Knowledge Management

Concepts and Definitions

Concepts and Definitions Knowledge management (KM) is a process that helps organizations manipulate important knowledge that comprises part of the organization's memory, usually in an unstructured format. For an organization to be successful, knowledge, as a form of capital, must exist in a format that can be exchanged among persons. In addition, it must be able to grow.

Knowledge. In the information technology context, knowledge is distinct from data and information. Data are a collection of facts, measurements, and statistics; information is organized or processed data that are timely and accurate. Knowledge is information that is contextual, relevant, and useful. Simply put, knowledge is information in action. Intellectual capital (or intellectual assets) is another term for knowledge.

To illustrate with an example, a bulletin listing all of the courses offered by your university during one semester would be considered data.

When you register, you process the data from the bulletin to create your schedule for the semester. Your schedule would be considered information. Awareness of your work schedule, your major, your desired social schedule, and characteristics of different faculty members could be construed as knowledge, because it can affect the way you build your schedule. You see that this awareness is contextual and relevant (to developing an optimal schedule of classes) as well as useful (it can lead to changes in your schedule). The implication is that knowledge has strong experiential and refl ective elements that distinguish it from information in a given context. Unlike information, knowledge can be utilized to solve a problem. Numerous theories and models classify different types of knowledge. Here you will focus on the distinction between explicit knowledge and tacit knowledge.

Explicit and Tacit Knowledge.

Explicit knowledge deals with more objective, rational, and technical knowledge. In an organization, explicit knowledge consists of the policies, procedural guides, reports, products, strategies, goals, core competencies, and IT infrastructure of the enterprise. In other words, explicit knowledge is the knowledge that has been codifi ed (documented) in a form that can be distributed to others or transformed into a process or a strategy. A description of how to process a job application that is documented in a fi rm's human resources policy manual is an example of explicit

knowledge. In contrast, tacit knowledge is the cumulative store of subjective or experiential learning. In an organization, tacit knowledge consists of an organization's experiences, insights, expertise, know-how, trade secrets, skill sets, understanding, and learning. It also includes the organizational culture, which reflects the past and present experiences of the organization's people and processes, as well as the organization's prevailing values. Tacit knowledge is generally imprecise and costly to transfer. It is also highly personal. Finally, because it is unstructured, it is difficult to formalize or codify, in contrast to explicit knowledge. A salesperson who has worked with particular customers over time and has come to know their needs quite well would possess extensive tacit knowledge. This knowledge is typically not recorded. In fact, it might be difficult for the salesperson to put into writing, even if he or she were willing to share it

Knowledge Management Systems

The goal of knowledge management is to help an organization make the most productive use of the knowledge it has accumulated. Historically, management information systems have focused on capturing, storing, managing, and reporting explicit knowledge. Organizations now realize they need to integrate explicit and tacit knowledge into formal information systems. Knowledge management systems (KMSs) refer to the use of modern information technologies—the Internet, intranets, extranets, databases—to systematize, enhance, and expedite intrafirm and interfirm knowledge management. KMSs are intended to help an organization cope with turnover, rapid change, and downsizing by making the expertise of the organization's human capital widely accessible.

Organizations can realize many benefits with KMSs. Most importantly, they make best practices, the most effective and efficient ways of doing things, readily available to a wide range of employees. Enhanced access to best-practice knowledge improves overall organizational performance. For example, account managers can now make available their tacit knowledge about how best to manage large accounts. The organization can then utilize this knowledge when it trains new account managers. Other benefits include improved customer service, more efficient product development, and improved employee morale and retention.

At the same time, however, implementing effective KMSs presents several challenges. First, employees must be willing to share their personal tacit knowledge. To encourage this behavior, organizations must create a knowledge management culture that rewards employees who add their expertise to the knowledge base. Second, the organization must continually maintain and upgrade its knowledge base.

Specifically, it must incorporate new knowledge and delete old, outdated knowledge. Finally, companies must be willing to invest in the resources needed to carry out these operations.

The KMS Cycle

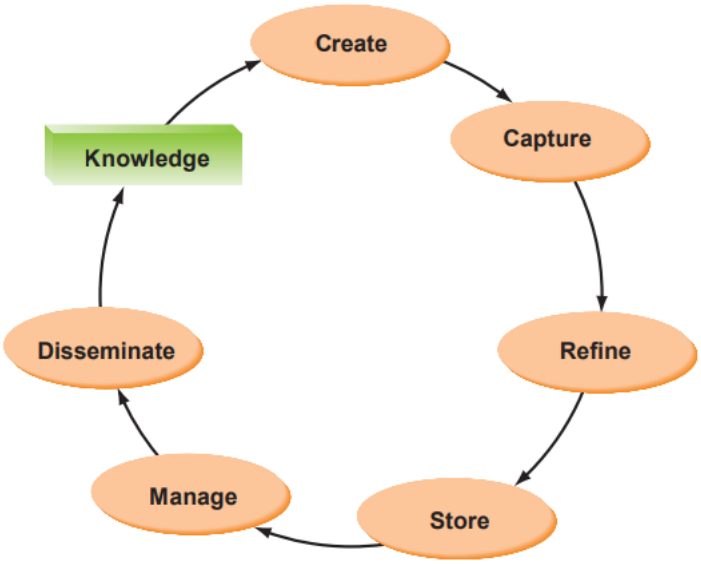

FIGURE 5.13 The knowledge management system cycle.

A functioning KMS follows a cycle that consists of six steps (see Figure 5.13). The reason the system is cyclical is that knowledge is dynamically refined over time. The knowledge in an effective KMS is never finalized because the environment changes over time and knowledge must be updated to reflect these changes. The cycle works as follows:

1. Create knowledge. Knowledge is created as people determine new ways of doing things or develop know-how. Sometimes external knowledge is brought in.
2. Capture knowledge. New knowledge must be identified as valuable and be represented in a reasonable way.
3. Refi ne knowledge. New knowledge must be placed in context so that it is actionable. This is where tacit qualities (human insights) must be captured along with explicit facts.
4. Store knowledge. Useful knowledge must then be stored in a reasonable format in a knowledge repository so that others in the organization can access it.
5. Manage knowledge. Like a library, the knowledge must be kept current. It must be reviewed regularly to verify that it is relevant and accurate.
6. Disseminate knowledge. Knowledge must be made available in a useful format to anyone in the organization who needs it, anywhere and anytime.