Research on the cultivation of the enterprise's sustainable competitive advantage

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ABSTRACT

The organizational learning theory and the competitive advantage theory are hot focuses in academia recently. But both of them are always expounded respectively and connective researches are rare. This paper is to attempt to combine the two together and carry on the research. Relative models of organizational learning have been introduced in the process of cultivating the enterprise's sustainable competitive advantage. On this basis, an integrated organizational learning model has been put forward as an effective tool to cultivate the enterprise's sustainable competitive advantage.

Introduction

Literature review of the organizational learning theory

Since the 1980s, the uncertainty of entrepreneurial external environment has been becoming higher and higher. Under such instances, learning is regarded as an effective means to respond to the uncertainty. The large creative company's strategy is decided by the degree of hard learning under the high uncertain environment, which is approved by Pavett's theory based on experience analysis [1]. Learning is a key character during the competition among enterprises. This is especially evident in Japanese enterprises. Japanese enterprises especially emphasize learning. They have a high fever on learning. The learning ability is regarded as an important reason for continuously introducing creative product successfully (Dodgson, 1993) [2]. The successes based on high level creation of Japanese enterprises make western enterprises realize the importance of organizational transform through learning. This kind of learning must exceed individual learning and team learning to organizational level. When organizational learning becomes the working habit of the whole enterprise, the enterprise will exist forever.

The source of organizational learning may trace back to the literature research of the 1920s. However, it was not paid more attention by the theory world until Argyris and Schon (1978) formally put forward the concept of organizational learning in their "Organizational Learning：Theory, Method and Practice". They considered that learning is cumulating information in the form of knowledge, and divided organizational learning into single-loop learning and double-loop learning. Single-Loop Learning is considered as the change occurred in the existing frame. Double-Loop Learning includes not only the above change, but also the validation of the basic hypotheses, such as organizational aim, essence and value [3]. Henceforth, different scholars put forward their own understanding of organizational learning. Fiol and Lyles (1985) thought that organizational learning was the process of improving behavior through better knowledge and intellect [4]. Levitt and March (1988) thought that organizational learning was the thought over the past behavior to form the organizational criterion that could guide behavior [5]. Huber (1991) thought that the process of organizational learning included the obtaining, sharing and using of the knowledge [6]. Senge (1994) thought that organizational learning was the capability and motive level that managers sought to improve organizational members' understanding and managing the organization and environment. Thus organizational learning is the process that managers can decide how to improve the organizational efficiency. Edmondson and Moingeon (1998) thought that organizational learning was the process that organizational members programed their own behavior through actively using relative data and information in order to increase the organizational continuous adaptability [7].

Viewing the relative literatures about organizational learning, we may find that organizational learning is a dynamic concept. It emphasizes organizational continuous transform and betterment in the face of internal and external environment. At the same time, organizational learning is also an integrative concept that can unify various levels of analysis: individual, team, organization and knowledge. Therefore, the concept of organizational learning in this paper is that the enterprise, under its culture framework, establishes, supplements and perfects the organizational knowledge and its systems around its businesses, and then deals with the changes of the external environment through continuously improving relative processes and skills to increase organizational efficiency.

Dispute of the Competitive Advantage Theory

How to gain and sustain enterprise's competitive advantage is a basic question in the field of strategy management [8]. Different scholars have discussed in different directions around this question for a long time. Viewing the relative literatures, it can be divided into two groups: one is the external generated theory of competitive advantage represented by Professor Porter's theory of industry analyse [9], the other is the internal generated theory of competitive advantage represented by resource basis theory and enterprise's capability theory[10-11].

Porter (1985) thought that the fundamental force to decide the enterprise competitive advantage is the attracting force of an industry and the competitive strategy based on the analysing model of five competitive abilities. His theory is founded based on the model of Structure-Behaviour-Performance in the economics of industrial organization and based on the hypothesis of enterprise's homogeneity and inadequately competitive market. Through the analysing model of five competitive abilities, we can find that the theory overemphasizes the external environment of an enterprise and ignores the differentia of enterprises. In practice, many enterprises can not exist even if they entered industries of high profit margin. Meanwhile, Rumelt's empirical research indicates that the separating degree of profit margin inside industry is much higher than that between industries, which shows that the enterprise's competitive advantage represented as excess profit margin comes from some factors of the enterprise itself instead of market external power[12]. This brings forward a great challenge to Porter's external generated theory of competitive advantage, and this also makes many strategy management scholars' angles of view turn to inside from outside. The resource basis theory is the earlier representative of the internal generated theories of competitive advantage. This theory emphasizes the importance of enterprises' resources and thinks that the competitive advantage comes from the heterogeneity of resources. Prahalad and Hamel (1990) put forward the theory of enterprise's core competence. They think that the core competence is accumulating knowledge of an enterprise, especially the knowledge about how to harmonize different manufacturing skills and integrate many technical groups [11], and that the competitive advantage comes from core competence. Based on the internal generated theory of competitive advantage, there formed many systems and methods of competitive advantage theory, such as organization theory, system theory, blending theory of capital and mechanism, etc. There is no last conclusion for the basic question of strategy management about how to gain and sustain enterprise's competitive advantage.

However, organizational learning and competitive advantage are divided in most literatures and the integrated studies of the two are rare. The author summarizes two reasons: one is that the relationship of the two is not clearly recognized and the integrating point is not found, the other is that good theory needs corresponding tools and methods to assist and the lack of effective tools and methods makes the integrating point difficult to be realized.

The integration of organizational learning and sustainable competitive advantage

The sustainable competitive advantage viewed from the angle of organizational learning

The conclusions can be drawn according to Dodgson's concept (1993) of organizational learning. Firstly, organizational learning emphasizes that the organizational knowledge and institution system can be perfected unceasingly, and the relative processes and skills can be improved continuously inside the enterprise.

Meanwhile, these activities are effective measures to deal with the change of outside environment and sustain competitive advantage. Therefore, organizational learning emphasizes that organizational continuous transform should be processed from inside and outside, which overcomes the unilateralism of the outside and inside generated theory of competitive advantage

and indicates right directions for the enterprise to cultivate sustainable competitive advantage.

The organizational learning viewed from the angle of sustainable competitive advantage

Different scholar groups of traditional strategy management (Rumelt1984, Porter1985, and Barney1991) defined competitive advantage from different points of view. But most of their theories were put forward from the relatively static point. Namely, enterprise adopts a series of actions toward competitive opponents to sustain competitive advantage under the condition that the object, environment and available resources are relatively certain. The theories of traditional strategy management pay more attention to the source of competitive advantage and ignore the sustainability of competitive advantage. Therefore, the author discusses sustainable competitive advantage. It is that the enterprise, viewing from dynamic angle, who perfects its knowledge and institution system unceasingly, apperceives and realizes environmental change continuously and sensitively forms the continuous flow of competitive advantage, in order to keep ahead among competitive opponents through continuous exceeding itself. Two big characteristics of sustainable competitive advantage can be drawn as follows:

1) Sustainable: The rigidity appears easily when competitive advantage is formed in an organization. Therefore, the form of the continuous flow of competitive advantage must depend on sustainable transform, which indicates that the enterprise's organizational learning is also a continuous process.

2) Knowledgeable: The enterprise needs to apply its knowledge system, perfect and create new knowledge unceasingly in practice, in order to support its further development when it deals with the change of inner and exterior environment. It is the characteristic that manifests the substantiality of organizational learning.

The only sustainable advantage of future enterprises is the ability to learn quicker and more efficient than their competitors. Therefore, the concept of sustainable competitive advantage is provided with the characteristic of organizational learning.

The integration of competitive advantage and organizational learning

Through the above analysis, we know that the sustainable competitive advantage is formed during unceasing organizational transform which manifests the process characteristic of organizational learning. Meanwhile, stage results are manifested by the form of knowledge (here, the knowledge is a broad concept including tactic, strategy, successful experiences and failing lessons) during every stage of organizational learning, which manifests the substantiality of organizational learning. Only when process characteristic and substantiality characteristic integrate organically and match in harmony, can it be the source of sustainable competitive advantage.

Wilson (2003) emphasizes the internal oneness of knowledge in his work named "Discussing Integrating — Unity of Knowledge". He considers it necessary for social study to integrate facts of different subjects and fields. The significance of this thesis is to present the organizational learning model based on searching after the integration of organizational learning and sustainable competitive advantage, in order to cultivate sustainable competitive advantage.

Organizational learning models in course of cultivating sustainable competitive advantage

Literature review of organizational learning model

From the above analysis, we know that the organizational learning model is the most important tool and method to cultivate sustainable competitive advantage. Different scholars presented different models about how organizational learning occurs in enterprises.

Argyris and Schon (1978) put forward the four-stage model that organizational learning experiences four stages: discovery, invention, production and generalization. Daft and Weick (1984) put forward the three-stage model that includes examination, interpretation and learning [13]. Pautzke (1989) puts forward an organizational learning model that includes individual learning, discussion, collective learning, institutionalizing and standardizing. On the basis of the Argyris and Daft's model, Kim (1993) sorts the learning cycle into two associated groups, i.e. "framework" and "procedures". The first group is "conceptual learning", including the "evaluation" and "design"; the second one is "practical learning", including the "evaluation" and "observation" [14]. Nevis, etal (1995) put forward an organizational learning model of acquiring, sharing and application from the perspective of knowledge management [15]. Crossan, Lane and White (1999) give a '4I' model of organizational learning, and they think the four related processes that link the individual learning and the organizational learning together are: intuiting, interpreting, integrating, institutionalizing. Crossan think that organizational learning is a multilevel process, which begins with individual learning, then the collective awareness, finally the organization institutionalized, but these levels contain two-way process, which is knowledge creation and knowledge application [16]. Chen Guoquan, etal (2000) put forward the five-stage model of organizational learning that includes discovery, invention, implementation, generalization and feedback [17]. Chris Collison and Geoff Parcell (2003) give an organizational learning model including all activities in management process. The model includes three processes: the learning before doing, the learning while doing, and the learning after doing, during which goes with knowledge acquisition, storage, application, validation and updating [18]. There are some relevant literatures that have more detailed discussions on the merits and shortcomings of the above models [19-20]. Due to space limitations, the thesis no longer tired out.

The integrated model of organizational learning

In recent years, many scholars try to integrate existed models to research related issues of organizational learning. According to this, the thesis puts forward an integrated model of organizational learning.

The model includes six basic stages of organizational learning, which are discovery, invention, implementation, evaluation, generalization and feedback. An enterprise is an entity that exists in internal and external environment. The task of discovery is to discover external opportunity and threat and internal strength and threat. Based on the results of discovery, the enterprise needs to adjust strategy and tactic dynamically in order to establish new scheme. That is the task of invention. New scheme can be carried out in the stage of implementation. The implementation of new scheme makes the enterprise operate in a new organizational structure and process. The implementation of new scheme may bring right or side effects. The enterprise should evaluate the implementing effects according to its value tropism and judge if it accords with its own developing mode. If the result accords with its developing

mode, the next stage will begin. Otherwise, the enterprise needs to scan the scheme itself and the whole process of the scheme implementing. New scheme usually relates to only part of the organization. However, learning must cross the boundary of individual and teams, and then rise to the whole organization level, even expand to exterior clients, suppliers and others that have relative interests. This kind of process is the generalization of learning. The enterprise can get final result of organizational learning through the feedback of the result of generalization. An enterprise should not satisfy with the progress obtained in the existed frame (single-loop learning).

Instead, it should check up the basic hypotheses such as the existed structure and process (double-loop learning) in order to begin a new round of organizational learning. This is a natural process. Because the internal and external environment is changing continuously, the enterprise can develop its own sustainable competitive advantage through continuously breaking old balance. The feedback makes organizational learning become a process of closed loop and continuously improving.

The process of organizational learning is the process of accumulating, transforming and creating knowledge continuously. Meanwhile, it is the process of organizational memory. Memorial knowledge forms the repository of an enterprise. However, only when the contents of the repository form the knowledge flow needed in all stages of organizational learning, can the repository be meaningful. On one hand, organizational learning can produce knowledge to accumulate in the repository. On the other hand, the existed knowledge in the repository can guide organizational learning to progress. The two-direction flow of knowledge breaks the traditional understanding of repository and emphasizes the concept of managing repository.

Meanwhile, it is necessary to explain that the process of organizational learning may not be carried out according to the six stages afforded by the model one by one. The real circumstance is always that the implementing of a new scheme has no meaning for an enterprise when the new scheme just begins to be implemented because of the quick change of environment.

At this time, the enterprise should return to the stage of discovery to scan external environment and internal resources again and begins a new circle of organizational learning. Because the two-direction knowledge flow mechanism is established and many loops are formed between repository management and every stage of organizational learning, the model provides a feasible analysing frame for the agile adjustment of organizational learning process according to external and internal circumstances.

The author introduces the concept of process area (PA) in every stage of organizational learning. Every stage is composed of several process area practices (PAP) of organizational learning connecting with corresponding stage.

When these practices are all implemented, a series of aims can be realized, which are helpful to reach the next stage of organizational learning. The establishment of process area effectively recognizes the practices that should be implemented to promote organizational learning. When these practices are finished, a series of knowledge and abilities to promote organizational learning are established.
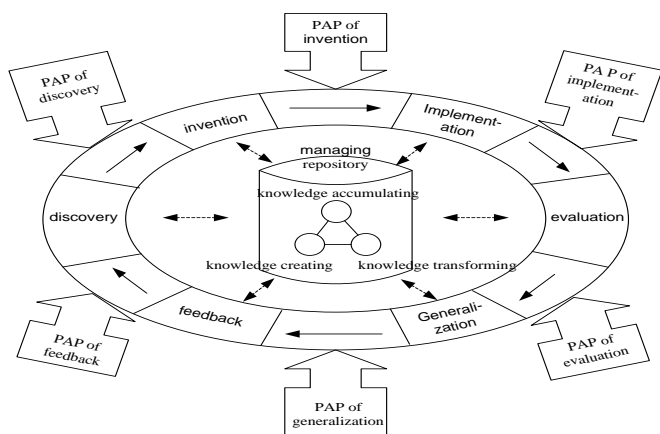
Fig. 1 The integrated model of organizational learning
The characteristics of the integrated model

Compared with the existed models, the integrated model has three characteristics as follows:

1) Based on the classical models of organizational learning, the model adds the evaluation stage and feedback stage. This not only guarantees the quality of generalization, but also makes organizational learning a closed loop. Therefore, the sustainable competitive advantage is cultivated in the enterprise's continuous improvement.

2) The model emphasizes the management of repository. The forming of repository is the effect of organizational learning. Meanwhile, the management of repository connects every stage of organizational learning with repository and forms a two-direction knowledge flow.

3) The model introduces the concept of process area, which provides a feasible basic frame for an enterprise to cultivate sustainable competitive advantage through organizational learning.

Conclusions and further studies

From the aspects of organizational learning and competitive advantage theory, the author first explores the integrating point and analyses the reason for the integrating of the two difficult to be implemented in theory and practice. Then the author introduces relative models of organizational learning and tries to give an integrated model as an effective tool to cultivate sustainable competitive advantage. At last, a case study of using the integrated model to cultivate sustainable competitive advantage is analysed.

The cultivation of sustainable competitive advantage is a complicated engineering system. The integrated model of organizational learning only represents a feasible frame for enterprise. There are much work left for further study including the mechanism establishment of learning process, concrete methods and tools of repository management, etc.

Acknowledgment

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