Best Practices in Knowledge Management

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KM: The World Changer We Love To Hate

You're Probably Already Doing It; You Just Don't Know It Yet

By Andy Moore, Editorial Director, *KMWorld* Specialty Publishing Group

I once asked a conference audience: "By a show of hands, how many of you work in organizations that have knowledge management implementations currently in place?" A smattering held up their hands... maybe three or four. "OK, now how many have, uh, content management systems in place?" Several more held up their hands. "OK, how many have systems that allow you to work together in collaboration, from remote sites, in some way?" Some more. "Now how many have the means to search your companies' employee list and identify people by their job function or specialty?" Several more. "Now, how many of you have email?" Pretty much everybody raised their hands, of course.

"Look around the room," I said. "Do you still think that you don't have some form of knowledge management in place?"

The enduring problem with knowledge management is a semantic one. We HATE calling it that. Everyone does it, to one degree or another, but no one likes calling it that. There's a long-standing enmity to the term that I have never fully understood. Acknowledge, yes, but understood, no. I mean, what could be more desirable than to have a seamless way to provide the necessary knowledge to your most important employees, in a timely manner?

Yet, most of the vendor community eschews the term as well. "The semantics around the term itself—knowledge management—can put people off the whole space. We don't want to do that, said Ashley ("Ash") Gorringe, a product marketing lead at Google Enterprise. Ash and I spoke for about an hour last week. I was trying to get a feel for the current market comfort with knowledge management. Ashley seemed more than willing to comply—gracious, in fact—but was cautious about misstating the approach his company takes to the concept.

"There's no IT department in the world whose focus is 'knowledge management,' per se," he said. "They are more concerned with practical issues such as reducing call volume to the help desk, etc. And line-of-business is similarly focused on being more effective at their jobs." In other words, I gather, nobody's job description says, "I do knowledge management."

"Well, the tools of the trade DO include knowledge management," admitted Ash. "But we would prefer they don't frame it in terms of a KM system, or a content management system or a set of collaboration tools. We prefer it when they ask us how they can do their job more effectively."

When you talk with a product marketing guy, it's really hard to get the subject off of... well, the product. But in this case, it's worth describing, in overall terms, what Ash's responsibilities include. I hope I don't over-simplify this. The Google you know and love (the commercial one) is not what we're talking about. Google Enterprise is sort of a division of Google, which first developed something called the Google Search Appliance. This is a piece of hardware (in a pretty yellow box) that business users—not citizens—use to find content stored within their many file shares, data stores, CM systems, etc. Then, pretty recently, the division launched Google Apps, which is a set of Web-based applications that would be familiar in most organizations—email, discussion space, collaboration tool, calendar, word processing, spreadsheet, presentation tool, Web authoring and social network-creation tool. Oh yeah, and email security.

> ***"The enduring problem with knowledge management is a semantic one. We HATE calling it that."***

Whew. Tall order. But, after all, they're not called Google Enterprise for nothing.

Anyway, despite its overarching set of business tools that seem to stretch from one end of the enterprise to the other, Ashley is pretty modest about the Google approach to market, and the degree to which it has a "take over the world" attitude.

First of all, they don't pretend to do it on their own. "While there is a lot of out-of-the-box functionality in most search solutions on the market, any IT person worth his salt is aware that there's development work involved in deploying a solution. Especially for very particular types of deployments... for example, if there's a need for OCR, there are partners out there who do that very well, and would need to be involved." So there is no "off the shelf" magic bullet, admitted Ash.

"We don't define the business processes that we think customers should use," he said. "But we have found that by putting in the right technological solutions, often the processes just sort of flow out. I wouldn't exactly describe it as 'organically evolving' or anything like that, but the processes become much more evident. We don't pretend to tell customers how to create their processes; that has to be led by the business itself."

And the change-events tend to be driven by impending events. An Exchange license is about to expire, or servers need upgrading, or something like that. Currently, there are massive efforts underway to migrate to (or adopt for the first time) SharePoint, in its 2010 iteration. These are the feet-on-the-ground things versus the head-in-the-clouds things that ultimately lead organizations to KM.

And it's coming to your town soon.

Andy Moore

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Is KM for Snobs?

I wanted to circle back around to the subject on the table: knowledge management. With a set of tools that ranges from search to collaboration to information interchange, it seems to me that Google is the poster boy for KM.

I also suggested, however, that many of the more academically inclined pundits tend to define knowledge management in such high-falutin' terms that it reaches a level of snobbery. That somehow technology solutions are beneath KM; KM belongs to the realm of philosophers.

"We do think, in a broad sense, about knowledge management. But we don't take that purist approach, either. We try to be practical about the business solution for the problem at hand without getting people bogged down in a grand vision. It sometimes evolves in ways we didn't even foresee. But regardless, it has to be iterative. These are big, big steps for organizations," he said.

Since this is a "best practices" white paper, after all, I asked Ash to provide an example of what he meant by "iterative."

"One potential road map is to do as one of our customers, Genentech, did, which is to put in a test deployment, then as you become more comfortable, roll it out across the entire organization in a planned way. In this way, you can solve all these challenges surrounding knowledge management without making it the primary goal from the start," he answered.

Is KM For the Elite?

Despite an almost universal reluctance to describe *anything* as "enterprisewide," enterprisewide is exactly what it needs to be. A great example appears in this white paper, in the article by Chris Hall from InQuira. He talks about a hypothetical case where a company is offering a 50% discount to consumers who switch to their service from a competitor. "This offer must be communicated and supported by every customer channel," he writes, "including the contact center, retail locations, website, VRU, Facebook page and even your field service technicians." With an enterprise KM system in place, he concludes, the company can thus have "just one source of knowledge... the offer is not only delivered in a unified, consistent and accurate manner everywhere the customer goes, but it can also be implemented far faster than if you had to wait for every channel to be updated individually."

This is where I think the "purists" and "philosophers" miss the point: accomplishing a complex task such as that requires technology as well as well-honed practices, training and cooperation from the participants involved. You can talk all you want about "story-telling" or "evangelizing innovation" or whatever. But the business world is seeking solutions to their points of pain. And Chris describes that one beautifully.

However, I will concede that some of the touchy-feely stuff has been, and should be, absorbed into the organization strategy... and then put to good use. "We're spending more energy connecting information from both within and without the organization, and providing a more 'social' search," said Ashley. "For example, how do you find people within an organization who have particular expertise? Our approach has been to provide ways for users to rank pieces of information, and allowing certain ones to be considered more useful than others."

"Some of the touchy-feely stuff has been, and should be, absorbed into the organization strategy... and then put to good use."

Selling that kind of non-specific, but good-sounding, strategy has always been a challenge for KM vendors. Ash said that his company's sweet spot is "the forward-thinking, technologically oriented, very collaborative organizations who are conscious about doing things at a large scale and a low cost."

(Well, no kidding, I thought. I would have guessed, "the slow-minded, tradition-bound, Dunder Mifflins of the world who want to spend more than they should and get less they want." Oops, excuse my sarcasm there.)

But Ash is exactly right. The organization that is considering anything remotely related to KM has to be 180 degrees opposite a Dilbert cartoon. "They need to be open to trial... willing to try something new," he said. "We appreciate these are big decisions. We're willing to say: how about trying it in a single department first? Or we might say, try a cloud solution for part of your problem, then maybe down the track try some more across additional functions. We'd rather wait until customers feel comfortable first, rather than shove it down onto them. It is a big shift in paradigm."

Is KM Changing the World?

Speaking of paradigm shifts, there are two game-changing forces at work right now that will alter—maybe transform—the KM world. One of them is "cloud."

"Here's how we analogize the cloud: A lot of businesses already have a lot of stuff in the cloud... HR data, for example, including social security numbers, bank account information. They're more in the cloud than they usually think they are already. So taking that step—while it seems huge—might be more familiar than they originally thought. So the concept of moving email servers over to the cloud should not be that big a deal. They've already got information in the cloud that is as, if not more, sensitive than something like their email stores," said Ashley. "But it still takes some persuasion."

Tony Frazier and David Fishman, in an article in this white paper, put it this way: "Solving the knowledge gap begins with enhancing our understanding of who's communicating and what they're communicating about... It's not about who's who, it's about what content they're creating and determining whether it's relevant to your work.

It turns out that the network is a pretty good place to process this information. Not only can it help you identify who's working with whom and when they're on or off-line, it's also possible to see what topics they're discussing—whether it's text-based or not."

Which leads us to the other game-changer: Social networking. "A lot of companies have access to a Twitter feed, and you can see if anyone's talking about your organization. If you see a high number of feeds from a single organization, you can choose to respond to that customer more rapidly. Only a small number of savvy organizations are doing things like this now.But it will be an increasingly important path to market; the ones doing it have been very successful," said Ash.

The whole conversation about enlightened versus tradition-bound organizations reminded me of what Lester S. Pierre of the Wall Street Network wrote in his article in this white paper: "The quality of information is often lost due to the filtered stages of communications in traditional organizational structures. Many organizations fail to capitalize on the wealth of knowledge scattered across their organization, because they rely on top-down decision making, centralized knowledge management systems and technologies. While analytics and data are very important, the interpretation of this data—which can only come from a person—can be more valuable to an organization."

"Only come from a person..." That's one of the strongest statements of knowledge management I've heard yet. ▮

KM with Google: Real World Cases

By Joyce Wu, Partner, Market Strategy Group

Consider that every week, workers waste more than a full day (nearly 9 hours) searching for information, costing $14,200 per employee per year.[1] They dig around on shared drives to locate data, or wait for colleagues to update team files. When the information is beyond reach—on a colleague's hard drive or in someone's head—more time is lost to regenerate the data. Large investments are made for reports that contain the same information that already exists within corporate walls. All told, employees spend 20 minutes per day recreating information that already exists.[2]

Despite the emergence of unified messaging and seamless mobility, the reality is that information access and collaboration still cause headaches. Synching the data in mobile devices with workplace desktops has its share of problems, and navigating through the various enterprise software systems—from Microsoft's to Oracle's—can be frustrating. No doubt, these systems have plenty of features, but making the systems talk to each other can be a challenge.

Companies usually begin by trying out one tool and finding that the value created inspires them to adopt multiple tools, which is where the transformation occurs. In 2002, Google introduced the Google Search Appliance (GSA), a tool designed to search enterprise content. Upon this foundation, Google introduced its suite of email and collaboration tools, Google Apps, in 2007. The GSA takes the familiar utility of Google web search into the realm of the enterprise space. Google Apps include email and instant-messaging, calendar and document-creation tools, and a suite of collaboration platforms—from shared documents to video.

Taking Teamwork to the Next Level

The Business:

Considered by some to be the founder of the biotechnology industry, Genentech has been in the biotech business for more than 30 years. Headquartered in south San Francisco, the company uses human genetic information to discover, develop, manufacture and commercialize medicines to treat patients with serious or life-threatening medical conditions.

The Challenge:

In the past, Genentech had separate mail and calendar systems, causing a user experience that was "fragmented and frustrating," according to staff. The company used Microsoft Outlook alongside an Oracle calendar system, a limiting combination for Genentech's 11,000 employees. The systems could handle a maximum of three months' history while users wanted at least a year, creating frequent crashes, especially in December when many users were inputting events for the next year.

The Solution:

Genentech's principals knew they needed a system that allowed the staff to find data more quickly and efficiently than their current tools allowed. Andy Wang, Genentech's senior systems architect, noted that typical MS Office users only used 10%-20% of the software's features. Genentech's usage was no different, but Wang and his team decided to deploy a "frictionless" and more "cohesive" system. Genentech researchers were being slowed by problems controlling versions of documents created via the Office suite of applications, and mobile users had difficulty accessing the documents.

They deployed Google Apps and Google Docs to provide a "lightweight" and "easy to use" system. So far, 20% of Genentech content is in repositories created through these tools, and before too long Wang expects that 80% of content will be. Mobile users can find the data they need, and most importantly, making back-up documents is easier. It allows users to save their data for reference, always keeping the most recent version on top.

The Results:

The relatively low price point translates into significant cost savings. While the cost equation is important, it's the functionality that has been most impressive. They no longer need to route edited versions repeatedly through email, quashing worries about which version is which and whether the right people have the right one. Users can edit a document "live," simultaneously with their colleagues. The process makes collaboration remarkably efficient.

Research studies confirm that fully engaged employees generate higher quality content and create a culture that fosters stronger collaboration.[3] Such facts make it clear that engaged employees drive more revenue and generate measurably greater business productivity.[4] No doubt, engagement at Genentech is on the rise. More than 7,000 of the company's 11,000 employees use the new system on a weekly basis, even though Genentech's IT department has not actively promoted its use.

The enterprise tools are proving useful as Genentech grows. The company recently merged with another pharmaceutical giant, Roche Group, creating a flood of information that needed to be distributed to people stationed all over the world. Video (in this case Google Video) has come to the rescue, Wang says. Researchers from different parts of the merged company share content. Human resources departments have used video for organizational announcements, employee training and the dissemination of important corporate policies. In each case, video has streamlined the process "without having to pay some production company $100K," Wang says.

Seek and Deploy: Mobile Access Becomes Reality

The Business:

Circle-E provides clients such as Wal-Mart, The Home Depot and Jack in the Box with indoor and outdoor preventive and reactive maintenance. The Texas company employs 25 mobile workers and at least as many contractors with specialized skills. The organization makes it a top priority to use leading-edge technology to manage client information and provide superior service.

The Challenge:

Every facility serviced by Circle-E's field maintenance professionals is unique. As they prepare for a job, the company's workers have to account for lots of data—from air conditioning filters to kitchen measurements. An unprepared field rep, obviously, can't be as efficient as one who is "in the know." In years past, information about individual facilities was either locked away on paper-based work orders or stored in field professionals' heads.

This informal way of sharing information—reps picking each other's brains—was costing Circle-E time and money. The company wanted to differentiate its services, improve efficiency and reduce costs by creating a centralized, searchable repository of information about customer facilities that field personnel could access using their mobile devices.

The Solution:

With a search appliance, Circle-E can help its workers find the information they need. It addresses all forms of content in the company's SQL Server database, and makes the information there easily accessible to employees even from the field. There was minimal need for training. Circle-E employees simply integrated search into their daily process, getting the information they needed before they headed out to work with clients. In addition to easy searching, field service professionals can add useful information into the database while on the go.

With the new solution, internally called "KNOWN," Circle-E field maintenance staff members receive emails on their mobile devices with work orders, and log into KNOWN remotely for all pertinent information, detailed specifications and photos, about the job site.

The Results:

Circle-E clients have noticed the enhanced preparedness and professionalism that reps now bring to the job. Field reps notice the benefits, too. Some say that when building an estimate, if there's a part or description of labor that they don't understand, they can now search KNOWN and figure it out. Or, if there's an estimate that needs specific part codes, that information is handy.

Reps are willing to collaborate as never before, making sure they input the information in KNOWN, so when another rep looks up his customer, it's clear how to work best with that specific client. "No matter where anyone is, they can add, edit and search the database," says Circle-E vice president Seann Slosson, who manages the company's IT.

The benefits don't stop in the field. Circle E's office workers are also putting search to good use. In the human resources department, for example, the advantages have led to greater efficiency and cost savings. Because employees can now find pertinent part numbers, paint codes, etc., on their own, the administrative support staff has been reduced by two slots, saving $80,000 a year.

The central office staff has also been reduced from nine positions to four, as the company has significantly upgraded HR functions such as recruiting and new employee orientation. Orientation is now done online by searching the keyword "orientation" rather than in a class setting. HR can search for new candidates by skill, zip code and prior interview notes. Consequently, the overload of technicians that they once had to sift through is quickly narrowed to the relevant candidates.

All in all, Circle-E has reaped tangible results. Better prepared field reps and automated find-and-collaborate capabilities have led to a noticeable difference in both top and bottom lines.

While over 3 million businesses use Google Enterprise tools, this paper highlights two businesses—one large (Genentech) and one small (Circle-E). Each presents a unique use case for knowledge management.

The Changing Workplace

The business world has changed over the past decade. The competitive landscape has become global. The workforce has skewed much younger. And technology has evolved. It has moved from the desktop to the Web, and from the desktop to the cloud.

Enterprise solutions, such as Google's, fit neatly into this new world. The executives mentioned in this article have found that access to information is critical to business users.

Yet the real power of such enterprise solutions, as evidenced from the anecdotes here, is their transformative nature. The tools are familiar to the growing youth base of today's companies, making adoption swift and enthusiastic. More importantly, their usability breeds employee engagement. Users become more involved and productive. Innovation increases, teamwork and collaboration grow as well.

Companies can now cite culture shifts as the rank-and-file break norms with ideas that flow upward and solve business problems. Enterprise solutions are not so much the purview of the IT department, but rather that of the C-suite as top executives look at ways to lead their organizations to the next level. ▮

1 Feldman, Susan. "Hidden Costs of Information Work." IDC, 2009.

2 Info-Tech Research Group. "ROI Guide for Document Management." www.infotech.com, 2008.

3 Crim, Dan and Gerard H. Sejits. "What Engages Employees the Most or, The Ten C's of Employee Engagement." Ivey Business Journal, 2006.

4 Lockwood, Nancy R. "Leveraging Employee Engagement for Competitive Advantage." SHRM Research Quarterly, 2007.

KU Technologies

A Noetix Case Study

By Daryl Orts, Vice President of Engineering Technologies, Noetix Corp.

KU Technologies' services are focused on delivering innovative business solutions to customers in the early childhood and school-age education and child-care industries. KU Technologies partners with Knowledge Universe, its largest customer, to create and deliver more manageable computer network environments that cost less to operate and deliver more value to the business and the customers that they serve.

The Challenge

KU Technologies delivers a wide range of IT services to the subsidiaries of Knowledge Universe, which include KinderCare Learning Centers and CCLC, serving 300,000 children across the US. The company's enterprise business intelligence (BI) team is responsible for multiple products and projects that provide critical insight into financials and other operational metrics for more than 1,800 early education centers.

In the fall of 2009, the BI team began examining methods that would enable them to better gather and access information from Oracle E-Business Suite (EBS) for reporting and analysis purposes. For example, they wanted the ability to look at an individual education center and to analyze how annual revenue related to employee turnover and then to compare these metrics with other facilities. They also wanted to be able to determine food costs at facilities so they could negotiate lower prices with vendors. At the time, managers were using a variety of methods to come up with this type of information, from Excel sheets to email compilation.

The Solution

The BI team determined they needed a new, robust reporting solution, and after much research and due diligence, the team decided to purchase Noetix Analytics. The solution would be used to augment the existing data warehouse and to do so in a way that enabled the team to quickly and accurately deploy a complementary solution, thereby reducing time to market and costs that would have been involved with a "from scratch" approach.

The new system is built on a module-based approach, which allows KU Technologies to select modules specific to what they use in Oracle EBS (general ledger, accounts receivable, accounts payable, fixed assets, project accounting) and to expand to additional modules as the need arises. The information is consolidated in near-real time, standards-based Operational Data Store (ODS) and a Kimball approach (fact table, dimensions) data mart.

"We could have spent 12 to 15 months and up to $2 million creating a customized data warehouse from scratch," said Wade Anderson, director of business intelligence. "The end result was a solution that was 80% of the way to what we needed at go-live, shifting the focus of our implementation effort away from creating an architecture from scratch and instead working on areas and business needs that are unique to Knowledge Universe business lines."

The BI team was live within 90 days of the initial implementation. A few months later, it had a data warehouse populated with 1.3 terabytes of data available for operational reporting and analytics.

The new system works in conjunction with existing BI platforms from a wide range of vendors, enabling KU Technologies to employ its existing Cognos 8.4 reporting tool to view information from Oracle EBS in a familiar format. The BI team built a series of dashboards and has conducted extensive training to empower the end users to use the solution to create their own operational reports.

The Result

Today, initial "consumers" in human resources, finance, legal and procurement are retrieving information from the new BI environment and creating their own operational reports—accessing information wherever and whenever they need it.

The finance organization in conjunction with the BI team recently launched a balanced scorecard for one of KU Technologies' major business lines. The information provided from the analytics system played a key part in achieving this in 30 days time. Center directors and field management now have the ability to log in and retrieve a common set of information unique to their business area.

"We could not have implemented this balanced scorecard with its systematized approach without the solution pieces we employed," said Anderson. "And when you imagine that this information will be available for the first time to 1,800 center directors and their staff, you can see that the impact on the business overall will be enormous."

A Q & A with Noetix: Evaluating BI for Oracle E-Business Suite

1. Will we need both real-time reporting and analytics? Most customers do and you probably will, too. You will want to look at solutions that provide access to real-time transaction data as well as data warehouse models for more complex analysis.

2. What functional areas will we need coverage for? Don't focus on just financials or human resources simply because you need to implement those modules first. Look at your more complex (and less obvious) applications such as enterprise asset management, time and labor or depot repair. Try to find a solution that provides coverage for everything needed now and in the future.

3. We already own a few BI tools—can we continue to leverage those? You might have users who are familiar with Oracle Discoverer. Maybe you have a department that is experienced with IBM Cognos BI or SAP BusinessObjects. It's possible that you just purchased OBI EE from Oracle and are looking forward to using it. Many organizations have more than one of these platforms. It makes good business sense to look at options that allow you to get value from your existing investments, while providing a common "data model" that remains consistent across the tools used throughout your organization.

4. How will an Oracle E-Business Suite upgrade affect my BI reporting? Whether you're currently on R12 or still on 11*i*, you are almost certain to go through an EBS upgrade at some point—probably multiple times. You will want a BI solution that makes those upgrades easier—something that will protect your reports and dashboards (and customizations you may have made) when you do the upgrade, so you don't have to redo all of that hard work.

5. What experiences have others gone through? Look for a solution that you know will work—something proven, something currently in use by organizations like yours (similar size, similar industry, similar user requirements), and something mature enough to have gone through a few upgrades. It's also a good idea to try to network with other Oracle EBS customers to learn firsthand of their successes and challenges. ▮

Daryl Orts is responsible for managing the growth and development of the Noetix Platform, Noetix Generators, Noetix Search, Noetix MetaBuilder and Noetix Dashboard. Orts brings more than 15 years of technology leadership experience to Noetix.

Noetix provides instant operational reporting and packaged analytics for Oracle Applications. More than 1,400 customers worldwide use Noetix to quickly and cost- effectively access the enterprise application data necessary for critical decision-making.

Six Keys to KM Success

Lessons Learned from the Global 2000

By Ashutosh Roy, Chairman and CEO, eGain Communications Corp.

Customer service has emerged as one of the few remaining differentiators that businesses can sustain over time. Companies that are winning in this environment provide "stand-out" customer service by using knowledge to empower contact center agents and drive self-service interactions.

In delivering KM solutions to world-class contact centers and self-service operations for more than 15 years, we have compiled hundreds of best practices that improve the odds of success in KM implementations, while maximizing ROI. Listed below are some of the popular ones.

1. Quantify value.

Assessing expected and realized ROI before and after the deployment helps you justify the initial investment as well as ongoing maintenance of the knowledge-base (KB) while elevating your visibility as a value creator for your business.

Best practice: Make sure the metrics you use are aligned with business objectives. For instance, if your main business goal is to increase upsell and cross-sell through knowledge-enabled contextual offers, reduction in call handle times will be a conflicting metric. As you assess ROI, keep in mind that KM delivers positive ROI in areas such as:

- Increase in first-time fixes and revenue through upsell and cross-sell; and
- Reduction in escalations, transfers, repeat calls, call handle times, training time, unwarranted product returns, field visits and staff wage premiums.

2. Build the right team.

Successful KM implementations start with the right team for knowledge capture and creation.

Best practice: Build a cross-functional team that can bring a 360-degree approach to knowledge creation. Best-practice teams typically include:

- Lead expert: individual who decides how the KB will be organized, which topics will be covered, what the roles of various people in the team are and plans for maintenance;
- Users: high-performance contact center agents who provide suggestions;
- Knowledge authors: individuals who are trained to use authoring tools; and
- Project manager: individual who keeps the project on track.

3. Avoid the "swiss cheese" syndrome.

Ambitious deployments almost always result in a KB that is solid in places, but full of holes, like a slice of Swiss cheese. This is a recipe for failure, because if users can't find the answers, or get inadequate or wrong answers, they will quickly stop using the system.

Best practice: Focus on depth and quality rather than breadth. For instance, if an enterprise sells printers, scanners and copiers, the best approach would be to cover one product line thoroughly first.

4. Maintain velocity.

A classic mistake in KM implementations is not making midcourse adjustments to keep the project on track.

Best practice: If the deployment appears to be falling behind schedule, narrow the scope of the KB and finish on schedule. In fact, it is better to widen the scope later to expand the benefits of the deployment. As a rough guide, a typical enterprise deployment should not take more than three months after the initial planning, with three or four full-time people engaged. Deployment includes software installation, knowledge gathering and testing both the quality of the KB and system performance.

5. Balance "ivory tower knowledge" with "street smarts."

Enterprises often make the mistake of relying solely on internally focused domain experts who rarely speak to customers. It is sometimes difficult for experts to get down to the level of ordinary customers who may not know technical terms such as whether their mutual fund is "no load," "front-loaded" or "back-loaded." Using jargon in questions posed by agents or self-service systems is a guaranteed way to increase escalations and customer defections.

Best practice: Find KB contributors who are both technically competent and not too far removed from customer contact. Successful customer service depends as much on the questions posed to customers as the answers.

6. Provide flexible content access.

People have different ways of finding information, or the same person may use different methods to suit the situation. A flexible approach to information access dramatically improves user adoption and ROI. For instance, novice agents, whether they are in-house or outsourced, may find it difficult to wade through hundreds of search hits to find the right answer, but may fare better if they are guided through a dialogue, powered by an inference engine. On the other hand, experienced agents may prefer to quickly process search hits.

Best practice: Provide users multiple ways to access information—FAQ, browse, search and guided help. The key here is to make sure that the KB remains the same and there are no content silos. ▮

Ashutosh Roy

Ashutosh Roy, eGain's co-founder, has served as chief executive officer and chairman of eGain since 1997. From 1995 to 1997, he served as chairman of WhoWhere? Inc, an Internet-service company he co-founded, which is now part of Lycos, Inc. From 1993 to 1995, Ashu co-founded Parsec Technologies, an international call center software company based out of India. Ashu holds a BS in computer science from IIT, New Delhi, a master's degree in computer science from Johns Hopkins University and an MBA from Stanford University.

eGain is a leading provider of multichannel customer service and knowledge management software for in-house or on-demand deployment. For more than a decade, hundreds of the world's largest companies have relied on eGain to transform their traditional call centers, help desks and Web customer service operations into multichannel customer interaction hubs (CIH). Based on the Power of One–the concept of one unified platform for customer interaction and knowledge management–eGain solutions help improve customer experience, optimize end-to-end service process, increase sales and enhance contact center performance. For additional information, please visit www.egain.com.

Knowledge Management:

The Holy Grail for Today's Economy

By Chris Hall, Vice President, Product Marketing, InQuira, Inc.

With all the channels and means for customers to get information, you might think a centralized knowledge management (KM) strategy isn't important any more. In fact, it's the exact opposite—KM is more important than ever. The multitude of channels from call centers, VRUs, email, retail stores and company websites to social networks like Twitter and Facebook has exponentially multiplied the opportunities for inconsistent and just plain wrong information to be everywhere.

Think about the vast array of technology in play: content management systems and knowledgebases are used in the contact center; the website has an FAQ engine; the email response system manages its auto-responses; and social forums maintain their own databases. The trouble lies in disseminating content to all these different applications and databases. They are being modified by different people with different skill sets, and when you add in global distribution and multiple languages, it gets even more complicated. Even if you could make the changes to these different engines in a matter of days, how consistent and accurate will the answers be when you're done?

This is why KM has become mission-critical. You need to be able to quickly create, maintain and update content across all channels so that customers can rely upon the accuracy of the information and know that it will be consistent regardless of the channel they are using to access it.

Consistent, Accurate Knowledge Delivery

So how can you make sure that customers are finding accurate and consistent information regardless of the channel they use? This is really a two-part question. First, how can you rapidly disseminate information across channels? Second, how do you help your customers find and consume this content?

The answer to quickly and easily sharing content is to use a knowledge platform. A knowledge platform is purpose-built to make the business of disseminating content across channels a rapid "one-step" process. Rather than requiring each channel's underlying technology to be manually updated, a single update from the knowledge platform can push the most relevant content to every channel and customer-facing process when and where it is needed.

Think how this capability can help you improve the quality of your service—and gain a competitive edge. For example, your company wants to offer a 50% discount to consumers who switch to your service from a competitor. This offer must be communicated and supported by every customer channel including the contact center, retail locations, website, VRU, Facebook page and even your field service technicians. With a KM platform, you can create this content in a single place and propagate it to all the channels. When a service agent logs into the CRM application, the knowledge is already in place and integrated into the desktop application. When a customer logs on to your website, visits a retail location or kiosk that is fed by the KM repository, your special offer becomes an integral part of their experience. With just one source of knowledge, the offer is not only delivered in a unified, consistent and accurate manner everywhere the customer goes, but it can also be implemented far faster than if you had to wait for every channel to be updated individually.

High-Value Customer Experience

So, with a knowledge platform, you can deliver information far more efficiently and effectively, and that means you are providing a much more satisfying customer experience, right? Well, yes—and no. Certainly, increasing consistency and accuracy, getting crucial information out there right away to meet customer demands—all of this is going to improve the experience. But now the problem of helping customers find what they are looking for arises. Too often, companies rely on enterprise search engines or content management systems that offer only keyword search. Customers find themselves caught in endless search loops, sifting through page after page of results, giving up and making a phone call to your contact center, or asking their friends for help. Even worse, they may turn to a competitor and bad-mouth you to their friends over all those social channels. As Harris Interactive reports, 86% of customers will stop doing business with an organization after just one bad experience, and 82% of them will tell their friends about it.

The answer is not to present *more* results. Instead, help customers avoid the content clutter with a specific and relevant answer. This requires understanding the intent of each inquiry—a capability that is not available with enterprise search or content management. KM solutions that offer intent-based search leverage natural language processing, business rules, behavioral analytics, ontologies and the context of the inquiry to discover its "true intent" and deliver the most relevant answer. For example, a self-service customer asks how to complete an online transfer between her checking account and IRA. Instead of searching all repositories and producing a massive results list, KM directs the search to the most relevant knowledge source, such as the page on the support site that explains how to complete transfers, or a micro-site for IRAs. This eliminates the presentation of irrelevant documents that just happen to contain the words "checking account" or "IRA" or "transfer," all of which could produce hundreds of results.

Advanced KM combines this intent discovery with "directed knowledge" that enriches the experience, both from the point of view of defining the inquiry as well as providing a response. For example, a wizard can guide a customer through the process of picking just the right product. The result can include not just the most relevant funds-transfer procedure, but also offer a rich environment of related knowledge, such as links to appropriate FAQs, a tricks-and-tips online forum and even a special offer or promotion related to the inquiry.

Killing Two Birds With One Stone

Why is there a new heightened focus on knowledge strategies? The current economic climate has forced businesses to be exceedingly vigilant on the cost of service and at the same time figure out new strategies to increase customer spending and retention. Top brands today are implementing knowledge strategies to make sure information across their global business is consistent and accurate. These same strategies bring new offers and products to market faster; quickly deliver troubleshooting solutions that prevent costly contact center inquiries; help customers find answers as rapidly as possible; and surround answers with information and opportunities that deliver more value every time a customer touches your company. The fact of the matter is that in this world of channel explosion, social exposure and fiscal responsibility; there are few things more relevant or more appropriate than a well-implemented knowledge management platform. ▮

Chris Hall brings more than 20 years of business experience as a senior marketing and product strategy professional in the enterprise software industry and is InQuira's VP of product marketing.

InQuira is a leading provider of intelligent knowledge solutions that connect people to the answers they need.For additional information, visit www.InQuira.com.

Closing the Knowledge Gap: A Case Study

How Cisco Unlocks Communications

By Tony Frazier, Director of Product Management, Cisco Systems and **David Fishman,** VP Marketing, Lucid Imagination

Historically, organizing and finding documents has been at the core of knowledge management and online collaboration—efforts to transform the collective intellect of an organization into a technology-powered asset. But perhaps documents are not the core of the proposition? Today, the best way to find the information you need to do your job may be to look more broadly at the discussions taking place outside of traditional text.

Consider this: you're looking for information and immediately search the documents at your disposal to find the answer. Are you the first person who conducted this search? If you are in a reasonably large organization, given the scope and mix of electronic communications today, there could be more than 10 other employees looking for the same answer. Unearthing documents, one employee at a time, may not be the best way of tapping into that collective intellect and maximizing resources across an organization. Wouldn't it make more sense to tap into existing discussions taking place across the network—over email, voice and increasingly video communications?

The Emerging Technologies Group at Cisco set out to solve these problems using network-based intelligence to find faster ways to close this knowledge gap. The result—a platform called Cisco Pulse.

Solving the knowledge gap begins with enhancing our understanding of who's communicating and what they're communicating about. We also have to take into account the medium—specifically, the explosive growth of online video and social networking applications and their adoption in the enterprise. It's not just about who's who, it's about what content they're creating and determining whether it's relevant to your work.

It turns out that the network is a pretty good place to process this information. Not only can it help you identify who's working with whom and when they're on or off-line, it's also possible to see what topics they're discussing—whether text-based or not.

Cisco's approach to this project centered on vocabulary-based tagging and search. Every organization has the ability to define keywords for their personalized library. Cisco Pulse then tags a user's activity, content and behavior in electronic communications to match the vocabulary, presenting valuable information that simplifies and accelerates knowledge sharing across an organization. Vocabulary-based tagging makes unlocking the relevant content of electronic communications safe and efficient.

To implement this process of finding and tagging, we turned to open source technology—specifically, Solr/Lucene open source search to form the foundation of our search architecture. By using Solr, the Lucene Search Server, Cisco Pulse can tag data in real time at a very high rate of high content throughput.

Working with Lucid Imagination, Cisco implemented a high-speed Solr/Lucene search engine within Cisco Pulse that hosts indices as large as 35 million records on a single appliance and yields high-speed queries in a search time ranging in milliseconds. Solr sharding—a mechanism for distributing the index—also makes this architecture easily extensible to support larger volumes of data.

Advantages of Open Source

An important dimension of the use of Solr/Lucene is that it is available as open source. This affords two advantages: 1. the code is publicly available, and can be built upon freely; and 2. its transparency enables us to see, control and optimize how its search operations execute.

Importantly, Solr is fault tolerant and highly available, so it meets the stringent requirements of an enterprise-ready application. With Solr's multi-core architecture, heterogeneous applications such as people search and video discovery can be managed in a single search server.

With the rapid expansion of audio and video communication in the workplace, it is essential that we be able to handle rich media with our content management technology. Using some of the same search methods that unlock the content, we are able to make rich media a seamless part of the solution.

Putting video to work starts with making the content easier to access and work with, resulting in more useful information for the user. The first step is to eliminate the need to watch a video end-to-end, in real time, in order to find what's in it. By leveraging video metadata and applying text-to-speech technology to the audio track, Cisco Pulse creates an information structure around videos that makes them easier to search and extract information from.

This process of tagging feeds directly into the Solr/Lucene search technology at the core of Pulse. The content of the video—who's talking and what they are talking about—can become part of the social and knowledge flow among workers. It makes videos easier to browse and search, adding tags for topics mentioned in the video to the metadata for the file and resulting in more effective use of content.

"Unearthing documents, one employee at a time, may not be the best way of tapping into the collective intellect and maximizing resources."

When the network plays an active role in connecting people through content in all its forms—be it text, rich media, or online activity—there's yet another frontier. With search technology helping to unearth content and make it useful to the masses, we can now actively match content to end users before they need to look for it: no more searching a database, the content finds you.

When content finds you, it brings the exercise of search and knowledge management full circle. While topics you are working on are indexed and understood by the search system, the same thing is happening at the same time with others, across your organization. The content becomes the connection between people working on similar projects.

By building on the power of Lucene/Solr search, Cisco has transformed content from a passive, accumulating archive to a dynamic network of people and information. ▮

How Modular Workflows Counter Risks and Costs

By Rich Turner, Vice President, Marketing, Content Analyst Company and **Bill Johnson,** President and CEO, TCDI

21st century businesses run on knowledge management workflows. Whether they have a formal ERP or ECM solution or simply rely on email, today's companies run their businesses largely through electronic documents.

Litigation is also a fact of life in business, and this is where the trouble begins. By and large, legal discovery is patterned after historic paper collection. Traditional mail often contained advertising or personal materials, but these never made it beyond the "circular file"—in essence, they were pre-culled before they ever made it into the workplace. The physical act of collecting paper—typically by paralegals with some knowledge of what they were looking for—provided a further opportunity to skip clearly non-relevant materials. Once everything was collected, it was more a matter of simply processing and reviewing everything you had.

The world of electronic data has a lot more "noise" than was ever present in paper. There is little "pre-culling," lots of repetition and massive volumes of information, stored everywhere by everybody. All of this information is potentially discoverable when litigation occurs.

In much the same way that companies began tackling the challenges of electronic knowledge management a decade ago with workflow solutions, the challenge of managing the risks and rising costs of e-discovery are being met with innovative workflow solutions.

The Growing Challenges of ESI

The first forms of e-discovery workflow for processing electronically stored information (ESI) were simple data flows: collected data was fed into one end of the pipe, and database records came out the other end to be reviewed. Simple filtering techniques such as keyword and date range helped cull down the amount of material needing to be reviewed.

As the amount of ESI has grown, so has the complexity. ESI contains rich metadata—so email threading is now an important way to enhance discovery. ESI can also be extraordinarily complex; comprehensive storage and knowledge management workflows mean that ESI can contain multiple languages, numerous document and data formats and hidden information. Even simple keyword techniques are coming under intense scrutiny by lawyers familiar with active and possible future litigation along with representative documents, often requiring iterative cycles of filtering and analysis.

Further complicating the "simple data flow" challenge are new advanced technologies. Data integrity can be compounded by the misapplication of these tools, or applying them at the wrong time. For example, aggressive culling of data early in the process can undermine the success of email threading technologies.

In response to the growing issue of e-discovery workflows, companies are finding solutions in scalable, modular processing platforms that use an integrated workflow engine. These platforms support complex decision points based on the data being processed, not simply a linear "one-size-fits-all" data flow. Their modularity readily accommodates voluminous datasets, complex customization requirements, multiple data formats and languages. Modular workflows that can scale are well-suited to organizations with large amounts of data, and they are less disruptive than rigid, fixed solutions.

This integrated workflow engine also presents opportunities to use advanced technologies in deciding the processing strategy for any single piece of data while maintaining an auditable workflow for defensibility. These decisions are no longer binary (to process or not to process), but can be a complex diversion of data to different processing buckets and strategies.

Enter Analytics

Advanced analytics—one of the most significant advances in e-discovery technologies—is well suited to integration into such modular workflow solutions. Analytics provide a variety of tools which can be applied to the e-discovery processing workflow to intelligently reduce the amount of information being presented for review. Technologies such as conceptual categorization, conceptual clustering, near-duplicate identification and concept search can be used in conjunction with more traditional methods of data organization (keyword filtering, date and custodian sorting, email threading) to enhance the processing workflow. The successful application of such technologies depends on the careful analysis of the types of data being reviewed, a clear understanding of what each technology does and is capable of doing and a determination of the best technologies available to achieve gains in productivity on the part of the reviewers. While the workflow engine can guide the selection and application of a whole suite of advanced tools, there is still no substitute for human reasoning and judgment in the analysis of data. It is the combination of a modular, integrated workflow, advanced tools such as analytics and human input that develops the most efficient and accurate way to manage e-discovery processing and review.

The modular, integrated workflow is also key to what the future will hold. Progressive markets are always pushing the convergence of technologies: analytical software such as sentiment, semantic and statistical analysis—historically divergent—thrive together, providing new relationships in a modular hybrid workflow. As these cutting- and bleeding-edge technologies behind analytics gain widespread use and acceptance, they will become the central technologies behind e-discovery processing.

E-discovery platforms in the form of processing appliances will feature analytics and workflow as the underpinning of advanced techniques to filter and organize data as standard processing "out-of-the-box." The ultimate payback for the technology, however, will occur when enterprisewide data can be organized using the product of analytics during the collection phase of the workflow. This will require the ability to analyze documents "in-place" in the enterprise, whether the data exists in file stores, enterprise content management systems or email archives.

Limiting the data that enters the e-discovery processing workflow in a defensible manner holds the greatest promise for cost control—and the modular workflow described here is the most likely enabler for controlling that data. Just as people learned with ERP solutions—that the human element still meant the difference between success and failure—e-discovery will always require attorneys to remain the "masters of the data." Only they can understand how the data relates to the case and can make the qualitative judgments on data relevance. ▮

Rich Turner is vice president of marketing for Content Analyst Company. Bill Johnson is president and CEO of TCDI. Content Analyst Company is a provider of advanced search and document analytics software to e-discovery providers and the public sector; headquartered in Reston, VA, they can be reached at 1-888-349-9442, or info@contentanalyst.com. TCDI serves the litigation technology needs of large corporations and law firms and can be reached at 888-823-2880 or tcdiinfo@tcdi.com.

The Advantage of Openness

How Open Semantic Platforms Improve Business Performance.

By Jeremy Bentley, Founder and CEO, Smartlogic

There are parallels to be drawn between the way we manage unstructured information today and the closed data world of the 1970s, before relational databases and business intelligence layers. In the '70s, data was unlocked by programmers and the business had to wait every time something new was required.

Today unstructured information has accumulated at an incredible rate, often unmanaged and held in multiple repositories. Again, specialized agents with a hard-earned understanding of the systems below are needed to unlock their secrets.

Business is again reliant on specialized skills in the hands of a few to unlock their information assets. As before, an opening up is required to properly harness the value of organizations' information assets.

Just as the gap between closed and open data was filled by new approaches in the '70s and '80s, so too will the gap between limited *search* and productive *find*.

This new approach requires semantic middleware.

Searching Without Understanding

Today's environment consists of two distinct layers; the human interface and the content services. Lots of users, from multiple disciplines, interact with different interfaces offering alternative methods of access to information.

As content is created, its metadata (the labels that describe the information) is manually applied by editors and authors. Often the metadata is non-existent, or inconsistent across systems or inaccurate.

Given this environment, searching for information can be time-consuming, frustrating and ultimately dissatisfying. After searching, the pertinent information may be missing from the result or lost among hundreds of results.

People use language descriptively, idiomatically, ambiguously and tainted with jargon. Search engines are binary and lack any idea of a subject's meaning or the way humans use language. Search takes the few words that are offered at search time and, using closed algorithms, scans the index for these words—literally.

Is "orange" a fruit, a color, a brand name or a place? Is "wound" an injury or balling up some string? The existing search experience is lacking context, and context is key to finding. Adding context to the mix improves information management and "findability" measurably.

But defining the context—the semantics—is complex, because language is complex and applying it takes effort. To be commercially viable, tools need to be employed to automate and assist.

The Case for Semantics

Most organizations recognize the need to establish classification standards so that standard metadata values are applied to content regardless of its origin.

Automating the application of metadata ensures consistency. Consistent metadata allows information stored in one repository to be joined with similar information in another. Consistent metadata means the user can be confident that all the information on a subject is presented.

There is a case for opening up the metadata for use by other systems. For example. it might suit that a document needs its metadata stored with it, as a matter of record. There is also a case to enhance the user's search experience: suggesting related topics, filtering to truly relevant subsets and providing a taxonomy path so that the user is kept in context with the subject that they are researching.

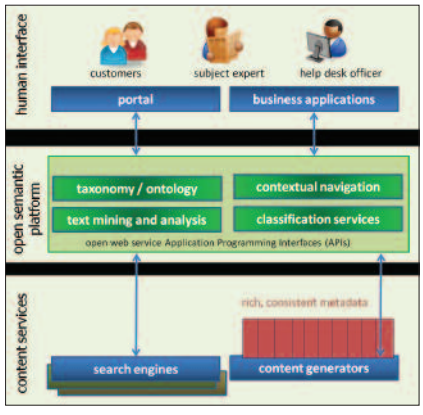
There is a case for a new layer that lies between the user interface and the content technology.

This new layer is the *open semantic platform*. "Open," as it needs to offer its facilities to any external system, "semantic" because it is about adding meaning to the information and "platform," because it lies between the human interface and the content services as a new layer—available to any application that needs it.

An open semantic platform is an ontology management system that enables the enterprise to maintain controlled and social vocabularies (a.k.a. semantic models), that describe the information domain, provide the context and form the standards for information classification.

It is a classification system that takes the semantic models and uses them as the evidence base for information classification. This classification approach should be transparent, auditable, adjustable and ultimately accurate—enhancing the metadata quality. Web service interfaces to the classification engine should ensure the metadata is available for use by the search engines and/or the content management systems and/or assisting workflow processing.

Natural language processing tools and text mining capabilities increase the productivity of the taxonomy and classification development to make the process commercially viable.



The advantage of the open semantic platform.

To offer a contextual navigation experience, the model also needs to offer its terms and structures through open APIs to user portals, search interfaces and line-of-business applications. By ensuring that the same model that is used for classification is also used for navigation, the system achieves a strong positive feedback loop that ensures context and relevancy that delivers an exceptional user experience and findability.

The open semantic platform delivers advantage by making it possible for a business to model its domain, and then organize, automate and communicate its information according to this model. This means that search engine precision is enhanced, the quality of metadata is improved, CMS implementations are sped up, unstructured information can be integrated from multiple repositories, compliance processes can be automated and the user experience that is offered to clients, staff and partners will be exceptional. ▮

Jeremy Bentley is founder and CEO of Smartlogic Semaphore. Bentley has spent his whole career working with information management systems ranging from business process workflow, documents and records management, search and now enterprise semantics and meaning. Smartlogic is the UK- and US-based creator of Semaphore, an open semantic platform that adds advanced content classification capabilities to information management systems in order to provide the most compelling semantic applications for search, content management and business process automation. Semaphore is used by more than 200 clients worldwide, such as NASA, Unicef, NHS, RBS and the UK Parliament.

The Interpretation of Information

By Lester S. Pierre, Chief Scientist, Wall Street Network

Every organization is challenged with the ability to make rapid decisions and innovate. To do this effectively, decision makers require relevant data and information as well as knowledge management (KM). Many decision support systems rely solely upon the analysis of data, which is insufficient for making accurate decisions. The old adage "knowledge (information) is power" is better stated, "information is power, but the interpretation of information is more powerful." KM solutions require the ability to combine data, analytics and human interpretation for decision-making.

One constant in the evolving field of knowledge management is that the activities are all over the map. According to Wikipedia, "knowledge management comprises a range of strategies and practices used in an organization to identify, create, represent, distribute and enable adoption of insights and experiences. Such insights and experiences comprise knowledge, either embodied in individuals or embedded in organizational processes or practice."

What then is knowledge management? Is there any substance behind the verbiage and fancy phrases that are so frequently and eloquently offered at keynote addresses, board meetings and conferences? According to Tom Stewart in an article titled "The Case Against Knowledge Management," (*Business 2.0*, February 2002), the question seems to suggest the activities of "building databases, measuring intellectual capital, establishing corporate libraries, building intranets, sharing best practices, installing groupware, leading training programs, leading cultural change, fostering collaboration, creating virtual organizations—all of these are knowledge management, and every functional and staff leader can lay claim to it."

Innovate or Die

"Innovate or die" is becoming more relevant every day in every company. It separates the leaders from the followers; those that will succeed and those that may just get by. Successful companies need to enable every employee in every position to be an innovator or risk being permanently sidelined. Solutions that enable employees to engage in KM activities are key elements for innovation.

The focus should be on providing quality information and knowledge to the decision maker. What ensues is the effective and efficient control of the operational environment so that the organization can not only survive, but thrive and continuously enjoy a sustainable competitive advantage. Furthermore, it is only by embracing knowledge management and becoming knowledge-based enterprises that organizations will find themselves prepared and ready to survive and thrive in a dynamic and extremely competitive business world.

The challenge of enterprise knowledge management is illustrated by the typical communications channel found in many organizations, which is radically different from the way communication and the dissemination of information occurs in the social networking paradigm. KM solutions require some of the key elements of social networking to enable the enterprise to drill through all tiers of the organization. To unlock the full potential and enable the human portal within any organization, everyone in the organization must know everyone else. Mathematically speaking, this is represented by the following equation:

$$NC = n(n-1)/2$$

where n is the number of people in the organization and NC is the number of connections needed for everyone in an organization to know everyone else. Even in an organization with only 50 people, 1,225 connections are required to unlock the human portal. Even companies with fewer than 50 employees struggle to effectively collaborate due to the high cost of these transactions using traditional methods such as meetings, webinars and conference calls. The time investment to get everyone together causes even a small organization to sacrifice its ability to effectively tap into the maximum organizational potential.

The Pareto principle, also known as the 80-20 rule, suggests that companies derive 80% of their value from just 20% of their products, customers or ideas. This might be due to the high transactional cost of typical corporate collaboration, through traditional communication channels to leverage business knowledge. The long tail of that curve, that 80% of uncertain value generators, is typically unexplored. Organizations need to reduce the transactional cost of corporate collaboration, allowing themselves to embrace and explore the rejected 80% of their value generators.

Many organizations fail to capitalize on the wealth of knowledge scattered across their organization because they rely on top-down decision making and centralized knowledge management systems and technologies. While analytics and data are very important, the interpretation of this data—which can only come from a person—can be more valuable to an organization. Many organizations are not good at transferring implicit knowledge, the kind needed to generate new insights and creative ways of tackling business problems and opportunities. The quality of information is often lost due to the filtered stages of communications in traditional organizational structures. Social networking paradigms have revolutionized and enriched many areas of our lives. Innovation requires a constantly agile mindset and perspective that enables companies to transform to the new business paradigm. These organizations require tools to leverage KM and social networking concepts to unlock the organization's intellectual property. Every organization requires the ability to mine its horizontal IP for effective decision-making and innovation, while maintaining its vertical lines of business. To enable an organization to innovate requires a KM solution with a low transactional cost to share, collaborate and communicate effectively across an organization. Organizations must combine data, analytics and the capture of human interpretation for better decision-making. ▮

"What then is knowledge management? Is there any substance behind the verbiage and fancy phrases…?"

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Content In Context

By Brian Dirking, Director, Oracle Corporation

The need for knowledge to be delivered in context is well understood. Organizations are seeing the benefit of delivering that content in enterprise and Web-based applications. The benefits are apparent in a number of ways—instant look ups, litigation management, improved content updates and content automation are a few examples.

When organizations perform business processes such as processing invoices, employee benefits or customer orders, people need to verify information. Looking at an employee benefits election form, we might want to verify which program an employee chose, or how much income he selected to put into a healthcare account. These look-up processes often result in walking down a hallway and pulling out a piece of paper from a file cabinet, which is time-consuming compared to having the content electronically and having a hot link from the employee record. But what about when you want to view all your invoices from a certain month, or from a certain group of vendors? Hand gathering that information is extremely time-consuming compared to running an electronic search. This is one of the reasons many organizations have moved away from paper-based processes to electronic processes. And because electronic representations of documents can exist anywhere, these processes can also be executed by employees who work remotely.

But getting that information into the system electronically can be the biggest time-saver. We often see organizations cut costs 90% by moving from paper-based processes to electronic processes for capturing invoice information, for example. And not only is the information processed faster, it is more accurate. According to Thomas Redman, in an article from *Information Management* magazine called "Data, An Unfolding Quality Disaster:" "If bad data impacts an operation only 5% of the time, it adds a staggering 45% to the cost of operations."

Use-Cases Tell the Story

Friesland Foods has been in business for more than 125 years, during which time the company has developed into a leading producer and supplier of dairy products, fruit-based drinks and ingredients. Friesland Foods develops, produces and sells natural, nutritional and high-quality dairy products, fruit-based drinks and ingredients in western and central Europe, southeast Asia, West Africa and the Middle East. Friesland needed to provide a solution to capture all electronic documents involved with the supply of foodstuffs to meet European regulations, linking together all records by customer and supplier with full version control, security and records management.

Friesland Foods integrated content management with Oracle E-Business Suite to provide the relationship between the supplier contract, order schedules and shipment notes. With this system, Friesland Foods can see a complete audit trail for each supplier order through to delivery to its customers. All documents now have full records and retention policies for storage and ease of access in the future, and also from other applications such as a supplier portal.

Embry Riddle Aeronautical University has also integrated its content management with E-Business Suite to automate invoice processing. But it is also integrating content management into its "e-campus" solutions to help manage student admissions. Embry Riddle is able to gather all student information for the admissions process, including reference letters, transcripts and military documentation for each student, and then evaluate the student for admissions. By improving turnaround, Embry Riddle is able to accept the top candidates while other institutions are still gathering information, giving them a competitive advantage to attract the best students.

The Bureau of Indian Affairs needed to provide a collaborative website that provided fast content updates. The 564 federally recognized tribes can now interact more effectively with the two million Indians who are members of registered tribes. Updating information and content used to be centralized and took more than a day. This is now managed by staff across the country and can be updated in minutes. Collaboration among the 10,000 BIA and 70,000 Department of the Interior employees can now be done via an intranet instead of purely through fax, phone or hard copy. Content that used to be redundant, irrelevant and spread across 500 categories is now properly managed, secure and searchable in 30 categories with tagging. Formerly, staff gathering information used email and phone for social networking to find subject matter. BIA has provided its IT infrastructure a better way to support its stakeholders and now has a secure and manageable way to better serve its constituents. ▮

For additional information, visit www.oracle.com/goto/ecm.

Oracle's Enterprise Content Management

Oracle has introduced revolutionary one-click Web content management with the release of Oracle Enterprise Content Management Suite 11*g*. Developers can drag content management services into any existing Web application, enabling content areas that your users can update with one click. This innovative approach breaks the cycle of emailing content updates to the Web development team, and having them paste content in-line with code. By enabling content editors direct access for content updates, organizations are more agile and responsive to market changes and customer demands. Subject matter experts make updates right in the context of the website, improving accuracy and productivity. Through a standards-based and open architecture, the ability to drag and drop these services into existing Web applications is unique to Oracle.

All Web content is under full content management, enabling reuse, de-duplication and lifecycle management. Oracle Enterprise Content Management Suite is a complete offering with document management, digital asset management, imaging and records management—all built on one repository.

Oracle Enterprise Content Management Suite is integrated with enterprise applications such as E-Business Suite, PeopleSoft, Siebel and JD Edwards. Content associated with customer, employee or supplier records can be checked in or scanned and managed, accessible directly from those records. Oracle Enterprise Content Management Suite is also integrated with other content management and file sharing systems to enable searching, managing and performing records management functions such as instant holds and dispositions on physical and remote electronic records from a single administrative interface.

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• Classification • Taxonomies • Categorization •

- Unstructured Content Management
- Text Mining/Analytics/Semantics
- Content Management Systems
- Autocategorization
- XML/Authoring
- Internal/External Search Strategies
- Litigation Support/Discovery Support

Bonus Distribution: Enterprise Search Summit, MER, TAWPI

Enterprise Social Networking & Collaboration

June 2011

Reservations: 3/18
Materials: 4/8
Mail Date: 5/20

• Enterprise 2.0 • Web 2.0 • Collaboration •

- Customer Relationship Management
- Partner Relationship Management
- Sentiment/Customer Intelligence
- Customer Experience
- Collaboration
- Virtual Teams
- Human Resource Management

Bonus Distribution: Enterprise 2.0, LegalTech West

KM for the Mobile Enterprise

July 2011

Reservations: 4/22
Materials: 5/13
Mail Date: 7/5

• SFA • 3G/4G • Smartphones •

- Salesforce Enablement
- Regulatory Compliance
- WLAN
- Security
- Portals
- Fleet Management
- Handheld Devices

Bonus Distribution: CRM Evolution, FOSE

KM for Customer Service

August 2011

Reservations: 4/29
Materials: 5/20
Mail Date: 7/5

• CRM • EDM • Analytics •

- Customer Relationship Management
- Enterprise Document Management
- Web Self-Service
- Site Search/Enterprise Search
- Web Site Analytics
- Cross-sell/Upsell
- Contact Center

Bonus Distribution: CRM Evolution

Information Governance & Compliance

September 2011

Reservations: 6/17
Materials: 7/8
Mail Date: 8/22

• Email Management • E-Records • Risk Management •

- E-Discovery
- Information Governance
- Document Lifecycle Management
- Retention Management/Archive
- Legal Hold
- Security
- Business Continuity

Bonus Distribution: ARMA, KMWorld, Enterprise Search Summit, Taxonomy Boot Camp, SharePoint Symposium

Knowledge Management

October 2011

Reservations: 7/15
Materials: 8/5
Mail Date: 9/21

• EDMS • ECM • BI/CI • E-Learning •

- Content Management
- Document Management
- Enterprise Search
- Classification/Taxonomy
- Collaboration
- Expertise Location
- Project Management/Modeling

Bonus Distribution: KMWorld, Enterprise Search Summit, Taxonomy Boot Camp, SharePoint Symposium

SharePoint Solutions

November 2011

Reservations: 8/12
Materials: 9/2
Mail Date: 10/20

• EDMS • CRM • ECM •

- Web Content Management
- Collaboration
- Business Process Management
- Enterprise 2.0
- Blogs, Wikis, Forums
- Enterprise Search
- Enterprise Portals

Bonus Distribution: Gilbane Boston

Sales Enablement

December 2011

Reservations: 8/19
Materials: 9/9
Mail Date: 10/20

• SFA • Search • Collaboration • KM •

- Mobile Salesforce
- Web Analytics
- Open Source Software
- Information Optimization
- Expertise Location
- Business Intelligence
- Enterprise Search

Bonus Distribution: Gilbane Boston

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