# Chapter 80
# Capturing Tacit Knowledge within Business Simulation Games

**Meira Levy**
*Shenkar College of Engineering and Design, Israel*

**Nava Pliskin**
*Ben-Gurion University of the Negev, Israel*

## ABSTRACT

*Knowledge, in particular the tacit knowledge embedded in people and groups, is considered a strategic organizational asset. Many organizations harness knowledge to increase the quality of decision-making processes, especially in the current complex global business environment. Many organizations also harness business simulation games to support learning aimed at improving decision-making processes. Given the importance of knowledge, on the one hand, and of simulation games, on the other, this chapter presents a conceptual model for embedding knowledge management capabilities, including Web 2.0 applications, within simulation games environments for the purpose of improving the learning outcomes with regard to capturing tacit knowledge as well as to developing online communication skills.*

## INTRODUCTION

Decision-making processes of high quality are important for organizational success in the unpredictable global business environment. In particular, tacit knowledge is considered an intangible asset that has strategic value which can yield a competitive advantage (Leidner, 2000; Polanyi, 1967). Moreover, successful management of an organization in the current dynamic environment involves effective integration of multi-systems perspectives regarding operations, services and business processes (Shtub & Karni, 2010). Thus, the capability of an organization to bring knowledge into action and, in particular, to embed knowledge management (KM) processes within decision-making processes is becoming a critical success factor (Bolloju et al., 2002; Nicolas, 2004). Recent research suggests, however, that decision makers sometimes make poor

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decisions due to bounded rationality and limited cognitive capabilities, quite often overlooking existing organizational knowledge, whether embedded in the organization's information systems or in the minds of various stakeholders (March, 1978; Stanovich & West, 2000; Kahneman, 2003; Bazerman, 2006; Levy et. al., 2010). Oftentimes, investments in information technology are made without realizing the importance of social relations that foster conversational KM and group collaboration (Wagner, 2004), to enhance knowledge creation and to be further used by decision-makers, as Cole describes:

*The gap between data warehousing and knowledge creation can be large indeed. It is one thing to slice and dice information from an integrated customer base to segment markets and conduct more focused sales campaigns. It is quite another to use that information to reorganize work routines in ways that embed knowledge in new products and services that lead to sustained competitive advantage. While informal mechanisms for the effective conversion of information into knowledge may limit wide dissemination, formal procedures packaged in powerful information technologies often inhibit learning. A redoubling of efforts to leverage explicit knowledge through new information technologies is bound to disappoint (Cole, 1999, p. 19).*

The social collaborative dimension of Web 2.0 is relevant for KM since it offers ways to cultivate and exploit knowledge sharing in enterprises (Wagner, 2004; Kirchner et al., 2009). Organizations are beginning to explore the potential of Web2.0 tools and concepts for KM across the enterprise (Anderson, 2007). Moreover, while current KM systems, based on the original Web technologies, aim at eliciting and making widely available in sharable platforms employees' tacit knowledge, best practices and relevant experience, Web 2.0 technologies can enable generation and sharing of knowledge in a distributed manner (McAfee, 2006). However, although Web 2.0 applications are known to have potential benefits within organizations, adoption is still rather limited (Lynch, 2008) due to personal and managerial barriers (Neus, 2001; Szybalski, 2005; Cosley et al., 2005).

To reap full potential of Web 2.0 requires exposing managers to Web 2.0 merits and business benefits, and a possible vehicle for such exposure might be business simulation games. Business games are used for educating decision makers about decision support, competitiveness, strategic planning, group behavior, change management, and leadership (Keys & Wolfe, 1990; Shtub & Karni, 2010). In addition, researchers can utilize simulation games to analyze decision-making based on theory adapted from fields as applied mathematics, computer science, and artificial intelligence (Summers, 2010). According to Faria et al. (2009), simulation games have an important pedagogical role in developing business education in natural settings. While game environments foster learning-by-doing and experiencing a dynamic virtual organization via realistic case studies, these games do not yet foster KM practices and utilization of Web 2.0 applications. Thus, the importance of conversational KM and group collaboration has yet to be realized within decision making processes.

This chapter presents a conceptual model that integrates Web 2.0 applications and KM capabilities within simulation games, for the purpose of educating business decision makers to rationalize decisions, capture tacit knowledge, learn from already captured group tacit knowledge, upscale their knowledge and analyze their performance (Levy & Hadar, 2010).