KM and Elearning: A Powerful Combination

By Tom Reamy - October 2003 Issue, Posted Oct 13, 2003
http://www.econtentmag.com/?ArticleID=5557

"In two years, KM will be a subset of elearning. Or elearning will be a subset of KM."

That Gartner prediction, cited in Rosenberg's book *e-Learning*, was made three years ago. Neither variation has come to pass.

Instead, the interactions of the two fields continue to increase and there seems to be a widespread agreement that KM and elearning are converging. And, perhaps more importantly, consensus is growing that this convergence is a good thing, that it should continue and intensify, and that both fields can benefit from a greater partnership. There have a been a number of works and articles exploring how and why elearning and KM are converging, including the Rosenberg book cited earlier, and a number of very good articles in KMWorld by Judith Lamont and others.

There are also numerous examples of this growing convergence. One place KM and elearning are merging for a more powerful result is in the pharmaceutical industry according to Paul Sparta, CEO of Plateau Systems, a vendor of LMS infrastructure software. According to Sparta, "The pharmaceutical industry was an early adopter of both elearning and KM technology and is on the leading edge of their convergence because of the industry's rigorous regulatory requirements."

Other areas seeing a great deal of activity at the intersection of KM and elearning are call centers and technical support. Sparta also sees energy, aviation, transportation, chemical, and financial services as growth areas for this convergence. He says, "Any industry where knowledge must be delivered to people in real time, and then tracked and assessed, must consider strategies that merge KM and elearning."

Separate and Not Equal

It is clear then that there is a great deal of activity at the intersection of KM and elearning, but that raises the next set of questions: Which of the two possibilities that Gartner raises should it be? Who should lead the integration of KM and elearning and how best to achieve that integration?

Clark Quinn, director of user experience at Knowledge Anywhere, says the driving force should be "Whichever has greater credibility in the organization," though he admits this to be a "cynical answer." In some organizations, Quinn has found that training (and consequently elearning) "is viewed as an appendix—an essentially useless organ. In others, it's viewed as a core strategic contribution to organizational innovation and competitiveness. In some enterprises," Quinn says, "KM is viewed as little more than AI voodoo, whereas in others it's viewed as the key to intellectual capital and consequent organizational advantage."

Yet it seems that, if KM and elearning are to achieve more than a superficial integration, KM would be a better-equipped leader because it provides the necessary foundation and broad scope for the integration. Not surprisingly, a number of representatives of KM companies agreed with this assessment. What is perhaps more surprising is so did most of the elearning people with whom I spoke.

As Andrew Pery, CMO and SVP of Hummingbird put it, "Elearning may be considered a KM

application. The foundation of elearning is access to knowledge sources. KM provides the tools and facilities to index, organize, and manage know-how. Therefore," according to Pery, "an effective KM implementation—methodologies, best practices, and incentives—created the foundation for re-usable content in support of elearning applications."

Dale Zwart, CTO and founder of Generation21 (which has its roots in elearning, especially where it intersects with KM) points out that "The KM side tends to be more focused on supporting business objectives and therefore," he believes, "it will probably be the catalyst for the integration."

Vive les Differences

The question arises then, if this convergence is so clearly recognized by vendors and enterprises alike, then why hasn't the Gartner prediction come to pass?

To most organizations, KM and elearning are still seen as separate. Jack Battersby, CEO, president, and cofounder of mGen, Inc., a learning company, noted that mGen is simply not seeing KM in any of their RFPs. Battersby says, "Organizations as a whole have not made the connection between learning, knowledge, collaboration, portals, and so forth. Just the fact that there are titles for chief learning officer and chief knowledge officer magnifies this fact." As Battersby says," In a perfect world, a CKO would be accountable for all facets of knowledge—including learning, knowledge management, collaboration, and other aspects of the human capital development. When all of these initiatives work together, the sum is far stronger." At present, however, KM is largely driven by CKOs or CIOs or some enterprise-wide, cross-organization group. Training, on the other hand, more likely originates from a dedicated training group associated with specific business units. There are a number of fundamental differences that have prevented a more complete integration of KM and elearning: historical and cultural factors, functional factors, and even vocabulary factors.

First, historically, KM has the elevated status of dealing with higher-level knowledge and information, while training has been seen as largely concerned with lower-level knowledge, information, and skills. A general belief persists that you can't teach high-level skills; you can only teach the basics and then the real learning takes place on the job. In this stereotype (which, like so many stereotypes does contain an element of truth), new employees are sent "back to school" to learn the basics and then sent out to the job where they promptly forget 80% of what they were taught while learning how to really do their job.

As training has begun to move out of the classroom—evolving to include elearning and, more importantly, to offer performance support, just-in-time training, and just-for-you training—this old stereotype is fading, but it's not gone yet.

Second, another major difference between KM and elearning is in their respective views and approaches to content and user communities, particularly in terms of the amount and type of structure and levels of metrics that they gather about content and people.

For example, within corporate intranets and desktops, it is still a struggle to get authors to add metadata to their content, much less to develop a coherent and consistent metadata practice. But when material is prepared for training purposes, not only is it understood that metadata will be added, the amount and structure of metadata is far advanced beyond what is normally seen on the corporate intranet.

In addition to the differences in authoring skills and backgrounds and types of content, another key reason training includes metadata is that there are, by contrast to KM, relatively few content

authors. The content is rarely revised, but instead essentially reused time and again. This means that the economics of adding structure or metadata is vastly different for training versus intranet or desktop content, which has many authors who write independently and for a variety of purposes, and who generate content that is only occasionally reused.

This difference in the amount and depth of structure also applies to the view of the user or consumer of content. In training environments, you usually find well-developed models of learners, what they have to know, what they have previously studied or been certified for, and you measure how well they understand the content they are currently interacting with.

Who's Learning?

In the more informal world of corporate intranets, typically very little is known about the consumer of content. The metrics that are typically measured on a corporate intranet are, quite honestly, pathetic in comparison to those of elearning. For a given document or Web page, you might have a measurement of how many people looked at it, how that number compares with other documents, and a few other very general measurements.

However, concerns about privacy (actually, more often than not, cultural and historical differences) mean that you have no idea of the specific people or communities who have read that document, what other documents those people have read on related subjects. As a result, you have no sense of their general level of understanding and no idea how well they understand the concepts within a given document. It is the twin structural elements of more complete profiles and understanding of content consumers and significantly deeper metrics on all aspects of content consumption that constitute a major difference between training and KM.

For example, when I asked one LMS vendor how its clients might typically handle unstructured content, the answer was simply: They add structure. This is not true for all LMS vendors, though. For example, Zwart at Generation21 downplayed the importance of metadata and cited studies that demonstrate the difficulties of adding metadata and also showed that customers were not seeing benefits from metadata. Knowledge Anywhere's Quinn, on the other hand, "would recommend that companies make every effort to structure data. The initial overhead in structuring, which necessarily implies associated metadata, pays off in the ability to add value." In any case, metadata associated with content is only one type of structure and an LMS system that supports the creation of learning objects combined with well-developed models of users is still operating within a much more highly structured environment than most KM projects.

Third, KM and elearning/training are separated by vocabulary. A simple example is how the content consumer is referred to. In training circles, they are learners and in KM circles, they are users. This seemingly minor difference is associated with significant cultural differences. Another example is at the training vendors sites, even those who emphasized the KM connection, performance support, and elearning, it was quite clear that I was reading training material and that the KM connection was on the level of the importance and/or usefulness of training for KM rather than a deeper connection.

It was, however, around this deeper connection that everyone was most interested. And there was a surprising amount of agreement as to how to achieve that connection.

Integration and Infrastructure

While I was researching this topic, I talked to representatives from training companies, LMS vendors, KM software vendors, Content Management vendors, and practitioners of training projects.

Two ideas kept coming up in virtually every conversation: integration and infrastructure. I found widespread recognition that standalone applications and separate departmental projects were not the optimal way to do KM, CM, or training. And, when the topic was how to merge all three, the consensus was even more profound that the only solution was an integrated infrastructure solution.

There was some disagreement about the particulars of that integration, but in general, there were three areas that needed to be solved to move the convergence of KM and elearning to the next level: organizational integration, technological integration, and intellectual integration.

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Who's The Boss?

The first step towards organizational integration, as in so many process transformations, is to develop a strategic vision that incorporates both KM and elearning and then to socialize the idea and achieve widespread acceptance of a philosophical reorientation. Sparta from Plateau says to "involve the highest levels of your IT organization, including the chief information officer."

Battersby of mGen suggests that organizations ask line managers—marketing department, human resources, engineering teams, etc.—what they would and would not use a system for. And Pery at Hummingbird recognizes that there's "no single individual that ought to be responsible for such an initiative. The management of intellectual capital requires a cross-functional approach involving HR, IT, and line managers. Ultimately however, there must be a top down executive endorsement of the importance of managing intellectual capital as a mission-critical corporate resource." Pery believes that "The chief executive must become the impetus behind and the champion for such an initiative."

The fact is that there's still no recognized organizational structure for such a cross-organizational group. Some companies report seeing more and more CKOs leading a dedicated KM department, while others are seeing CKO and CLO positions going away and being merged into existing departments with IT and HR as the main two homes. This seems to imply that the organizational platform for merging KM and elearning is still uncertain, and it is not clear that there will be or should be a single answer to how best to organize KM/training within a range of enterprises.

While Zwart believes organizational integration is important, he notes that "in larger organizations, most business units operate with a high level of autonomy that effectively negates the value of trying to share all information across the entire organization. What is truly important," according to Zwart, "is to identify the information that must be shared across the whole organization while at the same time identifying information that must be shared within each business unit." In other words, integration does not imply uniformity, but rather calls for a more sophisticated blend of local and global, one that goes beyond business units to the entire range of formal and informal communities within today's enterprises. This level of integration requires not only attention to information needs, but also organizational support that provides the context for both KM and elearning projects and, in many cases, personnel to support and facilitate those projects.

The second area of integration is technological. In many ways, this is the simplest aspect and also where there has been more measurable movement than the other two. Technological integration seems to be largely driven by the realization by vendors that they need to expand their offerings and provide a number of ways to integrate those expanded offerings. For example, Content Management vendors like Fatwire and FileNet are expanding their offerings to include search and

retrieval, portal APIs or components, along with the ability to track how people are using the content.

In other words, there is a growing recognition that it doesn't make sense to treat the creation of and publishing of content separately from finding and utilizing content.

KM platform software such as Hyperwave and Hummingbird have been pursuing this path for some time and seem to be moving toward what Gartner calls the Smart Enterprise Suite. This also suggests a movement towards building enterprise platforms designed to support a broad cross-organizational, infrastructure solution.

The same trends can be seen in training software vendors. LMS software is being extended beyond the classroom to include performance support and as it does so, employs sophisticated models of users/ learners. LMS software is also being extended with LCMS (Learning Content Management Systems), which Sparta at Plateau called a tweener application—a bridge between CM and LMS.

The third component of an infrastructure solution is intellectual integration. From my own consulting experience and from the comments of many of the people I talked to for this article, this is the component that could provide the push to both enable a greater integration of KM and elearning and to provide the justification for that convergence by delivering on the promise of such technologies as CM and search.

The intellectual integration necessary to achieve the broader integration that vendors and clients alike seem to be thirsting for consists not only of well-structured models of content, but also well-structured models of users/learners. In both of these arenas, training groups have been taking the lead and this is where they can provide the greatest value in an enterprise integration effort.

As noted earlier, training groups have traditionally been more advanced when it comes to adding structure to content. For example, one of the training metadata standards, SCORM, incorporates the more generic Dublin Core standard that can be found on some (but not enough) corporate intranets. However, as discussed, it is not always easy to put a large effort into adding metadata and it is important to do it well or the cost will outweigh the benefits. For example, it is impossible to predict the significant relationships between metadata values and some means of dynamically relating them at the time of search/ retrieval or other utilization is essential. Fortunately, the technology is available and work is being done to provide the right type of metadata and taxonomies.

Take the Lead

Training groups lead the development of well-structured models of learners and, just as importantly, of measuring the activities of those learners. I would look, then, for them to lead in generalizing from learners to users, but this transition is not simple. As Quinn of Knowledge Anywhere put it, "we have well-developed models of learners in a classroom context, but when you move to things like performance support, we need much more flexible and general models of people in a variety of contexts outside the classroom."

And finally, not only are better models of KM and elearning users needed, but even more important (and more difficult), there is a need for much richer models of activity or business process contexts—models that can capture the dynamic and social elements of those contexts. The development of richer models or schemas for dynamic content, people outside the classroom, and activity contexts is perhaps the frontier of the integration of KM and elearning, where training can

add sufficient rigor to KM initiatives and KM can add the strategic breath and experience with real-world social activities to training approaches that we will see the two fields achieve their long looked for integration and in so doing create a new foundation for both fields.

And who knows, perhaps we will see the promise of KM and elearning fulfilled to a degree that could have a truly major impact on how we do business and how we communicate in all our communities—business, social, political, and intellectual.

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