



Artificial intelligence, or AI, is the next frontier that will revolutionize the way we work in the coming years. The practice of law is no exception.

But questions abound. Will the increase in AI applications reduce the need for lawyers? What will graduating lawyers do if computers take over entry-level jobs? Can your firm afford AI technology and the knowledgeable workforce required to make use of it?

The truth is that AI is poised to pave the way for systemic improvements in how we practice law, and it can do the same for your legal practice. AI applications have the potential to make your firm better in three primary ways: giving you better results, for better clients, from better lawyers.

Does this sound too good to be true? Let us start by looking at what AI is and what it is not. We will then turn to how it can forge improvements in your practice.

WHAT IS AI?

AI is a broadly defined term that encompasses a range of technologies. Generally speaking, it refers to computer systems and software that can carry out complex tasks: those that previously required human intelligence to do. These tasks include recognizing spoken and written language, translating languages, perceiving the environment (both visually and otherwise), synthesizing information, and making decisions based on inputs.

Although we colloquially refer to many non-AI devices as smart, much of what seems like smart technology is not. Smartphones, for example, are connected to the internet and make our lives easier in many ways, but they do not use actual AI to do so. Most of what our smart devices can do is, in fact, done through a simple internet connection and automation of tasks. With automation, a computer is programmed with a series of rules that it can then apply quickly and accurately, as in spreadsheet formulas, or automatic formatting of documents. Similarly, ad-targeting and product-suggestion applications are generally automated systems. While they can be frighteningly accurate, these suggestions are rule-based, not thought-based.

On the other hand, several well-known AI applications are already in the public sphere. These include chess-playing computers, self-driving cars, and speech-recognition software. These generally use machine learning: the system is taught basic rules, and then allowed to analyze numerous examples, literally learning through feedback as it goes. The more—and the more varied—examples that the computer can analyze, the faster and better it learns. Even where we have not yet fully embraced AI solutions, we are inching closer every year. For instance, self-driving cars are not yet commercially available, but many cars are capable of parking themselves by using cameras and proximity sensors to avoid mistakes while following a simple automated script about how to maneuver into a space.

Note that most AI applications available today use what is called weak or narrow AI: they are designed only for a single, specific application. These systems cannot think outside of the context for which they are designed. A self-driving car may drive better than any human, but it still cannot tell you where you should go. Strong AI, or true machine thinking, is still in development. Due to the astonishing complexity of the human brain, figuring out how to build

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machines with the ability to truly think has lagged behind designing solutions for specific problems.

So, if your computer cannot yet think for you, what exactly can AI do for lawyers?

AI FOR LAWYERS

The universe of data is exploding. In 2013, IBM reported that 90% of the data in the world had been created in the previous two years, and data production has continued to increase since then. Untold amounts of that data have the potential to affect legal claims. Lawyers must find a way to sort and assess that data to adequately advise their clients about their rights, obligations, and liabilities.

Sorting data is costly and time-consuming. According to several studies, 70% of the costs of litigation arise from discovery, and 70% of those discovery costs consist of document review. Automation and AI applications can narrow the universe of data that must be reviewed manually, allowing lawyers to focus on the most relevant information, and avoid wasted time. Such applications already exist.

Through iterative machine learning, AI applications are able to learn over time about the relationships between reoccurring words. This means that, with enough input, these programs can recognize the same language or legal concepts, no matter what words are used to express them. Therefore, through predictive coding, technology-assisted review software can identify documents that are similar in concept or topic to the pool of relevant

coded documents provided at the outset. Similarly, contract analysis software learns the language of a set pool of contracts. It can then quickly analyze a new contract to determine whether it is missing key clauses, uses words inconsistently, or varies from a desired standard form.

In considering the future of legal AI, remember that computers excel at pattern recognition and repetitive tasks. This is fortunate in that the tasks that humans find least rewarding—such as the rote completion of forms, contracts, and the tedious detailed searching for errors and inconsistencies—are just what computers do best. For example, AI applications can already do these mundane jobs:

- evaluate and even generate standard contracts
- search for words or concepts for discovery responses
- search for data patterns that may indicate risks or threats
- research similar fact patterns in case law
- identify persuasive arguments before a specific court or judge and predict outcomes

Having computers perform these tasks avoids delays. AI also increases consistency, particularly in documents such as contracts, and allows variations to be eliminated or flagged for individual attorney consideration. Consistent documents allow for consistent management of obligations and expectations, increasing confidence in the results, and saving time.

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¹ David Selinger, *Big Data: Getting Ready for the 2013 Big Bang*, FORBES, Jan. 15, 2013, <https://www.forbes.com/sites/ciocentral/2013/01/15/big-data-getready-for-the-2013-bigbang/#d402f6a38c55>.

² ABA Section of Litigation Member Survey on Civil Practice: Full Report, Dec. 11, 2009, https://www.americanbar.org/content/dam/aba/migrated/litigation/survey/docs/report_aba_report_authcheckdam.pdf; Nicholas M. Pace and Laura Zakaras, *Where the Money Goes: Understanding Litigant Expenditures for Producing Electronic Discovery*, 2012, p. xvi, available at http://www.rand.org/content/dam/rand/pubs/monographs/2012/RAND_MG1208.pdf.

In short, the market will adapt to AI regardless of whether your firm does. To be on the leading edge, consider how AI solutions can help your firm create better results, work with better clients, and employ better lawyers.



Note that, at least for now, AI solutions produce a starting point, not a finished product. Ethical, responsible firms employing this technology will still use qualified lawyers to review the results provided by the computer.

But this is just the beginning. In the future, computers using AI will probably be able to completely handle tasks such as:

- assessing risk based on patterns of data and tracked behaviors
- drafting contracts, briefs, and outlining legal arguments based on case law
- predicting litigation outcomes based on an analysis of the facts and available arguments as applied to the case law of a jurisdiction

The advantages to AI will only accumulate as the marketplace adapts to its use. AI applications will increase the speed and responsiveness of research, document analysis, and the accuracy of outcome predictions. As they do, clients will expect more customized results, and will not tolerate excessive spending on repetitive tasks that computers could do better and faster. Similarly, junior attorneys and millennial associates will no longer be satisfied doing routine work that they know could be better done by machines. Retaining top talent in the next generation will require embracing technological advances.

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3 U.S. Courts, "Judicial Facts and Figures," Sept. 30, 2015, http://www.uscourts.gov/sites/default/files/Table4.01_0.pdf.

BETTER RESULTS

Your primary goal is to obtain better results for your clients. AI solutions can help your firm meet that goal by accelerating the way you work. This next wave of technological revolution will likely be as significant as the last one.

30 years ago, attorneys, and indeed all professionals, had to redline documents by hand, and retype edited documents (or ask their secretaries to do so). Computers and word-processing software completely upended the way we write. Now, our software can proofread for us, suggesting changes and ways to make our writing stronger. Similarly, just 20 years ago, most legal research was done in the stacks of a law library. Today, case law is all online, and in mere seconds our computers can complete searches that would have taken days of focused work to look up in books.

AI solutions are bringing about another transformation of legal practice as computers start to do more of our work and do it better than humans can. AI will not replace lawyers, but the speedy analysis that it enables will redefine the way we practice law. We can look forward to the following ways that AI can improve our work and results for our clients.

Deeper Analysis

While case law research was revolutionized by online services, cases must still be searched with complex Boolean keyword strings that often fail to capture all the relevant results. New software with AI solutions that learn and recognize legal concepts—however they are phrased—will allow faster and more complete searches.

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These nearly instantaneous search results will allow attorneys to analyze fact patterns and legal theories in greater depth and with enhanced confidence in the results. Faster searches can also encourage more creative approaches. AI research software will give attorneys time to check out novel ideas, and will allow them to do so quickly without worrying about wasting time on a creative solution that may not pan out.

More Agility

Litigation typically takes years, during which research grows stale. Therefore, background research and analysis must be repeated periodically to keep the legal team abreast of changes in the law or in the authority supporting an argument. Computers can continually scan the universe of case law, recognizing similar cases and tracking their progress and outcomes. This allows for better prediction of outcomes, quicker recognition of changes, and a faster response to those changes. By pinpointing cases that may be similar to your own, AI software will allow lawyers to adjust their approach as the law evolves. Nimble, real-time adaptation to the shifting legal world will allow you to give your clients the best possible results.

Faster Review

Whether you are reviewing contracts, briefs, or marketing copy, natural-language AI solutions will help you analyze documents faster while providing customized suggestions for in-depth review. Take e-discovery approaches as an example. Today, legal teams can use technology-assisted review to pinpoint the most relevant information for attorney review. This initial stage of review can quickly and easily winnow the universe of potential data down

to the information most likely to be relevant for a more focused review. Similarly, contract-review software can expedite contract drafting, editing for common inaccuracies like erroneous numbering, undefined terms, and mismatched cross-references, cutting hours of proofreading time to mere seconds.

Better Prediction and Risk Assessment

Since AI software can scan both case law and client-generated data on an ongoing basis, it can continually search for patterns and learn to recognize potential problems earlier. AI programs can learn over time what correlations in data might indicate criminal activity or security breaches, averting crises before they even happen. This may allow AI solutions to spot potential litigation sooner, institute an automatic litigation hold while the problem is investigated, and improve strategic decision-making. Similarly, cybersecurity AI applications reinforce other security measures, protecting law firms from hacker attacks.

When your firm provides exceptional results that empower your clients to make better decisions, a wonderful thing happens: your clients can do their work better, and your firm strengthens its client roster.

BETTER CLIENTS

Through AI solutions, your firm will be able to serve better clients in two distinct ways: you will be able to improve your existing clients by helping them manage their own business better through enhanced legal services, and you will also attract—and retain—more sophisticated, forward-thinking clients. Further, actively demonstrating that your firm values speed, efficiency, and

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technological advances can attract a new generation of clientele that holds those same values.

How do you show that these values are important to your firm? How can AI solutions help? These are just a few of the ways.

Communicating More Effectively

When your lawyers use AI solutions to obtain faster results, they can communicate with their clients earlier and give more timely advice. Moreover, when lawyers do not have to spend their own time combing through details, but can instead let the computer take a first pass, they have more time to talk with clients. The key attorney skills of advising clients, analyzing legal theories, and arguing cases are still human-centric tasks. AI software will simply give your attorneys more time to engage in that outward-facing work, helping clients to fully understand their options. Better-informed clients make better decisions and feel more secure with the counseling that they receive.

Marketing to a New Generation

The upcoming generation grew up with technology and understands its value. As that generation enters the workforce, becoming potential clients, they will seek out law firms that share their appreciation for AI approaches. Demonstrating your firm's knowledge and acceptance of technological solutions will put you ahead of the curve, especially in the "traditional" field of law. AI solutions will help you target your marketing to younger, forward-thinking clients. Firms that actively demonstrate their use of technology to improve workflows will appeal to this new generation—who will not want to spend money on repetitive tasks that

computers can do. AI solutions offer a selling point for your firm.

Customizing Results

Using AI applications to perform faster, more in-depth searches, and draft cleaner, more customized documents will allow you to quickly and transparently target your results to exactly what each client needs. Rather than "one size fits all" representation, you will be able to use the faster results of AI solutions to pinpoint critical differences in your clientele and adjust your approach for each individual client's needs. Flexibly tailoring your representation will also help you to meet your clients' needs as they change over time.

Minimizing Wasted Time

By letting AI applications do the time-consuming initial stages of research and drafting, lawyers will minimize the time they spend on these repetitive tasks. Rather than billing hours for these tasks, you can automate the first pass, freeing up time to focus on the higher-level human work of lawyering. This efficiency will attract clients who are themselves efficient and technologically savvy.

Again, these improvements are not just about finding new and better clients; there are ways to help current clients do their own business better. And you may have already noticed the synergy between better results and better clients, which leads naturally to better lawyers.

BETTER LAWYERS

Again, the ability to provide results for better, smarter, more informed clients is a tremendous benefit for lawyers—but the benefits of AI solutions do not end there. In much the same way that AI can enhance the quality of clientele that you serve, it also drives improvements in both the lawyers who



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already work with you and in those who want to join you.

At its heart, the practice of law involves listening, reading, analyzing, and persuasively writing or speaking about that analysis, whether to convince courts or opposing counsel, or to advise and counsel clients. Those critical tasks cannot be done by machines. Thankfully, the human-specific work elements are also usually the ones that most lawyers enjoy best. After all, how many people went to law school so they could do document review or proofread contracts?

From in-house counsel to litigators to attorneys in sales, marketing, human resources, and every other department, AI applications offer a range of benefits that will ultimately lead to better lawyers doing better and more satisfying work. Here are just a few of the ways that AI enhances lawyers' lives and work product.

Saving Time

Saving time is not a benefit just for clients. Historically, lawyers have had to spend too much time on repetitive, detailed combing through of data, regardless of whether it's case law research, discovery screening, or document generation and analysis. Often, these processes must be done over and over for a single case. When litigation routinely spans months or years, and new case law is decided every day, case research and analysis cannot be one and done. But these repetitive tasks are exactly the type of work

that computers excel at. When computers do the first pass, lawyers save time and energy and can focus on the work they trained to do.

Avoiding Monotony and Tedium

AI takes over the grunt work that lawyers—especially junior associates—have typically been saddled with. Many lawyers report that the work of lawyering is not what they expected when they went to law school. Instead of engaging in the work they envisioned, arguing cases in court or going head-to-head in high-stakes negotiations, most lawyers spend too much time on tedious, repetitive data and document review. Rarely do lawyers get to engage in the analytical deep thought and creative case analysis that they are trained to do and excited about. When computers take over the tedious tasks, not only do lawyers save time, but they are freed from the worst work of lawyering.

Allowing More Creative Work

When lawyers can step away from repetitive, mindless work, they can focus their efforts on more creative, thoughtful, in-depth analysis. Additionally, they will not have to reinvent the wheel each time they begin drafting a contract or other document. AI solutions that can organize contracts, briefs, and research, applying what they have learned and incorporating your firm's institutional knowledge, will enhance attorneys' creative application.

Providing Greater Job Satisfaction

With more time to focus on the interesting work and less time in the trenches doing drudge work, lawyers can experience greater job satisfaction and a higher overall quality

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⁴ Nicole Black, "Lawyers, Cloud Computing, and Mobile Technology in 2016," *LEGAL IT PROFESSIONALS* (July 11, 2016), <https://www.legalitprofessionals.com/legal-it-columns/8775-lawyerscloud-computing-and-mobiletechnology-in-2016>.



of life. This is a selling point for your firm to not only keep your best lawyers but also to attract and retain new top talent. Lawyers want to have time to talk with their clients, to think deeply about their cases, and to engage in the more interesting and challenging parts of the practice of law.

Attracting Young, Tech-Friendly Talent

Just as a new generation of technologically advanced clientele is attracted to firms that embrace AI solutions, new attorneys are also searching for firms where they will fit in. Millennials recognize that computers can tackle the mind-numbing work that was historically done by junior staffers. This new generation of lawyers will expect automation and smart use of technology. As AI solutions transform the way lawyers work in the future, your firm can be on the leading edge.

There is, of course, overlap in these benefits: better, happier lawyers do better work, resulting in more satisfied clients. Everyone stands to benefit from the coming revolution in the way we do legal work using AI.

Are you convinced about the wisdom of embracing AI solutions in your practice?

IT'S TIME TO LEAP AHEAD OF THE CURVE

AI is here to stay—it will only expand its reach as technology improves and as data continues to accumulate exponentially.

Litera Microsystems is the leading provider of software for drafting, proofreading, comparing, repairing and cleaning documents in the legal and life sciences industries worldwide. Our core products empower users to generate, review, and distribute high-quality content quickly and securely, from any device. Today, Litera Microsystems supports thousands of document-intensive organizations across the globe, helping them satisfy the complex demands of clients and regulators.

AI applications are not likely to replace lawyers anytime soon—but they will transform the way law firms provide legal services. Will your firm be ahead of the curve or left behind?

Whether or not your firm embraces these new applications will affect the results you can provide for your clients and the job satisfaction of your lawyers. AI solutions do require an initial investment, but that investment has a compounding effect. AI solutions give firms the ability to provide better results for clients. Their success attracts new top-notch clients and technologically minded lawyers. Lawyers who can focus on the human elements of lawyering without having to do the heavy lifting of document and data review are happier and better at their jobs. Those better lawyers have better conversations with better clients, continuing the benefit spiral.

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