

# Chapter VII

## Knowledge Management in SMEs Clusters

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### ABSTRACT

*This chapter highlights the necessity of establishing relationships with other companies and external agents in order to empower the creation and diffusion of knowledge, through factors such as innovation. Likewise, the influence of geographical and territorial factors will be studied in the context of this economy. SMES normally work and are immersed in particular geographical regions so this chapter will analyze the particular case of knowledge generation and sharing in SMES clusters as an essential source of competitive advantage. A new organizational form will be suggested in order to make possible the creation, transfer and sharing of knowledge in supply chain of SMES clusters. In this sense, a network functioning model is finally proposed.*

### INTRODUCTION

In recent years, the balance between knowledge and resources has changed so dramatically in the developed economies that the former has become

the most decisive factor in relation to standard of living. Knowledge has become even more important than traditional resources such as land, machinery and work. However, the existence of economic systems based on small and medium

enterprises (SMES) represents an important barrier for transition to take place from traditional economies to those based on knowledge.

It is important to distinguish between the individual and the organizational level of competences. The individual competences are necessary, but not sufficient, for organizational competence. A high level of organizational competence requires mechanisms to facilitate the conversion of individual, or tacit knowledge, into explicit organizational knowledge, as can be seen in some of the most important Knowledge Management models, particularly in Nonaka and Takeuchi's (1995).

But, besides the organizational level itself, the importance of the external sources of competence and knowledge must be borne in mind, especially in the case of the SMES, which lack the potential, size and resources to be self-sufficient in this area. It is extremely important to establish the necessary mechanisms to acquire new competences and knowledge from outside sources. These range from the recruitment of staff to the interaction with other organizations such as, consultants, clients and suppliers, other firms, universities or research centres, training organizations, banks or public administrations.

For these companies, cooperation with others of their same size or larger is a strategic alternative that allows them to take benefit of the competitive advantages of the companies with which they have decided to associate themselves. If these agreements are carried out among a large number of companies, they can knit a lattice of relationships that create compact networks through the links established.

In order for this configuration to take place, the existence of an environment which guarantees a series of factors that allows for this configuration and Knowledge Management among the participant companies becomes necessary. In the particular case of SMES, the fact that the companies are located in a certain territory can favour greater product specialization, greater flexibility

and a considerable increase in competitiveness. The grouping in function of a group of abilities, knowledge, technologies or markets, can be a catalyst that impels the innovative process in companies. In this case, the existing implicit knowledge in a territory plays a vital role, by means of the establishment of mechanisms of collaboration and participation, formal or informal, of the different public and private agents of the territory.

This chapter will analyze the particular case of SMES located in a certain territory, forming clusters or industrial districts. Firstly, a brief literature review about Knowledge Management at an inter-organizational level will be carried out. The particular case of industrial districts of SMES will be dealt with, studying the importance of the network concept in order to improve the Knowledge Management process at this level. A new organizational form, based on the Virtual Enterprise will be lastly suggested in order to make Knowledge Management possible in this specific case. A dynamic knowledge network will be proposed, represented within a mechanical analogy, in order to better understand the Knowledge Management process.

## **RELATION BETWEEN KNOWLEDGE MANAGEMENT AND THE ORGANIZATIONAL AND ENVIRONMENTAL CONTEXTS**

There is a strong interrelation between knowledge and the organizational and environmental contexts, since it is precisely in this area that knowledge will be generated, so that their features will have an influence on the way in which it is created, transmitted and used.

Each specific context will require a different form of Knowledge Management, as well as different support systems for this management. This becomes even more evident when we go outside the limits of a simple organization and talk about

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