

A Summary of Research on Innovation Performance of Domestic and Foreign Enterprises

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Abstract: Through the analysis of innovation performance at home and abroad, the definition, dimension and influencing factors of innovation performance are explored, which can make enterprises have a clear understanding in the development of innovation performance.

With the rapid development of the economy, enterprises are facing severe competitive pressures. To maintain a lasting competitive advantage, enterprises must improve their ability to innovate. This paper will combine the relevant literature at home and abroad to explore the definition, dimensions and influencing factors of innovation performance, and provide a favorable reference for enterprises to promote innovation performance.

1 Innovation performance connotation

The word "innovation" was first proposed by the Austrian economist Schumpeter. He believes that innovation is a new function of the re-establishment of production factors and conditions in the production system. Innovation reflects the emergence of new products or products in the enterprise. Improvements; the emergence of new markets; new profit points [1]. Schumpeter's proposal of the concept of innovation laid a solid foundation for later scholars at home and abroad to study innovation performance. Brown (1992) believes that innovation is the creation of a new product, a new process, and a new system [2]. Management Master Drucker (1994) proposed seven sources of innovation: 1. Unexpected success or failure; 2. Uncoordinated phenomena; 3. Program needs; 4. Changes in industry or market institutions; Changes in population structure; 6. Changes in cognition; 7. New knowledge. Through the above scholars' research on innovation, some scholars have begun to link innovation and performance. Afuah believes that innovation performance is the benefit of consulting process. From the perspective of production process design and production strategy, he summarizes innovation performance into product and process [3]. Poti believes that there are different meanings based on different management entities' innovation performance: from a macro perspective, that is, from the perspective of the whole country, innovation performance refers to the growth of the national economy and the improvement of the welfare of the whole people; from the perspective of the middle, that is, from the region On the level of innovation, innovation performance is the growth of regional economy; from the micro perspective, that is, from the enterprise level, innovation performance is the increase of enterprise output [4]. Hagedoom&cloodt (2003) defines the concept of innovation performance in both narrow and broad terms when it comes to the development of multiple measures of innovation performance. They believe that narrow innovation performance is a result, the degree to which companies introduce new inventions such as new products, new processes or new equipment into the market; innovation performance in a broad sense is considered to be from the generation of new ideas to the introduction of new inventions into the market. Comprehensive evaluation of the performance of invention, technology and innovation in the process [5]. Many scholars in China also have important research on innovation performance. Gao Jian puts forward the performance of technological innovation output

and the process of technological innovation process from the perspective of technological innovation. The “output performance” shows the various types of benefits and impacts brought to the enterprise by technological innovation achievements. “Process performance” It is reflected in the quality of the technological innovation process of the enterprise, which is reflected by the variables of the technological innovation process of the enterprise [6]. Li Chenglong et al., from the perspective of cooperation between industry, university and research, found that there are many soft factors in the process of cooperation between industry, universities and research institutes, and that R&D and innovation behaviors are continuous, and cooperation is required to have high stability. There is a need to pay special attention to the measurement of soft performance when measuring. And the production and research innovation performance is divided into two types of indicators. One is the innovation task performance, which measures the most direct output of the industry-university-research cooperation, and the measurable, tangible, verifiable output and outcome. The other category is to learn growth performance, mainly to measure the growth of the partners of industry, academia and research and the satisfaction of cooperation [7].

In summary, innovation performance is the result of an enterprise's application of new ideas to production activities and the benefits to the company.

2 Innovation performance measurement dimension

Janssen and Van Yperen conducted a large number of analysis of 170 employees of a Dutch company, and studied the impact of learning orientation on innovation performance, and applied four dimensions from innovation aspirations, innovative actions, innovations and innovations. An innovation performance questionnaire was constructed [8]. In the establishment of the adaptor-innovator model, Kirton proposed that both innovators and adaptors must have innovative behaviors. And in different organizational situations and environments, employees need to exhibit different adaptive and innovative roles [9]. The famous Chinese scholar Han Yi combines the three stages of innovation performance of Janssen and Van Yperen: ideas generation, ideas promotion and ideas realization. After a lot of research, the innovation performance is assumed to be three. Dimensions, willingness to innovate, innovative actions and innovative results [10].

3 Influencing factors of innovation performance

After combing the literature, the factors affecting innovation performance mainly include individual factors, organizational factors and environmental factors.

(1) Individual factors. Employee innovation is the basis of enterprise innovation. This article refers to relevant materials. Individual factors mainly include: a. Individual characteristics, namely individual characteristics of entrepreneurs, executives and R&D personnel. b. Individual innovation tendency, Nonaka found that individual innovation tendency has a strong influence on the level and quality of organizational innovation. Individuals have strong desire for innovation in the organization, so that the organization can continue to improve [11]. C. Individual innovation behavior, employee innovation behavior has always been the pursuit of enterprises, and is the core strength of enterprises to improve performance.

(2) Organizational factors. There are many organizational factors. Yang Yong based on panel data, through the fixed effect estimation method, made an empirical analysis of the technological innovation performance of enterprises in Jiangsu Province from 2000 to 2003. The results show that firm size, R&D expenditures and human resources have positive effects on technological innovation performance and have a positive impact [12]. Yang Jianjun and others believe that communication plays a vital role in the practice of technological innovation. It provides decision-making or investment support to operators and shareholders through the flow of information, thus effectively affecting decision-making performance and investment performance [13]. Fan Zhigang et al. empirical research verified the important role of strategic flexibility in the innovation performance

of enterprises [14]. Based on the above analysis, organizational factors mainly include organizational culture, organizational communication, strategic management, organizational system, and R&D investment.

(3) Environmental factors. Buy Yi Yuan et al. found that the profitability of industrial clusters has a significant impact on corporate innovation activities. The more economically developed regions, the stronger the innovation awareness of SMEs, the greater the proportion of innovation investment in sales revenue, each country The history of industry structure, economic systems and industry development will also affect the actual operation of production and innovation [15]. Li Ling proposed that the degree of industry competition has a great impact on enterprise innovation. At this time, it is possible to improve innovation performance by increasing R&D investment and internal governance [16]. Xu Wei et al. used the industrial enterprises above designated size in 52 cities to construct the HLM model and explored the micro-action mechanism of the regional innovation environment on the innovation performance of enterprises. The study concluded that: (1) Regional environment is an important factor affecting the innovation performance of micro-enterprises. (2) The human resource environment and institutional environment, as elements of public innovation, can have a direct impact on micro-enterprise innovation performance. (3) The human resources environment and cultural environment can enable enterprise R&D investment to be more effectively configured and utilized, thereby enhancing the utilization efficiency of innovative resources. (4) The infrastructure environment is neither an innovative element nor an innovation efficiency, and it has no impact on innovation performance [17]. According to the above analysis, environmental factors mainly include national policies, industry competition levels, and regional economic development.

conclusions

In recent years, the definition, dimension and influencing factors of innovation performance have become the hotspots of scholars at home and abroad. By studying a large number of domestic and international innovation performance related literatures, this paper summarizes the definition, dimensions and influencing factors of innovation performance, and provides a good reference for enterprises to improve their innovation performance activities to promote their core competitiveness.

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