

Knowledge Networks and Communities of Practice

Knowledge and learning have become the new strategic imperative of organizations. Recent surveys by The Conference Board and the American Management Association show that at least one-half of U.S. companies, and up to 72% of overseas firms, have some kind of knowledge management initiative underway. Other studies put the figure closer to 80% for global corporations. Chief Knowledge Officers and Chief Learning Officers are popping up everywhere. These strategic knowledge initiatives are ushering in a rich array of opportunities for applying OD expertise. This article will first describe the new logic driving interest in knowledge management and then focus on how OD practitioners can participate in that strategic conversation, and support knowledge creation and sharing through building communities of practice.

Why Knowledge?

What is this knowledge management focus really about? At the heart of the knowledge question lies a very different logic about how value is created in the new economy. In the industrial economy if people thought about knowledge at all they operated from the old equation: knowledge = power, so hoard it. Today companies are embracing a new equation for success: knowledge = power, so share and it multiplies. This new logic represents a radical rethinking of basic business and economic models.

Tom Stewart, editor of *Fortune* magazine, sums up the new assumptions that are driving business thinking when he writes about knowledge having become the most important factor of economic life: it is the chief ingredient of what we buy and sell; it is the raw material with which we work. As executives and business leaders absorb this simple truth they find they must completely change the way they think about the organization, business relationships, measures, tools, business models, values, ethics, culture and leadership. In short—it changes everything. In order to support this shift of thinking OD practitioners need to master this new strategic language and appreciate both the subtle and profound differences of the knowledge focus. (*Knowledge management* is a label that no one really likes, but we seem a bit stuck with it at the moment. I like *knowledge leadership* myself.)

A knowledge strategy serves as a unifying frame for building organizational capability across multiple arenas. For example, Xerox's corporate strategy director Dan Holtshouse, takes a broad approach to knowledge claiming "managing for knowledge means creating a thriving work and learning environment that fosters the continuous creation, aggregation, use and re-use of both organizational and personal knowledge... in the pursuit of new business value." Xerox embraces no less than ten knowledge-focused strategic domains:

- Sharing knowledge and best practices
- Instilling responsibility for sharing knowledge
- Capturing and reusing past experiences
- Embedding knowledge in product, services and processes
- Producing knowledge as a product
- Driving knowledge generation for innovation
- Mapping networks of experts
- Building and mining customer knowledge bases
- Understanding and measuring the value of knowledge
- Leveraging intellectual assets

Such focus areas are typical of companies that embrace the sharing of knowledge across organizational boundaries. Corporate know-how is important at strategic levels to sense the environment and challenge management assumptions. At the tactical level, day-to-day decision making requires that people talk candidly, share their experience and insights, and find meaning together. At the operational level, replicating best practices throughout the company quickly and effectively can lead to greater efficiencies, lower costs and higher quality of goods and services.

It's the People...

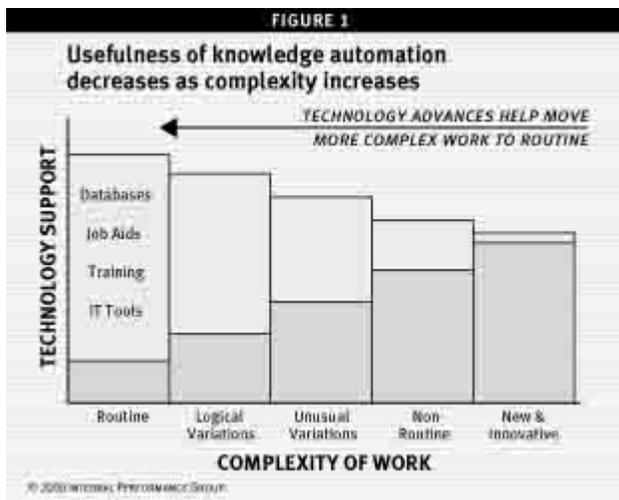
As an early practitioner and author addressing organizational intelligence and knowledge, I have helped many different companies develop knowledge strategies, ranging from global giant Motorola to small, fast moving start-ups. In the last six years I have seen the focus of knowledge management quickly move from an early emphasis on technologies and databases to a keen appreciation of how

deeply corporate knowledge is embedded in people's experience. Some companies have invested millions of dollars in technologies only to find that people don't use them.

Contrast these two examples. One global technology company spent roughly \$7 million building a best practice database for all its technology consultants around the world that sell very expensive, complex technology systems. When it became apparent that people weren't contributing to or accessing the database, they asked me to help them assess what went wrong. When I inquired how much of that \$7 million was invested in trying to understand how the target group of people already creates and shares knowledge, or in bringing them together as a learning community, the answer was zero! I then coached them in reshaping the project with a new focus on building a learning community and involving their internal OD and learning specialists.

As an example of how an OD perspective can make a difference, here is how another company undertook a similar effort. AT&T Global services (a \$10 billion segment of AT&T) wanted to support their worldwide, sophisticated technology consultants with a best practice database. However, they first established base-line measures of exactly what they hoped to improve and invested in studying how the group was already learning and sharing knowledge. Based on what they learned, they trained everyone in the group for forty hours in what it means to be a learning community. For the training they partnered with consultants with experience in learning organization concepts and practice. They fine tuned rewards and measurements to support community learning. Only then did they identify what technology support they might need. The company built a database to capture and share best practices, populated by the community with the information and practices *they* identified as important. The group achieved outstanding business results – with far less financial outlay and time than the first company.

Top companies have learned that technology is the easy part of supporting knowledge creation and sharing. The really hard part is working with people to improve collaboration and knowledge sharing. What becomes clear very quickly to those supporting knowledge initiatives is that as knowledge complexity increases the degree to which technology can be counted on to assist with the task is reduced. (*See Figure 1.*) On the up side, though, as we learn how to build smarter technologies that can assist with more complex tasks, we move the complex to the routine. This in turn frees up people's intelligence to address more complex questions.



The Social Nature of Knowledge and Learning

Knowledge and learning are social in nature. Knowledge travels through language and every conversation is an experiment in knowledge creation—testing ideas, trying out words and concepts. Continuing conversation through daily work activities continually builds both tacit and explicit knowledge. Tacit knowledge is the wealth of know-how that resides in people’s heads, deeply rooted in their life experience and learning. Explicit knowledge is that which gets deliberately shared, documented and communicated. Many people in the knowledge field insist that there is no knowledge outside of people. Externalized knowledge, they claim, is only information.

No database or technology system can fully capture and distribute all the knowledge that floats around a company—nor should it. If we respect the way knowledge naturally happens, then we support the communities in which it grows. As Chief Knowledge Officers appreciate that networks and practice communities are the most natural and powerful resources for learning and knowledge we are rapidly seeing a convergence of knowledge management efforts with a focus on learning communities. Time and again, as I speak at conferences or work with companies, I will meet a new Chief Knowledge Officer or Director of Knowledge Management bursting with plans for new technologies. A few months later the same person will present a new business card displaying a title such as Director of Knowledge Networks or Facilitator of Knowledge Communities and describe their efforts to change group behaviors around collaboration and learning.

Communities of Practice

Knowledge cannot be separated from the communities that create it, use it, and transform it. In all types of knowledge work, even where technology is very helpful, people require conversation, experimentation, and shared experiences with other people who do what they do. Especially as people move beyond routine processes into more complex challenges they rely heavily on their *community of practice* as their primary knowledge resource.

What is a community of practice? John Seely Brown, VP and Chief Scientist at Parc Xerox describes such communities as “peers in the execution of real work. What holds them together is a common sense of purpose and a real need to know what each other knows.” What sets these apart from teams, however, is that communities are defined by *knowledge* rather than task. Further, a community life cycle is determined by the value it creates for its *members*, not by project deadlines.

There are important distinctions between work groups, teams, communities of practice, and knowledge networks. Etienne Wenger, a global leader in community of practice development describes three important dimensions of communities of practice:

Domain. People organize around domain of knowledge that gives members a sense of joint enterprise and brings them together. Members identify with the domain of knowledge and a joint undertaking that emerges from shared understanding of their situation.

Community. People function as a *community* through relationships of mutual engagement that bind members together into a social entity. They interact regularly and engage in joint activities that build relationship and trust.

Practice. It builds capability in its practice by developing a shared repertoire and resources such as tools, documents, routines, vocabulary, symbols, artifacts, etc, that embody the accumulated knowledge of the community. This shared repertoire serves as a foundation for future learning.

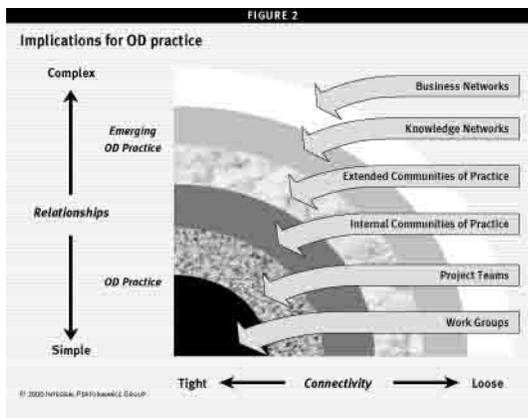
Skills that OD professionals have developed in respect to teams cannot simply be transferred to communities of practice. There are important differences that require different approaches. In work teams and project teams, major goals and the basic nature of the joint enterprise are generally predetermined by management. In a real community of practice these are negotiated among members. Also, where membership in work groups and project teams is usually assigned or selected

by the leader, a community of practice is completely self-selecting. People participate because they personally identify with the topic and enterprise of the community. Internal consultant Melissie Rumizen has led community of practice development at both the National Securities Administration and Buckman Laboratories. “I had to learn,” she says, “that these learning communities are more like volunteer organizations. They simply cannot be managed like a project or team.” A community continually redefines itself and its enterprise in a more emergent, organic way.

At the other end of the spectrum from work groups are informal knowledge networks and business networks where relationships are always shifting and changing as people have need to connect. The primary purpose of these informal networks is to collect and pass along information. They are loose and informal because there is no joint enterprise that holds them together, such as development of shared tools. They are just a set of relationships. Networking does not make for a community of practice. Communities require a sense of mission—there is something people want to accomplish or do together that arises from their shared understanding.

With today’s increasingly mobile workforce people are often more aligned to their professional identity than to their organizational affiliation. For this reason companies that actively connect new hires to practice communities, such as American Management Services, find that retention levels increase dramatically. In addition, many people also participate in external communities of practice, both locally and globally serving as intelligent “synapses” interacting with both the larger social system and with the company. In today’s work environment many people working for a company’s success aren’t even “in” the company. They are customers, suppliers, business partners, contract workers or consultants who frequently participate in learning communities that extend both inside and outside organizational boundaries. The social fabric of business extends to informal knowledge networks, business networks, economic clusters and technology networks that may be either local or global.

All of these arenas offer new possibilities and opportunities for OD practitioners to expand their field of practice. In *Figure 2* I have indicated where new OD practices are beginning to emerge in response to the growing need for facilitation and support of communities of practice and knowledge networks.



Communities of practice emerge in the social space between project teams and knowledge networks. When multiple project teams are engaged in similar tasks the need to share what they know often will lead to community formation. From the other direction, a loosely organized knowledge network of people who share common interests can gel into a focused community when people recognize new shared opportunities or begin to seek a significant breakthrough. Those who would support communities need to learn what conditions foster their emergence and create an environment in which they can flourish.

Xerox is an old hand at communities, having supported research at the Institute for Research in Learning in the 1980's. Today communities of practice are deeply embedded into Xerox culture. British Petroleum requires "dual citizenship" where everyone is both a member of their functional work group and an active participant in at least one community of practice. This helps spread learning from projects more widely across the company. Other companies leveraging communities of practice include Johnson & Johnson, General Motors, Pillsbury, The World Bank, The Veterans Administration, Hewlett-Packard, Chevron, Shell Oil, the large consulting groups, Philip Morris, Daimler-Chrysler, IBM, Intel, Lucent Technologies, and Motorola.

Benefits of Communities of Practice

Communities of practice are beneficial for the business, for the community itself and for employees. They are powerful vehicles both for sharing knowledge and achieving business results.

For the Business

- Help drive strategy
- Support faster problem solving both locally and organization wide
- Aid in developing, recruiting and retaining talent
- Build core capabilities and knowledge competencies
- More rapidly diffuse practices for operational excellence
- Cross fertilize ideas and increase opportunities for innovation

For the Community

- Help build common language, methods and models around specific competencies
- Embed knowledge and expertise in a larger population
- Aid retention of knowledge when employees leave the company
- Increase access to expertise across the company
- Provide a means to share power and influence with the formal parts of the organization

For the Individual

- Help people do their jobs
- Provide a stable sense of community with other internal colleagues and with the company
- Foster a learning-focused sense of identity
- Help develop individual skills and competencies
- Help a knowledge worker stay current
- Provide challenges and opportunities to contribute

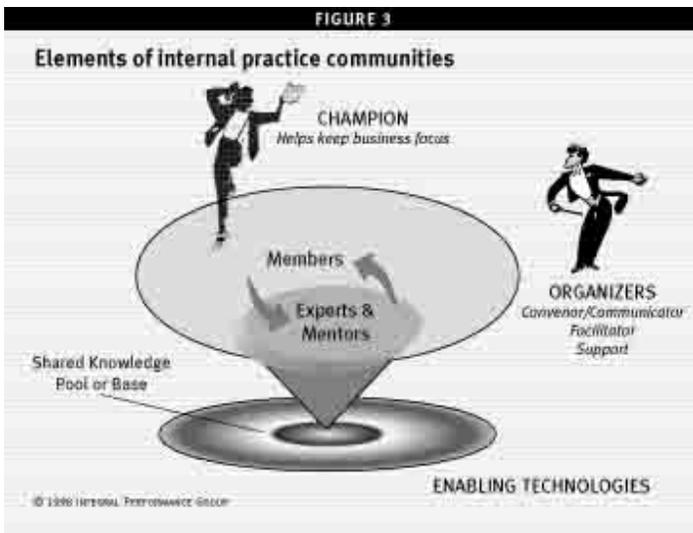
Implications for OD

OD practitioners can support knowledge initiatives in very important ways. The knowledge focus has expanded beyond learning organization approaches to embrace new thinking about the business, new scorecards and indexes, comprehensive supporting technologies, new frameworks and tools. Here is a sampling of ways that OD practitioners can help support knowledge and learning.

- **Actively participate in knowledge strategy development.** The knowledge management conversation is far too critical for OD practitioners to dismiss or be left out. While not difficult, a

knowledge focused strategy *is* different, and there are new concepts and terms that OD practitioners need to master to fully participate. This means learning the new language of intangibles, surfacing through attention to Balanced Scorecards, Intellectual Capital Indexes, and Triple Bottom Line accounting (financial success, social success and environmental success). Linking knowledge to building intangible assets poses a genuinely new way of thinking about business that potentially can reconnect business and economics to the web of life. We will need new perspectives, methodologies, frameworks and scorecards to manage in the Knowledge Era. At the strategic level, I expand ROI analysis to include a complementary framework for understanding intangibles. I also have developed a Value Network Analysis methodology that illuminates how knowledge creates both tangible and intangible value and deepens business relationships. It is critical to link specific domains of knowledge and their communities to business success and strategic goals.

• **Making networks and communities visible.** Knowledge networks and communities of practice already exist in most organizations. The first challenge is not to create them—but to simply find them and make them visible to themselves and to the rest of the organization. We need to first understand how knowledge sharing is already taking place before we begin strategizing ways to improve it. Some companies create directories or yellow pages, but these alone are insufficient. Other companies leverage special interest groups or expert networks into more formal, business-focused communities.



Networks and communities are always changing (*Figure 3*) and our analysis tools need to reflect the movement of people through different projects, communities and networks. OD practitioners need to continue to expand from a focus on teams to *patterns* of teaming and community formation as people come together, work on projects, participate in communities, connect with networks, then disband and move into webs of relationships. In my own practice I apply social network analysis methodologies to surface patterns of interaction and help guide development of communities.

• **Community formation.** Working with communities and knowledge networks is different from working with project teams or intact working groups. Communities have looser bonds and are focused less on a particular task than they are on overall development of their field of expertise. Facilitating community development, however, is a natural role for people with a solid background in OD. Etienne Wenger's groundbreaking book *Communities of Practice* lays out a solid theoretical foundation for understanding the dynamics of practice communities. We can anticipate that there will be a growing body of thought and practice in this area and it offers great opportunity for practitioners to shape offerings and services. (See "*Role of OD Practitioners...*" below)

Five Stages of Development

Role of OD Practitioners in Formation of Communities of Practice

Etienne Wenger has worked with colleagues Richard McDermott and Bill Snyder to define five stages of development in communities of practice. Although the following is not by any means a complete list of activities, adapting it to the OD perspective reveals many opportunities for those with expertise in group development.

Stage 1: POTENTIAL. At this stage there is a loose network of people with similar issues and needs. People need to find each other, discover common ground and prepare for a community.

Opportunities for OD support

- Staging an awareness campaign and identifying benefits of practice communities
- Diagnosing organizational issues around communities
- Leading creation of a corporate community development strategy
- Identifying what communities to build
- Helping people find common ground through interviews and group dialogue

- Identifying what knowledge a community wants / needs to share
- Coaching community champions

Stage 2: COALESCING. At this stage people come together and launch a community. People find value in engaging in learning activities and design a community.

Opportunities for OD support

- Facilitating dialogue around identity and joint enterprise
- Designing, facilitating and documenting informal meetings
- Mapping knowledge flows and knowledge relationships
- Designing and creating a community support structure
- Coaching community coordinators, communicators and support staff
- Working with designers of work spaces to improve knowledge sharing
- Building organizational support

Stage 3: MATURING. The community takes charge of its practice and grows. Members set standards, define a learning agenda, and deal with growth. By now they are engaging in joint activities, creating artifacts, and developing commitment and relationships.

Opportunities for OD support

- Guiding a community through growth
- Co-developing support strategies for the group learning agenda
- Creating frameworks, guidelines, measures and temperature checks for development
- Designing knowledge capture and documentation systems
- Designing, convening and facilitating conferences
- Working with the community on issues around relationships
- Building a Coordinator community and sharing best practices on community building

Stage 4: ACTIVE. The community is established and goes through cycles of activities. They need ways to sustain energy, renew interest, educate novices, find a voice and gain influence.

Opportunities for OD support

- Working with the community on issues around commitment and sustaining energy
- Addressing organizational issues that may be helping or hindering activity

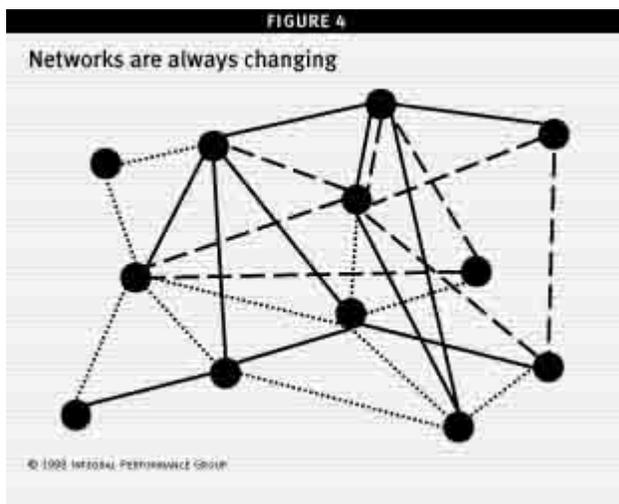
- Linking community learning to individual career development goals
- Helping negotiate the role of the community in organizational decision-making
- Forge linkages with other groups and communities for mutual learning

Stage 5: DISPERSING. The community has outlived its usefulness and people move on. The challenges are about letting go, defining a legacy and keeping in touch.

Opportunities for OD support

- Helping people let go
- Facilitating story telling
- Preserving artifacts, memorabilia and maintaining history
- Convening reunions
- Maintaining maps and directories

• **Supporting new roles.** Organizational design issues also emerge around the new roles that people play within a community. Even without going as far as BP's "dual citizenship" approach, people need to redefine their personal and collective roles and responsibilities so communities are not just "one more thing to do," but are how people do their work. This means reward systems, recognition, job definitions and relationships will change across the entire organization. Even though practice communities are more informal than work groups or business units, they still are purposeful groups of people. There are new roles to be defined for community champions, members, experts, mentors, organizers, coordinators, communicators, facilitators, documents and support staff. (*Figure 4*)



Holtshouse suggests that one important area of opportunity for OD professionals is helping communities find ways to share power and influence with the formal parts of the organization.

“Having forums, platforms, etc, for the voice of the community to be heard as a part of the business processes is something we in business need to do much better.” So not only do individual roles need to be revamped, but the role of the community itself also needs to be negotiated. The roles they can and do play range from informal, even hidden to those that are more formally supported. There is an art to this though, going too far can institutionalize them to the degree people actually stop learning.

- **Building capacity for meaningful conversation.** With renewed interest in community there is a great opportunity to build capacity and skill in holding meaningful conversations. Juanita Brown and David Isaacs have focused on community building with several global companies, including Hewlett-Packard. They insist that *conversation* is a core business process, because it is through conversation that decisions get made and real work gets done.

- **Building supporting infrastructure.** The knowledge evolution is clearly enabled by new communication and information management technologies. Xerox for example, employs intranet resources, collaborative on-line technologies, and shared databases to support its communities and project teams.

Yet it is still rare for companies to train and coach people in how to have more meaningful dialogue or seriously address the challenges of collaborative decision making. Most team and work group efforts focus on *cooperation*, not *collaboration*. We teach people how to cooperate so we can each get our work done, which is still basically an individual performance focus. It is far more challenging to learn real collaboration where we create new knowledge—together. OD practitioners can bring their experience with dialogue and group dynamics into supporting more complex knowledge work

- **Cultures of Learning and Sharing.** The knowledge era is ushering in new appreciation for the importance of culture in attracting and retaining valuable knowledge workers. Culture change is no longer a “nice to do” investment. Levering and Moskowitz’s list of 100 best companies to work for show those companies consistently enjoy higher valuation and profitability. The case has been made that attending to a supportive culture makes good business sense. Companies that ignore cultural

issues find many of their knowledge initiatives quickly stall out. Successful knowledge leaders work with internal or external OD professionals as strategic partners to create the right conditions for knowledge creation and sharing. Culture change is, of course, a much broader issue than can be addressed in a paragraph or two. However, classic culture and change management approaches serve very well for supporting behavioral change around knowledge sharing.

• **Champion new ethics and values.** Perhaps most important is an opportunity for OD practitioners to champion the new ethics and values that are at the heart of a knowledge-based enterprise. Knowledge cannot grow where there is no trust. At the core of this new understanding about knowledge and innovation as the key to success lies a very simple ethic that I call *the principle of fair exchange*. Do people feel they are being treated fairly for the intelligence, creativity, innovation, experience and passion they bring to their work? A fair exchange for knowledge may look somewhat different from culture to culture. Just as communities negotiate their roles and purpose, companies need to negotiate exchanges of knowledge that take place with everyone, both within the company and with the extended enterprise. Further, in this world of instant information, companies are being forced to act from the highest possible levels of integrity with openness, honesty and deep respect. Business tactics that were acceptable in the past destroy trust and erode the social fabric that companies need for success in a knowledge-based economy. OD professionals have an exciting opportunity to champion understanding of the new business fundamentals and the ethical underpinnings for success.

Conclusion

Knowledge and learning are now at the heart of strategic thinking about success in the new economy. Sir John Browne, Chief Executive of BP says that “in order to generate extraordinary value for shareholders, a company has to learn better than its competitors and apply that knowledge throughout its businesses faster and more widely than they do.” BP, like many other companies, is supporting learning and knowledge by focusing on communities of practice.

OD practitioners are much needed to support these learning communities and to work with executives to create the culture and conditions for knowledge sharing. However, OD practice must evolve to embrace this new strategic thinking and language of knowledge and intangibles.

Practitioners can partner with knowledge management champions and IT groups to develop the needed infrastructure, methodologies and practices assuring success in the knowledge era. We might even need new communities of practice of our own to meet the challenge!

Internet Learning Site

A comprehensive books and resources guide is at <http://www.vernaallee.com> or e-mail the author for a copy at verna@vernaallee.com.

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