

# Probe into the Countermeasures to Improve the Scientific and Technological Innovation Ability of Small and Medium-Sized Enterprises

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**Abstract:** The position and role of science and technology are becoming more and more obvious in the 21st century. The competitiveness of science and technology will be the main factor that determines the future and destiny of a nation. With the rapid development of China's economy, China's high-tech industries are constantly developing, including promoting the growth of the national economy, employment, and independent innovation. Small and medium-sized companies in China have been in the predicament of a high birth rate, short survival period, and high mortality for a long time. Based on the successful experience of foreign countries, this paper analyzes the problems existing in China's small and medium-sized scientific and technological enterprises.

**Keywords:** Small and Medium-Sized Enterprises; Science and Technology Innovation; Financial Support; Tax Preference

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## 1. The role of scientific and technological innovation in SMEs

### 1.1 Ensuring the sustainable development of SMEs

At present, both enterprises and multinational companies have set up scientific research teams to carry out scientific and technological innovation to gain an advantage in the fierce market competition. Because of the poor economic strength and product structure, if we don't actively innovate, we will not be able to meet the needs of technological development, so we will be expelled from the economic environment. If we can recognize the current development difficulties, arrange R&D talents as early as possible, follow up in due course, and carry out scientific and technological innovation based on this, it is possible to improve the development ability of enterprises and explore their development potential.

### 1.2 Promote the transformation of enterprise management philosophy

Due to the problems of small and medium-sized enterprises in China such as late start, single product structure, poor product quality and low economic benefits, etc., the main energy of operators is concentrated on the production of enterprises. Therefore, its management concept mostly stays at the stage of production management. If small and medium-sized enterprises want to survive and develop rapidly, they need to reflect deeply on the problems of enterprises, revise their marketing concepts promptly, make all-round plans for them, change and upgrade their products and innovate their models promptly. This change will improve the production, operation, management level of Chinese small and medium-sized enterprises in an all-around way, ensure their normal production and living order, and further enhance their international market competitiveness.

### 1.3 Enhance the core competitiveness of enterprises

Under the condition of the market economy, the development focus of enterprises is specialization and lean management. We can remain invincible in the market, constantly beat our rivals, strengthen our development ability and create a sufficient environment for sustainable development through this way. At present, small and medium-sized enterprises must carry out specialized research on their core products, maintain their uniqueness and unimpeachable features through continuous scientific and technological innovation. It is to improve consumer loyalty and goodwill, promote the sales volume of enterprises, and then form their core competitiveness.

## **2. Problems faced by SMEs in China in improving their scientific and technological innovation capability**

### **2.1 The main position of technological innovation is not clear.**

In western developed countries, the main body of scientific and technological innovation is enterprises rather than government scientific research institutions, which occupy a dominant position in the use of funds. In China, the main body of scientific and technological innovation is not enterprises, and the main technical research and development forces are scattered in universities, institutions, and the Chinese Academy of Sciences instead of companies. Therefore, the technical foundation of small and medium-sized scientific and technological enterprises in China is relatively weak, lacking specialized scientific research personnel and scientific and technological innovation ability.

### **2.2 The product has low technology content and a small market.**

Due to the limited scale and ability of small and medium-sized technology companies, they only pay attention to short-term benefits while ignoring the development of high-tech products with high investment and low return. Therefore, most of their products are knockoffs, high-end products with high circulation speed in the market. Therefore, the products developed by them lag far behind foreign countries and can only rely on the local market.

### **2.3 Enterprise financing difficulties**

If a company wants to continue to develop, it must first be supported by capital, and if financial institutions are to operate, it needs what the government plays in it so that the government can play an important role in it.

### **2.4 The positioning of the government in the process of financing guarantees is not clear.**

The credit risk-sharing rate of high-tech enterprises in China is closely related to relevant national policies. Over the years, many places have introduced some policies to support enterprises, but they all share the risks of SMEs from science and technology, and there is no stable financing platform that can guarantee the development of SMEs.

### **2.6 Government procurement system is flawed**

The United States stipulates that 30% of government procurement is for small businesses. However, China's government procurement has a limited guidance on scientific and technological innovation, which fails to effectively promote the development of high-tech industries.

### **2.7 The tax law system is imperfect.**

At present, there is no complete tax legal system for small and medium-sized enterprises in China. The preferential tax policies for small and medium-sized enterprises mainly focus on income tax, and their contents are ever-changing, changing greatly, supplementary laws and regulations are constantly, the operation is difficult, and arbitrariness is strong, which makes small and medium-sized enterprises grow from small to large and cannot enjoy the support of preferential policies.

## **3. Measures to promote scientific and technological innovation of small and medium-sized enterprises**

The government's investment is conducive to the development of high-tech enterprises, giving full play to their advantages, thus enabling them to have the necessary capacity for production and development. The company's development goal is to maximize profits and put all its basic resources into R&D for the company, it must adopt a series of policies to make the operating income of high-tech companies higher than other investments.

### **3.1 The government provides a guarantee for the scientific and technological innovation of enterprises.**

It is necessary to increase policy, tax, talent and technical support, set up special funds to support enterprises' scientific research activities, establish a platform for talent and technical exchange and mutual assistance, and support more small and

medium-sized enterprises to successfully carry out scientific and technological innovation. At the same time, most enterprises can form innovation alliances through the government, forming collaborative innovation and common development.

### **3.2 Strengthen SMEs' awareness of scientific and technological innovation**

In order to ensure the smooth progress of scientific and technological innovation activities to the maximum extent, it is necessary to continuously strengthen the innovative consciousness of the managers of small and medium-sized enterprises and encourage them to participate in innovative activities with confidence and perseverance. This paper puts forward the following suggestions. First, the managers of enterprises must understand the current economic situation, and find out what needs to be improved. Second, managers should formulate development goals, design blueprints, adopt scientific and reasonable methods and gradually carry out innovative activities according to the actual situation of enterprises. Third, managers in the process of enterprise innovation should have a strong awareness of technology introduction, digestion, and redevelopment.

### **3.3 Construction of scientific and technological innovation team of SMEs**

Faced with the current situation of talent shortage and low technical levels in small and medium-sized enterprises in China, enterprise managers should make scientific plans according to their reality, adopt various ways to strengthen scientific and technological innovation human resources and set up both independent research and development teams. The countermeasures for building R&D team in enterprises are as follows. First, we should have an objective understanding of the existing innovative human resources in enterprises, and timely and reasonably introduce and optimize the structure of human resources. Secondly, it is necessary to establish an effective incentive mechanism for R&D, so as to give full play to the enthusiasm and enthusiasm of scientific research workers and give full play to their potential.

### **3.4 Improve financing channels for scientific and technological innovation**

At present, we should start from the following aspects to solve the problem of insufficient financing of SMEs in China. First, establishing a venture capital withdrawal mechanism is needed. From the perspective of lowering the listing threshold of small and medium-sized enterprises in China, we should actively explore the financing channels that are in line with our characteristics. The second is to set up professional technical financial institutions. Regional financial institutions can be set up in high-tech development zones with high-tech enterprises, mainly providing venture capital for small and medium-sized enterprises in the development stage, and such loans are limited to activities related to scientific and technological innovation. Third, we should improve the credit system of small and medium-sized enterprises, establish a credit evaluation mechanism, improve the credit evaluation mechanism, and improve the incentive and punishment system, so as to ensure the healthy development of small and medium-sized enterprises' scientific and technological innovation capital market.

### **3.5 Promote scientific and technological innovation of SMEs**

First of all, it is necessary to stimulate enterprises to carry out scientific and technological innovation through encouraging financial policies. And, they should increase government financial subsidies so that enterprises can play a leading role in scientific and technological research and development. Secondly, special funds should be allocated. According to the actual situation of the market, the products and technologies provided to research institutes and institutions of higher learning every year should be provided to small and medium-sized enterprises free of charge, so that they can seize the opportunities in the market and gain a firm foothold. Finally, we should actively create favorable conditions for SMEs to "go global" in the process of China's economic transition. There are many enterprises which want to go an international path but they are short of conditions and platforms. Managers have issued corresponding preferential policies to support small and medium-sized enterprises to go an international way, master overseas cutting-edge technologies, guide small and medium-sized enterprises to carry out overseas scientific and technological exchanges and research and development, bring foreign research results to China, develop new products or improve their quality, and make them become famous brands with their intellectual property rights, making it difficult for competitors to copy them.

### **3.6 Improve the tax policy**

It is necessary to improve the existing enterprise income tax system and strengthen tax incentives. Expanding the deduction range of scientific research financial funds and drawing lessons from foreign advanced experience is essential. Individuals are encouraged to carry out R&D work, and their rewarded shares can enjoy the preferential policies of income tax after being transferred or sold, so as to encourage their inhuman research work.

### **3.7 Encourage large scientific and technological enterprises and small and medium-sized scientific and technological enterprises.**

Enterprise cooperative development entrusts large-scale scientific research projects to small and medium-sized enterprises. On the one hand, it can reduce the competition between enterprises and small and medium-sized enterprises for capital and raw materials. On the other hand, cooperation between enterprises can increase the utilization of equipment and technology by enterprises, thus improving the technical level of enterprises.

### **Conclusion**

Science and technology innovation is the fundamental reason to solve the bottleneck of small and medium-sized enterprises' development and achieve sustainable development. By solving the problem that talents, technology, capital, and Industry-University-Research are out of touch with each other through a reasonable relationship between the government and enterprises, we can explore a scientific and technological innovation road suitable for small and medium-sized enterprises, and then realize the orderly development of enterprises.

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