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Corporate Entrepreneurship and Organizational Learning*

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ABSTRACT

This study explores entrepreneurial activities in a large company in terms of organizational learning. Both interview data and written data concerning strategic renewal through internal corporate venturing show that the change process of a company's paradigm involves not only the creation of strategic vision by top management, but also the creation of new business paradigms through developing new businesses at operational and middle levels. The key to success of new business development is the acquirement of tacit knowledge through learning by doing. This study also suggests other mechanisms for promoting organizational learning, such as job rotation, education and training.

EXECUTIVE SUMMARY

In this paper, I examine the relationship between entrepreneurial activities and new business developments in a large mature company. The key concept of this study is organizational learning. This article emphasizes the role of internal entrepreneurs in organizational learning. That is, an intrapreneur creates a new business paradigm leading to the success of a new business development through promoting organizational learning, which is different from the paradigm in an existing business. The results of this study have important implications for practitioners, particularly for firms perceiving the necessity for change of an existing paradigm.

These implications are:

1. The key to a company's paradigm change is the creation and development of new models, that is, new businesses corresponding to exemplars. The success of new business development depends on the acquirement of tacit knowledge for its new business area through learning by doing.
2. While middle-level managers create the individual business paradigm, top management changes strategic vision based upon newly developed businesses and an existing strategic vision. A new strategic vision not only confirms newly developed businesses, but also should seize upon emerging business chances and indicate a new direction for company growth.
3. Top management also plays a critical role in establishing mechanisms for stimulating and capturing new business ideas at operational and middle levels in an organization.
4. If some special measures are not adopted, the experience and knowledge which is acquired in new business development is confined to venturing groups, and organizational learning

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My special thanks are due to Hiromi Kuramitsu and Noboru Yamamoto interviewed for taking time out of busy schedules. I also wish to express my gratitude to Robert Lee Kluttz for valuable editorial help.

doesn't occur. In order to spread these experiences over an entire organization and change a company's paradigm, they need to be recycled by job rotation and by the education and training of employees, which will utilize the reports of new business development.

5. The corporate entrepreneur needs skill for forging alliances with other members of the firm. The success of corporate entrepreneurship depends upon whether entrepreneurs recruit talented people or not. In Japan, as the personnel department manages the firm's human resources, the need for corporate entrepreneurs to be able to build a coalition not only with top management but also with that department is recommended.

I. Introduction

Most large Japanese firms are confronted with the problem of maturity. For instance, according to a survey of 364 leading Japanese firms by Keizai Douyou Kai in 1986 (reported in *Kigyō Hakusho*, 1986), over 78% of the respondents (285 companies) regarded their dominant businesses as coming to maturity. In order to attain long-range growth, mature firms must either revitalize their core businesses by developing revolutionary products (Abernathy et al., 1983) or develop new businesses, or both. If maturity is as inevitable to every business as life-cycle theory predicts, all companies (not only mature companies but also growing companies) need to find ways to escape maturity. Every company needs and will need entrepreneurship to achieve de-maturity.

This study deals with the creation and development process of the new venture department, and a new business development process under the new venture department's umbrella in a large mature company. In this paper, I examine strategic renewal through entrepreneurial activities in a large company in terms of organizational learning.⁽¹⁾ My basic hypothesis is that the essence of corporate entrepreneurial activity creates a new business paradigm, changes a company's existing paradigm, and leads to strategic renewal through promoting organizational learning. That is, corporate entrepreneurship restructures the company's organizational knowledge.

II. Internal Entrepreneurship and Organizational Learning

1. Internal Entrepreneurship

An entrepreneur is an innovator who promotes innovation. The essence of his/her function is in "the carrying out of new combinations" (Schumpeter, 1934). In other words, the core role of the entrepreneur is the transformational leadership function. The entrepreneur uses his/her influence to get the company out of the boundaries of routine.

Previous studies have found that in addition to independent entrepreneurs, there are intrapreneurs who conduct entrepreneurial activities within large, established companies (internal entrepreneurship, corporate entrepreneurship). Despite

the growing interest in corporate entrepreneurship, there appears to be nothing near a consensus on what it is. The topic of corporate entrepreneurship encompasses two types of phenomena and the processes surrounding them (Guth & Ginsberg, 1990). Some scholars view corporate entrepreneurship as new venture creation within existing organizations. Others emphasize that the concept of corporate entrepreneurship should explain the transformation of stagnant organization in need of revival (strategic renewal). Guth & Ginsberg (1990) argue that corporate venturing, or new business development within an existing firm, is only one of the possible ways to achieve strategic renewal.

According to these studies, middle-level managers play important roles in internal entrepreneurial activities (Kanter, 1983; Burgelman & Sayles, 1986). Burgelman (1983) suggested that autonomous strategic behavior outside the firm's current concept of strategy is the source of corporate entrepreneurship. Such strategic behavior is initiated by participants at the operational level. Middle level managers play a crucial role through their support for autonomous strategic initiatives, by combining these with various capabilities dispersed in the firm's operating system, and by conceptualizing strategies for new areas of business.

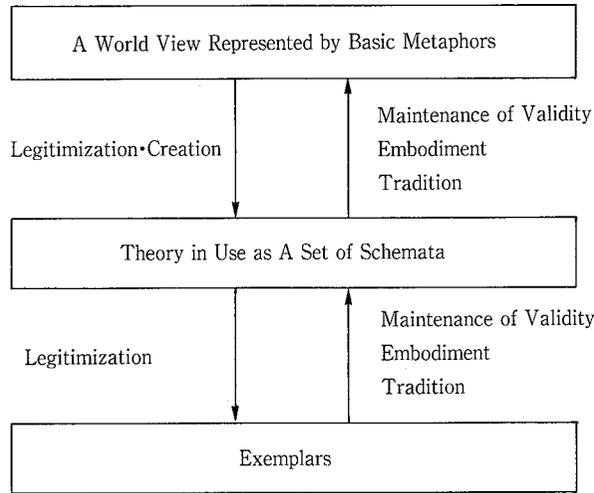
Researchers also suggest that original entrepreneurial roles are decoupled and borne by different individuals in larger firms. That is, their entrepreneurial activities are carried out by a network of intrapreneurs (Maidique, 1980; George & MacMillan, 1985; Pinchot, 1985; Burgelman & Sayles, 1986).

Kagono (1988) suggests that the essence of entrepreneurial activities is the creation of a new business paradigm. He and Nonaka (1985, 1988) argue that paradigm change starts at the top management level by creating new strategic vision and contradictions (destruction of equilibrium, generation of chaos). Middle management creates and implements concrete concepts to solve and transcend the contradictions (creation of the new paradigm). Kagono (1988) classified the concept of paradigm into three levels. This is represented in Figure 1.

The paradigm as a world view means the basic point of view shared by organizational members. Examples of these paradigms are "C & C" (NEC), "Human Electronics" (Matsushita Electric Industrial), and so on.

The second level of a paradigm — theory in use — is a set of values and norms which organizational members should obey. This concept is similar to "organizational culture".

The third level of a paradigm, the most concrete, is a set of models or examples which are represented by goods, businesses, heroes, and sagas. Both world view and culture are best understood and shared through exemplars.



Source: Kagono, 1988, p.110

Figure 1. Three Levels of Paradigm

2. Organizational Learning

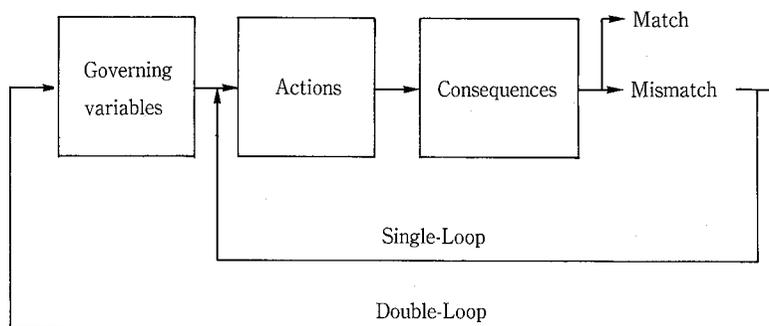
It is clear from the discussion above that each organization has a constant frame of reference, that is, the paradigm shared by members within the organization. Organizational theorists have made efforts to explain the mechanism of its formation, maintenance, and change.

Tushman and Romanelli (1985) suggest that organizations evolve through convergent periods punctuated by strategic reorientations (recreations). While convergent periods refer to processes which achieve greater consistencies among organizational elements, reorientations stand for processes where existing patterns of consistency are fundamentally reordered toward a new basis of alignment. In other words, convergence means changes within a paradigm, while reorientation involves a shift of the paradigm itself.

The concept of convergence and reorientation may be explained in terms of organizational learning. Nonaka (1985) views organizational evolution as creating a new pattern of thinking and activities through information creation. That is, organizational evolution is an organizational learning process in which organizational knowledge is obtained, accumulated and changed.

Argyris (1982) and Argyris and Schon (1978) illustrate the process of organizational learning as shown in Figure 2.

First, there is single-loop learning in which an error is detected and corrected without questioning or altering the underlying values and norms of the organization. Single-loop learning occurs when a match of outcome to expectation is created or when a mismatch is corrected by changing actions. Organizational theory-in-use is confirmed by single-loop learning. Such learning corresponds to changes within a



Source: Argyris, 1982, p.50

Figure 2. Types of Organizational Learning

paradigm.

Second, in double-loop learning, error correction requires an organizational learning cycle in which organizational norms themselves are modified and re-structured. Consequently, double-loop learning occurs in a process where mismatches are corrected by examining and altering first the governing variables and then the actions. This level of learning is equivalent to a paradigm shift.

In short, a corporate entrepreneur, or a network of intrapreneurs create a new organizational paradigm that changes an existing paradigm through a double-loop learning process.

III. The Case of Strategic Renewal through Corporate Venturing at Osaka Gas

1. A Total Process of New Business Developments

Established in 1897, Osaka Gas Co., Ltd., is one of the leading gas suppliers in Japan, with capital of over 131.5 billion yen. The company recorded non-consolidated net sales of 559.4 billion yen in fiscal 1989.

The new business development (NBD) of Osaka Gas has made rapid progress since its new venture unit (*shinbunya-kaihatsu-shitsu*) was created in October 1978. Before that, the company had established 18 subsidiaries and affiliated companies whose business are closely related to the core business. The new venture unit was expanded and raised to the status of a department in 1981.

At present, Osaka Gas has 65 subsidiaries and affiliated companies whose total sales are about 212 billion yen. The businesses of these subsidiaries extend to unrelated fields, such as the DIY business, information processing, software development, a cooking school, real estate, retirement housing, development of a science park, and restaurants.

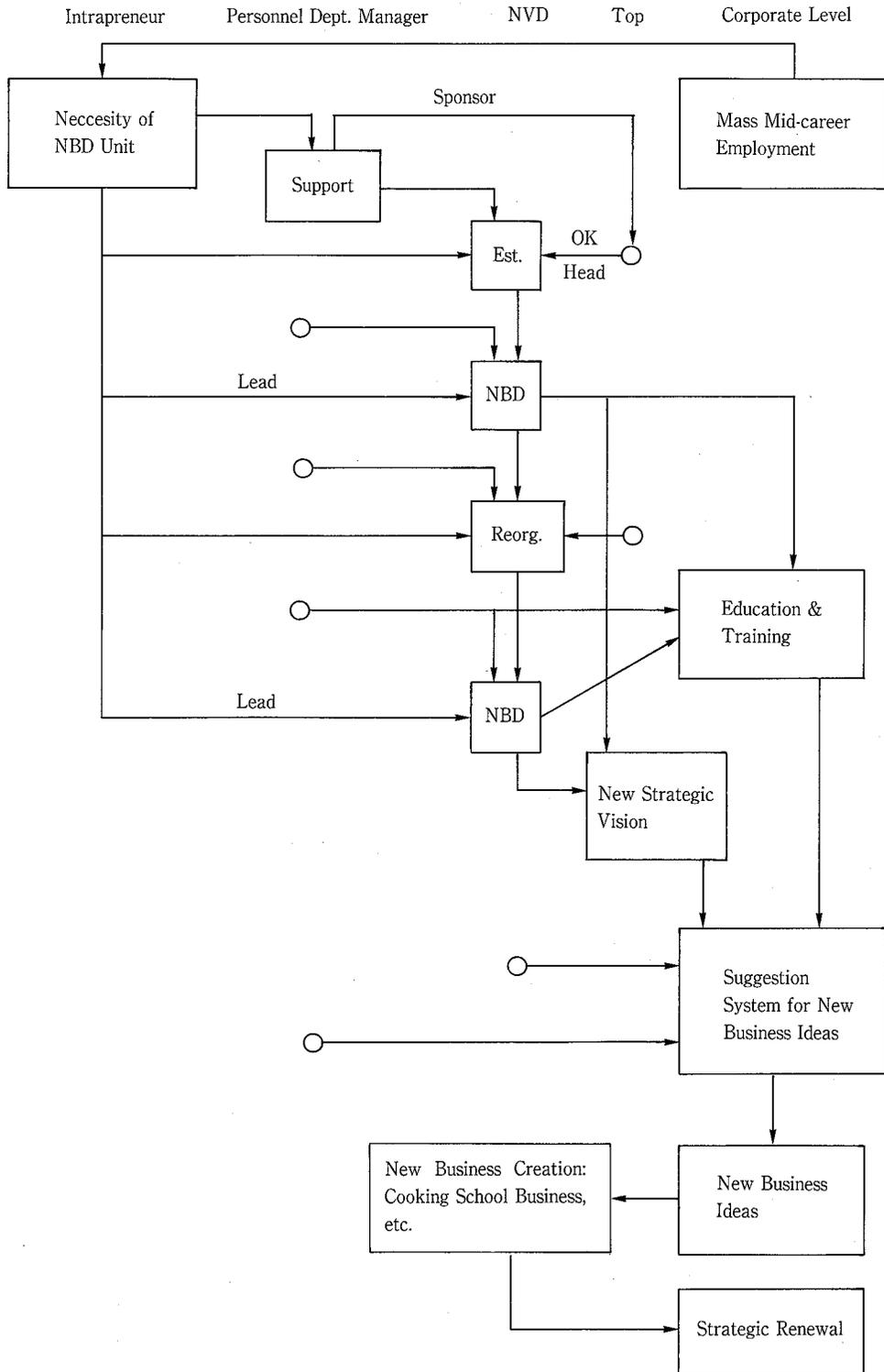


Figure 3. The Strategic Renewal Process of Osaka Gas

The total process of new business developments at Osaka Gas is illustrated in Figure 3. This development process was initiated and led by a middle-level manager, Hiromi Kuramitsu, who is now Osaka Gas's general manager of the Research Institute for Culture, Energy, and Life. Assuming that the growth of energy consumption will surpass economic growth, the company decided to convert conventionally manufactured gas into liquefied natural gas (LNG) in order to enhance its ability to provide a stable, cost effective source of energy for this anticipated rise. So, the company hired about 2000 mid-career employees to convert gas facilities, appliances, and other equipment for LNG use. But, Kuramitsu called the company's premise in question, and perceived the need for creating a new business development unit.

In Figure 3, we need to pay special attention to the sponsorship of a personnel department manager, who not only intermediated between the intrapreneur and top management, but also allocated human resources for the new venture department (NVD) preferentially. He also played a role in the diffusion of new knowledge acquired by new business development through the education and training of employees. He utilized records of new business developments within Osaka Gas.

From the description above, it is clear that intrapreneurial activities of the middle manager were performed in collaboration with the personnel department manager. The greatest role of top management in these processes was the creation and presentation of a new strategic vision.⁽²⁾ Top management created such a vision based upon these newly-developed businesses.

This strategic vision gave impetus to subsequent business developments. The suggestion system for new business ideas was initiated in order to stimulate new business developments by operational and middle-level managers.

2. The Development Process for a Cooking School Business

Osaka Gas established Apriti Sesamo Co., Ltd., in February 1989 to manage a unique cooking school by the same name. Opening this April, the school teaches courses on gourmet European cuisine, the same as those taught at the renowned Paris-based cooking institute, Le Cordon Bleu, and by Enzo Dellea, the celebrated Italian chef. Technical cooperation between the institute and Dellea brought about its establishment.

The idea of this cooking school was proposed and implemented by 29-year-old Noboru Yamamoto, on loan to Kinki Reinetsu Co., Ltd., a subsidiary of Osaka Gas, at that time. In 1987, he applied to the suggestion system for new business ideas (called "a challenge system for new business"). His idea for a unique cooking school was chosen from among 60 others.

After being transferred to the NVD of the parent company, he tackled the realization of his idea by telling his intention to Tomoyuki Sawaguchi who had

studied at the prestigious cooking school in Italy. Sawaguchi was Yamamoto's colleague in Kinki Reinetsu. He requested that Sawaguchi join the force. Yamamoto created the concept of this business in collaboration with Sawaguchi. They agreed on making a cooking school which emphasized maintaining exact original tastes. The school aims not at professional training, but at teaching how to cook refined French and Italian cuisine to people interested in enjoying the dishes at home. It also intends to provide lectures on dining etiquette, tradition, and cultures connected with the cuisine. The concept is different from that of cooking classes which have been held at Osaka Gas since 1933 in order to promote sales of gas appliances.

Furthermore, Yamamoto thought out an attractive plan, an alliance with Le Cordon Bleu in France. He submitted his plan to the development conference in the NVD and received its approval. He happened to catch wind about news that an assistant principal of Le Cordon Bleu would be paying a visit to Japan. When the assistant principal arrived, Yamamoto asked for an interview, and told him about the plan to establish a cooking school business. The assistant principal was interested in Yamamoto's plan, and the alliance between Osaka Gas and Le Cordon Bleu progressed without a hitch. Many Japanese companies had already come in contact with Le Cordon Bleu, but the quick response of Yamamoto and Osaka Gas beat out all rivals. The process above is illustrated in Figure 4.

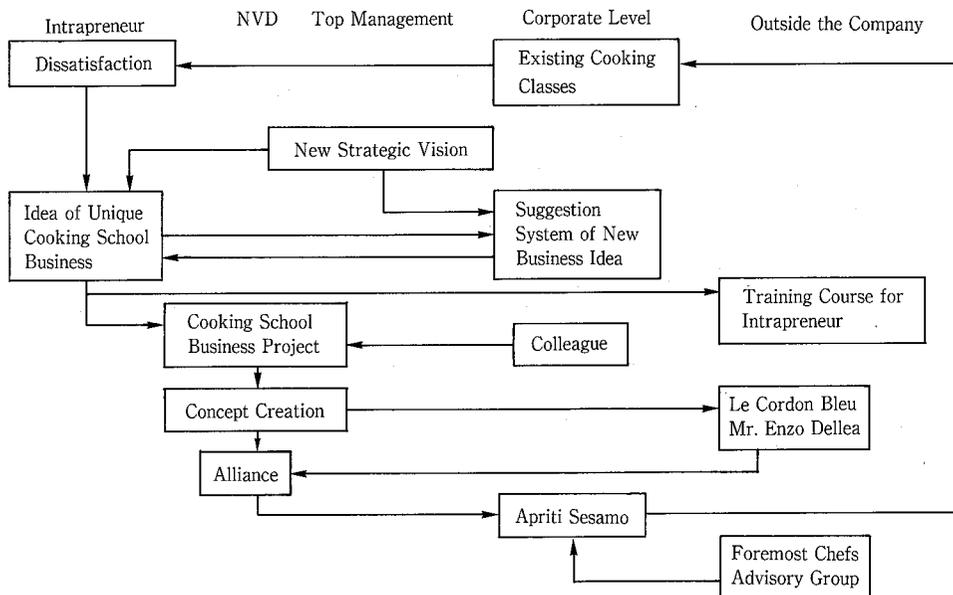


Figure 4. The Development Process of Cooking School Business

IV. Analysis of the Case

1. The Levels and Mechanism of Organizational Learning

The total process of strategic renewal can be classified into the following three phases, in terms of organizational learning:

- ① An intrapreneur doubts the company's frame of reference
- ② The intrapreneur promotes group-level learning by creating new businesses as a model
- ③ Corporate-level learning

The first phase corresponds to the period before the establishment of the new venture unit in 1978, when Kuramitsu began to call in question the company's existing frame of reference through group interaction (recognition of contradictions). He realized the necessity for creating new jobs in order to transfer about 2000 employees who were hired to convert conventionally manufactured gas to LNG. Therefore, he submitted a report to chief of the personnel administration, in which he insisted on the necessity for creating a new business development unit.

The second phase starts with the establishment of a new venture unit. Kuramitsu, first of all, requested that Nakatani, the senior managing director, might be appointed as general manager of this unit. This has the following three important meanings:

- ① Symbolizing the importance of new business developments
- ② Encouraging unit members
- ③ Protecting the activities of new business developments

Kuramitsu promoted double-loop learning at the group level through:

- ① Obtaining new knowledge by doing
- ② Dialogues among group members based upon knowledge acquired by doing
- ③ First imitating the model and then creating the new model
- ④ Starting on whatever business they seemed to be able to do, and going through the joys of success from the experience of creating a new business

Thus, group members learned how to create new businesses by starting one or two new businesses. This suggests that learning by doing or learning by trial and error is dominant at this phase. We observe the phenomenon that group members aggressively learned from early experiences (George and MacMillan, 1985). Early experiences in new business development contain rich information about know-how as well as key factors for success. Through such strategic behavior, new environmental segments are enacted and the firm's environment redefined. From the perspective of the firm, autonomous strategic behavior provides the raw material for strategic renewal (Burgelman, 1983). We need to notice here that learning does not extend to the organizational level thus far.

In order to expand group-level learning into organizational level-learning,

Osaka Gas adopted certain measures. First, reports of new business developments were utilized for the education and training of its employees. Second, the new domain definition presented by top management not only gave the new businesses new strategic meaning, but also provided a strategic basis for subsequent new business developments. Third, experiences gained through new business (developments) were introduced into the core business by job rotations between the parent company and its subsidiaries. The knowledge base shared by group members was thus diffused to the entire organization.

2. Middle-Level Manager Plays a Crucial Role in Corporate Entrepreneurship

As shown in Figure 3, Kuramitsu of middle management played a crucial role in establishing the new venture unit and in creating new businesses. In the case of Osaka Gas, entrepreneurial activity was autonomously initiated at the middle management level. Such strategic actions led to changes in the firm's concept of strategy afterwards. We call this phenomenon in a large firm "strategy formation by middle push" (Kanai, 1987).

Previous studies have pointed out three conditions for organizational learning: performance gaps, catalytic leadership, and organizational slack, which factors we also observe in this case. Kuramitsu perceived future performance gaps in relation to mass mid-career employment and submitted to the necessity of a new business development unit (catalytic leadership). Establishment of the new business development unit and experimentation within unit were made possible by the creation of slack. Large, resource-rich firms can afford to provide resources for such entrepreneurial activity.

On the other hand, as in the case of the cooking school, the business development process may take the form of bottom-up change, the operational manager playing the leading part. The strategic vision and suggestion system for new business ideas seems to have stimulated such entrepreneurial activities. This process is similar to March and Simon's concept of "institutionalization of innovation".

3. The Process of Paradigm Change

From the new business development process at Osaka Gas, we now analyze the process of paradigm change. As discussed above, the change process started from a middle-level manager's doubt about an existing company's frame of reference. Next, he proposed the establishment of a new business development organization. The personnel department manager supported and sponsored this proposition.

After establishing a new-venture organization, the main activity of the intrapreneur is the creation of new businesses as exemplars. The creation of new businesses then produced a contradiction with an existing domain definition. In this

process, a middle level manager played a critical role except for the establishment of a new venture unit, which was top management's role. The intrapreneur acquired a tacit understanding about new standards of conduct through this process, and created a group culture favorable toward change.

The most important role of top management is the creation and presentation of a new strategic vision which asks the basic question to members of the organization "What do we live for?". This strategic vision makes sense of preceding new business developments from the overall corporate perspective and gives a basis for the subsequent strategic actions of operational and middle-level managers. Previous contradictions were dissolved by creating the vision. The strategic vision corresponds to the company's world view. The paradigm change extends the company's frame of reference by creating the vision.

The new culture, the second level paradigm represented in Figure 1, was formed by interaction among the following elements: exemplars, new vision, education and training, and job rotation.

In the case of the cooking school, business was initiated on the basis of a new strategic vision. Therefore, it seems to represent the exemplar of a new vision. In other words, the cooking school business embodies new vision and gives it concrete image together with other new businesses.

V. Concluding Remarks

In this study, we have explored the relationship between corporate entrepreneurship and organizational learning. Needless to say, we can't derive general principles from a single case, but is, however, somewhat useful to derive certain conclusions and implications from this case study.

First, the preceding discussion reveals that middle-level managers play a critical role in changing a company's paradigm. This finding seems to be more or less similar to the concept of autonomous strategic behavior proposed by Burgelman (1983), except that such strategic behavior was initiated by middle management. On the contrary, Burgelman suggests that autonomous strategic behavior starts with participants at the operational level.

Kagono (1988), Nonaka (1988), and Yoshihara (1986), however, proposed different models in respect to paradigm change. Kagono and Nonaka insisted that self-renewal of a company starts with the creation of a strategic vision. This is an essential role of top management. We can call this a paradigm change process of the "top-pull" mode. On the other hand, Yoshihara stressed the paradigm change of "top-down" mode. The difference between the former and the latter is in the role of middle-level managers subsequently. The former regards middle management as a change agent, while the latter thinks top management strongly leads its change process. The development of a cooking school business is similar to the process

described by Kagono and Nonaka.

Second, when we defined corporate entrepreneurship as the process whereby a new business paradigm is created and an existing paradigm changed, we need to specify the level or depth of the paradigm change. We distinguished changes within a paradigm from the paradigm change in section II. A paradigm change also needs to be classified into two levels: the change at the exemplar level and the change of the whole paradigm. In other words, while changes at the exemplar level correspond to that of knowledge at the business level, the change of the whole paradigm corresponds to that of the company's knowledge structure. In the case above, it seems that the development of the cooking school business is equivalent to change at the exemplar level, while the change process from the establishment of NVD to the creation of a new domain definition corresponds to a change of the whole paradigm. The relationship between levels of paradigm and major elements of the case is illustrated in Figure 5.

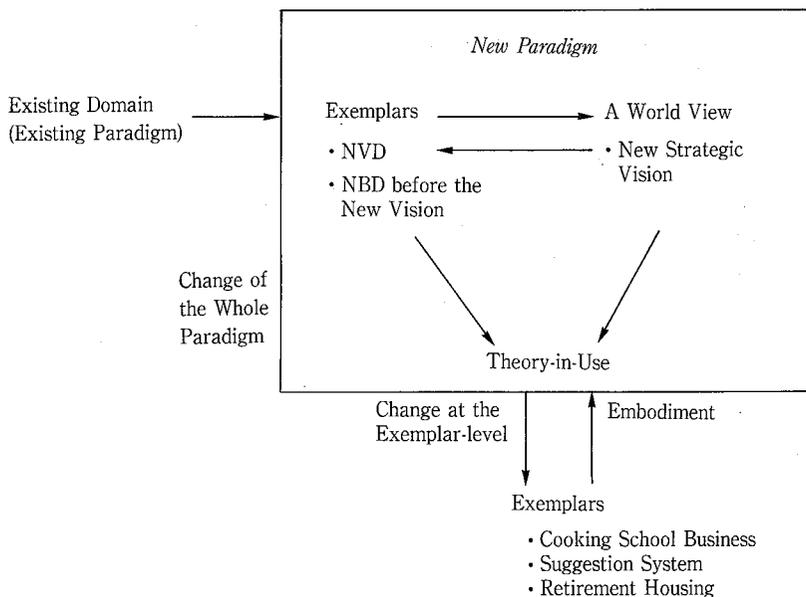


Figure 5. Two Levels of the Paradigm Change

Third, strategic renewal through new ventures evolves as an organizational learning process. It is a process whereby individual learning is accumulated, interconnected with that of others, and new knowledge is diffused throughout the organization. We can observe the mechanisms by which organizational learning is promoted. In considering organizational learning, it is important to examine how individual bits of learnings are linked up with one another. As long as the process

of learning is constrained to a certain level or to a division, no change of viewpoint (paradigm change) will take place. In the change process at Osaka Gas, some measures were used in order to facilitate organizational learning. First of all, learning by doing deserves special emphasis. We can obtain what Michael Polanyi has termed tacit knowledge through learning by doing. Nonaka (1988) pointed out that the essential elements of intuitive and tacit knowledge – the creation, learning, or recognition of the new and unknown – are particularly important in the process of information creation leading to innovation. If learning by doing is combined with dialogue among group members, organizational learning would be promoted even further. Job rotation is the mechanism by which new knowledge is spread over the whole organization by transferring employees. At Osaka Gas, the reports of new business development were utilized in education and training for employees. Organizational members can learn new standards of conduct through these measures.

Notes

(1) I have already presented this point of view in an earlier article (Kanai, 1987) and analysed entrepreneurial activities in small organizations in terms of organizational learning.

(2) The president of Osaka Gas created and articulated the new strategic vision of “Integrated Life-Style Industry” in 1985. The concept means that the company works toward its goal of providing a range of services that embraces all aspects of daily life. Such a strategic concept transformed the domain from the gas business only into various fields related to daily life.

REFERENCES

- Abernathy, W. J., K. B. Clark, and A. M. Kantrow, *Industrial Renaissance*. New York: Basic Books, 1983.
- Argyris, C., "How Learning and Reasoning Processes Affect Organizational Change," in P. S. Goodman and Associates (eds.), *Change in Organization*. San Francisco: Jossey-Bass, 1982.
- Argyris, C., and D. A. Schon, *Organizational Learning: A Theory of Action Perspective*. Reading, MA: Addison-Wesley, 1978.
- Burgelman, R. A. "Corporate Entrepreneurship and Strategic Management: Insights from a Process Study," *Management Science*, Vol.29, No.12, December 1983, pp.1349-1364.
- Burgelman, R. A. "Strategy Making as a Social Learning Process: The Case of Internal Corporate Venturing," *Interfaces*, Vol.18, No.3, May-June 1988, pp.74-85.
- Burgelman, R. A. and L. R. Sayles, *Inside Corporate Innovation: Strategy, Structure, and Managerial Skills*. New York: The Free Press, 1986.
- Duncan, R., and A. Weiss, "Organizational Learning: Implications for Organizational Design," in B. M. Staw (ed.), *Research in Organizational Behavior*, Vol.1, Greenwich, CT: JAI Press, 1973.
- George, R., and I. C. MacMillan, "Corporate Venturing: Venture Management Challenges," *The Journal of Business Strategy*, Vol.6, No.1, Summer 1985, pp. 85-91.
- Guth, W. D., and A. Ginsberg, "Guest Editors' Introduction: Corporate Entrepreneurship," *Strategic Management Journal*, Vol.11, Special Issue, Summer 1990, pp. 5-15.
- Kagono, T., *Soshiki Ninshiki Ron (Cognitive Theory of Organization)*. Tokyo: Chikura Shobou, 1988.
- Kanai, K., "Chushou Soshiki ni okeru Kigyokateki Ridashippu (Entrepreneurial Leadership in Small Organizations)", *Soshiki Kagaku (Organizational Science)*, Vol.21, No.3, 1987, pp.32-42.
- Kanter, R. M., *The Change Masters: Innovation and Entrepreneurship in the American Corporation*. New York: Simon & Schuster, 1983.
- MacMillan, I. C., "Progress in Research on Corporate Venturing," in D. L. Sexton and R. W. Smilor (eds.), *The Art and Science of Entrepreneurship*. Cambridge, MA: Ballinger Pub., 1986.
- Maidique, M. A., "Entrepreneurs, Champions, and Technological Innovation," *Sloan Management Review*, Vol.21, No.2, Winter 1980, pp.59-76.
- Nonaka, I., *Kigyou Shinka Ron (Theory of Corporate Evolution)*. Tokyo: Nihon Keizai Shinbun Sha, 1985.

- Nonaka, I., "Creating Organizational Order Out of Chaos: Self-Renewal in Japanese Firms," *California Management Review*, Spring 1988, pp.57-73.
- Pinchot, G., III, *Intrapreneuring: Why You Don't Have to Leave the Corporation to Become an Entrepreneur*. New York: Harper & Row, 1985.
- Schumpeter, J. A., *The Theory of Economic Development*. Cambridge, MA: Harvard University Press, 1934.
- Yoshihara, H., *Senryakuteki Kigyou Kakushin (Strategic Corporate Innovation)*. Tokyo: Toyo Keizai Shinpou Sha, 1986.