KNOWLEDGE FORMS OF ENTERPRISE AND THE RESEARCH OF ITS IDENTIFICATION AND DISTRIBUTION

Z. D. Yu
School of management, Fudan University, No.220 Handan Road, Shanghai, China

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Abstract: Knowledge has been a kind of important factor in enterprise, the status of knowledge is the same as resource and manpower under knowledge economy. To enterprise, knowledge is very abstract, in order to make use of knowledge, we should know the basic forms of knowledge firstly, then we can identify the knowledge and know its distribution rule. The knowledge is surveyed on the base of summarizing knowledge concept in the thesis, and its rules of identification and distribution is also given.

1 INTRODUCTION

Enterprises are the basis of national economic development. While they create a lot of GDP (gross domestic product) for each country and help countries accumulating vast wealth, enterprises also provide a lot of jobs for the people. In the past, economic development is totally dependent on the natural resources consumption and low-cost labour, but today the natural resources become more expensive, and cost of labour are increasingly higher and higher, which gives unprecedented pressure on the enterprises. On the financial crisis there are many business failures because of the cost. Therefore, in the new conditions, in order to develop enterprise, we must change the traditional model of economic growth, especially in the era of knowledge economy, people have become aware of the knowledge and resources, labour, and other equally important elements. Knowledge become the critical element to improve the competitiveness of enterprise, especially in a market economy, knowledge has become the most important engine of the economic growth and development of enterprises. In order to obtain long-term development, we must continue to make use of knowledge to innovate and obtain knowledge competitiveness.

Under knowledge economy, to make use of knowledge and enhance competitiveness, enterprise should clarify the forms and distribution of knowledge and construct the relationship between knowledge and competitiveness.

2 THE BASIC FORMS OF ENTERPRISE KNOWLEDGE

Although people have realized the importance of knowledge, there is no unified understanding about what is knowledge yet. In our country, the knowledge is defined as acquaintance and their understanding of thing in the dictionary of Ciyuan(1982). It is defined as the result and crystal of human cognition in dictionary of Cihai(1989), and it points out that human knowledge is acquired in the forms of social practice, a reflection of reality. Knowledge is defined as the sum of cognition and experience during the practice of people changing the world in Modern Chinese Dictionary(1979). It can be seen that knowledge can’t be separated with human being, and the forms includes human knowledge, outcomes, practice and experience.

In abroad, Nonaka (1994) considered that knowledge is a confirmed belief, it is created, organized and transferred by the belief model and constraints of the knowledge holders and recipient. Hedlund (1994) considered that knowledge is the cognitive knowledge, technology in human’s minds and concepts, and which is embedded in products, services, or other vectors. The cognitive knowledge is the experience of the surrounding environment, the existing forms are personal experience. Technology is the normative, in-depth and regular knowledge that obtained on the basis of human cognition. Davenport(1998) considered that knowledge is the mix of experience, important values, the scene of the information and the
framework of evaluating, incorporating new experiences and insights. Leonard (1998) considered that knowledge is some kind of information which has the character of relativity, actionable, subjective, experiential and recessive. O. Dell (1998) pointed out that knowledge is the action of making use of information, which means that knowledge is the actionable information, such as customer information, product information, program information and successful experience of information. Zack (1999) considered that the rules of information is knowledge, which emphasized the relativity of information. Seviby (1999) pointed out that knowledge is news, perception, knowing, cognition, wisdom, determination, science, experience, technology, insight, competence, know-how, ability, learning, identification, etc., the definition is decided according to its contents. Long (2000) pointed out that knowledge is the people’s thinking, which is rooted in a particular individual, group or process, it is situational, and the knowledge embedded in language, stories, concepts, rules and tools. Alavi (2001) divided knowledge into five categories: mental status, target body, process, use of information and capacity. Bhagat (2002) considered that knowledge is obtained from the changing, reconstructing and creating of different information.

In the sum of the above consideration, we can know the forms of knowledge:

(1) Know-how. People’s impression of reality which is formed gradually in work, live and judgments based on learning process. Action of know-how comes from individual thinking, which is affected by the individual factors, knowledge, experience, undergoing, social status and social class. The forms of know-how: ① Intuition. Intuition is the instant cognition of some kind of phenomenon, this instant feeling is a sudden feeling, the impression is memorable, we have the feeling of know-how when we judge something with intuition. ② Inspiration. Inspiration is the sudden creative idea in the activity of science, technology, production or the insight of a phenomenon. The memorization of inspiration is weak, it sometimes occur in a moment, and sometimes disappear instantly, the occurrence of inspiration is often inspired by something, objects or situations, and it is also vulnerable to the surrounding. Value of inspiration is different to different people. ③ Observation force. Observation refers to the purposeful, conscious know-how activity. It is an important method of gaining experience in long process. Observation is a very important activities of awareness, and it is widely used in science and technology. ④ Mental models. Mental models include assumptions, stereotypes and impressions which are deeply rooted in people's minds and affects how people understand the world around them. ⑤ Imagination and association. Imagination is the awareness of people in the past, which is constructed on the basis of things that he did not experience or the ability of imagination. Association is the judgments of other things about the past experiences. The result of imagination and association is human subjective consciousness, despite it has some basis, the results are sometimes not necessarily correct.

(2) Experience. Experience is based on the understanding in the past and it is the effective method of putting awareness of activities into practice. Human being is continuing to explore the survival since birth, and gradually master the experience. Experience is gained through the formation of knowledge. It is greatly influenced by the individuals, and is difficult to be expressed with language. Experience is very important in reality and sometimes it plays a decisive role, such as the producing of Swiss watches, the quality of watch produced in Switzerland is better than in the other countries, which is because of the difference of the workers’ hand experience.

(3) Values. Values is a common approach and goals of the organization. Values of enterprise is expressed on enterprise culture, and which is the enterprise's basic view of the long-term goals and values, it is inherent in the basic activities of staff action. Therefore, the enterprise should inspire employees to make it consistent with enterprise values, which cause them to put more enthusiasm in learning and work.

(4) Information. Information is the regular useful content that formed by the processed data. Peter Drucker said, "Information is the data of the background and purpose given." We can say that information is data on the nature.

(5) Technology. There are many forms of technology in enterprise, such as production technology, management technology, programs, operating methods and skills. It is a very important form of knowledge, which is accumulated during the development of human being, and formed by the continuous exploration and summary. Technology can exist in the brains of people, and can also be materialized in the machine tools and production processes. The basic forms of technology: ① Trick. The trick is a critical method that people solve problems, which comes from practice. It is effective method in the exploration of long-term, it is difficult
to be imitated, the content is vague, and it can not be taught; ② Techniques and skills. Techniques and skills are the ability knowledge of action which are accumulated by employees in long-term practice, such as the accuracy of operation; ③ Unique technology. Unique technology is the master of the regular organizations, which are capable of writing and are easy to grasp sometime.

(6) Patents. Patents are commonly core knowledge, and it is the weight of corporate competitive advantage. Strictly speaking, the patent itself is a technology, but it has different character: First, protection. In order to protect the interests of the patent’s owner, the country make patent laws, that inspire the owner to be willing to carry out the invention; second, openness. The patent of technology must be open.

(7) Practices. Practice is commonly used in business practices.

3 IDENTIFICATION AND DISTRIBUTION OF ENTERPRISE’S KNOWLEDGE

Occurrence of enterprise’s knowledge is divided into two cases: exogenous (professional) and endogenous (occurring in action). Exogenous knowledge is that the enterprise creating and accumulating knowledge by the purposeful and organized scientific research, technological inventions, technology development, or by accepting the dissemination of knowledge from other organizations, or by knowledge spillover. Ways of Exogenous knowledge: the first one is learning; the second is that enterprise cooperating with other enterprise and forming a broad technology alliance. Endogenous knowledge is that the enterprise accumulating the experience and forming the rational knowledge in the process of practice and trading, and continue to carry out such processes through the accumulation of knowledge.

Knowledge is intangible, and the intangible knowledge is difficult to be directly felt. It needs a certain carrier in order to make use of knowledge. The knowledge carrier can be person, objects and processes. The person factors include the person within the enterprise, such as senior leadership, middle managers and knowledge workers, and the external person are mainly customers, suppliers and the third parties (consultants, etc.). The objects factors include product, production material and production tools. The process factors include the production process, supply chain processes. (1) Person’s Knowledge

Person's knowledge includes cognition, experience, values, and technical knowledge of the personification. Among them the person’s knowledge is more complex. Person’s knowledge hidden in the brain, and can be expressed by the behavior of individual factors. In this case, it is difficult to identify. For explicit knowledge, the ability of obtaining explicit knowledge changes with age, children before school-age mainly obtain knowledge by imitation, memory and other aspects. As entering into a higher school and increasing of age, they begin to learn by understanding. Influence factors of person’s knowledge distribution include industry character, firm size, corporate standards and business development stage.

① Industry of Enterprise. The industry of enterprise is divided into three kinds: labour-intensive enterprises, capital-intensive enterprises and knowledge-intensive enterprises. To the labour-intensive enterprises, as the content of knowledge is very low, the leader hold the core of enterprise technical knowledge, the workers also have some experience, but these experiences is not important, and the workers just repeated at a lower level of production and processing. To capital-intensive enterprises, the knowledge is dispersed in enterprise, the leader hold the enterprise’s knowledge, and their cognition, experience and value can affect the enterprise. To knowledge intensive enterprises, the content of knowledge is high, each people's knowledge is important.

② Enterprise Scale. The profit ability is affected by the enterprise scale. In large scale of enterprise, knowledge worker hold the core knowledge and can affect the enterprise. In the middle scale enterprise, the knowledge is hold by the general manager, they can affect the enterprise. In the small scale enterprise, the leader hold the knowledge and affect the whole enterprise.

③ Business Norms. Business norms refers to the modern enterprise system. To the high normative enterprise, it will operate in accordance with the modern enterprise model. The knowledge distributes in enterprises, the cognition, experience, values and technology of the enterprise’s knowledge workers affect enterprise, and the manager only need to be responsible for daily supervision and direction. For the moderate normative enterprise, the common managers master the core technology knowledge and understanding, their experience, values and technology affect the enterprise. For the low normative enterprise, as the production
randomness, and the products are constantly changing, the leader of enterprise master the knowledge and the leader's understanding, experience, values and technology affect enterprise.

④ Development Stage of Enterprise. According to the life cycle theory, the life cycle is divided into four stages: generation stage, development stage, mature stage and decline stage. On the generation stage, the founder holds the knowledge, the understanding, experience, values and technology of leader can affect the enterprise. On the development stage, the knowledge gradually spread, and it is mastered by the common managers, their cognition, experience, value and technology affect the enterprise. On the mature stage, the knowledge spreads to each level of enterprise department, their knowledge plays an important roles. On the decline stage, knowledge begins to be fragmentation, knowledge workers’ cognition, experience, values and technology affect the enterprise.

(2) Knowledge of objects
Objects are the carriers of knowledge, which include the company's products, raw materials and production tools. The knowledge contained in objects are patent, demand information, methods of operation and skills. When identifying its knowledge, we should identify the core factors, such as core products, core raw materials and production tools. The distribution of objects knowledge is as the following table 1.

<table>
<thead>
<tr>
<th>product</th>
<th>patent</th>
</tr>
</thead>
<tbody>
<tr>
<td>raw materials</td>
<td>Patent, information</td>
</tr>
<tr>
<td>production tools</td>
<td>Operating method, technique</td>
</tr>
</tbody>
</table>

(3) Knowledge of Process
The process includes production process and supply chain processes, the former focuses on the movement of goods, and its knowledge has the character of liquidity, the later refers to the manufacture process, the distribution of process knowledge is as following table 2.

<table>
<thead>
<tr>
<th>Process of supply chain</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process of production</td>
<td>Technics, patent and skill</td>
</tr>
</tbody>
</table>

4 CONCLUSIONS
The distribution of enterprise’s knowledge has the character of dynamic nature, the reason is as follows: (1) the dynamics of production and operation. (2) knowledge flow and the stock of enterprise is also changing. (3) levels of knowledge carriers is diversity.

Knowledge is the core of enterprise competitiveness, and enterprise in knowledge economy has paid more attention to it, but it is difficult to grasp on knowledge in practice, as knowledge is more abstract. We can make use of knowledge after the identification of knowledge. The knowledge distribution character is shown from two aspects of carriers and value activity.

REFERENCES