Chapter 3.1 Knowledge Management Toolkit for SMEs

Kerstin Fink

University of Innsbruck, Austria

Christian Ploder

University of Innsbruck, Austria

ABSTRACT

The discipline of knowledge management is no longer emerging in large organizations, but also small and medium-sized enterprises (SMEs) are focusing on finding the right process that will allow them to make advantages of their intellectual capital. Using survey data from 219 small and medium-sized enterprises in Austria and Switzerland, this chapter illustrates the four key knowledge processes (1) knowledge identification, (2) knowledge acquisition, (3) knowledge distribution, and (4) knowledge preservation for SMEs and also reports the findings of the empirical study designed to allocate cost-efficient software products to each of the four knowledge processes. As a result a knowledge toolkit for SMEs that integrates knowledge processes, methods and software tool for decision support making is given. Finally, the social view of knowledge management to SMEs is discussed, showing that the use

of information technology is currently far more important than the integration of a social-cognitive perspective.

INTRODUCTION

The academic literature on knowledge management has become a major research field in different disciplines in the last ten years (Nonaka & Takeuchi, 1995; Ruggels, 1997; Sveiby, 1997; Davenport & Prusak, 1998; Back, Enkel, & Krogh, 2007). 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. In a global and interconnected society, it is more difficult for companies to know where the best and most valuable knowledge is.

The term knowledge has a wide range of definitions in the knowledge management literature. The authors follow the definition by Davenport and Prusak (1998, p. 5) "knowledge is a fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the mind of knowers." For a better understanding of knowledge management Jennex (2007, p. 4) points out that the concepts of organizational learning and memory should be integrated. Therefore, knowledge management can be defined as "the practice of selecting applying knowledge from pervious experiences of decision making to current and future decision-making activities with the express purpose of improving the organization's effectiveness" (Jennex, 2007, p. 6).

Knowledge management is more than the technological solutions provided to give people access to better and more relevant information (Wang & Plaskoff, 2002, p. 113). It is important that the design of the knowledge management systems reflect the mindset of the knowledge workers and their way of offering highly qualitative knowledge solutions with quick solution processes. An effective knowledge management system must integrate people, processes, technology and the organizational structure.

Historically, knowledge management focused on the domain of larger organizations and issues of culture, networking, organizational structure and technological infrastructure are applied upon the implementation of knowledge management initiatives in large multi-national organizations and seem to give little relevance (Delahaye, 2003) to small and medium-sized enterprises (SMEs). SMEs are playing a key role in European economic performance because they account for a high proportion of the gross domestic product (GDP) and employ some two-thirds of the European workforce. According to the OECD (Organisation for Economic Co-operation and Development) *Small and Medium-sized Enterprise Outlook 2002 and*

2005 (OECD, 2005), the role of SMEs in OECD economic is very important for strengthening economic performances. SMEs represent over 95% of enterprises in most OECD countries, and generate over half of private sector development. A similar impact of SMEs to economic value can be found in the report of the Asia-Pacific Economic Cooperation (APEC, 2006), where about 90% of enterprises are SMEs. During their 2006 meeting in Beijing, the members agreed to strengthen the SME's competitiveness for trade and investment. For example, SMEs account for more than 95% of companies in Australia. Of the 624.010 SMEs in Australia, more than two-thirds employ between one and four people. A further 180,880 SMEs employ between five and 19 people meaning that 93.5% of people employed by SMEs in Australia are employed by what can be described as 'micro-SMEs,' namely companies with less than 20 employees. However, the success and growth of SMEs depends on how well they manage the knowledge of their knowledge workers. In 2000, the European Council set the clear strategic goal for the European Union (EU) of becoming "the most competitive and dynamic economy in the world, capable of sustaining economic growth with more and better jobs and greater social cohesion" by the year 2010 (EC, 2000). Dezouza and Awazu (2006) point out that SMEs have to compete on the know-how in order to gain competitive advantages. Even more, SMEs do not have much money to spend on knowledge management initiatives, so knowledge must be leveraged that goals can be achieved in an effective and efficient manner (Fink & Ploder, 2007c). Ordanini (2006) discusses the issue that the adoption of information technology by SMEs began to be discussed during the 1980s. Furthermore, it has to be stated that the adoption of information technology for SMEs was slower than that of larger organizations, which can be referred to as the so-called digital divide phenomenon.

Looking to the European countries of Austria and Switzerland including Liechtenstein, a similar

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/knowledge-management-toolkit-smes/29437

Related Content

Anomaly-Based Intrusion Detection Systems for Mobile Ad Hoc Networks: A Practical Comprehension

Sharada Ramakrishna Valiveti, Anush Manglaniand Tadrush Desai (2021). *International Journal of Systems and Software Security and Protection (pp. 11-32).*

www.irma-international.org/article/anomaly-based-intrusion-detection-systems-for-mobile-ad-hoc-networks/284558

Engineering and Reengineering of Technology Enhanced Learning Scenarios Using Context Awareness Processes

Clara Inés Peña de Carrillo, Christophe Choquet, Christophe Després, Sébastien Iksal, Pierre Jacoboni, Aina Lekira, El Amine Ouraibaand Diem Pham Thi-Ngoc (2014). *Software Design and Development: Concepts, Methodologies, Tools, and Applications (pp. 1289-1313).*

www.irma-international.org/chapter/engineering-reengineering-technology-enhanced-learning/77758

Performance Analysis of a Distributed Execution Environment for JUnit Test Cases on a Small Cluster

Eric Bower, Tauhida Parveenand Scott Tilley (2013). Software Testing in the Cloud: Perspectives on an Emerging Discipline (pp. 96-112).

 $\underline{www.irma-international.org/chapter/performance-analysis-distributed-execution-environment/72228}$

Security Issues in Tactical Software-Defined Radios: Analysis of Attacks and Case Studies

Fabrício A. B. da Silva, David F. C. Mouraand Juraci F. Galdino (2014). Advancing Embedded Systems and Real-Time Communications with Emerging Technologies (pp. 22-53).

www.irma-international.org/chapter/security-issues-in-tactical-software-defined-radios/108436

TEA: A Generic Framework for Decision Making in Web Services

Zhaohao Sun, Grant Meredithand Andrew Stranieri (2012). *International Journal of Systems and Service-Oriented Engineering (pp. 41-63).*

www.irma-international.org/article/tea/79238