View from the Top

KM in Review: Tracing the Value of Knowledge Assets

A conversation with Andrew Pery, Chief Marketing Officer and Senior Vice President, Hummingbird Corporation

With this white paper, we wanted to answer the question "Where is KM now?" To look for the answer, we spoke with Andrew Pery, the thoughtful and knowledgeable Chief Marketing Officer and Senior VP of Hummingbird Corporation. Andrew brought a philosophical and historical perspective to the discussion, and provided these thoughts on the cultural and economic impact of knowledge management in today's business environment.

-Andy Moore, Editorial Director
KMWorld Specialty Publishing Group

Moore: *Review for us the evolution of KM, from its roots in the paper-reduction efforts of the early '80s (such as workflow, imaging, business process re-engineering) through today. What were the pivotal moments or major events or paradigm shifts thus far?*

Pery: Over the course of the past decade, there has been a fundamental shift toward increased investments in the capture, management and preservation of an organization's intangible assets. Such assets are defined to encompass human, process and relationship capital. A recent Brookings Institute study showed that market capitalization of firms today consists predominantly of intellectual capital, assets. Another study by Columbia University estimates that investments in intangible assets lead to more effective deployment of human and organizational capital, which have shown to yield a return on investment eight times greater than a similar investment in tangible assets (such as plant and equipment).

There is increased recognition of the immense potential inherent in leveraging intellectual assets. Tangible assets are subject to the laws of diminishing returns, and ultimately are written off. Intangible assets on the other hand are subject to the laws of abundance and they tend to be highly reusable, such as best practices, unique processes and privileged relationships that may be deployed for many purposes simultaneously. A recent Brookings Institute study concludes that "...the value of products and services depends increasingly on the development of knowledge-based intangibles, such as technological know-how, product design, a deep understanding of customer needs, expertise and problem-solving, and innovation. Powerful new technologies for capturing, storing, retrieving and sharing information are fast becoming the building blocks of a new knowledge infrastructure..."

Technology to support better methods of managing intellectual assets evolved in a somewhat disjointed manner. Document Management, Knowledge Management, Collaboration and Content Management technologies all provide a piece of the puzzle, however not necessarily in an integrated and fluid manner. Add to this the promise of Portal technology. In its first iteration, Generation 1 Portals attempted to provide content aggregation and personalization capabilities to deliver a singular view of enterprise content. While promising, portals fail to live up to corporate expectations. The cost of integrating and maintaining best-of-breed technologies from within a portal framework are considered to be prohibitive for many companies. The result was a major shakeout in the portal market. A year ago, there were over 100 vendors claiming to be in the "pure play" portal market. Today, there are only a handful of portal vendors. The market has polarized between infrastructure vendors that bundle portal frameworks as an integral part of their platform and IVS's that extend their offering with a portal interface.

Customers are increasingly looking to vendors that can provide tighter, more seamless integration of key content management services such as document profiling, version control, records retention, collaboration, searching, structured and unstructured information management from within a zero footprint portal interface. This inevitable convergence between these technologies was confirmed by Gartner in their recently published Research Note, titled "The First Wave of Smart Enterprise Suites," wherein they anticipate that "...smart enterprise suites will emerge as an aggregation of functionality offered by portals, team collaboration and content management..."

One may make a cogent argument that the major "paradigm shift" since the '80s is not technology per se, but the recognition of the relative importance of managing intellectual assets as an enterprise resource, and to do so as effectively as organizations have learned to manage tangible assets. By and large there has been widespread adoption of enterprise resource planning, supply chain management and customer relationship management software on an enterprise scale. Not so with intangible assets—the collective wisdom and best practices around which sustainable competitive advantages lie. While the Internet is certainly considered a "disruptive" technology, and it has fundamentally re-shaped the way organizations manage information, it has not in and of itself made companies more competitive. It's the application of these technologies and the methodologies associated with them that provide the potential to make an indelible imprint on how organizations leverage and protect their renewable intellectual assets.

"The Internet has not in and of itself made companies more competitive"

The increased emphasis on intellectual assets extends to a number of concerns that companies share today. Such concerns include risk mitigation. In the face of increased regulatory scrutiny, companies are paying a lot more attention to protecting their vital records by developing records retention and disposition practices that extend to all forms of records—paper, digital, including e-mail, as 35% of mission-critical business data is stored in e-mail repositories. Moreover, organizations are starting to recognize the importance of having an enterprise strategy for the management of content. Content resides in disparate repositories, often difficult to access from a single point of interface. A recent Gartner analysis estimates that an average knowledge worker wastes about $4,800

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annually in tasks relating to finding, filing and delivering information due to inefficient processes. For a company of 1,000 employees this inefficiency translates to a $4.8 million cost annually.

Peter Drucker argues "...that knowledge is not merely a source of competitive advantage but a pre-requisite..." For Drucker, knowledge replaces all other production factors. And the recognition of this fundamental principle is the real potential behind KM, not necessarily technology per se.

Moore: *Of all the "technologies" you identify as the key building blocks for KM, (enterprise information portals; federated search; content-, document-, information management; business intelligence; collaboration) which is the most important? Which has had the greatest success? Which has had the least impact? Why?*

Pery: It is important to recognize that no single technology component is more important than other components to support a KM solution. A KM system should be viewed as a fluid process that encompasses content creation (authoring), content sharing (collaboration and expert management), searching, management of knowledge artifacts (things that contain information, documents, images, web content, paper files), classification (taxonomies), versioning (document management), workflow (routing), and ultimately dissemination (which may include publishing, archiving, records retention).

The market demands increased integration between these components. According to the Gartner report, "...the vast explosion of unstructured data is overwhelming the management infrastructure of many enterprises. It is negatively affecting the productivity of individuals and the overall competitiveness of enterprises." Gartner further states that "In fact, portal products have been at the center of a convergence of multiple, complementary technologies, including content management, document management, search, classification, business intelligence, collaboration, knowledge management, workflow and e-learning..."

Moore: *What do you find to be the greatest "missing piece" when you first approach customers about implementing KM? Is it merely technology or an attitude adjustment?*

Pery: In large part, the initial failure of KM (in terms of hard and measurable ROI) is attributable to the notion that it was initially perceived as an application of technology, rather than an infusion of best practices and corporate culture that rewards knowledge contribution and sharing. There are still a number of built-in biases that preclude organizations from truly benefiting from KM practices. In a captivating and poignant book by Levine, Locke and Weinberger, titled the "Cluetrain Manifesto" the authors captured the principal issue in the following context: "Modern business almost universally has chosen a particular type of togetherness: a hierarchy...This not only makes the line of authority crystal clear, it also enhances the allure of success by making it into an exclusive club..." where "...It is not enough that I succeed. It is necessary that my friends fail..." KM best practices thrive on networks that transcend organizational boundaries. The hyperlinked nature of the Internet and the technologies that now empower us to share information in real time makes it possible to fully leverage the collective wisdom that's inherent in companies, provided that the culture is there to foster it.

Moore: *If KM is, as we always hear, "90% about people, 10% about technology,"*

Key Building Blocks of Knowledge Management

B2E Enterprise Information Portal	Provides a single point of access to all relevant information and applications, while also functioning as a gateway to communities of interest, best practices, etc. EIPs can also function as a platform for knowledge networks.
Federated Search	The ability to search across all organizational structured (databases) and unstructured (documents, records, emails, video & audio files) information sources.
Taxonomy, Classification and Indexing of Information Sources	Indexing of information resources and establishment and/or automation of an information taxonomy for industry-specific or organizationally specific information.
Document/Information Management Systems	Organization and archiving of documents, emails, files, illustrations, policies, procedures, records, audio & video files, etc.
Collaborative eCommerce application environments and/or workspaces	Enable organizations to easily create virtual project team rooms, and/or communities of best practices by allowing team members to collaboratively develop and store documents, tasks and schedules in a secure virtual environment.
Simultaneous collaboration	Allow workgroups and project team members to share information in real-time.

"An organization's intellectual assets—its people and knowledge artifacts—are as important as its tangible assets"

how do technology vendors (who are the usual proponents of KM-related efforts) satisfy that apparent dichotomy?

Pery: Generally, vendors have learned from the initial allure and subsequent failure of KM as a technology. There is considerable skepticism out there about KM as technology. Vendors do differentiate between KM as a practice and tools that enable it. Often a partnership framework is offered between providers of KM technology and domain experts who have skills in the implementation of KM methodologies. In some cases, KM tools are bundled with re-usable templates that provide a fast start to KM projects. Generally, it is widely recognized and accepted that KM is more about people, process and corporate culture than technology.

Moore: *What advice can you give to business managers who would* like *to create a long-term strategic goal of enterprisewide knowledge management, but are immediately driven by short-term tactical "fixes" that can gain quicker ROIs?*

Pery: Simply put, there is no instant gratification associated with KM. In many instances, ROI can only be measured in terms of soft costs such as improved efficiency and job satisfaction. In other cases, it is measured on the basis of hard costs such as reduced postage, travel and printing costs. The important thing to consider is to identify a concrete project or an area within the organization where the potential ROI and payback is clearly evident. It may be as simple as dissemination of corporate policies, which is a predominantly static application. This may be extended to a collaborative framework where amendments to policies are done in a virtual workspace, including workflow steps that reduce the level of manual intervention. This application may eventually be further augmented with an expert management system that links experts within the organization who may provide specific subject matter expertise in the development of corporate policies. Ultimately, such an application may be extended to an extranet that may be accessible by partners, contractors and other third parties. For each step along the way, the organization should have well defined metrics to measure the efficacy of the project that shows management the economic returns.

Moore: *You talk about "organizational barriers" for the adoption of KM, namely:*

1. *Senior management support*—"Where is the ROI?"
2. *Identifying the knowledge base*—"Who really knows about this?"
3. *Buy-in from knowledge workers*—"What's in it for me?"
4. *Information management and distribution*—"Does this really work?"

Which of these tend to be the greatest of all such barriers? And why?

Pery: In today's somewhat volatile and uncertain market conditions, technology in-and-of itself is not a differentiator. What matters is the business value. How will the application of KM technology help me save money, improve process or create competitive advantages? However, the application of KM technology is not a short-term fix to these considerations. It requires a culture change, namely that, an organization's intellectual assets—its people and knowledge artifacts—are as important as its tangible assets. Lack of understanding of this dynamic is perhaps the most significant "organizational barrier" for effective KM adoption.

Moore: *Following on from that question, do you approach a KM implementation from the "top-down" or the "bottom-up" and why does it matter?*

Pery: It must be both. There must be an overall top level executive endorsement of the principle of a knowledge sharing culture. But that in and of itself is insufficient. There must be a commitment to concrete and manageable projects within the organization that start from the bottom that gains increased adoption, which reinforces the perceived value of a knowledge sharing culture.

Moore: *Going back to the very first question, about the evolution of KM: With that historical perspective in mind, what are the next steps that need to be taken to fully integrate KM into the basic framework of business practices all over the world?*

Pery: There are a number of key developments that will contribute to an accelerated adoption of KM practices. They are as follows:

- Convergence of document, content and records management into a shared virtual repository;
- Single point of access to document, content, knowledge management and collaborative services natively from within the portal;
- Seamless application integration with key business processes such as SCM, ERM, CRM applications; and
- Common metadata, user-group and license management based on emerging platform standards such as Web Services and J2EE.

Moore: *Big Finish: Is the world any better off because of knowledge management? Has KM made a significant impact on business? The global economy? The quality of life for information workers and consumers?*

Pery: In response to this question, I am reminded of the words of Albert Einstein who said "Things should be made as simple as possible, but not any simpler." On the one hand, KM is this elusive concept that is difficult to define and which is somewhat malleable. On the other hand, KM is quite simple. It is about preserving and leveraging the collective wisdom of an organization. But that's easier said than done. Are we better off today with KM that we were 20 years ago? We seem to be overwhelmed with information. The average knowledge worker works longer hours and is more stressed than 20 years ago. The answers to these perplexing questions lie in the observations of Levine, Locke and Weinberger in the "The Cluetrain Manifesto": "Business is a conversation because the defining work of a business is conversation—literally. And 'knowledge workers' are simply those people whose job consists of having interesting conversations..." If we were to measure KM in this subjective and perhaps existentialist sense, then its enduring value depends on how we value the connections that may yield increased job satisfaction and productivity. ∎

Andrew Pery is Chief Marketing Officer and Senior Vice President of Hummingbird Corporation. He has over 20 years of marketing and general marketing experience in he software industry. Andrew's experience encompasses product marketing, brand strategy, mergers and acquisitions with both pre IPO and publicly traded companies.

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Andrew studied History and Political Science at Loyola of Montreal and Law at University of London. He has also completed post-graduate courses in Intellectual Property Law at Franklin Pierce School of Law, Concord NH.