Chapter 10

INTER-ORGANIZATIONAL KNOWLEDGE TRANSFER AS A SOURCE OF INNOVATION: THE ROLE OF ABSORPTIVE CAPACITY AND INFORMATION MANAGEMENT SYSTEMS

Stephen S. Cohen\textsuperscript{a} and Cinzia Dal Zotto\textsuperscript{b}

\textsuperscript{a}Berkeley Roundtable on the International Economy (BRIE), University of California at Berkeley, Berkeley, CA 94720; \textsuperscript{b}Jönköping International Business School, P.O. Box 1026, SE-551 11, Jönköping, Sweden

1. INTRODUCTION: THE STRUCTURE OF THE PROBLEM

The radical improvements and massive diffusion of information and communication technologies within the last decade have fostered the development and exchange of new knowledge. Firms realize that they now compete in their abilities to access, acquire and appraise new information in order to enhance their innovation capacity by applying it. Davenport and Prusak (1998) note that though spontaneous and unstructured transfers of knowledge routinely take place across organizational and geographical boundaries, independently from the management of the process, companies are now expected to have well defined systems of knowledge management. A substantial literature addressing the competitive dimensions of information management is, therefore, developing. The important and not yet solved questions concern the conditions needed for effective information and knowledge transfer and how to establish them (Zahra and George, 2002). The exploration of these conditions is the principal concern of this essay which studies three very different kinds of firms: new, venture firms (our principal focus); serial acquirers (Cisco), operating at scale in world markets but rooted in a local ecology of venture firms, and Japanese majors, such as Toshiba, NEC and Fujitsu operating, in their rapid growth period, far from such an environment.

The effectiveness of organizational knowledge transfers is, of course, facilitated by the capabilities of the transferring and the recipient organizations to use what are, by now, more or less institutionalized transfer mechanisms such as licensing agreements, strategic alliances, mergers and acquisitions (Bahgat,
Kedia, Harveston and Triandis, 2002). If the existence of such mechanisms is the first condition to facilitate knowledge transfer, an even more important condition for the recipient organization is to possess appropriate absorptive capacity in order to locate, obtain, assimilate and apply such knowledge (Cohen and Levinthal, 1990, Leonard, 1995, Dyer and Singh, 1998). In particular, the ability to accumulate new knowledge constitutes a driving force in the development and growth of young firms (Penrose, 1959, Spender, 1996, Grant, 1996). Knowledge acquisition, if the knowledge is new for the recipient, opens new “productive opportunities” (Penrose, 1959) and enhances the firm’s ability to exploit these opportunities (Yli-Renko, Autio and Sapienza, 2001). As young firms usually are resource constrained their development and growth is especially dependent upon innovatively combining their own specific knowledge with that of external partners (McDougall, Shane and Oviatt, 1994, Yli-Renko, Autio and Sapienza, 2001). Through inter-organizational relationships firms can get access to external knowledge and combine it with existing knowledge (Yli-Renko, Autio and Sapienza, 2001). The firm needs partners and an important potential partner to start with could be a Venture Capital firm.

In this paper we first focus on the relationship between the Venture Capital firm and its Portfolio Companies. Our premise is that the more absorptive capacity both of the partners develop, the more likely it is that knowledge is transferred, assimilated and utilized as a basis of competitive advantage for both partners within the relationship—as absorptive capacity allows information to be assimilated, networked, transformed into knowledge and applied. Absorptive capacity and therefore knowledge transfer is enhanced by a suitable information system to manage demand, supply and application of existing information within the entrepreneurial network. Furthermore knowledge transfer depends upon the motivation of the Venture Capital firm to invest tangible and intangible resources in its portfolio companies and the motivation of the young firms to cooperate with their investors. This motivation stimulates the development of absorptive capacity. Prerequisites to enhance both motivation and absorptive capacity are the existence of a similar knowledge base, experience in the relevant field, and trust in the truth of exchanged information between the partners.

Analysing the relationship between a VC firm and its Portfolio Companies allows us to focus on the phenomenon of absorptive capacity, to tune its precision as an instrument and link it to the concepts of information management and knowledge transfer. However, this is insufficient to develop a more generalized concept. One way to advance towards that end is to study the more general cooperation and merger & acquisition activities and especially the premises and techniques of information management in M&A processes. The structure of the problems arising from these activities appears sufficiently similar to those existing within the relationship between the VC firm and its