A G IDE MANAGING KN LEDGE

Cultivating Communities of Practice

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Boston, Massachusetts

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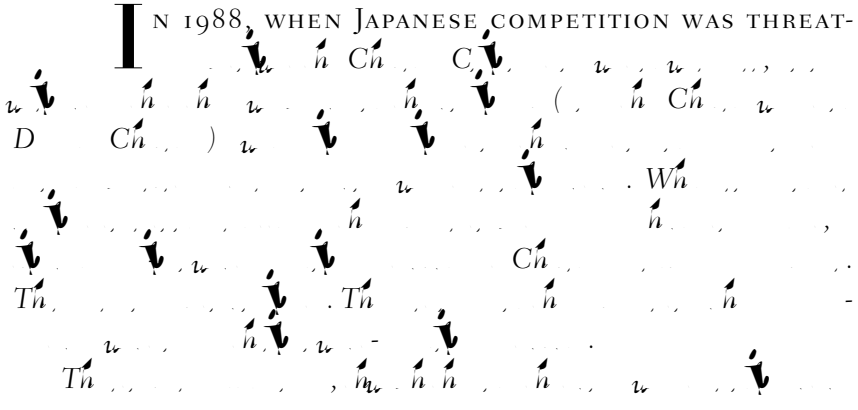
CHAPTER one

Communities of Practice and Their Value to Organizations



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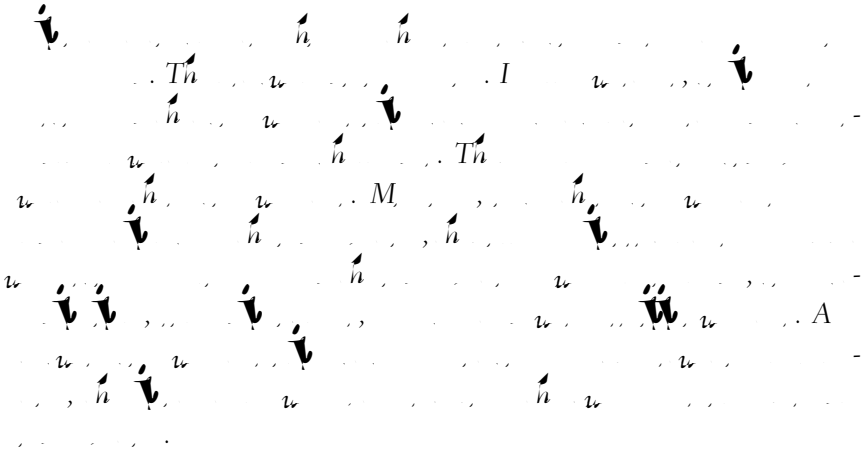

What Is a Community of Practice?

COMMUNITIES OF PRACTICE

act as sounding boards. They may create tools, standards, generic designs, manuals, and other documents—or they may simply develop a tacit understanding that they share. However they accumulate knowledge, they become informally bound by the value that they find in learning together. This value is not merely instrumental for their work. It also accrues in the personal satisfaction of knowing colleagues who understand each other's perspectives and of belonging to an interesting group of people. Over time, they develop a unique perspective on their topic as well as a body of common knowledge, practices, and approaches. They also develop personal relationships and established ways of interacting. They may even develop a common sense of identity. They become a community of practice.

Communities of practice are not a new idea. They were our first knowledge-based social structures, back when we lived in caves and gathered around the fire to discuss strategies for cornering prey, the shape of arrowheads, or which roots were edible. In ancient Rome, "corporations" of metalworkers, potters, masons, and other craftsmen had both a social aspect (members worshipped common deities and celebrated holidays together) and a business function (training apprentices and spreading innovations).[1] In the Middle Ages, guilds fulfilled similar roles for artisans throughout Europe. Guilds lost their influence during the Industrial Revolution, but communities of practice have continued to proliferate to this day in every aspect of human life.[2] Every organization and industry has its own history of practice-based communities, whether formally recognized or not. Why else are the surviving U.S. automakers all based in Detroit? What explains the high-tech fertility of Silicon Valley? And why can't you buy a world-class flute outside of three small manufacturers based in Boston?[3]

Communities of practice are everywhere. We all belong to a number of them—at work, at school, at home, in our hobbies. Some have a name, some don't. Some we recognize, some remain largely invisible. We are core members of some and occasional participants in others. Whatever form our participation takes, most of us are familiar with the experience of belonging to a community of practice.

A Key to Success in a Global Knowledge Economy

If COMMUNITIES OF PRACTICE have been so pervasive for so long, why should organizations suddenly focus on them? It is not communities of practice themselves that are new, but the need for organizations to become more intentional and systematic about "managing" knowledge, and therefore to give these age-old structures a new, central role in the business.

Knowledge has become the key to success. It is simply too valuable a resource to be left to chance. Companies need to understand precisely what knowledge will give them a competitive advantage. They then need to keep this knowledge on the cutting edge, deploy it, leverage it in operations, and spread it across the organization.[4] Cultivating communities of practice in strategic areas is a practical way to manage knowledge as an asset, just as systematically as companies manage other critical assets. Indeed, the explosion in science and technology creates a difficult paradox. At the same time that the increasing complexity of knowledge requires greater specialization and collaboration, the half-life of knowledge is getting shorter. Without communities focused on critical areas, it is difficult to keep up with the rapid pace of change.

These changes are happening at a time when firms are restructuring many relationships internally and externally to respond to the demands of a shifting market. Internally, companies are disaggregating into smaller units focused on well-defined market opportunities, as illustrated by the DaimlerChrysler Tech Club story. Externally, they increasingly partner with other organizations in the context of their extended enterprise. Both types of relationships spread production and delivery of value over many distinct entities.[5] Communities of practice connect people from different organizations as well as across independent business units. In the process, they knit the whole system together around core knowledge requirements.

The knowledge economy presents an additional challenge. Knowledge markets are globalizing rapidly.[6] What someone knows in Turkey

could make or break your business in London. What a competitor's team is learning in South America could be the undoing of your project in Massachusetts. Consider the example of the Siemens sales team in Malaysia that was able to get a large telecommunication contract because of the experience and material developed by their peers in Denmark. Success in global markets depends on communities sharing knowledge across the globe.

Besides contributing to the success of organizations in world markets, these communities have another benefit. In the globalizing knowledge economy, companies are not just competing for market share. They are also competing for talent—for people with the expertise and capabilities to generate and implement innovative ideas. One company found that employees belonging to world-class communities of practice

The Nature of Knowledge: A Managerial Challenge

ALTHOUGH EXECUTIVES RECOGNIZE the value of knowledge and the need to develop an intentional knowledge strategy, exactly how to do that is less clear. Recently, new information technologies have inspired dreams of capturing all the knowledge of an organization into databases that would make it easily accessible to all employees. Early attempts at knowledge management, however, were beholden to their origin in information technology (IT) departments. They tended to confuse knowledge and information. Building the system alone devoured resources, but it turned out to be even more difficult to motivate people to use these early knowledge bases. Companies that had invested their entire knowledge strategies in such information systems sooner or later found out that they had created digital junkyards. For instance, one consulting firm audited its knowledge systems and found it had 1,100 databases. Only thirty of them were active, and of these, at least twenty were actually news feeds. Companies discovered the hard way that useful knowledge is not a "thing" that can be managed like other assets, as a self-contained entity. Nor does it just float free in cyberspace. If companies are going to compete on knowl-ered ts n

to the evolving situation. Engaging their expertise in this way is an active, inventive process that is just as critical as their store of knowledge itself.[9]

To develop such expertise, practitioners need opportunities to engage with others who face similar situations. Neurosurgeons, for instance, will travel long distances to operate with a colleague in order to refine their technique.[10] The knowledge of experts is an accumulation of experience—a kind of "residue" of their actions, thinking, and conversations—that remains a dynamic part of their ongoing experience.[11] This type of knowledge is much more a living process than a static body of information. Communities of practice do not reduce knowledge to an object. They make it an integral part of their activities and interactions, and they serve as a living repository for that knowledge.

Knowledge Is Tacit As Well As Explicit

We are all aware that "we know more than we can tell."[12] Not everything we know can be codified as documents or tools. From a business standpoint, the tacit aspects of knowledge are often the most valuable.[13] They consist of embodied expertise—a deep understanding of complex, interdependent systems that enables dynamic responses to context-specific problems. This type of knowledge is very difficult for competitors to replicate.[14]

Sharing tacit knowledge requires interaction and informal learning processes such as storytelling, conversation, coaching, and apprenticeship of the kind that communities of practice provide.[15] This is not to say that it is not useful to document knowledge in whatever manner serves the needs of practitioners. But even explicit knowledge is dependent on tacit knowledge to be applied.[16] Companies have found that the most used, and useful, knowledge bases were integrated into the work of one or more communities. The success of Daimler-Chrysler's EBoK is largely due to the fact that the Tech Clubs are in charge of the process and view it as part of what their community is about. Communities of practice are in the best position to codify knowledge, because they can combine its tacit and explicit aspects.[17]

They can produce useful documentation, tools, and procedures because they understand the needs of practitioners. Moreover, these products have increased in meaning because they are not just objects by themselves, but are part of the life of the community.

Knowledge Is Social As Well As Individual

You know that the earth is round and orbits the sun, but you did not create that knowledge yourself. It derives from centuries of understanding and practice developed by long-standing communities. Though our experience of knowing is individual, knowledge is not. What counts as scientific knowledge, for instance, is the prerogative of scientific communities, which interact to define what facts matter and what theories are valid. There may be disagreements, there may be mavericks, but it is through a process of communal involvement, including all the controversies, that a body of knowledge is developed. It is by participating in these communities—even when going against the mainstream—that members produce scientific knowledge.[18]

Appreciating the collective nature of knowledge is especially important in an age when almost every field changes too much, too fast for individuals to master.[19] Today's complex problem solving requires multiple perspectives. The days of Leonardo da Vinci are over. We need others to complement and develop our own expertise. This collective character of knowledge does not mean that individuals don't count. In fact, the best communities welcome strong personalities and encourage disagreements and debates. Controversy is part of what makes a community vital, effective, and productive.

Knowledge Is Dynamic

Knowledge is not static. It is continually in motion. In fact, our collective knowledge of any field is changing at an accelerating rate. What was true yesterday must be adapted to accommodate new factors, new data, new inventions, and new problems.[20] This dynamism does not mean that a domain of knowledge lacks a stable core. In all fields, there