ABSTRACT

This paper is an instructional case that describes how the Center for Army Lessons Learned (CALL) has developed a unique, institutionalised knowledge application process. The paper highlights several issues related to knowledge application, including the collection, distillation, and dissemination of knowledge, the role of subject experts in the knowledge application process, and how technology facilitates knowledge application. Interested readers can contact the lead author for a list of questions and suggested answers intended for teaching the process of knowledge application to graduate students.

Keywords: case study; knowledge application; organisational learning

INTRODUCTION

Motivations for Knowledge Management

Corporate spending on knowledge management (KM) has increased substantially over the years (Ithia, 2003). Fueled by the notion that knowledge is a key resource upon which an organisation’s competitiveness depends (Kogut & Zander, 1992), organisations are implementing various KM initiatives to identify, share, and exploit their knowledge assets. Several highly publicised KM success stories include Buckman Laboratories’ Knowledge Network (Zack, 1999), Xerox’s Eureka database (Brown & Duguid, 2000), Tech Clubs in Daimler Chrysler, the communities of practice among quantitative biologists in Eli Lilly (Wenger, McDermott, & Snyder, 2002), and various KM initiatives in BP Amoco (Hansen, 2001).

The potential benefits of KM are numerous — improved decision-making, increased productivity, sharing of best practices, less need to reinvent, and improved staff development. In some cases, the reported benefits from KM have been nothing short of spectacular. Xerox, for example, estimates to have saved US$100 million from its Eureka database (Brown & Duguid, 2000). It is therefore understandable why organisations are drawn to KM.

Knowledge Application

Central to KM in organisations are the overlapping processes of knowledge creation.
Knowledge is created through two generic mechanisms, namely combination and exchange (Nahapiet & Ghoshal, 1998). Combination involves the confluence of elements previously unconnected or developing new ways of putting together elements previously associated. Exchange involves the transfer of tacit knowledge among individuals and groups. Knowledge transfer refers to the flow of knowledge from one part to other parts of the organisation. The idea is to minimise performance variations, particularly among similar functional units (Szulanski, 2003). Intricately related to the processes of knowledge creation and transfer, knowledge application refers to the acquisition and capture of knowledge from one part of the organisation and the subsequent application of the knowledge by itself or by other parts of the organisation. In Xerox, for example, the goal of the Eureka project was to facilitate knowledge application among its technical reps (Brown & Duguid, 2000). Whenever a rep has discovered ways to solve a problem, he or she submits an entry to a panel of reviewers who are also reps themselves. Through an internal process of vetting, rejection, and refinement, entries deemed valuable are stored in the Eureka database. In this way, tried-and-tested tips and insights culled from the day-to-day experience of individuals reps are retained, disseminated, and eventually become entrenched, commonly accepted practices organisation-wide.

Knowledge application has been labelled differently by different scholars even though the essence of the notion remains largely consistent. Coined as knowledge reuse, the term as used by Markus (2001) describes a process that involves sharing best practices or helping others to solve common technical problems. Kuwada (1998) and Thomas, Sussman, and Henderson (2001) conceive knowledge application as “strategic knowledge distillation,” a process through which experiential knowledge at the business level becomes infused into the modus operandi at the corporate level. New knowledge acquired within a specific organisational locale is effectively leveraged by the entire organisation. Thus, strategic learning takes place in the organisation.

Other scholars (e.g., Szulanski, 2003; NCDDR, 2003) investigate the constituents along the knowledge application process and identify four major elements, namely, the source, the content, the context and the recipient. The source, sometimes called the knowledge producer, refers to the organisation, workgroup, or individual who creates the knowledge. The content refers to the knowledge intended to be applied. Context refers to the environment in which knowledge is transferred from the source to the recipient. The recipient, sometimes called the knowledge consumer, refers to the organisation, workgroup, or individual who applies the knowledge. In studying the transfer and adoption of best practices across homogeneous workgroups, Szulanski (2003) elucidates nine factors that could impede the knowledge application process. These factors are lack of motivation of the source to share knowledge, lack of credibility of the source, unproven content, causal ambiguity, which is the incomplete understanding of why the use of the knowledge could lead to an intended outcome, an arduous relationship between the source and the recipient, unfavourable organisational context for knowledge application, lack of motivation of the recipient to apply the knowledge, lack of absorptive capacity of the recipient to recognise the value of the new knowledge, and lack of retentive capacity of the recipient to institutionalise the use of the new knowledge.

Apart from the source (knowledge producers) and the recipient (knowledge consumers), Markus (2001) highlights another role in the knowledge application process, namely that of the knowledge intermediary. This is one who facilitates knowledge application by eliciting, indexing, summarising, sanitising, packaging, and distributing it to the recipient.

Additionally, Markus (2001) proposes four distinct situations under which knowledge