

# Chapter 16

## Relationships Between Universities and Enterprises: The Perspective of Small and Medium-Sized Firms

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### ABSTRACT

*The university-enterprise (U-E) relationship is a topic that has gathered much interest in the academic world. Universities seek to offer services and technology that help firms to build and foster a harmonious U-E relationship, allowing firms to continually renew their involvement in the relationship. This chapter seeks to analyze the role played by various factors—satisfaction, commitment as perceived by firms, perceived commitment by universities, trust, and reputation—in encouraging firms to continually renew their involvement in the university relationship. A questionnaire was produced drawing on a literature review looking at U-E relationships, the results of which were then analyzed using partial least squares – structural equation modelling (PLS-SEM). After analyzing 80 responses from firms involved in U-E relationships, it was possible to conclude that commitment of firms, reputation, and the perceived commitment of the universities are very important in the continuous participation of firms in U-E relationships.*

### INTRODUCTION

The competitiveness among firms has increased dramatically in recent decades in such a way that firms are looking for new technologies and innovations both internally and externally. Complementarily, universities also face new international competition with the increasing mobility of students and the demand for commercial applications for the technologies they develop. For business firms, pressures have

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included rapid technological change, shorter product life cycles and intense global competitiveness that have radically transformed the current competitive landscape (Bettis & Hitt, 1995; Wright, Clarysseb, Lockett, & Knockaert, 2008). On the other hand, universities are feeling the pressure of embracing new knowledge to keep abreast of breakthrough innovation deployed in the business sectors and the challenge of rising costs and funding problems that national governments go through. This is exerting enormous resource burdens on universities that now seek cooperative relationships with business firms to remain at the leading edge in all subject areas (Hagen, 2002).

The establishment of stable relationships between universities and business firms is not new: universities have traditionally tried to commercialize brand new technologies, while firms try to acquire the latest state of the art in basic research (Perkmann et al., 2013). As such, traditional marketing strategies are being replaced by relational ones in which all marketing activities are directed to the establishment, development and maintenance of successful marketing exchanges (Morgan & Hunt, 1994; Moreira & Silva, 2015).

Universities are institutions that are involved in research activities, in the development of new technologies and in the provision of services, which lead to the development of business relationships with their various business partners (Marzo-Navarro, Pedraja-Iglesias, & Rivera-Torres, 2009; Perkmann, Neely, & Walsh, 2011). As such, by turning indifferent customers into loyal clients, universities benefit from creating strong relationships with firms by creating value for their clients. This value creation occurs jointly between the organization and its stakeholders (Morgan & Hunt, 1994). This is not new as it involves inter-organizational activities and working in innovation-based relationships (Moreira & Carvalho, 2015; Schiele, 2006).

University-industry collaborations are a particular type of inter-organizational activities as they refer to the interaction between any parties of the higher educational system and industry aiming at encouraging knowledge and technology exchange (Bekkers & Bodas Freitas, 2008; Siegel, Waldman, & Link, 2003).

Intense global competition, rapid technological change and ever shorter product lifecycles have made the current environment highly competitive. Consequently, firms are under growing pressure to continuously improve their knowledge base and generate new technologies so as to ensure economic prosperity and long-term survival. As universities also face an environment where competition is growing, building stable relationships between universities and their customers (primarily firms) becomes essential for both sets of institutions (Marzo-Navarro et al., 2009).

Innovation and knowledge creation are bind together. One way of firms keeping abreast of technological knowledge is to establish relationships with universities, which are known as being knowledge repositories (Dantas & Moreira, 2011). Over time firms have realized that they must move from a closed innovation process – focusing on internal skills – to an open innovation process, establishing relationships that envisage common goals, risk and cost sharing and the ability to achieve valuable returns for both parties in the relationship (Carvalho & Moreira, 2015). As such, firms look for universities and other technology-oriented institutions to develop new knowledge and increase competitive advantage.

Although the idea of collaborating with academic researchers seems attractive, there are some challenges that come attached. The most notable challenges that surround such relationships are: the organizational and institutional cultural differences, the misalignment of incentives and project management difficulties (Perkmann et al., 2011). As a result, it can be said that university-industry relationships must be adequately structured and managed to be productive. Moreover, Perkmann et al. (2013) demonstrated that these kinds of inter-organizational collaborations involve the active engagement of both parties to

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