Chapter 52
Technology Transfer and Innovation Management:
The Brazilian TTOs Challenges

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ABSTRACT

The goal consisted in analyzing the innovation management process and the technology transfer between Industry-University in the TTOs of the public universities in the state of Paraná, Brazil. The research is of Practical Research nature. The approach is qualitative and as a technical procedure it was used the case study. The research analyzed the faced challenges, strategies and actions taken in the TTOs that got a better result in stage 1. It was possible to identify that the offices have highly capacitated in a level of excellency in different areas of graduation, however with difficulties to stablish an internal relationship between its members, professors and research groups from the university. They find it difficult external problems. The government, universities and institutions must create transfer mechanisms connected to the form of the technology demand, innovation and the enterprises characteristics.

INTRODUCTION

The innovation management process and technology transfer is important in a more strategic way to industries and universities. The advances in the industrialization processes demand that the enterprises not only know its capability, but to seek cooperation partnerships in universities and the research centers as well.

This cooperation also allows that the enterprises acquire new knowledge and new academic experiences. The enterprises are capable to follow the fast changes in new technologies and integrate new products in their portfolios (Philbin, 2008).

And so, also the universities have access to different financial sources and a better empiric comprehension about the access to current strategies and the enterprises future ideas (Veugelers & Cassiman, 2005).

The cooperation between industry-university can increase in a significant way the capability of enterprises innovations and to decrease the technological Brazilian deficit in the production area, that in May 2012 was of US$9,98 billion, amount 5,8% above that in the period of 2011. In the first four months of 2012, the amount gathered was of US$ 46 billion, 73% came from the high and average industry's technology commercial deficit and 27% from royalties and licenses, computer and information, according to the data gathered by Protec (Sociedade Brasileira Pró-Inovação Tecnológica).

To face this new challenge, the enterprises need to be always innovating and acquiring new organizational knowledge by new strategic partnerships to keep a constant competitive posture, which is a very complex task to countries under development. These challenges throughout time are hard to overcome by the lack of conscience of the entrepreneurs, by the innovation and protection of intellectual properties made and, also, by the lack of motivation of the masters and doctors in industries. (Freeman, 1991; Sutz, 2000; Sáenz & Paula, 2002; Rozanski, 2003; Solleiro e Briseño, 2003; Pardo & Ortiz, 2010; Piñero et al., 2012; Silva et al., 2012; Silva et al., 2013).

The interaction with this new technological moment comer from the dissemination of new technology, information and means of communication, narrow significantly the existing obstacles in the market and universities (Evans & Wurster, 1997).

Relying on this line of thought, Debackere and Veugelers (2005), stress that the development of an appropriate structure for the cooperation between university and enterprise requires a special attention on the university interests and, above all, business.

According to Federal Innovation Law (n° 10.973), the TTO can be one of the most adequate agents to make possible the innovation and technological transfer, developing the region they are located, having as an objective to promote the innovation and an adequate protection towards inventions made in the internal and external environment of Science and Technology Institutes (STIs) and the technology transfer to the productive area, aiming to integrate it to the community and having contributed to the cultural, technological and social development in that region (Brazil, 2004).

The present research brings to discussion thoughts about the understanding of the innovation management and technology transfer in the TTOs that, in many approaches, don't take into consideration uniqueness of each organization or research center, regions where they act and the internal relationship in the innovation process and intellectual process, having as an objective the development and the innovation in the productive and academic areas.

INNOVATION

In literature, the word "innovation" can refer to a result of an innovative process or innovative process itself (Drucker, 1985). However, to some authors, the specific term is used only for the result of a process or the innovation management, for the activities management that try to control the process of innovation (Drejer, 2002).

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