Chapter XVIII

Leveraging Current Experiences for Future Actions: 
An Exemplar of Knowledge Reuse

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ABSTRACT

This chapter describes how the Center for Army Lessons Learned (CALL) has developed a unique, institutionalized knowledge reuse process. The chapter highlights several issues related to knowledge reuse, including the collection, distillation and dissemination of knowledge, the role of subject experts in the knowledge reuse process and how technology facilitates knowledge reuse.

INTRODUCTION

Motivations for Knowledge Management

Corporate spending on knowledge management (KM) has increased substantially over the years (Ithia, 2003). Fuelled by the notion that knowledge is a key resource upon which an organization’s competitiveness depends (Kogut & Zander, 1992), organizations are implementing various KM initiatives to identify, share and exploit their knowledge assets. Several highly-publicized KM success stories include Buckman Laboratories’ Knowledge Network (Zack, 1999), Xerox’s Eureka database (Brown & Duguid, 2000), Tech Clubs in DaimlerChrysler, the communities of practice among quantitative biologists in Eli Lilly (Wenger et al., 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 ex-
ample, estimates to have saved $100 million from its Eureka database (Brown & Duguid, 2000). It is therefore understandable why organizations are drawn to KM.

Knowledge Reuse

Central to KM in organizations are the overlapping processes of knowledge creation (Nonaka & Takeuchi, 1995; von Krogh, 1998), knowledge transfer (Dixon, 2000; McDermott & O’Dell, 2001) and knowledge reuse (Grant, 1996). 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 organization. The idea is to minimize performance variations particularly among similar functional units (Szlanski, 2003). Intricately related to the processes of knowledge creation and transfer, knowledge reuse refers to the acquisition and capture of knowledge from one part of the organization and the subsequent reuse of the knowledge by itself or by other parts of the organization. In Xerox, for example, the goal of the Eureka project was to facilitate knowledge reuse 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. 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 individual reps are retained, disseminated and eventually become entrenched commonly-accepted practices organization-wide.

Knowledge reuse has been labeled differently by different scholars even though the essence of the notion remains largely consistent. For example, Markus (2001) describes knowledge reuse as a process which involves sharing best practices or helping others to solve common technical problems. Kuwada (1998) and Thomas et al. (2001) conceive knowledge reuse 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 organizational locale is effectively leveraged by the entire organization, enabling strategic learning to take place within.

Through the grid of expectancy theory (Vroom, 1964), Watson and Hewett (2006) argue that knowledge reuse can be facilitated by (1) the belief that the effort to reuse existing knowledge will result in solving the problem at hand successfully (expectancy), (2) the belief that reusable knowledge can be obtained (instrumentality) and that (3) the knowledge accessed and reused is valuable (valence).

Other scholars (e.g., Szulanski, 2003; NCDDR, 2003) investigate the constituents along the knowledge reuse 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 organization, 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 organization, workgroup or individual who apply the knowledge. In studying the transfer and adoption of best practices across homogeneous workgroups, Szulanski (2003) elucidates nine factors that could impede the knowledge reuse 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
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