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Analysis and Countermeasure Research on Influencing Factors of International Scientific and Technological Achievement Transformation

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Abstract: This paper takes the transformation of international scientific and technological achievements as the research object. Firstly, it outlines the relevant content of the transformation of international scientific and technological achievements, then analyzes the influencing factors of the transformation of international scientific and technological achievements, and finally discusses the countermeasures for the transformation of international scientific and technological achievements, so as to improve the quality of the transformation of international scientific and technological achievements, convert more scientific research achievements into China's real productivity, and promote China's social and economic development.

Keywords: scientific and technological achievements, transformation, government

In the process of building a strong science and technology country, we need to actively learn from international advanced scientific and technological achievements and transform them into China's real productivity, so as to improve China's industrial competitiveness and promote China's scientific research achievements to a new level.

1. Overview of International Scientific Research Achievement Transformation

The transformation of international scientific research achievements mainly refers to the large-scale development and application of international advanced scientific research technologies in order to enhance the integration of science, technology and economy and improve the efficiency of productivity, so as to transform them into new scientific and technological products. The transformation of international scientific research achievements can be divided into two types. In a broad sense, it mainly includes the application of scientific research achievements, the improvement of scientific research capabilities and the perfection of the scientific research process. In a narrow sense, it only refers to the application of international scientific and technological technologies in China's industrial production. Generally speaking, the transformation of international scientific research achievements can be divided into two different approaches: direct transformation and indirect transformation. Direct transformation includes independent transformation by enterprise scientific research institutions, industry-university-research collaboration and transformation. Indirect transformation includes technology base transformation, government transformation and foreign business cooperation transformation.

2. Influencing Factors of International Scientific and Technological Achievement Transformation

(1) Maturity

The maturity of international scientific and technological achievements mainly refers to the technical maturity at various stages from scientific research achievements to the final large-scale production. The final large-scale production of international scientific and technological achievements not only requires the advancement and maturity of the achievements, but also requires a certain market demand for the technology and products. Therefore, the maturity of international scientific and technological achievements generally includes two different dimensions: the technical maturity of the achievements and the market maturity. Therefore, if the scientific and technological achievements are not practical, it will bring many strategic risks to enterprise investment. To ensure that technical achievements are practical and mature and avoid potential transformation risks, the transformation of international scientific and technological achievements needs to establish a sound technology incubation system. At present, the quality of China's personnel in international science and technology has not yet reached the international advanced level, and the relevant market cultivation is relatively lagging behind. Therefore, China needs to be cautious in the transformation of international scientific and technological achievements and find industries with mature technical achievements and relevant market cultivation in China.

(2) Personnel Factors

Scientific and technological talents are the basic factors affecting the transformation of international scientific and technological achievements. Talents are responsible for all links from technology research and development to final technology implementation. Therefore, the quality of talents and the rationality of talent resource allocation will have a profound impact on the entire transformation of international scientific and technological achievements. At present, China's scientific and technological talent team is uneven. Although the number of scientific and technological talents is increasing, the quality has not been significantly improved, and the number of international leaders is still scarce. Among the current scientific and technological talents, most are

primary scientific and technological talents, the number of high-end scientific and technological talents is very small, and the number of scientific and technological talents in some top industries is also very scarce. At the same time, most of the scientific and technological talents only know scientific and technological technologies and do not know management and operation, so the number of compound scientific and technological talents is also very small. It can be seen that although China has a large number of talents, it lacks high-end top talents, and the number of leading scientific and technological talents in the international arena is still very small.

(3) Funds

In the process of transforming international scientific and technological achievements, funds are an indispensable and important basic resource. Only a continuous flow of funds can ensure the smooth transformation of international scientific and technological achievements. In recent years, China has increased investment in science and technology, and the government has invested a lot in scientific research, but compared with the demand for the transformation of international scientific and technological achievements, the current funds are still insufficient [1]. At present, China has not established a sound mechanism for the use of funds for the transformation of international scientific and technological achievements. The government has not clarified a regular growth mechanism for such funds, nor has it issued a mechanism for the rational use of these funds, resulting in low efficiency in the use of funds for thie transformation of international scientific and technological achievements, which affects the efficiency of the transformation.

(4) Government

Among the various factors affecting the transformation of international scientific and technological achievements, government policies will affect the efficiency of the transformation. If the government provides standardized policies and preferential tax treatments for the transformation of international scientific research achievements, the efficiency of the transformation will be greatly improved, which is conducive to improving the quality of domestic scientific research. Therefore, the support and stability of government policies have a profound impact on the transformation of international scientific and technological achievements. High-quality guiding policies can not only improve the efficiency of transformation, but also promote the sharing of scientific and technological achievements, help stimulate more beneficial original scientific research results, encourage enterprises to further promote innovation, and mobilize the enthusiasm of scientific researchers to accelerate scientific and technological output. However, China's government policies on the transformation of international scientific and technological achievements are unstable, lack effective regulatory means, lack the courage for policy reform, and lack guidance for high-tech technologies, all of which will affect the efficiency of the transformation of international scientific and technological achievements.

3. Countermeasures for the Transformation of International Scientific and Technological Achievements

(1) Improve Maturity

The maturity of international scientific and technological technologies involves many different details. To improve the maturity of international scientific and technological achievements, various factors must work together. For this reason, China can establish a scientific and technological achievement evaluation mechanism, which can be composed of experts, users, researchers, etc., to correctly evaluate the value of international scientific and technological achievements. Experts can effectively evaluate the scientific and technological value of scientific and technological achievements, and users can evaluate the market demand for international scientific research achievements, so as to improve the maturity of international scientific and technological achievements [2]. At the same time, China also needs to establish a sound international scientific and technological technology incubation system to accelerate the incubation of scientific research achievements. To this end, China needs to establish an incubation system according to its own actual situation, create a good incubation environment, accelerate the promotion of the docking mechanism between incubation and the market, and form a good incubation operation mechanism, so as to improve the maturity of international scientific and technological achievements.

(2) Actively Cultivate Talents

To achieve a good transformation of international scientific and technological achievements, a sound employment mechanism is essential. At present, China has more and more scientific and technological talents, and the number of scientific researchers is also increasing, but there is still a shortage of top scientific research talents. For this reason, China needs to establish the idea of taking talents as the primary resource, and gradually shift to attaching importance to talent incentives and improving talent quality in scientific research assessments. At the same time, China also needs to establish a sound mechanism for introducing foreign talents, creating a good environment for the introduction of foreign talents, so as to solve the shortage of urgently needed scientific research technology leaders and compound talents in China. In addition, China needs to continuously improve the school-running mechanism, establish a talent training mechanism in combination with foreign universities, build a platform for talent introduction, and at the same time cultivate the innovative awareness of talents through internal school-running mechanisms, so as to accelerate the transformation of international scientific research achievements.

(3) Increase Fund Input

To promote the transformation of international scientific and technological achievements in an orderly manner, China needs to continuously invest funds in this field. To this end, the Chinese government needs to create a good financial environment, formulate a fund support mechanism for the transformation of international scientific and technological achievements, clarify the ways and methods of using such funds, so as to improve the efficiency and quality of fund use. At the same time, China also needs to continuously optimize the structure, establish diversified sources of funds, and allow social funds to participate in the transformation of international scientific and technological achievements, so as to form a multi-element fund input mechanism involving various social factors, and promote the transformation of international scientific and technological achievements. In addition, we need to actively cultivate the capital market

for the transformation of international scientific and technological achievements, improve the market access and exit mechanisms, strengthen the control of funds, and ensure the liquidity of funds.

(4) Strengthen Government Support

To promote the transformation of international scientific and technological achievements, the Chinese government also needs to strengthen its guidance in this regard. The government needs to issue a guidance system for the transformation of international scientific and technological achievements, improve the docking mechanism between the transformation of international scientific and technological achievements and the market, and strongly support cooperation between enterprises and international scientific research institutions. At the same time, China can establish a national-level scientific and technological achievement transformation center to select a number of international advanced technologies that can be vigorously transformed in China at the national level, so as to promote the development of China's industries.

4. Conclusion

In conclusion, to effectively promote the transformation of international scientific and technological achievements, we need to continuously improve the maturity of scientific and technological achievements and the market, actively cultivate talents, increase fund input, and the government needs to strengthen support. Only in this way can we improve the level of transformation of international scientific and technological achievements, convert more advanced technologies into China's real productivity, and promote China's economic and social development.

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