

## Chapter 65

# The Relevance of Customers as a Source of Knowledge in IT Firms

**Laura Zapata Cantú**  
Tecnológico de Monterrey, Mexico

**José Luis Pineda**  
Tecnológico de Monterrey, Mexico

### ABSTRACT

*The overall aim and contribution of this chapter is to identify the main sources of knowledge generation in IT-related SMEs and the organizational elements that support this process. Knowledge generation occurs through external knowledge acquisition and internal knowledge creation. The latter process is facilitated by personal motivation and the learning opportunities it offers to the organization's employees, who play a key role as initiative and suggestion carriers. In order to evaluate the phenomenon under study, which the literature review reflects as an incipient stage, two-step exploratory research was conducted. In the first stage, eight interviews were conducted in four firms. The objective of the second phase was to validate some of the insight from the first stage, so a questionnaire designed for the research purpose was administered. The results show that knowledge in SMEs in the IT sector is generated mainly by employee self-learning, meetings and customers as an external source. These activities are strongly supported by the employees' opportunity to learn and by organizational culture.*

### INTRODUCTION

Strategic knowledge generation is viewed as fundamental to a company's development and to successfully building and sustaining a competitive advantage. As organizations interact with their

environment, they absorb information and convert it into knowledge (Nonaka and Takeuchi, 1995). That is, a firm is a dynamic entity which actively interacts with its environment, and reshapes the environment, and even itself, through the process of knowledge creation (Nonaka and Toyama, 2005).

As Kogut and Zander (1992) explain, companies are not just knowledge warehouses. They

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also have the capacity to learn and acquire new knowledge, which they refer to as a company's *combinative capability*. In this sense, a company's knowledge base can be produced and reproduced within a social framework. Companies are social organizations that specialize in creating and transforming knowledge (Nonaka and Takeuchi, 1995). In the knowledge-based view there is a basic assumption: knowledge cannot exist without human subjectivities and the context that surrounds human beings (Nonaka and Toyama, 2005). In this sense, individuals play a relevant role in each of the knowledge management processes: generation, transfer and utilization.

Knowledge generation is mainly an institutionalized activity, so each organization must be able to establish its own creative routines and human intervention to make this process possible. The challenge is to build systems that collect the learning processes acquired during projects and ongoing activities, to capture that knowledge in a database or document, and then to spread it throughout the entire organization (Grant, 2000).

Knowledge generation is defined as the specific activities and initiatives undertaken by organizations to increase their organizational knowledge (Davenport and Prusak, 2001). These activities involve external acquisitions of knowledge and internal creation of this intangible resource. Knowledge generation is highly dependent upon the organization's culture and management style. Organizational culture, which results from experience based on tacitly shared norms of coordination and collaboration, can influence the way in which individuals interact within an organization. In fact, a culture that promotes intensive communication, accepts new ideas, and is prepared to explore new processes and activities favors the generation of knowledge (Ruggles, 1998). This process also leads to increased firm competitiveness. It may be stimulated through non-hierarchical organizational structures, an active general management, and by motivating employees to innovate and

learn lessons that allow them to obtain new and better knowledge (Zapata, Rialp and Rialp, 2009).

The overall aim and contribution of this chapter is to identify the main sources of knowledge generation in IT-related SMEs and which organizational elements support this process. This objective has two critical points: First, these organizations have a specific profile in order to respond quickly to continuously changing market needs. Such firms require flexibility to coordinate internal resources and an adaptive capacity for managing environmental challenges - innovation becomes an important determinant of survival (D'Aveni, 1994; Teece, Pisano and Shuen, 1997). Secondly, it is important to study SMEs because these firms usually possess greater flexibility to adapt to market changes and to conduct innovative projects.

## **KNOWLEDGE GENERATION**

Theorists argue that knowledge is the distinctive resource of the firm (Grant 1996, Davenport and Prusak, 2001; Tsoukas, 2009). The strategic approach based on knowledge identifies the generation and application of knowledge as fundamental bases of the firm (Kogut and Zander 1992; Nonaka and Takeuchi, 1995; Foss, 1996 and Grant, 1996). All successful organizations create and use knowledge as a fundamental tool as organizations interact with their environment, absorb information, make informed decisions and carry out actions based on the combination of this knowledge and their experiences, values and rules. All of these are activities that make up the knowledge generation process in organizations (Nonaka and Toyama, 2005).

Knowledge generation activities and specific initiatives are undertaken by organizations to increase organizational knowledge assets (Davenport and Prusak, 2001; Nonaka, von Krogh and Voelpel, 2006). This process has been explained

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