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**Faculty of Economics and Management**

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**Diploma Thesis**

**EFFECTIVE MANAGEMENT STRATEGIES FOR  
INNOVATIVE TECHNOLOGY TRANSFER IN THE  
RUSSIAN FEDERATION IN COMPARISON TO THE  
CZECH REPUBLIC**

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## **1 Introduction**

Russia's relation of export energy products and raw materials has already achieved critical level that creates the economic security threat. Country's economy is becoming weaker as affected oil price reduction, outflow of foreign investments and import forces which is the evidence of that the country should go in the direction of technological upgrading and new technologies development.

Creating an innovative economy based on new knowledge, new technology, new management forms is the basis for long-term socio-economic development of the Russian Federation. The effectiveness of implementation of innovation process shall be determined by effectiveness of its instrument - **technology transfer** that is basic foundation for national recovery and fast growth of economy.

In the Czech Republic the development of technology transfer and commercialization system had been apparent for several decades. Comparing Czech innovational infrastructure with Russian, it's obvious that foreign experience in the innovational area can cope with lack of well-functioning innovational infrastructure in the Russian Federation, which consists such master links as tech parks, venture funds, technology transfers and small innovational companies.

## **2 Keywords**

Innovation technologies, research and development, technology transfer, national innovation system, innovation diffusion, strategic management.

## **3 Objectives of thesis**

**Main aims of this research work** are an identification of the mechanism of technology transfer and to elaborate the management strategy for development and enhancement of efficiency in the Russian Federation in comparison to the Czech Republic.

These aims can be achieved through the **set of sub-goals**:

- overall analysis of the origin of the technology transfer process;
- study the innovational infrastructure and technology transfer system of the Czech Republic;
- consider the role and place of technology transfer in innovational economy in the Russian Federation;

- indicate the main problems and disadvantages of Russian technology transfer functioning;
- develop a strategic plan for effective execution and expansion of Russian technology transfer system based on experience of the Czech Republic;
- overview and appraise the perspective development of technology transfers in the Russian Federation.

All these completed objectives will show the true picture of the technology transfer system and innovative infrastructure in the Russian Federation and the Czech Republic and help to create strategy of development for Russia.

#### **4 Methodology**

To achieve these aims it is necessary to use certain methodology. There are number methods and analytical tools have been used in this paper in order to achieve the objectives: **literature research, mathematical method, method of comparison and SWOT-analysis.**

**The literature research** included the scientific works and development of Russian and foreign scientists on the problem of innovative technologies and technology transfer.

Empirical base of the literature research consists of:

- official documents of the authorities, organizations and institutions such as National Innovative Strategy, Annual Innovative Report;
- statistical data as Federal State Statistical Service, Czech Statistical Office etc.

Countries should have sufficient innovative capacity for innovative activity. Therefore, the **mathematical method** for estimating the country's innovation potential is essential. According to Anderson and Warner, it is encouraged to use functional evaluation model for the assessment of innovative activity and competitiveness.

**Method of comparison** requires identification of identical or varying aspects of innovative activity of the Czech Republic and the Russian Federation.

Based on **SWOT- analysis** of the effectiveness of technology transfer will occur in two phases: the first phase – to assess the strengths/weaknesses of the technology transfer system; on the second – to estimate opportunities/threats of the innovative infrastructure.

#### **5 Results of the research findings**

Based off of the thesis sub goals, the following research results can be reported:

1. Technology transfer is an effective tool for implementing the national innovation policy in the framework of the modernization of the country. It stimulates the development and improvement of such elements of the innovation infrastructure as an intellectual organization, virtual corporation, market-intelligent enterprise, technology transfer centers, innovation and technology centers, technology platforms, innovation consulting etc.

2. The experience of most foreign countries testifies to the need for the main components of technology transfer infrastructure: legislative governing the activity of technology transfer; financial support both from the government and from the private sector; experienced and qualified personnel. The Czech Republic has considerable experience in the management of innovation and technology transfer, which is evidence of high indicators of innovation activity.

3. In Russia technology transfer should be considered as one of the main mechanisms for the link between science and production, which should be carried out by professional managers who work in specialized institutions. Today in Russia the processes of transfer and commercialization of technologies are not sufficiently effective, poorly controlled, more expensive and do not provide a regular improvement of industrial enterprises innovation..

4. In Russia, there is no centralized balanced innovation policy that leads to the fact that the processes of technology transfer carried are not effective enough. In addition, government regulations, patent incentives, legal framework, regulating investment activities in the innovation processes in the Russian Federation do not allow actively develop the tools of innovative development.

5. Technology transfer should focus on such internal improvements as creation of cooperation between science and business sector, regulation of legislative acts, integration of the Russian and European technology transfers, creation of venture capital network, development of investment and IP conditions for implementation of technological innovations etc.

5.1. For wide distribution of new production technologies in the innovation economy is necessary to create cooperation of technology transfer with state support, as done in the Czech Republic. In the absence of an alliance in Russia the technology transfer is often performed spontaneously, that does not meet the modern requirements of a competitive economy.

5.2. On the world stage in recent years international integration transformations gain more and more weight, which gradually transformed into independent political and economic structures. The Russian Federation is a participant of association of five major

emerging national economies BRICS, which have the necessary tools to build cooperation in all sectors of industry and to solve practical problems identified by the strategy of economic partnership association of countries. In terms of cooperation the BRICS technology transfer should be considered as a part of networking platform, the main purpose of which government regulation and prospects for development of technology transfer, incentive mechanism of private investment and inter-sectoral cooperation in the framework of a technological platform, the formation of high-tech sectors, and addressing the priority tasks the energy and the industry of Russia and other BRICS countries.

6. Availability of the system of technology transfer and high-tech industries in Russia creates conditions for:

- ensure technological leadership for a number of key areas;
- formation of a complex of high-tech industries and the expansion of positions in the world markets of high technology products;
- increase Russia's strategic presence in the markets of high-tech products and intellectual services;
- the upgrading of traditional industries, including through the deployment of globally oriented specialized production.

At the same time, the lag in the development of new latest generation technologies may reduce the competitiveness of the Russian economy, as well as increase its vulnerability to rising geopolitical rivalry.

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