#### Research on Embedded Development Path of Value Chain Network of Small and Medium-sized High-tech Enterprises in Shaanxi Province under the Concept of Sharing

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*Abstract:* As China's economy continues to grow and develop, the market economy structure continues to advance, and the business model of Shaanxi small and medium-sized high-tech enterprises is constantly updated with the development of the times. Through the investigation of Shaanxi small and medium-sized high-tech enterprises, the embedded development model of value chain network under the concept of sharing has become a key factor affecting the development of SMEs. According to the results of this research, this paper analyzes the background and role of the embedded development path of value chain network under the concept of sharing. Taking the small and medium-sized enterprises in Shaanxi Province as the research object, the paper explores the embedded development path of the value chain network of small and medium-sized high-tech enterprises in Shaanxi Province under the concept of sharing.

#### **1. Introduction**

As China's economy continues to grow and develop, China's high-tech continues to innovate, and the Internet economy has become an important part of China's economic sector. The Internet economy relies on the Internet and uses information technology management to achieve interoperability and information sharing. In the process of small and medium-sized high-tech enterprises, the concept of sharing economy has gradually become an important development model. The biggest advantage of the sharing concept is that it can effectively integrate the scattered idle resources in the society. On the one hand, the idle resources are effectively utilized, and on the other hand, the small and medium-sized high-tech enterprises are greatly facilitated. This paper takes Shaanxi small and medium-sized high-tech enterprises as the research object, deeply explores the embedded development path of value chain network, and hopes to provide reference and help to small and medium-sized high-tech enterprises, so as to improve the development level of China's high-tech enterprises as a whole.

#### 2. Research background

With the development of the times, China's economy has shown a diversified development trend, and small and medium-sized high-tech enterprises occupy a very important position in the national economy. Small and medium-sized high-tech enterprises are not only related to the country's independent innovation capability, but also related to the future development of China's entrepreneurial sector. Cultivating and supporting small and medium-sized high-tech enterprises has a profound impact on China's future economic development. Shaanxi is located inland, and due to geographical location, Shaanxi's economic development is slow. In recent years, with the in-depth development of China's economy, Shaanxi small and medium-sized high-tech enterprises have developed rapidly, and a large number of small and medium-sized high-tech enterprises have sprung up.

From the actual situation, Shaanxi small and medium-sized high-tech enterprises in Shaanxi Province have certain advantages. Because these enterprises are high-tech enterprises, advanced equipment, high product technology content, and broad product market prospects, these characteristics determine that small and medium-sized high-tech enterprises are at the forefront of the market industry chain. Although small and medium-sized high-tech enterprises have many advantages, in the actual development process, the development of small and medium-sized hightech enterprises has encountered great resistance. First of all, due to geographical conditions, Shaanxi is located inland, and the investment environment and economic environment are far different from those of developed coastal provinces. Many small and medium-sized high-tech enterprises have moved away to economically developed provinces for development; secondly, Shaanxi Province has economic conditions. Underdeveloped, the government has not supported enough financial support; in the end, small and medium-sized high-tech enterprises have insufficient development momentum. These factors have led to the slow development of small and medium-sized high-tech enterprises in Shaanxi. Under this circumstance, if no effective measures are taken, the small and medium-sized high-tech enterprises that are slow to develop will face abortion or withdraw from the market. In response to this situation, effective measures must be taken, the government should increase support, and enterprises should find out the reasons for their own shortcomings and find countermeasures.

## **3.** The status quo of the development of small and medium-sized high-tech enterprises in Shaanxi Province

Although Shaanxi Province is located inland and the economy is underdeveloped, the level of science and technology education is at the forefront of the country. Science and technology is the primary productive force, and scientific research institutions are the backing of small and medium-sized high-tech enterprises. Shaanxi small and medium-sized high-tech enterprises have strong R&D and intellectual support. After several years of development, Shaanxi small and medium-sized high-tech enterprises have grown rapidly and become an important pillar of Shaanxi's economic development.

According to data released by the Shaanxi Provincial Government, as of the end of 2017, there were 2,209 high-tech enterprises in the province, an increase of 20.78% compared with 1829 in the previous year, which is the fastest growing year since 2013. At the same time, the province's high-tech enterprises are active, and the main economic indicators have achieved growth of more than 20%. Among them, operating income was 566.095 billion yuan, up 26.77%; total industrial output value was 487.369 billion yuan, up 22.21.%; total export value was 29.075 billion yuan, up 29.37%; net profit was 31.908 billion yuan, up 19.51%; actual tax payment was 26.535 billion yuan. The increase was 23.36%.

The province's high-tech enterprises have more investment in innovation and higher output. In 2017, the province's high-tech enterprises invested 42.484 billion yuan in science and technology activities, an increase of 16.2% over the previous year; the province's high-tech enterprises' average scientific and technological activities accounted for 7.5% of the main business income, including aerospace and electronic information. The expenditure on science and technology activities of enterprises in the field accounted for the largest proportion of the main business income, which were 20.62% and 20.39% respectively. With the increase in investment in innovation, the main output related to science and technology activities of high-tech enterprises in the province has increased by more than 20%. Among them, the output value of new products was 178.096 billion yuan, up 26.46%; the sales income of new products was 144.757 billion yuan, up 21.83%; the number of patent applications was 16,736, an increase of 26.56%.

From the perspective of the distribution of enterprise technology, the number of electronic information enterprises in the province's high-tech enterprises is the largest, with 826, accounting for 37.67% of the total number of high-tech enterprises in the province. In terms of income scale, advanced manufacturing and automation enterprises have the highest operating income, reaching 205.276 billion yuan, accounting for 36.26% of the total operating income of high-tech enterprises in the province. In terms of geographical distribution, there are 2,101 high-tech enterprises in Guanzhong, accounting for 95.11% of the province.

It can be seen that the current high-tech enterprises in Shaanxi are booming and present a development situation of a lot of flowers. While a large number of high-tech enterprises are developing, how to strengthen the resource sharing of high-tech enterprises has become the focus of current thinking.

## 4. Characteristics of the development of small and medium-sized high-tech enterprises in Shaanxi Province under the concept of sharing

### 4.1. Sharing concept makes small and medium-sized high-tech enterprises in Shaanxi Province change the traditional marketing model

The traditional marketing model is based on physical management, and the emergence of the concept of sharing has greatly changed the traditional marketing model. The core of the sharing concept is sharing, and the foundation of the sharing concept is the network. The concept of sharing is based on the support of the Internet, relying on strong Internet technology support to effectively combine idle resources in society and achieve resource optimization. Compared with the traditional marketing model, the shared concept marketing model is more convenient, the marketing cost is lower, and the profit is more than the traditional marketing model. With the rapid development of China's economy, the concept of sharing has been widely applied by small and medium-sized high-tech enterprises. The application of the sharing concept will centrally allocate high-quality resources in the society and provide a good marketing platform for small and medium-sized high-tech enterprises in Shaanxi Province.

### **4.2.** The application of sharing concept provides a new development platform for small and medium-sized high-tech enterprises in Shaanxi Province

Small and medium-sized high-tech enterprises are the products of the new era, and high-tech is the foundation of the company. Only by mastering advanced high technology can enterprises be in an invincible position in social development. With the development of the times, high-tech enterprises have become more and more important in the economic market. Due to the emergence of the concept of sharing, many small and medium-sized high-tech enterprises have found a new development platform. They can contact the customers in the world without relying on the customers, and rely on the perfect logistics resources to complete the transfer between east and west, and the concept of time and space is shortened under the concept of sharing. It provides a new development platform and survival opportunity for small and medium-sized high-tech enterprises.

### 5. The embedded relationship between small and medium-sized high-tech enterprises and value chain networks in Shaanxi Province under the concept of sharing

After more than ten years of development, small and medium-sized high-tech enterprises have begun to take shape, but they have encountered unprecedented challenges in the actual development process. For small and medium-sized high-tech enterprises to grow and develop, they must dare to meet the challenges. Small and medium-sized high-tech enterprises must develop from the low-end nodes of the value chain to the high-end nodes, so as to realize the embedded development path of the value chain network of small and medium-sized high-tech enterprises under the concept of sharing.

## 6. Small and medium-sized high-tech enterprises and value chain network embedded development steps

### **6.1. Embedded from low-end value chain network embedded to high-end value chain network embedded embedded**

The value chain embedding mode of small and medium-sized high-tech enterprises is mainly in the low-end mode in the early stage of development, but with the development of the times, this value chain embedding model is far from being able to meet the needs of the times. In this case, small and medium-sized high-tech enterprises must be embedded embedded in the low-end value chain network embedded into the high-end value chain network. The change of the value chain embedding method has solved the dilemma faced by the development of small and medium-sized high-tech enterprises in Shaanxi Province. The development process of small and medium-sized high-tech enterprises is actually the process of occupying the embedded network of high-end value chains.

#### 6.2. Value chain network embedding must have a passive to active transition

Most small and medium-sized high-tech enterprises have experienced three processes in the development process, namely, the driving of production factors, the driving of investment factors, and the driving of innovation factors. These three stages are successively progressive. With the continuous development and growth of small and medium-sized high-tech enterprises, the role of innovation elements in the development of enterprises is becoming more and more obvious. Without innovation, there is no enterprise development. If there is no innovation drive, the development of high-tech enterprises will encounter obstacles, and the development of enterprises will be passive. The result will only be locked in the low end. The innovation-driven process is the second upgrade of enterprise development. The innovation drive is the process of value chain network embedding from passive to active, which is conducive to the high-end position of small and medium-sized high-tech enterprises.

### **6.3.** The embedding mode of small and medium-sized high-tech enterprises has changed from increasing to optimizing

From the current point of view, Shaanxi small and medium-sized high-tech enterprises in the development process did not pursue the pursuit of high-level elements as the direction of the future development of the enterprise, but passively accept the traditional value chain embedding method, the enterprise positioning is low, and the added value of the enterprise chain is low-end. This kind of embedding method makes the enterprise in a passive position in the development process and is greatly influenced by the international market. The international market is in a little fluctuating, and companies may face bankruptcy. Therefore, small and medium-sized high-tech enterprises must transform the embedded mode, from incremental embedded to optimized embedded. Timely transformation of the embedded approach to meet the needs of global economic development.

# 7. The specific measures for the embedded development path of the value chain network of small and medium-sized high-tech enterprises in Shaanxi Province under the concept of sharing

#### 7.1. Improve macro awareness and plan ahead

Shaanxi Province is located inland, and there is a big gap between economic base, transportation and developed coastal provinces. For these reasons, some high-tech enterprises have developed in Shaanxi for a period of time, and found that the investment environment, marketing environment and coastal developed provinces are very different, and they have moved. In response to this situation, small and medium-sized high-tech enterprises should raise their macro awareness and plan ahead. Only by improving macro-awareness and making precautions can small and mediumsized high-tech enterprises develop in a sustainable manner and be able to achieve sustainable development in an environment that is in an invincible position in a fierce market competition.

### 7.2. Break through the traditional business model and improve the development mechanism of the enterprise

Under the current circumstances, if small and medium-sized high-tech enterprises want to be bigger and stronger, if they want to make great progress, they must make breakthroughs in the business model, continue to innovate, break through the original model, and improve the enterprise development mechanism. For small and medium-sized high-tech enterprises to have a long-term development, they must be well positioned and must determine the direction of their development. The development direction of the enterprise determines the future development of the enterprise, so small and medium-sized high-tech enterprises must break through the original business model and introduce the sharing concept into the enterprise marketing model. Under the current circumstances, it is necessary not only to break through the traditional business model, but also to further improve the enterprise development mechanism. The introduction of the sharing concept can improve the enterprise development mechanism. The introduction of the sharing concept can improve the methousiasm of employees, improve work efficiency, and maximize the enthusiasm of employees, making management more efficient and convenient.

#### 7.3. Scientific management is the foundation, sharing ideas and creating great cause

In the era of the Internet economy, the concept of sharing takes the role of the Internet to its fullest. The introduction of the sharing concept can not only improve the efficiency of enterprise management, but also improve the competitiveness of enterprises. Under the concept of sharing, the

embedded development model of small and medium-sized high-tech enterprise value chain network is based on scientific management, giving full play to the self-motivation of each employee, giving full play to the development potential of each employee, and bringing potential to work, better enterprise innovation and technology development services.

### 7.4. Do a good job in the embedded development of the value chain network, which can upgrade the product and function of the enterprise

Due to geographical conditions, the development time of high-tech enterprises in Shaanxi Province is short. Although the reserve of professional talents is abundant, the influence of many factors has led to the slow development of small and medium-sized high-tech enterprises in Shaanxi Province. The scale is small and the profits are low. It is difficult to break the bottleneck of low-end locking. Under this circumstance, the embedded development of the value chain network can upgrade the products and functions of high-tech enterprises. The small and medium-sized high-tech enterprises in Shaanxi Province have single product and low-end products, low profit of enterprise products, and the introduction of embedded concept value chain network embedded. The original main value chain has moved from the low end to the high end, thus realizing the high-end nodes of the main value chain. Leapfrogging development has realized the economic benefits of enterprises and the rise of product value, completely breaking through the bottleneck of the original low-end lock.

# 7.5. Sharing concept under the embedded development of the value chain network of small and medium-sized high-tech enterprises in Shaanxi Province, it is inseparable from high-quality employees

If enterprises want to become bigger and stronger, enterprises must be invincible in a complex market economy and cannot be separated from high-quality employees. Today, with the rapid development of the sharing economy, information technology is changing with each passing day. The promotion of the social background requires that employees must raise awareness and learn new knowledge every day. In the information age, the most important change for high-tech enterprise employees is to transform from mechanical operation to intelligent operation. Once employees can't keep up with the rhythm of the times, they will be eliminated by the times. Enterprises must pay attention to the improvement of their own quality, especially the improvement of information technology.

Employees are the mainstay of enterprise development. Only when the quality of employees is improved, can enterprises achieve a leap in management mode and enterprise efficiency can be improved. Small and medium-sized high-tech enterprises in Shaanxi Province should give full play to their own advantages and use their advantages in scientific and technological talents to create more opportunities for employees to learn innovative technologies, so that employees can learn more advanced and innovative technologies to ensure the normal and orderly development of enterprises.

#### 8. Conclusion

Today, with the rapid development of the economy, the concept of sharing has penetrated into every corner of life. For small and medium-sized high-tech enterprises to have long-term development, it is inseparable from the introduction of sharing concepts. Due to its own geographical reasons, small and medium-sized high-tech enterprises in Shaanxi Province need to introduce advanced management models. Under the concept of sharing, the value chain network embedded development path can concentrate resources and maximize the role of various resources, so as to realize the transformation and upgrading of small and medium-sized high-tech enterprises in Shaanxi Province, and realize the leap-forward development of small and medium-sized high-tech enterprises in Shaanxi Province.

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