ABSTRACT

Knowledge management is still a problem for many organizations and at two different levels: tacit knowledge, which typically resides in the head of each individual and gets lost for the organizations when a person goes to work with a different company; and explicit knowledge, which presents growing costs for its dissemination in the organization. In the chapter, the author proposes a model to address those problems, taking for base the SECI (socialization, externalization, combination, and internalization) model, originally developed for knowledge management, together with an e-learning platform and a set of activities as tools to implement a working solution. Such models have the ability to solve organizational knowledge problems, implementing a knowledge management process, allowing the transformation of tacit knowledge into explicit knowledge.

INTRODUCTION

Knowledge and knowledge management are, at the moment, topics with high interest for investigation. As organizations were able to understand the importance of knowledge as an organizational resource, as important as capital, human resources and all the others, the topic of knowledge and its management quickly became a focus in the studies along the years, acquiring a remarkable place. In today’s world, the ability of organizations to realize economic value from their collection of knowledge assets as well as their assets of information, production distribution and affiliation are a competitive advantage. This also gives us a clear image of the environment where the organizations are working, being submerged in a permanent and huge flood of data. And there is a high risk in ignoring all that data and not working it to produce knowledge, which can later be used to generate value to the organization. This may represent the difference between the survivals, or not, of the organization in today’s highly competitive environment.
An Approach to Knowledge Management With an E-Learning Platform

If the processes toward the building, maintenance and distribution of knowledge inside organizations are well studied and defined (Grant, 1996), there is still a long way to go in terms of methods and tools to implement them in a practical and useful way.

It is easy to find several approaches to the topic of knowledge management in organizations, but many of them don’t provide an implementation model, allowing a quick adoption of that particular approach, being too much theoretical. This is the purpose of this chapter, where we will present and discuss an architecture and an implementation model for a knowledge management system within an organization. We will start by presenting all the involved concepts to later fuse them all together with the purpose of providing a practical guide for implementation.

We will use concepts, models and tools already established to show how using them all together may present a practical way to implement a knowledge management system within an organization.

CONCEPTS AND DEFINITIONS

The concepts important for this chapter and that are used are knowledge, knowledge management, e-learning and its applications in companies.

It is easy to find authors that have written about the concept of knowledge (Handzic, 2006; Maier and Schmidt, 2007; Nunes et al., 2006; Podgorski, 2010; Schulte et al., 2004; Teo and Gay, 2006), several of whom cite Nonaka (1994) and Nonaka and Takeuchi (1996). Their work is centered on the concept of two distinct types of knowledge, explicit and tacit, with explicit knowledge being that which is known and shared, and tacit on to knowledge being that which is stored within the minds of individuals. Many authors use those concepts (Floyd, et al., 2013) and, in this chapter, we will also use those definitions and types of knowledge.

Nonaka worked extensively with the concepts of explicit knowledge and tacit knowledge, and drew attention to the way organizations tend to focus too much on the former (Nonaka & Takeuchi 1996). These conclusions have been supported by many authors since then, from the field of organizational learning to knowledge management (e.g. Cook & Brown 1999, Kreiner 2002, Tsoukas & Valdimirou 2001, etc.).

Nonaka and Takeuchi introduced the SECI (Socialization, Externalization, Combination and Internalization) model (Nonaka & Takeuchi 1996) which has become the cornerstone of knowledge creation and transfer theory. They proposed four ways that knowledge types can be combined and converted, proposing a model to show how knowledge is created and shared in the organization. The model is based on the two types of knowledge outlined above, and its representation is shown on Figure 1.

The four ways represented in Figure 1, illustrating the SECI model, are socialization, externalization, combination and internalization, meaning:

- **Socialization**: Tacit knowledge to tacit knowledge. Knowledge is passed on through practice, guidance, imitation and observation. Tacit knowledge is freely transferred between learners and mentors. Here, it is possible to measure the gaps and the need for knowledge.

- **Externalization**: Tacit knowledge to explicit knowledge. This is deemed as a particularly difficult and often specifically important conversion mechanism. Tacit knowledge able to be captured from early stage is codified into documents, manuals, etc. so that it can spread more easily through the organization. Since tacit knowledge can be virtually impossible to codify, the extent of this knowl-