

ABSTRACT

INTRODUCTION

Science and technology are crucial for development in an increasingly globalised world. Many countries are recognizing the importance of investing in science and technology research, from both public research organisations and the private sector firms, to build their economies. As identified by O Shea et al (2004) economies looking to meet the aim of developing a comparative advantage based on the enhancement and exploitation of the national knowledge base must look to foster university-based entrepreneurship as a central component of their strategy to develop a knowledge-based society (OECD, 1994). New organisational forms and functions that promote research, knowledge and technology commercialisation are emerging, such as technology transfer offices, science parks, incubators and industry-university research centres (Markman et al, 2008). A primary purpose of this paper is to review the extant literature on Technology Transfer Offices in the context of the Triple Helix Model by focusing on the conventional view of TTOs. A second purpose is to outline a new research agenda by applying a strategy process perspective which can enrich our understanding of the operations of TTOs and the role played by TTO directors in the technology transfer process. Our contribution is a research agenda which ties to the strategy process field, centers on strategic planning, strategy formulation, the strategist, and the praxis and practices of strategy process, and which potentially offers a deeper understanding of the role of the TTO in the university industry technology transfer process.

BACKGROUND

To date there has been a growing literature deploying conventional economic models to identify the value of the TTO in the commercialization process (Jensen and Thursby, 2001; Thursby and Kemp, 2002; Markman et al, 2005). There is also considerable literature depicting the key impediments to effective university technology transfer (Siegal, Waldman and Link, 2003; Agrawal, 2001; Cunningham and Harney, 2006; Debackere and Veugelers, 2005; Lockett, Wright and Franklin, 2003). However, in spite of the relative growth of TTO literature there have been substantial calls for further research into a deeper understanding of the TTOs methods, roles and management strategies (Lockett and Wright, 2005; Markman et al, 2008). Colyvas et al (2002) emphasized how there is little understanding of exactly what roles technology transfer offices play in bringing inventions to practice. The paper

proposes to set out a new research agenda for the TTOs focused on the strategy processes behind TTO activities.

TOWARDS A NEW RESEARCH AGENDA

In line with the calls of focusing on TTO management and governance issues, a new research agenda around strategic processes is necessary in addressing key research themes from theoretical and practice perspectives. There are several perspectives on strategy process that are helpful in understanding the issues faced by technology transfer offices namely strategic planning, strategy formulation, the strategist and praxis and practices. A study of this kind would not only further our understanding of TTOs value creation but also highlight the management practices of the TTO Director that support effective technology transfer.

CONCLUDING THOUGHTS

A primary purpose of this paper is to review the TTO literature. Our synthesis of the research confirms that the majority of research on TTOs is at an economic level. However, there have been substantial calls for an investigation into the management practices and governance issues of TTOs. A second purpose of the paper is to suggest a future research agenda. We advocate a broad agenda creating a more insightful view of the role of the TTO by looking at the strategy processes of the TTO. Within this agenda we propose applying the principles of strategy planning and strategy formulation. Consequently the role of the TTO director as the strategist and the praxis and practices involved in strategizing will be a worthwhile avenue for empirical investigation. Thus, the opportunity is here for a deeper understanding of the role of the TTO and their strategy process.