
Implications for the Future and Their Present-Day Use of Artificial Intelligence

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ABSTRACT

In this article, we take a look at how AI is changing the legal sector, particularly how lawyers do research and prepare contracts. The article will begin by discussing how AI might change the legal industry as we know it. Second, it will explore what AI may mean for the future, regarding legal firms and the potential regulatory hurdles associated with artificial intelligence. The spread of A.I. clients, who are not lawyers, will be able to access the same information and services that attorneys have always offered. The function of attorneys will evolve as the availability of these services grows. A.I. is a resource that will pave the way for more affordable and efficient services, but those who aren't attorneys won't be able to make sense of the data it produces. To better serve their clients, lawyers will need to adapt to this new role, which involves making better use of these tools to increase efficiency and produce higher-quality work.

Keywords: Higher-Quality Work; Transportation; General Artificial Intelligence

Introduction

Apple co-founder Steve Jobs used the analogy of a "bicycle for our minds" on more than one occasion to explain his vision for the personal computer's place in society.¹ People burn more calories than other animals to move the same amount of weight, but a bicycle allows people to move more efficiently than any other mode of transportation.³ Jobs saw the potential related effects on mental performance may result from the rise of personal computers. Because computers and the artificial intelligence (A.I.) that will be covered in this article are both tools to be used and managed by people, it is helpful to place them in this perspective. In light of the impending dominance of AI in the legal industry, the myth that AI will eventually supplant humans must be debunked. Artificial intelligence's potential. The development of a more efficient bicycle for the legal mind should replace the current paradigm in the legal sector [1-8].

Three sections make up this problem brief. The article will begin with a brief introduction to artificial intelligence. The second part is that it will show how artificial intelligence may be used in the legal field, by looking at three legal tech startups leveraging A.I. to do research, write documents, and examine and assess legal matters. Third, it will talk about how these new developments could change the way lawyers work in the future.

Machine Learning and Artificial Intelligence

Creating computer programs that mimic human intelligence is known as artificial intelligence (AI). In science fiction, AI is frequently depicted as robots that are more efficient and effective at performing mundane human tasks than humans. These highly complex machines incorporate a form of AI known as general artificial intelligence (GAI), which allows them to reason broadly and think like humans. Conversely, narrow A.I. machines based on limited artificial intelligence systems are those that are created to carry out certain duties, do a certain task, such as securing the front bumper to an assembly-line vehicle, and

will never be able to compete with the depth of human cognition. Both of these methods encompass artificial intelligence. include machine learning [7–15].

Machine learning is training a computer to adapt to new data sets automatically, rather than relying on pre-programmed instructions like an engineer would in the past factual item. One of the most groundbreaking aspects of machine learning is that it enables computers to learn and execute tasks successfully with little to no human guidance on how to do so. These systems enhance their outputs through iteration, which involves repeatedly putting data into an algorithm.¹² With time, these computers can learn to make their own decisions using data from comparable jobs, rather than identical ones.

When it comes to machine learning, natural language processing is among the most important applications. The program's interpretation of commands is what distinguishes natural language processing from conventional machine learning. Natural language processing systems learn to comprehend and interpret queries expressed in natural language (e.g., English) by examining the words, sentence structure, syntax, and patterns of human communication, as opposed to translating a set of instructions into a series of symbols or computer code. Natural language processing systems may learn to digest text without requiring human intervention by decoding it into a sequence of codes. This capability opens up a world of practical uses for these systems, including text summarization, emotional undertone analysis, pattern recognition, and more.

The Present Status of Lawful A.I.

Using three different legal tech companies as examples, we'll go over how each one has used AI in their work. within the realm of law. One business, ROSS Intelligence, use NLP to produce memoranda and do legal research. Next up is LawGeex, a startup that has just raised capital and using machine intelligence to design contracts. Beagle is the last business that employs AI. so that contracts may be examined and organized [16-28].

Ross Research

With ROSS Intelligence's proprietary technology, Legal Cortex, and natural language processing, users may ask the machine questions using complete sentences completes legal research in response to the user's query. If the user specifies "'[w]rite me a memo' before a search question, the system will also draft and email a legal memorandum based on that research."¹⁸ At any point, the user can provide feedback to ROSS's tool, letting it know how helpful the results were for future searches. At this time, the platform is limited to investigating insolvency, IP, and labor and employment issues. The ROSS team is "evaluating tax applications, though." ..securities law, [and] family law."

LawGeex

In-house attorneys are LawGeex's primary market for their contract review and management solution. The application uses natural language processing to analyze contracts, extract key points, and propose changes. With a Series A round of \$7 million raised as of March 2017, LawGeex's total funding stands at \$9.5 million.²¹ The first step in using LawGeex is to upload contracts. These contracts may be accessed by many users on the platform, regardless

of their firm or location. This facilitates collaboration between in-house and outside counsel. The software finds missing or unusual terms in contracts, as well as problematic or unusual clauses that are normally present in contracts. Claiming that their A.I. tool allows attorneys to save roughly eighty percent (80%) of the time it normally takes to review and approve documents by using natural language processing to edit and summarize contracts [29-42].

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A.I. Beagle is different from ROSS Intelligence and LawGeex. tool for contract evaluation that is particularly geared for non-lawyers. Users that require contract review and management capabilities but do not have the knowledge or resources to employ an attorney might benefit from Beagle. Customers begin by bringing their contracts into the system. After that, the NLP system finds the most important clauses to examine. This is accomplished by determining the most common terms used in this particular sort of contract and then examining how it differs from the standard. Additionally, it has an integrated communication system that allows users to engage in discussions about their papers with one another. The system can not only pick up new skills from its users, but it can also remember their preferences and employ them in future papers based on what it learns.

AI'S Potential Future Consequences in The Legal Firm

Artificial intelligence is our next target. regarding the future of the legal practice, and its possible effect on that future. We examine the potential regulatory challenges that disruptive technologies may bring and their impact on legal businesses in this section. Using the pyramid workforce model, which involves hiring associates in large numbers and having them work 2,300 hours a year, is central to the traditional big business model. Associates spend much of their time conducting research and due diligence. These colleagues may now utilize "machine learning capabilities to identify legal authorities relevant to particular questions" thanks to new legal tech startups.

At this point in time, there is insufficient evidence to support the claim that legal tech tools are more successful than the traditional pyramid technique used by most large corporations. This is one of the key concerns with these products. As a result, legal tech businesses must prove three things: 1) their information retrieval quality is superior to Boolean or Natural Language searches; 2) their solutions are user-friendly and require minimal training; and 3) they will significantly reduce the number of hours spent on administrative tasks.

Possible Consequences

Is this a sign of things to come for AI and the legal industry? There will soon be a major shakeup in the legal industry's organizational structure. Companies can save money by not having to employ fifty (50) workers to review contracts and gather legal information. Because ROSS will make every research project go as smoothly as possible, companies will have no choice but to reduce the number of associates they employ or, more likely, find better ways to use the ones they do have. Associates will have more time to focus on higher-level projects while they are younger since administrative tasks in the legal field are becoming increasingly automated. This may render some jobs, like paralegals, obsolete, but

it won't put an end to the need for attorneys altogether. It only signifies that the function of attorneys is evolving [43-64].

Big Law may soon be extinct, and that is a very serious prospect. A.I. will make services that were previously only available to teams of highly trained attorneys accessible to everyone. Improved research tools and self-drafting contracts have leveled the playing field so that smaller businesses can compete with their larger counterparts. Big companies may have to rethink their operations in light of this, mostly because it makes no sense to charge customers astronomical amounts when they can find similar services from a smaller company down the street for much less. We may soon see an end to the exorbitant costs charged by bigger businesses for employing thirty (30) workers to work nonstop on legal research.

One possible counterargument is that larger companies may be better able to acquire this game-changing technology ahead of smaller ones due to their greater financial resources and profit margins. Paid access to artificial intelligence systems. Early on, apps can be pricey. If large organizations can acquire this technology, learn it well, and utilize it to bring in new customers while keeping the ones they already have, then smaller enterprises would not have a chance. If legal tech businesses really want to make legal tech more accessible to everyone, they need to watch out that bigger firms don't become even more powerful with their tools [65-86].

Client expectations may also evolve. Legal research will no longer command six-figure sums from customers, as mentioned earlier. Currently, it is typical for customers to insist that associate labor not be included in their fee. More and more, customers want more for their money. The proliferation of tech-savvy individuals is a contributing factor customers, such as IT entrepreneurs based in Silicon Valley. This new clientele is starting to challenge the conventional wisdom about the value of the legal profession's tried-and-true practices. Businesses risk losing a ton of money if they don't adjust and cut costs to meet these shifting customer expectations. Alternative-fee systems may grow increasingly popular, especially for basic form contracts and routine paperwork.

Regulatory Issues of Artificial Intelligence

False Apprehension

Misunderstanding what artificial intelligence (AI) is fueling the concern that new legal technology will supplant attorneys. is at its core Using ROSS Intelligence as an example, A.I. serves as a technique for conducting studies. An operator who is also well-versed in the tool's intended application is necessary, as is the case with any instrument. In the end, legal technology research tools still need human oversight, instruction on what to search for, and manual sorting of results to ensure completeness and accuracy. Smart, cunning attorneys are needed for this sort of activity.

Rising anxiety among newly minted lawyers is that as A.I. makes teams of junior associates more efficient in tasks that were previously handled by such teams, companies will recruit fewer young college grads. Having said that, the demand for associates proficient in these

technologies to fulfill customers' evolving demands is expected to rise in the future (described below). Even if there are fewer of them, the time these associates save on research and due diligence allows them to focus on the more substantial tasks that have historically been performed by partners and senior associates. Furthermore, it is also anticipated that while fewer associates will be needed to do the activities typically designated for newer attorneys (e.g. due diligence), A.I. will generate new roles (which we cannot yet imagine) for people who it displaces to assume [87-105].

While it is true that some attorneys will lose their jobs to this emerging legal technology, it is also true that in a profession of intelligent professionals, those that lose their jobs to these new tools will not be those with the least practical experience, or those with lower test scores coming out of school, but those who refuse to recognize that change is happening, and adapt.

Future Consequences

How do you break the news to a business partner whose model has been turning a profit for twenty (20) years running that it is no longer viable? Previously charged by the hour, clients are now demanding set costs. A large number of customers are also demanding that firms have a choice: they can adapt to the changing demands of their clients by adopting technology that makes their associates more efficient, or they risk losing clients to more progressive competitors who will pay for their junior associates' work. This is because they do not want to pay for young lawyers to gain experience.

More and more, smaller businesses are able to compete for clients with the more illustrious "big firms" because to innovative internet-based programs and startups like ROSS Intelligence and Beagle. Anyone practicing law may benefit from using ROSS Intelligence to get more done in less time. Although it poses a challenge to the billable-hour pyramid structure of conventional large organizations, this technology is helpful for smaller firms who are attempting to offer services on par with bigger firms. If partners' billable hours are going down due to more efficient technology, then their profit margins must be going down as well.

What large companies are neglecting is this. It is possible that one job may take less time with the introduction of new legal technologies such as LawGeex and ROSS Intelligence. Instead of having an associate spend an hour on a single contract using the billable hour structure, a firm could achieve the same or even more by negotiating for them to complete multiple employment agreements in an hour at a fixed fee rate using LawGeex. Now that the monotony of conventional grunt labor can be handled more quickly, firms have the opportunity to boost their production while also providing colleagues with more substantial experience from the start. Clinging to the conventional billable hours structure, and rejecting customer expectations based on the available output that legal tech delivers, might push business towards more technologically savvy businesses.

The framework upon which the billable hour structure is founded has become irrelevant due to the world's quick pace of change. To be competitive, legal companies must welcome change and the innovations in technology that accompany it.

Issues of Ethics for Lawyers and Technologists

Artificial intelligence has another effect. the ethical challenges that new legal technologies pose to lawyers. This part will begin by reviewing the Model Rules, which aim to address the growing number of ethical concerns raised by these new technologies. Second, we'll examine ransomware and hackers in this part, as well as the measures that attorneys may take to safeguard their clients' personal information. At last, we'll examine metadata to see how an understanding of basic computer concepts is becoming more necessary for attorneys [106–117].

Procedure of the Model

The House of Delegates of the American Bar Association (ABA) revised Comment 8 of Model Rule 1.1 as follows: A lawyer needs to participate in ongoing study and education, stay current on developments in the law and its practice, including the pros and cons of applicable technology, and meet any continuing legal education requirements that may apply to them in order to keep their knowledge and skills up to date.

What kinds of concerns are particularly relevant here, and how can attorneys fulfill this new need to keep up with ever-expanding technology in the practice of law, given that twenty-eight states have enacted the duty of technical competence into law as of September 2017?

Part of the attorney-client relationship is maintaining confidentiality. It is the base of trust between an attorney and his client: the client's opinion that an attorney can secure the material to which he is entrusted is vital for the reputation of any lawyer. However, threats lie in every email; there are hackers, ransomware attacks, and metadata dumps, to mention a few. These three items will be discussed, along with how they affect a lawyer's ethical obligations to his client.

Hackers

Both the tools and the data that hackers use to their advantage are constantly evolving. From email addresses and bank accounts to confidential legal notes detailing an attorney's assessment of a case's merit, hackers will steal any and all information they can get their hands on. The hacker's next move is to sell the client's or firm's information to whoever pays the most. No one can reasonably expect lawyers to possess the technological know-how necessary to repel hackers, but that shouldn't stop them from implementing even the most fundamental security measures an excellent first step is to set up a robust firewall. Password generators abound, and there are a myriad of storage solutions that enable users keep all their passwords in one safe location (see obviously secured with a password. To make sure you only access secure websites online, you may install extensions. Downloading ad blockers and adjusting browser settings to not leave cookies are two ways attorneys may protect themselves against cybercriminals who use them to impersonate others. Another fantastic suggestion is to use a cloud-based storage solution that prevents the organization from storing or sharing your client's data.

Ransomware

Ransomware is a relatively recent occurrence where, in the example of a legal practice, a hacker may send an associate an email, with a return address of a partner (or other higher-up at the company), demanding that the associate email the partner sensitive information about a case. The associate, always eager to make a good impression on the partner, whips up a memo containing the confidential material and answers to the email. The associate has no idea that a partner did not really send this email. Unfortunately, the hacker took great care to make it look like an email from one of the firm's employees, and now both the lawyer and his client are in a lot of trouble.

The hacker may hold the company ransom in exchange for the release of the data, or they might sell the data to the highest bidder. The hacker either sells or distributes the material to a rival if the ransom is not paid. On the other hand, hackers often use infected emails to gain complete control of a company's network the moment an employee views one of these messages. After then, the hacker locks the company's systems in a state of hostage-taking until it pays a ransom.

So how would a lawyer proceed? What are his ethical obligations? Every organization should have a plan in place. There has to be a strategy in place for informing clients about the breach, insurance to cover damages, and a consensus among management on whether the company would pay off hackers. Are they willing to pay the money and risk future assaults, or are they willing to forego the client's details in the hopes that they would be less vulnerable? The intriguing part is that, depending on how sensitive the stolen material is, one could argue that attorneys, who have a duty to their clients, should pay the ransom. An attorney's duty is to be cognizant of the existence of such dangers and to take all reasonable precautions to protect themselves from them [118-124].

Information Description

For example, a Word document's metadata may include the author, date drafted, date edited, and file size cases of metadata.³⁴ For example, when you produce a document in Microsoft Word, all of your edits, spelling corrections, and sentence deletions are saved as metadata. After you've accepted all modifications and figured out how to modify your document, someone may be able to see the tracked changes. For legal purposes, this is of the utmost importance. Envision a discovery process in which the prosecution and defense exchange word documents via email. What if you could see the opposing counsel's revision history, which would shed light on how they approached the case, in addition to the final product they sent you via email?

Here, as with any technological development, lawyers must protect themselves by learning about these possible pitfalls; otherwise, their clients may sue them for unethical behavior. Metadata may be removed from Word documents in a few different methods. Sending the final result in PDF format is another possible simple solution.

In These Domains, AI Will Prevail

It would be easy to include AI into each of these scenarios: hacking, ransomware, and metadata. throughout the next several years. A few businesses have begun utilizing AI, such

as Lex Machina. to incorporate information into the legal domain.³⁵ Regardless of the cause, attorneys have a moral responsibility to be aware of and to prepare for potential threats, such as foreign hackers or metadata on their own computers. As part of this, you should stay updated on technological developments (like artificial intelligence) that might play a pivotal role in your day-to-day legal work.

Concerns Related to AI Regulations

The subject of what regulatory issues these innovative technology may cause is perhaps more intriguing to examine. For example, consider ROSS in the far future; it will have advanced to the point where, given certain instructions, it will gather relevant materials and draft an issue brief that you may submit to the court. The catch is that, based on the case facts, you know the issue brief is untrue. A glorified search bar is surely not something we would approve of. But rules are necessary, and someone must be punished when these robots make a mistake. One approach to look at this issue is via the perspective of product liability. Maybe a malfunctioning automobile is the best analogy for legal tech software; in this case, rather than the user (the lawyer), the manufacturer (in this example, the software's engineering team) would bear the responsibility for any errors. One may argue against this approach to program analysis by pointing out that legal tech is more accurate than the greatest attorneys when left to their own devices. In this case, how can we hold engineers responsible for reducing the number of mistakes compared to its predecessors, who were very intelligent attorneys? So, why shouldn't people hold the programmers of these research tools accountable for their faults, even if humans have historically made considerably more mistakes than machines? After all, people have always held attorneys accountable for their mistakes.

Another approach to examining errors produced by legal tech tools is to ensure that the user is held accountable. Someone may argue that the tool isn't the issue; rather, it's user error. In that scenario, the engineer would not be held responsible for any mistakes, but the lawyer would. This is the preferable choice for engineers working on future legal technologies, but current regulation is vague on the topic, so it's hard to say who's responsible for blunders like this it is risky because lawmakers can't come up with laws for these businesses quickly enough. Without a firm grasp of the rules of law, new businesses may struggle to formulate a viable business plan. In many cases, laws are enacted as a direct result of high-profile incidents, when the public and courts begin to wonder what limits need to be imposed on the particular technological advancement that is presently drawing the most attention. Instead than letting courts figure out how to handle the first few cases using these new technologies without any direction, it would be wiser to establish laws in advance so that new businesses may build their strategies around them [124-133].

At some point, we'll have to determine whether or not to make an AI tool answer for its own mistakes. A lot of people think that eventually, a super A.I. machine is going to evolve into a conscious being. Will that entity be subject to the same restrictions as other attorneys when that happens, if it can be determined to have happened? Keep in mind that this thing is not a lawyer and has not even taken the bar test. We need to make a call on whether to establish new criteria for the timing and scope of these entities' participation in professions like law,

how might these AIs be controlled if they exhibited any signs of consciousness? A computer cannot be thrown into prison. In any case, twenty years for a sentient entity with an infinite lifespan, twenty years in prison is hardly a deterrent. To what extent an AI could be appropriately disciplined is an open question. There can be no regulation of AI conduct or assurance that it will adhere to rules without penalty that other lawyers must adhere to in terms of ethics (or, more generally, the standards by which our society functions). Without concrete repercussions for wrongdoing, we will never be able to regulate intelligent robots.

You may educate ROSS Intelligence and LawGeex to be smarter and quicker by reviewing your previous judgments; this allows them to more quickly adapt to your preferences and make improvements. Thus, in the event that the A.I. makes a mistake based on your preferences, are you held responsible since it was following your "instructions" and operating in a way that you would have preferred, or does the machine itself retain responsibility? To put it simply, the machine learns your habits and preferences and adapts its performance accordingly. To fit in with your tastes, the tool may purposefully make a mistake on a certain task if your tendencies are strong enough. Some may contend that the A.I. Once a tool has merged itself to your preferences, it is no longer the same product as the one you purchased. However, what constitutes that threshold? Given the absence of concrete regulations on such matters, the question of liability in such a case is up to speculation. We must resolve these issues immediately, not wait for litigation to be filed.

Imagine you decide to take legal action against a software that operates just online—an artificially intelligent lawyer. In what courts do you file lawsuits? The entire internet is used to spread the software. At the same time, it is both here and there. Judgment on such a matter may be outside the purview of any particular court. Also, keep in mind that the AI lawyer in one San Francisco office could not be the same as the one in another New York office owing to local preferences, program settings, etc. So, you might say that each computer runs a unique version of the software, or you could say that they are all part of the same big system even if you win, you might not be able to get your money back. Ultimately, there is no bank account associated with the program. But you might sue the program's creator, claiming vicarious liability for the program's "employee." The truth is that without regulation, businesses, lawyers, and the courts are all flying blind.

Professional Extension

Think about these Kodak cameras. Kodak used to be to cameras what large, elite law firms are to the modern legal industry. The digital camera came out, but Kodak was so successful that the company thought it could stay "analog" and avoid using the new technology because of its stellar reputation and loyal customer base recording devices. Now we're in the present day, and Kodak has been in bankruptcy for quite some time.

Companies like Nikon, who were quick to adopt digital technology, were able to oust Kodak since the former was unwilling to do so. This lesson should be heeded by top-tier businesses. No matter how big or successful a firm is, it will still be affected by change. A company has two choices: change or perish. Firms that refuse to adopt new technologies, do contract diligence with a team of five associates, and continue to bill by the hour will eventually wind

up in Chapter 11 bankruptcy. Using technology, smaller businesses are already able to attract clients that larger firms either wouldn't represent or couldn't afford. Smaller organizations may soon be able to offer the same services, if not faster, than bigger firms, thanks to technologies like Beagle and LawGeex. Pay attention and be ready, bigger companies. Soon, the future will arrive.

Conclusion

It would be foolish for legal companies to hold on to an antiquated way of life by acting as if the rest of the world will halt evolving. This company model can't continue with partners in their sixties smoking cigars and lounging in leather recliners while their colleagues charge 2,300 hours annually. Partners counting down the days before retirement may not give this much attention, but associates and junior partners who aspire to take over the company in the future should find the prospect of its demise stemming from a failure to adapt to changing legal technology trends shocking feel free to use these tools without fear. The goal of legal technology is to make lawyers more productive so that they can take on more cases and represent more clients with more complex legal needs. If anything, technological advancements in the legal industry will make it easier and more profitable for attorneys to take on more clients. Those attorneys who are resistant to change are the only ones who should be worried. In addition to potential efficiency gains, the function of lawyers may undergo transformation in the future years. More and more, clients can see the same documents that lawyers can. Most laypeople lack the training necessary to evaluate this data and extract the essential pieces, which is a persistent problem. Lawyers' abilities are still valuable, but they need to be flexible to stay up with the times the unpredictability of the manner in which legal services will be affected by the present and future uses of legal technology is high. In addition, we must immediately begin considering these matters if we are to succeed in regulating these new technologies. A.I. could infiltrate nearly every facet of the legal profession. To have everything ready and to do one's we owe it to the public to familiarize ourselves with the potential future uses of artificial intelligence. adherence to legal requirements.

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