Chapter 7
Promoting Lean Innovation for SMEs: A Mexican Case

José Luis Solleiro
Universidad Nacional Autónoma de México, Mexico

Rosario Castañón
Universidad Nacional Autónoma de México, Mexico

Claudia Gaona
Consejo Nacional de Ciencia y Tecnología, Mexico

ABSTRACT

In Mexican SMEs the IDB, COMECYT and CONACYT have sponsored innovation. Target firms belong to priority manufacturing and service sectors and they have been supported through providing technical assistance to generating technology-development projects and innovation-based networks as well as matching funds for those projects. Over 150 Mexican SMEs participated in this effort in the period 2011-2013 to build and implement innovation agendas with the assistance of innovation managers. This paper includes an analysis of participating firms, their perceived technology needs, their openness to collaborate with actors of the innovation system and their abilities to identify goals, formulate proposals and implement specific projects. The conclusion is that success of innovation policies in developing countries is highly dependent on previous experience and learning abilities of firms. Finally, some recommendations are drawn for building capacities at the firm level as well as for strengthening innovation policies aimed at involving and technologically upgrading SMEs.

DOI: 10.4018/978-1-5225-0135-0.ch007
INTRODUCTION

Located in the central part of Mexico and because of its population and contribution to Gross Domestic Product (GDP), the State of Mexico is one of the most important states in the country. Most of the State’s economic activities are highly concentrated in the surrounding areas of Mexico City (40 out of 125 municipalities), thus a great portion of the State is closely linked to Mexico’s capital city.

Micro, small and medium-size enterprises (MiSMEs) play a key role in the State’s economy. More than 99% of businesses in the State of Mexico pertain to this category; large organizations in the State account for only 0.2% of overall business entities (919 firms from a total of 585,292). Micro enterprises create 48.2% of all jobs, small and medium-size enterprises 28.8%; and large ones, around 5%.

Despite its economic significance, the State of Mexico is below the average of an amid of competitiveness indicators. According to a survey by the Mexican Institute for Competitiveness (IMCO, Instituto Mexicano para la Competitividad) the State ranked 28th out of 32 states in 2010. Just recently, in 2012, in surveys on systemic competitiveness the State of Mexico ranked 15th in Mexico.

The Ministry of Economic Affairs, on the other hand, put together an Innovation Index where the State of Mexico ranked 17th among states around the country. The Innovation Index shows how innovation is being considered as the driving force for economic growth and prosperity.

On the other hand, the Regional Innovation Report by OEDC (2009), shows that the greatest percentage of the State of Mexico’s gross value added (GVA) comes from medium to low-technology sectors. Low-technology industries accounted for 41.9% of the GVA, whereas those with a medium-technology 23.3%, and high-tech, 8.8%

Prior data shed light on the fact that the State of Mexico’s performance has room for improvement in several fields such as: capacity building, infrastructure, technology training, business sophistication and innovation.

To strengthen competitiveness a top strategic priority would be to encourage innovation through greater investments by the private sector in areas such as research and development (R&D) and by increasing cooperation ties among organizations, research centers, universities and the government, alike.

Under this framework, the Program called Development of State Innovation Systems in Mexico (SEI, Desarrollo de Sistemas Estatales de Innovación en México) was created by the State of Mexico’s Council of Science & Technology (COMECYT, Consejo Mexiquense de Ciencia y Tecnología) backed-up by the Inter-American Development Bank (IDB), through its Multilateral Investment Fund (FOMIN, Fondo Multilateral de Inversiones) and the National Science & Technology Council (CONACYT, Consejo Nacional de Ciencia y Tecnología).

According to patronage states, outside reviewers and users alike, during its three years in operation the outcome by SEI was successful. The SEI program has gained enough experience so as to serve as a role model that can be rolled-out to other states around the country.

Throughout this document the SEI program’s experience is analyzed, identifying success factors and obstacles for the establishment of an innovation agenda, as well as major issues for the implementation of related government policies. Based on this analysis a series of recommendations will be made to enable similar projects in other states around the country and improve the effectiveness in the fostering of SMEs-oriented State Innovation Systems.

Given the active role that some authors have given to this document, the approach to the SEI Program after such analysis is that of “research– action”, in which change is encouraged and lessons learned emerge at the same time from the process.
Related Content

The Effect of R&D Cooperation on Organizational Innovation: An Empirical Study of Portuguese Enterprises
[www.igi-global.com/chapter/the-effect-of-rd-cooperation-on-organizational-innovation/130529?camid=4v1a](www.igi-global.com/chapter/the-effect-of-rd-cooperation-on-organizational-innovation/130529?camid=4v1a)

IT Security Risk Management Model for Cloud Computing: A Need for a New Escalation Approach
[www.igi-global.com/article/it-security-risk-management-model-for-cloud-computing/106896?camid=4v1a](www.igi-global.com/article/it-security-risk-management-model-for-cloud-computing/106896?camid=4v1a)

Exploring the Dynamics of an Energy Service Venture
[www.igi-global.com/chapter/exploring-the-dynamics-of-an-energy-service-venture/176265?camid=4v1a](www.igi-global.com/chapter/exploring-the-dynamics-of-an-energy-service-venture/176265?camid=4v1a)

The Role of Creativity (And Creative Behaviour) In Identifying Entrepreneurs
Debbie Richards, Peter Busch and Ayse Bilgin (2010). *E-Entrepreneurship and ICT Ventures: Strategy, Organization and Technology* (pp. 149-168).
[www.igi-global.com/chapter/role-creativity-creative-behaviour-identifying/41153?camid=4v1a](www.igi-global.com/chapter/role-creativity-creative-behaviour-identifying/41153?camid=4v1a)