

ETHICAL ISSUES IN AI-POWERED LEGAL TECH

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INTRODUCTION

“It’s a day that is here.” --- John G. Roberts¹, Chief Justice of the Supreme Court of the United States, replying to questions about when Artificial Intelligence (AI) would assist with judicial decision-making in 2017.

The idea of technology replacing human labors has long existed. In the legal profession, tech companies have already found ways of developing technologies that assist or even replace lawyers. Nowadays, technology can help lawyers perform due diligence, review contracts, conduct legal research, or even analyze and predict case outcomes.²

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their behaviors.³ While AI has been proven to improve lawyer’s work efficiency or even outperform lawyers in certain tasks⁴, empirical research has shown that AI may sometimes generate biased and unjust outcomes.⁵ The American Bar Association (ABA) amended its Model Rules of Professional Conduct in 2012, including the duty of technology competence in Rule 1.1.⁶ Under this new amended rule, lawyers have the duty to update their knowledge and skills in accordance with technological development.

This article intends to discuss the growing interest in applying AI in law and the potential challenges that AI-powered legal technology may bring to the traditional legal profession. Part I introduces the concept of AI and the different types of machine learning models behind it. Part II analyzes some practical challenges

¹ Adam Liptak, *Sent to Prison by a Software Program’s Secret Algorithms*, N.Y. TIMES (May 1, 2017), <https://www.nytimes.com/2017/05/01/us/politics/sent-to-prison-by-a-software-programs-secret-algorithms.html>.

² Daniel Faggella, *AI in Law and Legal Practice – A Comprehensive View of 35 Current Applications*, EMERJ (Oct. 23, 2019) <https://emerj.com/ai-sector-overviews/ai-in-law-legal-practice-current-applications/> (last updated Mar. 14, 2020).

³ Chris Chambers Goodman, *AI/Esq.: Impacts Of Artificial Intelligence In Lawyer-Client Relationships*, 72 OKLA. L. REV. 149 (2019).

⁴ Cal Jeffrey, *Machine-learning algorithm beats 20 lawyers in NDA legal analysis*, TECHSPOT (Oct. 31, 2018), <https://www.techspot.com/news/77189-machine-learning-algorithm-beats-20-lawyers-nda-legal.html>.

⁵ Joy Buolamwini, *Artificial Intelligence has a problem with Gender and Racial Bias*, TIME (Feb. 7, 2019, 7:00 A.M.), <https://time.com/5520558/artificial-intelligence-racial-gender-bias/>.

⁶ MODEL RULES OF PROF’L CONDUCT r. 1.1 (AM. BAR ASS’N 1983).

of applying ABA’s Model Rules of Professional Conduct to AI-powered legal technology, with a particular focus on the specific implications with regard to lawyer’s obligations concerning exercising independent judgement and rendering candid advice, and supervising third parties. Part III concludes by proposing guidelines to address the ethical and liability issues arising from the use of AI-powered legal technology, and argues that a better way to handle these challenges requires collaborative efforts from legal technology industry, legal organizations, and legal professionals altogether.

AI, MACHINE LEARNING, AND CURRENT APPLICATIONS IN LAW

“Artificial Intelligence” is used to describe how computers can perform tasks normally viewed as requiring human intelligence, such as recognizing speech and objects, making decisions based on data, and translating languages, which largely mimics human brains.⁷ Machine learning, on the other hand, is an application of AI in which computers use algorithms embodied in software to learn from data and adapt with experience.

There are three major types of machine learning: (1) supervised machine learning, (2) unsupervised machine learning, and (3) reinforcement machine learning.

a. Supervised machine learning

Supervised machine learning is a method of learning that maps an input to an output based on example dataset.⁸ Supervised machine learning starts with teaching the machine with a training dataset which are typically labeled with inherent rules that identify the characteristics of data that distinguish one group of data from another. By learning to process the initial training dataset, the machine is able to classify new datasets based on the rules from the training dataset. However, the training dataset might not cover every characteristic of the data, and machines may sometimes fail to recognize patterns from a new dataset. When an incorrect or unexpected result is generated by the machine from failure to recognize existing patterns, the programmer can make changes to the training dataset to the right course. Because the algorithm generates information based on its analysis of the training dataset, the programmer can refine the analysis or discern new trends by refining or expanding the training dataset.

Supervised machine learning has many benefits. For one thing, because the algorithm itself is programmed and linear, it tends to generate a more consistent and predictable outcome. For another, the

⁷ See Goodman, *supra* note 3.

⁸ STUART J. RUSSELL & PETER NORVIG, ARTIFICIAL INTELLIGENCE: A MODERN APPROACH (3d ed. 2010).

training dataset can be updated easily, which increases the machine's performance in both speed and accuracy. Email spamming and Netflix, for example, ingest user preference data to produce individualized outcomes to that user.

b. Unsupervised machine learning

Unsupervised machine learning is a type of self-organized learning that helps to find previously unknown patterns in dataset without pre-existing labels.⁹ Unsupervised machine learning requires that the programmer have more flexibility in its use of dataset. Unlike supervised machine learning where the machine is given an initial set of data, unsupervised machine learning does not involve a preliminary data input. Instead, unsupervised machine learning identifies the unknown pattern in a new dataset by clustering the dataset into groups according to similarity.

For example, Google image search operates by extracting the features of the targeted image and compare them with other image to find similarities. Unsupervised machine learning improves over time with more data input in which it can learn to extract more features from a data and compare it with an expanding database with increasing accuracy.

Unsupervised machine learning is beneficial when faced with problems where patterns are unknown or constantly changing or for which we do not have sufficiently large labeled datasets.

c. Reinforcement machine learning

Reinforcement machine learning is a type of machine learning technique that enables a computer to learn in an interactive environment by trial and error using feedback from its own actions and experiences.¹⁰ In reinforcement machine learning, the machine is faced with a complex situation where it needs to come up with its own solution to handle it. The programmer does not provide the machine with any instructions on how to handle the situation, but trains the machine by giving it either rewards or penalties according to how it performs. When the machine encounters a complex scenario which it has never encountered before, the programmer will note it down and recreate the scenario to test the machine again.

Autonomous vehicles are a good example of reinforcement learning. By repeating scenarios, it previously encountered, the vehicle learns from its errors and is capable of adapting its performance to future scenarios.

⁹ MIT PRESS, UNSUPERVISED LEARNING: FOUNDATIONS OF NEURAL COMPUTATION (Geoffrey Hinton & Terrence Sejnowski eds. 1999).

¹⁰ Leslie P. Kaelbling, Michael L. Littman & Andrew W. Moore, *Reinforcement Learning: A Survey*, 4 J. ARTIFICIAL INTELLIGENCE RES. 237 (1996).

Compared to supervised machine learning, reinforcement machine learning needs little initial data input or handcrafting preset rules because it learns from feedbacks.

d. Current applications of AI in legal practice

There are four major areas where the legal industry is using AI to facilitate the practice of law: document review, prediction, document automation, and legal research.

i. Document review

Legal technology uses AI to perform document review in order to search for a particular provision across the document or to flag provisions that are rare, missing, or potentially problematic. For example, KIRA Systems allows lawyer to identify, extract, and analyze business information contained in large volumes of contract data, which is used to facilitate M&A transactions.¹¹ On the other hand, LawGeex uses AI to identify what clauses and variations are present and missing. By selecting from a list of clauses and variations to require, accept, or reject, the relevant languages in the document is highlighted and bookmarked based on the user's preset criteria.¹²

ii. Prediction technology

AI can also be used to generate results that forecast litigation outcomes. Ravel Law is said to be able to identify outcomes based on relevant case law, judge rulings and referenced language from more than 400 courts. The software laid out cases, citations, circuits and decisions of a specific judge and makes it easier for lawyers to understand how judges are likely to rule on a case.¹³ Similarly, Premonition asserts to have the ability to predict a lawyer's success by analyzing his win rate, case duration and type, and his pairing with a judge. The product can also predict the duration of which the lawyer will handle the individual client's case.¹⁴

iii. Document automation

Law firms are also beginning to use software templates to create filled out documents. PerfectNDA, for example, uses AI to fill out nondisclosure agreements. The users are asked to answer questions and a pre-filled template is then generated.¹⁵ Similarly, ANAQUA

¹¹ *Using machine learning for contract review in due diligence and corporate contract management*, KIRA SYS. BLOG (Jun. 5, 2015), <https://info.kirasystems.com/blog/using-machine-learning-for-contract-review-in-due-diligence-and-corporate-contract-management>.

¹² *Platform*, LAWGEEX, <https://www.lawgeex.com/platform/>.

¹³ See Romeen Sheth, *What is Ravel Law?*, RAVEL LAW (Jun. 7, 2019, 10:35 A.M.), <https://ravellaw.zendesk.com/hc/en-us/articles/213290107-What-is-Ravel-Law->.

¹⁴ Faggella, *supra* note 2.

¹⁵ *Id.*

Studio uses AI to draft patent prosecution. The product is said to be able to detect document errors, circular claim references and formatting defects aside from automatically generating literal claims support.¹⁶ By product descriptions, both Perfect NDA and ANAQUA Studio seem to be using supervised machine learning to perform document automation.

iv. Legal research

AI can make legal research more expedient and accurate. Ross Intelligence uses the power of IBM's Watson supercomputer to find relevant cases when performing legal research on a certain legal issue. It can even respond to search queries in plain English, and the machine will bring up recommended readings, related case law and secondary resources. Similar to many other products using machine learning, Ross purportedly improves with use.¹⁷ In a 2017 survey, Ross Intelligence was reported to have outperform Westlaw and LexisNexis in finding relevant legal authorities, and in achieving research efficiency and user satisfaction.¹⁸

PRACTICAL CHALLENGES OF APPLYING MODEL RULES TO LEGAL TECHNOLOGY

As the above has shown, much of the traditional lawyer's work can be substantially aided through the use of artificial intelligence technologies. However, even though legal technology has proved to outperform human lawyers on some legal tasks, it is not yet perfect. Lawyers consider much more information in crafting a case, much of which is never documented and therefore not available for machine analysis. The American Bar Association (ABA) amended its Model Rules of Professional Conduct in 2012, including the duty of technology competence in Rule 1.1.¹⁹ But given the unique challenges posed by AI, these efforts will only be of limited use if lawyers are not aware of these challenges.

a. Potential challenges to ABA's Model Rules of Professional Conduct

i. Model rule 2.1 lawyer must exercise independent judgement

One of the major limitations of AI is its inability to take into account information beyond the basic linear data that it has been given to train itself. Even though the machine learns faster and better

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ Robert Ambrogi, *Ross AI Plus Westlaw Outperforms Either Westlaw or LexisNexis Alone, Study Finds*, LAWSITES BLOG (Jan. 17, 2017), <https://www.lawsitesblog.com/2017/01/ross-artificial-intelligence-outperforms-westlaw-lexisnexis-study-finds.html>.

¹⁹ MODEL RULES OF PROF'L CONDUCT r. 1.1 (AM. BAR ASS'N 1983).

overtime with more data inputs, many pieces of information, including sensitive or embarrassing information concerning the client, the instinctual knowledge of the lawyer, and relevant non-legal factors that the AI might not have access to, cannot be simply quantified.

Model Rule 2.1 obligates a lawyer to exercise independent professional judgement and render candid advice in representing a client.²⁰ The judgement does not merely involve legal decision making, but also other considerations such as moral, economic, social and political factors, that may be relevant to the client's situation. Lawyers must consider and address clients' nonlegal needs, as well as their legal ones.

As lawyers become increasingly reliant on AI to handle legal work, their professional judgement might not be "independent." For instance, KIRA and LawGeex use human-labeled data input as a preset rule to perform document review. Because in reality different lawyer might take different factors into consideration when doing document review, sometimes one document can be reviewed very differently when performed by different lawyers. As AI technology becomes more widespread, lawyers are increasingly relying on AI technology without crosschecking the work performed by these products. As a result, lawyers may blindly rely on legal technology to perform legal work and thus may hamper their ability to exercise their independent judgment. Therefore, human supervision is necessary to control the quality and consistency of the documents.

ii. Model rule 5.3 responsibilities regarding nonlawyer assistance

The AI legal industry has increasingly been involved with third parties, including non-lawyers, technologists, and entrepreneurs.²¹ The potential risk arising from the nature of using new technology in the practice of law is prompting lawyers to provide increasing supervision of non-lawyers.

Model Rule 5.3 requires supervisory lawyers to make reasonable efforts to ensure that nonlawyer assistants comply with professional legal obligations. Under this rule, the conduct of non-lawyers associated with the lawyer is compatible with the professional obligations of the lawyer. The ABA in 2012 amended the rule to cover more than human assistants. Within this context, AI products are effectively covered under the rule. But AI's role in a lawyer's practice, including its ability to assist a lawyer's judgement, remains under addressed.

²⁰ MODEL RULES OF PROF'L CONDUCT r. 2.1 (AM. BAR ASS'N 1983)..

²¹ William D. Henderson, *A Blueprint for Change*, 40 PEPP. L. REV. 461, 462–63 (2013).

Traditionally, when a lawyer fails to adequately supervise a paralegal's work, he would be subject to violation of the Model Rule. Similarly, when today's AI technology enables computers to perform the tasks that are traditionally handled by nonlawyers, lawyers too have the responsibility to adequately supervise the AI's work to ensure that it would not undermine the firm in client representation. Consequently, the lawyers who failed to review and correct the errors produced by AI are essentially no different than the lawyers who failed to oversee the work produced by their paralegals. Thus, lawyers cannot escape liability for failure to review works performed by AI.

b. Courts' approach to issues concerning AI legal technology

The ABA, prevents the unauthorized practice of law by those who are not licensed.²² As a result, lawyers have traditionally effectively prevented machines from “practicing law” and have precluded non-lawyer investment in the “practice of law.”

However, in 2015, the Second Circuit Court of Appeals' holding in *Lola v. Skadden* suggests otherwise. In *Lola*, the contract attorney was asked to work on a contract review for a litigation where he worked overtime but was paid the same hourly rate. Specifically, the contract attorney was asked to look at documents to see what search terms appeared, marking documents into the categories predetermined by the firm.²³ The attorney claimed that the firm provided documents had already been “pre-marked” by the software system Relativity, which used a predictive algorithm to pre-mark most of the documents. The court reasoned that because the attorney performed documents review under such tight constraints that rendered him no independent legal judgement, the document review task he performed could be provided by a machine entirely.

The holding of *Lola* incentivizes lawyers to learn more about what legal technology can do to understand the limits of it in order to uphold the legal profession's status quo. For lawyers, the drive to do so is both critical and critically lacking. For one thing, without lawyers who have the knowledge as well as the ethical duty to test the answers provided by future AI legal system, clients would be left with no option but to settle for the answers given by the algorithms. As such, lawyers will need to assure their clients of the outcomes of these algorithms by understanding what mistakes were made if the outcome is questionable. Thus, future lawyers will need the skillsets to either challenge these systems or argue for their use. For another, even though the market for legal technology is growing, law firms are generally unwilling to incorporate new technology into their practice because it goes against their traditional billable hour system.

²² MODEL RULES OF PROF'L CONDUCT r. 5.5 (AM. BAR ASS'N 1983).

²³ *Id.*

Therefore, law firms that recognize the values of legal technology may gain an advantage in the legal market by improving efficiency on basic transactional practice, and shifting focus on practices that are hard to be performed by machines, such as litigation and consulting services. Either way, lawyers need to gain a better understanding of legal technology, especially the strengths and limits of the machine, in order to better use it to facilitate their practice.

PROPOSED SOLUTIONS

a. Transparency

Lawyers might make inadvertent misrepresentations about what AI tools have accomplished, partly because they are unlikely to have an adequate understanding of how they work. Therefore, it is incumbent on the creators of these tools to facilitate transparency and specify the skills and knowledge required for their effective operation. Opening this door can lead to improved communication between legal and technical fields, while bettering the science behind AI and its application in legal systems. This does not mean that lawyers should abdicate responsibility or authority. But it does require them to recognize that being competent means knowing the limits of their own knowledge and skills, and thus when to enlist the aid of those skilled in the relevant field.

In light of this, the legal-tech companies should be more transparent about the mechanisms they use to design these technologies, so as to allow lawyers to become better aware of how to use the technology in line with the ABA competence requirement.

b. Updating the Model Rules

In 2012, the ABA amended the Model Rules of Professional Conduct in Rule 1.1 to include the duty of technology competence. Under the new amendment, lawyers are required to “keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.”²⁴

The ABA rule implies that lawyers using AI to facilitate their practice must not only advise their clients on the legal risks associated with AI, but also need to evaluate how and how much to include AI technologies in their practices.²⁵

²⁴ MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 1983).

²⁵ Jason Tashea & Nicholas Economou, *Be Competent in AI before adopting, integrating it into your practice*, ABA JOURNAL (Apr. 23, 2019, 7:30 A.M.), <https://www.abajournal.com/lawscribbler/article/before-lawyers-can-ethically-adopt-and-integrate-ai-into-their-practices-they-must-first-be-competent>.

At the time of writing, 37 states including the state of Indiana, have adopted the duty of technology competence to their own rules of professional conduct.²⁶ Yet, the challenge of understanding and using AI does not seem to be stressed adequately, especially considering the direct impact of maintaining technology competence will have on other rules of professional responsibilities. For example, Model Rules 1.4 (communications) or 1.5 (fees) are triggered when a lawyer is explaining how the use of AI may affect client representation or fees. Therefore, the potential ethical conflicts stemming from the use of AI calls for a heightened awareness about AI and its relevant education.

c. Continued Legal Education (CLE)

By design, the ABA’s duty of technology competence requirement calls for lawyers to recognize the increasingly important role technology plays in the practice of law. However, despite the fact that 37 states have adopted the technology competence rule in their own state rules, Florida is the only state to attach a mandatory continuing legal education (CLE) requirement for technology. Under Florida’s rule, lawyers are required to receive up to three hours of technology CLE every three years.²⁷ Even so, an hour a year is an insufficient amount of time for lawyers to learn the details of constantly evolving technology, let alone understanding the strengths and limits, risks and benefits associated with these new technologies.

Considering the widespread prevalence and the highly technical nature of AI, it is crucial for state bars to mandate more CLE hours on topics related to AI and new technology. For states that do not require CLE hours on technology, Florida’s approach is perhaps a helpful starting point to address the issue.

CONCLUSION

Improving efficiency, accuracy, and reducing costs for law firm clients is just the beginning of AI’s potential in the legal profession. AI, with its flexibilities and widespread prevalence, has the potential to transform hundreds of years of traditional legal practice.

However, AI’s transformation of the legal profession does not come without challenges. For one thing, lawyers will likely be less inclined to exercise their independent judgement when an increasing amount of legal work can be performed by AI-powered technology. For another, even if lawyers are obligated to oversee the work performed by AI, case law suggests that merely doing what the machine is able to do does not constitute practice of law. These

²⁶ *Tech Competence*, LAWSITES BLOG, <https://www.lawsitesblog.com/tech-competence> (last visited Dec. 20, 2019).

²⁷ Tad Simons, *For a lawyer, What Does “Technology Competence” Really Mean?*, LEGAL EXEC. INST., (Apr. 20, 2018), <https://www.legalexecutiveinstitute.com/lawyers-technological-competence/>.

challenges call for a heightened understanding of the strengths and limits, risks and benefits associated with AI. Yet, this heightened awareness should not be exercised by lawyers unilaterally, instead, it should be stressed by state bars and AI service providers together, in a way that will improve the effectiveness and reduce the risks of using AI in legal practice.