Chapter 72

Knowledge Management in SMEs:
A Mixture of Innovation, Marketing and ICT: Analysis of Two Case Studies

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ABSTRACT

Global economy is transforming the sources of the competitive advantages of firms, especially for firms embedded in local manufacturing systems. Based on the theoretical contributions to knowledge management and industrial districts, this paper describes alternatives firm's strategies and upgrading options by exploring the relationships among innovation, marketing and network technologies. Starting from the analysis of the global competitiveness report and the European Innovation Scoreboard, this paper focuses on the case of firms specializing in "furniture and textile" industries (fashion, mode, home products) to outline a framework explaining the new competitive opportunities for SMEs. Through a qualitative analysis, this paper presents two case studies of French firms that promote successful strategies based on a coherent mix of R&D based innovation, experienced marketing and design, by leveraging on ICT.

INTRODUCTION

Global economy is transforming the sources of firms' competitive advantages and especially for firms embedded in local manufacturing systems. As in the case of France, small and medium enterprises (SMEs) localized in industrial districts

and specializing in low or medium-tech industries have built their success on productive flexibility, quality certification and incremental innovation. Literature on industrial districts has provided evidence of the sources of competitiveness of local systems (Porter, 1990). As opposed to large multinational corporations, district SMEs emphasize an alternative model of economic organization (Porter, 1998), in which external economies

support distributed production processes within the local networks of firms. From this perspective, on the one hand, scholars focused on the advantages offered by proximity in terms of technology spillovers and economic externalities (i.e., Krugman, 1991) (collective goods). On the other hand, studies on the knowledge economy (Arora et al., 1998) consider industrial districts as knowledge management systems, where the local context is able to sustain and facilitate creation, exploration and exploitation of knowledge, rooted into social practices (Nonaka and Takeuchi, 1995).

In the actual environment, SMEs are now facing competitive forces that impact on the sustainability of their strategies in the next years. First, manufacturing internationalization pushes firms operating in local supply chains to extend their networks beyond local boundaries to catch the opportunities of global value chains (Gereffi et al., 2005). While, on the one hand, a growing part of local productive activities may be transferred internationally with cost advantages, on the other hand, those paths may reduce a small firm's control over economic processes with negative influence on learning-by-doing innovation.

A second major challenge refers to the development and management of sales networks on a global basis, in a framework of stronger connections with the market. As many scholars have outlined, the interaction between customers and the firm through sales networks, as well as the web, is crucial in order to understand the market and anticipate demand trends. More important, building relationships with active customers (lead users and communities of customers) is part of a firm's innovation strategy, to obtain profitable knowledge for product and brand management (i.e. Sawhney, Prandelli, 2000). From this perspective, SMEs have to improve their competencies in interaction with customers at the international level, overcoming local, social and cultural boundaries as well as their traditional manufacturing approach. Such strategic options require more sophisticated marketing competencies, which are not usually available within SMEs operating in local productive systems.

Thirdly, the evolution of information and communication technologies (ICT) contributes to the debate about the transformation of the district firm model and the advantages of local embeddedness. Global supply chains and international commercial outlets ask the firm to increase control on processes at the organizational level and within the firm's extended value system. From this perspective, network technologies can strengthen information sharing, process transparency and interaction among players in the value system (final customers included). Large multinational companies were able to fill the gap with the flexible SME model in the 1990s, thanks to network technologies. These tools supported distance cooperative work, also increasing process monitoring, knowledge management and communication within a renovated firm model (Scott Morton, 1991). In the present scenario, SMEs are asked to update their strategies benefiting from network technologies. SMEs have to overcome the local environment as the prime source of innovation –local tacit knowledge mainly manufacturing-oriented and informally managed- by developing new capabilities to manage extended networks including research centers, designers, and customers.

Based on the theoretical contributions to knowledge management and industrial districts, this paper describes alternative firm's strategies and upgrading options by exploring the relationships among innovation, marketing and networks technologies. The paper focuses on the case of firms specializing in "furniture" and "clothes and shoes" industries (fashion, mode clothes, and equipments, home products) to outline a framework explaining new competitive opportunities for SMEs. Our hypothesis is that the learning-by-doing innovation model that has characterized district firms in the past is no longer sufficient to sustain their competitive advantage. The RD based innovation, efficiently adopted in large corporations, can offer new strategic options to

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