

Research on Transformation and Application Driving Mechanism of Scientific and Technological Innovation Achievements in Colleges and Universities

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Abstract: Colleges and universities are an important part of our national innovation system. To improve the efficiency of the transformation of their own scientific and technological achievements, colleges and universities can effectively promote the transformation of the mode of domestic economic development in China. By analyzing the internal relationship between scientific and technological achievements and technological innovation, the types of innovative scientific and technological achievements in colleges and universities in China and the main factors restricting the transformation of scientific and technological achievements, it is not difficult to find that the transformation of innovative achievements in colleges and universities is a complex system engineering. For innovation, the transformation drive needs not only the efforts of the school, but also the joint drive of all the forces of government and society. Therefore, the transformation personnel of scientific and technological innovation achievements in colleges and universities in China need to promote the driving mechanism of the transformation of scientific and technological achievements in colleges and universities, provide suggestions for the implementation of the strategy of transformation of scientific and technological achievements in colleges and universities, and realize the efficient transformation of innovation achievements in colleges and universities in China.

1. The Role and Significance of Universities in the Transformation of Scientific and Technological Innovation Achievements

With the continuous change of social concept in China in recent years, the implementation of innovation-driven development strategy has become an important innovation achievement development strategy established by colleges and universities in China in the new period. As the frontier position of new industry and new technology development, colleges and universities can effectively stimulate the motive force of scientific and technological innovation, effectively promote technological innovation and industrial transformation and upgrading, and play a key role in the strategy. Improving the efficiency of the transformation of scientific and technological achievements in colleges and universities will inevitably release great technological potential and provide strong support for the national scientific and technological innovation and technological progress of our country. At the same time, it can also provide effective guarantee for the social and economic transformation of our country and effectively improve the mode of economic development of our country. At present, the field of scientific and technological achievements transformation in colleges and universities in China has great potential. Therefore, colleges and universities need to deeply explore the application driving mechanism on the basis of the original innovation achievements transformation, and combine the government and social forces to realize the efficient transformation of scientific and technological innovation achievements in colleges and universities together[1].

Colleges and universities play an extremely important role in the innovation, transformation, progress and development of science and technology. Colleges and universities are not only a place to train students' basic abilities, but also a source of research results and technology closely related to the progress of science and technology innovation and technology. With the development of science and innovation technology in China in recent years, China has gradually entered a new era of scientific and technological innovation with a hundred flowers competing and a hundred schools of thought competing. The basic research of colleges and universities plays an increasingly important role in the system of science and technology innovation.

In the transformation of scientific and technological innovation achievements, first of all, colleges and universities have a relatively complete and advanced team of technological innovation and R & D system of technological innovation. Since the establishment of institutions of higher learning, scientific research has been closely related to the research and inquiry activities of institutions of higher learning. Even as institutions of higher learning, which focus on education and teaching, the construction of basic scientific research facilities, as well as scientific research and development activities and technology have become necessary means of auxiliary education in such colleges and universities. At present, the development of domestic institutions of higher learning has formed an innovation system based on scientific research platform. Many institutions of higher learning have set up comprehensive scientific and technological innovation sites, such as scientific research institutions, science and technology science parks, key laboratories of colleges and universities and engineering research centers. These scientific and technological innovation sites cover basic scientific research and applied research, and realize the development of all aspects of scientific and technological innovation. Secondly, colleges and universities are the main source of innovative talents. For our country, the key to building a scientific and technological power is to have an innovative talent team. With the deepening of the concept of transformation of scientific and technological innovation achievements, colleges and universities have gradually taken talent training as the fundamental task of serving the innovation and development of various industries in the country, and intellectual capital and human capital have played a fundamental role in economic development. Finally, colleges and universities have made great contributions to technological innovation and economic development. In recent years, it is not difficult to find out that colleges and universities are the main award-winning institutions of the National Science and Technology Award. Colleges and universities have gradually become the main force to promote the development of social economy, culture and science and technology. Therefore, promoting the transformation of scientific and technological innovation achievements and applying the innovation driving mechanism in colleges and universities can effectively realize the multi-faceted and efficient development of our country[2].

2. On the Transformation and Application Driving Mechanism of Scientific and Technological Innovation in Colleges and Universities

The transformation of scientific and technological achievements in colleges and universities has entered a new period and a new stage, and the transformation of innovative achievements in colleges and universities in China has made rapid progress in the development of domestic economy and society. However, it is not difficult to find out that there are still many institutional problems in the transformation of scientific and technological innovation in colleges and universities in China. Many colleges and universities still have difficulty in getting rid of scientific and technological achievements, making it difficult to evaluate scientific and technological transformation and low economic efficiency. In order to further enhance the transformation effect of scientific and technological achievements under the innovation-driven strategy, technicians can carry out the transformation of achievements and the implementation of the driving mechanism from the following aspects.

2.1. Transformation From Single to Diversified

The transformation strategy of scientific and technological achievements in colleges and

universities driven by innovation must form the basic concept of multiple collaborative innovation based on economic and social development and the technological progress of industry companies. Therefore, the efficient transformation of scientific and technological innovation achievements should give full play to the basic role of independent R & D in colleges and universities, and constantly coordinate the relationship between scientific and technological achievements innovation and the allocation of government and enterprise resources through the use of the main role of government investment and the decisive role of market resource allocation. Actively integrate the existing resources of the market, guide colleges and universities and stakeholders to participate extensively, and establish a common application-driven innovation mechanism. The transformation of diversified innovation achievements is conducive to stimulating the vitality of many disciplines, forming a system of multiple participation and collaborative innovation, which is conducive to the efficient transformation of scientific and technological innovation achievements in colleges and universities in China and the practical implementation of the application-driven mechanism.

2.2. Actively Explore Market-Oriented STI

At present, the state has invested a lot of scientific research funds in colleges and universities. The scientific and technological achievements of colleges and universities are abundant and the scientific and technological achievements are increasing, but the efficiency and economic benefit of the scientific and technological innovation achievements in colleges and universities are very low. Some colleges and universities have insufficient ability to use market orientation, so it is difficult to realize the value of innovation achievement transformation in colleges and universities. There are more and more people behind closed doors in colleges and universities, and the links between the developed scientific and technological achievements and the market are reduced, which lacks practicability and maneuverability. Therefore, it is necessary to break the bottleneck of research methods, change applied research from the free exploration of colleges and universities to market-oriented scientific and technological innovation, and truly integrate the various values of technology. To maintain a social position in the field of scientific research and to follow the development basis in the field of educational scientific research, so as to improve the correspondence and contribution between scientific research achievements and the economic and social development of colleges and universities, and to help form a good situation of mutual benefit and win-win between economy and science and technology.

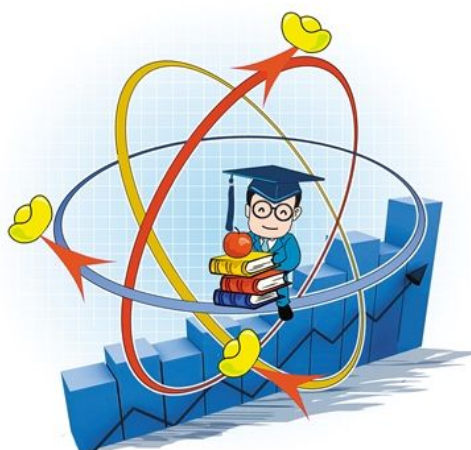


Figure 1 Technological innovation transformation to actively explore market demand

3. Application of Driving Mechanism for Transformation and Application of Scientific and Technological Innovation Achievements in Colleges and Universities

3.1. Actively Promote the National Innovation-Driven Strategy and Strengthen Innovation and Entrepreneurship

For social governments, government innovation drivers need to increase support for STI and R & D. We will focus on supporting the establishment of innovative technology-based research sites for teachers of higher learning, the development of corresponding preferential financial, talent and tax policies, and the provision of funds for scientific and technological innovation sites in institutions of higher learning to translate achievements into new operators' vertical entrepreneurship and large-scale national project cost support based on large-scale national projects, and vigorously support the entrepreneurial projects of university researchers. To further ensure the investment of funds for scientific and technological innovation and the transformation of results, and to increase the budget optimization, use, management, evaluation of the performance of the Fund and other comprehensive work. For the scientific and technological innovation of colleges and universities, it is necessary to continue to increase the investment of funds, invest funds to establish the innovation fund of colleges and universities, provide financial support for large-scale achievement transformation projects with major scientific research achievements, industry relevance and broad market prospects, and use funds to help the further development of the achievements of scientific and technological piercing pipes in colleges and universities.

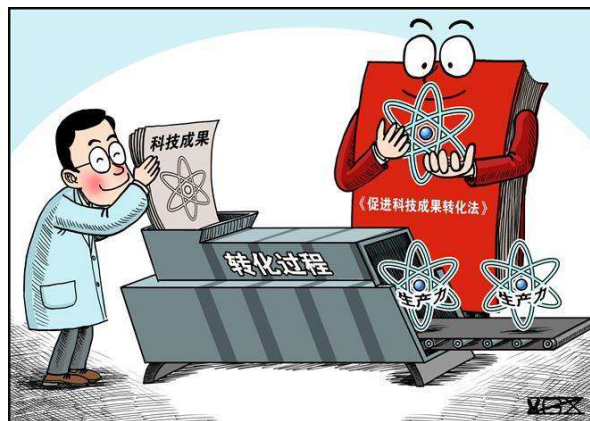


Figure 2 "Midwife "for the transformation of scientific and technological achievements

3.2. Deepening the Physical Reform of Science, Technology and Innovation Management and Promoting the Development of the Driving Mechanism

For colleges and universities, colleges and universities need to deepen the reform of scientific research management and provide positive incentives and support policies for service innovation. Secondly, colleges and universities need to promote the reform of scientific research project management, improve the mechanism of scientific research achievement acceptance evaluation and patent evaluation, establish scientific research achievement archives, actively introduce third-party professional evaluation institutions and implement the common acceptance of many agents. Establish an open assessment and assessment mechanism for classified talents. Establish basic research based on peer assessment and focus on the scientific value of the evaluation results; market demand-oriented applied research, with emphasis on target achievement, assessment of achievement transformation and contribution to develop industry substantially, etc., effectively avoid the academic trend of technological innovation goals. Strengthen the research of innovation theory and improve the ability of university leaders to drive development by innovation[3].



Figure 3 Science, technology and innovation for social development

As an important fulcrum of science and technology and talent transformation and development, colleges and universities should strengthen the research on innovation theory system and strategic planning. It emphasizes the strategic planning and research of science and technology innovation in colleges and universities, and plays a key role in promoting innovation-driven national strategy and sustainable and healthy development of social economy.

4. Concluding Remarks

In general, the key problem of the transformation of scientific and technological achievements in colleges and universities is how to gradually transform from the idea of single transformation to diversified transformation, and how to actively explore market-oriented scientific and technological innovation. Therefore, in the transformation of scientific and technological achievements in colleges and universities, it is necessary to use the power of government and society to promote the transformation and development of scientific and technological achievements in colleges and universities. Colleges and universities need to use the power of all parties, including the university itself, to form a dynamic model to promote the transformation of scientific and technological achievements in colleges and universities, to help the efficient development of scientific and technological achievements in colleges and universities, and to further promote the development of national economy.

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