Research on technology innovation strategy of small and medium-sized enterprises

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Keywords: Small and medium-sized technology enterprises, Technology innovation, Safeguard measures

Abstract: Nowadays, with the continuous development of The Times, more and more attention has been paid to scientific and technological innovation, and technology-based small and medium-sized enterprises have entered a stage of rapid development, which has provided a great driving force for China's economic development. Current state for small and mid-sized enterprise attaches importance to promote the continuous optimization of the technological innovation strategy, to seek the development of better and faster, but in the current social background, small and mid-sized enterprise still exist many problems, mainly reflected on the technical innovation strategy, such as some strategy, some strategies lack of corresponding supporting measures, it is difficult to get the specific implementation, and so on, in order to solve a series of problem, based on small and mid-sized enterprise technology innovation strategy as the research object, the analysis of related concepts and theoretical research, on the basis of this paper discusses the influence factors of technology innovation strategy, Then analyzes the countermeasures of technological innovation strategy, hoping to promote the theoretical development of technological innovation strategy of small and medium-sized technology-based enterprises, solve the existing problems of technological innovation of small and medium-sized technology-based enterprises, and promote the all-round development of China's economy.

1. Introduction

With the continuous development of science and technology, gradual economic integration and market globalization have become the trend of world economic development. How to adjust the technology innovation strategy is an important factor for SMEs to survive and develop in the fierce market competition. The technological innovation of enterprises plays an increasingly important role. Facing the internal and external environment, how to improve the current strategic mode, choose the technological innovation strategy suitable for their own development and effectively implement it has become a very important issue.

2. Definition of related concepts

2.1 The connotation of science and technology type small and medium-sized enterprises

Currently, there are few definitions of technology-based SMEs in the theoretical circle. Generally speaking, they are defined as enterprises with professional scientific and technological talents, mainly engaged in research and development experiments, transforming intellectual property rights into scientific and technological products, and mainly engaged in services, consulting, research and sales, etc. [1]. From the above definition, we can summarize the technology-based small and medium-sized enterprises as follows: the development direction of enterprises is mainly based on technology research and development and application; the principle of enterprise development is mainly based on independent management and self-responsibility for
profits and losses; the work content of enterprises is mainly engaged in research and development, service, consulting, sales and so on.

2.2 The characteristics of small and medium-sized enterprises of science and technology

Small and medium-sized technology-based enterprises mainly have the following characteristics:

We will attach importance to scientific and technological innovation. The difference between technology-based SMEs and other enterprises lies in their emphasis on innovation ability. Generally speaking, such enterprises will invest a large amount of money in scientific and technological research and development to develop products that adapt to the development of The Times and meet the needs of consumers[2].

Have a clear target group. At the beginning of their business, small and medium-sized technology-based enterprises tend to lock the target market, accurately locate the target customers, develop relevant products according to the needs of such customers, and put them into the market for testing after successful research and development, and make improvement according to the response of target customers[3]. Therefore, the target market of such enterprises is very clear.

It is small and flexible. Generally speaking, small and medium-sized technology-based enterprises have a relatively small scale and a relatively clear target market, so they can timely adjust their strategies according to the changes of the market and adapt to the needs of the market.

Information can be conveyed in a timely manner. Small and medium-sized technology-based enterprises, due to their small scale, will not set up a lot of middle layer, relevant orders can be timely conveyed, omit the time of information transmission, reduce the error of transmission, and effectively help such enterprises to quickly judge the market demand.

2.3 Definition of technology innovation strategy

With the advent of the information age, the connotation of technological innovation is constantly enriched. At present, it not only includes the innovation of product process and so on, but also includes the further optimization of service system. The theory of technological innovation has been further developed in practice and quickly applied into practice. Technology innovation theory directly determines the technology innovation strategy of enterprises, and the technology innovation strategy directly affects the subsequent implementation and development of enterprises, so enterprises must be very careful when choosing the technology innovation strategy. Companies because of own development, technology innovation strategy should be selected for differentiation, good technical innovation strategy can help enterprises to quickly locate the target market, and find the method of the use, bring excess profits for enterprise, but not science, not reasonable technical innovation strategy, can make the enterprise cost a lot of time and economic cost, even will bring great loss[4].

3. Influencing factors of technology innovation strategy of small and medium-sized science and technology enterprises in China

The technological innovation strategy of small and medium-sized technology-based enterprises in China is affected by many factors in the process of formulating and implementing. Specifically, it can be divided into the following two categories:

3.1 External factors of the enterprise

First of all, from the perspective of policy market, China's current policies are basically inclined to state-owned enterprises, and most of the human and economic costs are invested in state-owned enterprises and large private enterprises, and the attention to small and medium-sized enterprises is not enough. Secondly, the economic impact is that the current market economy in China, more and more attention to technological innovation, high and new technology is listed as a key field of development, while promoting the rapid development of technology-based small and medium-sized enterprises, the market competition is more and more fierce[5]. Finally, there is a lack of professional market department and risk control department. With small scale and relatively simple personnel,
small and medium-sized technology-based enterprises cannot fully understand the needs of customers due to their insufficient grasp of key market projects. In addition, it is also in a weak position in risk prevention and control. At present, most venture capital enterprises are established by the state and the investment objects are mostly large private enterprises or state-owned enterprises. The lack of professional venture capital companies greatly hinders the development of small and medium-sized technology-based enterprises[6].

3.2 Internal factors of the enterprise

The second is the influence of internal factors, which can be divided into the following aspects:

There is a problem with the quality of managers. Managers of small and medium-sized technology-based enterprises do not pay enough attention to scientific and technological innovation, but pay more attention to market interests, and regard technological innovation as a means of making profits, which hinders the improvement of management consciousness and management level and is not conducive to the long-term development of enterprises[7].

Financing is not in place. Due to the lack of policy protection for small and medium-sized enterprises, their financing difficulties at the beginning of the problem greatly restricted the development of small and medium-sized enterprises, the market also has financing difficulties, fewer channels and other problems.

Lack of talent. Due to the gap in policy funds, small and medium-sized enterprises in science and technology can not compare with large private enterprises and state-owned enterprises. Most talents in science and technology will go to large enterprises. It is difficult for small and medium-sized enterprises in science and technology to introduce professional talents, and even if they do, it is difficult to retain them, so they are in a weak position in market competition.

The incentive mechanism is not sound. For scientific and technological talents, salary incentive alone is not enough. Many talents pay more attention to spiritual incentive, promotion channels and career development prospects. However, at present, most incentive mechanisms for employees in small and medium-sized enterprises of science and technology are mainly based on salary, with a low sense of professional belonging, and it is difficult to retain talents[8].

4. Optimization measures of technology innovation strategy of small and medium-sized science and technology enterprises in China

4.1 We will improve the system for technological innovation

Improve the mechanism for technological innovation. At present, the industry standards of small and medium-sized technology-based enterprises in China are not unified, and the quality standards are not clear enough, which greatly hinders the development of small and medium-sized enterprises[9]. Therefore, small and medium-sized enterprises should find the right development direction, improve the quality level, ensure the production standard, improve the efficiency and success rate of research and development, actively seize the market and create profit margins.

Improve the mechanism for managing technological innovation. Due to the smaller technology-based small and medium-sized enterprises in China, the number of staff is less, so management cost is low, the information to be able to communicate in time, but with the continuous development of enterprises, employees will be more and more, it is difficult to adapt to the needs of the development of top-down management way, so small and mid-sized enterprise should perfect management mechanism, to explore a new mode of parallel, so as to solve the new problems in the process of development[10].

Improve the incentive mechanism for technological innovation. To fully stimulate the subjective initiative of employees, strengthen supervision, improve the assessment system, establish positive and negative incentive mechanism, reward the excellent and punish the poor, and give corresponding rewards to the employees with good performance, such as increasing salary, distributing equity and so on, to enhance the passion of employees at work.

4.2 Introduce professional talents
The implementation of the strategy of small and mid-sized enterprise technology innovation depends on science and technology talent, in modern times, science and technology talents are scarce, and that such personnel are often working for the demand is higher, not only requires better salary, at the same time also to have certain requirements for spiritual motivation, in addition, they are keen to challenge, realize self value pursuit, cooperation development is less, more independent research[11]. For small and medium-sized technology-based enterprises, technology-based talents are the core, is the foundation, so we must pay attention to the introduction of talents.

As for high-tech talents, various enterprises are scrambling for them. Therefore, the current small and medium-sized technology-based enterprises need to increase the labor cost, raise the salary, explore the diversified profit distribution mode, understand the needs of high-tech talents, actively introduce talents, and rationally use the incentive mechanism to retain talents.

4.3 Strengthening research and development of key technologies

Due to the relatively small size of the small and mid-sized enterprise, so that most can only focus on one or more technology research, in this case, the research focus areas, key technology research and development is the key content of science and technology innovation strategy, small and mid-sized enterprise shall, in the full understanding of the market demand, on the basis of comprehensive analysis of the current market information, understand the trend of the development of the market, focus on layout the future development of better products, such as cloth kind of ultra wide flame retardant products or contact clothing, etc., focusing on key products at the same time, strive to improve the level of science and technology, investment, fight for the market in a short time, Capture market share and obtain excess earnings. At the same time of determining the key projects, we should also focus on the deployment of human capital and so on to ensure that the resources of the project are sufficient. In the process of research and development, we should actively explore the mode of independent innovation[12]. For some products that we know little about, we can set up expert consultants to explain the product theory and technology. In addition, we can set up project team system to promote the cooperation within the team, improve the efficiency of research and development, and build the core competitiveness.

4.4 Fostering a Culture of Innovation

Enterprise culture for the formulation and practice of enterprise technology innovation strategy is very important, through the enterprise culture can be subtle influence and change the employees' values, therefore can reasonable use of the enterprise culture, strengthening the staff's innovation consciousness, improve the staff's ability to innovate, to shape good innovation atmosphere, while meet employees' spiritual needs, prompted them to create greater value.

5. Conclusion

For small and mid-sized enterprise technology innovation strategy is very important, not only affect the enterprise future development, but also determines the enterprise's human and economic costs of inputs, although companies are very the attention of the technology innovation strategy, but in the process of its development and implementation still exist many problems, the article on the basis of its concept is defined, analyzed the influence factors of small and mid-sized enterprise technology innovation strategy, and then puts forward the corresponding solution measures, the current small and mid-sized enterprise shall give priority to with the independent innovation, on the basis of a comprehensive understanding of influencing factors, select the appropriate development strategy to avoid risk[13], To improve profits, SMEs must pay attention to the cultivation of talents and the construction of corporate culture, so as to provide a good guarantee for the implementation of technological innovation strategy, so as to promote the sustainable and healthy development of enterprises[14].

Reference


