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Artificial Intelligence and Ethics

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By:

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Abstract:

This paper focuses on the impact that artificial intelligence has had on the practice of law and ethics rules. In some respects, the ethics rules, comments, and continuing legal education requirements incorporate knowledge of technology into the duty of attorney competence. After offering a primer on artificial intelligence and attorney ethics, the paper discusses certain proposals for revising the ethics rules, comments, and continuing legal education requirements.

Introduction

Artificial intelligence has had a major impact on the business world because of its advantages, and businesses that decline to pursue innovation through enfolding technology into the business will be left behind. Younger, forward-thinking individuals might be charmed by the analytic possibilities of technology to complete routine tasks more efficiently and competitively, permitting efforts to be shifted to more complex and higher-value tasks. For example, some have counseled using artificial intelligence as a co-pilot;[1] however, permitting artificial intelligence to intervene to that extent should be done with caution, given its inherent risks.

Artificial intelligence is invaluable in certain respects but is deficient in accurate results, critical thinking, and creativity.[2] "AI's social prospects are simultaneously alluring and alarming: we want efficient and effective AI systems, but not if they efficiently or effectively cause harm. Satisfying *all* of these conditions may not be possible; AI's promises and perils are hard to decouple."[3] The product of artificial intelligence lacks transparency, meaning that one must be extremely vigilant in evaluating it to weed out bias and error.

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[1] Darren Person, *Why Business Leaders Should View Artificial Intelligence As A Co-Pilot*, FORBES, Oct. 23, 2023, https://www.forbes.com/sites/forbestechcouncil/2023/10/23/why-business-leaders-should-view-artificial-intelligence-as-a-co-pilot/?sh=5fe34b402ae6.

[2] *Id.*

[3] David S. Rubenstein, *Acquiring Ethical Ai*, 73 FLA. L. REV. 747, 771 (2021).

Artificial intelligence is viewed by some as disruptive in that it creates social challenges because it causes people to act in new and different ways.[4] A risk is that someone may exaggerate the dependability of writing produced by artificial intelligence, whereas the true nature of the product is "unpredictable and may generate improper or incorrect output . . . , not based on what is objectively true."[5] This disruption may cause a push to legally regulate artificial intelligence, as well as pressure to more specifically tighten legal ethics rules to provide attorneys more guidance on the applicable standard of conduct in the face of increasing penetration of artificial intelligence into the legal realm.

This manuscript is divided into five portions. The first portion includes an explanation of artificial intelligence, discusses artificial intelligence ethics, and provides information on government regulation of artificial intelligence. The second portion discusses artificial intelligence in the legal sphere, including its risks. The third portion provides information on American Bar Association Model rules and state ethics rules dealing with technology. The fourth portion examines various proposals for making attorneys more technologically competent. The fifth portion reaches a conclusion.

I.   *Artificial intelligence*

What is artificial intelligence?

"'Artificial intelligence' is commonly defined as any technology that allows a machine to replicate tasks typically associated with higher level human cognitive processes, such as learning from experience and understanding language."[6] A machine is central to artificial intelligence. "In the simplest sense, AI is the ability of a machine to convert inputted data into recognizable patterns and/or then use those patterns to formulate decisions."[7] Large language model programs are moving forward at great speed and can automatically detect patterns and produce a work product. "LLMs have had shocking success in mimicking human understanding and production of language."[8] However, the programs initially required human intervention, using system designers, and are not inherently intelligent. "AI involves machine learning, whereby an algorithm optimizes its responses through experience as embodied in large amounts of data, with limited or no human interference."[9]

"AI-driven systems act on the basis of self-learning algorithms that enable them to perform in increasingly autonomous and often unexpected ways."[10] One author classifies algorithmic error "as *sociotechnical* constructs--as *relationships* between people and machines that have somehow

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[4] Hin-Yan Liu et al., *Artificial intelligence and legal disruption: a new model for analysis*,12 L., INNOVATION & TECH. 205, 224 (2020).

[5] Colin E. Moriarty, *The Legality of Generative AI*, 52 COLO. LAW., Sept. 2023, at 30, 34.

[6] Erica Friesen, *The Artificial Researcher: Information Literacy and Ai in the Legal Research Classroom*, 26 LEGAL WRITING: J. LEGAL WRITING INST. 241, 242 (2022).

[7] Chris Lewis, Comment, *The Need for A Legal Framework to Regulate the Use of Artificial Intelligence*, 47 U. DAYTON L. REV. 285, 286 (2022).

[8] Colin E. Moriarty, *The Legal Ethics of Generative AI*, 52 COLO. LAW., Oct. 2023, at 30, 32.

[9] Philip Sales, *Algorithms, Artificial Intelligence, and the Law*, 105 JUDICATURE 22, 24 (2021).

[10] Axel Walz & Kay Firth-Butterfield, *Implementing Ethics into Artificial Intelligence: A Contribution, from A Legal Perspective, to the Development of an Ai Governance Regime*, 18 DUKE L. & TECH. REV. 176, 181 (2019).

failed, broken down, behaved in unexpected ways."[11] Thus, artificial intelligence involves a component of unpredictability. "AI can involve machines that are capable of analyzing situations to learn for themselves and then generating answers that may not even be foreseen or controlled by their programmers."[12]

Artificial intelligence is rapidly becoming interwoven into the various professions, including the legal profession, and it is anticipated that it will have a widespread effect. The "intelligence" part of "artificial intelligence" might make some believe, to their detriment, that the work produced has an "aura of infallibility."[13] The adjective "artificial" is useful to emphasize in that it indicates that, even though the writing produced might seem to be beyond reproach, it is only an attempt to approach true intelligence and comes accompanied by certain risks.

After all, the programs that have given birth to artificial intelligence were created by humans and thus contain all their idiosyncrasies and biases, even though, at first glance the writing they produce might seem to be entirely trustworthy. One author explains that artificial intelligence is lacking in common sense and does not have the capacity to make reliable decisions.[14] What is even worse is that the programs insert material that might logically follow the general train of thought but that might have no basis, as if the program hallucinated. Another pitfall is potentially putting privacy and confidential information at risk.

"In the simplest sense, AI is the ability of a machine to convert inputted data into recognizable patterns and/or then use those patterns to formulate decisions."[15] Artificial intelligence was conceived as an attempt "to mirror a person's reasoning process in order to accomplish the desired solution."[16] In the legal realm, "AI would have to mimic the analytical reasoning of lawyers to arrive at a legal solution,"[17] tasking artificial intelligence with "an understanding and modeling of legal reasoning."[18] Much is dependent on how deeply the design engineers who created the various programs understood about legal reasoning and analysis. Perhaps an interdisciplinary team would be necessary to produce the best programs capable of performing legal research and reasoning. "AI arises from algorithmic programming but, due to the complexity of the processes it carries out, the outcome of the programming cannot always be predicted by humans, however well informed they may be."[19]

The following section discusses artificial intelligence ethics and AI audits.

What is AI ethics?

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[11] Mike Ananny, *Seeing Like an Algorithmic Error: What Are Algorithmic Mistakes, Why Do They Matter, How Might They Be Public Problems?*, 24 YALE J. L. & TECH. 342, 345 (2022).

[12] Sales, *supra* note 7, at 24-25.

[13] Chris Chambers Goodman, *Ai/esq.: Impacts of Artificial Intelligence in Lawyer-Client Relationships*, 72 OKLA. L. REV. 149, 149 (2019).

[14] Joshua P. Davis, *Of Robolawyers and Robojudges*, 73 HASTINGS L.J. 1173, 1175, 1201-02 (2022).

[15] Lewis, supra note 7.

[16] Sergio David Becerra, Comment, *The Rise of Artificial Intelligence in the Legal Field: Where We Are and Where We Are Going*, 11 J. BUS. ENTREPRENEURSHIP & L. 27, 34 (2018).

[17] *Id.*

[18] *Id.*

[19] Sales, *supra* note 7, at 25.

Some advocate incorporation of AI ethics into the fast-moving artificial intelligence industry. One author states, "The field of AI Ethics seeks to apply ethical precepts and theories of ethical conduct to the devising and usage of AI systems, doing so to try and steer AI into sufficient ethical mores and avert unethical actions by AI."[20] The author opines that AI Ethics should be incorporated into the entire life cycle of artificial intelligence system, beginning with its conception and continuing through its development and the entire time it is in use.[21] All players, from developers, to software engineers, to management, to leaders must be committed to AI ethics.[22] In addition, the artificial intelligence industry can take a stab at calling for the industry to voluntarily abide by a set of artificial intelligence ethics principles.[23]

One of the problems in successfully achieving AI ethics may lie in a disconnect among the responsible artificial intelligence professionals. "For example, data scientists and software engineers may not anticipate or feel responsible for the social impacts of their digital creations."[24] Attorneys are looking to artificial intelligence to incorporate moral principles. However, "lawyers may not appreciate the technical challenge of translating nebulous concepts like fairness and nondiscrimination into code."[25] A complicating factor is that a desire by those involved in the development, implementation, and use of an artificial intelligence system to reach AI ethics may be overridden by other prominent AI professionals. "[C]orporate leadership can ignore, marginalize, or terminate ethical AI champions that do not tow the company bottom line."[26]

Another author agrees that "as AI systems and robots become more advanced and intelligent, they must be subjected to ethical norms."[27] This author distinguishes between *ethics of AI* and *ethical AI*.[28] According to this author, the ethics of AI concern "the principles that govern the development of AI, ensuring that ethical dilemmas about the interaction of AI with humans and nature are taken into account in the design phase."[29] The term ethical AI concerns "the AI system itself: how ethical principles can be incorporated into the AI system, ensuring that it operates ethically in its interaction with other agents (humans, animals, and other AI systems)."[30]

Incorporating ethics into artificial intelligence seems like the perfect aspirational goal, except that there are different views on what ethics encompasses, given that different cultures embrace differing moral values. In other words, there is not a single set of ethical principles that can be identified.[31] As a further complication, at some point, a super-intelligent artificial intelligence may

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[20] LANCE B. ELIOT, ADVANCES IN GENERATIVE AI CHATGPT GPT-4 AND AI ETHICS 5 (2023).

[21] *Id.* at 6.

[22] *Id.* at 7.

[23] Michael Veale et al., *AI and Global Governance: Modalities, Rationales, Tensions*, 19 ANN. REV. L. & SOC. SCI. 255, 259 (2023).

[24] Rubenstein, *supra* note 3, at 788.

[25] *Id.*

[26] *Id.* at 789.

[27] Oren Perez & Nurit Wimer, *Algorithmic Constitutionalism*, 30 IND. J. GLOBAL LEGAL STUD. 81, 86 (2023).

[28] *Id.*

[29] *Id.*

[30] *Id.*

[31] *Id.* at 86-87.

come into being that takes over the reins and develops its own principles that may conflict with whatever ethics were instilled in it by its human developers.[32]

Besides differing views of ethics, there are power imbalances to consider. At this stage of artificial intelligence, the tech companies hold all the power. One author counsels that adoption of a digital constitution that would "pressure tech companies to impose effective constraints on their escalating power to influence many crucial aspects of our public and private lives, from our elections to our personalities and emotions, to environmental degradation through the extraction of global resources to labor exploitation."[33] The small attempts at regulating tech companies have thus far done little but to continue the status quo.[34] "[T]he end result has been [that the] the tech companies collect and exploit personal data not only for profit but also for political and social power."[35] The author advocates that: "Instead, our laws and corporate policies must be assessed on how well they achieve public goals; how fairly they distribute power and wealth; how well they protect from corporate predations; and how well they minimize the risks to people, health, and welfare."[36]

The American Bar Association adopted Resolution 604 in February 2023 that has an impact on AI ethics and the use of artificial intelligence by the attorney. Resolution 604 states:

> RESOLVED, That the American Bar Association urges organizations that design, develop, deploy, and use artificial intelligence ("AI") systems and capabilities to follow these guidelines:
>
> 1) Developers, integrators, suppliers, and operators ("Developers") of AI systems and capabilities should ensure that their products, services, systems, and capabilities are subject to human authority, oversight, and control;
>
> 2) Responsible individuals and organizations should be accountable for the consequences caused by their use of AI products, services, systems, and capabilities, including any legally cognizable injury or harm caused by their actions or use of AI systems or capabilities, unless they have taken reasonable measures to mitigate against that harm or injury; and
>
> 3) Developers should ensure the transparency and traceability of their AI products, services, systems, and capabilities, while protecting associated intellectual property, by documenting key decisions made with regard to the design and risk of the data sets, procedures, and outcomes underlying their AI products, services, systems and capabilities.
>
> FURTHER RESOLVED, That the American Bar Association urges Congress, federal executive agencies, and State legislatures and regulators, to follow these guidelines in legislation and standards pertaining to AI.[37]

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[32] *Id.* at 87.

[33] Monika Zalnieriute, *Against Procedural Fetishism: A Call for A New Digital Constitution*, 30 IND. J. GLOBAL LEGAL STUD. 227, 228 (2023).

[34] *Id.* at 252.

[35] *Id.* at 253.

[36] *Id.* at 254.

[37] ABA House of Delegates, Resolution 604 (adopted Feb. 6, 2023).

One of the helpful steps in ensuring AI ethics is to implement an artificial intelligence audit. An AI audit "is a structured assessment of an AI system to ensure it aligns with predefined objectives, standards, and legal requirements."[38] Rather than a one-time operation, the AI audit should be performed on a continuing basis to ensure that the artificial intelligence system is performing properly. It involves "a thorough examination of the AI system's design, inputs, outputs, use case, and overall performance. The goal is to identify and address any potential gaps, flaws, and risks that may arise during the system's operation."[39]

The legal sphere can benefit from AI audits. "AI audits provide a structured assessment to identify and mitigate ethical concerns and ensure an AI system is used and operates as intended."[40] One benefit is to prevent an artificial intelligence system from creating "unintended harm," for example "avoiding disclosing sensitive information or applying the appropriate rigor to legal predictions."[41] The AI audit can evaluate "the AI system's accuracy and efficiency in delivering on its intended purpose, such as accurately summarizing legal documents or predicting the likelihood of legal outcomes."[42]

There are benefits of regularly performing AI audits. One benefit is creating trust between the AI developers and its users. A legal practitioner that performs regular AI audits should earn a reputation as being ethical and trustworthy, which should lead to an enhanced position in the legal market.[43]

Unfortunately, a proper and robust audit with a broad and deep scope[44] is time-consuming and expensive and must be done on a regular basis. A proper audit may involve disclosure of client confidential information to the auditor and an audit that identifies significant negatives may place the legal practitioner's reputation at risk.[45]

The following section reviews the preliminary steps that the federal government has take in regulating artificial intelligence.

Artificial intelligence regulation by the federal government

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[38] Olga V. Mack & Emili Budell-Rhodes, *Navigating the AI Audit: A Comprehensive Guide to Best Practices*, LAW.COM (Oct. 20, 2023), https://www.law.com/legaltechnews/2023/10/20/navigating-the-ai-audit-a-comprehensive-guide-to-best-practices/.
[39] *Id.*
[40] Olga V. Mack & Emili Budell-Rhodes, *Navigating the Pros and Cons of AI Audits in the Legal Sector*, LAW.COM (Oct. 18, 2023), https://www.law.com/legaltechnews/2023/10/18/navigating-the-pros-and-cons-of-ai-audits-in-the-legal-sector/.
[41] *Id.*
[42] *Id.*
[43] *Id.*
[44] Olga V. Mack & Emili Budell-Rhodes, *Decoding AI Audits: A Guide to Breadth and Depth*, LAW.COM (Oct. 19, 2023), https://www.law.com/legaltechnews/2023/10/19/decoding-ai-audits-a-guide-to-breadth-and-depth/.
[45] Mack & Budell-Rhodes, *supra* note 40.

Artificial intelligence regulation by the federal government is in its infancy, with both President Trump and President Biden issuing executive orders[46] concerning artificial intelligence.

The tenor of President Trump's executive order was to encourage innovation and refrain from imposing restrictions on business development of artificial intelligence. The order directed the Office of Management and Budget Director to "consider ways to reduce barriers to the use of AI technologies in order to promote their innovative application while protecting civil liberties, privacy, American values, and United States economic and national security."[47] Thus, the federal government's involvement in regulating artificial intelligence was to be minimal except where fundamental liberties would be impacted.

President Biden's executive order was consistent with President Trump's executive order in encouraging innovation and development of artificial intelligence, yet the Biden order provided more regulation. The summary emphasized that the executive order "establishes new standards for AI safety and security, protects Americans' privacy, advances equity and civil rights, stands up for consumers and workers, promotes innovation and competition, advances American leadership around the world, and more."[48]

The following portion provides information on the interaction of artificial intelligence and the practice of law.

II.   *Artificial intelligence in the legal sphere*

Artificial intelligence in the legal sphere

It is no longer true that an attorney can rely solely on a foundational knowledge of the law. In addition, the legal practitioner "should be well-equipped to work with new and emerging technologies, including AI-driven tools."[49] Some term this knowledge of artificial intelligence technology as information literacy. "Information literacy is a concept that centers instructional efforts on improving how researchers interact with information itself, instead of with specific tools or resource types."[50] In other words, information literacy focuses on the principles central to a wide range of technology tools.

Attorneys have been notoriously reticent to become technologically savvy and may be distrustful of technology. "[L]awyers who continue to ignore the current technological revolution put themselves at risk of being replaced--if not by robots, then certainly by those lawyers who are using technology to drastically increase their efficiency, provide better service to clients, and cut costs."[51] Economic pressure has forced legal practitioners to use technology to become more

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[46] Exec. Order No. 13,859, 84 Fed. Reg. 3967 (Feb. 11, 2019); Charlie Mitchell & Rick Weber, *Biden order sets out federal roles on AI, creates new interagency council at White House*, INSIDE AI POL'Y, October 30, 2023, https://insideaipolicy.com//ai-daily-news/biden-order-sets-out-federal-roles-ai-creates-new-interagency-council-white-house.

[47] Exec. Order No. 13,859, supra note 46, at 3970.

[48] *FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence*, https://insideaipolicy.com/sites/insideaipolicy.com/files/documents/2023/oct/ai10292023.pdf.

[49] Friesen, *supra* note 6, at 243.

[50] *Id.*

[51] Tammy Pettinato Oltz, *Educating Robot-Proof Attorneys*, 97 N.D. L. REV. 185, 186 (2022).

competitive by using artificial intelligence technology assisted review to perform repetitive low-level tasks more effectively and efficiently, thus lowering costs. Artificial intelligence produces better results with fewer errors when asked to use a formula to analyze data, such as that necessary for reviewing discovery documents.[52]

Generally, law firm profits are declining these days.[53] Fortunately, technology permits greater productivity in concentrating on high value tasks and shortening the time spent on more mundane work, including "contract drafting and review, digital signatures, contract management, legal and matter management, contract due diligence, expertise automation, legal analytics, task management, title review, and lease abstracts."[54] These time-consuming tasks include legal research, which must evaluate vast amounts of data to arrive at the best solution to the client's high risk business needs. Legal research is vital to identifying trends in the law and the best negotiation and litigation strategies to provide advice to enable the client to make the best business decisions. "In addition, there is now software that reviews legal briefs for strengths, weaknesses, patterns, and connections, and that can suggest additional cases as well as analyze the vulnerability of certain arguments."[55]

Thus, technology has the possibility of lowering the cost of legal services, although the cost of artificial intelligence programs can be high.[56] The tremendous cost of legal representation has meant that a certain percentage of the population has little access to legal services. Decreasing the cost of legal services may ultimately lead to a narrowing of the gap in access to legal services. "Disadvantaged individuals have often been excluded from legal services because of their inability to pay hourly billable rates. Thus, increasing efficiency can help introduce more clients to available legal resources."[57]

Only innovative law firms that incorporate emerging technology can sustain a healthy and competitive legal practice in a complex legal landscape. "[G]enerative AI could automate certain intelligent tasks that previously could only be done by a human being."[58] AI has the potential to radically alter the way that time-consuming legal research has been done in the past through predictive legal analytics, which helps the attorney counsel the client on the best course of action. "In law, for example, these tasks might include proofreading, searching for applicable authority, drafting a memo summarizing the law or facts, or producing timelines or tables of contents for large documents or groups of documents."[59] Use of an AI legal research tool has the potential of proactively augmenting the scope of one's legal research, perhaps through alternative perspectives, identifying relevant primary sources, and reaching a more correct and inclusive answer, even more quickly.

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[52] Becerra, *supra* note 16, at 39.

[53] *Id.* at 29.

[54] Goodman, *supra* note 13, at 154.

[55] *Id.*

[56] Isha Marathe, *How Much? Law Firms Grappling With Cost of Leveraging Generative AI in E-Discovery*, LAW.COM (Sept. 26, 2023), https://www.law.com/legaltechnews/2023/09/26/how-much-law-firms-grappling-with-cost-of-leveraging-generative-ai-in-e-discovery/.

[57] Lisa Z. Rosenof, *The Fate of Comment 8: Analyzing A Lawyer's Ethical Obligation of Technological Competence*, 90 U. CIN. L. REV. 1321, 1339-40 (2022).

[58] Moriarty, *supra* note 8.

[59] *Id.*

The power of AI is that it can discover correspondences, trends, insights, and connections interwoven into huge amounts of data and otherwise unobservable, all the while continuing to improve the legal research process. "The software is also very good at helping brainstorm ideas to spur the human creative process, such as generating ideas for voir dire, presenting possible questions for depositions, or suggesting counterarguments to a draft brief."[60] AI can be used to guide an attorney to predict a successful planning, negotiation, litigation, or settlement strategy, while gauging risk and compliance issues and optimizing client results. Legal research performed through AI can streamline the process through production of targeted results, placing the law firm at the forefront to tend to clients with improved legal performance, efficiency, precision, and cost.

Incorporating artificial intelligence into a legal practice offers exciting opportunities. "Put simply, in this time of technology transformation, multidisciplinary problem-solving lawyers--who combine their curiosity, cognitive range, creativity, and emotional intelligence to generate 'novel connections' and original solutions--will possess valuable economic power."[61]

Use of artificial intelligence is not without risk, as explained in the following section.

Risks of artificial intelligence in the legal sphere

Law firms can put themselves and their clients at risk of privacy loss, security loopholes, manipulation, deep fakes, and vulnerabilities when implementing an AI-based legal research tool that has not been tested for reliability, integrity, security, timeliness, and accuracy. "The largest risks to attorneys using generative AI may be overestimating the capabilities of the software or being overly credulous as to its output."[62] Use of the tool must be analyzed to determine its limitations and whether its use will create any ethical problem or negative consequences, given that some courts have restrictions on AI use, and AI has been known to produce biased, inaccurate, or unverified responses. "But algorithms fail, in different and intertwined ways. They rely on incomplete datasets, partial categorizations, inaccurate and unjust assumptions, extractive business models, reductionist understandings of identity and culture, and generally odious aesthetics about the human value of automation."[63]

Artificial intelligence is based on the data sets used to train the technology system. "[C]oding algorithms create a danger of freezing particular relationships in set configurations with set distributions of power, which seem to be natural and beyond any question of contestation."[64] One author sees certain artificial intelligence errors as an opportunity for the public to put pressure on the technology industry to correct certain types of errors. Some "algorithmic errors are 'good' mistakes--ones that point to systematic problems that we might think with, design around, regulate against, and use to shape public concerns."[65]

Technology is best employed by a team that has great processes and training in place and makes full use of all functions of a product. Use of an AI-based legal research tool requires a proficient

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[60] *Id.*

[61] Hilary G. Escajeda, *The Vitruvian Lawyer: How to Thrive in an Era of Ai and Quantum Technologies*, 29 KAN. J.L. & PUB. POL'Y 421, 430 (2020)(footnotes omitted).

[62] Moriarty, *supra* note 8.

[63] Ananny, *supra* note 11, at 348.

[64] Sales, *supra* note 7, at 25.

[65] Ananny, *supra* note 11, at 345.

operator to be sufficiently trained in the use of a well-thought-out query that will produce a correct and high-quality response. The potential risk is that a less than well-worded query lacking in context could produce an inaccurate, unreliable, or misleading response that differs from authoritative legal principles. Attorneys should have concerns with using artificial intelligence in legal practice. Although many have been wary of incorporating artificial intelligence into legal practice, many have come to trust work produced by artificial intelligence. The danger comes in when an attorney trusts artificial intelligence so much that the attorney fails to check machine-produced content for accuracy.

Legal expertise is crucial to evaluating the usefulness of an AI-generated response and discussions with colleagues may be vital to spot differing perspectives and highlight alternative solutions. "With the human application of law, the open-textured nature of ideas, like justice and fairness, creates the possibility for immanent critique of the rules being applied and leaves room for wider values not explicitly encapsulated in law's algorithm to enter the equation leading to a final outcome."[66] Secondary sources can profitably be consulted to verify the responses produced with AI and to educate oneself on the area being researched.

An AI response must be validated to be consistent with the facts and the law. What is the best way to determine the right and best technology for legal research? It might be helpful to ask others to provide their candid opinion on the best legal research technology and to interact with various technology consultants to evaluate the leading legal research technologies. The responses should also divulge any downside to the technology and how the technology could be improved. These days the best service to the client is to provide business-focused advice that is as much a business answer to the client's concern as it is a legal answer.

One risk is that the artificial intelligence-produced writing is not built on normally expected societal values and lacks a solid ethical framework. "[J]udges in resolving cases regularly need to engage in purposive reasoning, making moral or other value judgments."[67] Legal practitioners often consider value judgments as well. Because it can produce unpredictable results, the results can directly or indirectly conflict with long-held ethical principles. "Other risks are more subtle, such as the potentially corrosive effect on the development of legal reasoning skills and the training and professional development of new lawyers."[68] Some fear that "AI has the potential to cause fundamental changes to humanity."[69] Some point out that artificial intelligence has a certain rigidity in its nature. "A coding algorithm, like law, is a rule laid down in advance to govern a future situation. However, equity or rule modification or adjustment in the application of law is far harder to achieve in a coding algorithm under current conditions."[70] Thus, the question might be how and to what extent artificial intelligence should be regulated.

The following portion deals with the intersection of artificial intelligence and ethics rules.

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[66] Sales, *supra* note 7, at 25.
[67] Davis, *supra* note 14, at 1175.
[68] Moriarty, *supra* note 8, at 31.
[69] Walz & Firth-Butterfield, *supra* note 10, at 190.
[70] Sales, *supra* note 7, at 26.

III.   *Artificial intelligence and ethics*

Artificial intelligence and ethics rules

Attorneys do need guidance, as demonstrated by their duty to comply with ethics rules. Ethics rules create substantive expectations enforceable by the Bar. Unfortunately, ethics rules lag considerably behind modern developments in technology. This reticence to deal with emerging technologies is scary when combined with the lightning speed at which technology is advancing. Given the extremely wide gap between ethics rules and technology, some attorneys have committed sizable errors in client representation. The legal practitioner's use of artificial intelligence has come to a point at which its use is disruptive to ethical legal practice.

Attorneys have a duty of competence, including knowledge of technology relevant to the legal practitioner. Attorneys put clients at risk if the attorney is not sufficiently knowledgeable concerning technology and can undermine public confidence and trust in the legal practitioner. In addition, the attorney can easily invite error, should the attorney not double-check the artificial intelligence produced document because of lack of time or an assumption that the information produced is correct.[71] "The largest risks to attorneys using generative AI may be overestimating the capabilities of the software or being overly credulous as to its output."[72]

Two recent cases offer examples of an attorney's use of an artificial intelligence document combined with the attorney's failure to ascertain its reliability. In each case, the attorney employed ChatGPT in a document submitted to court without carefully reviewing included case law. One author decries attorney use of ChatGPT, stating "ChatGPT does not have the required safeguards and protections needed to uphold a lawyer's ethical obligations. . . . [T]he current version of ChatGPT is risky and should be utilized with extreme caution."[73]

In a Colorado case, *Gates v. Chavez*, the judge issued an order to the defense attorney to show cause why the attorney should not be sanctioned and reported to the Colorado Bar for an ethics violation.[74] In response, the defense attorney filed an Affidavit[75] explaining the contents of his motion to set aside judgment. The attorney's lack of thoroughness in preparation was compounded by the attorney's inexperience. The attorney, who had been practicing civil litigation for approximately three months, used ChatGPT[76] and admitted that he "made the imprudent step in assuming that the tool would be generally accurate."[77] On the day of the show cause hearing, the attorney discovered the deceptiveness of the ChatGPT-generated case citations.[78]

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[71] Moriarty, *supra* note 8.
[72] *Id.* at 32.
[73] Cari Sheehan, *The Ethics of Chatgpt*, Res Gestae, June 2023, at 12, 14.
[74] Order, *Gates v. Chavez*, No. 2022CV31345 (El Paso Cnty. Dist. Ct. filed May 5, 2023).
[75] Affidavit of Zachariah Christian Crabill and Notice of Errata, *Gates v. Chavez*, No. 2022CV31345 (El Paso Cnty. Dist. Ct. filed May 11, 2023).
[76] *Id.*
[77] *Id.*
[78] *Id.*

A New York case, *Mata v. Avianca, Inc.*, was similar in that a document filed by Peter LoDuca and Steven A. Schwartz on March 1, 2023, included fake case citations generated by ChatGPT.[79] Schwartz researched and wrote the offending document, while LoDuca reviewed the document for style.[80] "Before executing the Affirmation, Mr. LoDuca did not review any judicial authorities cited in his affirmation. . . . Mr. LoDuca simply relied on a belief that work produced by Mr. Schwartz, a colleague of more than twenty-five years, would be reliable."[81] In his June 6, 2023 declaration, Schwartz stated that prior to the first order to show cause he "still could not fathom that ChatGPT could produce multiple fictitious cases, all of which had various indicia of reliability such as case captions, the names of the judges from the correct locations, and detailed fact patterns and legal analysis that sounded authentic."[82]

In contrast to the Colorado case, LoDuca and Schwartz refused to admit their error and perpetuated a coverup until May 25, 2023.[83] It was not until the June 8, 2023, hearing that the two attorneys "expressed their remorse."[84] The judge sanctioned the two attorneys and their law firm for "bad faith . . . based upon acts of conscious avoidance and false and misleading statements to the Court."[85] One reason for the judge's finding of subjective bad faith was "Mr. Schwartz's statement in his May 25 affidavit that ChatGPT 'supplemented' his research."[86] The judge found that Schwartz' statement "was a misleading attempt to mitigate his actions by creating the false impression that he had done other, meaningful research on the issue and did not rely exclusive on an AI chatbot, when, in truth and in fact, it was the only source of his substantive arguments."[87]

In considering Rule 11 sanctions, the judge stated: "Respondents advocated for the fake cases and legal arguments contained in the Affirmation in Opposition after being informed by their adversary's submission that their citations were non-existent and could not be found."[88] In addition, "Mr. LoDuca violated Rule 11 in not reading a single case cited in his March 1 Affirmation in Opposition and taking no other steps on his own to check whether any aspect of the assertions of law were warranted by existing law."[89] The judge imposed a $5,000 fine and ordered LoDuca and Schwartz to provide information regarding the fictitious case law to the judges falsely identified as having authored those cases.[90]

More recently, Pras Michel was convicted in April 2023 of political conspiracy. Apparently, Michel's attorney used an artificial intelligence program to draft the closing argument. Michel's

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[79] *Mata v. Avianca, Inc.*, No. 22-cv-01461, 2023 WL 4114965, *3 ¶ 11 (S.D.N.Y. June 22, 2023).
[80] *Id.* at *2 ¶ 6.
[81] *Id.*
[82] *Id.* at *10 ¶ 47.
[83] *Id.* at *1, 10 ¶ 44 (S.D.N.Y. June 22, 2023). This was "the first acknowledgement from any Respondent that the Affirmation in Opposition cited to and quoted from bogus cases generated by ChatGPT." *Id.*
[84] *Id.* at *50.
[85] *Id.* at *1.
[86] *Id.* at *9 ¶ 42.
[87] *Id.*
[88] *Id.* at *15 ¶ 21.
[89] *Id.* at *15 ¶ 23.a.
[90] *Id.* at *17.

new attorney filed a post-conviction brief asking for a new trial,[91] arguing that the closing argument "made frivolous arguments, conflated the schemes, and failed to highlight key weaknesses in the Government's case," adding that the closing argument was "damaging to the defense" and "deficient, unhelpful, and a missed opportunity."[92] Michel's first attorney lauded the use of artificial intelligence as "an absolute game changer" in that its use "turned hours or days of legal work into seconds."[93]

The following section reviews the American Bar Association Model Rules that are most closely impacted by an attorney's use of artificial intelligence.

American Bar Association ethics rules

The unfortunateness of the attorney actions in the Colorado and New York cases reviewed above impacted on the attorney's ethical duties of competence and candor to the court and opposing counsel. Other ethical duties that are of concern in attorney use of artificial intelligence include supervision of nonlawyer assistance, confidentiality, and avoidance of discrimination. "[A]s a computational matter, there is no computer program or regulatory system that can reliably guarantee in all cases that an arbitrary AI System will operate in conformity to an ethical norm."[94]

Most of the states and the District of Columbia have adopted some version of the American Bar Association Model Rules of Professional Conduct.[95] Unfortunately, there is a considerable lag time between a proposed ABA Rule or a comment and its adoption. In similar fashion, it usually takes some time after the adoption of an ABA Rule or comment and its adoption by the various state Bar Associations.[96]

One of the basic ethics rules is Rule 1.1 that concerns attorney competence: "A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation."[97] One could argue that the attorney's duty of competence did include technological competence since the passage of the rule; however, it was unclear until 2012 that the attorney's duty of competence included competence in technology. The inclusion of an affirmative duty to be technologically knowledgeable is perhaps one of the most significant changes in the ethics rules. In addition, as more fully described below, this duty has an impact and resonates with several other ethics rules.

In 2012, comment 8 to Rule 1.1 was revised to clarify that attorney competence includes technological knowledge: "To maintain the requisite knowledge and skill, a lawyer should keep

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[91] Jonah Valdez, *Pras blames AI for his guilty verdict in conspiracy trial. Does he have the right culprit?*, L.A. Times (Oct. 19, 2023), https://www.latimes.com/entertainment-arts/music/story/2023-10-19/rapper-pras-artificial-intelligence-ai-conspiracy-trial-appea**l.**

[92] *Id.*

[93] *Id.*

[94] Lorin Brennan, *Ai Ethical Compliance Is Undecidable*, 14 HASTINGS SCI. & TECH. L.J. 311, 337 (2023).

[95] ELLEN J. BENNETT ET AL., ANNOTATED MODEL RULES OF PROFESSIONAL CONDUCT xvii (10th ed. 2023).

[96] Amy B. Cyphert, *A Human Being Wrote This Law Review Article: Gpt-3 and the Practice of Law*, 55 U.C. Davis L. Rev. 401, 438 (2021).

[97] MODEL RULES OF PRO. CONDUCT r. 1.1 (AM. BAR ASS'N 1983).

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 a lawyer is subject."[98] The challenge is that technology is advancing practically at warp speed and being competent in technology one year may not mean that the attorney is technologically competent the following year. "Incentivizing attorneys to use technologies that could improve client representation was arguably one of the core motivations behind implementing the new duty."[99]

The language of the comment is purposely broad, considering that an attorney's duty of technological competence is continually evolving and encompasses present and future technology. This means that an attorney has a continuing obligation to understand how technology can be employed in the practice of law and must be aware of both the benefits and the risks presented by using technology. "Generative AI presents grave dangers for the uninformed, hasty, or lazy."[100] At least forty states require attorneys to be competent in technology.[101]

The ethics rule and comment lack guidance to the attorney as to what the attorney must do to attain technological competence. Rule 1.1 mandates that the attorney "shall provide competent representation," while comment 8 states that the attorney "should keep abreast of changes in the law and practice." This difference in obligation could be significant. "Comment 8's omittance of Rule 1.1's thoroughness and preparation requirements, together with the differing affirmative obligations, suggests that the ABA intended for any duty of technological competence suggested by Comment 8 to be precatory rather than mandatory."[102] In addition, the introductory section of the Model rules provides: "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules."[103] This provision lessens the impact of Comment 8.

The undefined nature of this duty of technological competence has pluses and minuses. Because technology is advancing so rapidly, it would be extremely difficult to place parameters around technology that an attorney is responsible for that would include new developments as technology progresses. The downside is that an attorney could be at risk of an ethical violation or legal malpractice, should the attorney's duty of technological competence be interpreted broadly. In addition, the vagueness of the rule may indicate that its impact is lessened. It is an open question as to how far an attorney must proceed to close the gulf between the attorney's technological knowledge and the newest technological developments.

Rule 1.4, concerning communication with the client, and Rule 1.5, concerning attorney fees could come into play when the attorney employs artificial intelligence in client representation. Rule 1.4 requires an attorney to "reasonably consult with the client about the means by which the client's objectives are to be accomplished,"[104] and Rule 1.5 requires the attorney to communicate to the client "[t]he scope of the representation and the basis or rate of the fee and expenses for which the

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[98] MODEL RULES OF PRO. CONDUCT r. 1.1 cmt (AM. BAR ASS'N 2012).

[99] Oltz, supra note 51, at 188-89.

[100] Moriarty, *supra* note 8, at 31.

[101] Robert Ambrogi, *Tech Competence*, LAWSITES, https://www.lawnext.com/tech-competence (last visited Nov. 5, 2023).

[102] Rosenof, *supra* note 57, at 1336.

[103] MODEL RULES OF PRO. CONDUCT, supra note 97 at Scope ¶ 14.

[104] *Id.* r. 1.4(a)(2).

client will be responsible."[105] These rules would require the attorney to explain the benefits and why use of artificial intelligence is recommended, along with its risks and limitations, and would require the client's consent to its use.

Rule 1.6, concerning confidentiality, provides that "[a] lawyer shall not reveal information relating to the representation of a client unless the client gives informed consent" and the attorney must "make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client."[106] It is becoming more prevalent for a legal practitioner to develop its own computer program to review client documents, so as to safeguard divulgence of client confidential information. Client confidential information can be put at risk if the program is other than proprietary to the legal practitioner.

The Colorado and New York cases reviewed above relate to Rule 3.3, concerning the attorney's candor toward the tribunal, and Rule 3.4, concerning fairness to opposing party and counsel. Rule 3.3 provides that "[a] lawyer shall not knowingly . . . make a false statement of fact or law to a tribunal or fail to correct a false statement of material fact or law previously made to the tribunal by the lawyer."[107] If false evidence has been offered, "the lawyer shall take reasonable remedial measures, including, if necessary, disclosure to the tribunal."[108] Rule 3.4 provides that "[a] lawyer shall not . . . falsify evidence."[109] In both cases, the attorney document provided reference to non-existent case law to the court and opposing counsel. In the Colorado case, the attorney tried to rectify the error as soon as possible; however, in the New York case, the attorneys continued to deny the falsity of the case law information for almost three months.

Rule 5.1 requires a supervising attorney to "make reasonable efforts to ensure that the firm has in effect measures giving reasonable assurance that all lawyers in the firm conform to the Rules of Professional Conduct."[110] In *Mata*, the New York case, LoDuca and Schwartz were both attorneys in the same firm. When the case was removed to federal court, LoDuca filed a notice of appearance, but Schwartz, who was not admitted to practice in federal court, continued to prepare the documents submitted to court.[111] LoDuca signed the Affirmation in Opposition filed on March 1, 2023, without verifying the case law cited in the document.[112] "There is no claim or evidence that [DoLuca] made any inquiry of Mr. Schwartz as to the nature and extent of his research or whether he had found contrary precedent."[113] Thus, DoLuca did not fulfill his responsibilities under Rule 5.1.

Rule 5.3 requires an attorney "having direct supervisory authority over the nonlawyer" to "make reasonable efforts to ensure that the person's conduct is compatible with the professional

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[105] *Id.* r. 1.5(b).
[106] *Id.* r. 1.6(a)(c).
[107] *Id.* r. 3.3(a).
[108] *Id.* r. 3.3(c).
[109] *Id.* r. 3.4.
[110] *Id.* r. 5.1.
[111] *Mata v. Avianca, Inc.*, No. 22-cv-01461 at *2 ¶ 2.
[112] *Id.* at *2 ¶¶ 5, 6.
[113] *Id.* at *2 ¶ 6.

obligations of the lawyer."[114] This rule has an impact on the nonlawyer's interaction with technology, requiring the attorney to supervise the nonlawyer's choice and use of technology.

Rule 5.5 forbids unauthorized practice of law and could come into play when an attorney uses an artificial intelligence tool or facilitates its use by a nonlawyer to provide legal advice in a jurisdiction other than one in which the attorney is licensed.[115]

Rule 5.7 makes an attorney "subject to the Rules of Professional Conduct with respect to the provision of law-related services."[116] Law related services could include an attorney providing artificial intelligence-based services that are outside traditional legal services.

Rule 8.4 makes it "professional misconduct" for an attorney 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."[117] Discriminatory language can easily creep into an attorney's work product if the attorney fails to carefully check technologically produced writing. "[Large language m]odels will absorb whatever biases exist in their training data and may learn to make associations common in written language even if they are discriminatory."[118] For example, "[a] misbehaving chatbot might also make discriminatory statements concerning race, gender, national origin, or other protected classes."[119] This is because a "[large language model's] output is only as good as the text that trained it and the human preferences that refined it."[120]

The following section reviews state ethics rules.

State ethics rules

In August of 2019, the American Bar Association House of Delegates passed the following resolution:

> 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") in the practice of law 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.[121]

The following twenty-six states have adopted the language of comment 8 to Model Rule 1.1: Alaska, Arizona, Arkansas, Connecticut, Delaware, Idaho, Illinois, Iowa, Kansas, Kentucky, Minnesota, Missouri, Nebraska, New Hampshire, New Mexico, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin,

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[114] MODEL RULES OF PRO. CONDUCT *supra* note 97, r. 5.31.
[115] *Id.* r. 5.5.
[116] *Id.* r. 5.7.
[117] *Id.* r. 8.4.
[118] Moriarty, *supra* note 8, at 39.
[119] Moriarty, supra note 5, at 35.
[120] *Id.*
[121] ABA House of Delegates, Resolution 112 (adopted Aug. 12-13, 2019).

and Wyoming.[122] However, those states do not make the comment mandatory. All but five of the state ethics rules echo language from the Scope section of the Model Rules and provide: "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules."[123] The ethics rules of Alaska, Connecticut, Illinois, New Hampshire, and New Mexico are similar in substance, but differ slightly in wording.[124]

Five states, Florida, Hawaii, Massachusetts, Oklahoma, and Texas have adopted the substance of the Model Rule comment, although with slightly different wording. Of these, Florida[125] and

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[122] RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (Alaska 2023); ARIZ. RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (2023); RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (Ark. 2014); RULES OF PRO. CONDUCT r. 1.1 cmt. (Conn. 2023); RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (Del. 2023); IDAHO RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (2014); ILL. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (2023); IOWA RULES OF PRO. CONDUCT r. 32:1.1 cmt. 8 (2023); KAN. R. PRO. CONDUCT r. 1.1 cmt. 8 (2014); RULES OF PROF. CONDUCT r. 3.130(1.1) cmt. (6) (Ky. 2022); RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (Minn. 2023); RULES OF PRO. CONDUCT r. 4-1.1 cmt. 6 (Mo. 2017); NEB. RULES OF PRO. CONDUCT § 3-501.1 cmt. 6 (2017); N.H. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (2023); RULES OF PRO. CONDUCT r. 16-101 cmt. 9 (N.M. 2017); N.D. RULES OF PRO. CONDUCT r. 1.1 cmt. 5 (2016); OHIO RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (2023); RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (Pa. 2018); RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (S.D. 2023); RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (Tenn. 2023); RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (Utah 2023); VT. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (2019); RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (Wash. 2021); RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (W. Va. 2015); RULES OF PRO. CONDUCT FOR ATT'YS r. 1.1 cmt. 8 (Wis. 2023); WYO. RULES OF PRO. CONDUCT FOR ATT'YS AT LAW r. 1.1 cmt. 6 (2023).

[123] ARIZ. RULES OF PRO. CONDUCT Pmbl.: Scope ¶ 14 (2003); RULES OF PRO. CONDUCT Scope ¶ 14 (Ark. 2023); RULES OF PRO. CONDUCT Scope ¶ 14 (Del. 2008); IDAHO RULES OF PRO. CONDUCT Scope ¶ 14 (2014); IOWA RULES OF PRO. CONDUCT Pmbl.: Scope ¶ *14* (2023); KAN. R. PRO. CONDUCT Scope ¶ *14* (2019); RULES OF PROF. CONDUCT r. 3.130 Pmbl.: Scope ¶ XV (Ky. 2009); MINN. RULES OF PRO. CONDUCT Scope ¶ 14 (2023); RULES OF PRO. CONDUCT Pmbl.: Scope ¶ 14 (Mo. 2007); NEB. RULES OF PRO. CONDUCT Scope ¶ 14 (2008); N.H. RULES OF PRO. CONDUCT Statement of Purpose (2016); RULES OF PRO. CONDUCT Scope (N.M. 2008); N.D. RULES OF PRO. CONDUCT Scope ¶ 1 (2006); OHIO RULES OF PRO. CONDUCT Pmbl.: Scope ¶ 14 (2007); RULES OF PRO. CONDUCT Pmbl.: Scope ¶ 14 (Pa. 2005); RULES OF PRO. CONDUCT Scope ¶ 14 (S.D. 2021); RULES OF PRO. CONDUCT Pmbl.: Scope ¶ 15 (Tenn. 2011); RULES OF PRO. CONDUCT Pmbl.: Scope ¶ 14 (Utah 2021); VT. RULES OF PRO. CONDUCT Pmbl.: Scope ¶ 14 (2009); RULES OF PRO. CONDUCT Scope ¶ 14 (Wash. 2015); RULES OF PRO. CONDUCT Scope ¶ 14 (W. Va. 2015); RULES OF PRO. CONDUCT FOR ATTORNEYS Pmbl.: Scope ¶ 14 (Wis. 2007); WYO. RULES OF PRO. CONDUCT FOR ATT'YS AT LAW Scope ¶ 14 (2014).

[124] The Alaska ethics rules provide: "COMMENTS do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules." RULES OF PRO. CONDUCT Scope § 14 (Alaska 2009). The Connecticut ethics rules provide: "Commentaries do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules." RULES OF PRO. CONDUCT Scope (Conn. 2007). The Illinois ethics rules provide: "Comments and the Preamble and Scope do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules." ILL. RULES OF PRO. CONDUCT Pmbl.: Scope ¶ *14* (2010). The New Hampshire ethics rules provide: "The ABA and Ethics Committee Comments are intended to be interpretive, not mandatory." N.H. RULES OF PRO. CONDUCT Statement of Purpose (2016). The New Mexico ethics rules provide: "Commentaries do not add obligations to the rules but provide guidance for practicing in compliance with the rules." RULES OF PRO. CONDUCT Scope (N.M. 2008).

[125] The Florida version of comment 8 to Rule 4-1.1 provides:

> To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, engage in continuing study and education, including an understanding of the benefits and risks associated with the use of technology, and comply with all continuing legal education requirements to which the lawyer is subject.

RULES REGULATING THE FLA. BAR r. 4-1.1 cmt. (2017). The comments are not mandatory.

> The comment accompanying each rule explains and illustrates the meaning and purpose of the rule. The comments are intended only as guides to interpretation, whereas the text of each rule is

Oklahoma[126] retain the substance, while reorganizing the wording of the Model Rule comment. The Hawaii[127] and Massachusetts[128] comments drop the requirement of compliance with continuing education requirements. The Texas comment is slightly more adamant in its requirement of technology competence.[129]

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authoritative. Thus, comments, even when they use the term "should," do not add obligations to the rules but merely provide guidance for practicing in compliance with the rules.

Id. Scope (2018).

[126] Oklahoma comment 6 to Rule 1.1 provides: "To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject, including the benefits and risks associated with relevant technology." RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (Okla. 2016). The comments to the Oklahoma ethics rules provide guidance. "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules." RULES OF PRO. CONDUCT Scope ¶ 14 (Okla. 2008).

[127] Hawaii comment 6 to Rule 1.1 provides: "*To maintain the requisite knowledge and skill, a lawyer should engage in continuing study and education and keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology.*" HAW. RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (2022). The Hawaii *comments are not mandatory.* "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules." HAW. RULES OF PRO. CONDUCT Scope ¶ 1 (2014).

[128] Massachusetts comment 8 to Rule 1.1 provides: "To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, and engage in continuing study and education." MASS. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (2022). The comments to the Massachusetts ethics rules provide guidance:

> **The Rules are Authoritative.** The Comment accompanying each Rule explains and illustrates the meaning and purpose of the Rule. The Preamble and this note on Scope provide general orientation. The Comments to each Rule are intended as guides to interpretation. They are meant to assist lawyers in applying the Rules, and disciplinary authorities and courts may rely on the Comments in determining whether a lawyer has violated the Rules.

Id. Scope ¶ 21 (2022).

[129] Texas is slightly more adamant in its requirement of technology competence, substituting "should strive to become and remain proficient **and competent in the practice of law**, including the benefits and risks associated with relevant technology" for "should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology." Texas comment 8 to Rule 1.01 provides:

> Because of the vital role of lawyers in the legal process, each lawyer should strive to become and remain proficient and competent in the practice of law, including the benefits and risks associated with relevant technology. To maintain the requisite knowledge and skill of a competent practitioner, a lawyer should engage in continuing study and education. If a system of peer review has been established, the lawyer should consider making use of it in appropriate circumstances. Isolated instances of faulty conduct or decision should be identified for purposes of additional study or instruction.

TEX. DISCIPLINARY RULES OF PRO. CONDUCT r. 1.01 cmt. 8 (2022). The comments to the Texas ethics rules provide guidance:

> The comments are cast often in the terms of may or should and are permissive, defining areas in which the lawyer has professional discretion. When a lawyer exercises such discretion, whether by acting or not acting, no disciplinary action may be taken. The Comments also frequently illustrate or explain applications of the rules, in order to provide guidance for interpreting the rules and for practicing in compliance with the spirit of the rules. The Comments do not, however, add obligations to the rules and no disciplinary action may be taken for failure to conform to the Comments.

Id. Pmbl.: Scope ¶ 10 (2022).

Six states, Indiana,[130] Michigan,[131] New York,[132] North Carolina,[133] South Carolina,[134] and Virginia,[135] tie the technology competence to the attorney's area of practice.

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[130] The comments to the Indiana ethics rules are not mandatory: "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules." RULES OF PRO. CONDUCT Scope ¶ 14 (Ind. 2023). Comment 6 to Rule 1.1 of the Indiana Rules of Professional Conduct provides:

> To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with the technology relevant to the lawyer's practice, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.

Id. r. 1.1 cmt. 6 (Ind. 2023).
[131] The comments to the Michigan ethics rules are not mandatory: "Comments do not add obligations to the rules, but provide guidance for practicing in compliance with the rules." RULES OF PRO. CONDUCT r. 1.0 Scope (Mich. 2018). The Michigan technology comment to Rule 1.1 provides:

> To maintain the requisite knowledge and skill, a lawyer should engage in continuing study and education, including the knowledge and skills regarding existing and developing technology that are reasonably necessary to provide competent representation for the client in a particular matter. If a system of peer review has been established, the lawyer should consider making use of it in appropriate circumstances.

RULES OF PRO. CONDUCT r. 1.1 cmt. (Mich. 2020).
[132] Comments to the New York ethics rules are not mandatory. The New York ethics rules provide: "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules." N.Y. RULES OF PRO. CONDUCT Scope ¶ 6 (2018). New York comment 8 to Rule 1.1 provides:

> To maintain the requisite knowledge and skill, a lawyer should (i) keep abreast of changes in substantive and procedural law relevant to the lawyer's practice, (ii) keep abreast of the benefits and risks associated with technology the lawyer uses to provide services to clients or to store or transmit confidential information, and (iii) engage in continuing study and education and comply with all applicable continuing legal education requirements under 22 N.Y.C.R.R. Part 1500.

Id. r. 1.1 cmt. 8 (2018).
[133] The comments to North Carolina ethics rules are not mandatory: "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules."
REVISED RULES OF PRO. CONDUCT OF THE NORTH CAROLINA STATE BAR r. 0.2 Scope ¶ 1 (2004). North Carolina comment 8 to Rule 1.1 provides:

> To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with the technology relevant to the lawyer's practice, engage in continuing study and education, and comply with all continuing legal education requirements to which the lawyer is subject.

REVISED RULES OF PRO. CONDUCT OF THE NORTH CAROLINA STATE BAR r. 1.1 cmt. 8 (2014).
[134] The comments to South Carolina ethics rules are not mandatory: "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules." S.C. RULES OF PRO. CONDUCT Scope ¶ 1 (2020). South Carolina comment 6 to Rule 1.1 provides:

> To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including a reasonable understanding of the benefits and risks associated with technology the lawyer uses to provide services to clients or to store or transmit information related

Colorado is the sole state that mentions knowledge of communication technology as a requirement. The Colorado version of comment 8 to Rule 1.1 provides: "To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, and changes in communications and other relevant technologies, engage in continuing study and education, and comply with all continuing legal education requirements to which the lawyer is subject."[136] The comments to the Colorado rules are not mandatory: "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules."[137]

California has a short comment 1 to Rule 1.1 requiring technology competence: "The duties set forth in this rule include the duty to keep abreast of the changes in the law and its practice, including the benefits and risks associated with relevant technology."[138] The comments' to the California rules are not mandatory: "The comments are not a basis for imposing discipline but are intended only to provide guidance for interpreting and practicing in compliance with the rules."[139]

At the opposite end of the spectrum, ten states, Alabama, Georgia, Louisiana, Maine, Maryland, Mississippi, Nevada, New Jersey, Oregon, and Rhode Island, and the District of Columbia do not directly require technology competence, either because technology is unmentioned in the comment to the rule concerning competence (Alabama, Georgia, Maine, Maryland, Mississippi, Rhode Island, and the District of Columbia[140]) or because the state has no comments to Rule 1.1 (Louisiana, Nevada, New Jersey, and Oregon[141]).

Montana appears to have no comments to Rule 1.1. However, paragraph (5) of the Preamble to the Montana ethics rules provides: "In all professional functions a lawyer should be competent, prompt

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to the representation of a client, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.

S.C. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (2021).

[135] The comments to the Virginia ethics rules are not mandatory: "Comments do not add obligations to the Rules but provide guidance for practicing in compliance with the Rules." VA. RULES OF PRO. CONDUCT Pmbl.: Scope (2000). Virginia comment 6 to Rule 1.1 provides:

To maintain the requisite knowledge and skill, a lawyer should engage in continuing study and education in the areas of practice in which the lawyer is engaged. Attention should be paid to the benefits and risks associated with relevant technology. The Mandatory Continuing Legal Education requirements of the Rules of the Supreme Court of Virginia set the minimum standard continuing study and education which a lawyer licensed and practicing in Virginia must satisfy.

VA. RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (2016).
[136] COLO. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (2021).
[137] COLO. RULES OF PRO. CONDUCT Scope ¶ 14 (2018).
[138] CAL. RULES OF PRO. CONDUCT r. 1.1 cmt. 1 (2021).
[139] CAL. RULES OF PRO. CONDUCT r. 1.0(c) (2018).
[140] ALA. RULES OF PRO. CONDUCT r. 1.1 cmt. (2012); GA. RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (2023); RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (Idaho 2023); RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (Me. 2009); MD. ATT'YS' RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (2016); MISS. RULES OF PRO. CONDUCT r. 1.1 cmt. (2011); RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (R.I. 2023); RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (D.C. 2018).
[141] LA. RULES OF PRO. CONDUCT r. 1.1 (2023); RULES OF PRO. CONDUCT r. 1.1 (Nev. 2006); RULES OF PRO. CONDUCT r. 1.1 (N.J. 2020); OR. RULES OF PRO. CONDUCT r. 1.1 (2005).

and diligent. Competence implies an obligation to keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology."[142]

The following portion explores methods of encouraging attorney competence in technology.

IV.   *Keys to technology competence in the legal sphere*

Continuing legal education in technology

The key to this dilemma may be to impose specific continuing legal education requirements concerning technology. The more specific the requirement, the better the requirement is in ensuring that attorneys are complying with the requirement that they be competent in technology.

The American Bar Association requires fifteen hours of continuing legal education annually.[143] Although certain of the hours must be in three specific areas,[144] there is no specific requirement that the continuing legal education be in technology. However, Technology Programming[145] is a recognized subject matter for a Continuing Legal Education Program and is defined as:

> "Technology Programming" means programming designed for lawyers that provides education on safe and effective ways to use technology in one's law practice, such as to communicate, conduct research, ensure cybersecurity, and manage a law office and legal matters. Such programming assists lawyers in satisfying Rule 1.1 of the ABA Model Rules of Professional Conduct in terms of its technology component, as noted in Comment 8 to the Rule . . . .[146]

Two states currently require the attorney's continuing legal education requirement to include training in technology. A third state requires the attorney's legal education requirement to include cybersecurity, privacy and data protection.

One of those states is Florida. Florida Bar Rule 4-1.1 provides: "A lawyer must provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness, and preparation reasonably necessary for the representation."[147] A comment to that rule provides:

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[142] MONT. RULES OF PROF. CONDUCT Pmbl. ¶ (5) (2023).

[143] MODEL RULE FOR MINIMUM CONTINUING LEGAL EDUCATION § 3(A)(1) (AM. BAR ASS'N 2017).

[144] *Id.* As part of the required Credit Hours referenced in Section 3(A)(1), lawyers must earn Credit Hours in each of the following areas:

> (a) Ethics and Professionalism Programming (an average of at least one Credit Hour per year);
> (b) Mental Health and Substance Use Disorders Programming (at least one Credit Hour every three years); and
> (c) Diversity and Inclusion Programming (at least one Credit Hour every three years).

Id. 3(A)(2).

[145] MODEL RULE FOR MINIMUM CONTINUING LEGAL EDUCATION § 4(B)(6) (AM. BAR ASS'N 2017).

[146] *Id.* § 1(P).

[147] RULES REGULATING THE FLORIDA BAR r. 4-1.1 (2023).

To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, engage in continuing study and education, including an understanding of the benefits and risks associated with the use of technology, and comply with all continuing legal education requirements to which the lawyer is subject.[148]

Florida Bar Rules require that: "Every member must complete a minimum of 33 credit hours of approved continuing legal education activity every 3 years. . . . [A]t least 3 of the 33 credit hours [must be] in approved technology programs."[149]

North Carolina is the second state. North Carolina Ethics Rule 1.1 provides:

A lawyer shall not handle a legal matter that the lawyer knows or should know he or she is not competent to handle without associating with a lawyer who is competent to handle the matter. Competent representation requires the legal knowledge, skill, thoroughness, and preparation reasonably necessary for the representation.[150]

A comment to the Rule provides:

To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with the technology relevant to the lawyer's practice, engage in continuing study and education, and comply with all continuing legal education requirements to which the lawyer is subject.[151]

North Carolina Bar Rules require that: "Each active member subject to these rules shall complete 12 hours of approved continuing legal education during each calendar year . . . . Of the 12 hours . . . at least 1 hour shall be devoted to technology training . . . ."[152] That type of training is defined as follows:

"Technology training" shall mean a program, or a segment of a program, devoted to education on information technology (IT) or cybersecurity (see N.C. Gen. Stat. § 143B1320(a)(11), or successor statutory provision, for a definition of "information technology"), including education on an information technology product, device, platform, application, or other tool, process, or methodology. To be eligible for CLE accreditation as a technology training program, the program must satisfy the accreditation standards in Rule .1519 and the course content requirements in Rule .1602(e) of this subchapter.[153]

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[148] *Id.* r. 4-1.1 cmt.
[149] *Id.* r. 6-10.3(b).
[150] REVISED RULES OF PRO. CONDUCT N.C. STATE BAR r. 1.1 (2023).
[151] *Id.* r. 1.1 cmt. 8.
[152] NORTH CAROLINA STATE BAR RULES r. 1.1518(a) (2019).
[153] *Id.* r. 1.1501(c)(19).

It is further defined as follows:

Technology Training Programs. A technology training program must have the primary objective of enhancing a lawyer's proficiency as a lawyer or improving law office management and must satisfy the requirements of paragraphs (c) and (d) of this rule as applicable. Such programs include, but are not limited to, education on the following: a) an IT tool, process, or methodology designed to perform tasks that are specific or uniquely suited to the practice of law; b) using a generic IT tool, process, or methodology to increase the efficiency of performing tasks necessary to the practice of law; c) the investigation, collection, and introduction of social media evidence; d) e-discovery; e) electronic filing of legal documents; f) digital forensics for legal investigation or litigation; g) practice management software; and h) a cybersecurity tool, process, or methodology specifically applied to the needs of the practice of law or law practice management. A program that provides general instruction on an IT tool, process, or methodology but does not include instruction on the practical application of the IT tool, process, or methodology to the practice of law shall not be accredited. The following are illustrative, non-exclusive examples of subject matter that will NOT receive CLE credit: generic education on how to use a tablet computer, laptop computer, or smart phone; training programs on Microsoft Office, Excel, Access, Word, Adobe, etc.; and instruction in the use of a particular desktop or mobile operating system. No credit will be given to a program that is sponsored by a manufacturer, distributor, broker, or merchandiser of an IT tool, process, or methodology unless the program is solely about using the IT tool, process, or methodology to perform tasks necessary or uniquely suited to the practice of law and information about purchase arrangements is not included in the accredited segment of the program. A sponsor may not accept compensation from a manufacturer, distributor, broker, or merchandiser of an IT tool, process, or methodology in return for presenting a CLE program about the IT tool, process, or methodology.[154]

New York is the third state. New York Ethics Rule 1.1 provides: "A lawyer should provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation."[155] Comment 8 to Rule 1.1 provides:

To maintain the requisite knowledge and skill, a lawyer should (i) keep abreast of changes in substantive and procedural law relevant to the lawyer's practice, (ii) keep abreast of the benefits and risks associated with technology the lawyer uses to provide services to clients or to store or transmit confidential information, and (iii) engage in continuing study and education and comply with all applicable continuing legal education requirements under 22 N.Y.C.R.R. Part 1500.[156]

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[154] *Id.* r. 1.1602(e).
[155] RULES OF PRO. CONDUCT r. 1.1(a) (N.Y. 2023).
[156] *Id.* r. 1.1 cmt. 8.

New York Court Rules require: "Each attorney shall complete a minimum of 24 credit hours of accredited continuing legal education each biennial reporting cycle . . . at least one (1) credit hour of which shall be in cybersecurity, privacy and data protection."[157] A related definition provides:

> (h) Cybersecurity, Privacy and Data Protection.
>
> (1) *Cybersecurity, Privacy and Data Protection--Ethics* must relate to lawyers' ethical obligations and professional responsibilities regarding the protection of electronic data and communication and may include, among other things: sources of lawyers' ethical obligations and professional responsibilities and their application to electronic data and communication; protection of confidential, privileged and proprietary client and law office data and communication; client counseling and consent regarding electronic data, communication and storage protection policies, protocols, risks and privacy implications; security issues related to the protection of escrow funds; inadvertent or unauthorized electronic disclosure of confidential information, including through social media, data breaches and cyber attacks; and supervision of employees, vendors and third parties as it relates to electronic data and communication.
>
> (2) *Cybersecurity, Privacy and Data Protection--General* must relate to the practice of law and may include, among other things, technological aspects of protecting client and law office electronic data and communication (including sending, receiving and storing electronic information; cybersecurity features of technology used; network, hardware, software and mobile device security; preventing, mitigating, and responding to cybersecurity threats, cyber attacks and data breaches); vetting and assessing vendors and other third parties relating to policies, protocols and practices on protecting electronic data and communication; applicable laws relating to cybersecurity (including data breach laws) and data privacy; and law office cybersecurity, privacy and data protection policies and protocols.[158]

Maine includes technological knowledge as one of the purposes of continuing legal education: "The purpose of minimum continuing legal education (MCLE) requirements is to promote and sustain competence and professionalism and to ensure that attorneys remain current on the law, law practice management, and technology in our rapidly changing society."[159]

The following section reviews various proposals designed to ensure that the attorney is competent in technology.

Proposals to ensure technology competence

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[157] N.Y. CT. RULES § 1500.22 (2023).
[158] *Id.* § 1500.2 (2023).
[159] BAR RULE 5(a) (Me. 2020).

There are various measures to take to encourage technical competence. One measure would be to amend the Model Rules and state ethics rules or comments to those rules to more specifically require technology competence. Another is to require continuing legal education in technology, a requirement that would benefit the attorney and promote compliance with a competence requirement of the ethics rules. At the present time, the offerings in continuing legal education in technology are sparce, but, hopefully, there will be additional technology sessions available in the future.

The language of comment 8 to Model Rule 1.1 is broad, leading some to criticize and some to applaud its broadness. The criticism is that the comment requires "further clarity for proper application."[160] There is a risk that the vagueness of the wording may mean that the comment has less impact and may not motivate the attorney to zealously represent the client, especially if the attorney does not know what the technical competence requirement entails. If the comment were to be seen as mandatory and applied broadly, an attorney could be caught up in a potential ethics violation of not being competent in technology.[161] In addition, the rules are more attuned to a litigation attorney and not attorneys engaged in other types of practice, for example transactional work.[162] The technology necessary for a litigation practice may differ from that necessary for a transactional attorney.

An opposite view is that it is a "structural" change that "*created a framework to address future issues.*"[163] In other words, the non-specificity has the benefit of providing parameters for an attorney's obligation to be knowledgeable in technology rather than binding an attorney to particular obligations that would quickly become outdated, given the rapid evolution of technology. "The beauty of this change is that it is the gift that keeps on giving" "add[ing] a principle that can be applied to future technology and developments, and in doing so, made explicit an important principle that will remain relevant in the future, and that lawyers will need to follow."[164]

One author[165] proposes updating Model Rule 1.1 by adding two new comments. The first new proposed comment provides: "Benefits and risks of technology that lawyers should be aware of for competent representation include but are not limited to the level of security in the technology, the probability and legal ramifications of third-party intercept, possible client impact, urgency, cost for the attorney and client, and time efficiency."[166] This new proposed comment is sufficiently broad to encompass present as well as future technology.

The second new proposed comment provides:

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[160] Jessica de Perio Wittman & Kathleen (Katie) Brown, *Taking on the Ethical Obligation of Technology Competency in the Academy: An Empirical Analysis of Practice-Based Technology Training Today*, 36 GEO. J. LEGAL ETHICS 1, 11-12 (2023).

[161] Lori D. Johnson, *Navigating Technology Competence in Transactional Practice*, 65 VILL. L. REV. 159, 181 (2020).

[162] *Id.*

[163] Laurel S. Terry, *Globalization and the ABA Commission on Ethics 20/20: Reflections on Missed Opportunities and the Road Not Taken*, 43 HOFSTRA L. REV. 95, 105, 106 (2014).

[164] *Id.* at 106.

[165] Ellen Platt, Comment, *Zooming into A Malpractice Suit: Updating the Model Rules of Professional Conduct in Response to Socially Distanced Lawyering*, 53 TEX. TECH L. REV. 809, 832, 833 (2021).

[166] *Id.* at 832.

> Relevant technology could include any system the lawyer uses to communicate confidential information, such as email or videoconferencing platforms; store confidential information; or provide confidential information to others. This could also include platforms for electronic legal research, as well as social networking platforms, whether the attorney chooses to use it or not.[167]

This new proposed comment clarifies that typical communication technology is definitely covered by the Model Rules.

For one author, innovation is the key to an ethical legal practice.[168] This author has two suggestions, one of which is to revise comment 8 of Model Rule 1.1 to read: "To maintain the requisite knowledge and skill, a lawyer should keep abreast of ~~changes~~ *innovations* in the law and its practice, including the benefits and risks associated with relevant *[innovations such as* technology]."[169] The other proposal is to add a new Model Rule to read:

> *Every lawyer has a professional responsibility to engage in ethical innovation. The duty to innovate is an obligation to continually assess the intended, known, and unknown consequences of innovation in law and its practice, including the benefits and risks associated with relevant technology and other advancements. A lawyer also has an obligation to pursue ethical innovations for the improvement of the legal system.[170]*

Another proposal[171] is to revise comment 8 of Model Rule 1.1 to adopt the language of a comment to North Carolina Ethics Rule 1.1, which provides:

> To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with the technology relevant to the lawyer's practice, engage in continuing study and education, and comply with all continuing legal education requirements to which the lawyer is subject.[172]

This language ties the attorney's required technology competence to the particular attorney's area of practice.

An alternative proposal would be to revise comment 8 of Model Rule 1.1 to adopt the language of comment 8 to New York Ethics Rule 1.1, which provides:

> To maintain the requisite knowledge and skill, a lawyer should (i) keep abreast of changes in substantive and procedural law relevant to the lawyer's practice, (ii) keep abreast of the benefits and risks associated with technology the lawyer uses to provide services to clients or to store or transmit confidential information, and (iii)

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[167] *Id.* at 833.

[168] Renee Knake Jefferson, *Lawyer Ethics for Innovation*, 35 NOTRE DAME J.L. ETHICS & PUB. POL'Y 1, 3, 4 (2021).

[169] *Id.* at 36.

[170] *Id.*

[171] Rosenof, *supra* note 57, at 1336.

[172] REVISED RULES OF PRO. CONDUCT N.C. STATE BAR r. 1.1 cmt. 8 (2023).

engage in continuing study and education and comply with all applicable continuing legal education requirements under 22 N.Y.C.R.R. Part 1500.[173]

Like the North Carolina comment, this language in the New York comment ties the attorney's required technology competence to the particular attorney's area of practice.

Another proposal[174] would be to delete the wording "including the benefits and risks associated with relevant technology" from comment 8 to Model Rule 1.1 and instead impose continuing legal education requirements in technology. The imposition of continuing legal education in technology benefits the attorney by making the attorney more knowledgeable and encourages the attorney to provide better service to the client. This is particularly important given the rapidity with which technology advances.

Still another proposal[175] would be to follow Delaware's lead and have each state form a Commission on Law and Technology. Delaware formed a Commission on Law and Technology in 2013, which was recently revived in 2023.[176] The Commission's Mission is to "address developing technology and to identify critical technological needs and gaps. Recent developments, including . . . the introduction of generative artificial intelligence, highlight the need to address the continually expanding use of technology in Delaware legal matters."[177] The Commission has a "commitment to improving access to justice for all through developing technology and educating attorneys and self-represented litigants in their understanding of and use of technology."[178]

The following portion offers a conclusion as to the best manner of ensuring attorney competence in technology.

V.   *Conclusion*

This author offers a three-prong approach to ensure the attorney's technological competence. The first prong would be to amend the Model Rule and state continuing legal education requirements to mandate at least one hour of technology continuing legal education per year. This should be accompanied by encouraging the bar to offer more technology continuing legal education courses.

The second prong would be for the American Bar Association and the states to include a comment in the ethics rules requiring technology competence. The language of the comment should be sufficiently broad to include innovation in technology, perhaps following the proposal of one author, as quoted above. Besides requiring the attorney to be knowledgeable in legal innovation, the language should specify that the legal innovation knowledge should relate to the attorney's particular type of practice.

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[173] RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (N.Y. 2023).
[174] Rosenof, *supra* note 57, at 1337.
[175] *Id.* at 1341-42.
[176] Press Release, Delaware Supreme Court, Delaware Supreme Court Re-launches the Commission on Law and Technology (Oct. 4, 2023), https://courts.delaware.gov/forms/download.aspx?id=215708.
[177] *Id.*
[178] *Id.*

The third prong would be for the American Bar Association and the states to follow Delaware's lead and form a Commission on Law and Technology.

These changes are long overdue and are necessary to nudge the attorney to competently represent the client, while being at the forefront of legal innovation.