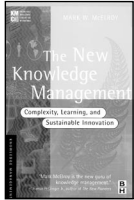




## LEARNING TO CREATE NEW KNOWLEDGE

BY STEVEN CAVALERI



**The New Knowledge Management: Complexity, Learning, and Sustainable Innovation**  
by Mark W. McElroy

For many people, the purpose of pursuing organizational learning is to create new knowledge for competitive advantage. Although researchers and managers alike often assume that such knowledge ultimately proves its value in the form of innovative products and services, the link between learning, knowledge, and innovation can be elusive. There seem to be few cogent explanations of how to develop promising ideas and then put them into practice. Fortunately, management consultant Mark McElroy has courageously set off in search of this organizational Holy Grail in his book *The New Knowledge Management: Complexity, Learning, and Sustainable Innovation* (Butterworth-Heinemann, 2003).

### Two Generations of Knowledge Management

While many of us were just grasping what the term *knowledge management* means, innovators at the Knowledge Management Consortium International (KMCI), the organization that McElroy heads and for which I serve as a board member, were already creating a new and improved iteration of the concept. Although some people may be tempted to dismiss this advance as being simply a case of old wine in new bottles, McElroy draws a bold line in the sand between these two distinctly different versions of knowledge management (KM). He explains how first-generation KM approaches are largely based on the notion that organizations are machines; from this perspective, knowledge and information

are close cousins in that both are effectively managed through the use of technology. Practitioners of second-generation KM, on the other hand, adopt a more organic view; they regard information as a distant precursor to knowledge and view social processes as more critical than technology for creating new knowledge.

First-generation KM is based on the assumption that knowledge is a well-defined commodity that can be easily used by people throughout a company and that the main task of KM initiatives is to leverage the use of existing knowledge by sharing it freely throughout an organization. Technology becomes valued as an efficient means to accomplish this goal. Therefore, first-generation KM approaches typically focus on the use of technology to collect, analyze, and store data—especially best practices—that organizations can use to improve performance. For instance, a company's sales force may use wireless systems to capture insights and lessons learned about customer buying patterns and competitor strategies. They then channel this information to someone within the organization who will organize it, conduct meta-data analyses to draw overarching conclusions, and place the results into a computer database. Such databases are then made available to employees through corporate intranets. Employees may access information such as lists of handy selling tips for approaching customers with certain profiles and strategies for increasing sales that have been developed and used successfully by other members of the sales force. Some of these database systems use "Yellow Pages" directories and expertise profiling to help practitioners connect with those colleagues who have demonstrated successes.

Although such tools are technologically impressive, they tend to focus on identifying isolated elements of knowledge, out of their natural context, and fail to address the fundamental process by which knowledge is created in individuals and groups. Second-generation KM seeks to address this shortcoming. The notion that sharing tips about how a colleague successfully achieved a sale presumes that others can effectively use a similar strategy without changing what they believe, how they think, or how they perceive selling situations. Such an approach reduces selling from an art that is developed over years of experience to a form of behavioral mimicry.

### The Knowledge Life Cycle

Whether or not you subscribe to the increasingly popular view that first-generation KM has already proven to be ineffective, McElroy gives compelling reasons to consider switching to second-generation KM. He addresses how (1) organizational learning is linked to KM, (2) knowledge drives innovation, (3) complexity and systems thinking are related to KM, and (4) corporate policies can be an important lever for creating knowledge and innovation (see "10 Key Principles of Second-Generation Knowledge Management" on p. 8). For example, in first-generation KM schemes, such as those that focus on creating formal mechanisms for sharing best practices, knowledge is driven by what we might call "supply-side considerations." That is, the mere availability of new knowledge is assumed to be sufficient reason to distribute it to employees throughout the organization—regardless of whether they are satisfied with the knowledge they are currently using or even have the capability to use this new material. According to

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McElroy, second-generation KM approaches are primarily demand-driven. A good example is what human resource professionals call “just-in-time” training (JITT). Through JITT, employees can access training when they believe they need it to solve problems that concern them, rather than attend management-mandated workshops that may or may not provide them with timely information.

In addition, according to the KMCI knowledge life-cycle model that McElroy presents, high-quality knowledge evolves over time through dialogue within communities of practitioners who are committed to understanding what works best. Technological fixes, such as the one described above, are not a substitute for nurturing the essential social processes that contribute to developing new knowledge—they are an adjunct. It is this idea that McElroy tries to impress upon advocates of first-generation KM, who portray computer-based fixes as a main feature of KM rather than as a tool for facilitating it. Because of this limited view of KM’s applicability, it is not surprising that many executives have become skeptical of the discipline’s promise for delivering sustainable competitive advantage.

## Knowledge-Friendly Policies

In its essence, *The New Knowledge Management* espouses the perspective that managers cannot directly manage many critical organizational processes, such as knowledge creation, but they can influence them by judiciously altering certain factors. Xerox’s Palo Alto Research Center (PARC) is one enterprise that has organized knowledge management processes around people’s natural behaviors. For example, because workers tend to congregate around coffee pots, the company has installed white boards and markers in those areas to assist people in capturing the knowledge that emerges through informal conversations. In addition, because studies at Xerox revealed that people also tend to engage in conversations in stairways, the company facilitated this process by widening those areas so coworkers can remain on the stairs and chat while others still have room to pass by.

Likewise, McElroy argues that corporate policies often unintentionally stifle knowledge creation by favoring efficiency, and that managers should scrutinize and modify processes to be “knowledge-friendly.” In the latter portion of the book, in his description of the Policy Synchronization Method (PSM), he alludes to some key policy levers for systematically redesigning

organizations to facilitate knowledge processing and innovation. PSM helps managers do a baseline diagnostic assessment of the effectiveness of current knowledge-processing systems and then alter policies and processes to yield greater innovation in how knowledge is created.

The importance of this naturalistic view of *husbanding* organizational processes, as opposed to managing them, cannot be overstated. The simplistic industrial engineering notions of Fredrick W. Taylor and others once served the prevailing Newtonian/Cartesian mental models of managers well, but that era is over. Today, managers are killing organizations by sacrificing innovation to the god of *efficiency*. We shouldn’t be surprised to learn that stagnant, ineffective processes are traceable to an organization’s failure to create new knowledge, or that the solution lies in finding innovative ways to harness people’s talents, or intellectual capital, rather than in installing new hardware and software. Historically, tools and technology have always worked best when used to augment people’s know-how and understanding. While technologies can often replace people in simple, routine situations, they can’t generate innovation in complex, dynamic environments—that’s where the real value of second-generation KM is most apparent.

Does McElroy find the ultimate answer for achieving high organizational performance? Probably not. But in this writer’s opinion, he convincingly points toward a direction where it may be found, when many other so-called knowledge management gurus remain bewitched by the lure of first-generation KM solutions. Second-generation KM—and McElroy’s book—provide a viable conceptual framework for effectively linking KM to systems thinking and organizational learning. In doing so, it offers a promising way for us to create and sustain organizational success. ■

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### 10 KEY PRINCIPLES OF SECOND-GENERATION KNOWLEDGE MANAGEMENT

1. Learning and innovation is a social process, not an administrative one.
2. Organizational learning and innovation is triggered by the detection of problems.
3. Valuable organizational knowledge does not simply exist—people in organization create it.
4. The social pattern of organizational learning and innovation is largely self-organizing and has regularity to it.
5. KM is a management discipline that focuses on enhancing knowledge production and integration in organizations.
6. KM is *not* an application of IT—rather, KM sometimes uses IT to help it have an impact on the social dynamics of knowledge and processing.
7. KM interventions can only have direct impact on knowledge-processing outcomes, not business outcomes—the impact on business outcomes is indirect.
8. KM enhances an organization’s capacity to adapt by improving its ability to learn and innovate, and to detect and solve problems.
9. If it doesn’t address value, veracity, or context, it’s not knowledge management.
10. Business strategy is subordinate to KM strategy, not the reverse, because business strategy is itself a product of knowledge processing.

Created by Mark McElroy