

Chapter 25

Entrepreneurial Knowledge– Based Strategies for Organizational Development: A Case of Tecnológico de Monterrey Mexico

José Manuel Saiz-Alvarez
Tecnológico de Monterrey, Mexico

ABSTRACT

Combined with leadership, transformational entrepreneurship led to higher levels of creativity. In this business-related process, knowledge-based strategies have a vital role to play, as they enhance productivity, efficiency, and EBITDA. The objective of this chapter is to analyze which success factors grounded in knowledge-based strategies determine organizational development. To cope with this goal, the author examines how the Tecnológico de Monterrey (Mexico) achieves this objective through a complex entrepreneurial ecosystem described in the chapter. The main finding is that the creation of business incubators and accelerators in higher education institutions fosters transformational entrepreneurship, especially when are linked to technology parks.

INTRODUCTION

Creativity is a transversal skill for lifelong learning and a driver for innovation (Paraskeva et al., 2015). Firms must focus on developing knowledge-based strategies to foster organizational development, especially in global business environments where organizations compete worldwide. Given the existing facilities for better transportation, with the use of safer means of transport, and real-time tools grounded on Information and Communication Technologies (ICT)-based devices, firms are now cooperating in global environments. As a result, they tend to use “glocalism” (think local, global act) to achieve their business objectives, and thus to satisfy their stakeholders.

DOI: 10.4018/978-1-5225-9273-0.ch025

In this process of activity, knowledge-based strategies have a vital role to play, because knowledge is an intangible active for firms. At this respect, Iazzolino and Laise (2016) show that in traditional industries the weight of human capital investments is less than in sectors with low human capital intensity. These “dead knowledge” areas are mainly embedded in physical capital (machines and infrastructures), while nontraditional industries ground in “living experience,” where human resources have a fundamental role.

Higher education institutions (HEIs), and especially universities, are crucial in this process of knowledge-based information acquisition. Resulted from the entrepreneurial focus taught in the classroom, some HEIs have created a complex entrepreneurial network defined by efficiency and social impact linked to social entrepreneurship. As a result, a transformational entrepreneurship has been set up, and consequently, learning communities have emerged. Only internationally known HEIs focused on instilling the entrepreneurial spirit of their students can globally compete to attract the best students and professors. The process of attraction that is stronger when the relation professor-student is around 1:10 in average, which allows offering high-quality teaching standards, especially when the selection process is complemented with higher standards to become freshmen with an average of 90 (out of 100) or higher when enrolled for the first time.

The objective of this chapter is to analyze which success factors grounded in knowledge-based strategies determine HEIs’ organizational development. To cope with this goal, the author explains business innovation linked to the six innovation waves. Second, transformational entrepreneurship emerges as a tool to foster change in organizations by adopting highly-effective entrepreneurial-based practices focused on optimizing the functioning of entrepreneurial networks to highlight the lessons learned to benefit other entrepreneurial centers located in different parts of the planet. Third, to transform societies efficiently and profoundly is vital to creating entrepreneurial ecosystems. At this respect, the author points to the entrepreneurial ecosystem of the Tecnológico de Monterrey in Guadalajara (Mexico) to highlight the importance of using transformational entrepreneurship as a tool for changing HEIs and societies. Fourth, the author discusses how leadership, cooperation, and private treatment determine the success of an organization from a human resources vision, and analyzes the keys for the market niche diversification and enlargement. The book chapter ends with some conclusions, perspectives, and future research lines.

BACKGROUND

The Six Innovation Waves

Since the First Industrial Revolution (from about 1760 to 1840), six waves of innovation can be distinguished

1. *Technology-Driven Innovation*, linked to a scientific breakthrough, consists of a new combination of technologies to create new products (Maarse & Bogers, 2012). When firms dispose of a sustain technological capability, they tend to create specialized discontinuous products defined as technologically drastically advanced, and yet not fully perceived as different by final consumers and users.
2. *Market-Driven Innovation*, when firms target their policies to satisfy the needs of key markets. Four principles ground Market-driven Innovation (Sullivan, 2009). First, to understand market segments and requirements needed to target the most attractive market niches for growth. Second, to

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/entrepreneurial-knowledge-based-strategies-for-organizational-development/231203

Related Content

Taming of 'Openness' in Software Innovation Systems

Mehmet Gencer and Beyza Oba (2021). *Research Anthology on Recent Trends, Tools, and Implications of Computer Programming* (pp. 1163-1178).

www.irma-international.org/chapter/taming-of-openness-in-software-innovation-systems/261074

Free and Open Source Tools for Volunteer Geographic Information and Geo-Crowdsourcing

Maria Antonia Brovelli, Blagoj Delipetrev and Giorgio Zamboni (2018). *Emerging Trends in Open Source Geographic Information Systems* (pp. 1-32).

www.irma-international.org/chapter/free-and-open-source-tools-for-volunteer-geographic-information-and-geo-crowdsourcing/205154

Guidance Algorithm for Unmanned Aerial Vehicles on a Basis System of Technical Viewing

Oleksii Pikenin and Oleksander Marynoshenko (2019). *Cases on Modern Computer Systems in Aviation* (pp. 202-220).

www.irma-international.org/chapter/guidance-algorithm-for-unmanned-aerial-vehicles-on-a-basis-system-of-technical-viewing/222190

3D Medical Images Compression

Mohamed Fawzy Aly and Mahmood A. Mahmood (2021). *Research Anthology on Recent Trends, Tools, and Implications of Computer Programming* (pp. 1046-1067).

www.irma-international.org/chapter/3d-medical-images-compression/261068

Machine Learning Models for Forecasting of Individual Stocks Price Patterns

Dilip Singh Sisodia and Sagar Jadhav (2018). *Handbook of Research on Pattern Engineering System Development for Big Data Analytics* (pp. 111-129).

www.irma-international.org/chapter/machine-learning-models-for-forecasting-of-individual-stocks-price-patterns/202837