Knowledge Management Meets Analysis

By Allison Rossett

I could tell that this training manager liked knowledge management. She grinned when I talked about capitalizing on untapped resources and sharing lessons regardless of turf and geography. A long-time warrior in the battle against hoarding knowledge, she nodded when I emphasized the importance of a trusting, generous culture, dedicated staffing, technology, and access to information. And she jotted notes as we discussed Thomas Stewart's use of the metaphor of an iceberg to describe organizational knowledge, focusing on the wisdom beneath the surface, only hinted

When it comes to needs analysis, knowledge managemant brings a lot to the table.

at in course catalogues.

At the conclusion of my presentation, she greeted me with a smile and a question: "I'm convinced. But what do I do now? I'm working on a technology rollout project. I think knowledge management could help me approach this task, but how?"

The answer would be what we think of as a traditional needs analysis. This article is my attempt to add beef to that response by beginning to bring analysis and knowledge management together. What does KM bring to planning training? How does it enhance the way we figure out how to serve our clients and customers? It starts with definitions.

How Knowledge Management Expands Our World

TYPICALLY	KNOWLEDGE MANAGEMENT PERSPECTIVES
Our goal is development of individual capacity and memory.	The goal is creating, nurturing, and refreshing organizational resources and interactions.
A customer might ask, "When can we schedule a class to introduce sales reps to the system?"	Typically, customers will not come to us for knowledge management. We provide grist for the knowledge base and impetus for the interactions that surround it.
Our responsibility is products and services that teach.	Responsibility expands to content and social situations for learning and performance.
We communicate the right way to do it.	We attempt to show many ways to handle it, with commentary that illuminates standards and customization.
Our efforts have staying power.	We contribute to materials and systems that change readily.
Interventions must be of sufficient length and magnitude to justify travel costs.	The knowledge management system is salient for problems and opportunities that are great and small, important and mundane.

What is analysis?

In a nutshell, analysis is the planning we do in order to figure out what to do. Through analysis, we take a fresh and data-driven look at the work, worker, and workplace—seeking to base our training recommendations on wide-ranging opinions, practices, and work products—not on habit, whim, or fiat.

Bracketing the training profession as we move into the next century are enthusiasm about workplace training *and* cynicism about the ability of training in and of itself to influence what really matters: performance improvement linked to strategic results. Analysis is the systematic basis for decisions about how to influence performance.

These ideas dominate analysis:

❏ Analysis is where it all begins—establishing relationships, exploring strategies, and defining solutions.
❏ More sources of information are better than one.
❏ It is important to seek the gap between the current situation and the desired situation, focusing resources where they're most needed.
❏ The analysis must determine root causes, or drivers, to define systemic solutions—recognizing, for example, that a question about why something doesn't or won't work is just as critical as what people do and do not know.

What is knowledge management? Knowledge management involves recognizing, documenting, and distributing explicit and tacit knowledge in order to improve organizational performance. KM efforts tend to come in two flavors. The first is content-oriented, in which data, information, experiences, lessons, presentations, and commentary are actively collected and maintained. The other KM is more social—typified by online dialogues, action learning and problem solving, and communities of practice.

Knowledge management is happening now. For example, Lakewood Publications reports that the World Bank counts knowledge management as an "urgent necessity" for global development and is spearheading knowledge-management initiatives in third world countries. Not surprisingly, global consulting companies are leading the way in establishing knowledge management systems, staffing, and culture.

Jim Marshall of Lightspan Partnership and I found that people in consulting firms are four times more likely to have a formal KM system made up of dedicated staff and technology, compared to the situations reported by representatives from other organizations. Those firms distinguish themselves in many ways, including greater unrestricted access to information and fewer command-and-control management policies.

Though some organizations are moving forward with knowledge management, the obstacles can't be ignored. Research conducted by G. Szulanski for the American Productivity & Quality Center shows that successful practices typically linger in a company for years, unrecognized and unshared. When recognized, it took more than two years on average before other sites within the companies in the study began adopting the practice, if at all.

As good an idea as knowledge management is, success depends on new ways of thinking and acting (see the table). Habits regarding intellectual property, professional identity, and unit boundaries are challenged.

KM and analysis

Questions remain at the heart of analysis. During analysis, we seek opinions from sources about three kinds of information: optimals, actuals, and drivers. Let's set up a situation and look at how an able, traditional training and development professional might carry out analysis. Then, we'll see what knowledge management can bring to the table.

Our mock requirement appears via email: *I hate to drop it on you like this, but we need a class ASAP for our salesforce, global partners too, so that everybody will be ready to sell the R2P2. We've got a lot invested in this product, so the training is critical. When can we schedule those classes?*

Optimals and actuals. The quest for optimals would lead the typical training professional to talk with the engineers and marketers responsible for the R2P2's product specifications, pilot-site sellers, customers, and other data—all in an effort to find what solid sales perfor-

mance and perspectives look like. In conducting an analysis, the training professional would query sources to define how an effective salesperson qualifies a customer for this new product and how the salesperson would explain it, customize a proposal, and create a compelling presentation. In other words, the optimal or ideal results.

During the quest for actuals, the training professional would examine current sales performance associated with similar products or prior versions of the product. He or she might also focus on the efforts of the pilot users. What sales tools were used? How much of what they were taught about selling new products has found its way into actual sales efforts? What does practice look like? Successes? Failures?

Though trainers' efforts are often driven by subject matter experts, knowledge managers dare not take their lead from experts alone. User priorities must rule if far-flung users are to be drawn to the knowledge management system.

Here's how knowledge management perspectives might influence analysis:
❑ Though perspectives on optimals and actuals remain valuable, they would not convert into one teachable course in a KM system. Instead, the analyst would look for meaningfully organized morsels for sliced-and-diced data elements that learners can reference as needed, depending on the particular challenge.

Suppose that you are in Hamburg, Germany, and looking for a comparison between R2P2 and European competitors. Happily, several comparisons would be on the KM system for the taking. Suppose that you're in Beirut (or Boise) and must prepare a briefing on the implications of R2P2 for telecommunications in higher education. There would be slides and notes on the KM system to adapt for the situation. In Portland (or Prague) and concerned that customers have heard rumors about a bug in the R2P2? You would join the asynchronous online chat that focuses on technical issues.
❑ Because a knowledge management resource must be obviously useful to many users, with no opportunity for an instructor to tweak or customize in the classroom, the analysis must capture an array of diverse experiences and examples. The analyst seeks several views of

the product, all the while pressing R2P2 experts for core standards if they exist.

For example, five proposals for R2P2 at work in university settings might come to reside in the KM system, representing customers with differing installed databases, priorities, monetary systems, and resources. What do good proposals share? Where are variations encouraged?
❑ Knowledge management heightens attention to the distinction between explicit and tacit knowledge. Trainers don't have to be reminded that experts don't always know what they're supposed to know and that critical wisdom in people and organizations sometimes lurks within teams and people's habits and insights. To unearth that buried knowledge, analysts conduct observations and interviews. They ask such questions as, "May I look at the notes you jotted to yourself after the meeting?" "How did you know to revise the proposal in that way?" "Why did you terminate your efforts for that customer and intensify for the other?" "When you're not at work, what are your thoughts about your customers?" "Why did you work with Dagmar on that project and bring in Frank and Alfonso on the other project?" "What do you consider as you are planning the right proposal for a customer?" "To what do you refer?" "Why have you altered that checklist, and may I make it more widely available?" "I notice you aren't using the R2P2 marketing video. Why?"
❑ A robust knowledge management system should include rich commentary. That assures a deeper experience for users when they choose to review both the knowledge element and people's ideas about it. In addition to seeking comparisons with competitors, for example, an analyst could capture why salespeople said what they said, how that worked, what the customer said, and what the salespeople would do differently the next time. The wisdom of the sales trainer is still there—of several sales trainers perhaps—but embedded within the KM system, not the classroom.
❑ Some advocates of knowledge management focus on social relationships. In the example of R2P2, such advocates would remind the analyst to question ongoing interactions between the sales staff and their managers and customers. The KM advocates who focus on social relationships seek ways to engage people with the content. Where are the users?

KM Predictions

What lies ahead for knowledge management? Here are some thoughts from the field.

Betsy Lewis-Chan, knowledge architect, The Mutual Group, Waterloo, Ontario, Canada: "I'm an optimist, so I see knowledge management evolving from concepts to reality, where its principles and practices are applied intuitively as part of people's day-to-day work. What are considered cliches now will become as common as words like *strategy*, *planning*, and *design*."

John L. Naman, professor, Katz Graduate School of Business, University of Pittsburgh: "Knowledge management currently focuses on pools of operational knowledge within companies. In the future, I expect to see more attention in two directions—horizontally [between organizations] to alliance knowledge and vertically [within an organization] to strategic knowledge management.

Alliance knowledge management is arising from closer ties between companies, such as those involved in supply-chain management or consortiums. Corporate employers are asking for more knowledge management training and strategic thinking skills to help bring about faster and better responses in competitive markets."

Melissie C. Rumizen, assistant to the chairman, Buckman Laboratories, Memphis, Tennessee: "Although the importance of culture has long been acknowledged, I see a growing emphasis on measuring cultural values and developing and using methodologies to systematically change cultures."

Compiled by Donna J. Abernathy

What's in a Title?

Knowledge leadership represents a broad range of positions and responsibilities—from people who fall into the de facto position of knowledge manager with no change in title, responsibilities, or compensation, to well-compensated senior executives recruited for the role of CKO. Here's a sampling of typical KM jobs.

❑ The **Chief Knowledge Officer** is responsible for enterprise-wide coordination of all knowledge leadership. The CKO typically is chartered by the CEO and often (but not always) part of IT.

❑ The **Knowledge Analyst** collects, organizes, and disseminates knowledge, usually on demand. He or she becomes a walking repository of best practices, a library of how knowledge is and needs to be shared across an organization.

❑ The **Knowledge Engineer** converts explicit knowledge to instructions and programs systems and codified applications.

❑ The **Knowledge Manager** coordinates the efforts of engineers, architects, and analysts. The knowledge manager is most often required in large organizations where the number of discrete knowledge-sharing processes risk fragmentation and isolation.

❑ The **Knowledge Steward** provides minimal, ongoing support to knowledge users in the form of expertise in the tools, practices, and methods of knowledge leadership. He or she is usually a person who has fallen into the role of helping others understand and leverage the power of new technologies and practices in managing knowledge.

Source The Delphi Group, www.delphigroup.com

What concerns them? What are their priorities? What content elements will rivet them over time as they move from neophytes to experienced learners? How can they be brought together over time through technology or other means?

Drivers. When seeking drivers, a training professional wants to know what is encouraging or discouraging performance—or in the case of a rollout such as R2P2, what might become an impediment. Typically, trainers are concerned about performance that is blocked by an absence of skills, knowledge, or information; lagging motivation; or a flawed organizational environment and culture. The savvy trainer knows that great classes can boost cynicism instead of performance when they're surrounded by halting supervisors, technology breakdowns, and mismatched incentives. Focusing on drivers provides definition for the training and for crucial, parallel interventions.

Back to R2P2. Here are a few of the questions that a wise trainer might ask to solicit drivers:

❑ How do you feel about the shift to R2P2?

❑ Would you describe yourself as confident in explaining the new product to

> *Knowledge management isn't a replacement for training.*

your customers?

❑ As you look at the specifications, what questions do you have about R2P2?

❑ Can you describe the benefits associated with R2P2, the ways it provides better performance for customers?

❑ Can you anticipate any reasons that salespeople might not be eager to sell the product?

❑ If we wanted to increase sales of R2P2 right from the get-go, what are the things we should do?

❑ Given the realities of selling in your territory, Europe and Middle East, are there any special things that need to be done to support sales?

In addition to those questions, a knowledge manager might ask:

❑ What elements in the organization's culture will encourage sharing information instead of hoarding?

❑ How will you counter resistance to putting favorite ideas in a place where others can use, adapt, or criticize them?

❑ How will the organization recognize and honor employees' contributions?

❑ How will contributors be afforded the security and status that come from being the unique ones with knowledge about XYZ? (That's not a trivial issue. A 1998 study Marshall and I did found that only one-third of respondents' organizations offered incentives for contributions to a knowledge base.)

❑ Are the users ready, willing, and able to engage in independent efforts and development? Some won't be. The new product won't compel everyone. Many people will lack the cognitive skills to search, find, adapt, and use information on their own.

❑ How can the organization discourage restricted access to information?

❑ Is there a system for refreshing the data? Able instructors often update old classes on the fly. Old data, prices, examples, problems, and commentary just sit there on the system, blatantly out of date and discrediting the training effort.

Aging data is one challenge. Quality is another. What is good material? What has meaning? Because you can't guarantee perfection in a system that typically favors rich options, use analysis to seek

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Additional Reading

❑ *Working Knowledge: How Organizations Manage What They Know,* by T.H. Davenport and L. Prusak. Boston: Harvard Business School Press, 1998

❑ *If Only We Knew What We Know,* by C. O'Dell. New York: Free Press, 1998

❑ "Signposts on the Road to Knowledge Management," by A. Rossett and J. Marshall. *Proceedings of the 1999 AHRD Conference,* vol. 1, pp. 496-503; editor K.P. Kuchinke. Baton Rouge, Louisiana: Academy of Human Resource Development

❑ *Intellectual Capital: The New Wealth of Organizations,* by T.A. Stewart. New York: Doubleday, 1997

customers' and other users' reactions to the myriad efforts. Urge contributors to reflect on the flaws and excellence in their practices.

❑ Does the effort reflect user priorities? Though one salesperson might be compelled by R2P2 templates, fact sheets, and FAQs, others might crave commentary and war stories. During a recent consultation with a telecommunications company, it described a disappointing maiden effort with knowledge management for the HR staff. When I asked why few used it, I heard this: "Well, we have no time to go to it." I suspect that the content didn't match their priorities.

❑ How accessible is the knowledge base? Though online Oracle databases might be convenient for salespeople in Atlanta and Indianapolis, there's good reason to be concerned about New Delhi and Shanghai.

If you were thinking about creating a KM system to support R2P2, what concerns would disturb your sleep? Anticipate obstacles. Look at the literature. Even though the idea of separating knowledge from the owners and sharing it widely has immediate appeal to executives, recognize that some individuals and constituents will be horrified by the concept

Your expanded role

Here's how to expand your role in knowledge management:

Join ongoing efforts. Knowledge management brings new allies to performance improvement. Perhaps there's a chief knowledge officer. More likely, information technology leaders and managers are paying attention. Look into existing initiatives and contribute current ideas and materials. Share sources. Advocate in ways that assure growth and development as goals for the KM effort.

Repurpose. What's in the knowledge bases that could be incorporated into training? What training materials belong in the base? Encourage a two-way exchange, in which a particular fact sheet, example, or story is used in class and in the KM system. How might the ongoing interactions associated with knowledge management reinforce and intensify the impact of training events?

Use many strategies to support people at work. It's not an ei-

The Language of Knowledge

Here's a glossary of knowledge management terms, from The Delphi Group.

❑ *Community of practice.* Organizational groups of people that assume roles based on their abilities and skills, instead of titles and hierarchy. Also referred to as a community of interest.

❑ *Competency of management.* The ability to use knowledge management to consistently facilitate the formation of new ideas, products, and services that support the core competency of an organization.

❑ *Content mapping.* Identifying and organizing a high-level description of the meaning contained in a collection of electronic documents.

❑ *Corporate amnesia.* The loss of collective experience, embedded tacit knowledge, and accumulated skills, usually through excessive downsizing and lay-offs.

❑ *Corporate memory.* An unquestioned tacit or explicit understanding of an organization's people, process, or products. Corporations, like individuals, remember the past, including long-standing processes, procedures, corporate traditions, and values. Memory is strategically important, but it can also become a serious liability if it inhibits an organization from adjusting quickly to a changing environment.

❑ *Customer capital.* The value, usually not reflected in accounting systems other than as goodwill, that results from the relationships an organization has built with its customers.

❑ *Digital nervous system.* The computing infrastructure (desktops, servers, networks, and software) used to inform and support an organization's decision-making processes.

❑ *Discontinuity of knowledge.* A phenomenon that occurs when experienced knowledge workers move from one position to another position (inside or outside of an organization) without having adequate time- or knowledge-management facilities to transfer their tacit knowledge to co-workers.

❑ *Electronic yellow pages.* An online listing of staff, their competencies, and their contact information.

❑ *Explicit knowledge.* Knowledge that's easily codified and conveyed to others.

❑ *Human capital.* The collective value of an organization's know-how. The val-

ue, usually not reflected in accounting systems, that results from an organization's investment to re-create the knowledge in its employees.

❑ *Intellectual capital.* Human capital, structural capital, and customer capital.

❑ *Knowledge broker.* A person, organization, or process that identifies intersections between knowledge seekers and knowledge providers and that creates a link between them.

❑ *Knowledge chain.* Corporate instinct that stems from knowledge flow through four stages: internal awareness, internal responsiveness, external awareness, and external responsiveness.

❑ *Knowledge ecology.* The component of knowledge management that focuses on human factors—namely, the study of personal work habits, values, and organizational culture.

❑ *Knowledge half-life.* The point at which the acquisition of new knowledge is more cost-effective and offers greater returns than the maintenance of existing knowledge.

❑ *Knowledge management.* Leveraging collective wisdom to increase responsiveness and innovation.

❑ *Knowledge mapping.* A process that provides a "picture" of the knowledge an organization needs to support business processes.

❑ *Learning organization.* An organization with the necessary practices, culture, and systems to promote a continuous sharing of experience and lessons learned.

❑ *Return-on-time.* A metric for assessing quickly whether a knowledge chain is working.

❑ *Structural capital.* The value, usually not reflected in accounting systems other than as goodwill, that results from products, systems, or services an organization has built.

❑ *Tacit knowledge.* Experiential, how-to information based on clues, hunches, instinct, and personal insight.

❑ *Touch points.* Priority areas for applying knowledge management. Typically, interactions with customers, suppliers, and employees.

❑ *Work cell.* A collection of roles in an organization that crosses functional barriers.

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ther-or situation. Knowledge management isn't a replacement for training; they should integrate and complement. For example, it might be appropriate to train salespeople about R2P2 *and* to encourage them to rely on the KM database and online discussion. You might consider incorporating the KM system into a training session, with the knowledge base on hand as trainees practice the lessons.

Lead a pilot effort. Though training and development professionals aren't yet typically in the lead for knowledge management, seek opportunities to use KM perspectives and systems in initiatives for which you *are* responsible.

Increase the "learningfulness" of the KM system. There is a tendency for online systems to favor information over interaction, data over development, facts over feelings. Seek opportunities to make sure that the system encourages self-assessment and practice, and that it is rich with reasons, reflections, commentaries, and war stories.

Knowledge management pushes to the forefront many things we have always wanted to do, with and for people who ought to be our allies. Rather than staying on the sidelines as knowledge is packaged and as teams become virtual, trainers should influence KM systems to value the people with the ideas, and they should nurture social networks and growth.

Sir Francis Bacon said, "Knowledge itself is power." I have my doubts when we apply that statement to far-flung organizations, diverse people, and complex products and ideas. For Bacon's quote to approach truth, training professionals must enrich their efforts. It won't happen automatically. ❑

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