

# DATA-DRIVEN LEGAL SERVICES

NEW ROLES FOR INFORMATION  
PROFESSIONALS TO MAKE  
LAW FIRMS MORE COMPETITIVE

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## How artificial intelligence and data-driven analytics tools are helping firms gain and keep new clients.

**T**he first wave of artificial intelligence (AI) and data analytics applications is being adopted in law firms, from supervised learning systems for discovery to contract review and legal research applications. Just beyond the horizon, however, a second wave of AI applications is being built—apps that are being built by law firms, rather than software companies.

This “maker movement” in law firms is just getting started, but it is not too early to canvas some of these applications. They may show where data analytics and AI are headed in law firms and presage some of the new legal services that law firms will offer in the near future. Although there is no cause for breathless claims of robot lawyers coming to take our jobs, the last few years have seen interesting new software applications that augment traditional, human lawyering.

Most interesting of all, these new applications are not being built by data scientists—they are being created by information professionals from across the spectrum at law firms, and much of the best work is being done by law library professionals.

### **The Next Generation of Legal Services**

Clients bring some of their most important and challenging issues to law firms, and many of their questions concern data. Questions about market prices or contract terms ask about data. Many questions of litigation strategy, such as where to file or how much to offer in a settlement, are informed using data analytics and the underlying data from past cases.

Law firms are giant warehouses of this kind of data, from billing systems

to contracts to document management systems. Law firms are repeat players in legal services, representing diverse clients across many different industry types, but most law firms remain ill-equipped to answer clients’ data-driven questions with data-driven legal services and solutions.

This AI and analytics maker movement, especially in the knowledge management and law library centers in law firms, can create new, data-driven legal services to answer these kinds of questions. This movement also holds the promise of services that proactively help clients avoid risk, which is more valuable to clients than litigating after the fact. New, data-based legal services may also increase the size of the legal market and help firms win new clients.

Firms that can automate some of the most time-consuming tasks of providing legal services can also provide the services at lower cost and help many more clients, including those without the means to comfortably hire a lawyer; but who nevertheless do not qualify for assistance from legal aid. Rebecca Sandefur’s now-famous 2014 study showed that some 80 percent of people with legal problems don’t address them with the help of a law firm.

By and large, people who handle legal matters themselves fare less well than people who have the benefit of counsel. This means that the vast majority of people with a legal problem are disadvantaged because they do not or cannot avail themselves of legal counsel, which suggests that there is a latent market for legal services.

The hope of access-to-justice advocates is that law firms can use AI, data analytics, and automation to deliver newer and better legal services at lower prices to more people. But AI is not just a way to reach this latent market.

Corporate clients are demanding that law firms become more sophisticated about understanding their own costs. In 2017, Microsoft announced that it was shifting away from paying hourly rates for its outside counsel. As a result, more law firms are now using AI and data analytics to better understand their own costs, thereby allowing corporate clients to forecast more accurate legal budgets in advance. Corporations budget years in advance for all kinds of expenses, even variable ones, for all kinds of spending, with the notable exception of legal spending. Law firms that use AI, data analytics, and automation to better understand and control their costs will be more competitive and better positioned to win work from clients who need to budget their legal expenses the same way they budget their other expenses.

Equally important to clients, when law firms bid fixed fees on their engagements, those firms become highly incentivized to work more efficiently. Law firms still have a long way to go to understand staffing and efficiency, but new tools are helping them to understand their costs. For example, Digitory Legal uses AI to understand past bills to help law firms create accurate litigation budgets, a task that was previously considered impractical.

### **How Law Firms Use AI, Automation, and Analytics**

Law firms that use AI built into a third-party tool, or analytics reports from legal research services, can leverage important new insights for the benefit of clients. Using third-party tools offers advantages over using no tools at all. Indeed, reporting analytics and AI tools should be the new floor. In the near future, law firms that do not use AI or analytics tools will scarcely be able to compete for new business.

This is hardly groundbreaking; lawyers have been using AI in their practices for years. Every time Microsoft Word autocorrects a spelling error, it's using AI. Smart speakers such as Amazon's Alexa or Apple's Siri use speech recognition and smart algorithms. Software that converts PDFs to text uses optical character recognition in a way that now seems

routine. Computer scientists often muse about artificial intelligence that "once it works, we stop calling it AI."

That may be why lawyers look past the AI tools they use in practice. Electronic discovery (or technology-assisted review) that uses supervised learning now yields higher accuracy and recall than that of human reviewers. Lawyers also use third-party tools such as RAVN from iManage to categorize and summarize documents or LawGeex to ensure the consistency of contracts.

The ceiling for legal work will be defined by the custom tools that law firms are just starting to build. Take as an example the knowledge management systems that larger firms have built over the last 10 years. These systems were designed to collect and leverage the combined wisdom of firm lawyers over many years, thereby providing noncommodity insights for future legal matters. Similarly, the AI tools of the next few years will leverage the private data of law firms to create unique insights unattainable by other law firms because they will be generated from the collective experience of lawyers and their work product from a particular firm. AI is the accelerator of increasing a firm's competitive advantage, and the power of this capability should not be underestimated.

By building its data analytic solutions and chatbot technology from the ground up, BakerHostetler is one such firm driving this change. The firm places a strategy called Augmented Legal Practice at the heart of its innovation strategy, employing AI, automation, and cognitive services as a way to optimize processes to meet the demands of corporate clients.

Law firms leverage technology and new services to differentiate themselves in the marketplace. One key observation is that some firms have created dedicated teams to focus on innovation. Governance levels of these teams range from informal to formal. Those with the most support and direction from upper management tend to have the largest advancements and greatest sophistication.

Dentons, a large law firm, created its own legal innovation lab, NextLaw Labs. It has invested in start-ups from Canada, the United Kingdom, the United States, and South Africa. BakerHostetler created IncuBaker to engage their attorneys and clients with developing technologies such as blockchain, AI, and data analytics. Law firms are even creating and marketing their own software. U.K. law firm Taylor Vinters incubated and launched ThoughtRiver, an AI-based contract management tool.

### **The Maker Movement In Law Firms**

Law firms are becoming laboratories of experimentation in AI tools, spawning a generation of "makers" in the legal services industry. Law firms are using AI to dig deep into their matter histories to understand the resources required to handle different kinds of client matters. Clients are increasingly requesting fixed-fee engagements or alternative fee agreements from law firms. But if those firms do not understand their costs, a fixed-fee engagement poses a serious risk of cost overruns borne by the firm.

So instead of hand coding and curating past bills, firms are using AI to understand the range and distribution of costs, computing the mean and median costs for similar matters and looking for facts that create outlier conditions. Understanding costs mitigates risk for clients and for law firms, and it can help those firms be more competitive when seeking new business.

Similarly, law firms are looking at litigation analytics more than ever to determine litigation strategy—in no small part because the tools are better. Tools from the recently launched Lexis Analytics and from Docket Alarm give users a much deeper look than ever before into the strategies, judges, and law firms that help firms understand litigation outcomes. Formerly the domain of federal courts only, these tools are now expanding into state courts as well.

Markets may drive this trend toward a deeper understanding of legal analytics. Clients need better information to make strategic decisions about litigation, and they are becoming increasingly

sophisticated about pricing risk. In addition, litigation financing companies will have hundreds of millions of dollars at stake, so they will demand that firms use analytics to understand the risks at trial.

Expert witnesses have similarly been a mystery to many litigators for years; understanding the strengths or weaknesses of different experts, or their challenge histories, is a difficulty that faces firms large and small. Litigators are now using AI tools such as Fastcase's AI Sandbox to combine their own experience with those of expert witnesses, then factoring in expert witness data from Courtroom Insight, to create their own custom dossiers for expert witnesses.

### New Tools and New Legal Services

How is it possible for law firms, long reputed to be technological laggards, to build their own tools for pricing risk or driving litigation strategy? The trend is powered by several of the same forces that have more generally driven the advance of AI.

First, there is now more legal data than ever to train machines. Law firms have vast document repositories, and legal research databases are less expensive than ever before. There is more information available from email and the internet generally for firms to use.

Second, processors continue to scale according to Moore's Law, doubling in processing power and halving in size and cost every two years. Computing power is now a commodity, and law firms can more easily use cloud computing platforms such as Amazon Web Services, Microsoft Azure, or Google Cloud to massively process data at scale.

Third, the AI tools are better and easier to use now. We think of IBM Watson as a monolith that beat Ken Jennings and Brad Rutter at *Jeopardy!*, but Watson is more properly a collection of discrete pieces of software, or application programming interfaces, that accomplish specific tasks. Today you can use more than 60 of IBM's Watson Cloud Developer application programming interfaces—and get started with many of them for free. Instead of the

six-figure price tag for the AI of old, Watson application programming interfaces now cost fractions of a penny per call. (But be careful, those penny fractions can add up!)

Lastly, there is more open-source AI software than ever before. TensorFlow from Google is perhaps the best known in this genre of open-source AI software. But last year LexPredict released the first open-sourced AI tool specifically for lawyers, ContraxSuite. The ContraxSuite platform can be used to analyze documents, extract and organize information, and visualize the data for clearer understanding.

### An AI Future for Law?

Will law firms adopt AI? Remember that 25 short years ago, people were seriously asking whether lawyers would ever use the internet. We are just at the leading edge of the AI revolution in law, but we are not waiting for it to begin. Law firms are already using AI tools, and now they are using AI to build new tools for themselves. *This is not a revolution for the next generation: it's an important opportunity for ours.*

Perhaps it is easiest to think about what will happen if firms don't use AI. For one thing, their peer firms are already starting to use AI, and that literacy makes those firms more competitive for client business. Firms that do not learn to use these tools will become less competitive.

If their law firms do not use AI to deliver legal services, corporate legal departments will take more of the legal analysis work in-house. In 2016, corporate legal departments brought in-house \$4 billion worth of work from outside counsel. Corporate clients—under intense internal pressure to reduce the overall costs of legal services—are taking control of their matters and managing the work of their outside law firms to a degree never before seen. As client sophistication grows, law firms must question exactly where their role fits into the landscape of the legal industry. Firms that can adjust service, pricing, legal work processes, talent management, and overall structure will enjoy an enormous competitive advantage.

Clients value firms that vigilantly understand their needs. Firms must keep up with their clients' changing strategic visions.

Law firms have a great opportunity working with the next generation of data analytics tools and AI. They can reach latent markets for legal assistance, develop new and deeper insights for sophisticated corporate clients, and gain a differentiated strategic advantage over trailing firms. The market is ripe for firms to drive innovation and transform delivery of legal services. It is a formative time for attorneys and law library professionals to explore solutions together. ■

Research + Analytics

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### AALL2go EXTRA

Listen to the 2018 AALL Annual Meeting program "Powered by AI, Built in the Law Library," at [bit.ly/AM18Allaw](http://bit.ly/AM18Allaw).

### READ

Ed Walters and Morgan Wright's article "Putting Artificial Intelligence to Work in Law Firms," from the September/October 2018 issue of *AALL Spectrum* at [bit.ly/SO18Walters](http://bit.ly/SO18Walters).



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