Describing the Business Justification for New Technology

IT and knowledge workers are often enthusiastic about new solutions they believe will aid the practice of law. However, as Conrad J. Jacoby explains, translating that enthusiasm into a compelling technology proposal can be difficult unless certain threshold questions are addressed.

Legal Project Management Enters Adolescence

Legal project management (LPM) is growing up – and growing out, according to Pamela H. Woldow and Douglas B. Richardson. The trend, driven by client needs and client demands, continues to evolve and mature as firms big and small pursue ever more practical approaches to LPM implementation.

Document Assembly as a Means to Improved Client Service

The bad economy has given new life to knowledge management, as clients pay more attention to law firm efficiency. Document automation is one method of improving document drafting speed and consistency. Several new products have entered the legal market in recent times, affording opportunities that were not previously available. In this article, John Gillies details his firm’s experience with kiiac, a linguistic analysis tool that his firm is using to help generate precedents.

Deciding on Document Automation

Document automation can play a critical role in providing legal services in a more efficient and effective manner. In deciding whether to implement document automation, Anthony Kikuta writes, it is important to consider the full range of potential benefits and their relevance to your business, as well as your readiness for document automation and the full extent of the investment required.

The Impact of the Consumerization of IT on Law Firm Technology

Curt Meltzer, CIO at Orrick Herrington & Sutcliffe, discusses the ways in which the consumerization of technology is pushing law firm IT professionals to embrace new tools at a time when security risks are rising. Nevertheless, he says, the opportunities for enhanced efficiency and improved client service require a fresh look at these challenges.

HTML5 and What It Means

HTML5 is a technology that promises to bring new features that will change how we interact with the Internet. It will also redefine how we use our computers. This article by Don Philmlee outlines and summarizes these new features and their benefits.

Use of Analytics in Early Case Assessment: Defensible, Reproducible, and Cost-Effective Options

Karen Hendrickson discusses the use of data analytics, which many case teams are looking at to help offset the effects that shortened timelines and cost constraints have had on the early case assessment process. Data analytics, through the use of technology and automation, promises gains in efficiency when plowing through the volumes of documents associated with the review
process. At this juncture, these technologies are very enticing and they have a lot of potential, but they’re not a universal panacea for managing large document reviews – at least not yet.

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Communicating best practices and innovations in law firm information and knowledge management to legal professionals.

Four regular editions of Practice Innovations are published each year in January, March, July, and October.

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An amazing variety of excellent technology-based tools is available to the legal community. Even ignoring recent innovations in mobile computing (e.g., tablet devices and increasingly powerful smartphones), law firms and legal departments have access to diverse solutions that can simplify core tasks of legal research, document production, discovery management, computer networking, data security, and other IT functions.

However, the process of obtaining approval and funding to implement these solutions can be a complicated and frustrating exercise. Improvements that seem critically needed and self-evident to technical professionals are often challenged as unnecessary and disruptive by others. Particularly in the current economic climate, any expense is viewed with skepticism and, if at all possible, deferred to the future.

Effectively describing the benefits of technology initiatives can make the difference between an enthusiastic embrace of the project’s potential and its outright dismissal. Addressing two questions, in particular, will help showcase the merits of a technology proposal.

**What Changes Will Occur to the Work Environment If New Technology Is Implemented?**

New technology should be brought into an organization to address specific needs. The tool may be brought in to fix existing problems or it may be brought in to add new functionality. A proposal for new technology should specifically describe the impact the new tool is expected to have.

For example, consider the discussion taking place in many organizations about integrating tablet-computing devices into the workplace. Tablets are substantially different from the computing tools currently deployed in most law firms and law departments; they add new functionality, rather than replace something already in use.
While it’s certainly easy to estimate the deployment cost, empirical “before and after” benchmarks that show the total value of adding this solution simply don’t exist. A strong proposal, however, will support the estimated deployment cost with a comprehensive discussion of the tasks for which the new tool will be used. For example, a tablet-computing proposal should concretely address how lawyers would use the device in their daily practice. Itemizing specific tasks, such as remote desktop access to retrieve firm work product, reading and responding to email, taking notes at depositions or hearings, and adding freehand signatures to electronic documents (e.g., ezPDF Reader for Android™ tablets) adds a story to otherwise dry technical specifications and showcases the potential value of the new technology.

Addressing workplace tasks changes the discussion topic from, “Why are we spending this money?” to, “Is this the most efficient way to accomplish this task?” The former question invites disapproval; the latter opens a genuine conversation about workflow and potential competitive advantages.

**What Is the Cost of Remaining with Existing Technology Versus Deploying New or Updated Tools?**

Every new technology implementation has a cost:

- First, there’s typically an out-of-pocket expense for purchasing the new technology
- Second, someone (in-house staff or outside vendor) must spend time to configure and deploy the new technology
- Third, new users of the technology will require training on the tool, which both costs money and prevents users from completing their usual business tasks during the training period (lost income)
- Fourth, most users will experience a short-term drop in productivity as they adjust to their new tools (additional lost income)

Taken together, these expenses can add up to a surprising estimated total cost.

Too many proposals focus only on deployment cost or on ways to shave a few dollars off the implementation by cutting a few corners. This approach rarely makes a strong case in favor of adopting a new tool. Instead, a presentation that balances new costs against existing or otherwise anticipated costs can take a seemingly intimidating number and whittle it down significantly. In some cases, presenting a more complete picture can even demonstrate how moving forward costs less than maintaining the status quo.

How does this work in real life? Imagine a scenario in which new technology is being proposed as a replacement for an existing solution – here, upgrading the computer operating systems in use at an organization from an older release. (Many enterprises are still running Microsoft® Windows® XP, which was first released in 2001 and is two full generations behind the current version of the Windows operating system.)

Expenses associated with the upgrade will include new software licenses, labor involved with installing Windows 7 on existing and new workstations and servers and additional labor to tweak the configuration of existing tools so that they work the same way under the new operating system.

In addition, it’s likely that some older software may not run correctly under the new operating system; these ancillary tools may also need to be upgraded. The training cost for end users, however, is likely to be quite modest, as core productivity applications should continue to operate as they did before the upgrade.

A simple statement of costs associated with an operating system upgrade will suggest little benefit for spending money. After all, the goal of the upgrade is for users to continue to have essentially the same experience they had before the project took place. However, a more holistic presentation of the proposal can flesh out the important nature of this project and highlight its
importance to the organization. For example, the upgraded operating system should decrease system downtime, reducing overtime and after-hours support. The new operating system would provide increased protection against viruses and other malware that might compromise enterprise security as well as decrease worker productivity.

While the upgraded OS might not work perfectly with all legacy applications, the older OS may have held back the organization from taking advantage of other tools and accessing certain cloud-based applications. Finally, if it isn't already, the legacy version of the operating system faces a sunset for developer-supplied hot-fixes and support. Ongoing maintenance costs of the existing system, to the extent that maintenance is even available through independent consultants and developers will soon be much higher than the same level of support for the new operating system.

Conclusion

It's easy for technologists to get excited about new tools that promise greater functionality or that resolve behind-the-scenes IT infrastructure problems. Conveying that enthusiasm to managers who may not focus on these issues requires clear, compelling arguments in favor of the initiative. A winning technology proposal will provide sufficient context and background, so that the document tells a complete story about both costs and benefits of the proposed solution. Ideally, it will educate even a casual reader of the proposal to the point that no additional outside research will be required.

Above all, it must provide an unambiguous answer to the question, “Why move away from the status quo if existing tools already support the workforce?” Proposals that accomplish these objectives stand the best chance for approval and funding.
Welcome to the New Normal

Why is LPM hot and continuing to get hotter? Client pressure continues to escalate and law firms that want to retain client loyalty, build business, and remain profitable have to make some tall promises to their clients: leaner budgets, more efficiency, more predictability, better communication, greater value achieved.

Merely promising is not enough. Firms have to deliver on those promises, a difficult challenge for many firms that have never measured the costs of providing service and therefore lack internal metrics on which to build budgets and plan profitability. So the time is ripe for improving the management and control of all kinds of legal projects and engagements. As LPM expands and evolves, it is not just for the big kids. It promises to become the norm for how law is practiced throughout the legal profession.

An LPM Primer

Fortunately, lawyers have largely overcome the misperception that LPM is the mindless application of software-driven decisions and methods, a set of lockstep, follow-the-dots marching orders that ignores lawyers' legal experience and judgment. On the contrary, LPM should be thought of as a logical, flexible framework for integrating better planning, management, and communication into the myriad ways lawyers employ their knowledge and experience and work with their clients. LPM is not one-size-fits-all; above all, it is both scalable and adaptable. Depending on its application or context, it can be elegantly simple or extraordinary complex.

Regardless of where and how applied, however, LPM includes five cascading steps:

1. Collaborating with the client to set project **Objectives and Scope**

Legal project management (LPM) is growing up – and growing out. The trend, driven by client needs and client demands, continues to evolve and mature as firms big and small pursue ever more practical approaches to LPM implementation.
2. **Building the Project Plan**, which includes identifying phases and tasks, naming the project team and stakeholders, building the project budget, creating a communications plan, and analyzing risks
3. **Executing the Plan** as a framework for legal work
4. **Monitoring** progress
5. **Post Project Review** with both the project team and client.

**Yes, But Can We Make It Work?**
The concepts may seem elementary, but making LPM work – really work – is no easy task. The first adopter firms that undertook LPM implementation soon realized that the task would involve three very distinct phases:
- Introduction, building buzz and rollout
- Initial implementation, which includes lawyer training, developing work process breakdowns for all legal tasks, and developing support tools, templates, and software
- Long-term institutionalization and continuous improvement

Those firms furthest along in LPM implementation now find themselves somewhere between steps 2 and 3, that is, in a third wave of LPM activity. They are working to translate their initial efforts, successes, and pratfalls into mature, firm-wide LPM platforms.

“The good news is that we have strong lawyer buy-in at all levels,” says Colleen Nihill, who holds the newly created position of director of legal project management at Dechert. “Since our LPM rollout, our culture has shifted from understanding LPM principles to active use by an increasing number of our lawyers. We are building out our infrastructure now to permit greater access to LPM-related information by our lawyers and practice groups.”

**Pioneering LPM Efforts**
Early law firm LPM pioneers quickly learned that industrial project- and process-management techniques translated poorly into managing legal work. So they went back to square one to focus their LPM methods more on how lawyers actually practice in diverse disciplines. This has involved either home-growing their own LPM approaches and tools or seeking consulting support for LPM planning and rollout.

**Meanwhile, Back at the Recession**
The Great Recession drove dramatic cost squeezes that triggered a powerful wave of large-firm efforts to adopt LPM. In highly publicized initiatives, a few first-adopter firms embarked on ambitious broad-scale, full-immersion training programs for large numbers of same-level lawyers. This approach was often carried out in an intensive flurry of introductory partner-level workshops that often combined participants from different practice areas. These introductory “horizontal” workshops emphasized LPM’s business development value and were designed to introduce LPM principles more than teach hands-on project management skills.

In addition to revealing considerable resistance to LPM, particularly among senior lawyers comfortable with the status quo, these early horizontal initiatives demonstrated how hard it would be to overcome organizational inertia – decades of entrenched structures, processes, and procedures woven deeply into the fabric of firm operation, management, and culture. For large firms, in particular, the challenge of getting everyone on board and then rapidly turning the ocean liner unquestionably looms large. Some skeptics still express doubt about whether law firm LPM programs can ever be installed and institutionalized fully and effectively.

While some practice groups and client teams immediately recognized LPM’s potential value to their clients, others claimed it was neither relevant nor useful for their practice and their clients. This variability has made for testy debates in some firms about whether the gains – in business development, client relations, efficiency and profitability – are worth the time and expense long-term LPM institutionalization requires.
The Vertical Approach
As LPM has become steadily better understood and accepted, full-immersion programs have become less common. Even in firms that started with horizontal LPM rollout, there now is a call to “dive deeper” and for “more granularity.” Today, there is less interest in broad theory and general awareness programs and more call for hands-on practice with case studies, tools, and techniques that relate directly to real-life experience.

To address this changing priority, as well as to limit the costs and complexity of large-scale initiatives, many second-wave “first followers” are turning away from broad-scale training initiatives, opting instead for a series of vertical pilot workshops attended by all members of particular practice groups or client teams. The pilot project approach allows a firm to ramp up its LPM efforts gradually, to build buzz and buy-in incrementally, to better manage budget burn, and to reality test the firm’s willingness and ability to undertake major long-term change.

It was a pleasant surprise when vertical practice group-oriented pilot workshops demonstrated greater utility and buy-in than full-immersion programs. Training worked better still when it was targeted to specific client teams. Client team workshops are designed now to include performers at all levels, operating in their real-life roles, relationships and responsibilities.

Broadening the Team
We also have been urging law firms to include client representatives in LPM training workshops. In our experience, workshops with the client in the room are real game-changers: Client priorities and viewpoints are heard firsthand by all players, project scoping is highly interactive, and the process of law firm-client collaboration to identify and anticipate potential problems commences early on, before they can ripen into scope creep or crises requiring costly damage control. Sheri Palomaki, director of practice management at Sutherland, reports that, “We moved to include clients in our pilot programs as an experiment. The benefits so exceeded our expectations that the firm will be adding new client programs every quarter. Clearly, this is the way to go.”

Strategy and Infrastructure Challenges
However well they work to teach hands-on skills and provide near-term utility, vertical training programs do present the firm with long-term strategic and infrastructure challenges. Large firms can have scores of practice groups and client teams, thus creating the need for a lot of workshops before full firm-wide institutionalization is achieved. Even smaller firms must consider how to maintain LPM momentum while phasing it in over months or years.

Strategic LPM implementation planning therefore must focus on how to achieve the most effective staging of LPM introduction and training. As LPM enters adolescence, we have been encouraging firms of all sizes to change from, “Everyone must learn LPM” to an approach where access to LPM training is offered only to those who demonstrate that they really want and need it. This approach minimizes resistance by limiting training to enthusiastic participants. People who refuse to get on board will learn that by opting out they are only damaging their own prospects.

“This approach is working well for us,” says Lisa Gianakos, director of knowledge management at Pillsbury Winthrop Shaw Pittman. “We invite everyone, but we don’t require anyone to attend; they can self-select. We find that the people who do attend support the program afterward. The result is that we now have a strong cadre of champions who back LPM and put our best foot forward.”

It Takes a Village
Strategic LPM planning also must deal with the question of who will “own” LPM within the firm. While pilot initiatives may be budgeted out of special accounts and driven by ad hoc committees, in the long term firms must consider what form of LPM infrastructure will work best, where to assign LPM costs, and to whom to assign responsibility for LPM management and continuing development.
Several large firms with substantial LPM budgets have created dedicated LPM departments and/or created an LPM czar (usually a non-lawyer) charged with integrating the demands of practicing lawyers with the invaluable contributions of professional development, IT, practice management, marketing, financial management/analysis, and knowledge management staff. (See Toby Brown’s article, The Role of the Alternative Fee Manager, in the October 2011 issue of Practice Innovations.)

Other firms have worked to create their own unique LPM brand, emphasizing how LPM creates a common platform and vocabulary for lawyers in all disciplines. Nixon Peabody’s website, for example, describes how NPPM (Nixon Peabody Project Management) unifies its lawyers’ service delivery: “Our NPPM-trained attorneys operate from a ‘one firm’ physical and virtual platform for sharing with each other and with our clients best practices in legal project management.”

The Trickle-Down Effect
As LPM trickles down to middle-of-the-pack followers, midsize and smaller firms face the challenge of developing their own cost-effective set of LPM best practices. This may be hard where budgets are tight. In many midsize firms we still see primary LPM responsibilities being added to the responsibilities either of the HR function, professional development experts, the finance department or, increasingly rarely, to the IT staff. Imposing double duty, however, risks nonlawyer staff burnout and uneven quality of LPM implementation.

Midsize and smaller firms cannot simply ignore LPM; more and more of their clients are demanding it or at least the benefits well-managed legal work provides. And many of their competitors are proclaiming their commitment to LPM. Accordingly, in the next several years we can expect to see a cottage industry spring up to help middle-market firms ramp up streamlined LPM efforts that produce at least some increase in efficiency and predictability, while maintaining profitability, of course.

Crossing the Pond
The LPM trend is by no means confined to the United States. All around the world, both global and national firms are coming quickly up to speed, and many of their LPM programs now rival those of the most advanced US firms. Eversheds in the UK, for example, now is recognized as a thought leader committed to implementing LPM best practices firm-wide, and Mallesons Stephen Jaques, a premier firm in Australia and Asia, is well along in its LPM implementation. “I believe we qualify as the region’s LPM first adopters,” says Michelle Mahoney, Mallesons’ director of applied legal technology. “We have observed LPM development in other markets closely, and we are now well along in all aspects of LPM implementation here: training, technology and support resources. We are taking a holistic approach that both trains those who will be at the heart of legal service delivery and includes our clients in LPM implementation.”

What About Tools?
Technical support for LPM is an area that has seen terrific progress in the last two years. Although LPM must not be fundamentally IT-driven, its successful implementation does depend on tools, templates, and dashboards that aggregate, organize, and permit open access to all relevant forms of project information: project scope, team selection, phases and tasks, metrics, and communication.

Initial efforts at developing software support for LPM often were delegated to internal or external IT experts. This produced some remarkably sophisticated prototypes that lawyers found too complex to learn and use easily. Current templates, budgeting templates, and project dashboards, whether homegrown or offered by external vendors, have improved enormously. They are user-friendly, they integrate current information from all planning/budgeting stages, they provide open communications access to all stakeholders, and they can be tied seamlessly into a firm’s existing systems.
Clearly the challenge in coming years will be to align the enormous capabilities of emerging information management technologies with the decidedly more limited IT capabilities of lawyers. Watch for greater user-friendliness and for the availability of real-time dashboards accessible 24/7 by all team members, whether in the firm or at client locations.

Watch, too, for tighter links between the post-project review stage of LPM and knowledge management, now commonly nicknamed “KM.” KM is becoming an increasingly crucial discipline in which law firms and legal departments decide what they need to know, map what they already know, integrate continuous learning, and make all of it accessible and useful to all who need it.

“Post-project review is a crucial part of LPM,” Lisa Gianakos says, “but it isn’t just a stand-alone report card. It is a vitally important information entry point, but that information isn’t automatically self-propagating. KM is the firm’s vehicle for pulling together, storing, and retrieving all the information derived from the practical experience of the firm’s performers. KM is where firms can make huge strides in enhancing their abilities to tap their accumulated wisdom.”

**What the Future Holds**

It is ironic that, despite all the remarkable developments LPM is going through as it careens into adolescence, before long it will cease to be remarkable. It will become an accepted part of the legal landscape, a kind of operational wallpaper. In as soon as 18 months, LPM will stabilize, settle on best practices, and become lean, elegant, user-friendly, and transparent. Already, LPM courses are being added to many law school curricula, a solid signal of what the future holds. At this point, first-adopters will be history, first-followers will have caught up with best practices, and middle-of-the-pack followers will have adapted and scaled LPM to their clients and their work.

Unfortunately, some firms’ LPM initiatives have lost momentum, strayed down ineffective paths or succumbed to resistance or firm politics. In some cases this is because they tried to do too much too fast. “You shouldn’t try to build a perfect system off the bat,” says Ben Barnett, head of Dechert’s products liability practice and an instrumental player in LPM implementation at the firm. “You can’t do everything and anticipate everything at the outset. Don’t bite off more than the firm – and its lawyers – can chew. Build a program that works now, recognizing that you probably will be changing and redesigning almost everything as your LPM function matures.”

Overall, however, the jury is in: When pursued persistently and provided adequate PTM resources (people, time, and money), LPM can be brought successfully online in all its dimensions: buy-in, implementation, infrastructure, tools and support software, methods, metrics, continuous improvement and demonstrable added value.

Those firms whose LPM efforts are moving through adolescence to maturity report that, although initial implementation was noisy and painful, their efforts are clearly gaining momentum, internally and with clients. LPM has become accepted as part of who they are and how they operate. As pioneers, their experience will make it easier for others to follow – to move from introduction to initial implementation to long-term institutionalization.
The recent down economy is making knowledge management (KM) more popular than it has been for a while, due to the need for increased efficiency. As a result there has been a renewed focus on the use of document automation tools. Several new products have entered the legal market in recent times, affording opportunities that were not previously available. In this article, the author details his firm’s experience with “kiiac,” a linguistic analysis tool that the firm is using to help generate precedents.

By way of background, my firm, Cassels, Brock & Blackwell LLP, is a single-office firm in Toronto with about 200 lawyers and 45 law clerks, which offers the full range of large firm corporate and litigation services. We have a much larger percentage of lateral hires than most firms, which brings with it many advantages but also carries the risk that there may be many different approaches to the right way of doing things. One key sentiment that is widely shared, however, is acknowledgment of the need to create a comprehensive collection of authoritative and up-to-date precedents.

Creating a precedent bank and then keeping it up to date has been one of the cornerstones of traditional KM. Unhappily, though, this initiative commonly has not been as effective as it could have been. Indeed, precedent projects often fail, mainly due to the huge time investment in creating them, the often overly cumbersome documents that are produced, and the failure to keep them “green.”

There is usually a disproportionate amount of time devoted to producing what ultimately appears to be of little benefit. This is because the authors (or owners) of the precedent tend to want the document to be as perfect as possible. Therefore, the resulting precedents often contain large numbers of possibly unnecessary clauses, requiring users to strike large sections of unnecessary
text in order to prune the document back to essentials. The risk of this approach, though, is that users may end up throwing the baby out with the bathwater as they cut vast swaths of what appears to be unnecessary language.

More significantly, the resulting precedent might simply reflect the personal predilections of the drafters on the precedent team. It may be a pretty good starting point, but nonetheless may be missing essential clauses. Finally, the precedents, once developed, tend not to be updated to reflect current experience, since users in the heat of drafting rarely think to incorporate their improvements made to the base documents.

Essentially, the spanner in this approach is exclusive reliance on human effort to generate these documents. However, today's linguistic analysis software tools, which did not exist even five years ago, enable a significant degree of automation not previously possible. Document assembly tools that previously made sense only for very frequently used documents can now be used for regular documents.

It is now possible to leverage computer-based content analysis to:

- Fast-track the process of precedent production and renewal
- Generate good, reliable precedents
- Guide users in including necessary, and excluding unnecessary, clauses

This has essentially re-energized the firm's precedent initiative.

While increased efficiency and consistent branding of the firm's content always have been the primary business goals for a precedents initiative, there are other important ones. From a risk management perspective, it is crucial that all necessary clauses be included, all unnecessary clauses be eliminated, a logical structure be adopted for the final document, and there be consistency of language across similar documents.

These goals are now more easily attained when using computer-based linguistic analysis tools. From the point of view of training, good precedents also constitute a just-in-time means of delivering professional education. Further, there is increased satisfaction of professional staff, particularly associates, who have immediate access to top-quality content. Although impossible to quantify, this could have a positive effect on associate retention.

In the last year, we have begun using kiiac, the linguistic analysis tool developed by Kingsley Martin, to help focus our precedent activities. We identify a particular document type and then, using our enterprise search engine, gather a representative sample (ideally at least 20, preferably more on the order of 40 or 50). These documents are then fed into kiiac, which identifies commonly recurring clauses and the consistency of drafting within clause types. Through what is essentially a computer-based elucidation of the wisdom of crowds, we can identify both a logical structure to the particular document type and all the necessary clauses, as well as the most commonly encountered drafting of each particular clause.

There is, however, a concomitant need for lawyer review, not just computer analysis. Kingsley’s clear conclusion, after reviewing both publicly available documents on EDGAR and those submitted from many different firms, is that similar substantive clauses are often jumbled together with others. The process, therefore, involves teasing out the separate substantive issues so that each can be addressed on its own. There is accordingly a consultative effort involving Kingsley and the appropriate KM lawyer to arrive at the optimum form of the template document.

The resulting draft is then put out for use, and suggestions are invited. Realistically, however, drafting improvement suggestions are rarely made during the heat of document-drafting sessions. Accordingly, once a year we will identify and collect documents created from each particular precedent, run them through kiiac, identify substantive improvements that have been made to the underlying document, and update the precedent accordingly.
There are at least two advantages of using this computer-based tool in precedent drafting. First, the structure of the template document enables markers to be embedded within it (to identify things such as the names of the parties, the jurisdiction of the governing law clause, etc.), which can then be used to generate a document assembly checklist. A lawyer can, for example, review the opinion checklist to determine the relevant assumptions, opinions, and qualifications needed for the particular matter.

Instead of having to strike out unnecessary clauses from an omnibus precedent opinion, the drafter can focus on the substantive issues dealt with in the opinion. The resulting document accordingly should include only the necessary clauses. There are clear risk management advantages to having the drafter review the document assembly outline and think carefully about each potential issue. As well, the list can be given to a more junior member of the team, who will be obliged to think about the various substantive issues, thereby providing that lawyer with an excellent professional development opportunity.

Even five years ago, document assembly tools such as HotDocs™ were available, but at a significant cost and intended for documents that were used repeatedly. With the checklist tools embedded in the precedent software, document assembly is now available even for documents that are used only occasionally.

The second advantage of newer solutions such as kiiac is the benchmarking capability. A firm’s precedent document will only be useful half the time, namely when the firm creates the first draft. The rest of the time, the firm’s role is to review the first draft prepared by opposing counsel. One cannot, however, blackline the latter document against the firm’s precedent because its structure is completely different. The kiiac tool, on the other hand, because it analyzes the document’s substance, provides a benchmarking capability to quickly identify what is missing, what is added, and what the drafting variances are.

While we are still at a relatively early stage of this process, there are some words of advice that I can offer.
• First, as with any similar initiative, it almost goes without saying that it is best to start small and to target the low-hanging fruit first.
• Second, it is important to recognize that this initiative strikes at the heart of the lawyers’ drafting prowess. Generally speaking (and this is a conclusion that Kingsley has seen across the range of documents he has analyzed), there exists a much greater diversity in drafting styles than one would expect. While each lawyer recognizes the need for greater consistency in the drafting of firm documents, many do not recognize that this will require each of them to adapt (and indeed change) his own drafting practices.

As these documents become more common and are seen to be updated according to the firm’s experience, and as lawyers use the document assembly checklists to generate first-draft documents, firms should see more consistent and substantively reliable documents being produced, thus advancing the business requirements that the precedents were intended to serve.

Sources:

http://www.kiiac.com/
BACKGROUND

With recent changes in the legal market and economic conditions in general, law firms and in-house legal departments increasingly have sought to provide legal services in a more efficient manner. One area that has seen increased emphasis is document automation. Document automation tools allow end users to automatically generate documents based on information furnished in response to an online questionnaire.

Wilson Sonsini Goodrich & Rosati’s efforts in the area of document automation extend back over several years. The firm always has looked to invest in technologies and processes that maximize value for our clients. We monitored document automation possibilities for an extended period before we decided to proceed. We ultimately felt that it was important to implement these tools so that our clients could benefit from the resulting cost efficiencies and speed. Our document automation initiatives fall under our knowledge management function and primarily are managed by individuals who have both legal subject-matter expertise and experience with the underlying document automation development software.

Our initial project involved automating a suite of forms used in organizing a new corporation (e.g., certificate of incorporation, bylaws, etc.). We developed a fill-in-the-blank tool using Microsoft® Word macros. However, with increased use and popularity of the tool, we received requests for additional functionality that led us to consider licensing document automation development software. After looking at several vendors, we selected the DealBuilder (now ContractExpress DealBuilder) software developed by Business Integrity.

Using ContractExpress DealBuilder, we developed FAST, a document automation tool that automates the various documents used in venture financings, including a term sheet, a stock purchase agreement, an amended and restated certificate of incorporation, investor agreements, corporate authorizations, and closing certificates. We also developed a similar tool for bridge loan financings called BLAST which encompasses a term sheet, transaction documents and corporate authorizations. We also migrated our original start-up-related tool (START) to the ContractExpress platform, enabling us to add significant functionality. These tools and others we created automated over 50 different forms across different product suites.

Our document automation tools lead the end user through an online questionnaire to solicit information relevant to preparing the documents. We provide tutorials and guidance to end users, including links to relevant external information, to help them complete the questionnaire. Based on the information provided by the end users, our tools will automatically generate the relevant documents in a Microsoft Word format. We have published a publicly available version of our venture financing term sheet generator on our external website.

This article addresses a number of issues relevant to the decision to initiate document automation projects and the management of those projects in the law firm and in-house legal department context. Document automation projects that involve end users who are not legal personnel (e.g., automated commercial contracts for use by sales staff) involve many of the same issues but also implicate workflow processes and related issues that are beyond the scope of this article.
BENEFITS OF DOCUMENT AUTOMATION

Before we began our document automation efforts, we carefully evaluated the costs and benefits associated with document automation. We concluded that document automation offered significant potential value to clients, as well as related internal benefits for our firm. While the legal market and economic landscape has changed somewhat since our initial evaluation, we feel that our analysis still holds true. In many respects, the case for document automation has become more compelling with recent changes in the legal market that encourage efficiency and value.

Efficiency
A principal benefit to document automation is efficiency: With document automation, more work can be completed in less time. The degree of efficiency can vary depending upon the nature of the documents subject to automation and the amount of leverage in the questionnaire (i.e., the extent to which a single question controls multiple outcomes in the documents). In one test, we found that we could reduce the eight hours required to complete a particular set of documents manually to less than one hour using document automation (and less than 30 minutes, for an experienced user).

From the client’s perspective, efficiency can translate into reduced costs. A shortsighted view may interpret this as a negative for law firms, which stand to generate fewer billable hours for the same work product. A more progressive view is that improved efficiency enables a firm to take on more work and focus its energies on higher value-added services. This in turn can improve realization rates for law firms (i.e., the amount collected relative to the amount billed), which may be particularly important in areas where there is significant pressure on billing rates. The efficiencies associated with document automation also can enable firms to pursue alternative billing arrangements, such as flat fees and task-based billing, to the mutual benefit of firms and clients.

Speed
A potentially underappreciated aspect of document automation is the speed with which documents can be prepared and distributed. Certain matters can be very document intensive, and the time associated with preparing the documents can be a drag on the transaction. Although clients will certainly appreciate lower costs associated with efficiency, during the immediacy of the transaction, clients are often most concerned about closing the transaction as soon as practicable.

In our practice, in which we represent companies in fast-moving technology sectors, the ability to move quickly is of paramount importance and can mean the difference between the success and failure of the enterprise as a whole. However, in almost any business, the ability to close deals quickly is a competitive advantage and should be a focus for all service providers. We have found that the ability to generate and distribute documents quickly is often what clients appreciate most about document automation.

Quality and Improved Workflow
By embedding tutorials, guidance, and other information into the online questionnaire used to solicit information for the document automation tool, firms can help to ensure that each client will benefit from the collective knowledge of the firm. You can refer to our publicly available term sheet generator. We have included tutorials, guidance, and links to market data in the questionnaire.

Although similar benefits can be obtained through the use of annotated forms and other resources, we have found that the convenience associated with directly coupling questions with related guidance within the online questionnaire has increased use and reliance on our information resources. Moreover, because document automation tools typically are based on forms that have been subject to some level of formal review and maintenance, use of document
automation helps to ensure that clients are consistently receiving the benefit of up-to-date resources and forms.

Document automation is also a potential window into more extensive workflow automation. ContractExpress DealBuilder, for example, includes workflow automation capabilities that can extend the efficiencies and controls associated with document automation into the workflow process more generally.

**Education and Training**

The guidance included in an online questionnaire not only benefits clients, but also can serve as an important educational and training tool within a firm or in-house legal department. The ability to organize and crystallize issues in the online questionnaire and to provide associated guidance can furnish learning opportunities that are more targeted and practical than what might be covered in a more general training session and more detailed than what might be gleaned from a form.

The flexibility with which the online questionnaire can be organized can serve to bridge the gap between a discussion of top-level issues of a particular transaction and the more detailed minutia of the documents themselves, providing what otherwise can be difficult to convey in a training session or an annotated form alone. Because of this, we will sometimes use our document automation tools as a framework when we cover related topics in our formal training programs. We have also received requests from law school and business school faculty to use our publicly available document automation tools as part of their curriculum.

**Employee Satisfaction**

By focusing on key decision points and minimizing time that would otherwise be spent on ministerial tasks associated with preparing documents, document automation tools enable employees to focus on the more interesting aspects of their work and can improve employee satisfaction.

**Supporting Knowledge Management**

Document automation can play a key role in promoting the use and improvement of forms and other resource materials. As people become more committed to document automation tools, they have a greater investment in the forms underlying those tools. Following the release of our document automation tools, we have seen a jump in the number of suggestions for improvements to the forms and other resource materials used in our document automation tools.

Document automation can also serve as an alternative, or even the primary, framework for organizing materials. For example, our startup-related tool has more than 20 key documents used in organizing a new company. For some, one of the main benefits of document automation is the ability to quickly access that particular collection of documents at a single location. Document automation also can be used to support other knowledge management-related initiatives such as deal tracking.

**BALANCING BENEFITS AGAINST COSTS**

Although there are a number of benefits to document automation, there can be some uncertainty associated with balancing the costs and benefits of developing document automation tools. Is it something that you want? Or is it something that you need? And how much should you pay for it?

It is important to consider the expected implementation and use of document automation in your particular practice when weighing costs and benefits. Factors to consider include the following:

**What Are the Specific Benefits You Hope to Obtain?**

Of the potential benefits, which are most applicable to your practice?
How Important Are Those Benefits to Your Clients and Your Organization?
Assess the degree to which those benefits can have meaningful benefits for your clients and a positive effect on your organization. For our clients, speed and efficiency gains were most important.

How Often Do You Expect Document Automation to Be Used?
Increased usage translates to an across-the-board increase in the various potential benefits.

How Many Documents Do You Expect to Automate?
If you are able to automate more documents, you can more effectively divide the fixed costs associated with any software license, training, required information technology resources, etc.

To What Degree Are Your Forms Susceptible to Efficiency Benefits?
It is important to look at the potential leverage associated with your forms. If you automate a form that requires the end user to answer three questions that correspond to three blanks in a form, document automation will be helpful but may not be worth the cost.

Is It Possible to Quantify or Otherwise Measure Benefits for Your Organization?
For a law firm, quantifying benefits can be difficult. The benefits in many areas, such as improved quality, education and training and employee satisfaction, are not easily measured, whereas potential time savings is. Firms also may benefit by redeploying the personnel resources freed by the efficiencies of document automation to new projects.

Although it may not be practicable to develop a measure for all potential benefits, one approach might be to at least build a model that might capture benefits associated with improved realization rates and the redeployment of resources to other opportunities. It is certainly possible that the breakdown may not be favorable if there is already excess capacity within the firm. However, where certain matters or practices have consistently lower realization rates, there may be significant benefits associated with minimizing the time required for those matters or practices and redeploying resources to areas where there is higher demand, higher margins, or higher expected collection rates.

How Much Will It Cost?
A key consideration in determining your expected cost is whether you will be licensing document automation development software, because the associated cost can be significant. Licensing arrangements are likely to be relatively straightforward for internal use but more complex to negotiate for third-party use. Remember that there are a number of other costs associated with document automation; the license for the development tool is just the starting point. There are potentially significant direct and imputed costs associated with developing and maintaining the underlying forms, automating the forms, providing technical support, etc., which are addressed in more detail in the following paragraphs.

Do You Already Have Documents That Can Form the Basis of Document Automation Tools?
An important threshold question is whether you have forms that can be used as the basis for a document automation template. If not, you should carefully assess your capacity to develop forms expeditiously that will be well accepted across your organization. More specifically, you should look at:
• Whether the subject-matter experts have the time and motivation to create forms
• The expected time frame within which those forms can be finalized
• Whether you can succeed in getting organizational buy-in to use those forms
None of these should be underestimated as potential problem areas.

Do You Have the Personnel to Support Document Automation?
Although your personnel requirements will vary somewhat with the expected breadth and complexity of your document automation tools, document automation requires a significant
investment of time by subject-matter experts on the underlying forms, developers who apply automation codes to the forms, and information technology experts who assist with installation, maintenance, quality assurance, support, and testing. You may be able to handle document automation projects by reallocating the time of existing personnel in the relevant departments. But you may find that you will need to reallocate personnel within the organization or possibly even hire new personnel.

Among other things, do not underestimate the resources required for quality assurance. A complex automation project, particularly with branched or nested logic, can involve thousands of permutations that will need to be checked. Moreover, with changes in the law or market practice, forms can change often, which can necessitate continuing involvement of substantive experts, developers, and information technology personnel. Continuous updates to the underlying development software can also require continuing attention by information technology personnel and can trigger frequent quality-assurance checks.

To What Degree Do You Expect Adoption of the Tools, and What Is the Projected Rate of Adoption?
Building a useful tool does not guarantee adoption. You should consider the culture within your organization with respect to adoption of new technologies and processes. The existence of internal champions can significantly facilitate adoption of the tools. Consider your organization’s internal communications and marketing capabilities and the ability to tie document automation training to formal education programs, whether specifically targeted to document automation or as a part of training on the substantive area of law to which the document automation tool will relate. The expected rate of adoption is important in assessing whether it is worthwhile to make the investment now.

To What Degree Will You Be Able to Track Usage to Assess Any Benefits of Document Automation?
It is important to have the ability to track and analyze usage to assess ongoing investment in document automation resources and the need for internal marketing efforts.

CONCLUSION

While document automation has been beneficial for our firm, we recognize that not all firms or legal departments may be in a similar situation at the present time. It is important to be practical in your approach. You should be careful about the precise timing and your readiness to engage in document automation, and you should assess the value proposition carefully for your clients and your organization.

If you are on the fence, however, consider that advances in document automation technology and trends in the legal market tilt toward adoption. We feel that document automation will eventually become a routine and integral part of legal practice. Although it might not have the same initial adoption rate as technologies associated with word processing, document comparison tools, document management tools, email, and Web conferencing, we feel that it will assume a similar level of significance over time.

Sources:
Wilson Sonsini Goodrich & Rosati’s term sheet generator
The consumerization of technology is pushing law firm IT professionals to embrace new tools at a time when security risks are rising. Nevertheless, the opportunities for enhanced efficiency and improved client service require a fresh look at these challenges.

For more than 20 years, law firms have provided technology to their personnel to support their business requirements. Everybody received the same devices, resulting in standards across the enterprise. As technology use increases in our private lives, we want to access both professional and personal information using the same devices. Our expectations have changed.

The immediate management challenge is to protect the firm's business interests while supporting the lifestyle of its personnel. In the long run, however, the consumerization of technology presents an unprecedented opportunity for law firms to leverage the energy of their lawyers to achieve greater efficiency and enhanced client service.

Standardizing the business technology used within a law firm delivers many benefits. These include strong security, increased availability, ease in delivering new capabilities, and reduced support costs. This approach served law firms well as computer technology was introduced in the 1980s.

The first sign of disruptive change was the growth of the World Wide Web in the mid-1990s. Prior to the Web, technology was seen as an internal resource, limited within the confines of a given company. After the Web and the widespread adoption of electronic mail, people started to think of technology as a means to reach beyond corporate borders. People began to use the Internet for personal reasons, such as shopping, reading, and entertainment. Search became a commonly used tool. It was simple to use with no training required. The results were often spectacular and surprisingly helpful.

The second significant disruptive change was the introduction of the smartphone. RIM’s BlackBerry® was the dominant business smartphone after its introduction in 2003. With Apple’s launch of the iPhone® in early 2007, consumers started to embrace smartphones. The touch screen, applications (referred to as “apps”), and intuitive ease of use sent sales soaring. Google’s
Android™ phones and Microsoft’s Windows Phones have continued to fuel consumer adoption of the smartphone.

The third disruptive technology was Apple’s iPad® in April 2010. The iPad’s brilliant screen, multitouch surface, and once again, ease of use have resulted in breathtakingly fast consumer adoption. Over 30 million iPads have been sold in less than a year and a half. Competitors are flocking to the market to take away some of Apple’s momentum. Google’s Android tablets, Amazon’s Kindle™ Fire, and the impending Microsoft Windows 8 with tablet functionality are all focused on the consumer market.

Large technology manufacturers clearly see the consumer as their primary target market. Products are relatively inexpensive, easy to use, and adaptable to new functions. Consumers expect their technology products to be good enough to serve their needs. Few are willing to pay high prices for top-of-the-line products and services. MP3 files reduce audio quality when compared with analog recordings. Digital photographs are also seen as good enough for most consumers as compared with the higher-quality images delivered by film technology.

Traditional law firm technology possesses few of the traits that make consumer technology popular. The following table summarizes the features found in technology of both worlds.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Law Firm Technology</th>
<th>Consumer Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>High</td>
<td>Good Enough</td>
</tr>
<tr>
<td>Security</td>
<td>High</td>
<td>Low – Privacy Issues</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>Moderate to Hard</td>
<td>Easy</td>
</tr>
<tr>
<td>Training</td>
<td>Moderate to High</td>
<td>None – “Self-Evident”</td>
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<tr>
<td>Cost</td>
<td>Moderate to High</td>
<td>Low</td>
</tr>
<tr>
<td>Adoption</td>
<td>Varies</td>
<td>High</td>
</tr>
<tr>
<td>Integration</td>
<td>High</td>
<td>Low – Apps</td>
</tr>
<tr>
<td>Sharing/Collaboration</td>
<td>Moderate to Low</td>
<td>High</td>
</tr>
<tr>
<td>Service Level</td>
<td>High Touch</td>
<td>Low – Self-Service</td>
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<tr>
<td>Enthusiasm</td>
<td>Mediocre</td>
<td>High</td>
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<tr>
<td>Search</td>
<td>Complex</td>
<td>Simple</td>
</tr>
<tr>
<td>Interface</td>
<td>Keyboard and Mouse</td>
<td>Touch Screen</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Debatable</td>
<td>Debatable</td>
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<tr>
<td>Providers</td>
<td>Few Large, Many Small</td>
<td>Many Large, Few Small</td>
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Quality and security remain the primary distinctions found in law firm technology. Legal work product must maintain the highest quality standards. Few compromises are acceptable, as many legal service providers operate in a highly competitive marketplace. Clients expect there will be
no mistakes with the high fees they pay. Protecting client confidentiality is essential to the delivery of legal services. Law firms are spending an increasing amount of time focused on security as threats continue to grow around the world.

Many consumer-focused technologies do not value either quality or security. Dropbox is a service that allows the storage and sharing of files on the Internet. It is device-independent, meaning that it works on Web browsers, smartphones, and tablets. Dropbox is free or low cost and easy to learn and use. It provides limited security functionality, and its user agreement absolves Dropbox of any breaches. In consumer terms, it's good enough.

As the service grows in popularity, clients who use Dropbox within their organization are beginning to ask lawyers to share documents on Dropbox. It is difficult for a lawyer to refuse a client’s request. Even if the law firm can provide a secure extranet to the client for free, the client may be more comfortable using a familiar technology.

Law firms are struggling to respond to this challenge. Some block access to Dropbox from their networks. Others place a policy ban on its use. A number of firms have policies requiring lawyers to get a client to provide a disclaimer absolving the law firm of damages should their confidential material be compromised on Dropbox. No consensus has developed on how to deal with this security challenge.

Lawyers have used search technology for more than 30 years. Online legal research grew quickly once it was introduced, despite its complex taxonomy and interface. Today many law firms present a wide array of search technologies to their users. There can be different search engines delivered not only by third-party online services, but also internally in disparate systems that manage documents, email, records, client relationships, personnel, policies, and more. Few lawyers know how to use all the search tools available to them. The result can be frustration and a lack of use of the expensive resources they have developed.

In contrast, consumers rely on one engine for all of their search needs. Whether they use Google®, Bing, Yahoo, or another service, search is simple and free. Search is a seemingly magical tool that almost always delivers exactly what one wants. It is good enough. Consumers develop high expectations for search. Few law firms can deliver on these expectations to their users.

Multi-office law firms build redundant wide-area networks to connect all their outposts. They invest significant resources in devices, personnel and policies to deliver strong security on these networks to protect confidential client data. Law firm IT teams live in fear of an embarrassing security breach.

Consumer technology provides lower security standards. At times it is purposely designed to skirt corporate security measures so users can access services while at work. Instant messaging has long posed a threat to law firm security, since data can be transferred through its interface. Video to the desktop from Skype and other services also provides a means to transfer data. Once again, these services are inexpensive, device-independent, and easy to use. When clients say they want to talk to a lawyer on Skype, the lawyer says “yes,” and the IT department groans.

When technology was first introduced in law firms, everyone in the firm received training. Many hours or days were devoted to learning how to make best use of the new tools. The software was complex, feature-rich, tightly integrated between applications, and expensive. The investment in training was necessary to ensure a return on the technology investment.

Today’s consumer technology is not nearly as complex. App software delivers tools that typically have a limited set of functions. If they require any training (and most do not), it is provided in short YouTube videos or brief instructions that look like comic books. Most apps cost less than $10.
They do not work in conjunction with each other, so you cannot transfer data between apps. Yet consumers think the compromises are good enough.

Collaboration and sharing long have been challenges in the law firm business. Lawyers may not be given economic incentives to share work product and client information with their peers. While most law firms claim to have collegial cultures, few achieve this goal. In contrast, consumer technologies such as Facebook® and Twitter® are focused on sharing information with peers. They have become alternative means of communicating with both friends and business associates.

All these contrasts create a new set of expectations as law firm personnel bring their generally positive consumer technology experiences to the workplace. They want device independence, little to no training, one search engine, simple interfaces, high ease of use, and a straightforward means to share information. These expectations can present challenges to law firm IT teams.

On the other hand, users are also more willing to help themselves, accept some lower quality standards, and lower levels of integration. Most significantly, for the first time in law firm technology history, users are willing to make a personal investment in money and time to embrace these new technologies. This represents a significant shift in the relationship between IT and users.

We are entering a new era of learning and experimentation as we struggle to maintain our traditional standards and best practices. The legislative and judicial branches are behind the technology curve, providing little guidance or protection as businesses adopt cloud and tablet computing. Different standards are emerging among jurisdictions.

IT is challenged to develop the means to leverage this energy and enthusiasm for technology for the benefit of the business. Some early adopters are embracing device independence by delivering virtual desktops to whatever device a lawyer wants. This helps maintain standards while providing choice. A few have provided their lawyers with tablets and a limited set of apps for document reading and editing. Other firms are developing extensive libraries of short videos to deliver just-in-time training to their personnel.

There are many untouched opportunities for law firms to embrace the consumerization trend. There are few tablet or smartphone apps designed specifically for the practice of law. Even the few available do not leverage the touch-screen feature. The medical profession has developed apps that embrace the tablet and provide new levels of efficiency to the profession.

Many consumer apps are designed to make technology an enjoyable experience. They introduce an element of gaming to routine tasks that builds enthusiasm for the tasks. Gamification is the term applied to this new wave in software development.

Legal technology might leap into a new era of adoption and efficiency if it became fun. For example, a time-entry program could provide psychic or monetary rewards for time entered soon after the work was performed and in an accurate manner. Document management systems could track the frequency and accuracy of emails filed in the system and then reward those who perform this task well. It may be difficult to turn business challenges into games, but the benefits may be worth the effort.

In time law firms will undoubtedly grow more comfortable with the consumerization of IT. Many of us remember the fears that we had when faxing and email were new. Those firms that embrace the trend most effectively may find themselves with a competitive advantage in delivering client service and attracting the best talent.

Sources:
Dropbox
http://www.dropbox.com
HTML5 is a technology that promises to bring new features that will change how we interact with the Internet. It will also redefine how we use our computers. This article outlines and summarizes these new features and their benefits.

Would you be interested in buying a new technology that offers the following features?

- Improves your Internet experience
- Uses less power on your portable device (longer battery life)
- Lets you work offline with Web-based applications (like Google Docs)
- Allows you to transfer files by dragging and dropping them onto a Web page (no more emailing of files)

Not convinced? What if the deal gets sweeter? What if:

- It costs nothing
- You already own it
- You know how to use it
- It's already installed
- It has a bright orange logo

This sounds like an impossible technology that hails from the halcyon dot.com days of P.T. Barnum-like promises. It is all true, available now, and called HTML5. HTML5 is the latest version of the language that drives the Internet.

Unless you've been living under a rock for the last 15 years, you have used a Web browser. All Web browsers read text that has been formatted using markup tags called HTML (hypertext markup language). As the Internet has gone from just showing us text pages to multimedia streaming entertainment, Web browsers have had to change. Or more correctly, the underlying HTML has had to become more sophisticated and accommodating.

HTML5 has its roots in the dot.com era. Back in 1997, HTML was standardized at Version 4 to help minimize chaos and competing standards. It has been updated and augmented over the last 14 years, but still, given the frenetic pace of the Internet, that is a very, very long time to wait for the next full version of HTML.
HTML5 is expected to provide support for the latest multimedia standards and provide new improved features. It will subsume previous versions of HTML as well as several other variations like XHTML1 and JavaScript.

HTML5, also known as Web Application 1.0, is an open standard that will compete with Web application technologies such as Adobe® Flash® or Microsoft Silverlight®. These applications allow graphic manipulation and multimedia files to be easily distributed. Today most online video is easily available because of Web browser plug-ins like Flash or Silverlight (e.g., YouTube, Vimeo).

Today’s Web browser plug-ins are so easily installed and well integrated with your browser that you may not even be aware that you are using one. These plug-ins also place a heavier load on your computer’s processing power. HTML5 renders the need for these processor-intensive add-ons unnecessary.

FEATURES

Where Am I?
Geolocation is the ability to locate where you are in the world and then do something with that information. Good examples of this abound on most smartphones. Google Maps™ can locate you and give you directions, or Yelp can find your location and make restaurant recommendations. HTML5 brings this feature to the Web browser. GPS (global positioning systems) determine your latitude and longitude from information sent by satellites in space. As this hardware gets smaller and more ubiquitous, this HTML5 feature holds great promise.

Working Offline
This feature provides the ability to store information for Web-based apps right on your computer, thus allowing you to work offline. An offline Web application seems like a contradiction in terms, but armed with a Web app enabled with this feature, you will be able to download what you need when you’re online and take it with you on the road. For example, you will be able to save a document in Google Docs and choose to take it offline to work. The next time you connect to Google Docs, these changes will be automatically synchronized and available.

Drag and Drop
HTML5 also adds the new ability to drag and drop content. A good example would be adding an attachment to a message in a Web-based email application. Instead of a cumbersome series of dialog boxes asking what file you want to attach, you can simply drag the document from the local machine and drop it into the mail message. This feature allows Web apps to more closely mimic “drag and drop” functionality found in desktop applications like Outlook®.

Bigger and Better Than Cookies (local storage)
Cookies are the curse and blessing of today’s Web browsers. They allow website owners to track data from any Web browser, like usernames or what product we last browsed, so the next time you visit a website this information can be called up. It can also be transmitted to a remote Web server and used either benignly or malignantly by the recipient. Hence, the big problem with cookies as local storage: They aren’t terribly secure and they don’t hold much data (about 4K).

HTML5 has a new feature called local storage. Much like cookies, it allows data to be stored locally, but unlike cookies, this data is never sent to the Web and greatly expands the amount of information that can be stored. This not only provides better security, but it also means much more information can be locally and securely stored and recalled to improve your Web browsing experience.

An Open Canvas
While prior versions of HTML4 supported only pictures and text, HTML5 provides a canvas for drawing graphics. A canvas is a rectangle in your page where you can use JavaScript to draw anything you want. This resolution-dependent bitmap canvas can be used for rendering images, charts, graphs, full-motion graphics, or other images on the fly. Again, this feature replaces the need to load a plug-in like Flash to display a map or other image.

OTHER BENEFITS

You've Already Upgraded
When you want to browse a website that draws upon HTML5’s new features, you’ll find that HTML5 is already supported. Firefox®, Opera™, Safari®, and Google Chrome™ support some features such as canvas, video, geolocation, and local storage. Each new Web browser upgrade adds more features. For example Microsoft is planning to support most HTML5 features in version 9 of Internet Explorer®.

It's Available Now
Some major websites are working with HTML5 and making their experiments publicly available. YouTube is testing HTML5’s video features. Another example is Google, which has already started working with parts of HTML5 (offline storage and drag and drop) and has made them part of Google Docs, Google Calendar, and Gmail.

Another sure sign that HTML5 is being used is when a website says it is “iPad friendly.” The iPad Safari browser makes extensive use of HTML5. Examples of such websites include The New York Times, CNN, ABC, NBC, CBS, and more.

Compatibility
The best feature is compatibility. HTML5 builds on the success of HTML4. Existing Web pages will continue to work alongside newer HTM5-enabled content. It is an additive technology that enhances and expands HTML4 and won’t break older Web browsers.

WHERE IS IT ALL GOING?

HTML5 isn’t done; it is still a work in progress. But because it has many exciting and advantageous features, expect to see vendors and website owners implement large parts of HTML5 before the whole specification reaches its final stage sometime after 2012.

The biggest improvements will be for mobile attorneys using laptops, tablets, or smartphones. The ability to use Web-based applications offline, geolocate, and store data locally will improve how mobile users work. Implementing HTML5 features in apps such as Gmail or other popular Web-based applications will be the key to these apps competing against desktop apps such as Microsoft Outlook.

HTML5 brings new features that will change how we interact with the Internet. It is not just another meaningless technical acronym but a critical component that will heavily influence the future of the Internet and how we will use computers.

Sources:

Further examples of HTML5 features can be found at:

http://html5demos.com/


http://canvaspaint.org/ (must use Firefox to download site)
The key to successful early case assessment is the early part. Unfortunately, there is still a great deal of focus on ways to limit the data collection by reducing the number of custodians and data stores tapped for potentially responsive documents. Another unproductive trend is skipping the very important data mapping step and email culling at the client site, using search terms and searching techniques that are not comprehensive, agreed upon, or fully understood.

More importantly, it’s critical to have an adequate understanding of the IT infrastructure and storage habits of the custodian population, through witness interviews. Cost constraints mandated by clients, alongside shortened litigation life cycles, have led to an abbreviation of the first phase of the EDRM (Electronic Discovery Reference Model) life cycle, the very critical step of early case assessment.

Failure to perform these initial steps often results in a less-than-comprehensive production. Because these production gaps are often not identified until after the documents have been collected, culled, processed, and partially reviewed, a secondary collection is sometimes required. Dipping into the client well a second time is not just an annoyance to the client, but it also increases the risk of data loss and/or spoliation. This could occur when data from new sources discovered late in the game were not included in the initial preservations and additional custodians may have departed the company. It also results in the dreaded downstream costs that are neither anticipated nor budgeted. Supplemental collections and productions should be avoided whenever possible.

All of these issues have spurred technology vendors to create not only new approaches to data collection and culling, but also to spawn a whole new industry around the use of data analytics. Data analytics is marketed as a way to miraculously streamline and reduce the number of human
hours required to plow through a document review. While there are many interesting and exciting software tools available at this time, bear in mind that the use of data analytics is not an isolated approach to discovery management and should not be relegated to the end of the discovery life cycle. There is also no definitive standard at this time regarding the use of these analytics.

It is safe to say that the human element is, and will continue to be, the most important element in reducing data volumes. Data analytics is just one step in the process, alongside a solid early case assessment strategy, and it requires sufficient planning and engagement of both the technical and legal teams to succeed.

Data analytics is the science of examining data with the purpose of drawing conclusions about that information. This examination is through the disciplined analysis of iterative search terms and their responsiveness rates. The result should yield more precision, repeatable methodology, and increased defensibility. Still, it is an iterative approach and requires forethought, strategy, and a team dedicated to “training” the software and building the relevancy ranking within the document population.

Many tools such as Attenex, Clearwell, Ringtail, EViews, Recommind, Equivio, and Relativity offer both conceptual analytics that build on relevancy rankings and use bulk tagging to help whittle the population of documents requiring review by human eyes. As well, these software options offer more traditional document clustering and categorization based on document properties, such as date and author, to also allow for group tagging of like documents. Universal elements for all of these applications are the ability to create a conversation index through email threading and to flag near-duplicate documents based on various percentages of precision desired by the case teams.

Technology-assisted review is definitely in its infancy. But it is only going to grow as the scope of discovery demands expand and as opposing parties and the courts demand more substantial documentation for any documents eliminated from production. Relevancy rating and sampling techniques must be objective, repeatable, and documented. However, none of these tools reduces the need to analyze the data sources, document types, and document custodians or to outline the proper scope of production through the meet-and-confer process.

In fact, these tools make the meet-and-confer process and cooperation between opposing parties even more critical. They emphasize the idea that data analytics is not a static process, nor something to be found at any fixed position on the EDRM life cycle, but rather throughout the EDRM life cycle, with significant benefit to the shifting of this effort toward the early case assessment phase.

Good things come to those who do not wait!