

# Chapter 1.12

## Enhancing Performance Through Knowledge Management: A Holistic Framework

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### ABSTRACT

*Knowledge management (KM) has gained increasing attention since the mid-1990s. A KM strategy involves consciously helping people share and put knowledge into action. However, before an organization can realize the promise of KM, a fundamental question needs to be asked: What performance goal(s) is the organization trying to achieve? In this paper, we develop and offer a framework that provides a holistic view of the performance environment surrounding organizational knowledge work. We illustrate the KM framework using two organizational case studies. Then, based on the KM framework and further insights drawn from our case studies, we offer a series of steps that may guide and assist organi-*

*zations and practitioners as they undertake KM initiatives. We further demonstrate the applicability of these steps by examining KM initiatives within a global software development company. We conclude with a discussion of implications for organizational practice and directions for future research.*

### INTRODUCTION

Knowledge management (KM) is a topic that has gained increasing attention since the mid-1990s. Knowledge about customers, products, processes, past successes, and failures are assets that may produce long-term sustainable competitive advantage for organizations (Huber, 2001;

Leonard & Sensiper, 1998; Stewart, 2001). KM proponents argue that these assets are as important as managing other organizational assets like labor and capital. A survey conducted by Knowledge Management magazine and the International Data Corporation suggests that KM is evolving from a discrete undertaking to a strategic component of business solutions (Dyer & McDonough, 2001).

A KM strategy entails consciously helping people share and put knowledge into action by creating access, context, and infrastructure, and by simultaneously shortening learning cycles (Alavi & Leidner, 2001; Davenport, DeLong & Beers, 1998; Davenport & Prusak, 1998; O'Dell & Grayson, 1998). It takes place within a complex system of organizational structure and culture and is often enabled through information technology (IT) (Alavi, 2000; Alavi & Leidner, 2001). While technology drove the initial interest in KM, both academics and practitioners have begun to realize that effective KM initiatives and solutions will be based on a more holistic view of the knowledge work environment (Grover & Davenport, 2001; Holsapple & Joshi, 2002; Massey & Montoya-Weiss, 2002; Rubenstein-Montano et al., 2001). Specifically, before an organization can realize the promise of KM, a fundamental question needs to be asked: What performance goal(s) is the organization trying to achieve? Addressing this question will direct the organization to what knowledge should be managed and how it should be managed.

Improving customer service, shortening product development cycles, growing revenues, and improving profits are commonly cited as goals motivating KM initiatives. If the intent of a KM initiative is to enhance organizational performance, organizations first need to understand the performance environment surrounding and driving the underlying knowledge work. For example, improving customer service and shortening product development cycles require that firms look to their processes, which may be reengineered to capitalize on or to expand orga-

nizational knowledge resources and capabilities (Gold, Malhotra, & Segars, 2001; Hammer & Champy, 1993; Maier & Remus, 2001). Generating performance improvements via a KM initiative thus requires a deep understanding of how process work is organized, what knowledge is inherent to and derived from it, what factors influence knowledge workers, and how all of these factors relate to an organization's business environment (Massey & Montoya-Weiss, 2002).

In this paper, we offer a framework that provides a holistic view of the performance environment surrounding organizational knowledge work. The framework provides a useful means to identify, define, analyze, and address knowledge-based problems or opportunities relative to multi-level (business, process, and knowledge-worker) performance goals and requirements. Our perspective responds to a current call in the literature for KM frameworks that take a holistic, systems-oriented perspective by considering problems and opportunities in their entirety (Rubenstein-Montano et al., 2001; Senge, 1990). We draw from and integrate literature concerned with approaches to dealing with complexity and purposeful (i.e., performance-oriented) systems (Checkland & Howell, 1998), business process reengineering (Hammer & Champy, 1993), and human performance (Stolovich & Keeps, 1999). Rather than suggesting that KM requires a whole new perspective with its own special laws, our framework purports that KM sits well within our current understanding of what drives performance (Soo, Devinney, Midgley, & Deering, 2002).

We illustrate the efficacy of our framework to KM using case studies conducted at IBM and Nortel Networks. In addition, based on the framework and the insights we drew from our case studies, we offer a series of steps that can help direct organizations as they undertake KM initiatives. Finally, we illustrate the generalizability of these steps by demonstrating them in context of the software development process, using insights gained from a study with a software development

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