

David Skyrme interviews Verna Allee

How would you describe the state of knowledge management today? (Consider differences in sectors, public vs. private, geography, etc.)

The overall state of KM is very uneven. It all depends on what country you are in and what sector you are looking at. Korea has high-level political support to become the top knowledge economy on the planet. That is a very large ambition, but one that has teeth in it due to an excellent educational system and government support for connective technologies and infrastructure. Korea has the largest percentage of the population connected to the Internet of any country. They are focusing on higher education as a foundation to become the leader in knowledge-intensive fields such as biotechnology. So most of the energy there focuses on knowledge economy issues, national technology infrastructure, and an educated workforce as the keys to success.

In Canada the private sector has some interest in knowledge or intangibles, but the real action is in government agencies. A number of them are big supporters of knowledge management and there is a very active cross-agency community of practice where people from different agencies share knowledge management practices. There is also a broad understanding that knowledge management has a technology component, a social component, and a business component. I have worked with Environment Canada through their learning process around the knowledge question. There knowledge management is a core business issue and they have had very high-level support. There has been a noticeable shift in their strategy and identity—from being a regulatory agency to being a knowledge services provider. Also, at the business level they have introduced value network analysis to manage workflows and projects with a knowledge focus. They support the needed social innovation with coaching, workshops, and web-based toolkits, for a significant communities of practice initiative. And of course they have undertaken an audit and overhaul of their technologies, particularly web-based services.

The U.S. and India have yet a different take on knowledge management. Since computer and information technologies have a strong economic impact in those countries, the knowledge focus tends to be toward hard technologies and software systems that allow people to manage codified knowledge. This focus is largely driven by technology vendors who are offering different technologies ranging from collaborative workspaces to advanced search engines and taxonomy builders. The social aspects of knowledge sharing tend to be undervalued and underappreciated as companies pursue that elusive silver technology bullet that will make knowledge magic happen.

Since the dot-com crash, of course, the bloom is off all advanced technology systems. With KM so strongly linked in people's minds with technology, especially in the United States, it has more or less been shrugged off in many quarters as either not terribly important or only something the CIO needs to be concerned with. Or a company will waste their money installing some technology system without any training or support for the human aspect. Then they dismiss the whole idea saying, "We tried KM and it didn't work." Of course they didn't really try KM—they tried to install portals or an e-mail search engine or some other gizmo. But they will paint all of KM with the same brush.

The largest challenge in the US is convincing people that the knowledge question is much more about people and social innovation than about technology. Business decisions in the US are heavily influenced by stock behaviors and the market, which drives companies to invest more in hard technologies that will show up as assets on the balance sheet. Those who want to invest in soft technologies, such as collaborative work processes or communities of practice, are always

challenged to make a business case based for gaining a direct and usually short-term financial return. This is not only extremely difficult in most cases, but is also a very small part of the potential ROI for knowledge initiatives.

The big payoffs in KM often lie in enhancing or leveraging the intangible assets of the company to build strategic capability in competences, structures, and relationships. This type of return can only be demonstrated with intangible metrics or nonfinancial scorecards, because they are targeted to ensure success in unknown conditions that will happen in the future. However, there is very little understanding or support for those types of numbers or the business logic that lies behind them.

There are actually three levels of innovation that have to happen. There must be a technology foundation, there must be social innovation, and there must be a fundamentally different way of thinking about how the business works and how value is created. It is rare to find companies where an appropriate amount of emphasis is devoted to all three of these areas. There has not been research conducted to prove this, but in my experience knowledge management initiatives that fail are missing at least one type of innovation and often are focused on only one, usually technology. In most cases that simply doesn't work.

What do you consider the most significant developments over the last year or two? (Strategies, techniques, tools, vendors, initiatives, etc.)

I find it useful to think of the knowledge management arena as one where the three levels of innovation are all happening at once.

Technology innovation

At the operational level people need to codify, manage, and disseminate the day-to-day information, learning modules, and job aids that people need to get the work done. Hard technologies are very helpful for this type of knowledge innovation. There must be a strong technology underpinning in the workplace or people simply can't do their work.

There have been a number of significant technology developments that support better knowledge management. One is data integration techniques such as XML and XBRL tagging. The whole concept of metadata is a very powerful idea, although there are huge language issues associated with that. That is why innovation in search engines and taxonomy builders is so important. I don't see how metadata can really work without sophisticated taxonomies or other types of "interpreters." These are vital for helping people cross the barriers of different cultures, different languages, and different usage habits for various terms and concepts.

The capabilities of search engines are also greatly improving the ability to mine existing pockets of codified knowledge and point people to other resources. There is a kind of serendipity that happens through using these comparable to the way a thesaurus opens up new concepts and nuances of meaning for an author.

There are also fascinating developments in the visual display of real time data. We are seeing many new visually supported analytic tools being developed in medicine, environmental and life sciences, geology, economics, and biotechnology. We don't ordinarily think of these visual analytical tools as knowledge management tools but they are tremendously important as indicators where knowledge systems will be going in the future. It will be particularly exciting when analytical tools from one science begin to be applied in other fields. I am intrigued with

how certain visual modeling tools potentially could be used to understand business dynamics and show other patterns of data beyond what we have traditionally tracked.

Social innovation

Social innovation is about understanding the way people work together, create new knowledge, refine existing know-how, create shared meaning, make decisions, and develop new ways of working. Knowledge is social in its very nature. There is no such thing as individual knowledge. If one of the key goals of KM is to support cross-boundary knowledge sharing and knowledge innovation, then it simply will not happen without attending to the social aspects of knowledge. In addition to understanding patterns of interaction and conversation, we also need to master ways to create the conditions for innovation and foster an environment of trust where people are more willing to collaborate.

In the 1980s, when we discovered processes, we also had a powerful social innovation called “teams.” Today the social innovations we are focusing on are knowledge networks and communities of practice. So we have moved to the next order of complexity in understanding the social dynamics of work. The most significant development here is the very rapid adoption of two innovations: social network analysis and communities of practice.

Social network analysis was first developed in the 1930s and has over seventy years of research and use. However, it is only now being discovered by mainstream business as a management tool. In the knowledge management field, people are finding it useful for quickly profiling networks of experts in a given area. The methodology used to only be accessible by employing outside experts. Today, we are seeing tools such as KnetMap (<http://www.konvergeandknow.com>), user-friendly tools that can be used directly by people in the workplace.

We also now have a growing number of experts in communities of practice. This term was first popularized by Etienne Wenger, whose groundbreaking research revealed previously unseen and unappreciated patterns of relationships and learning in companies. Over the last few years, a number of consultants and practitioners have refined our understanding, and there is a growing body of knowledge about how to better support cross-boundary learning and knowledge sharing. An Internet search will surface experts such as Wenger, Snyder, McDermott, Saint-Onge, Wallace, Rumizen, Stemke, and many others pioneers in the field.

Business innovation

The third level of innovation around the knowledge question involves thinking differently about the world of business, the dynamics of value creation, and the workings of the economy. This was actually the original impetus for focusing on knowledge but it got pushed aside for a few years. With all the hype around dot-coms, IPOs, and technology in the late 1990s—people thought the new economics was all about the Internet and e-business. It is actually much bigger than that. Now that we are past our “false start” we are finding a serious undercurrent of radically different ways of thinking about business and economics.

There are a number of different aspects to this question of how business models and business analytics can factor in knowledge and other intangibles. First of all, there are a lot of new economic terms that have shown up: knowledge economy, attention economy, support economy, sustainable economy. There seems to be a new one every few months. The sheer number of terms and concepts shows that we have already made a breakpoint with traditional economics, even if we haven't quite figured out the new methods and tools.

Two other important themes in business thinking are vitally connected with each other: intangibles and sustainable economics. These two themes are driving business toward entirely new definitions of success, investment, and value. Metatrends in society, according to the Institute for the Future, include more people holding values of health that cover the gamut from personal health to the health of society and the environment. There appears to be strong global shift of values toward defining economic success in both financial and nonfinancial terms. In California, they are even introducing legislation to rework the legally defined purpose of a corporation—from “increasing shareholder return” to a larger definition that includes socially and environmentally responsible business practices. The pressure for corporate social responsibility is just one aspect of this deep societal shift of values.

So how does this play out? For managers and executives it means that they must now model their business in a way that demonstrates how knowledge and other intangibles are leveraged to generate both financial and nonfinancial value. They must move beyond value chain thinking to value network thinking—shifting the focus from process to people. For regions and cities, it means finding ways to work with all their different constituencies in a way that creates both economic success and enhanced quality of life in the community. For nation-states, it means developing a more systemic approach to calculating national accounts so that healthy ecosystems and a strong social fabric, for example, are counted as real assets. For global action networks and advocacy groups, it means modeling their own activities in much the same way to leverage their tangible and intangible resources to generate value. For governments and nation-states it means new policies for a shifting economic foundation from physical resources and heavy capital investment to knowledge and services. It also means dealing with the complexities of taxation and intellectual property in a society where increasingly knowledge is free.

These all are knowledge management issues as well. One of the research projects I have recently been involved in, with the European Commission, is posing the question of “What would the economic feedback system be for a truly sustainable economy?” Now, factor in some of the innovations we have been discussing and we see that even this is a huge knowledge management question. The economists are not going to lead the new economic theory. The theory will evolve as new patterns of data become available.

Lets take as a given that we are moving to a society of 360-degree transparency, feedback, and participation. We all have data to contribute and data we need that tells us if our company or our city is on track for sustainability.

- Corporations have social and environmental practices to report, locally and globally.
- Cities have data on quality of life to contribute and need data from businesses.
- Governments have statistical data of all types that could be made available.
- Investors and market analysts need data on intangibles and have analytical tools that could be made broadly available.
- Many advocacy groups concerned with social issues and the environment gather data that would be useful feedback about sustainability.
- Citizens have data to contribute as well as data they need in order to make responsible buying decisions where they can support products and companies with socially, environmentally and ethically sound management practices.

So at the technology level there are challenging questions of how data can be integrated across different institutions and different systems of indicators. Social innovation will be needed in local,

regional, national, and global communities of practice— innovation that supports collaborative learning to create meaning and coherence around the most essential patterns of data that we need to understand. On the business side there will be need for a wealth of new theory, analytics, and visualization tools.

Have there been any surprises for you?

(Things that happened unexpectedly; things that did not happen as predicted?)

One of the surprises has been how little understanding there is in the field about the larger business and societal issues that form the context for our focus on knowledge in the first place. We play a very important role in business, within our organizations, as educators for how people can begin to think differently about the business. Without that larger understanding, people miss the potential for creating a more hopeful future and get caught up in business as usual. Most people in KM are themselves still caught in traditional business thinking—trying to justify their initiatives only in financial terms and with traditional ROI analysis. People are still using the process as the basic unit of analysis for knowledge management, which is linear and mechanistic. A shockingly small percentage can talk intelligently about knowledge and intangibles as assets, as negotiables and deliverables. It is not that difficult to model the business from a value network perspective, demonstrating both the financial and nonfinancial exchanges that lead to success. There is a learning curve and, yes, it is different—very different. But in essence these approaches are quite simple.

One of the developments I have been very pleased about is to see how quickly communities of practice and social network analysis are spreading. This is very exciting. I believe that communities of practice are our learning vehicle—as a society—to develop successful behaviors for living in a truly networked, global society. We are learning how to be accountable to each other instead of only to a higher authority. We are learning how to negotiate the work we do together in a way that supports us as social, evolving, learning beings. We are learning how to see network patterns across our organizations and beyond. I did not anticipate that the social innovation would happen this quickly. Now that it is taking hold, people are ready to think about the business itself as network, as community. This is a good thing.

What do you see as the main developments and changes over the next 2-3 years?

(Will there be a 3rd or 4th generation KM? Will KM remain a distinct initiative?)

I have never cared for making distinctions between generations of KM. Such broad generalizations aren't particularly helpful and have an uncomfortable undercurrent of elitism. Also the claim that first generation KM was only about technology is just flat wrong. All the early leaders and practitioners were seriously rethinking the business model in regard to knowledge and intangibles—and focused a lot more on cross-organizational learning and communities of practice than technologies. Those elements have all been part of the picture since the very beginning. Trends in management practices are cyclical anyway—not linear. We continuously revisit different themes over time.

Rather than thinking in terms of generations, I find it more useful to consider the levels of innovation a particular company may be addressing—and which levels might be receiving the most attention by practitioners in the field at any given moment. Many companies do start with technology, but others will first focus on social innovation such as collaboration. Others, like Amazon and E-bay, may be innovating around knowledge and intangibles in the business model. It really doesn't matter where you start as long as all three types of innovation are supported appropriately for your organization's value, mission, culture, and strategy. It also

doesn't matter if these are all identified as "knowledge management." The label is not as important as the type of questions being addressed and what people are actually doing.

Personally, I don't think of knowledge management as anything other than a business fundamental. It is just good basic management practice to consider how your group or project needs to handle data and information, how people will interact to learn together and innovate across boundaries, and how you will manage both tangibles and intangibles to achieve success and create value. Would we talk about an accounting initiative, a performance management initiative, a business process initiative, an IT initiative, or a customer service initiative? If we do, it would only be with a short-term emphasis geared toward achieving certain targets or objectives. Why would we insist on keeping knowledge management as a distinct initiative indefinitely?

As far as an academic discipline and certain roles that people might play in an organization, it is useful I think to have a professional specialization in knowledge management. But organizationally speaking, knowledge management and knowledge professionals should be considered as another support function to all business units and workgroups, much in the way that IT, Training, Accounting, or HR services are distributed across the company. Companies that do the best job of KM typically have a very small support group of internal consultants who can talk with managers about their needs for knowledge supporting technologies, collaborative learning processes, and ways to better manage and leverage intangibles in their projects and functions. They are always working within the context of a particular business challenge. By working across the organization as a support function, the group also plays a role of cross-pollinator and integrator. They can identify systemic issues that may need to be addressed at a more strategic level.

I believe this is actually where the trend is going. There are fewer people who use the broad term of knowledge management and more people focusing on specific short term initiatives that are framed as business issues, not as KM issues. People may have a job description or title with the word knowledge in it, but they are more and more couching their activities in business terms: expert communities, data integration, collaboration. This makes good sense, I believe. The goal is not to do KM, but to help our organizations be financially viable, succeed in their mission and goals, and maintain a healthy, vital, learning-focused, and innovative work environment that will assure future success.

Suggest three key actions for KM practitioners in 2004.

Actually, I have five suggestions.

1. Master the business language of intangibles and more actively educate managers and leaders into this way of thinking. The intangibles perspective helps move focus to leading indicators around building strategic capabilities for future success. Financial performance only tells you about the past. It is still important to analyze investments in financial terms, but the really big payoff is usually found in the larger story of how you will better expand, utilize, and renew intangible assets, and leverage knowledge and other intangibles to both gain and generate value.
2. Move beyond mechanistic thinking focused on business processes and learn how to analyze your organizations as living networks. Processes are not the active agents in the organization—people are. Support the people in the right way, with the right kind of whole-system thinking and tools, and they will always figure out how to innovate the processes. Employ a value network perspective to model how to better manage

exchanges of both tangible and intangible value across workgroups, across companies, and across stakeholder groups.

3. Focus on the social innovations that will be needed as people learn to live in an increasingly networked environment where they are more accountable to each other. Communities of practice can be a great learning vehicle for how people can more effectively self-organize, negotiate around intangibles needs and specific processes, and create the conditions in which innovation can happen.
4. Educate yourself about important business issues that have strong knowledge management implications. For example:

Transparency

George Orwell put forward a dark vision in his famous book, *1984*, of a world where Big Brother is watching and knows everything you are doing. What was never envisioned was a world where not only is Big Brother watching, but we are all watching each other—and we are watching big brother! What are the implications of a transparent society for your business? What role does KM play in corporate responsibility reporting? What happens from a KM perspective when internal processes and practices become more visible to customers, to suppliers, to partners and external stakeholders?

Risk

We are seeing a world where information and intellectual property “leak.” What are the implications for your business as people become more successful at accessing proprietary information? What will happen in your industry as old protections around patents and copyrights continue to erode? How will you maintain the quality of corporate knowledge and expertise when the baby boomers hit retirement in the next few years? What role will KM play to help companies navigate this societal change into a world where information is free and corporate knowledge systems may be under attack?

Globalization

IBM and other companies are announcing massive movement of IT and programming work from the U.S. and Europe to countries such as India. Functions such as order fulfillment are being outsourced to vendors or partners. What are the implications of this trend for your business? What could a knowledge specialist do to support cross-cultural collaboration, knowledge sharing and virtual teams? How might this affect strategic core competencies and what would knowledge specialists advise to offset negative effects?

5. Find ways to bring your KM skills to your community. The number of nongovernment organizations has exploded in the world. Some estimate there may be as many as 40% more than there were in the world five or six years ago. Concerned citizens are finding each other and weaving local, regional, and global action networks and communities to address complex global issues, such as poverty, disease, and environmental degradation. What are you learning about data management, connective and collaborative technologies, conscious conversations and dialogue, value networks and communities of practice that might be helpful to these emerging networks? Are there ways we can bring our KM expertise to bear on some of the issues we care most deeply about? How can we use our knowledge about knowledge to create a more hopeful future?