

Research on the Strategy of Improving the Utility of University Sci-Tech Innovation in the Development of Regional Economy

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ABSTRACT

As an important part of the innovation system, colleges and universities are in an important mission in cultivating innovative talents and social services. The role of scientific and technological innovation in promoting regional economic development has been increasingly important. Based on the analysis of the utility of university science and technology innovation in serving the regional economic development, this paper reveals the existence of university science and technology innovation in the service of regional economic development from the aspects of input and output coordination, linkage between universities and corporate research institutes, and regional economic service. Then, corresponding countermeasures were submitted from strengthening government guidance, optimizing the scientific research environment, establishing an evaluation system, and constructing a service mechanism.

Keywords: *Regional economic development, technological innovation in colleges and universities, utility analysis and improvement*

1. INTRODUCTION

Technological competition is closely linked to the destiny and future of a country or region in the future international competition pattern. It is likewise the key to maintaining national security and enhancing national cohesion. As the main front of talent training, universities have an important influence on scientific research innovation and serve regional economic development, and the status and role of scientific and technological innovation in the overall work of universities are becoming more and more important. In order to accelerate the narrowing of the gap with developed countries, promote the development of the national economy, and improve the overall scientific research level of universities, so as to better serve the regional economic development, it is necessary to enhance the scientific and technological innovation capabilities of universities.

2. ANALYSIS OF THE RELATIONSHIP BETWEEN UNIVERSITY SCIENCE AND TECHNOLOGY INNOVATION AND REGIONAL ECONOMIC DEVELOPMENT

The relationship between university science and technology innovation and regional economic development can be explained as interdependence, mutual promotion, mutual restriction and interaction.

2.1. serve as a source of innovation

Starting from the most basic source of innovation, colleges and universities have directly participated in innovation activities at all stages of economic growth. The first is the training of diverse talents in the research and development of high-tech industries. A large number of their basic research and preliminary research are carried out by universities, and these studies are precisely the important foundation of regional scientific and technological strength; the second is to use their own technology Diffusion to enterprises through technology transfer and technology licensing, thereby creating a regional innovation network, and ultimately forming a close interaction between universities and enterprises, becoming a radiation source of high-tech, providing a steady stream of power for the development of the regional economy; third, fully supporting high-tech In the development of the technology industry, high-tech companies are directly established through the transformation of scientific and technological achievements, and the integration of production,

education and research has become an important part of the high-tech industry.

2.2. Promote emerging industries

The high-tech R&D and innovation capabilities of universities have gradually developed into an industrial chain with an autonomous system. In the context of today's knowledge economy, the innovation and entrepreneurial capabilities of the university's technology industry have had a positive impact on the promotion of regional economic, social, and scientific and technological development. The science and technology innovation system driven by the university science and technology industry has become the mainstay of the upgrading and optimization of the regional industrial structure. Through the research, development and industrialization of cutting-edge technological achievements, it not only encourages the development of emerging industries, but also accelerates the reform and upgrading of traditional industries, making mature technologies more advanced.

2.3. Play the role of incubation

The characteristics and advantages of universities determine that they are very suitable as incubators for technology companies. This incubation is not simply a process of combining teaching, research, and industrialization, but also a process of effective allocation and full utilization of educational resources. By combining production, teaching and research, colleges and universities have formed an optimized brand-new form-school production, learning and research, which strengthen the connection between colleges and the society and shortens the distance between technology and demand. It has a more noticeable effect on promoting the transformation of universities from closed to open, and on teacher reform, which helps to quickly transform scientific and technological achievements into productivity and realize the landing of products. This in turn will have a counterproductive effect on the raising of teaching funds, which will further benefit the improvement of teaching conditions and the investment in high-tech education in colleges and universities, Forming a virtuous circle.

2.4. Cultivate talented team

Scientific research in colleges and universities integrates personnel training and scientific research. These high-level talents must apply the theoretical knowledge and experimental experience learned in school to the practice of scientific research in order to attain rapid economic growth. Colleges and

universities use basic research, applied research, experimental development research, university industry, science and technology parks and other scientific research practices as parallel teaching methods to complete the training of college talents, so as to improve their innovative ability and comprehensive quality. Because of this, colleges and universities are the main departments that provide high-level talents for profitable development.

3. EXISTING PROBLEMS IN THE SCIENTIFIC AND TECHNOLOGICAL INNOVATION OF UNIVERSITIES SERVING THE REGIONAL ECONOMIC DEVELOPMENT

Compared with the requirements of rapid economic progress and fierce market competition, compared with the requirements of modern science and technology development, there are still many problems to be solved in the service of regional economic development in university science and technology innovation.

3.1. Input and output are not coordinated

The structure of basic research funding in my country's universities is unreasonable, and the scientific research potential of universities is far from being released. As the main font for the output of talents and basic research, colleges and universities receive very low research funding and investment. Colleges and universities engaged in basic research accounted for 2/3 of the national basic research personnel, while investment funds flowing into colleges and universities accounted for only 1/3. The serious imbalance between input and output has caused universities to "have more than enough energy" in scientific research projects, and also affected the degree of input of university researchers in scientific research projects, resulting in poor scientific research results, which will ultimately affect the innovation service capabilities of universities. In addition, in order to maintain normal scientific research activities, universities have to embezzle teaching funds to scientific research projects, which will undoubtedly directly threaten the teaching quality of universities and cause invisible suppression of methodical research innovation.

3.2. The linkage between universities and corporate research institutes is not strong

Knowledge innovations can only be regarded as a process. It is imperative to carry out technological innovation and for industrialization on the basis of knowledge innovation and promote economic

development. At present, the role of my country's science and technology intermediary service system is very weak, and the role of "bridge" in the process of landing scientific research results is very insufficient. Whether enterprises have insufficient trust in the science and technology developed by universities to transform into productivity, so they are over-pressing the R&D funding of universities, and even late-stage funding; universities are worried that companies cannot provide long-term stable funding chains, or it is worrying about the protection of intellectual property rights and fearing that companies will leak information about R&D results, and they will often "leave one hand" in the final delivery stage. All in all, because China's science and technology intermediary service agencies have not established a smooth communication and contact system, [3] there have been obstacles in the process of information exchange, dissemination, and the industrialization of results, which has seriously hindered the in-depth development of industry, university and research, and restricted universities and enterprises. Smooth passage and resource integration between research institutes and research institutes.

3.3. Insufficient awareness of economic development in the service area

First, the management departments of universities and scientific research institutions have insufficient understanding of the societal functions of serving regional economic development. [1] The phenomenon of weak market awareness and weak sense of responsibility generally exists in college teaching and scientific management. In scientific research and innovation, pay attention to the foundation, and value theory rather than practice; second, most colleges and universities do not seek financial support in enterprises, and lack of awareness of industrializing scientific research results and implementing the results; third, because universities and research institutes The understanding of the status of enterprises is different, scientific research and management of major issues cannot be continuously deepened, and some follow-up services and exchanges cannot be carried out in a timely manner. This has led to the failure of some systematic research cooperation projects and severely restricted the role of university science and technology innovation in regional economic development. [2] [4]

4. COUNTERMEASURES TO ENHANCE THE UTILITY OF SCIENTIFIC AND TECHNOLOGICAL INNOVATION IN UNIVERSITIES IN THE DEVELOPMENT OF REGIONAL ECONOMY

4.1. Strengthen government guidance and implements policy support

The government must give full play to the leading role of financial investment, increase its investment in scientific research funds in universities, adjust the structure of basic research funds in universities, and ensure that the investment time of in-service researchers is proportional to their corresponding rewards, so that they can focus on the quality of scientific research; It is necessary to introduce relevant policies for cooperation and exchange between universities and enterprise scientific research institutes, increase the protection of intellectual property rights, and use policies as support to smooth the channels between universities, enterprises and scientific research institutes, so as to form a vivid situation of linkage and cooperation; it is to build capital The system closely integrates the market and the technology market, expands the financing and loan channels for university science and technology innovation, introduces various preferential policies, guides the public to pay attention to university scientific research innovation, absorbs funds from all parts of the society, and encourages enterprises to invest in university scientific research projects.

4.2. Optimize the scientific research environment and accelerate the transformation of the results

The first is joint scientific research. Improve the linkage among universities, enterprises, and scientific research institutes on the basis of honest cooperation. Universities should focus on basic research, scientific research institutes should focus on applied research, and companies should focus on how to apply the results to the front line of production, so that the three are orderly and closely linked; the second is Transform scientific research results. The transformation of scientific research results is the most critical step for universities' scientific and technological innovation to serve the regional economy. After universities or scientific research institutes have achieved important phased results. They must quickly seek support from enterprises so that the results can enter the production and market stage. This not only directly served the local economic construction, but also provided a large number of jobs for the local area. At the same time, it also obtained more funds for universities and scientific research to guarantee their sustainable development. The third is to create technology companies. Universities or scientific research institutes can use the form of establishing technology companies as a platform to absorb technology and funds, so as to directly realize the transformation of scientific research results without a third party, which greatly accelerates the

speed of transformation; fourth, further improve the intellectual property protection system and increase The protection of technological inventions and scientific research projects creates conditions for the transfer of intellectual property rights between universities and enterprises.

4.3. Establish an evaluation system and construct a service mechanism

The first is to establish a systematic and effective innovative scientific research evaluation system to break the original highly planned system. [5] Taking into account the special circumstances of the region, actively construct specialized disciplines with regional characteristics. Establish a scientific research evaluation system that is guided by scientific research results, encourages scientific research innovation, and tolerates failures, so as to stimulate the potential of scientific research innovation at a deep level; second, it is necessary to focus on target positioning, according to the different positioning of short, medium and long goals, and reasonably formulate evaluation standards. It is necessary in order to shift the focus of evaluation from quantity to quality. Key scientific research projects must be launched around the difficulties of provincial economic development, market-oriented, and encourage teachers to devote themselves to the transformation of scientific research results. For scientific research achievements with outstanding contributions, it is necessary to increase the material and spiritual rewards to researchers, so as to stimulate the initiative and creativity of scientific research personnel, and in the long run, it will effectively improve the influence and benefits of scientific and technological innovation in universities; third, strengthen basic science popularization Sex education encourages exchanges between colleges and universities in scientific research management, avoids laymen' s leadership, breaks the original rigid and cumbersome system, establishes a knowledge value-oriented income distribution mechanism, and enhances the effectiveness of scientific and technological innovation in colleges and universities.

5. CONCLUSION

In the service of regional economic development, university science and technology innovation can provide a source of innovation for regional economic development, promote emerging industries, play an incubation role, and cultivate talented teams. However, there is still uncoordinated input and output, universities and corporate research institutes. Problems such as weak linkage and insufficient awareness of regional economic development can be improved by strengthening government guidance to implement policy support, optimizing the scientific

research environment to accelerate the transformation of the results, and establishing an evaluation system to improve service mechanisms.

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