Chapter XVI Sharing and Protecting Knowledge: New Considerations for Digital Environments

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ABSTRACT

As **knowledge management (KM)** practice increasingly moves onto the Internet, the field is changing. The Internet offers new opportunities to use knowledge assets, defines new types of knowledge assets, and readily spreads knowledge beyond the borders of the organization to collaborators and others. This potential is tempered, however, by new threats to the security of proprietary knowledge. The Internet also makes knowledge assets more vulnerable to competitive intelligence efforts. Further, both the potential and the vulnerability of knowledge on the Internet will vary according to the nature of knowledge assets (tacitness, complexity, appropriability). Those looking to practice KM must, more than ever, understand their knowledge assets and how to best employ them.

INTRODUCTION

Knowledge management (KM), even though a young discipline, has already passed through a number of stages. From the recognition that personal, tacit knowledge has unique value to

the organization to systems for measuring and managing knowledge assets, and now to information technology (IT) KM installations, we have seen the field grow in its sophistication and applications.

In this chapter, we will look at some specific trends in KM related to the Internet. Initially,

there are ways in which KM, as it is traditionally understood, is changing, as new methods and techniques come online. The Internet has opened up the use of knowledge and knowledge-related assets, allowing greater and more effective sharing, and it has also expanded the number of tools we can apply to KM processes.

Secondly, if one takes a broader view of what constitutes valuable knowledge within an organization, as well as a broader view of organizational boundaries, the increasingly tight Web-based ties between a firm and its e-network also create new opportunities for knowledge management. Rather than just considering the core organization in a network and its knowledge assets, a more complete perspective now includes all collaborators with whom firms exchange knowledge or information. Established Internet-based systems for immediate exchange of such assets have contributed to this broad trend.

Thirdly, an often overlooked part of KM is protection of these valuable proprietary knowledge assets. While KM theorists and practitioners typically recommend ever more knowledge sharing, few in the field ever talk about keeping these valuable proprietary assets protected. The Internet has raised all sorts of new concerns about knowledge protection, as it and other information technology advances have amplified competitive intelligence (CI) threats. Digital knowledge is an issue in and of itself, and when digital knowledge is available through the Web, protection becomes an issue.

KNOWLEDGE MANAGEMENT

The basic concepts of KM, and its companion field **intellectual capital (IC)**, have been with us for some time. From Drucker's (1991) knowledge workers to Edvinsson's (Edvinsson & Sullivan, 1996) attempts to measure the knowledge assets of the firm, we have been talking about the management of these intangible resources for almost two decades. A full discussion of KM/IC and their underlying theory requires defining some basic terminology, as described in Table 1. Let us start with IC.

Intellectual capital (IC), as the name implies, grew out of an interest in **intellectual property (IP)**. IP includes formalized knowledge assets that can be structured and then protected by

Preknowledge	Data are "observations or facts out of context" and information is "data within some meaningful con- text" (Zack, 1999, p.46).
Knowledge	"That which we come to believe and value on the basis of the meaningfully organized accumulation of information (messages) through experience, communication, or inference" (Zack, 1999, p.46). Also sometimes termed know-how, learning that takes place leading to individual expertise (Zander & Kogut, 1995).
Knowledge assets	Intangible assets of the firm. Personal knowledge, corporate culture, social capital with those outside the organization, intellectual property, or any other valuable organizational knowledge.
Intellectual property (IP)	Formalized knowledge assets, qualifying for a patent, copyright, trademark, or other institutionalized protection mechanism.
Intellectual capital (IC)	Knowledge assets of the firm. The field of intellectual capital focuses on the identification, measure- ment, and management of these intangible assets. Includes IP (in most treatments, not all) as well as less formalized knowledge (Edvinsson & Malone, 1997).
Knowledge management (KM)	The practice of managing knowledge assets, focusing on identification, capture (when possible), orga- nization, sharing, and analysis. Closely related to IC, the differences are more in emphasis on measure- ment (IC) vs. management (KM).

Table 1. Knowledge definitions

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