

Self-Organization: Taking a Personal Approach to KM

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"The maintenance of organization in nature is not—and can not be—achieved by central management; order can only be maintained by self-organization" (Christof Karl Biebracher, Gregoire Nicolis & Peter Schuster, Address to the European Communities)

"An empowered organization is one in which individuals have the knowledge, skill, desire, and opportunity to personally succeed in a way that leads to collective organizational success." (Stephen R. Covey, Principle-Centered Leadership)¹

Rise of the knowledge worker

Long before most people had heard of a new economy, Peter Drucker defined the knowledge age and the new principles of knowledge work. He understood two fundamental things about the transition from the industrial age to the information age. First, that the changing nature of work put more emphasis on intangibles such as knowledge than on tangible resources. Second, that performing and managing knowledge work required new personal and organizational skills. As early as 1959, again long before there was anything called "knowledge management," Drucker recognized that an emerging class of knowledge workers, who perform their labors with a valuable combination of skill and learning, would eclipse the industrial workers who then dominated the economies of developed countries.

"This is far more than a social change. It is a change in the human condition," Drucker explained in a 1994 *Atlantic Monthly* essay called "The Age of Social Transformation."²

In truth, there have always been knowledge workers. Acquired skills passed from generation to generation or from master to apprentice were an essential part of any occupation before the Industrial Revolution and many since. But by and large, they were skills that only had to be learned once by any worker because they generally changed little over the lifetime of a worker. On the other hand, knowledge has become increasingly important in the value of more types of work today, and the skills of today's knowledge worker require constant renewal. In the age of the knowledge worker, Drucker predicted, competitive advantage would be all about the management of

knowledge resources.

"How well an individual, an organization, an industry, a country, does in acquiring and applying knowledge will become the key competitive factor. The knowledge society will inevitably become far more competitive than any society we have yet known—for the simple reason that with knowledge being universally accessible, there will be no excuses for non-performance," Drucker wrote in *The Atlantic*.

Managing knowledge as a resource

From this notion of a knowledge economy eventually emerged the idea of managing knowledge and intellectual capital. There has been as little consensus about how to define knowledge management (KM) as there is about defining knowledge itself. In general, however, the phrase refers to strategies and structures for maximizing the return on intellectual and information resources.

Because knowledge occurs in **explicit** form (documents and data), **tacit** form (human education, experience and expertise) and can also be **implicit** (in cultures and communities), KM depends on both sociological and technological processes of creation, collection, sharing, recombination and reuse.

Knowledge is not the same thing as a knowledge worker. There is a difference between the knowledge that exists in a knowledge management system and knowledge that exists in the mind of the knowledge worker. There is also a difference between the kind of knowledge that exists in the mind of the knowledge worker and that which exists within a community of knowledge workers.³

The differences between tacit, implicit and explicit knowledge are more than academic. By and large, the distinction determines who owns the knowledge. Explicit knowledge is most likely the property of the firm. One way or another it is either a data or work product. But since tacit knowledge cannot be codified, it effectively remains the property of the knowledge worker. The knowledge that is implicit in communities and relationships is often accessible only in a social context. Companies have certainly tried to own or control all three types of knowledge. Employees may be ethically or contractually prohibited from sharing their knowledge with competitors, but if a knowledge worker leaves the firm, they take much of that knowledge and its inherent value with them.⁴

Because the knowledge-as-resource metaphor is imperfect, it highlights similarities as well as differences with other resource types under organizational management. A knowledge worker is an asset that appreciates over time. Knowledge itself is more often a depreciating asset. Patents quickly lose their value if not productized or licensed. A sales lead becomes worthless if the contact chooses a competitor's product or leaves the customer's company for another job.

¹ Stephen R. Covey: *Principle-Centered Leadership* Simon & Schuster, 1992.

² Peter F. Drucker "The Age of Social Transformation" *The Atlantic Monthly*, November 1994. <http://www.theatlantic.com/politics/ecbig/soctrans.htm>

³ Of course, not all knowledge is equally valuable. Accuracy, relevancy and trust are highly variable and context-dependent.

⁴ Steve Barth: "ID Check". *CRM* magazine. June, 2000. http://www.destinationcrm.com/cr/dcrm_cr_article.asp?id=287

Unlike other resources, knowledge is not depleted through use. On the other hand, the value of knowledge often increases with scarcity. And it is certainly subject to the law of diminishing returns; too much information quickly becomes a liability.

Table 1 suggests how different types of knowledge, information and data need to be treated differently.

Managing knowledge: dubious progress

Today, more and more studies indicate that the world's biggest companies are pursuing knowledge management in some way. "Practices associated with knowledge management and organizational learning have begun to make substantial contributions to companies' financial statements—more than \$600 million at both BP

Amoco and Ford Motor Company," explains Brian Hackett. "Results like that have spurred 80 percent of companies to launch KM efforts, including the creation of a chief knowledge officer or chief learning officer in 25 percent of companies."⁵

The Most Admired Knowledge Enterprises studies conducted by Teleos have demonstrated that companies pursuing shareholder value through knowledge management and innovation are out-performing the pack more than three to one.⁶

But KM experts admit that, too often, KM initiatives still fail to be completely deployed, fail to ease information overload, fail to create knowledge-sharing communities or fail to increase the efficiency of knowledge work. "Companies waste billions on knowledge management because they fail to figure out what knowledge they need, or how to manage it," says Thomas A. Stewart, editor of the *Harvard Business Review*.⁷

KM failures mirror the fates of other implementation and transformation efforts. "Less than 16 percent of the change

Table 1: Knowledge types and properties

Key info & intellectual assets	What is their value?	How to leverage?	Who owns the asset?
EXPLICIT <ul style="list-style-type: none"> • Transaction Data • Work Products (Docs) • Research Notes, etc. • Email & Correspondence • Patents & IP 	<i>Valuable</i>	<i>Collect</i>	<i>Organization</i>
TACIT <ul style="list-style-type: none"> • Experience • Expertise • Relationships • Reputation 	<i>Invaluable</i>	<i>Connect</i>	<i>Individual</i>
IMPLICIT <ul style="list-style-type: none"> • Conversations • Trust • Values 	<i>Intangible</i>	<i>Cultivate</i>	<i>Community</i>

Source: Author

efforts in business organizations achieve the results hoped for by management and more than 68 percent of these efforts encounter significant problems," according to Jeffrey A. Martin and Paul Carlile.⁸

The problem is that implementing an enterprise KM system is such a lengthy, expensive and contentious process that initiatives often run out of time, money or political support before they can contribute real value.

"Unfortunately, this is knowledge management (KM) today—a good idea gone awry," complains a report in *Darwin* magazine. "KM has fallen victim to a mixture of bad implementation practices and software vendors eager to turn a complex process into a pure technology play. The result: like many a business concept, KM has evolved from a hot buzzword to a phrase that now evokes more skepticism than enthusiasm."⁹

One of the persistent failings of enterprise-wide KM projects, whether based on technological or sociological principles, has been that over-emphasizing economies of

⁵ Brian Hackett: "Beyond Knowledge Management: New Ways to Work" The conference Board Research Report 1262-00-RR. 2000. www.conference-board.org.

⁶ Teleos: 2003 Global MAKE Report. October, 2003. <http://www.knowledgebusiness.com>

⁷ Thomas A. Stewart: "The Case against Knowledge Management." *Business 2.0*, February 2002.

⁸ Jeffrey A. Martin and Paul Carlile: "Designing Agile Organizations: Organizational learning at the boundaries" in R.E. Quinn, R.M. O'Neill, L.S. Clair (Eds.), *Pressing Problems in Modern Organizations: Transforming the Agenda for Research and Practice*. Amacom, 2000. <http://www.amanet.org/books/catalog/0814470521.htm>

⁹ Eric Berkman: "When Bad Things Happen to Good Ideas". *Darwin*, April 2001. <http://www.darwinmag.com/read/040101/badthings.html>

scale of organizational knowledge often yields a solution that is useless to individual members of the organization. Too many KM applications are designed for managers rather than workers. Looking at knowledge management from the perspective of the knowledge worker rather than the knowledge manager makes it clear that the productivity of knowledge is more important than the amount of knowledge stored in the repository. Whenever a corporation tries to maximize the value it extracts from its knowledge workers, it seems to end up discouraging those workers from maximizing their individual contributions.

Prospects for personal knowledge management

Personal knowledge management (PKM) was a phrase barely whispered during the 1990s. Now more and more KM practitioners are seeing how issues addressing individual knowledge work support the critical challenges of collaborative knowledge work.¹⁰ Buckman Laboratories knowledge architect Melissa Rumizen even included a chapter on PKM in the *Complete Idiot's Guide to Knowledge Management*.¹¹

Personal knowledge management rated a breakout session at TFPL's annual CKO summit in 2002. The group found, "There is a premise that most organizations are capable of only poorly exploiting personal knowledge management with estimates of 30% or less of personal knowledge being used. To achieve a higher percentage, there needs to be an alignment of personal and corporate objectives—as well as the right values, policies, skills, behaviors and tools available."¹²

An educational agenda has emerged which looks beyond basic literacy in information and communication technologies. At Millikin University's Tabor School of Business in Decatur, Illinois, Paul Dorsey, Associate Professor of Management Information Systems, leads a group of Millikin faculty investigating the concept of personal knowledge management in terms of training knowledge workers to become more effective and efficient in their development and use of knowledge.¹³

At the University of California, Los Angeles, incoming MBA students were required to take a course designed by Jason Frand, assistant dean of the Anderson Graduate School of Management. According to Frand, "PKM, as conceived at the Anderson School, is a conceptual framework to organize and integrate information that we, as individuals, feel is important so that it becomes part of our personal knowledge base. It provides a strategy for transforming what might be random pieces of information into something that can be systematically applied and that

expands our personal knowledge."¹⁴

Gartner KM specialist French Caldwell places PKM squarely on the adoption curve, predicting: "By 2004, more than 90 percent of knowledge workers will use personal knowledge management and consumer technologies to close the gaps in enterprise support for their information and knowledge needs."¹⁵

Companies are also starting to see reasons to incorporate the PKM perspective into their knowledge management strategies. For example, global public relations firm Hill & Knowlton made "enlightened self-interest" a design principle of their hK.net knowledge portal. Hill & Knowlton has about 1,300 employees in 66 offices in 35 countries. Looking to tap the knowledge reserves of this global workforce, the company constructed hK.net in 1999. Based on corporate memory technology from Intraspect, hK.net is a multilingual, multimedia portal with libraries, tools and collaboration spaces that let the company's PR professionals work with each other and with clients. The key to achieving critical mass is that employees are expected to participate in knowledge sharing for their own reasons first and the company's reasons second. Although there are traditional incentives for posting and accessing enterprise knowledge such as bonuses and micropayments, Hill & Knowlton employees are expected to participate out of enlightened self-interest: to do their jobs more efficiently and effectively and to be recognized by their peers and by the company for their expertise so that they will be in demand for the best assignments.¹⁶

Personal knowledge in collaborative work

The "gap" that French Caldwell mentioned above is the difference between what the organization provides to knowledge workers and what knowledge workers themselves feel they need to get their jobs done. In many ways, this gap can be traced to two prevailing assumptions about knowledge management. One has to do with social networks; the other has to do with information and communication technologies—but neither in the way that people usually mean.

The first of these misperceptions is about the role of technology. Disenchantment with top-down KM technologies is well-known. For example, a 2001 Bain & Company poll ranked knowledge management only 19th out of 25 categories of management tools.¹⁷

One problem might be that, in the context of knowledge

¹⁰ Steve Barth: "The Power of One." *Knowledge Management*, December 2000. <http://www.destinationkm.com/articles/default.asp?ArticleID=615>

¹¹ Melissa Clemmons Rumizen: *The Complete Idiot's Guide to Knowledge Management*. Alpha Books, 2001.

¹² TFPL: *New Directions for Knowledge Strategies*. Executive report from TFPL's fifth international CKO Summit, held October 2002 in Dublin, Ireland. http://www.tfpl.com/thought_leadership/cko_summits.cfm

¹³ Paul A. Dorsey: "Personal Knowledge Management: Educational Framework for Global Business." Tabor School of Business, Millikin University. http://www.millikin.edu/pkm/pkm_istanbul.html

¹⁴ Jason Frand and Carol Hixon: "Personal Knowledge Management : Who, What, Why, When, Where, How?" Working paper of previous PKM presentations, December, 1999 <http://www.anderson.ucla.edu/faculty/jason.frand/researcher/speeches/PKM.htm>

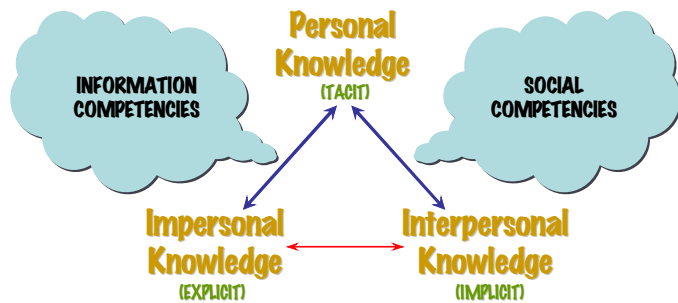
¹⁵ French Caldwell: "Personal Knowledge Networks Emerge With Grassroots KM." Gartner Research Strategic Planning Research Note, November 2002.

¹⁶ Steve Barth: "Paul Taaffe: Hill & Knowlton's president talks about the role of self-interest to motivate knowledge sharing." *Knowledge Management*, November 2001.

¹⁷ Steve Barth: "KM Horror Stories." *Knowledge Management*, October 2000. <http://www.destinationkm.com/articles/default.asp?ArticleID=923>

Figure 1: Knowledge typology

Three kinds of knowledge



Source: Author

work, people tend to use the words “tools” and “technologies” interchangeably. But technology is a very general label. Tools is more specific. Technology is provided by the company. Tools are personal. Workers have no sense of ownership or stewardship for the technology. If a tool is useful, it’s “my tool.” Otherwise workers think of them as ‘the system’ imposed by management.

The effort to distinguish knowledge work from manual labor may serve to disconnect knowledge workers from the tools of their trade—and in doing so disrupt their sense of identity. Carpenters and auto mechanics take pride in using their tools skillfully, becoming craftsmen (and craftswomen) in the process. Their tools become symbols of their professional identities as individuals and as communities. How many knowledge workers think of information and communication tools this way? How many think of themselves as craftsmen in terms of how we use e-mail or search engines?

The second major misperception is about the implications of collaborative knowledge work. The evolution of knowledge management from a field based largely on information technologies to one based on communities of practice as well represents genuine progress. But this emphasis on community will fail if everyone neglects the needs of the individual knowledge worker.

If work today is more collaborative, it is natural that the focus has been on collective efforts. The problem here is the degree to which human networks—teams, communities or societies—are ultimately only the consequence of individual actions and behaviors. The characteristics of the group cannot be designed as one would design a business process or product. They can only emerge from the complex interaction of those individuals.

At the same time, focusing on the increasingly collaborative nature of work often misses the difference between the collaboration and the work. People do work differently, teaming and collaborating more than ever before and companies have accelerated rates of innovation to show for it. But knowledge workers almost never actually produce their deliverables collectively. Instead, they cooperate by dividing tasks and then everyone goes back to their cubicle to research the subject, write up the report, analyze the problem, communicate with others outside of the group, and so on.

Thus, both the “knowledge” nature of work and the “network” nature of work put more responsibility on every individual, not less. Collaborative work requires more of the individual—not less. And we left with a whole generation of knowledge workers ill-equipped to handle those obligations and responsibilities.

In other words, to be effective in today’s jobs, knowledge workers need to manage three kinds of knowledge: their own tacit knowledge, their interaction with the information available in explicit form, and their interactions with other knowledge workers to tap the knowledge implicit in conversations and communities. The skills to do this efficiently and effectively more or less break down into two general categories: information skills and social skills.

Emotional intelligence in the workplace

Although we claim to understand the social imperative of knowledge work, workplace behaviors reflect little of that understanding.

In the old days of rigid hierarchies, employees needed little motivation to guide their interactions besides fear and greed. In today’s workplace -- characterized more by distributed decision-making, ad hoc teams and networks, and multiple modes of interaction throughout the day -- social, political and emotional competencies are critical. These factors have a huge impact on the ways in which managers and workers communicate.

Social network analysis has demonstrated the degree to which dynamic, informal networks create value in modern knowledge organizations. According to Bonnie Nardi, Steve Whittaker and Heinrich Schwarz, “Social networks are key sources of labor and information in a rapidly transforming economy characterized by less institutional stability and fewer reliable corporate resources. The personal social network is fast becoming the only sensible alternative to the traditional ‘org chart’ for many everyday transactions in today’s economy.”¹⁸

Nevertheless, talented, ambitious individuals are still hired, promoted and rewarded on the basis of their individual skills and accomplishments—even when their behaviors subtract from the value and productivity of the group. Rob Cross, Wayne Baker and Andrew Parker recently demonstrated how much a single employee can add—or subtract—energy from the workplace. “Energy in organizations matters for performance, morale, innovation and learning,” they explain.¹⁹

Many executives ignore the hard-dollar benefits of “soft” skills such as emotional intelligence. Although there are several somewhat conflicting definitions of emotional intelligence, they are all based on the idea of awareness of control over one’s own emotions, combined with a

¹⁸ Bonnie Nardi, Steve Whittaker and Heinrich Schwarz: “It’s not what you know, it’s who you know: Work in the information age.” *First Monday* (May 2000). http://www.firstmonday.org/issues/issue5_5/nardi/index.html

¹⁹ Rob Cross, Wayne Baker and Andrew Parker: “What Creates Energy in Organizations.” *MIT Sloan Management Review* Summer 2003.

sensitivity to and consideration for the emotions of others. By any of these definitions, there is plenty of evidence that the individual-level of EI in the workplace creates an organization of more effective individuals. Kate Cannon's pioneering work at American Express beginning in 1991 demonstrated a direct link between "soft skills" and the bottom line. By 1998 a retrospective study of business results for regions where sales managers had received "emotional competence" training found sales results were 11% greater than for those regions that had not. The company projected the bottom-line impact could be worth as much as \$200 million in additional sales annually if all sales managers participated.

Adding these competencies to a knowledge worker's portfolio does not mean learning new skills from scratch. In fact, many popular personal development programs encourage similar skills that enhance both independence and interdependence. Three such approaches are compared in **Table 2**.

Framework for PKM

Based on the drivers above, an agenda for personal knowledge management would involve a range of relatively simple skills and tools that workers use to acquire, create and share knowledge, extend personal networks and collaborate with colleagues. Knowledge workers should be encouraged to take initiative and responsibility for individual efficiency and individual effectiveness, as well as taking initiative and responsibility for *what* he or she knows, does not know and needs to know, as well as *who* he or she knows or needs to know.

PKM should automate, accelerate or augment human processes of individual knowledge work. Ideally, such a system would work anytime and anywhere. Such skills and tools would be available to individual knowledge workers without their having to always rely on the technical or financial resources of a corporation.

One way to maintain this focus on individual efficiency and effectiveness is to evaluate PKM principles, processes, values, skills and tools in a framework originally developed by Prof. Paul Dorsey to help students at Millikin University in Decatur, Illinois. Dorsey and his colleagues are looking to bridge the skills gaps between information literacy and critical thinking, both of which are needed by students making the transition from academic studies to professional practice. The Millikin framework is interesting precisely because it does not confuse the raw

Table 2: Perspectives on personal development skills			
	Peter Senge	Stephen Covey	Daniel Goleman
	Five Principles	Seven Habits	Emotional Intelligence
Independence	Personal Mastery ²⁰ Understanding Mental Models	Be Proactive Begin with the End in Mind Put First Things First	Self-Awareness Self-Regulation Motivation
Interdependence	Shared Vision Team Learning	Think Win-Win Seek First to Understand, Then be Understood Synergize	Empathy Social Skills
	Systems Thinking	Sharpen the Saw	

Source: Author

material with the final products of knowledge work: decisions, recommendations and actions.

Table 3 represents a modified Millikin framework, with the matrix populated for competitive intelligence professionals. The principles are explored further below.

1. Accessing information and ideas

For most people, a cycle of knowledge work begins with a question at the heart of a problem to be solved or a decision to be made. Answering that question is a process of research and learning. Accessing information is about locating, identifying, retrieving and viewing documents and data to discover the knowledge contained therein. Accessing ideas is about learning, inquiring and seeking out experts and other colleagues in the network who can help. Asking becomes a key skill, as does the ability to map and navigate vast landscapes of explicit knowledge.

2. Evaluating information and ideas

Information technologies such as document management and the Internet have led to a triumph of quantity over quality. But after retrieving information and ideas, both quality and relevance to the question at hand must be evaluated. Evaluation depends more on skills than on tools, although trust in the tools we use is one of the most important factors. These skills include identifying and validating authoritative sources in terms of bodies of information or individuals.

3. Organizing information and ideas

Once material is in hand, information and ideas become actionable knowledge by being internalized and integrated with what people already know and believe, sometimes even dislodging obsolete assumptions. Organizing is vital, but finding patterns, trends and relationships is often a very personal process: some write in journals or diaries or dictate to a voice recorder. Increasingly, those notes can be digitized and indexed to be clustered and displayed with

²⁰ This includes: "Systemic view, core principles, mission/vision, commitment to seek truth/knowledge, integrate yourself with the whole, creative tension"

Table 3: Information processes, skills and tools

PRINCIPLES	PROCESSES	VALUES	SKILLS	TOOLS
Accessing Information & Ideas	<ul style="list-style-type: none"> • Browse, buy, subscribe • Search (local, network, web) • Research • Asking & Listening • Learning 	<ul style="list-style-type: none"> • Transparency • Concentricity (spiral out) • Learning & unlearning • Mobility • Persistence 	<ul style="list-style-type: none"> • Question formation • Search techniques • Research strategies • Inquiry • "Know the map" 	<ul style="list-style-type: none"> • Push/Pull services • Desktop Search • Web MetaCrawlers • Contact database • Wireless email, phones, Web
Evaluating Information & Ideas	<ul style="list-style-type: none"> • Attribute info & ideas • Vet sources • Confirmation • Testing • Question motives 	<ul style="list-style-type: none"> • Objectivity • Quality and relevance • Message literacy 	<ul style="list-style-type: none"> • Source identification, qualification & cultivation • Validation • Judgment • Intuition, feeling 	<ul style="list-style-type: none"> • Collaborative filtering • Rating services • Trusted recommendations & references
Organizing Information & Ideas	<ul style="list-style-type: none"> • Capture, convert text & data • File, archive • Search automation • Map, categorize, index • Internalize & Integrate 	<ul style="list-style-type: none"> • Availability & flexibility • Version control • Personal Area Networks • Narrative* 	<ul style="list-style-type: none"> • Email filtering • Discard (carefully) • Outlining • Networking 	<ul style="list-style-type: none"> • Voice, character recognition • Journals, diaries, calendars • Indexers, links & bookmarks • Personal & enterprise portals • Databases
Analyzing Information & Ideas	<ul style="list-style-type: none"> • Sense-Making • Hypothesis & Synthesis • Identify Trends 	<ul style="list-style-type: none"> • Critical thinking • Systems thinking • Empathy • Narrative* 	<ul style="list-style-type: none"> • Analytical techniques • Testing hypothesis • <i>This category is very practice-specific</i> 	<ul style="list-style-type: none"> • Summarizers • Spreadsheets • Visualization tools
Conveying Information & Ideas	<ul style="list-style-type: none"> • Answering • Explaining • Presenting • Publishing • Teaching 	<ul style="list-style-type: none"> • Clarity • Articulation • Context • Language • Narrative* 	<ul style="list-style-type: none"> • Written word • Spoken word • What's left unspoken 	<ul style="list-style-type: none"> • Office suites: word processing, spreadsheets, presentations, databases, HTML editors, etc.
Collaborating with Info & Ideas	<ul style="list-style-type: none"> • Messaging • Sharing docs • Workflow • Brainstorming • Meetings & conversations 	<ul style="list-style-type: none"> • Trust • Teamwork, Compromise • Network ethics • Just-in-time collaboration • Gratitude, Generosity 	<ul style="list-style-type: none"> • Emotional intelligence • Facilitation • Relationship management • Play • Leadership 	<ul style="list-style-type: none"> • Messaging • Collaboration apps • Mobile communications • Whiteboards, etc • Water Coolers
Securing Information & Ideas	<ul style="list-style-type: none"> • Backup • Inoculation • Insulation • Encryption 	<ul style="list-style-type: none"> • Confidentiality • Privacy • Need-to-know • Responsibility • Integrity & confidentiality 	<ul style="list-style-type: none"> • Self-discipline • Threat awareness 	<ul style="list-style-type: none"> • Access controls • Passwords & encryption • Virus filters & firewalls • IP agreements

Source: Author (based on a framework originally developed by Paul Dorsey)

other captured data and information. Making sense of information and ideas is greatly facilitated by search, categorization and indexing technologies that are increasingly available to individual users, reducing the time wasted re-locating pertinent items.

4. Analyzing information and ideas

Calling this category “analysis” misses the point of all of our new ways of looking at both knowledge and work. Because sense-making equally depends on synthesis and hypothesis, it is deeply linked to the integrating processes of the organization category above. As Paul Dorsey noted in his original framework—and others have concurred—this is the most practice-specific category of knowledgework. So the professional skills and tools of one community are largely useless to another.

6. Collaborating around information and ideas

Nothing about PKM should be taken to imply that knowledge work is solitary, only that the individual needs both skills and tools to bring to the table. So the key collaboration tools by now should be familiar to any KM practitioner: messaging, shared workspaces, discussion

and chat applications, expertise locators, and the like. Some community-of-practice aids build in functions to maintain the social fabric of the group. But more than any other, this category emphasizes how much tools must be subordinated to skills and values. Social, emotional and political competencies cannot be automated and they have much more to do with the success of teams, networks and communities than do the tools.

5. Conveying information and ideas

Distinguished from the collaboration category in terms of an intentional one-to-one or one-to-many transfer, communicating our knowledge to others is how we establish our value in a knowledge economy, by answering, articulating and even advertising what we know. This is where most of us live, using the most familiar tools in Microsoft Office and other "productivity" suites that include word processing, spreadsheets, presentations, databases and HTML editors to explain, present, publish, convince and teach with written words, spoken words—and with what is left unspoken.

7. Securing information and ideas

Finally, if knowledge has value, then that value is worth protecting.²¹ There are certainly enough tools to control access to digital systems, but today's emphasis on security overemphasizes inoculation from viruses, insulation from hackers and encryption of sensitive communications. More valuable information is given away through lazy disregard for common-sense principles and practices. Likewise, we rely too much on contractual safeguards to preserve the value of intellectual capital. For individuals, there are ways to share their knowledge without losing credit for it or control over it.

Conclusion

In sum, the PKM argument goes like this. In a knowledge economy, the value of an organization derives from the intellectual capital of its knowledge workers. Unfortunately, few knowledge management projects go far enough to understand or address individual priorities and processes. Even when everyone agrees about the potential value of enterprise-wide knowledge sharing, implementing an enterprise knowledge management system is such a lengthy, expensive and contentious process that initiatives often run out of time, money or political support before KM can achieve critical mass.

At the same time, fewer and fewer of us rely on our corporations for identity or security. Organizations get too big, too impersonal, too political. And our relationships to them are more transient; the companies themselves are more transient. So the basic organizational unit is only one.

KM cannot succeed unless every knowledge worker takes personal responsibility for what he or she knows and does not know. Management has to take responsibility for cultivating an atmosphere in which everyone has reason to share while building an infrastructure that makes it easy to share.

The most valuable intellectual assets—such as tacit knowledge, trust and innovation—can be encouraged and exploited by the corporation, but never owned. Enterprise KM strategies should be designed to leverage rather than attempt to overcome individual motivations and behaviors. As an investment strategy for personal intellectual capital, personal knowledge management helps knowledge workers demonstrate their value to their organizations and in the job market while they improve the aggregate value of intellectual capital for the organization. At the same time, it builds momentum to overcome the technological and sociological barriers to top-down, enterprise-wide KM initiatives.

Peter Drucker points out how much all of this comes down to personal responsibility for competence, integrity, continuous learning—all aspects of managing oneself. Knowledge workers, as Drucker frequently points out, cannot be managed as if they were part of industrial structures or processes. Neither knowledge nor knowledge

workers can really be managed at all. For one thing, knowledge workers frequently have expertise that their supervisors don't have and can take their expertise elsewhere. That is one reason knowledge workers should be managed as volunteers to maintain their loyalty. And knowledge workers tend to spend too much time on tasks they weren't hired for.²²

Maximizing human capital (in terms of experience and expertise), structural capital (practices and systems) and social capital (networks and relationships) on a personal level can meet the needs of both individuals and organizations. If organizational productivity depends on the efficiency and effectiveness of individuals, KM systems must be designed with personal knowledge management needs in mind, giving each worker the content, context and connections they need to acquire and create knowledge, share learning, collaborate with colleagues and extend their networks. Taking a PKM approach also gives workers and managers more time for value-creating processes that can never be automated, such as reflection and innovation.

SIDEBAR

A Personal PKM System

There are hundreds of available tools for PKM. Most of them can even be purchased, installed and used by the average knowledge worker without having to rely on the financial or technical resources of their employers. These include metasearch tools for more effectively finding explicit knowledge on the Internet and local hard drives. There are capture tools to digitize spontaneous ideas and conversations for later retrieval. There are all kinds of communication and collaboration tools that make it easier to work together.

I have personal favorites, of course—and the choices will be personal for anyone. Here are some examples:

- I walk around with 16 year's worth of work on a 3lb. **IBM ThinkPad** laptop
- I can't live without **Enfish Find** to instantly and intelligently retrieve the documents, data, and contacts I need during the day
- I also love **Intelliseek BullsEye** for simultaneously searching dozens of Internet sources and consolidating the results (unfortunately, this product is no longer sold, but **Copernic Agent** is also very good)
- I use an **Olympus digital recorder** to capture conversations and interviews for easy transcription using a foot pedal, but I can also dictate to it for machine transcription by speech recognition programs such as **IBM ViaVoice**
- Although there are lots of collaboration functions built into **Microsoft Office** and **Outlook**, **Groove** is a great peer-to-peer collaboration platform that anyone can set up in less than an hour

Capturing ideas and information

Being prepared, in advance, to capture spontaneous ideas and information is an important part of building an infrastructure for

²¹ Steve Barth: "Open yet Guarded: Protecting the Knowledge Enterprise." *Knowledge Management*, March 2001.

²² Steve Barth: "Heeding the Sage of the Knowledge Age." *CRM* magazine, May 2000. http://www.destinationcrm.com/cr/dcrm_cr_article.asp?id=302&ed=5/1/00

managing personal knowledge. It is a way to make sure that what you know is ready, available and accessible (that is, organized) when you need it to create new knowledge.

How many ideas are lost forever before we can record them in any form? Even at our desks, ideas can evaporate faster than we can type them. And we are rarely at the keyboard when the best ideas come, anyway. Some end up scratched out by hand if there's paper handy — or at least a napkin. Or they can be quickly chatted into tape recorders. But even if they do get captured on paper or on tape, they rarely get transferred to digital files. In my case the scraps tended to pile up in drifts at the corner of my desk or in spiral notebooks on the shelf.

The illustration above describes the components of my personal PKM infrastructure, and how they fit together. These are the tools I use to perform many of the tasks detailed in the framework mentioned in this chapter. However they should not be misunderstood as a PKM system, which more importantly includes values, skills and processes that can't be simply replaced by these tools.

Consider for example, a day in the life of a simple business card. I frequently return from a conference, trade show, or even an evening's reception with hundreds of cards representing potential opportunities.

In the old days, you would bring your stack of cards back to the office and hand them to a secretary who would staple them to Rolodex cards or slip them into plastic pages and then—this is important—compose a personal follow-up letter that started building a relationship. You could gauge someone's success by the size of his or her business card collection.

Now the business card follows another route. Think of the card as an artifact of social capital, a talisman that can set off a chain of events both technological and anthropological to build and maintain the relationships that hold your network together. First, drop a card for John Smith from Acme Ltd. into a business card scanner, such as the **Corex Technologies**

CardScan, where the text is recognized and filed into the proper data fields of a contact entry, retaining an image of the original card as a memory aid. Synchronization software copies the contact to your desktop PIM, perhaps **Outlook**, as well as to your PDA and cell phone. Connections are just a button away.

More importantly, the new contact is picked up by an indexing tool such as **Enfish Professional**. Now when you open John Smith from Acme Ltd., you have a whole portal into

everything there is to know about Smith and Acme, with relevant news delivered from the Web and relevant files and messages listed from local drives. Sending links and referrals to begin building a relationship is just a click away. And holding all of this together are a few drops of ink on paper or a few bits in a database.

Leveraging ideas and information

Don't let anyone tell you information productivity doesn't have a place in KM. When someone asks, "Who do you know at the World Bank who understands Pakistan?" you send them a name, phone number and e-mail address. However, behind those few bits of information is a complicated transaction of social capital. Your reputation is on the line for making the introduction. If the people you are introducing build their own mutually beneficial relationship, it will reflect doubly well on you.

We've all heard the proposition that KM is about whom you know more than what you know. But how do you keep track of whom you know? In the old days, finding a World Bank Pakistan contact might have required an hour or two of going through the business card file or a weekend afternoon drilling through old conference notes. The time required limited the number of such favors you could provide. Now however, a few keystrokes in a personal search tool yields names in a matter of seconds. In this case, as it turns out, I don't have any WB Pakistan experts in my Outlook database. However, on several occasions I wrote or edited stories using such individuals as sources and that is enough of a relationship for a phone call to solicit their cooperation.

It's all information until you put it into context and into action by making introductions, suggestions, recommendations or decisions. PKM tools help an individual knowledge worker to automate, accelerate, augment, articulate and activate the information and the ideas that he or she works with every day to perform their job.

--Steve Barth

