

# • KNOWLEDGE MANAGEMENT

## Collaborative Expertise

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## EDITOR'S NOTE

Historically, knowledge management was relegated to a firm's librarian. He or she would be the “go-to” person for most research. With current collaboration technologies, nearly everyone in a firm (including the librarian) is involved in the knowledge management process. From an attorney correctly profiling a document in a DMS, to a secretary tracking a pleading, to the marketing department maintaining contact information, everyone is contributing to the firm's most valuable asset, knowledge.

Knowledge management departments have the enormous task of determining what information needs to be included, who has the expertise, and what tools are best for both mining and sharing this knowledge.

We gratefully thank our authors for sharing their knowledge through tips, techniques and technologies to help us manage ours.

Ken Hansen, Editor

## ABOUT ILTA

Providing technology solutions to law firms and legal departments gets more complex every day. Connecting with your peers to exchange ideas with those who have “been there done that” has never been more valuable.

For nearly three decades, the International Legal Technology Association has led the way in sharing knowledge and experience for those faced with challenges in their firms and legal departments. ILTA members come from firms of all sizes and all areas of practice, all sharing a common need to have access to the latest information about products and support services that impact the legal profession.

**Statement of Purpose:** ILTA is the premier peer networking organization providing information resources to members in order to make technology work for the legal profession.

by Chris Boyd of Wilson Sonsini Goodrich & Rosati  
and Ron Friedmann of Prism Legal Consulting, Inc.



## :: Powering a KM Windmill

**K**nowledge management (KM) resources provide significant value for attorneys, firms and clients. Model and sample forms provide efficient starting points for drafting contracts and briefs; profiles of past deals or cases provide comparable matters for new client pitches and ways to find attorneys who may have faced similar knotty issues; and expertise locators identify attorneys with the know-how required for solving client problems.

These KM tools do not, unfortunately, create themselves and must be built and maintained through manual or automated effort. Some large firms, primarily in the U.K. and Australia, hire many experienced lawyers (professional/practice support lawyers or PSLs) to serve as the primary collectors and creators of KM resources. PSLs are well-respected attorneys, usually with several years of practice experience, who draft or gather high-quality precedent documents, research and summarize legal developments for internal and client use, help billable attorneys find expert colleagues and train junior lawyers. The PSL model offers many benefits but is costly: PSLs bill little time but are paid roughly three-quarters of the compensation of comparably tenured billable attorneys, and the largest firms typically hire dozens.

U.S. and Canadian firms, in contrast, generally hire few if any nonbillable attorneys. Instead, they have tried motivating billable attorneys to draft form documents and otherwise lead the development of KM resources — an effort that has generally failed, although billable attorneys can and should provide input on attorney-facing KM resources. Recognizing this failure, North American firms have increasingly focused on automating KM and have had some success. Software can provide rapid and accurate responses to requests for sample work product, internal experts and similar matters, but license fees and annual maintenance for this software can be expensive. Moreover, automating KM does not address all KM needs. For example,

a document management system cannot draft a model annotated form, nor can an enterprise search engine produce a state-of-the-market report on trends in venture capital financing terms.

Many large law firms now combine manual and automated KM approaches, seeking to harness the strengths of each at reasonable cost. Whatever the approach, all firms face cost constraints on their KM programs. Law firm KM and business leaders must therefore determine how to deliver the highest returns from a given level of investment.

### **KM Can Be a Windmill, Not a Treadmill**

A practical and achievable way to maximize KM results is to capitalize on existing law firm information flows and business processes. By doing so, a firm can get the greatest possible “K” returns for a reasonable “M” effort. Think of a windmill rather than a treadmill. Whereas a treadmill keeps turning only via human effort (analogous to PSLs) or dedicated power from a generator (analogous to KM-specific software), a windmill relies on dependable winds (analogous to work flows and processes that exist independent of KM requirements).<sup>1</sup>

Some real-world examples of such non-KM business processes include:

**The Matter Intake Process.** Law firms collect information about each new matter and report it to accounting, conflict checking and records management. Matter-specific data (“metadata”) includes the client name and location, industry and segment, responsible and billing attorney, matter type and subtype and matter description. KM leaders can tap this data flow and direct it to matter databases, to serve as the foundation for deal and case profiles; document profiles, to make it easier for search engines and other retrieval tools to find relevant past work product; and attorney profiles, to make it easier to find internal experts. But capturing matter metadata is hard, and firms must overcome several challenges:

Standardization of metadata (industry codes, topic codes, level of detail) is often lacking. Many firms have developed formal classification schemes called taxonomies to address these needs. Devising and maintaining taxonomies that work across practice groups and departments such as marketing and finance, while also minimizing the work required to tag each new matter, is surprisingly difficult.

Tapping metadata takes significant behind-the-scenes process analysis and technology planning. Some firms use workflow engines, some use advanced semantic search tools with inference engines and some create customized tools that pull information from one source to use elsewhere.

Beyond technical challenges, capturing accurate metadata is hard. Partners frequently do not give secretaries, who typically open new matters, accurate or complete information. The urgency to open the file and start billing time frequently overwhelms the need to capture accurate matter metadata.

Even when initial metadata is accurate, after a few weeks of work, the metadata often needs significant revising. Tapping metadata for KM — indeed for any purpose — should have a mechanism to revisit metadata after a period of time.

To continue the analogy, while the wind from new matter intake may blow steadily, building a windmill to tap it requires careful planning and execution.

**Marketing Activities.** The saying “consumers don’t buy drills, they buy holes” applies to law firms as well. Clients don’t buy lawyers, they buy solutions. Law firms solve problems by applying substantive know-how and deep expertise. To convert prospects to clients, firms must prove they are experts. Marketers, who help lawyers sell solutions, must therefore quickly “slice and dice” matters by industry, topic and area of law, to present prospects compelling relevant experience. In firms where marketers have not already designed the intake system to

## Existing law firm processes offer ample opportunity to enhance knowledge collection.

capture metadata, they may invest significant resources to record metadata in their own systems. If so, then KM professionals can, as described above, use this metadata (with all the same challenges).

Prospects also want to meet the lawyers who will serve them. To identify the best fit, marketers often maintain lawyer biographies, which can be quite detailed and exist in multiple versions that emphasize different experiences. Some KM systems, off-the-shelf or customized, can tap these biographies to, for example, personalize and rank document search results for that lawyer. Firms also give free “samples” that showcase expertise. If marketers categorize client updates/alerts by industry, legal topic or area of law, knowledge managers can more easily reuse them and distribute them internally.

**The Secretarial Role.** Secretaries, who play critical roles in practice management, can be valuable KM allies. For example, litigation

secretaries typically track and distribute pleadings and other court filings and maintain case files. With a little extra work, they can tag and submit pleadings to brief banks, categorize cases and link to pleadings in online databases, and record other information that makes it easier to find work product, similar matters and internal experts. Similarly, transactional secretaries can track data about deals along with important documents and enter them directly into dealrooms or other types of deal databases or send them to a central KM team. Secretaries typically have attributes that make them ideal KM players: excellent attention to detail, compliance with defined business processes and the absence of pressure to bill hours.

**Practice Group Databases and Meetings.** Some practice groups maintain lists or databases of their clients, deals or cases and have processes to keep them current and useful. At minimum, these activities suggest that the group values knowledge collection and reuse and is likely a good place to invest KM time. More immediately, these resources can provide steady feeds of new content for matter metadata, wherever it may be stored. Some practice areas also meet periodically to discuss new matters and legal developments. Beyond being valuable knowledge exchange forums, these meetings can provide valuable leads for new model or sample content and updates to profiles of matters or attorney expertise. Secretarial participation can help them become more valuable contributors to the KM process.

## Deciding Where to Start

As the above examples show, existing law firm processes offer ample opportunity to enhance knowledge collection and provision without investing substantial additional money. How, then, should a savvy law firm KM leader choose the first area to target?

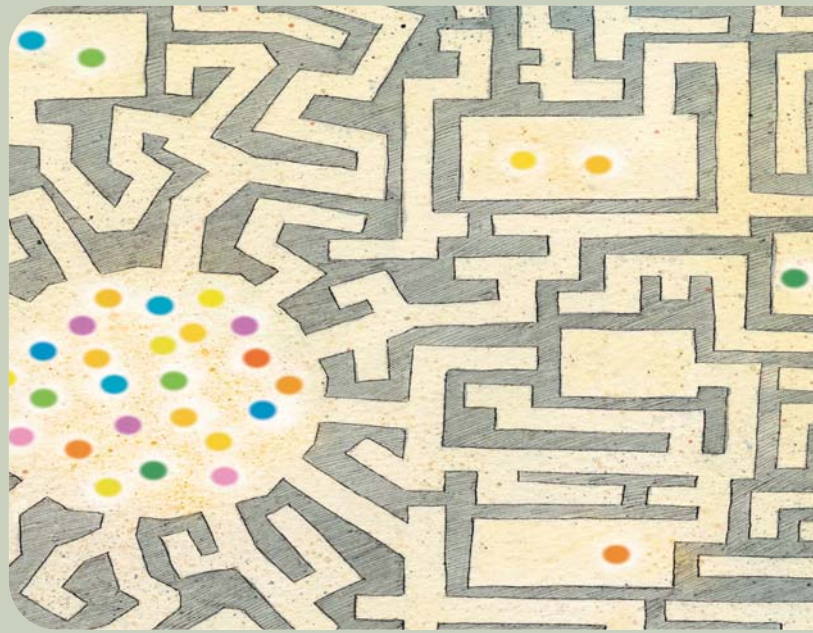
It’s always a good idea to start with the proverbial “low-hanging fruit” or “quick win.” The KM leader must assess what department or which existing process is most likely to provide a steady wind. If marketing is itching to classify matters, help them. If a practice group has a detailed deal database that just needs a few links added to make it a KM system, start there. The key is finding allies who, for reasons unrelated to KM, are already motivated to collect and reuse more information.

Manual, stand-alone KM efforts have limited traction in North America. Lawyers rarely explicitly contribute to KM systems. Firms compensate with automated solutions or with specialized and expensive staff. The “pure automation” versus “big staff effort,” however, is a false dichotomy. Firms have a middle path — hiding in plain view — to create important KM assets with limited extra effort. Though not designed for KM, a range of practice or administrative processes can, with some tweaking, become the wind that powers successful KM windmills.

## Endnote

- 1 To the authors’ knowledge, this “treadmill vs. windmill” concept was first set forth in an article by Dan Felean of PensEra Knowledge Technologies, which appeared in ILTA’s November, 2002 white paper titled “Knowledge Management.” The full article can be found at [www.iltanet.org](http://www.iltanet.org) under “Communications,” “White Papers and Surveys.”

by Tania Daniels and Mark Horne of Horne Daniels Group, Inc.



## ::KM and Expertise Location

“If only we knew what we knew.” “If only we knew who knows what we know.” The first quote is the title of a well-respected knowledge management (KM) text, the second a frequently listed goal of many legal KM departments. Yet if creating systems that explicitly document and categorize what firm personnel know seems to be a logical initiative for KM groups, it is also a confounding topic in KM circles. Indeed, at recent legal KM gatherings, the topic of expertise location elicited such comments as, “Isn’t there anything new out there?” or “Has anyone finally found the holy grail for expertise location?”

While some law firms initially created homegrown solutions for categorizing firm expertise, these systems usually required manual data entry and often suffered from lack of participation. Over the past few years, new software products have offered creative approaches to automated categorization and identification of firm expertise. Yet with the new wave of technology-based solutions, it becomes critical that firms understand the business objectives for developing an expertise location system, what type of expertise they want to gather and how they want to measure and categorize expertise. We will explore the challenges with defining and measuring expertise, the data sources available for identifying and collecting expertise and how some software applications are capitalizing on new technologies to solve these issues.

### What Is Expertise?

In today’s knowledge economy, professional services firms, including law firms, are the sum of their intellectual capital. Unlocking the intellectual capital vault can’t occur until there is agreement on the types of intellectual capital, or expertise, that a firm wants to track. On the one hand, expertise location can be considered just another name for a skills database familiar to human resources professionals. On the other hand, in light of firm mergers, cross-office and cross-practice

group collaboration requirements and recognition that only a fraction of a firm’s intellectual capital is codified explicitly in firm work product, today’s expertise location systems seek to keep track of the complex matrix of experience and relationships that go into defining an expert.

Prior to evaluating an expertise location tool, it is imperative that firms understand what value they want to derive from that system. Firms frequently cite a variety of reasons for developing an expertise system, including faster and more targeted associate education, providing clients with a broader array of services and identifying cross-selling opportunities more effectively. However, each of these business drivers requires quantifying a different type of expertise and may require garnering that expertise from a different information source.

Once firms articulate their goals for developing an expertise system, they can better define what type of expertise they need to track. Breaking expertise into internal and external categories helps to identify what is really being measured, allows firms to set accurate measurement criteria and establishes evaluation criteria that can be used to assess product solutions or define homegrown internal ones.

Internal expertise answers the question “who knows what?” In law firms, it usually refers to knowledge of substantive or procedural expertise about a particular legal topic or procedural requirement. These types of requests are frequently found in those “all attorney” e-mail messages asking whether anyone knows anything about topic X in the context of facts Y or has filed a particular type of motion in jurisdiction Z. This is most often what attorneys think of when needing to locate a subject matter expert. This type of expertise assists in associate education by codifying firm expertise into a reusable commodity and by connecting associates with firm subject matter experts they don’t know or don’t interact with on a frequent basis. This type of expertise also

assists in cross-selling new services by identifying untapped firm expertise that meets current client needs for additional services.

External expertise answers the question “who knows whom?” Although this is related to client relationship management needs, in an expertise location context, this goes beyond simply establishing who knows a particular contact to defining additional context about the relationship. Requests such as “Has anyone appeared before judge X in jurisdiction Y in this type of a matter?,” “Has anyone worked with co-counsel J,” or “Has anyone used expert witness Q on a case with these facts?,” establish the depth of a firm’s resources on a particular topic. External expertise systems seek to capitalize on the complex layers of relationships and subject matter expertise within firms and between firm personnel and external organizations. It requires unique ways to relate pieces of information often found in disparate systems. This type of expertise can assist in associate education and cross-selling and helps firms uncover untapped business opportunities by identifying previously unknown areas of firm expertise that can be marketed as new business areas.

### **Determining Measures and Sources of Expertise**

Attorneys spend years acquiring highly specialized knowledge, and it is this knowledge that clients buy. This knowledge is explicitly documented in firm work product and usually found in a firm’s document management system, and it is also found in e-mail threads, client relationship management systems and other practice management systems. Additionally, some internal and external expertise is never explicitly codified in firm work product but remains locked away in attorneys’ minds.

The challenge lies in defining the qualitative and/or quantitative measures of the different types of expertise and the sources to determine that measure of expertise, all while addressing the politically charged issue of labeling an attorney’s expertise (or lack thereof). Although how to measure expertise will likely continue to be a highly contentious issue, looking at the ways in which firms most commonly define expertise can guide what is most important for your firm.

A common way to quantitatively identify internal subject matter expertise is to measure the number of hours billed by a particular practitioner on matters categorized by a firm’s subject matter taxonomy. The number of hours billed as a sole measurement of expertise does not account for the learning curve associates require while becoming familiar with a particular topic. That is, associates may bill significant hours on a particular matter when they need to educate themselves on a subject or simply because of workload, but a partner who has handled many matters on the topic may bill significantly less. Yet it is likely the partner who would be considered the firm expert in that area. Additionally, with the number of lateral attorney moves among firms, ranking expertise on billed hours alone will not account for experience gained at prior firms.

An alternative or adjunct to number of hours billed for measuring internal expertise is to ask practitioners to rank themselves against a list of substantive topics. Many early attempts at creating expertise or skills databases were just that, a list of categories where attorneys ranked themselves. The result was often an expertise system full of

self-ranked associate “experts” and little, if any, partner participation. Today, some applications combine the adjustment of quantitative “hours billed” ranking with qualitative commentary and self-ranking options to account for experience gained elsewhere and provide additional context beyond the sole measure of hours billed.

Measuring number of hours billed and self-ranking are the most common quantitative approaches to identifying expertise. It has been more challenging to identify useful qualitative measures to uncover additional sources of firm expertise. Establishing useful qualitative measures usually depends on the information source being analyzed. One example is firm work product. Since internal subject matter expertise is codified in a firm’s work product and stored in a firm’s document management and/or work product retrieval system, it is a corollary that providing better access to authors on particular topics should also identify expertise in those areas. Another example is e-mail. Some firm expertise is inconsistently codified in e-mail and requires tools to cull through the huge amount of e-mail messages to locate relevant information. Finally, some qualitative measures can come from uncovering relationships between information that resides in disparate repositories, such as document management, e-mail, client relationship management and practice management systems.

The latest approaches to identifying expertise take advantage of the improvements in enterprise search by offering more granular categorization of internal information repositories, offering new ways to identify both internal substantive and external expertise. These applications use contextual analysis of documents, e-mail and other information resources to locate expertise by uncovering previously unknown relationships between information in disparate repositories. Because they offer an automated solution, they are seen as more user-friendly, requiring less effort for the end user to participate. The challenges, however, lie in the success of algorithms used to determine expertise and a firm’s willingness to mine information stores, such as e-mail, which is frequently (although often incorrectly) seen as off limits.

### **Approaches to Expertise Location**

Although it is beyond the scope of this article to examine all expertise location systems available, understanding how some of the most commonly used solutions define expertise and what technologies they use is instructive on the challenges and opportunities in gathering and harnessing firm intellectual capital into a true expertise location solution.

One vendor’s solution offers a module that integrates with its other knowledge management and portal modules. This module allows users to be ranked by number of hours billed by any term in a firm taxonomy that is integrated with the firm’s financial management system. Firms can define levels of expertise based on billable hours, and these numbers can be adjusted up or down by an individual attorney to identify circumstances not accurately reflected in hours billed. The module also allows users to add self-ranking comments giving additional explanatory detail and links to biographies that expand on a user’s experience. Ultimately, firm experts are then listed on topic pages and matter pages within the firm’s portal, where links to documents, research guides and other substantive material reside.

Solutions that emphasize quantitative measures of expertise are good choices for firms that consistently use a subject matter taxonomy

throughout their financial and practice management systems. This provides a consistent framework for identifying firm experience and ultimately expertise. For firms that limit their subject matter categorization at a high level within their financial system, the solution above allows firms to add additional categorization at more granular levels in other areas that may not be relevant in a time and billing system, but are relevant for expertise location, such as industry, jurisdiction and language.

Another vendor offers a module that builds on their core client relationship management functionality to uncover “relationship intelligence” or the complex set of relationships that can define external expertise. This module allows firms to categorize matters by a firm subject matter taxonomy, so that when contacts within the firm or external to the firm are linked to matters, users can find sources of expertise based on substantive matter topic. Additionally, matter contacts can be assigned role types which further assists in understanding the depth of participation on a matter and potential levels of expertise.

## The challenge lies in defining the qualitative and/or quantitative measures of the different types of expertise.

Solutions that emphasize finding external expertise are a good fit for firms that have well categorized or easily searchable work product and need to strengthen the relationships between information in disparate systems. In particular, for firms that have well developed implementations of the above solution, this module can utilize and mine the data in that repository while also building additional links to previously uncovered data sources.

A third vendor’s module is an example of a solution that uses contextual analysis of different information stores to identify expertise. This module uses the vendor’s search engine to search a firm’s document store, associated billing information and other practice management systems, to identify documents, matters, and people that meet specific search criteria. Once identified, the search results can be sorted by additional filters relevant to people, matters or documents, such as office, practice group or industry. Although this does not eliminate the need for a firm to manually categorize matters in a financial or practice management system, contextual search of documents and other information repositories allows end users to search for expertise using terminology they are comfortable with, rather than fitting their needs into a firm taxonomy. Additionally, it allows end users to combine multiple topics, which is particularly useful when needing to locate niche areas of expertise.

Solutions that use contextual analysis to search multiple repositories are particularly well suited for larger firms or firms that have multiple locations and, therefore, multiple work product repositories. Contextual search solutions are also useful for firms that do not yet have a consistently used matter categorization system or for firms that are challenged by searching their work product store.

## The Future of Expertise Location

As firms adopt expertise location systems, the unmet challenge that has to be addressed in the future is how to effectively exploit the expertise information that resides in e-mail. As noted, many initial requests for locating expertise are generated in e-mail, and often replies with answers are found there, too. Contextual search tools seem primed for solving the “e-mail holy grail” and assisting with expertise location via e-mail threads. Third-party applications that utilize e-mail search as part of their solution have made strong in-roads in heavy research and development industries but have not caught on in the legal industry. Part of the reticence to mining e-mail stores is that attorneys still view their e-mail as private, rather than a firm intellectual property. But part of the reluctance has been that the few firms that have piloted these tools have found they do not meet the needs for locating legal expertise. That is, while the search capabilities offered better access to a wider e-mail store, the algorithms could not discern legal specific requirements and thus led to irrelevant search results.

A couple changes in the near term may offer a better future for mining e-mail for expertise. One is that many firms are beginning to store e-mail messages in their document management system. By aiming a contextual search tool at e-mail that attorneys have consciously saved into a document management store, rather than at an entire Exchange store, it immediately weeds out unnecessary garbage. It also solves the security concern because most contextual search tools respect document management security rights. Another change is that contextual search tools specific to the legal industry continue to develop search algorithms that meet the specific needs of legal practitioners. Using these industry specific solutions may prove to be better solutions for mining expertise found in e-mail, whether the tools search e-mail stored in a document management, records management or other practice management system.

Additionally, there are two classes of applications not designed to be used as expertise location tools that have the potential for solving some expertise location challenges. These classes of applications are work product retrieval and social network analysis. Some legal specific work product retrieval applications use analysis engines that apply business rules to programmatically recognize such things as jurisdiction, substantive areas of law, etc., that are germane to a document. How great a leap would it be to use such a product to automate identification of expertise by author? Outside of the legal industry there is a growing use of applications that support social network analysis in order to discover relationships and information flows among people, groups and other information systems. One of the data sources for this software is the analysis of e-mail to identify people-to-people connections and related subject matters. It may be possible to use such analysis tools to recognize expertise in a legal environment. The future will tell, but at a minimum, applications like these could be used to supplement more traditional expertise location systems.

Finally, it is important to note that some firms have had success in creating their own internal solutions for capturing and searching e-mail messages. One firm sought to make better use of all the e-mail messages requesting help with a particular topic. They established a central e-mail address to which users send both questions and answers. The e-mail chain is collected into a full-text search database

that has a simple Web search interface on it. The searches allow firm members to identify who within the firm has asked or answered similar questions before and gets them to internal experts quickly. The firm has had such success with this solution that users now check the database first before sending out e-mail requests, and it has become a popular tool to market internal expertise by answering questions posed. This example illustrates how a simple technological solution can solve part of the expertise location problem by capturing relevant e-mail.

### Expertise at Your Firm

As with any initiative where the technology is rapidly changing, it is imperative to outline your firm's requirements before evaluating or designing an expertise system. What does your firm seek to gain from

an expertise system? What type of expertise does your firm need to capture? How does your firm want to measure that? How do your attorneys currently locate internal and external experts? Is there a gap — cultural, technical or both — in how your firm communicates expertise internally? By outlining these requirements first and understanding any cultural barriers in place to categorizing expertise, then your firm can develop evaluation criteria for assessing existing expertise location software and/or design specifications for an in-house developed solution.

## Is KM Evolving into Practice Support Consulting?

While other articles in this white paper address some of the tools being employed in legal knowledge management efforts, it is also important to focus on how these tools make their way to the intended targets. The folks from FedEx or Pizza Hut might be better suited to discuss the evolution of KM into practice support consulting because we're really talking about delivery.

Let's begin with a clarifying note. The term "practice support" is sometimes used by firms to define its efforts in the traditional litigation support arena, *i.e.*, assisting with the core discovery and trial process with the use of standard tools to do so. For our purposes, let's pretend that practice support refers to something a bit broader, like strategic application of technology to the practice of law.

I should also offer some typical meanings of "knowledge management" (and over the years, there have been many).

Two of the more contemporary meanings are "knowing what we know" and "connecting brains." For a more academic definition, "capturing, organizing and storing knowledge and experiences of individual workers and groups within an organization and making this information available to others in the organization."

Now that we have the working definitions, let me make the case for merging KM and practice support consulting within a firm.

### All Politics Are Local

Many KM initiatives (especially in larger firms) began as firmwide initiatives with the promise of building "global" systems. While this approach might have some economic and standardization advantages, it avoids the fact that law firms are extremely "tribal" in nature. These tribes can be centered around practice groups, offices, industries or even particular matters.

The most common clans have a common denominator of practice area whose members would argue their requirements for knowledge-sharing tools are as unique as their practice. This reality argues strongly for the development of knowledge-related tools, *e.g.*, expertise and precedent locators, at the practice group level. When this approach is followed, it is common to see one practice group adopt a tool originally developed for another with only slight tweaks in design or functionality. This form of "system envy" dramatically shortens development and implementation times and leads to increased use of practice specific tools.

### Another Arrow for the Practice Support "Quiver"

Referring to the definition of practice support offered earlier, the following inquiry seems fair. Need there be a distinction between assisting a group implement an "off the shelf" document analysis tool and a custom built tool for tracking transactions? While the latter would clearly be placed in the knowledge-sharing camp, lawyers would likely not care about this distinction, and the practice groups would clearly benefit from the ability of the same individual(s) to deliver a broader range of services.

Using practice support consultants to identify, champion and deliver technology solutions to various legal groups within the firm, without regard to the "knowledge sharing" nature of the tool, could greatly simplify the process from an organizational standpoint. It also gives these individuals the ability to get a more complete understanding of the unique requirements of these groups. And who knows . . . if this model becomes more widely adopted, some law firms may be even able to teach FedEx a thing or two about delivery.

by David Hambourger of Winston & Strawn LLP

by Bob Tennant of Recommind



## :: Build an Information Mosaic

When beginning to look for information, people are often unsure of what they will find or what bits of uncovered information are most important for them. The ability to discern important from less important information comes only with understanding the context in which information is embedded. Looking at a few pieces of tile, it can be difficult to envision a mosaic floor. In a similar way, a search result can be made far more relevant when viewed within the larger context of the case, the client and the legal team involved in its writing.

### Managing Information

Firms have vast amounts of information, most of which is divided up and locked away in separate storage silos. Document management systems handle a firm's work-in-process, records management systems handle and protect those items that become records, precedent libraries contain tagged cases that an expert believes may be relevant to future work, time and billing systems track the work that has gone into developing documents and records, CRM systems track client details and e-mail captures more and more of both internal and external daily communication. The amount of information being generated, distributed and stored within a firm is growing very rapidly. With all of these disparate systems managing their own collections, the larger context for information gets lost.

Attorneys and legal staff spend their entire working day focused on finding, distilling and presenting information. The kind of information being searched varies greatly. Searches are performed to identify conflicts, to find matters being worked on for a client, to find pitch documents, to find documents to begin drafting from and for a multitude of other tasks. In most cases, different pieces of relevant information are contained in disparate systems. A precedent document may be found in a document library, but does the client have a

specialized way of doing things? Who last worked on the document, and who was the responsible attorney on the file? By weaving together information from different systems, a powerful enterprise search system helps build out the firm's information mosaic and enables its employees to develop real knowledge, not only of subject areas, but also of clients, deal structures and the firm's own resources.

### Providing Context Matters

Firms benefit from effective search tools in a variety of ways. Attorneys are more productive and can focus on high-value work instead of looking for information — crucially important in our industry focused on client service and firm profitability.

An IDC study in 2001 indicated that typical knowledge workers spend between 38 and 150 hours searching for information annually.<sup>1</sup> A separate usability study by the Nielsen Norman Group indicated that replacing a poor quality search infrastructure typically reduces the time to find information (in one system — let alone many!) by 53.4 percent,<sup>2</sup> thereby saving heavy users about 1.5 hours a week, medium users 0.51 hours, and light users 0.4 hours per week. At a blended billable rate of \$200 per hour, a firm with 400 partners, associates and paralegals with a poor infrastructure in one system will be spending over \$2.1 million of firm resources per year on low-value work. A firm with 2,000 attorneys and paralegals would be spending over \$10 million. Those are resources that could be concentrating on higher-value work that would result in higher quality work product, greater customer satisfaction, less billing pushback and higher firm profitability.

All of the above were the result of studies of a single system, and law firms have many systems with relevant information. Just deciding where to start searching for information can dictate what information is found and in what time frame. If an associate has to search for

information in a range of locations, the search times indicated above will quickly increase, along with the associate's frustration level. By providing information within the context of a matter, a client or an experienced attorney, a good enterprise search infrastructure can reduce these frustrations and increase both the associate's and the firm's productivity.

## Putting Context to Work

Context is important for providing deal, case, matter or expertise context to documents and for enabling effective searching within documents themselves. Law firm repositories contain a lot of the same words, making simple keyword searching largely ineffective. A sophisticated search process can dramatically improve a searcher's ability to correctly identify relevant information in this noisy environment. This sorting process can be done entirely manually — starting with general search terms and sifting through a long results list — or it can be done more efficiently by identifying document characteristics important for the search. These characteristics can be inherent in the document, like the kinds of concepts identified by the search engine, or they can be explicit metadata associated with the documents.

Conceptual search helps prioritize result sets so that those items most relevant to a query are returned near the top of the list. Additionally, conceptual search extends the result set so that documents containing the same concepts are returned, even if they might not contain all the key words. This helps a search be more complete.

Despite the application of concept search, however, too many documents may be returned or other important factors may be missed because they weren't represented in the query. This second kind of characteristic is identified by common topics contained across the system like industry, practice group, author or jurisdiction. Advanced filtering enables the user to start with a broad search concept and quickly narrow in on a very specific result set.

By employing both concept search to better understand content within documents and smart filtering across multiple information systems and metadata types, users are able to find the important items without needing to manually sort through a huge number of irrelevant results.

## Examples in Context

Let's discuss the points above in the context of a real example. Merger agreements are common in law firms, and any search for "merger agreement" will bring back a large number of results. If the user is looking for an agreement appropriate for the acquisition of a small Singaporean biotech company by a Californian corporation, however, not all agreements are created equal. If an attorney were to find 400 documents titled "Merger Agreement," it would be difficult to find the right document until they were able to narrow in on the appropriate context and which jurisdictions and practices are appropriate to the work. By finding search results for "merger agreement" and filtering first by industry "biotech" and then by location "California" and/or "Singapore," the resulting document set contains a much more targeted context to the work at hand.

This context can then be further enhanced by the information contained in other systems, like the origin and editors of the documents, and the

responsible attorney on the files. If the user wants to check references to this matter, he/she has access to the entire matter file to cross-check materials used in a related case. If the user is interested in discussing the biotech merger with a knowledgeable attorney, he/she instantly knows who to call based on related authors and the corpus of their work. The same search terms, in this case "merger agreement," provide access to a range of information in order to rebuild the context around a specific issue. By finding context, first in documents and then throughout the firm, a real understanding of documents, deals, cases and matters can be gleaned.

## Turn Information into Knowledge

Accurate, relevant information is the key to developing knowledge. Attorneys can quickly and easily find the information they need by using the right tools to sort through the large numbers of words contained in law firms. By viewing these individual pieces of information in the context of a complete work or matter, law firm staff are empowered to make better decisions and to be more productive. The result is lawyers and paralegals who are able to find the information they need with much less frustration and without losing valuable time. The additional time saved by more efficient searching is much better spent on high value work — like communicating directly with the client.

By giving information context, knowledge workers are able to produce better results. Information on its own is interesting — information interlinked with other information forms a clear picture — a mosaic for success.

## Endnotes

- 1 *The High Cost of Not Finding Information*, IDC, July 2001.
- 2 *Intranet Usability*, Nielsen Norman Group, November 2002.



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## ::Going Beyond E-Mail Queries

Technology makes it very easy to create documents, and large law firms routinely create hundreds if not thousands each week. Technology, however, has not helped lawyers very much in finding the truly useful documents. As a former technology and knowledge manager — and in my current role as a technology consultant — I’ve encountered the same challenge repeatedly: Lawyers at many firms, even those with collections of manually selected “best practice” documents, struggle with finding on-point work product.

On a recent consulting engagement for a technology company, I studied how one firm successfully solved the problem of making good use of its accumulated intellectual capital.

### Adding Value to “Commodity” Services: Littler Mendelson’s Challenge

In 2003, Littler Mendelson, a 400-lawyer firm with 26 offices around the United States, concluded that improving its ability to retrieve on-point work product would result in better client service and ultimately, increase profitability. Littler advises employers on a wide range of labor and benefit issues. Because of the economics of its practice, the firm was especially motivated to improve its work product retrieval efforts. “Clients view certain types of employment law work, such as developing policy manuals, employment agreements and routine transactional documents, as well as being able to provide answers to routine employment law questions, as a commodity practice,” explained Scott Rechtshaffen, Managing Shareholder for Business Development and head of the firm’s knowledge management initiative. “As a result, clients are often reluctant to pay rates for this type of work that they might more readily pay for premium litigation work. They want their employment attorneys to be able to provide this work quickly and in a

cost-efficient manner. To do this, we need to be able to better tap our collective expertise.”

Until recently, “tapping the firm’s expertise” meant relying on e-mail messages sent to distribution lists, informal connections among lawyers, searches of the document management system (DMS) and a collection of best practice documents available via the firm’s knowledge management portal. These tools worked, but the firm thought it could do better. As the firm planned its DMS upgrade in 2003, Rechtshaffen and his knowledge management team confronted the limitations of DMS for retrieving work product.

They found that lawyers selected the document type “other” for 45 percent of documents, which greatly limited the ability of lawyers to find useful documents. (Many firms find that most lawyers categorize more than 50 percent of documents in one document type, either “memo” or “other” or the default value at the top of the “pick list.”) The team also realized that document titles were generally written in shorthand, primarily useful to the author and not to searchers. Finally, they found that full-text searches of the DMS typically yielded far too many hits.

The lack of accurate and consistent document profiles severely limited the value of DMS searches. While the DMS was still a necessary tool to handle work in progress, the KM team concluded it would be necessary to look elsewhere to answer the work product retrieval problem.

One potential solution involved hiring more professional support lawyers and staff to identify and vet exemplary work product, that is, to expand the firm’s current “best practice collections” through a manual review process. The firm’s handful of knowledge management lawyers were

already doing this. The effort yielded good documents but captured only a small percent of relevant work product. Like almost all large U.S. law firms, Littler concluded that hiring more than a few non-billable lawyers for KM purposes was not economically viable.

The firm also ruled out any approach that would require its lawyers to take extra steps to identify and mark up high-value documents. “We wanted a passive system,” said Michael Williams, Chief Technology Officer at Littler. “And I mean passive in a very positive sense, in that it works behind the scenes to identify meaningful work product with no lawyer participation whatsoever.”

### **An Automated “Artificial Intelligence” Solution**

Given the requirement for a passive system — and the additional criteria that the system had to be easy for lawyers to use and easy to deploy with their existing DMS — Littler set out to find a technology compatible with their existing DMS that could identify useful documents in it on a granular, substantive level. Put another way, the prohibitive cost of expanding manual efforts meant the firm had to find a reasonably priced and effective automated approach.

Early in the search process, the Littler KM team learned about a software solution designed for work product retrieval. The software programmatically analyzes each document in the DMS (and other repositories) to eliminate clutter and to create a detailed profile for the remaining high-value documents. Algorithms extract substantive information such as jurisdiction, opposing counsel and type of document (*e.g.*, “motion to dismiss”). A “Google-like” interface makes it easy for lawyers to find documents specific to their needs and situation. The system combines topical searching — by substantive area, document type and objective, practice area or transaction type — with full text searching. It works like this: Suppose an attorney needs to find an Illinois severance agreement. The system automatically distinguishes among multiple agreement types to identify just severance agreements; furthermore, it automatically identifies the jurisdiction. All the lawyer has to do is select a topic, subtopic and jurisdiction from pull-down lists. The search result, instead of displaying cryptic file names, shows meaningful abstracts that enable the lawyer to assess quickly and easily each “hit” in the search result list.

The firm valued four key benefits of the software: automated selection of useful work product, categorizing documents into topics and subtopics, full-text searching and an easy user interface. “Our attorneys’ general reaction to the application was ‘IT is finally doing something for us, not to us,’” said CTO Michael Williams. “Some also said, ‘Why don’t we have this already — what are we waiting for?’” Beyond this unusually positive response from lawyers, Williams liked the vendor’s focus on work product. “They didn’t try to tell us that their product would solve all of our problems, that it’s the only tool we need.”

The system also proved easy to deploy. No manual efforts were required to vet documents; the program automatically selects valuable

documents without attorney intervention. This eliminated one labor-intensive step for both lawyers and IT staff. Furthermore, Williams liked the hosted option, which minimized the work for his department to install and configure the software.

### **Ensuring a Successful Deployment**

Littler KM and IT staff quickly saw that anyone comfortable with e-mail and simple Web browsing could easily learn to use this type of simple work product retrieval system. But they understood that ease-of-use does not guarantee adoption, so they took several steps to create awareness and encourage use.

The most important component of the plan was KM team visits to multiple offices for demonstrations. Knowing that persuading lawyers to attend a software demonstration can be hard, the KM team worked with the managing shareholder of each office to strongly encourage lawyers to attend a short (30 to 45 minute) demonstration of the work product retrieval application. Showing the basics takes less time, but the KM team wanted to run lawyers through several scenarios where the application would seem useful. The KM team also took other awareness-building steps such as distributing a quick reference guide and placing a “banner ad” on the firm’s intranet home page.

An ongoing measure to encourage broader usage is reviewing many all-attorney e-mail messages seeking documents. A lawyer on the KM team receives most lawyer inquiries. Five to ten times a day, she

## **The prohibitive cost of expanding manual efforts meant the firm had to find a reasonably priced and effective automated approach.**

conducts a search using the system based on the inquiry and almost always finds useful documents. She then replies (privately) to the lawyer and explains that there are good documents in the firm repository. Rather than simply providing a list of documents, she provides step-by-step instructions on how to use the program. It can take up to five such interactions before the lawyer becomes a regular user. This confirmed the KM team’s hypothesis: Even with easy-to-use software that lawyers ultimately like and use, active measures and perseverance are essential to ensure a successful deployment.

One deployment concern that the firm had turned out not be a problem at all. While lawyers and IT staff loved the automatic classification feature they saw in demos, they were concerned that the system might not provide the granular categorization needed by a firm focused on employment law. The vendor addressed this concern by tuning the rules with feedback from the firm. “Other firms now benefit from the rules we’ve helped create,” Michael Williams commented, “and we in turn benefit from the fine-tuning the vendor does for its newer customers.”

## Measures of Success

Administrative tools and software logs have allowed Littler to quantify the impact of its work product retrieval initiative:

Littler's work product retrieval system contains about 350,000 automatically selected documents, which is about 10 percent of the total number of documents in the firm's DMS, and what the firm expected would be picked as high-value, potentially reusable documents.

In February of 2004, the month the system was launched at Littler, there were roughly 500 searches conducted. In June of 2005, nearly 2,000 searches were conducted.

Lawyers conducted just over 10,000 searches in the first six months of 2005 and viewed 21,000 documents (or "click-throughs" to search results). The fact that lawyers typically view only two documents per search suggests the system displays highly relevant documents; the abstracts of each document that are shown as part of the search result make it easy for lawyers to determine which are worth "clicking through" to view.

As of June 2005, more than 200 lawyers — over half of the attorneys at Littler — were using the system at least once per month, with many conducting multiple searches each month.

Anecdotal information also suggests effective usage of the application. As mentioned above, the firm had relied in part upon "all-attorney" e-mail messages for lawyers to post and answer questions. Littler's KM department estimates that the firm had significantly cut back on the time spent on all the lawyer interaction, which had been costing the firm at least \$800,000 per year in non-billable time. "Our lawyers still use e-mail to find documents, but they spend much less time doing so," said Scott Rechtschaffen. "Volume is down considerably. I've had one associate report that if he uses e-mail, he starts his message by saying 'I've already searched the work product retrieval system and could not find anything.'"

Feedback from associates as well as senior attorneys at Littler has reinforced the positive impact of the firm's work product retrieval initiative. One associate reported that he uses the application at least three times per week, when drafting any document for court and for research projects. As a new lawyer, it gives him confidence, as the system helps him identify a good model for the task at hand. A managing shareholder for one Littler office recounted being at a conference when a client called needing a document. He asked an associate to locate it and was amazed to get the perfect document back 15 minutes later. After learning that the associate had found it using the work product retrieval system the shareholder asked for training and quickly became a regular user.

## Lessons for Other Law Firms

Large law firms today face many pressures. Externally, clients seek lower costs, faster turnaround, and deeper expertise. Internally, firms want to improve realization rates and stem the cost of high associate

turnover. Improved work product retrieval is one step in responding to these pressures, but firms must carefully consider their strategy.

In my 15+ years in the legal market, working for two large law firms, a software company and as a consultant, I have seen many attempts "to stop reinventing the wheel." Manual approaches in U.S. firms have had limited success. Practicing lawyers will not take time to contribute work product to central systems. And, unlike in the U.K., large U.S. law firms are not willing to hire the army of nonpracticing lawyers that a successful manual strategy requires.

Until recently, automated solutions did not work well — that is no longer true. Today, firms can choose from two broad approaches. One is "enterprise search," which is software that searches multiple information sources and ranks results by inferred relevance. The other is targeted work product retrieval software.

Firms are usually better off starting with work product retrieval because it solves a specific problem that has frustrated lawyers for generations. This focused solution is more likely to achieve a quick win than enterprise search, which solves the problem of finding potentially useful information from multiple sources. (Enterprise search can be engineered to find work product, but at least so far, doing so is a substantial and costly undertaking.) As firms grow larger and the practice challenges bigger, it is quite possible many firms will eventually deploy both solutions.

While the choices available and decision-making process may seem daunting, the good news is that the options are far more viable today than even a few years ago. Management must recognize that the "cycle time" for adopting new solutions has shrunk dramatically. It took 20 years for firms to adopt online legal research, 10 to adopt document management software and five to fully embrace the Web. Today, most large law firms have mastered basic infrastructure, so adding a practice application such as work product retrieval is no longer a traumatic or even difficult experience. And besides, competitive pressures mean the market will be less forgiving of the late adopters this time around.



by Catherine Monte of Fox Rothschild LLP

## :: A Guide to Collaboration Tools

At its core, the concept of knowledge management implies collaboration; and intranets, portals and extranets provide the platform for the sharing of collaborative content. Often, law firms and legal departments use specific tools on these platforms to organize information so it can be searched and shared.

According to a recent CIO article, “The ABCs of KM” (click “Overview” under “Articles By Topic” at [www.cio.com/research/knowledge](http://www.cio.com/research/knowledge)), tools fall into one or more of the following categories:

Knowledge Repositories

Expertise Access Tools

E-Learning Applications

Discussion and Chat Technologies

Synchronous/Asynchronous Interaction Tools

Search and Data Mining Tools

Some illustrative examples under each of these categories include:

### Knowledge Repositories

Sample documents, forms libraries, precedent collections, past work product exemplars

Best-practice forms, checklists and other practice aids, along with authors

Project databases with profiles of past deals, including which attorneys and paralegals worked on them, along with associated work product

Business plans

Customer lists: marketing and business development lists by practice area or industry

Outside counsel: a database of attorney and firm contacts previously used by the firm

Experts: a database of accountants, architects, medical experts, etc.

Venture capital: a database of information on funding sources

### Expertise Access

Attorney skills or expertise database searchable by a variety of fields including office location, bar admission, practice area, and other biographical information

Attorney of the Week: an in-depth profile of individual attorneys highlighting their skills and personal characteristics

### E-Learning Applications

Practice area courses

Practice area procedural check lists and guides

Documented “lessons learned”

### Discussion and Chat Technologies

Deal room: organization of corporate deal documents, calendar deadlines, etc.

### Synchronous Interaction Tools (Same Time Conversation)

Discussion boards for practice groups, etc., with alerting mechanism

Threaded discussions on a topic, recent legislation, etc.

Instant messaging applications and/or Microsoft Office 2003 presence awareness capabilities

### Asynchronous Interaction Tools

Blogs

Wikis

### Search/Data Mining

Enterprise search: a search across internal data stores, such as documents, e-mail messages, Web pages, newsfeeds, etc.

Specific KM tools such as West km, DealProof, Real Practice, LexisNexis Total Search

### The Challenges Ahead

In order to keep pace, we will need to find more creative ways of capturing “tacit” knowledge of experts (*i.e.*, Social Network Analysis), fine tune enterprise search across various firm/company repositories and apply the concept of auto-categorization into the results.

A man in a brown suit stands on a small orange hill, holding a long, thin, glowing branch that branches out into a large, intricate tree structure against a dark blue, starry night sky. A crescent moon is visible in the upper left corner. The scene is illuminated by the glow of the branch and the stars.

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