

Chapter 6

The Role of Knowledge Management Strategies in Cooperation Agreements

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ABSTRACT

In this chapter, the role of knowledge management strategies (KMS) in cooperation agreements is analyzed in a technology-intensive company. Knowledge management in alliances implies to establish an organizational design to both explore and exploit knowledge for achieving competitive goals (for each partner). The importance of alliances for technological companies and the necessity of designing suitable KMS in alliances—in terms of objectives and goals, knowledge management tools, and support systems—are explained first of all. Moreover, the analysis of a case study on KMS in the alliances of a high-tech Spanish company with businesses in innovation intensive settings is developed by the authors. Finally, this chapter will conclude with a discussion on the way that the implementation aspects concerning KMS in cooperation agreements have been managed by the company in order to support technology development and product diversification.

INTRODUCTION

The interest in alliances and cooperation agreements has grown among strategic management scholars over the past 25 years (Grant & Baden-Fuller, 2004; Meier, 2011; Yang, Zheng, & Zhao, 2014). In particular, the strategic management literature has recognized alliances as a source for firms to acquire and improve their knowledge-based capabilities in current innovation-intensive environments (Oxley & Sampson, 2004). Alliances can thus operate as a mechanism for firms to develop a competitive advantage, outperforming their rivals by means of the company's proven access to economies of scope

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and scale, complementary capabilities and knowledge, the possibility of competing in new markets, the improvement of their learning capacity, or the sharing of costs and risks of R&D projects, among other reasons (Saxton, 1997; Ireland, Hitt, & Vaidyanath, 2002; Luo, 2008).

A Knowledge Management Strategy (KMS) is considered in this chapter as one of the main factors in order for firms to achieve these objectives and build collaborative advantages through cooperation agreements (or alliances). Managing organizational knowledge in alliances involves working on the best possible strategic design to create, acquire, maintain, transfer and apply organizational knowledge developed or acquired amongst the partners in order to achieve competitive goals (Guadamillas, Donate, & Sánchez de Pablo, 2006).

A clear relationship exists between cooperation agreements and the way KMS are established by firms in order to obtain specific knowledge outcomes. For instance, Lane and Lubatkin (1998) and Stuart (2000) contend that the main objective of partners in a technological alliance is inter-organizational learning, as a consequence of the difficulty faced by each partner in terms of internally solving their competitive challenges. Inter-organizational learning is based on the absorptive capacity of the company, which represents its ability to assess, assimilate and use the external (acquired) knowledge (Cohen & Levinthal, 1990; Lane & Lubatkin, 1998). For that learning to take place, an adequate KMS has to be developed to effectively exploit the flows of knowledge that are produced in the cooperation agreement through absorptive capacity (Grant & Baden-Fuller, 2004). In doing so, the development of innovations will speed up, thus making its implementation over a short period of time possible, ultimately leading to important advantages for the firm whilst encouraging a superior level of learning (Stuart, 2000).

In order to effectively manage a cooperation agreement, organizational and technical aspects have to be taken into account: the use of information technology (IT) and the systems that make the access to knowledge easier, the organizational culture that fosters innovation development and ethical and responsible behavior, and human resources (HR) practices. All of these make the establishment of a coherent structure for knowledge management in cooperation agreements a complicated issue (Schmaltz, Hagenhoff, & Kaspar, 2004; Guadamillas et al., 2006).

Other important problems also arise in cooperation agreements, which make the effective development of collaborative activities and knowledge sharing complex issues. Meier (2011) summarizes all those aspects influencing (intra and inter-organizational) knowledge outcomes such as:

1. The characteristics of knowledge;
2. Those of the alliance partners;
3. Those of their interaction and relationship; and
4. The way knowledge management is developed in the alliance (active knowledge management).

Taking into account these issues, in this chapter we attempt to analyze the KMS of companies involved in cooperation agreements, and in particular, a number of aspects related both to the sharing and transmission of knowledge from the *knowledge-based view of the firm*. The role of technical and organizational factors in these processes will be thus analyzed in relation to culture, HR practices, and the management of IT systems.

This chapter will be structured as follows: Firstly, the importance of KMS for individual companies in alliances in order to develop a collaborative advantage and obtain important returns on their R&D investment will be explained. Secondly, we shall analyze the importance of organizational and strategic aspects that are involved in this process, stressing those factors that make the effective transmission and

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