

Enterprise Culture and Technological Innovation Capability From the Perspective of Resources

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Abstract

Enhancing the technological innovation capability is important for the enterprises to get core competencies. In view of the resources is important for the enterprises' technological innovation capability, this paper builds a model of enterprise culture-enterprise resources-technological innovation capability based on the perspective of resources. It analyzes the mechanism of enhancing the technological innovation capability with enterprise culture, including the way of accumulating basic resource, shaping innovational resource and promoting technological innovational ability, and put forward the way to enhance the technical innovation ability with enterprise culture.

Key words: Enterprise resource; Enterprise culture; Technological innovation capability

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INTRODUCTION

Technological innovation is an important factor for enterprises to obtain the core competitive ability in the environment of scarce resources (Peteraf, 1993). There is no technological innovation without resources, which are the basic factors to promote technological innovation ability. However, if they focus only on resources required from outside, enterprises would not gain sustainable

competitive advantages. To make better use of resources to promote the enterprise technological innovation ability, enterprise must focus on the construction of enterprise culture.

1. ENTERPRISE RESOURCES AND TECHNOLOGICAL INNOVATION ABILITY

All elements owned or controlled by enterprises are enterprise resources, which have an active role in the development of enterprises. However, not all resources can make the technological innovation ability of enterprises to be promoted. Foss and Knudsen (1996) think that the resource is the foundation of the enterprise to obtain ability, and the ability is the main source of the enterprises to gain competitive advantage. Therefore, enterprise resource is the important factor of the technological innovation ability of enterprises. Enterprise resource is divided into basic resources and the heterogeneous resources in accordance with the scope and impact of technological innovation capability (Barney, 1991; Barney, 2001).

1.1 Basic Resources to Promote Technological Innovation Ability

Basic resources are the necessary elements for the enterprise technological innovation activities, including human resource, financial resource, material resource, technical resource, information resource, etc. Among them, human resource and financial resource are the most important basic resources.

1.1.1 Human Resource

Human resource which is independent of the other forms of resources is an important asset of the enterprise (Wright, McMahan, & McWilliams, 1994). Human resource is the main body of the enterprise culture, and at the same time is also the main body of technological innovation activities. Therefore, human resource is

the basic resource of the enterprise to enhance their technological innovation ability.

1.1.2 Financial Resource

Financial resource is the basic resource to provide support for business operations activities. Enterprise technical innovation is a complex systems engineering, and requires a lot of money from the various stages of market research, product development, production, marketing and so on. Therefore, there are no technological innovation activities if enterprises do not have enough financial resources.

1.2 Heterogeneous Resources to Promote Technological Innovation Ability

Heterogeneous resources are manifested in the heterogeneity with the unique use value (Barney, 1991). Enterprise culture which transforming the basic resources development into heterogeneous resources during the process of promoting technological innovation abilities, makes the enterprises survival and development.

1.2.1 Innovation Team

Not everyone will be the heterogeneous resources in the enterprise to promote enterprise technological innovation ability. Only innovation teams that having innovation consciousness and innovative knowledge are able to play a positive role in enhancing the resources of technological innovation abilities (Camelo-Ordaz, Hernandez-Lara, & Valle-Cabrera, 2005).

1.2.2 Innovation Atmosphere.

Innovation atmosphere which need the support and the active participation of the leaders is the organizational atmosphere that encouraging members of the enterprise to constantly innovation. Innovation atmosphere enables members a sense of security and belonging in the organization, and is able to maintain a strong entrepreneurial spirit and inspire the enthusiasm for the innovation of enterprise members, prompting the members to the formation of innovative ideas (Ahmed, 1998).

1.2.3 Knowledge Resource

Knowledge resource is the key factor determining the success of technological innovation is to enhance the fundamental premise of the technological innovation ability (Gilbert & Cordey, 1996). Different organizations have knowledge systems that will cause the accumulation, proliferation and integration of existing knowledge resources, thus forming a unique style, irreplaceable; it is difficult to imitate other organizations.

2. ENTERPRISE CULTURE AND TECHNOLOGICAL INNOVATION ABILITY

Enterprise culture is a collection of the enterprise philosophy and standard of conduct founded by the entrepreneurs in the beginning of the enterprise. With the long-term development of enterprises, it is gradually accepted by all employees. Schein (2010), professor

of Massachusetts Institute of Technology, insists that enterprise culture is a series of assumptions that invented, discovered or developed by the organization when it deals with the problems to adapt to outside world and to integrate internal problems. The enterprise culture not only determines the quantity and quality of enterprises innovation resources, but also determines the allocation of resources for innovation in the technological innovation activities.

2.1 Enterprises' Spirit Culture

Enterprises' spirit culture is a kernel of the enterprises. And it bears excellent tradition of the enterprise, and determines the direction of enterprises' development. Zhang, Wang, and Xue (2002) insists that enterprise culture is core values and ideas, which is to enable enterprises to maintain competitive advantage, and such core values and ideas to would continually motivate the staff. In an innovative enterprise, each employee that accepts the enterprise values will be encouraged to study hard and constantly update their knowledge, improve the professional ability, and finally enhance the enterprise technological innovation ability.

2.2 Enterprises' System Culture

Enterprise system culture is in the middle of the enterprise culture. Enterprise system culture transfers the targets, spirits and values of the enterprise spirit culture to each organization member through a tangible form, so as to constrain the behavior of enterprise members.

Enterprise system and culture through a form of tangible business goals in the spirit of enterprise culture, entrepreneurship and enterprise values shown, passed to the members of the enterprise every organization, in order to constrain the behavior of the corporate members.

2.3 Enterprises' Behavior Culture

Enterprises' behavior culture is a cultural phenomenon formed in enterprises' production and operation activities and interpersonal communication of organization members. And it takes human behavior as the carrier. Enterprise behavior culture, which transforms the enterprise human resources and financial resources into heterogeneous resources, help enterprises to form innovation team, create innovation atmosphere.

2.4 Enterprise Material Culture

Enterprise material culture is the surface layer of form enterprise culture, including product, product packaging design, enterprise name and logos, enterprise advertisement, etc, so as to satisfy the enterprises' survival and the development needs of material products. Because of the perceived nature, enterprise material culture plays a major role in the accumulation of technological innovation basic resources, such as human resources and financial resources.

3. MECHANISM OF ENHANCING TECHNOLOGICAL INNOVATION ABILITIES WITH ENTERPRISE CULTURE BASED FROM PERSPECTIVE OF RESOURCES

3.1 Model of Enhancing Technological Innovation Abilities With Enterprise Culture Based on the Perspective of Resources

Penrose (1995) points out in the enterprise growth theory that enterprises' resources and abilities is the key difference between themselves and their rivals. The enterprise is a collection of various resources, which gets a competitive advantage through the transformation from basic resources into heterogeneous resources for innovation. And this transformation is also dependent on the enterprise culture.

It is the Model of enhancing technological innovation abilities with enterprise culture based on the perspective of resources Figure 1.

3.2 Analysis of Enhancing Technological Innovation Abilities With Enterprise Culture Based on the Perspective of Resources

Enterprise culture is the effective way to promote the enterprise technological innovation ability. On one hand, the enterprise culture can help enterprises to acquire basic resources and transforming it into heterogeneous resources, so as to enhance the technological innovation ability, on the other hand, the enterprise technological innovation ability ensure enterprise resources available. Constantly strengthening technological innovation ability will put forward higher request to the enterprise culture.

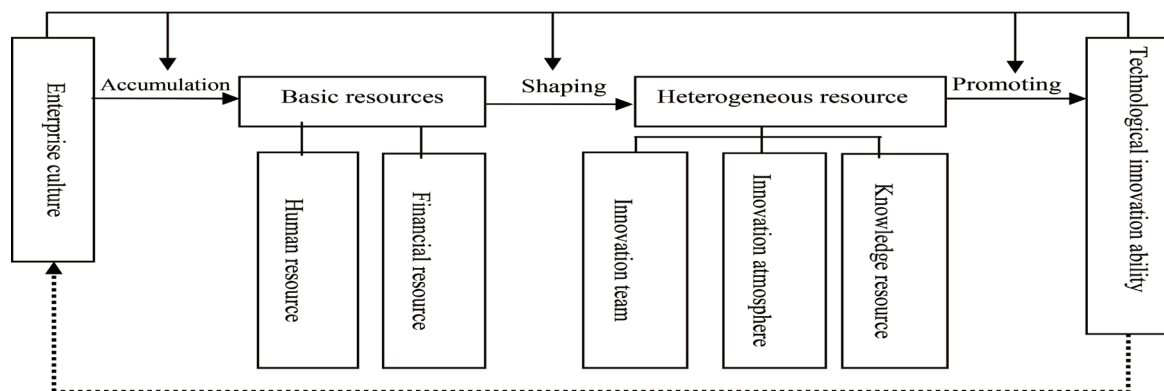


Figure 1 Model of Enhancing Technological Innovation Abilities With Enterprise Culture From the Perspective of Resources

4. THE WAY TO PROMOTE TECHNOLOGICAL INNOVATION ABILITY WITH ENTERPRISE CULTURE FROM THE PERSPECTIVE OF RESOURCES

4.1 Accumulation of Basic Resources With Enterprise Culture

4.1.1 Accumulation of Human Resource

Enterprise should attract talents and retain talents and treat human resources as the most important enterprise heterogeneous innovation resources by the construction of enterprise culture. Therefore, the enterprise will not transform the human resources into enterprise heterogeneous resources without the unique enterprise culture.

4.1.2 Accumulation of Financial Resource

Enterprises need a lot of money at various stages technological innovation. It is hard to succeed for the new technology if enterprises have only perfect originality and outstanding talent but no funds. Therefore, financial resources ensure enterprise technological innovation

ability. Enterprise can also raise key financial resources from the enterprise internal and external, similar as the accumulation of human resources.

4.2 Shaping Heterogeneous Resources With Enterprise Culture

4.2.1 Strengthening Entrepreneurship & Promoting Managers' Innovation Management Ability

Entrepreneurship is usually abstraction of specific personal quality, values and thinking mode of entrepreneurs group. Managers with the spirit of the entrepreneur often encourage innovation, building a good enterprise culture that help to promote technological innovation ability, and they are willing to put more human resources and financial resources as far as possible into the technological innovation activities.

4.2.2 Setting Good Examples, Forming the Innovative Team

Although the behavior of entrepreneurs play an important role in the form of innovation consciousness, the employees is not likely to be more innovative because the position differences between entrepreneurs and

employees. So it is necessary for the enterprise to set up the innovation model character in the enterprise, in order to encourage employees to make technological innovation.

4.2.3 Establishing Innovation Incentive System, Creating Innovation Atmosphere

Technological innovation is the process of marketization of the new innovation ideas. Enterprises can better inspire staff innovation enthusiasm by establishing a set of technological innovation incentive system suitable for enterprise, and creating a good innovation culture atmosphere.

4.2.4 Building A Learning Organization, Acquiring Unique Knowledge Resources

Enterprise must rely on abundant knowledge resources so as to make constant technology innovation. Therefore, in order to better technology innovation, enterprise should establish a learning organization, form a continual upgrading knowledge base.

CONCLUSION

This paper made a full analysis of the relations between the enterprise resources, enterprise culture and technological innovation ability. On this basis, the paper constructs a model of enterprise culture, enterprise resources and technological innovation ability based on the perspective of resources. Finally, it points out that enterprise culture can accumulate, mould, integrated configuration enterprise innovation resources, including basic resources and heterogeneous resources, so as to promote enterprise technological innovation ability.

REFERENCES

- Ahmed, P. K. (1998). Culture and climate for innovation. *European Journal of Innovation Management*, 1(1), 30-43.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27(6), 643-650.
- Camelo-Ordaz, C., Hernandez-Lara, A. B., & Valle-Cabrera, R. (2005). The relationship between top management teams and innovative capacity in companies. *Journal of Management Development*, 24(8), 683-705.
- Foss, N. J., & Knudsen, C. (1996). *Towards a competence theory of the firm*. Routledge.
- Gilbert, M., Cordey-Hayes, M. (1996). Understanding the process of knowledge transfer to achieve successful technological innovation. *Technovation*, 16(6), 301-312.
- Penrose, E. T. (1995). *The theory of the growth of the firm*. Oxford University Press.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179-191.
- Schein, E. H. (2010). *Organizational culture and leadership*. Jossey-Bass.
- Wright, P. M., McMahan, G. C., & McWilliams, A. (1994). Human resources and sustained competitive advantage: a resource-based perspective. *International Journal of Human Resource Management*, 5(2), 301-326.
- Zhang, H., Wang, F., & Xue, H. (2002). Constructing Corporate Culture to Promote Enterprise's Core Competitiveness. *Science & Technology Progress and Policy*, (11), 91-92.