vision provides direction for daily activities of which knowledge creation has become a part. This shared mindset enables Eisai to innovate in all areas of the organisation, not only R&D.

Active community involvement enables employees to gain contextual knowledge and think about healthcare from a different point of view. For example, researchers from the Tsukuba Research Institute visit nearby healthcare facilities to interact with both healthcare professionals and patients. During these interactions, researchers are able to gain an understanding of what drugs mean to patients and what can be done to increase patient well-being. Fundamental questions, such as ‘what makes good medicine?’ are part of daily reality in research and development and other parts of the company.

### 3.7 The constant practice of knowledge creation

Knowledge-creating practices are conducted mainly through *hhc* projects. Since the initial *hhc* projects were implemented in 1992, almost every employee has come to participate in some *hhc* project and realise the *hhc* concept through daily work. For each *hhc* project, a leader is chosen and committee members appointed to help further the project. In order to provide greater benefits to patients and their families, approximately 500 different *hhc* themes are developed in Japan and overseas every year. Because of the extensive use of project teams, the organisational structure of Eisai resembles that of a project-based company.

In 2003, *hhc*-driven innovation projects replaced *hhc* projects to systematise KM practices at Eisai. The biggest difference is that the *hhc*-driven innovation projects emphasise continuous evaluation of current practices and changes in them to ensure that they contribute to the *hhc* vision, either directly or indirectly. Participants in these innovation projects need to think about the ideal situation that their projects seek to achieve, identify the gaps between the ideal and existing situation, and find solutions to close them (Figure 4).

**Figure 4  *hhc*-driven innovation**
To minimise the identified gap(s), project teams create step-by-step action plans for hhc-driven innovation. These hhc-driven innovation processes are guided by easy-to-understand written documents.

Currently, every employee participates in some hhc (innovation) project and realises the hhc concept through day-to-day practices. In Japan, the result of one such project was that Eisai became the first pharmaceutical company to provide a CD-ROM containing information about its prescription pharmaceutics to more than 47,000 pharmacies accepting Japanese National Insurance. Examples of some hhc global activities come from the USA, China, and France. In the USA, a pediatric cancer patient was invited to Eisai’s Research Institute in Boston so that each employee would have an opportunity for direct patient interaction. By hearing the patient’s stories, the researchers were able to gain insight into what it means to have cancer. Eisai China, Inc. brings its employees together with families caring for relatives with cognitive and mental disorders, giving the employees the opportunity for personal interaction. In France, the Eisai Foundation gives the Florence Nightingale Awards to individuals involved in outstanding activities that contribute to the care of elderly Alzheimer patients.

4 Discussion

This paper describes the vision-led implementation of KM practices in a Japanese pharmaceutical company, Eisai. The implementation of KM practices started with the idealistic but pragmatic vision of Naito, who realised that visions linking employees’ thoughts and actions to patients and their families would encourage greater employee commitment than comparing the company’s performance to those of its competitors. Targeting the ‘common good’, the hhc vision synthesises commercial growth with medical needs in a dynamic way. This vision is the shared mission of Eisai employees worldwide, regardless of country, culture, language, gender or race. As Naito explains, “If we, as human beings, can share thoughts that transcend borders, language and culture, I think those thoughts can be a kind of aesthetic, like truth, virtue or beauty. Such thoughts induce commitment.” While behaviour, as well as behavioural changes, are explained through contracts in institutional economics (Williamson, 1974), they are limited in terms of inducing employee commitment and therefore do not provide a sufficient base for knowledge creation.

The vision-led movement towards a knowledge-based company was a systematic process that tied all employees into the change process and legitimised knowledge creation throughout the company. A shift in focus from doctors and pharmacists to patients marked a radical change in corporate thinking. Instead of trying to implement changes through hierarchies, Naito built consensus on a common corporate identity and avoided the impression of change imposed from above. It was important that people were able to relate to the hhc vision and interpret it in a way that was meaningful to their group activities. This process was guided by the theory of knowledge creation, which was used as a driving objective. This driving objective helped to educate people about the meaning of the hhc vision, and encouraged their involvement in knowledge creation through hhc projects. The projects gained considerable attention and were successfully incorporated into daily corporate routines.
Phronetic leadership made it possible to install knowledge-based visions as part of the daily practices towards goodness. As a result of combined experience and reflection, Naito came to understand how Eisai should change in order to respond to future challenges. The consequent \textit{hhc} vision was directed toward the good of the community. Based on Halverson (2004), successful leaders rely on their sense of local particulars to determine, for example, which employees are capable of given tasks. CEO Naito carefully selected both the first group of young EI managers to spread the \textit{hhc} concept and the members of the knowledge creation department. Middle managers played an important role in disseminating and refining the \textit{hhc} mission. Coherence between the vision and enabling processes make it possible to create a company with collective phronesis in which thinking and action are improved in daily practices. As a shared, evolving collective property, phronesis enables companies to respond effectively to environmental volatility and create knowledge in close interaction with their environment.

The \textit{hhc} vision is not a static concept. Its significance evolves as employees add meaning to it. The overarching objective is not the pursuit of profit, but the attainment of the greatest happiness for the greatest number of patients. Unlike most of its competitors who judge their performance in relation to their rivals’ performance, Eisai believes in absolute terms. The \textit{hhc} vision governs all dimensions of the company’s business – research, products, training, and resource allocation. It motivates people to create and share knowledge with other employees in daily practices. It is designed to provide the company with an overall direction, describing what needs to be done to remain successful in the future based on changes in the marketplace and internal knowledge assets. For each employee to recognise the \textit{hhc} vision as a shared value and to express it in daily practices, they are encouraged to participate in the \textit{hhc} activities of different divisions or organisations. Through these activities, innovative solutions are created that satisfy unmet medical needs and contribute to the health and well-being of people worldwide.

This discussion indicates some parallelism to a recent conceptual discussion that organisations are different simply because they envision different futures, which are based on their dreams and ideals (Nonaka and Toyama, 2005). In contrast to institutional economics (Williamson, 1974) and economic-based KM views (Conner and Prahalad, 1996), our discussion shows that firms are not static, objective entities that exist without values and a sense of mission to create good. Instead, we view (knowledge-based) firms as dynamic entities that exist to achieve idealistic visions and comprise employees committed to attain these visions. Ideals, subjectivity, and contextual meanings that subjective humans possess and share through social interaction explain changes and knowledge creation. Conceptually, the movement toward a knowledge-based company can be explained through the SECI process. High-quality experiences made Naito realise that the focus should be on customers. He then shared his ideas with the entire company through dialogue. Training programmes and \textit{hhc} projects were established to help employees internalise the \textit{hhc} vision and disseminate it throughout the company, and the concept was implemented to cover daily practices at Eisai. The linkage among visions, dialogues, and action has made \textit{hhc} a built-in system at Eisai, enabling constant knowledge creation.
5 Conclusion

The implementation of KM practices is often equated with upgrading information technology. In this paper, we claim that the successful implementation of KM practices requires supporting context (ba), visions, driving objectives, dialogues, practice and phronetic leadership. The Eisai case shows that KM practices can be incorporated only through employee participation. Naito purposely left the hhc vision vague so that employees could add meaning to and crystallise it through the process of social meaning creation. Eisai adopted a vision of being a knowledge creating company, and used the knowledge creation theory as the driving objective to achieve its goal. To entrench the hhc concept, Naito initiated training programmes, the Knowledge Creation Department, meetings and initiatives and linked employees closely to hhc activities. These enabling factors helped to establish the hhc concept as a part of daily activities both in Japan and abroad.

Limitations and boundary conditions apply to our discussion. First, vision-driven changes are most applicable to companies with shared values and identity. In Japanese companies, group identity and social control are an important part of the change process (Ouchi, 1980). Second, in order to understand the relationship between phronetic leadership and organisational knowledge creation, it is important to develop the means to trace the connections among intention, planning, consequence, and emergent characteristics as they unfold in day-to-day practices. More research using both qualitative and quantitative methodologies needs to be conducted in order to specify mechanisms and differences between companies in Japan and overseas before any normative statements about the vision-led implementation of KM practices can be made.

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