

Chapter 10

Building Industrial Clusters in Latin America: Paddling Upstream

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ABSTRACT

Analysis of more than 20 projects for clustering small and medium enterprises and supporting organizations in different Latin American countries has uncovered a number of barriers, activities, structures, strategies, policies and procedures that impact competitiveness. These factors mean that there are different appropriate industrial cluster and industrial business models appropriate for the social, economic, and business conditions of the Latin American region. It is difficult to transfer successful practices from industrialized countries to developing regions with a light adaptation, because it is impossible to have “clustering readiness” when resources are scarce, regional and industrial conditions are hostile, and associated capabilities of the participants of clustering are poor or nonexistent. These conclusions are supported by applying a methodology designed by the authors to identify global opportunities and formulate viable cluster structures, capable of converting isolated scarce resources in difficult situations, into world-class regional value propositions.

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INTRODUCTION

From the analysis of numerous successful cases in industrialized countries, we have found that most of them have been strongly supported by well articulated clustering organizations and a proper governance of effective national innovation systems. Is this organizational structure working on the Latin-American industrial environment?

Since the publication in 1990 of Michael Porter's book, *The Competitive Advantage of Nations*, the cluster approach has been broadly spread and applied in two particular directions. The first one is on the academic world because it has served as a new label for older concepts like the economy of agglomeration. The second one is oriented toward policy circles as an instrument for supporting industrial sectors and regions (Maier, 2007). However, as the term is openly extended, a universal definition doesn't exist. Thus, for the purposes of this article, we define a cluster as a "spatial agglomeration of similar and related economic and knowledge creating activities" (Teigland, Lindqvist, Malmber, & Waxell, 2004), or as "poles of competitiveness" (Cohen, 2007) using the French approach.

It should be recognized that the cluster approach is based on four broad assumptions. First, in today's economy, the ability to innovate is more important than cost efficiency in establishing the long-term ability of enterprises to grow. Innovation is defined broadly here as the ability to develop new and better ways to organize the production and marketing of new and better products and services (Grant, 1996; Lundvall, 1992; Nelson, 1993; Nonaka, 1994; Porter, 1990). This does not mean that cost considerations are irrelevant, but simply, that the combined forces of market globalization are enhancing the real impact of knowledge as an intangible resource and learning as a production process.

Second, innovations frequently occur as a result of a linked interaction between multiple elements, rather than an effort of an isolated

individual (Håkansson, 1987; von Hippel, 1988; Lundvall, 1992). This fits with a Schumpeterian view of innovation as a new mix of already existing knowledge with organizing production process and entering new markets in unconventional ways by improving or redesigning goods (Schumpeter, 1934). All of this confirms not only the statement that organizations can't compete as lone agents but also that system interaction is needed in order to shape the innovation process. This is a key factor regarding the interaction of different players and regional conditions on a cluster organization.

Third, geography is an important factor because agglomeration empowers face-to-face interaction, trustful relations between various actors, easy observations, creation of a brand and the possibility to perform immediate benchmarks (Malmberg & Maskell, 2002). Furthermore, spatial proximity enhances innovation interaction, learning process and value creation, where it has to be recognized that the empowerment drivers for these phenomena are participants such as universities, research centers and new venture capitals.

The fourth and final implication is that local industrial structures with many firms tend to activate processes which create not only a dynamic flexibility, but also a learning process and innovation. In such environment, chances are greater for an individual company to get in touch with agents that have developed new technology. Furthermore, the flow of industry related information and knowledge is to the advantage of all firms involved (Malmberg & Maskell, 2002). Moreover, Malmberg and Maskell (2002) foster the impression that reasons exist to believe that the knowledge structures of a given geographical territory are at the same level of importance than other characteristics, such as raw material input supplies, production costs, regulations, etc., when it comes to determine where we should expect economic growth in today's world economy.

When it comes to observe the four broad assumptions explained above, but within the Latin American (LA) environment, economic accelera-

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