


## Chapter 12

# Proposal of Indicators for Intellectual Capital in Higher Education

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### ABSTRACT

*The objective of the chapter is to provide a proposal of indicators of intellectual capital in higher education for the organizations that comprise it. The importance of valuing intellectual capital in educational organizations is to measure their contributions to society, which complement the financial landscape and allow comparison between similar institutions, in order to compare their performance. Therefore, the conclusion of carrying out this process in higher education is 1) providing adequate information on the value of HEIs to society, 2) assessing and directing the response capacity of the organization towards the needs of the productive and services sector (interest groups), 3) orienting the development of the components of intellectual capital towards a knowledge management that allows to solve in an efficient way the problems of the society, and 4) optimizing the human talent of the institution for the achievement of the organizational objectives.*

### INTRODUCTION

Economic globalization has established knowledge as a competitive advantage for any organization, so it has been oriented towards its management based on developing the skills that a person needs to acquire. Thus, the formation of human capital as

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the main strategic resource that allows achieving productivity and profitability of organizations becomes relevant.

Also, as the environment evolved as a result of political, economic, social and technological transformations, organizations began to interact in a global, dynamic and competitive environment, where the only constant is change. In this sense, intangible assets have become relevant because they articulate, strengthen and stimulate internal processes, customer orientation and, as a consequence, an optimal financial result, which, depending on the capabilities and resources of the organizations, allow achieving competitive advantage (Silva, Barahona, & Galleguillos, 2014).

Given this panorama, higher education has acquired a transcendental role in the fulfillment of the training of human capital in the knowledge society. As pointed out by Molina, Arango, and Botero (2010): A key factor in generating competitive capacities of countries in their economic growth and in their social development is the improvement of formal education systems, so it is vitally important that the upper level transforms both its management models and its main teaching function. In this way, it is undeniable that educational institutions assume an important role in societies, becoming a key factor in generating competitive capacities of countries, in their economic growth and in their social development. Therefore, to compete in this scenario, it is necessary that the University as a formative entity of the intellectuality transforms its utopias and its management models.

Thus, higher education, aware of the value that knowledge has acquired worldwide, requires the integration and strengthening of information and communication technologies (ICT) together with the creation of knowledge networks that allow for their exchange (UNESCO, 2009). In this way, higher education is not immune to the changes produced by globalization or the value that knowledge has acquired for the improvement and growth of societies, so its priority function is the production and transfer of knowledge to achieve the transformation of society which allows the positioning of countries and regions in the geopolitical context (Arrieta, Gaviria, & Consuegra, 2017).

Therefore, the highly changing environment has impacted on the role of higher education institutions (HEIs) fostering an evolution from being closed systems to becoming open systems characterized by the generation and transfer of knowledge in connection with research and the main interest groups or “stakeholders”. As mentioned by Etzkowitz (2003): HEIs have become an important economic actor, generating value beginning with their results based on the innovative capacity and the efficient use of investments in research and development (R & D) in the generation of knowledge, and its application for the solution of problems in the countries.

In this sense, Trillo and Fernández (2013) established that the benefits obtained from incentivizing investment in R & D are directly related to intellectual capital

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