

Analysis of the Impact of Enterprise Knowledge Assets on Destructive Innovation

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Abstract: Enterprise Knowledge Assets Are the Foundation of Enterprise Innovation. the Differences in the Acquisition, Digestion, Transformation and Utilization of Enterprise Knowledge Reflect the Different Applications of Enterprise Knowledge Processing Activities in Disruptive Innovation. the Stronger the Enterprise's Ability to Transfer Experience, the Better It Will Be to Open Up a New Market or Bring Destructive Threats to External Enterprises. the Stronger the Ability of Self-Substitution, the Better It Will Be to Acquire and Absorb Technologies and Knowledge with Destructive Potential and Develop Destructive Products Aimed At Self-Market.

1. Introduction

Destructive innovation theory has always occupied an important position in the research of innovation management, and enterprise knowledge assets are the basis of enterprise innovation. Using these knowledge assets to carry out destructive innovation is the key to achieve commercial success and build competitive advantages, and it is also the focus of long-term attention of theoretical circles, enterprises and other relevant stakeholders. The relationship between knowledge assets and disruptive innovation needs to be deeply analyzed based on the nature of knowledge assets and the specific types of disruptive innovation.

2. Enterprise Knowledge Assets

2.1 Absorption of Enterprise Knowledge Assets

(1) Enterprise knowledge acquisition. Enterprise knowledge acquisition means that an enterprise approaches external knowledge sources and searches for and evaluates new knowledge through certain methods. Customers, suppliers, scientific research institutions, universities, and even competitors are all important sources of knowledge acquisition, while observation, authorization, cooperative research and development, franchising, joint ventures, mergers and acquisitions and other modes can all become mechanisms of knowledge acquisition for enterprises. Through the acquisition of external knowledge, the enterprise has increased its knowledge storage capacity. Although the nature of external new knowledge has not changed in the "acquisition" stage, it still exists in the state before the transfer, but it is the necessary foundation and prerequisite for the transfer of new knowledge within the enterprise.

(2) Enterprise knowledge digestion. Knowledge digestion emphasizes the enterprise's understanding and interpretation of the acquired new knowledge, and emphasizes that the enterprise weighs the importance and value of external new knowledge in its own way. The understanding and explanation of new knowledge can promote enterprises to develop a common language and value system. Knowledge digestion is the premise and necessary condition of the two stages after knowledge absorption.

(3) Knowledge transformation of enterprises. The form and content of external new knowledge will be changed and sublimated in the process of enterprise knowledge transformation. Through knowledge transformation, enterprises connect external new knowledge with existing knowledge, and generate new knowledge and capabilities through knowledge deletion and addition or new interpretation methods. The process of enterprise knowledge transformation has given birth to new

ideas and new ideas.

(4) Enterprise knowledge utilization. Knowledge utilization emphasizes that knowledge is creatively applied to other situations instead of original use situations and users. The use of knowledge by enterprises emphasizes the commercialization of new external knowledge. The transfer of knowledge in an enterprise does not end with the process of knowledge utilization. Those enterprises with strong knowledge utilization ability are more likely to find the potential demand of the market for certain knowledge, and transform and create knowledge according to the market demand. Therefore, knowledge utilization in turn can improve the ability of enterprises to acquire new knowledge in the future. In the new round of cycle, the enterprise relies on the experience and lessons accumulated in the previous cycle to more accurately assess the changes in the external environment, examine its own internal capabilities and better integrate internal and external resources.

Whether the acquired and digested knowledge can be transformed into products and services depends on the transformation and utilization effect of these knowledge by enterprises. Under the condition of insufficient acquisition and digestion of new knowledge, there is not enough new knowledge to realize transformation and utilization. As a result, the role of absorptive capacity is not fully reflected. The absorptive capacity of enterprises is concerned not only with the acquisition and digestion of external knowledge, but also with the internal processing of knowledge. These two dynamic knowledge processes form a tension between internal knowledge processing and external knowledge acquisition.

2.2 Enterprise's Handling of Knowledge Assets

Innovation is the result of the creation and application of knowledge assets. Enterprise knowledge assets are embedded in employees, technical systems, management systems and codes of conduct. Enterprises need to identify valuable knowledge and transform and utilize it in order to improve the innovation performance of enterprises. The key is to analyze the processing activities of enterprises on knowledge. The “attribute-tool-result” process model of organizational learning is a theoretical framework for studying organizational knowledge transfer. Under this theoretical framework, knowledge attributes will not only directly affect the effect of knowledge transfer among organizations, but also affect them through the differences of knowledge transfer activities. The activities of applying knowledge assets in enterprises can be divided into two types: experience transfer ability and self-substitution ability.

Empirical transfer capability is a sub-concept separated from absorptive capability, which corresponds to the transformation and application dimension of absorptive capability. It refers to the capability of an enterprise to apply existing knowledge and experience to the generation of new knowledge or the development of new products (or services). Based on the perspective of organizational learning process, the ability of experience transfer can be understood as four knowledge processing processes: storage and renewal of enterprise internal knowledge base, reactivation of internal knowledge in new situations, matching and transformation of internal knowledge and new situation knowledge, and integration and application of internal knowledge in new situations.

Self-substitution ability developed from “self-nibbling will” refers to the ability of an enterprise to reduce the potential or actual value of its current investment, specifically including the replacement of its existing products, assets and business. In essence, it describes the extent to which an enterprise has paid and made efforts to pursue the interests of new products or services and replace the existing operation system and products in order to improve its competitive position.

3. Destructive Innovation

When the concept of disruptive innovation was first put forward, it refers to those enterprises that at first often provide simpler, more convenient and cheaper products or services to attract new or less picky consumers and gain a foothold in the market. Then, through continuous improvement of the importance attached by mainstream users, it will eventually occupy more market space.

Gilbert and Bower believe that the cognitive judgment of enterprises has a strong guiding effect on the innovative behavior of enterprises. Based on the cognitive perspective of initiating enterprises on disruptive change, disruptive innovation can be divided into two types: “extroversion” and “introversion”. Export-oriented disruptive innovation emphasizes that enterprises introduce disruptive products in their external markets to compete with products of non-consumers or other enterprises, thus opening up a new market or eroding the market share of products of other enterprises. In export-oriented disruptive innovation, the knowledge base for introducing new products will not form too much conflict with the original knowledge assets. However, inward destructive innovation emphasizes that enterprises introduce destructive products into the market dominated by existing products, encroach on the market share of existing products and even completely replace the market share of existing products. The required knowledge and skills are often quite different from the existing knowledge assets.

4. The Influence of Knowledge Assets on Destructive Innovation

In the era of knowledge economy, the ability to acquire, transform and apply new knowledge is a necessary condition for enterprises to innovate effectively. Christensen and Raynor [1] believe that obtaining valuable customized information at any time is a prerequisite for promoting organizational change and growth. Identify more new opportunities to apply the accumulated knowledge base, thus continuously generating new products and processes. At the same time, the core competence of an enterprise may also change into core rigidity or capability trap, thus hindering the innovation of the enterprise rather than playing a role in promoting it.

Whether an enterprise's treatment of knowledge assets focuses on extension or reconstruction, the creative power it can exert is different. A big reason lies in the nature difference of innovation itself. Similarly, due to the differences in the target markets targeted by outward-oriented and inward-oriented disruptive innovations, their requirements for the ability of enterprise organizations to deal with knowledge will be different.

The role of absorptive capacity in promoting enterprise innovation has long been confirmed by scholars. As an important component of an enterprise's absorptive capacity, the ability of experience transfer is bound to have an impact on enterprise innovation. Outward-oriented disruptive innovation aims to introduce new products with disruptive innovation characteristics to non-consumer or competitor markets. For the initiating enterprise, the development of this new product cannot be separated from the creative application of the existing knowledge assets of the enterprise. It may be a new attempt of the existing technology of the enterprise in different industry fields, or it may be a gradual improvement of the existing products based on the new market demand. Experience transfer ability is an important variable to measure the level of creative use of existing knowledge assets in different industries. The stronger the ability of experience transfer, the more frequent the matching and integration activities between the existing knowledge and experience and the new situations and needs, the more favorable it will be to develop destructive products in different industries. Therefore, on the premise of not damaging the existing business or reducing the existing investment, it will open up a new market or bring destructive threats to external enterprises.

Inward disruptive innovation emphasizes the introduction of disruptive products into the enterprise's existing product market, which will have a negative impact on the enterprise's current product sales. Compared with outward-oriented destructive innovation, the knowledge and skills required by inward-oriented destructive innovation are often quite different from or in conflict with the existing unique capabilities of the enterprise, requiring the enterprise to subvert the existing resources and capabilities. Self-substitution ability often involves fundamental and progressive changes at different levels of the organization. It is an external manifestation of an enterprise's active embrace of new external things and plays a positive role in promoting breakthrough product innovation and long-term success. Studies by Chandy and Tell [2], Mason and Milne [3] show that enterprises with higher self-substitution ability tend to show stronger willingness to commercialize destructive technologies and are more likely to become the leaders of a new round of destructive changes. The stronger the enterprise's self-substitution ability, the more likely it is to overcome the

path dependence and organizational inertia in the process of knowledge search and learning, acquire and absorb those technologies and knowledge with destructive potential, and develop destructive products targeted at self-market.

As for management practice, the dependence of enterprise knowledge assets on its generating carrier is also an important attribute that affects destructive innovation. Therefore, managers should manage the knowledge assets of enterprises more carefully when carrying out destructive innovation activities, and fully consider the differential mechanism between the characteristics of knowledge assets and the outward-oriented destructive innovation of “opportunity cognition” and the inward-oriented destructive innovation of “threat cognition”. Therefore, appropriate knowledge asset activities are adopted to play a positive role in disruptive innovation.

References

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