

Chapter 8.4

Integration Concept for Knowledge Processes, Methods, and Software for SMEs

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ABSTRACT

Small and medium-sized enterprises (SMEs) are a vital and growing part of any national economy. Like most large businesses, SMEs have recognized the importance of knowledge management. This Chapter investigates the use of knowledge processes and knowledge methods for SMEs. The learning objectives of this Chapter are to assess the role of knowledge management and knowledge processes in SMEs. Furthermore, the reader should be able to describe major knowledge management programs in SMEs and assess how they provide value for organizations. Empirical studies conducted by the authors show that for SMEs, only four knowledge processes are important: (1) knowledge identification, (2) knowledge acquisition, (3) knowledge distribution and (4) knowledge preservation. Based on the research result of several empirical studies, an integration

concept for knowledge processes, knowledge methods, and knowledge software tools for SMEs is introduced and discussed.

INTRODUCTION

The academic literature on knowledge management has become a major research field in different disciplines in the last decade (Davenport & Prusak, 1998). Through knowledge management, organizations are enabled to create, identify and renew the company's knowledge base and to deliver innovative products and services to the customer. Knowledge management is a process of systematically managed and leveraged knowledge in an organization. For Mockler and Dologite (2002, p. 18) knowledge management "refers to the process of identifying and generating, systematically gathering and providing

access to, and putting in use anything and everything which might be useful to know when performing some specified business activity. The knowledge management process is designed to increase profitability and competitive advantage in the marketplace". Before implementing a knowledge integration concept, there must be a common understanding of the term knowledge, its characteristics, and its impact on knowledge management. The multi-faceted nature of the term knowledge is reflected in a variety of definitions (Kakabadse, Kouzmin, & Kakabadse, 2001, p. 138). Davenport and Prusak (1998) use the term "*knowledge in action*" to express the characteristics of the term knowledge management in a way it is valuable for the company and to capture it in words because it resides in the minds of the humans and their action. Davenport and Prusak (1998, pp. 6) identify five key components that describe the term knowledge management:

1. The first component is *experience*. Knowledge develops over time, and it builds on the lifelong learning and training practice of an employee. Experience has a historical perspective, and it is based on the skills the knowledge-worker applies to familiar patterns to make connections between these links.
2. The second component of the term knowledge is "*ground truth*" (Davenport & Prusak, 1998) which is a term used by the U.S. Army's Center for Army Lessons Learned (CALL). CALL used the term "ground truth" to express experiences that come from the ground rather than from theories and generalizations. "Ground truth" refers to the way that the people involved know what works and what does not. CALL experts' take part in real military situations, and they pass their observations to the troops through videotapes or photos. The success of this knowledge management approach lies in "After Action Review" programs

which try to cover the gap between what happened during an action and what was supposed to happen. This reflection process helps uncover disparities and differences

3. The third component is *complexity*. The skill to solve complex problems and the ability to know how to deal with uncertainties distinguish an expert from a normal employee.
4. A fourth characteristic of knowledge is *judgment*. An expert can judge new situations based on experience gained over time. Furthermore, they have the ability to refine them through reflection. Knowledge, in this sense, is a living system that interacts with the environment.
5. Finally, knowledge is about heuristics and *intuition*. An expert acts based on their intuitive knowledge.

Knowledge is tacit, action-oriented, supported by rules, and it is constantly changing. In a global and interconnected society, it is more difficult for companies to know where the best and most valuable knowledge is, thus it becomes more difficult to know what the knowledge is. A successful implementation of knowledge management only can be achieved in a culture that supports knowledge sharing and transfer. An appropriate organizational culture can empower effective knowledge management. The organizational culture of a company consists of its shared values or norms which are transmitted through common beliefs and feelings, regularities of behavior, and historical processes. Trompenaars and Hampden-Turner (2006, p. 6) define culture as a group of people concerned with problem solving processes and reconciliation dilemmas. Culture itself has three different levels. The first, and highest level, is *national culture* or regional society; the second level describes *organizational culture*, and, finally, *professional culture* focuses on the knowledge of specific groups. A knowledge culture is the most important value for the implementation of knowledge management,

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