Vol. 2, No. 1 March 2009

Research on Evaluation Index System of Enterprise Innovation Culture Based on Sustainable Development

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Abstract

This text introduced the necessity of establishing an index system of evaluating innovative culture in enterprise in the view of sustainable development by analyzing the relationship between innovative culture and sustainable development, and then established an index system of evaluating innovative culture based on sustainable development. This is beneficial to enhance the core-competitiveness of enterprise.

Keywords: Sustainable development, Innovation culture, Evaluation index system

1. Introduction

Schumpeter's "Innovation Theory" pointed out clearly that innovation is the essence of economic development. Innovation culture in enterprise is the value view in which innovation is the part and core of employees' lives. It is created and shaped in activities of innovation and innovation management in order to adapt to the rapid development of market competition. It can motivate the staff to innovate and develop their conscious awareness of innovation gradually so that they can innovate constantly and try their best to innovate. Innovation culture in enterprise is the source of innovation, and the premise and pilot of technological innovation, system innovation and management innovation. It is need to nurture innovation spirit, innovation awareness and innovation thinking to develop innovation culture so that it can provide spiritual motivation and intellectual support, and break the factor of culture that impedes the innovation of enterprise culture, that is, innovate the cultural environment. In a word, innovation culture should affect innovation subject and improve the innovation capacity of enterprises to promote the sustainable development in economy of enterprise. As a result, the enterprise culture of innovation is critical to the development of enterprise. So it is more and more important for enterprises to evaluate the level of innovation culture. In order to evaluate the innovation culture of enterprise it is required to construct reasonably the index system of evaluating innovation culture of enterprise. The text is to construct the evaluation index system of evaluating innovation culture in enterprise from the perspective of sustainable development, and then evaluate the level of innovation culture in enterprise on this basis. This can promote enterprise to understand its level of innovation culture and enhance its competitiveness.

2. The necessity of constructing the evaluation index system of evaluating innovation culture in enterprise from the perspective of sustainable development

The sustainable development of enterprise refers to that the development of enterprise is a kind of long-term and stable behavior, by no means a temporary and short-term one. The core of sustainable development in enterprise is to accommodate the enterprise with the environment and achieve the constant innovation, strengthen management, and then achieve its existence. Therefore the sustainable development of enterprises can not do without continuous innovation and the continuous innovation can not do without the support of innovation culture of enterprise.

2.1 The innovation culture in enterprise is a prerequisite for sustainable development.

Modern society is a competitive society and the market is an ever-changing market. So any enterprise must continue to innovate based on market conditions in order to occupy the market continuously, gain the profit continuously and achieve sustainable development. The core of innovation in enterprise is the innovation of culture, and the innovation of technology and management is followed. Only innovation culture is fundamental to maintain the continuous innovation in enterprise. The construction of innovation culture in enterprise is to create a favorable environment suitable for innovation features and fit for innovation law in order to achieve for innovation. On this basis, enterprise puts up technological innovation and product innovation continuously in order to get higher earnings, and thus achieved sustainable development. Therefore it can be said that enterprise culture of innovation is a prerequisite for sustainable development in enterprise.

2.2 Sustainable development is the purpose and basis for the building of innovation culture in enterprise.

The ultimate goal of the development of any enterprise is survival, development and profitability, so that it can achieve sustainable development. This requires enterprise to carry through continuously the construction of innovation culture, to go along technical innovation and product innovation, to produce marketable products, and then it can obtain favorable economic benefit. So it can be said that sustainable development is the purpose of building innovation culture in enterprise; On the other hand, only the enterprise has a favorable economic benefit and can achieve sustainable development can the enterprise has the ability to build innovation culture constantly. So the sustainable development is also the basis of building innovation culture in enterprise.

2.3 The innovation culture and sustainable development in enterprise complement each other and promote each other.

The construction of enterprise innovation culture serves the economic development of enterprise and is a prerequisite for sustainable development of enterprise; At the same time, the purpose of building enterprise innovation culture is to achieve sustainable development. Only sustainable development can utilize efficiently the production of the construction of enterprise innovation culture will lose its carrier and significance. Sustainable development is the foundation of building enterprise innovation culture. Through sustainable development enterprise has accumulated valuable experience in building enterprise innovation culture and has accumulated the necessary capital for innovation, which will be propitious to the building of enterprise innovation culture. Therefore, the building of enterprise innovation culture and sustainable development go hand in hand. They promote each other and work together to serve enterprise.

The aim of enterprise innovation culture is to achieve sustainable development, so it is necessary to study the evaluation index system of enterprise innovation culture from the perspective of sustainable development. This paper is to build the evaluation index system of enterprise innovation culture from the perspective of sustainable development in order that the evaluation index system of enterprise innovation culture is more practical.

3. The evaluation index system of enterprise innovation culture from the perspective of sustainable development

It is necessary to establish the evaluation index system of enterprise innovation culture reasonably in order to evaluate the overall level of enterprise innovation culture objectively, accurately and completely. In order to make the evaluation index system of enterprise innovation culture serve the building of the enterprise innovation culture better, this article is to construct the evaluation index system of enterprise innovation culture in such four aspects as innovation environment, innovation **subject**, innovation **content and independent** innovation from the perspective of sustainable development.

3.1 Innovation environment

Innovation environment is a set of factors that is conducive to innovation. It is a set of all material factors and intangible factors which is favorable for innovation. Enterprise innovation environment is important condition to ensure enterprise to promote innovation culture. So it can be used to measure the level of enterprise innovation culture. Innovation environment includes physical environment and immaterial environment.

3.1.1 Physical environment

Physical environment mainly includes infrastructure, labor, human resource, engineering level and other material factors.

3.1.2 Immaterial environment

Immaterial environment mainly includes social systems, social psychology, social customs, legal systems, social morality, political policies and other immaterial factors.

3.2 Innovation subject

The index to measure innovation subject in enterprise includes innovation concept, innovation consciousness, innovation spirit and innovation thinking, and so on.

3.2.1 Innovation concept

One of the constituent elements of enterprise innovation culture is the atmosphere in which everyone is innovating whenever. Innovation concept is just formed in such an atmosphere. So the innovation concept of innovation subject will help enterprise to measure the level of innovation culture.

3.2.2 Innovation consciousness

Innovation consciousness is a kind of high-level mental reflection of an objective reality. It is produced in the course of practice needs in social life of community and individuals according to the motive of discovery and invention. In this practice people show their intention, desire and idea in order to regulate and adjust their directions of activities. Enterprise innovation consciousness is the most direct spiritual strength that decides the innovation ability of enterprise. It will help people to shape such advanced concepts as deploitation consciousness, opening awareness and so on. It can

also help enterprise form democratic enterprise culture. So innovation consciousness can be used to measure the level of enterprise innovation culture.

3.2.3 Innovation spirit

Innovation culture is essentially a people-oriented culture whose center is people. All the fruits of innovation in enterprise are to serve humanity so that people can live a more convenient and more comfortable life. Consequently, as the important features of innovation culture, people-oriented culture pays attention to the innovation value of and innovation contributions of every member, to the idea and advice of the staff, to the most democratic activities on the widest sense, to the demand at all aspects and all levels of the staff, and to staff exercising their powers fully within their authority. Therefore, the innovation spirit of innovation subject can measure the level of innovation culture in enterprise.

3.2.4 Innovation thinking

The most core part of innovation culture is innovation values, while the inclusive thought of encouraging innovation and tolerating failure is an essential part of innovation values. Because innovation means risks and uncertainties, that is, the possibility of failure, the innovation culture should put more emphasis on encouraging innovation and spurring the employees' innovative behavior and tolerate their failure in innovation, which will help to maintain the innovation enthusiasm of the staff so that they can maximize their professional skills and develop their innovation thinking so as to the success of innovation. Therefore, the status of the innovation thinking ability of innovation subject can reflect the level of enterprise innovation culture.

3.3 Content of innovation culture

The index to measure the content of enterprise innovation culture includes innovation values, innovation system and innovation incentives, and so on.

3.3.1 Innovation values

Enterprise innovation culture provides innovative values for enterprise. The core of enterprise culture is values, and the values of innovation culture advocates change and is progressive. Shaping the innovation values is a process that all the members of the organization understand all the connotations of innovation, build innovative thinking, realize the process of innovation and treat the outcome of innovation reasonably.

3.3.2 Innovation system

Enterprise innovation culture provides innovative system for enterprise. To maintain long-lasting capability of innovation and improve the efficiency of innovation in enterprise, it is necessary to build corresponding system which is the basis of carrying out innovation acts. The innovation activities are uncertain and there is no specific rules and regulations to follow, but as the organizer and manager of innovation activities, it is need for enterprise to establish a set of matching system in order to get the most fruit of innovation in the lowest cost. In short, the building of system is an integral part of innovation culture, and it is an important safeguard for an organization to develop its continuous ability of innovation.

3.3.3 Innovation incentives

Enterprise innovation culture requires enterprise to adopt incentives to promote innovation. In addition to an increase in wages and promotion, the incentive for innovation action can create a variety of Honor in recognition of foster innovation and build up heroes to strengthen innovation positively in order to encourage people to innovate.

3.4 Independent innovation

Enterprise innovation culture constitutes the driving force of enterprise innovation in culture. In particular, enterprise innovation culture is the premise to enhance the ability of independent innovation in such aspects as spirit, idea and values; is the foundation of improving the ability of independent innovation from the perspective of system; is the systemic "software" to construct the system of enterprise innovation from an environmental viewpoint. Therefore, the core of innovation in enterprise is the innovation of culture which is followed by the innovation of science and technology, technology and products.

3.4.1 Scientific and technological innovation

With the arrival of the era of knowledge economy, the competition of science and technology is more and more intense, and the ability of technological innovation has become the core competitiveness of enterprise. The source and power of scientific and technological innovation comes from the innovation culture of enterprise. Therefore, the level of scientific and technological innovation in enterprise can reflect the level of innovation culture of enterprises.

3.4.2 Technology Innovation

At present, with the deepening of reform and development in China's society, economy and technology, technological

innovation has become the conditions of survival, the basis of development and the source and means of improving the core competitiveness in enterprise. While the foundation of technological innovation is the innovation of enterprise culture, so the level of technological innovation can reflect the level of enterprise innovation culture.

3.4.3 Product innovation

Technological innovation is critical to enterprise. The embodiment of technological innovation is product innovation, that is, high-quality products can be produced in low cost in enterprise through technological innovation. Therefore, the level of product innovation can similarly, reflect the level of enterprise innovation culture.

Specifically, the evaluation index system of enterprise innovation culture is established as that in the table 1.

4. Conclusion

The evaluation index system of enterprise innovation culture in the table can be established from the perspective of sustainable development and give full consideration to all factors of impacting enterprise innovation culture. So the evaluation of the level of enterprise innovation culture in the right way on this basis is objective, accurate and complete, and can encourage enterprises to understand their own situation of evaluating innovation culture so as to take further measures to improve their own level of innovation culture and improve the competitiveness of enterprise.

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Table 1. Evaluation Index System of Enterprise Innovation Culture

Level of Enterprise Innovation Culture	Innovation environment	Physical environment
		Immaterial environment
	Innovation subject	Innovation concept
		Innovation consciousness
		Innovation spirit
		Innovation thinking
	Content of innovation culture	Innovation values
		Innovation system
		Innovation incentives
	Independent innovation	Scientific and technological innovation
		Technology innovation
		Product innovation