RESOLVED, That the American Bar Association urges courts and lawyers to address the emerging ethical and legal issues related to the usage of artificial intelligence ("AI") including: (1) bias, explainability, and transparency of automated decisions made by AI; (2) ethical and beneficial usage of AI; and (3) controls and oversight of AI and the vendors that provide AI.
I. PURPOSE OF THIS RESOLUTION AND REPORT

Lawyers increasingly are using artificial intelligence (“AI”) in their practices to improve the efficiency and accuracy of legal services offered to their clients. But while AI offers cutting-edge advantages and benefits, it also raises complicated questions implicating professional ethics.

The purpose of this resolution and report is to urge courts and lawyers to address the emerging legal and ethical issues related to the usage of AI. Courts and lawyers must be aware of the issues involved in using (and not using) AI, and they should address situations where their usage of AI may be flawed or biased.

In order to assist courts and lawyers in addressing these AI issues, we will be exploring the establishment of a working group to, in part, define guidelines for legal and ethical AI usage, and potentially develop a model standard that could come to the American Bar Association House of Delegates for adoption.

Section II of this report provides an overview of AI and the different AI tools used in the practice of law. Section III, in turn, analyzes a lawyer’s ethical duties in connection with AI technology. Section IV explores how bias can affect AI and the importance of using diverse teams when developing AI technology. Section V discusses questions to ask when adopting an AI solution or engaging an AI vendor. And finally, the report concludes with Section VI.

II. OVERVIEW OF HOW ARTIFICIAL INTELLIGENCE IS CHANGING THE LAW

Artificial intelligence promises to change not only the practice of law but our economy as a whole. We clearly are on the cusp of an AI revolution. But what does all this mean, as a practical matter, for lawyers? What is AI? And how is it being used in the practice of law?

A. Defining AI.

Artificial intelligence has been defined as “the capability of a machine to imitate intelligent human behavior.” Others have defined it as “cognitive computing” or “machine learning.” Although there are many descriptive terms used, AI at its core encompasses

---

1 This report is based on the article “Legal Ethics in the Use of Artificial Intelligence” by Janine Cerny, Steve Delchin, and Huu Nguyen, https://download.pli.edu/WebContent/pm/249218/pdf/02-22-19_1600_115843_LegalEthics.pdf with full permission


tools that are trained rather than programmed. It involves teaching computers how to perform tasks that typically require human intelligence such as perception, pattern recognition, and decision-making.⁴

B. How AI Is Being Used In The Practice Of Law

There are many different ways that lawyers today are using AI to improve productivity and provide better legal services to their clients. Below are several of the main examples. As AI becomes even more advanced in the coming years, it fundamentally will transform the practice of law. Lawyers who do not adopt AI will be left behind.

1. Electronic Discovery/Predictive Coding.

Lawyers, predictably, use AI for electronic discovery. The process involves an attorney training the computer how to categorize documents in a case. Through a method of predictive coding, AI technology is able to classify documents as relevant or irrelevant, among other classifications, after extrapolating data gathered from a sample of documents classified by the attorney.⁵

2. Litigation Analysis/Predictive Analysis.

AI also is being used to predict the outcome of litigation through the method of predictive analytics. AI tools utilize case law, public records, dockets, and jury verdicts to identify patterns in past and current data.⁶ AI then analyzes the facts of a lawyer’s case to provide an intelligent prediction of the outcome.⁷


AI tools are being used by lawyers to assist with contract management. This is particularly valuable to inside counsel who quickly need to identify important information in contracts. For example, AI tools can flag termination dates and alert the lawyer about deadlines for sending a notice of renewal. AI tools also can identify important provisions in contracts, such as most favored nation clauses, indemnification obligations, and choice of law provisions, among others.⁸

---


⁶ Supra, note 3

⁷ Id.

⁸ Id.
4. Due Diligence Reviews.

AI is being used to assist in automated due diligence review for corporate transactions to reduce the burden of reviewing large numbers of documents.9 Similar to contract management, due diligence review involves the computer identifying and summarizing key clauses from contracts.10

5. “Wrong Doing” Detection.

AI is being used to search company records to detect bad behavior preemptively. AI is able to see beyond attempts to disguise wrongdoing and identify code words.11 AI can also review employee emails to determine morale, which may lead to identification of wrongdoing.12 For example, in one test using emails of Enron executives, AI was able to detect tension amongst employees that was correlated with a questionable business deal.13

6. Legal Research.

AI traditionally has been used to assist with legal research, but it increasingly is becoming more sophisticated. With AI, lawyers can rely on natural language queries—rather than simple Boolean queries—to return more meaningful and more insightful results.14 AI also can be used to produce basic legal memos. One AI program called Ross Intelligence, which uses IBM’s Watson AI technology, can produce a brief legal memo in response to a lawyer’s legal question.15 Over time, such AI technology will become more and more powerful.

7. AI to Detect Deception.16

Finally, as AI becomes more advanced, it will be used by lawyers to detect deception. Researchers, for example, are working on developing AI that can detect deception in the courtroom. In one test run, an AI system performed with 92 percent accuracy, which the

9 Id.
13 Id.
14 Supra, note 3.
researchers described as “significantly better” than humans. While AI is still being developed for use in courtrooms, it already is being deployed outside the practice of law. For example, the United States, Canada, and European Union have run pilot programs using deception-detecting kiosks for border security.

C. It is Essential for Lawyers to be Aware of AI.

The bottom line is that it is essential for lawyers to be aware of how AI can be used in their practices to the extent they have not done so yet. AI allows lawyers to provide better, faster, and more efficient legal services to companies and organizations. The end result is that lawyers using AI are better counselors for their clients. In the next few years, the use of AI by lawyers will be no different than the use of email by lawyers—an indispensable part of the practice law.

Not surprisingly, given its benefits, more and more business leaders are embracing AI, and they naturally will expect both their in-house lawyers and outside counsel to embrace it as well. Lawyers who already are experienced users of AI technology will have an advantage and will be viewed as more valuable to their organizations and clients. From a professional development standpoint, lawyers need to stay ahead of the curve when it comes to AI. But even apart from the business dynamics, professional ethics requires lawyers to be aware of AI and how it can be used to deliver client services. As explored next, a number of ethical rules apply to lawyers’ use and non-use of AI.

III. THE LEGAL ETHICS OF AI.

Given the transformative nature of AI, it is important for courts and lawyers to understand how existing and well established ethical rules may apply to the use of AI.

A. Several Ethics Rules Apply To Lawyer’s Use (And Non-Use) of AI.

There are a number of ethical duties that apply to the use of (and non-use of) AI by lawyers, including the duties of: (1) competence (and diligence), (2) communication, (3) confidentiality, and (4) supervision. These duties as applied to AI technology are discussed below.

1. Duty of Competence

Under Rule 1.1 of the ABA Model Rules, a lawyer must provide competent representation to his or her client. The rule states that “[c]ompetent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the

---

17 Id.
19 Supra, note 3.
representation.” The duty of competence requires lawyers to be informed, and up to date, on current technology. In 2012, this was made clear when the ABA adopted Comment 8 to Rule 1.1 which states that “[t]o maintain the requisite knowledge and skill, lawyers should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology . . . .”21

As one author points out, there does not appear to be any instance “in which AI represents the standard of care in an area of legal practice, such that its use is necessary.”22 Nonetheless, lawyers generally must understand the technology available to improve the legal services they provide to clients. Lawyers have a duty to identify the technology that is needed to effectively represent the client, as well as determine if the use of such technology will improve service to the client.23

Under Rule 1.1, lawyers also must have a basic understanding of how AI tools operate. While lawyers cannot be expected to know all the technical intricacies of AI systems, they are required to understand how AI technology produces results. As one legal commentator notes, “[i]f a lawyer uses a tool that suggests answers to legal questions, he must understand the capabilities and limitations of the tool, and the risks and benefits of those answers.”24

2. Duty to Communicate

ABA Model Rule 1.4 governs a lawyer’s duty to communicate with clients and requires a lawyer to “reasonably consult with the client about the means by which the client’s objectives are to be accomplished.”25 A lawyer’s duty of communication under Rule 1.4 includes discussing with his or her client the decision to use AI in providing legal services. A lawyer should obtain approval from the client before using AI, and this consent must be informed. The discussion should include the risks and limitations of the AI tool.26 In certain circumstances, a lawyer’s decision not to use AI also may need to be communicated to the client if using AI would benefit the client.27 Indeed, the lawyer’s failure to use AI could implicate ABA Model Rule 1.5, which requires lawyer’s fees to be

20 ABA Model Rule 1.1
23 Supra, note 4.
25 ABA Model Rule 1.4.
26 Supra, note 4.
27 Id.
reasonable. Failing to use AI technology that materially reduces the costs of providing legal services arguably could result in a lawyer charging an unreasonable fee to a client.28

3. Duty of Confidentiality

Under ABA Model Rule 1.6, lawyers owe their clients a generally duty of confidentiality. This duty specifically requires a lawyer to “make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client.”29 The use of some AI tools may require client confidences to be “shared” with third-party vendors. As a result, lawyers must take appropriate steps to ensure that their clients’ information appropriately is safeguarded.30 Appropriate communication with the client also is necessary.

To minimize the risks of using AI, a lawyer should discuss with third-party AI providers the confidentiality safeguards in place. A lawyer should inquire about “what type of information is going to be provided, how the information will be stored, what security measures are in place with respect to the storage of the information, and who is going to have access to the information.”31 AI should not be used in the representation unless the lawyer is confident that the client’s confidential information will be secure.

4. Duty to Supervise

Under ABA Model Rules 5.1 and 5.3, lawyers have an ethical obligation to supervise lawyers and nonlawyers who are assisting lawyers in the provision of legal services to ensure that their conduct complies with the Rules of Professional Conduct.32 In 2012, the title of Model Rule 5.3 was changed from “Responsibilities Regarding Nonlawyer Assistants” to “Responsibilities Regarding Nonlawyer Assistance.”33 The change clarified that the scope of Rule 5.3 encompasses nonlawyers whether human or not. Under Rules 5.1 and 5.3, lawyers are obligated to supervise the work of AI utilized in the provision of legal services, and understand the technology well enough to ensure compliance with the lawyer’s ethical duties. This includes making sure that the work product produced by AI is accurate and complete and does not create a risk of disclosing client confidential information.34

29 ABA Model Rule 1.6.
30 Supra, note 4.
31 Id.
32 Id.
34 Supra, note 4.
There are some tasks that should not be handled by today’s AI technology, and a lawyer must know where to draw the line. At the same time, lawyers should avoid underutilizing AI, which could cause them to serve their clients less efficiently. Ultimately, it’s a balancing act. Given that many lawyers are focused on detail and control over their matter, it is easy to see why “the greater danger might very well be underutilization of, rather than overreliance upon, artificial intelligence.”

**B. Key Practical Takeaways Relating to The Ethics of AI.**

There clearly are a number of ethical rules that apply to lawyers’ use and non-use of AI technology, and they have real-world application. Lawyers must be informed about AI’s ability to deliver efficient and accurate legal services to clients while keeping in mind the ethical requirements and limitations. Ultimately, lawyers must exercise independent judgment, communicate with clients, and supervise the worked performed by AI. In many ways, the ethical issues raised by AI are simply a permutation of ethical issues that lawyers have faced before with regard to other technology. It shows that the legal ethics rules are adaptable to new technologies, and AI is no exception.

**IV. BIAS AND TRANSPARENCY IN THE AI CONTEXT.**

There is a final, often overlooked consideration in a lawyer’s use of AI technology, and that is the problem of bias. For all the advantages that AI offers for lawyers, there also is a genuine concern that AI technology may reflect the biases and prejudices of its developers and trainers, which in turn may lead to skewed results. It is critical for lawyers using AI to understand and address how bias can impact AI results.

The problem of bias in the development and use of AI potentially implicates professional ethics. In August 2016, the ABA adopted Model Rule 8.4(g), which prohibits harassment and discrimination by lawyers against eleven protected classes. Rule 8.4(g) states that it is professional misconduct for a lawyer to “engage in conduct that the lawyer knows or reasonably should know is harassment or discrimination on the basis of race, sex, religion, national origin, ethnicity, disability, age, sexual orientation, gender identity, marital status or socioeconomic status in conduct related to the practice of law.” About 20 states already have some variation of ABA Model Rule 8.4 on the books, and several other states are considering whether to adopt ABA’s new expansive rule. Lawyers in jurisdictions that have adopted some form of Rule 8.4 must consider whether their use of AI is consistent with the rule. Moreover, even in jurisdictions that have not adopted some form of Rule 8.4, lawyers must consider how bias in the use of AI could create risks for clients.

35 *Supra*, note 22.
36 *Id.*
38 ABA Model Rule 8.4(g).
Bias in AI technology stems from the nature of AI tools, which involve machine training rather than programming. If the data used for training is biased, the AI tool will produce a biased result. For example, one major company recently launched an AI tool that could have text-based conversations with individuals.\textsuperscript{39} The tool continuously learned how to respond in conversations based on previous conversations. Unfortunately, the tool began to mimic the discriminatory viewpoints of the people it previously engaged in conversation.\textsuperscript{40}

As yet another example, the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) software used by some courts to predict the likelihood of recidivism in criminal defendants has been shown by studies to be biased against African-Americans.\textsuperscript{41} For these reasons, it is important to have diverse teams developing AI to ensure that biases are minimized. The data used for training AI should also be carefully reviewed in order to prevent bias.

In the AI world, there has been a movement away from “black box” AI, in which an AI model is not able to explain how it generated its output based on the input.\textsuperscript{42} The preferred model is now “explainable AI,”\textsuperscript{43} which is able to provide the reasoning for how decisions are reached. The importance of transparency in the use of AI is being recognized by governments. New York City, for example, recently passed a law that requires creation of a task force that monitors algorithms used by its government, such as those used to assign children to public schools.\textsuperscript{44} One of the task force’s responsibilities is to determine how to share with the public the factors that go into the algorithms.\textsuperscript{45}

There are also industry specific laws that prohibit bias and require transparency which may cover AI decision making. Competent counsel should understand these laws and their AI context as well. For example, under the Fair Credit Reporting Act (“FCRA”), 15 U.S.C. § 1681 et seq., among other requirements, any financial institution that uses a credit report or another type of consumer report to deny a consumer’s application for credit, insurance, or employment – or to take another adverse action against the consumer – must tell the consumer, and must give the consumer the name, address, and phone number of the agency that provided the information. Upon the request of a

\textsuperscript{39} Jonathon Vanian, \textit{Unmasking A.I.’s Bias Problem}, Fortune (June 25, 2018) \url{https://www.fortune.com/longform/ai-bias-problem/}.

\textsuperscript{40} Id.


\textsuperscript{45} Id.
consumer for a credit score, a consumer reporting agency shall supply to the consumer a statement and notice that includes “all of the key factors that adversely affected the credit score of the consumer in the model used,” and any consumer reporting agency shall provide trained personnel to explain to the consumer any information required to be furnished to the consumer under the Act (15 U.S.C. §1681g(f) and (g); see also 15 U.S.C. §1681m for requirements of adverse action notices). And the Equal Credit Opportunity Act ("ECOA"), 15 U.S.C. §1691 et seq. states:

(a) ACTIVITIES CONSTITUTING DISCRIMINATION It shall be unlawful for any creditor to discriminate against any applicant, with respect to any aspect of a credit transaction—

(1) on the basis of race, color, religion, national origin, sex or marital status, or age (provided the applicant has the capacity to contract);

(2) because all or part of the applicant's income derives from any public assistance program; or

(3) because the applicant has in good faith exercised any right under this chapter.

Ultimately, the need for lawyers to understand how AI generates outputs is important for combatting bias and providing good counsel to clients. And it may be required by legal ethics. As detailed above, lawyers have a duty to communicate with clients, and explaining why AI generates a particular outcome may be included as part of that duty. The good news is that while AI has the potential to be biased, AI is much more predictable than humans. It is easier to remedy bias in machines than it is in humans. Given their role as officers of the court, it is critical for lawyers to be on the forefront of understanding how bias in the use of AI can impact outcomes achieved by the legal profession and society as a whole.

V. QUESTIONS TO ASK WHEN ADOPTING AN AI SOLUTION OR ENGAGING AN AI VENDOR

Lawyers and courts will most likely adopt AI though their third party vendors. Before adopting such solutions, lawyers and courts should ask their vendors the following questions and ensure the vendors understand the following issues:

i. Al Bias, Explainability, and Transparency

● Before using AI, the technology should be determined not to have built-in bias due to its programming or its data.

● The lawyer and court should ensure that AI vendors providing the tool to the lawyer and court are aware of and take into account the potential for bias, including disparate impact.

Questions to ask:
Can the result of the AI’s decision be explained in a meaningful and lawful way to affected stakeholders, where appropriate?

Is the training set examined to minimize potential of data bias?

Do the AI’s data and machine-learning operations reinforce bias? Do the operations fail to or give poor performance for certain segments of the population due to age, gender, race, ethnicity, etc.?

Does the AI identify itself as AI where appropriate or required by law?

ii. Ethical and Beneficial

AI, its production, and deployment should be beneficial (or at least not detrimental) to the lawyer, the court, clients, and society in general.

Deployment of AI should take into account the needs and viewpoints of the lawyer’s and court’s various stakeholders (e.g., clients, plaintiffs, defendants).

The use of AI should take into account accessibility for those with disabilities, both enhancing access where possible and minimizing impacts on the disabled (for example, an online chatbot provided by a court might also have a voice interface, or vice versa).

The use of AI should align with the ethical codes and principles.

Questions to ask:

- Does AI promote civil activities, where appropriate (e.g., AI tools that do not hinder freedom of speech or assembly)?
- Depending on the industry, does AI accommodate diverse populations?

iii. Monitoring, Accountability, Controls, and Oversight

The lawyer and court should have control and oversight of AI vendors and what AI does and how it operates.

- The use of AI should be monitored for potential legal and ethical issues.
- AI should be designed to retain records and to allow for the re-creation of decision-making steps or processes, especially when accidents might occur.
- Legal counsel should be part of the process of accountability, controls, and oversight in order to protect the attorney-client privilege as well as to ensure legal compliance.
- AI and its usage should be audited and auditable.

Questions to ask:

- Is there a single lawyer, staff person, or officer, such as a Chief Artificial Intelligence Officer, who oversees the AI program?
- Does the lawyer or court understand AI and its risks?
  - Is the AI semi-autonomous or fully autonomous?
  - Does the AI incorporate machine learning or is it static?
Are people interacting directly with AI, and how?

- How does the lawyer or court know if the AI is operating properly?
- Is the keeping of AI data and decisions part of the lawyer’s or court’s records retention policy and obligations?

VI. CONCLUSION

This resolution, if adopted, will urge lawyers and courts to address the emerging ethical and legal issues related to the usage of artificial intelligence as described in this report.

Respectfully submitted,

William B. Baker
Chair, Science & Technology Law Section
August 2019
GENERAL INFORMATION FORM

Submitting Entities: Science & Technology Law Section

Submitted By: William B. Baker, Chair, Science & Technology Law Section

1. Summary of Recommendation(s).
The American Bar Association urges courts and lawyers to address the emerging ethical and legal issues related to the usage of artificial intelligence (“AI”) including: (1) bias, explainability, and transparency of automated decisions made by AI; (2) ethical and beneficial usage of AI; and (3) controls and oversight of AI and the vendors that provide AI.

2. Approval by Submitting Entity.
Approved by Science & Technology Law Section on May 6, 2019.

3. Has this or a similar recommendation been submitted to the ABA House of Delegates or Board of Governors previously?
No

4. What existing Association policies are relevant to this recommendation and how would they be affected by its adoption?
In August 2012, the ABA amended Model Rule 1.1 of the Model Rules of Professional Conduct to add Comment 6, which states that a lawyer has a responsibility to keep abreast of the benefits and risks associated with using relevant technology.46 This resolution urges action related to a specific type of technology, AI, that is or will become increasingly used in business and by lawyers.47

5. If this is a late Report, what urgency exists which requires action at this meeting of the House?
N/A

6. Status of Legislation. (If applicable.)
N/A

7. Brief explanation regarding plans for implementation of the policy, if adopted by the House of Delegates.

46 https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/rule_1_1_competence/comment_on_rule_1_1/
47 See generally https://biglawbusiness.com/artificial-intelligence-creeps-into-big-law-endangers-some-jobs
The Section of Science & Technology Law intends to study with interested ABA entities a possible model standard for legal and ethical usage of AI by courts and lawyers. This resolution could also be used by the ABA, as well as by ABA members to promote continuing legal education related to AI.

8. **Cost to the Association.** (Both direct and indirect costs.)
   Adoption of this proposed resolution would result in only minor indirect costs associated with staff time devoted to arranging teleconference calls for Section members and other interested persons, as part of the staff members’ overall substantive responsibilities.

9. **Disclosure of Interest.** (If applicable.)
   None

10. **Referrals.** (List entities to which the recommendation has been referred, the date of referral and the response of each entity if known.)
    This Report with Recommendations was circulated to the leadership of the ABA Section of Civil Rights and Social Justice, Innovation Center, Litigation, CPR, Judicial Division, GP Solo, and Law and National Security.

11. **Contact Person.** (Prior to the meeting. Please include name, address, telephone number and email address.)

    William Baker  
    1300 Pennsylvania Ave, Suite 700,  
    Washington DC 20004,  
    571-317-1922,  
    wbaker@potomaclaw.com

    Richard Field  
    755 Anderson Avenue  
    Cliffside Park, NJ 07010  
    201-941-8015  
    field@pipeline.com

    Bonnie Fought  
    55 Tiptoe Lane Hillsborough,  
    CA 94010,  
    650-218-6248,  
    aba@garber-fought.net

    Huu Nguyen  
    30 Rockefeller Plaza,  
    New York, NY 10112,  
    212-872-9802,  
    huu.nguyen@squirepb.com
12. **Contact Person.** (Who will present the report to the House. Please include email address and cell phone number.)

Richard Field  
755 Anderson Avenue  
Cliffside Park, NJ 07010  
201-941-8015  
field@pipeline.com

Bonnie Fought  
55 Tiptoe Lane  
Hillsborough, CA 94010  
650-218-6248,  
aba@garber-fought.net
1. **Summary of the Recommendation.**

The American Bar Association urges courts and lawyers to address the emerging ethical and legal issues related to the usage of artificial intelligence (“AI”) including: (1) bias, explainability, and transparency of automated decisions made by AI; (2) ethical and beneficial usage of AI; and (3) controls and oversight of AI and the vendors that provide AI.

2. **Summary of the issue which the Recommendation addresses.**

Artificial intelligence promises to change the practice of law. There are many different ways that lawyers today are using AI to improve productivity and provide better legal services to their clients, and the usage of AI tools in the legal profession will only increase. It is essential for lawyers to be aware of (a) how AI can be used in their practices, including who their ethical duties apply to the use of AI, (b) the problem of bias in the development and use of AI, and (c) proper control and oversight of the use of AI by lawyers and their vendors.

3. **An explanation of how the proposed policy position will address the issue.**

The proposed policy position will increase understanding in the legal profession of the legal and ethical issues posed by the usage of AI.

4. **A summary of any minority views or opposition which have been identified.**

N/A