

# Study on the Cultivation of Core Competence Based on Tacit Knowledge

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## ABSTRACT

This paper discusses the meaning and characteristics of core competence, analyzes the relationships between tacit knowledge and core competence, and gets the conclusion that tacit knowledge is the basis for the development of core competence. At last methods that can transfer tacit knowledge into core competence are discussed.

**Keywords:** Core Competence, Tacit Knowledge, Cultivation

## 1. INTRODUCTION

In the new business environment, characterized by an increased turbulence and complexity, an organization's capacity to create and sustain competitive advantages lies in what it knows, not what it owns. Therefore, knowledge, especially tacit knowledge, is increasingly considered an important source of sustainable competitive advantage. Thus, it is necessary for tacit knowledge to be converted into competence. So it is important and meaningful to study the cultivation on how to transfer tacit knowledge into core competence.

## 2. THE CONCEPT OF CORE COMPETENCE

C.K. Prahalad and Garry Hamel mentioned core competence in the paper of enterprise's core competence published in the Harvard Management comment. They think enterprise's core competence is accumulated knowledge in the organization, especially the knowledge that coordinates different product skills and combines with many technological schools<sup>[1][2]</sup>. It is a set of special skills and technologies that can provide additional value to customers. Dorothy Leonard-Barton defined enterprise's core competence as knowledge system identifying and offering advantages. It consists of four elements, knowledge base and skill, technical system, management system, and value system. Thus, core competence is a knowledge system embedded by enterprise's tacit knowledge, and must be accumulated by enterprise<sup>[3]</sup>. It is valuable and unique for an enterprise, which is difficult to be imitated and acquired by competitors.

From the concept of core competence, its characteristics can be summarized: 1) It is unique, which mainly manifests in tacit knowledge that is exclusive for enterprise and unique for whole industry<sup>[4]</sup>. 2) It is customer-oriented value, that is, it can make enterprise provide more value to customers. 3) It is dynamic. Knowledge structure, storage, and capability of enterprise will change with time and external environment, so core competence must be continuously updated. 4) It is synthetic. Core competence combines with many kinds of knowledge and technologies, and it

touches every aspects of enterprise. 5) It is inimitable. Once it forms, core competence will become the unique competitive advantages of enterprise, and other enterprises can not acquire this capability in short-term. 6) It has path-dependence. The formation of core competence depends on synthesizing existing knowledge storage, knowledge structure, and enterprise's absorptive capability, which all have stronger path-dependence.

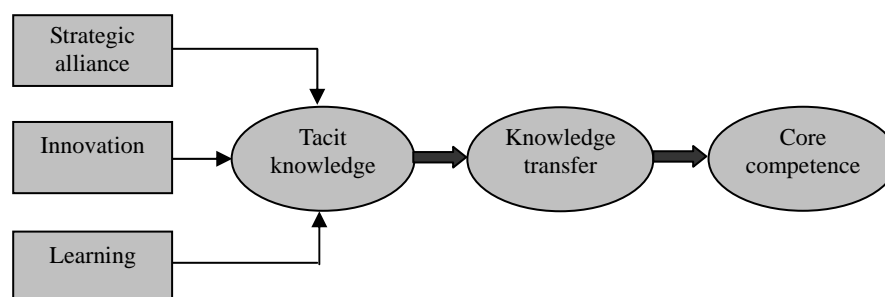
## 3. RELATIONSHIPS BETWEEN TACIT KNOWLEDGE AND CORE COMPETENCE

Knowledge can be classified as tacit knowledge and explicit knowledge from the point of view epistemological. Explicit knowledge is defined as encoded knowledge, which can be expressed by words and figures, so it is easy to communicate and imitate by competitors. Tacit knowledge, however, is neither easily imitated nor clearly understood outside the enterprise, i.e. skills and practical knowledge. It can be classified into four types: scientific, conscious, communal, and automatic<sup>[5]</sup>. Scientific knowledge is social, abstract, and highly mobile. In this case, appropriability is an important issue. Alternatively, appropriability is less of a concern with automatic (individual-focused and taken for granted) or conscious (individual-focused and explicit) knowledge. To use automatic or conscious knowledge effectively, it must be integrated with the enterprise's complementary assets. Moral hazard is of concern if an individual or teams holds the tacit knowledge. Communal knowledge, on the other hand, is often interrelated with the culture. Four types of tacit knowledge are all enterprise specific and often can not be written or encoded. They also have an immutable, hard-to-decipher quality that can not be easily transmitted to others, and often represent a shared experience among organization members. They not only can be transferable within the enterprises relatively and widely, but also can be very difficult for other enterprises to copy or develop. So tacit knowledge is the basic resources for cultivating enterprise's core competencies.

The difficulty of expressing, codifying, and transmitting

tacit knowledge makes it easier for an enterprise to protect than that of explicit knowledge. So acquiring another enterprise's tacit knowledge requires hiring its people. But a single expert is unlikely to possess all of the knowledge needed to reestablish the desired organization in the new enterprise, since the knowledge underlying core competence is held by a number of people whose individual knowledge is incomplete. Moreover, tacit knowledge may only be effective when embedded in a particular enterprise culture, structure, a set of processes and routines. The difficulty of copying tacit knowledge enables tacit knowledge to be the basis of an inimitable competitive advantage, and usually, tacit knowledge can be converted into core competence only through transferring <sup>[6]</sup>, as show in Figure 1. For

example, the study of American government indicates the cost of each auto made in Japan is less 2200 \$ than that in America, because Japanese auto manufacturing uses advanced inventory control, personnel management, and quality management. So many large-scaled enterprises in American, such as, Ford , GE, and Chrysler, put many resources to mine and study the product knowledge of Japanese auto. Although great deals of data were collected, many consultants were invited, and relative books were written, American enterprises did not acquire competitive advantages like Japanese enterprise. Obviously, the successful advantage of Japanese enterprise based tacit knowledge is difficult to be imitated by others.



**Figure 1 Relationship between tacit knowledge and core competence**

#### **4. APPROACHES OF CULTIVATING CORE COMPETENCE**

Because tacit knowledge is much difficult for competitors to imitate than that of explicit knowledge, the ability to capture and transfer tacit knowledge is the key for cultivating competitive advantage. Following is some methods to spread tacit knowledge within an enterprise so that it can be transferred core competence.

##### **4.1 Learning by Apprenticeship**

Learning is often the route by which many enterprises can accelerate development of a knowledge base. Explicit knowledge can be readily transmitted and learned by others through documents. Tacit knowledge, on the other hand, is often captured in metaphors that outsiders can not easily decode, so it often can only be learned by apprenticeship or learning-by-doing.

Learning by apprenticeship is a good method to translate tacit knowledge, it helps the enterprise understand and define complex problems and, therefore, solve them in unique way <sup>[7]</sup>. Several things can be done to promote learning by apprenticeship in companies. First, managers can be taught how to coach. Second, their performance measures can include their efforts to train subordinates. Third, structured group discussions can be used to serve many of the educational functions of training with far lower costs in terms of human resources than that of one-to-one mentoring. For

example, in enterprise, R&D department hold regular conferences in which difficult problems are shared and discussed. Each participant has the opportunity to assess how the problems can be dealt with, and to hear the professional members of the department how to dealt with the problems.

##### **4.2 Making effective communication**

Tacit knowledge can be transferred through personnel communication. The effective communication mechanisms in enterprise are net and teamwork. In enterprise, people can work through net informally with others having similar interests, or form communities of practice, to discuss their experiences, gather the ideas of others, and receive feedback on their own ideas. Communities of practice are groups of people sharing an interest in an issue who meet periodically to discuss problems, brainstorm, and share knowledge <sup>[8]</sup>. Meetings may be in person, or virtual. Optimally, information is stored in a database for future use. Companies can significantly facilitate the transmission and spread of tacit knowledge by supporting such net: providing the communications resources needed, giving people time to use net, and formally recognizing the community and its best contributors. When supported by the enterprise, communities of practice hold considerable potential for developing and spreading the expertise of an enterprise.

A common problem in teamwork is that they tend to deal with explicit knowledge, rather than tacit

knowledge. Therefore, companies need to arrange case discussions and other opportunities for individuals to exercise judgment and compare their decisions with those of experts. Working in teams can also present a platform for sharing tacit knowledge. When working in teams, people have an opportunity to observe how others conceptualize situations, approach problems, generate and evaluate solutions. The more people work together, and the more time they spend on socializing and talking about their experiences and sharing anecdotes, the more tacit knowledge they will share.

#### 4.3 Fostering Dynamic Routines

Another approach of cultivation core competences is instilling dynamic routines within the organization. Organization's dynamic routines fostering differentiated technological capabilities represented a critical enterprise-specific resource. Broadly speaking, dynamic routines refer to the organization's particular approaches that provide the basis for understanding and transferring tacit knowledge<sup>[5]</sup>. Routines are important for influencing the context of corporate strategy. Enterprise-specific routines established within the organization are based on the collective consciousness among its members. The complexity and dynamics of the organization's routines play a critical role in transferring tacit knowledge in the enterprise.

Moreover, numerous organizational routines enable the enterprise to envision and to develop combinations of different tacit knowledge that allow for more competitive. Combinations of routines allow for enterprise-specific combinations of tacit knowledge that are applicable to numerous products and processes. As a result, the risk of entering new markets is reduced. Accumulation of dynamic routines generates scaled economic benefits in learning. Dynamic organizational routines reflect the richness of the enterprise's learning patterns, as well as its potential for developing idiosyncratic know-how. And enterprise's ability to absorb new knowledge and to create new knowledge is related to the diversity of its learning base. Particularly in uncertain environments, the promotion of several organization routines enables the enterprise to absorb different types of knowledge, especially tacit knowledge to develop new skills faster. Therefore, application of dynamic routines increases causal ambiguity for competitors and increases the attractiveness of entering new markets.

## 5. CONCLUSIONS

Tacit knowledge is the basis for cultivation competitive advantages. It can be spread within an enterprise, but it is very difficult for other enterprises to imitate. The predominant way that enterprises can facilitate the spread of tacit knowledge within themselves is by giving employees the chance to work with expertise. In addition, making effective communication and fostering dynamic routines also provide employees with the opportunity to develop their own tacit knowledge and communicate with other. The more tacit knowledge are communicated and transferred in enterprise, the easier core competence develops.

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