Research on the Strengthening Motivation of Knowledge Transfer in China

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Abstract: Since the 21st century, with the advent of the era of knowledge economy, knowledge has become increasingly important in all walks of life in modern society. The knowledge transfer of industry, university and research refers to the process of transferring the knowledge created by universities and scientific research institutions to enterprises and creating new value in them. In short, it is a process of acquiring and supplying knowledge among the three internal subjects. Therefore, this paper will take the reinforcement incentive theory put forward by Skinner as the starting point [1] to study the mode of connecting the knowledge transfer of industry, university and research, mainly involving its definition, influencing factors and models to briefly summarize. reveal the deficiencies under its measures and provide theoretical help for subsequent improvement.

1. Introduction

Since the late 1980s, with the rapid development of the world's economies, the world has entered a period of worldwide attention, that is, the era of knowledge economy has come. Today's state is simply relying on the enterprise's self-innovation has been unable to meet the contemporary enterprise's strong demand for new knowledge, each enterprise must rely on the rich resources from outside, so as to achieve the effect of knowledge transfer, and then to achieve the enterprise's desire for new knowledge. As we all know, the main responsibilities of our colleges and universities are divided into three parts: scientific research, knowledge dissemination and serving the society. At the same time, it is also an important hub belt for the transformation of knowledge productivity into real productivity. Therefore, strengthening the incentive mechanism of knowledge transfer of industry, university and research institutions can transfer their own knowledge to each enterprise, provide opportunities and conditions for enterprises to create new knowledge, at the same time, it can also expand the amount of knowledge storage within each enterprise, and then improve the independent innovation ability of each enterprise. The transfer of industry, university and research knowledge can also bring benefits to both parties. Universities and research institutions engage with businesses through data and funds, facilities and equipment to help them develop technology. Therefore, the transfer of research knowledge is an important and urgent measure for universities, research institutions and enterprises by strengthening the help of incentive theory.

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Figure 1 Transfer of knowledge from industry and research

2. Current Situation of Knowledge Transfer in Cooperation Between Industry, University and Research

First of all, for enterprises at present, the benefit of knowledge transfer of industry, university and research is to be able to use the advantages of high-tech and high-IQ talents and scientific research technology in colleges and universities to solve the technical problems of enterprises, improve the overall quality of employees and the level of management. Secondly, for colleges and universities, it can improve the quality of education and the cultivation of innovative talents, but also improve the conditions of running schools and insufficient funds for scientific research. Finally, for scientific research institutions, knowledge transfer is conducive to faster scientific and technological success and funding for scientific research projects. Although knowledge transfer initiatives are of great benefit to all three parties, many difficulties remain in practice.

From the big point of view: first, the system is not perfect, which leads to the innovation of science and technology can not be carried out smoothly; second, the ideological consciousness of colleges and universities and scientific research institutions is still lagging behind, and can not take the initiative to create a favorable environment for themselves; third, because the current system of science and technology services is not perfect, which leads to the lack of high-tech achievements in the development process and the financial support and college technology.

From a small point of view: first, in the knowledge transfer of industry, education and research, because of the narrow understanding between the subjects, ignoring its important process, resulting in a lot of cooperation in the early failure; second, the knowledge transfer of industry, education and research by enterprises, universities and scientific research institutions combined with intermediary institutions, government and other institutions, the transfer forms led by different subjects may affect their efficiency; Third, although there have been many practical cases carried out by universities and enterprises in China, because the partners are not familiar with the process of operation, resulting in neither the management experience of the enterprise side nor the core technology of independent research and development, and finally face the case of failure.

3. Influencing Factors of Knowledge Transfer in Industry, University and Research

The experimental data show that the knowledge transfer process of industry, university and research institutions will be influenced by enterprises, universities and research institutions. The main factors that affect the success of the transfer of knowledge are the relationship between universities and research institutions and enterprises and the internal marketing management of enterprises.



Figure 2 Schematic diagram of the tripartite co-operation

First, in cooperation with the enterprise, the close relationship with the enterprise will make the school staff psychological fear, they believe that too many close cooperation models may interfere with the academic process of the pursuit of fair, long-term research freedom. Scientific research institutions, universities and enterprises are presented in three different entity states, each of which has different objectives and properties, so it is inevitable to affect or even limit the interaction between the three of them.

Second, in today's highly competitive market environment, most enterprises are not willing to provide some corresponding support to universities and research institutions that have nothing to do with the needs and interests of their own enterprises. Because of the different values, enterprises will not choose to seek and rely on the cooperation of universities and scientific research institutions in the key areas of competition.

Higher education professionals and scientists from research institutions agree that it is necessary to increase communication and contact with each other, but there are also problems in this, which they believe will limit the contact and communication between scientists in the process of cooperation with enterprises. However, through cooperation with enterprises, universities and scientific research institutions can obtain sufficient funds, large amounts of data and perfect equipment and facilities.

4. Specific Measures to Strengthen Incentives for Knowledge Transfer in Industry, Education and Research

The four-helix model measures are effective for the transfer of industry, university and research knowledge. It refers to the four aspects of government to enterprise, which are composed of four main bodies: universities, universities and research institutions, enterprises and intermediary institutions.

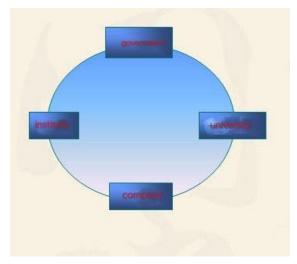


Figure 3 Four helix pattern

4.1. Government

In order to promote the transfer of industry, university and research knowledge to the greatest extent, the government should make full use of policies to strengthen and encourage its operation and improve the quality of public service. Therefore, the government should give full play to its strong promotion role in the process of strengthening the incentive of knowledge transfer of industry, university and research, and provide a relatively complete and feasible guarantee system for all parties in the process of industry, university and research, so that it can proceed smoothly.

The government should speed up the establishment and improvement of relevant policies and systems, as far as possible to attract more scientific research institutions, colleges and universities, as well as enterprises and other institutions to participate in the transfer of knowledge between industry, education and research.

Improve the construction of information platform and improve efficiency as soon as possible. The government must improve the talent pool of universities, enterprises and scientific research institutions as soon as possible, as well as the information of scientific and technological achievements and the needs of enterprises, so as to speed up the improvement of the information platform and ensure that the transfer of knowledge between the main bodies can proceed smoothly.

4.2. Universities and Scientific Institutions

Universities and scientific research institutions should first take the market demand as the basic guidance, and then carry out reasonable development. Because any effective research and development results are actually inseparable from the basic premise of social market.

Institutions and universities need to develop practical and useful mechanisms to reward researchers who have contributed significantly to the successful transformation of results. Colleges and universities and scientific research institutions should strictly follow the relevant regulations of the state to formulate the corresponding methods to those who have made contributions to the scientific research personnel and related personnel to a certain extent of material or spiritual rewards.

Colleges and universities and scientific research institutions and enterprises should strengthen the unity of mutual cooperation consciousness, and try to make all employees realize that cooperation through the transfer of knowledge can not only make their own knowledge level to a new height, but also bring collective economic and reputation benefits, and achieve a win-win situation between the two.

4.3. Enterprises

Enterprises should take the initiative to participate in the cooperation of knowledge transfer of production, education and research, and combine the scientific technology of universities and scientific research institutions with the production and marketing of enterprises.

In the process of knowledge transfer of industry, university and research institutions, actively appeal to their technical problems in the process of R & D, more communication with them, strive to achieve smooth communication between the two sides, promote cooperation.

Intermediary organizations should try their best to establish and perfect transfer information platform, and through the network or initiative to transfer the benefits of appropriate transfer of knowledge, thereby promoting the success of transfer of knowledge.

Intermediary organizations can train some excellent compound talents, mainly for the ability to better understand both universities and enterprises.

Can set up industry, university and research cooperation intermediary organizations, at a higher level to carry out the integration of all kinds of intermediary resources, and through the improvement of service coordination, professionalism and convenience, do a good job, do all kinds of service work.

5. Conclusion

To sum up, knowledge transfer is an important way of innovation and a means for Chinese enterprises to maintain strong competitiveness. In the process of knowledge transfer, industry, university and research institutions can not only successfully transfer the knowledge created by universities and research institutions to various enterprises, but also promote the interaction of talents between the two sides. However, at present, most of them are universities and research institutions to transfer knowledge to enterprises [2], while some special knowledge of enterprises is rarely transferred to colleges and research institutions, and the transfer between knowledge should be two-way. Therefore, it is of great significance to carry out intensive incentive research on knowledge transfer of industry, university and research.

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