ARTIFICIALLY INTELLIGENT LAWYERS: UPDATING THE MODEL RULES OF PROFESSIONAL CONDUCT IN ACCORDANCE WITH THE NEW TECHNOLOGICAL ERA

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"[I]n the last two years, AI in the legal space has gone from science fiction, to niche subject, to mainstream interest... [W]e [now] have a toolset capable of transforming the legal industry for the better. We owe it to everyone to use it properly."

-Thomas Hamilton, VP, Strategy & Operations, ROSS Intelligence

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¹ Thomas Hamilton, From Hyperbole to Real Talk, Law is Finally Ready for AI, ROSS, https://rossintelligence.com/law-finally-ready-ai (last visited Feb. 22, 2017).

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INTRODUCTION

With BigLaw firms like Sidley Austin, Bryan Cave, Dentons, Latham & Watkins, K&L Gates, Simpson Thacher, and von Briesen & Roper employing artificial intelligence (AI) to handle bankruptcy, intellectual property, and labor and employment cases (soon also criminal, tax, and corporate law),² AI is becoming a hot topic in the legal world.³ ROSS, the world's first AI lawyer, built on IBM's cognitive computer Watson, was designed to read and understand natural language, postulate hypotheses when asked questions, conduct legal research, and write thorough legal memoranda, along with references and citations.⁴ Essentially, ROSS is the legal equivalent of Watson.⁵ In

² See, e.g., Susan Beck, AI Pioneer ROSS Intelligence Lands Its First Big Law Clients, AM. LAWYER (May 6, 2016, 5:04 PM), http://www.americanlawyer.com/id=1202757054564/AI-Pioneer-ROSS-Intelligence-Lands-Its-First-Big-Law-Clients?slreturn=20160804183020; John Mannes, ROSS Intelligence Lands \$8.7M Series A to Speed up Legal Research with AI, TECHCRUNCH (Oct. 11, 2017), https://techcrunch.com/2017/10/11/ross-intelligence-lands-8-7m-series-a-to-speed-up-legal-research-with-ai; ROSS, http://www.rossintelligence.com (last visited Jan. 25, 2018); see also E-mail from William Caraher, Chief Info. Officer and Dir. of Operations, von Briesen & Roper, to Katherine Medianik, Student, Benjamin N. Cardozo Sch. of Law (Sept. 8, 2016, 11:57 AM) [hereinafter Caraher E-mail] (on file with author) (Q: "What types of cases does ROSS handle? Is it more useful for litigation or transactional attorneys?" A: "ROSS has initially been seeded with U.S. Bankruptcy data sources. It can presently be used for all practice areas that involve bankruptcy proceedings. Additional areas of law are being added that will increase the use and value across the legal industry and corporate law departments. Due to the fact that ROSS uses machine learning, it can scale its learning across multiple practice areas which means ROSS will continue to learn exponentially.").

³ See Hannah Augur, AI Is the Future of Law—And Lawyers Know It, DATACONOMY (Mar. 17, 2016), http://www.dataconomy.com/ai-future-law-lawyers-know ("No current discussion on AI in law would be complete without mention of IBM's ROSS, which helps lawyers 'get back to being lawyers.' ROSS is like Siri. A lawyer can ask a realistic question like 'can a bankrupt company still conduct business?' and ROSS gives the answer."); see also Megan Rose Dickey, Twitch Co-Founder Justin Kan Unveils Tech Platform for Law Firms, TECHCRUNCH (Sept. 14, 2017), https://www.techcrunch.com/2017/09/14/twitch-co-founder-justin-kan-launches-tech-enabled-law-firm-for-startups/?wpnd_cid=47e7eeb4c436bcb4 (Atrium, the newest tech platform for law firms, offers startups ongoing legal and financial services for joint ventures, mergers and acquisitions, Initial Coin Offerings, litigation, and more.).

⁴ See Andrew Arruda, Artificial Intelligence Systems and the Law, PEER TO PEER MAG., Summer 2016, at 38, 39 ("[T]he ROSS system is built upon IBM's cognitive computer Watson. It's an artificially intelligent attorney designed to help with legal research. It is using machine learning and natural language processing."); Steve Dykstra, *The View from up North: Will ROSS App Make Life Better for Lawyers?*, ABOVE THE LAW (Jan. 7, 2015, 12:45 PM), http:// www.abovethelaw.com/2015/01/the-view-from-up-north-will-ross-app-make-life-better-forlawyers; Beck, *supra* note 2.

⁵ See Arruda, supra note 4, at 39. ROSS is IBM's software tailored for legal services applications, built on the Watson platform. Like Watson, ROSS "uses algorithms to mimic the human brain's learning, analytical, and decision-making processes." Mary Ann Neary & Sherry

an email interview, the Chief Information Officer (CIO) and Director of Operations of von Briesen & Roper, William Caraher, stated:

ROSS is the first legal research platform built upon the award winning IBM Watson platform. ROSS is an independent database of laws, cases and other fact-based material that is cross-referenced by the Watson engine, but the ROSS team has built its own proprietary AI technology to get ROSS to function the way it does. The key to the success of ROSS and Watson is that it thinks and responds in human language terms, not just keywords and Boolean⁶ logic operators. Due to proprietary technology, there is a lot of "secret sauce" in the custom developed back-end and front-end interfaces.⁷

ROSS learns from experience, gaining speed and knowledge the more it engages in interaction. It is able to go through mounds of data in seconds, monitors the law around the clock to notify lawyers of new court decisions that can affect their cases, and makes the legal research process quicker and cheaper.⁸

The response to ROSS's release has been relatively positive.⁹ Though some critics contend that lawyers may lose their jobs,¹⁰ they

⁹ See Peter Mancini & Marc Jenkins, Ethics of Artificial Intelligence in the Legal Field (unpublished paper), https://www.academia.edu/10089717/Ethics_of_Artificial_Intelligence_ in_the_Legal_Field. Legal AI is valuable because it will reduce "transhuman" problems. For example, "[u]nderstanding very large amounts of unstructured information is a transhuman problem because finding the relationships and connections in the data is limited by the ability of humans to read and recall the data." *Id.* Nevertheless, "[m]achines have weaknesses just as humans do. Together [their] separate strengths cover the other's weaknesses and make [them] stronger." *Id.*

Xin Chen, Artificial Intelligence: Legal Research and Law Librarians, AALL SPECTRUM, May-June 2017, at 16, 20.

⁶ The following is an example of a "Boolean" search term-and-connector that is required on research engines such as Lexis, Westlaw, and Bloomberg: "judge court /s discret! authori! /s reduc! lessen! /s sentence judgment." ROSS, on the other hand, will understand the following natural language search question: "Does a judge have the authority to reduce a sentence?"

⁷ Caraher E-mail, *supra* note 2.

⁸ See Richard Tromans, Lawyers with Real Intelligence Will Defeat Artificial Intelligence, BLOOMBERG LAW (Mar. 26, 2015), https://bol.bna.com/lawyers-with-real-intelligence-willdefeat-artificial-intelligence; Arruda, supra note 4 ("With ROSS, it was about 11 months from day one of development until it was commercially released. AI's ability to continue to learn from its users was a driving factor in the rapid development cycle."); Caraher E-mail, supra note 2 (Q: "Does ROSS monitor the law around the clock to notify attorneys of new court decisions that can affect their cases?" A: "This is an exciting feature of ROSS. When you perform a search, regarding a specific area of the law, you can tick a box to subscribe to updates regarding the issue. When new data is added or laws are updated, ROSS will be the first to know and the users will be a close second.").

¹⁰ See John O. McGinnis & Russell G. Pearce, *The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services*, 82 FORDHAM L. REV. 3041, 3042 (2014). AI technology is a threat to the "lawyer monopoly." ROSS shaves off hours of time spent on legal research, allowing attorneys to focus on more pressing work, but also necessitates fewer attorneys to do so. *See* Jeff Bennion, *Are Robots Going to Take Our Legal Jobs?*, ABOVE THE LAW (June 21, 2016, 2:02 PM), http://abovethelaw.com/2016/06/are-robots-going-to-take-our-legal-jobs ("If by 'taking our jobs' you mean that one day there will be a

acknowledge that the rest of society will benefit.¹¹ These critics focus on ROSS's time and cost efficiency¹² and recognize that while technology can be a "game changer," without a large platform of quality human talent to deploy it, it will "fall flat."¹³ In today's reality, ROSS merely assists and supplements human intelligence by allowing human lawyers to be more efficient at what they do.¹⁴

ROSS Intelligence CEO and co-founder, Andrew Arruda, expressed that his goal is to sign licenses with many other law firms and expand the technology worldwide.¹⁵ With this kind of mass expansion,

¹² See Jeff Gray, University of Toronto's Next Lawyer: A Computer Program Named Ross, GLOBE & MAIL (Dec. 11, 2014), http://www.theglobeandmail.com/report-on-business/industry-news/the-law-page/university-of-torontos-next-lawyer-a-computer-program-named-ross/

article22054688 ("'It's able to do what it would take lawyers hours to do in seconds'.... 'When we are short on time, we just say it is Siri for lawyers,' says ROSS team software engineer, Jimoh Ovbiagele...."); David J. Parnell, *Steven Kestner of BakerHostetler, on Adopting ROSS A.I., Strategic Expansion, and Organic Growth*, FORBES (July 20, 2016, 12:23 PM), http:// www.forbes.com/sites/davidparnell/2016/07/20/steven-kestner-bakerhostetler-ross-a-i-

strategic-expansion/#4859d09a22fb ("ROSS uses natural language processing and machine learning to more intelligently, quickly, and efficiently process the massive document loads of today's legal work—major litigation, in particular.... Our view is this is a tool, and it's a tool to help improve our work processes, reduce costs, and ultimately generate better results for our clients. You know, it's particularly true in large-scale litigation and corporate investigations where the volume of document discovery and electronic evidence has become huge."); Caraher E-mail, *supra* note 2 (Q: How does ROSS save the firm money? A: ROSS has saved research time, which translates into fewer billable hours. So, indirectly based upon solid research (getting to the right answer quickly) and directly by reducing the amount of time spent on research.).

¹³ Parnell, *supra* note 12; *see also* ROSS, *supra* note 2 ("Ask direct questions and ROSS will use A.I. to find you answers from the law in seconds—no more fumbling with Boolean queries and thousands of keyword based results . . . Use ROSS to ensure you deliver the same value to your clients, without writing off thousands of dollars on unbillable research time.").

¹⁴ Michael Mills, Artificial Intelligence in Law: The State of Play 2016 (Part 3), THOMSON REUTERS (Mar. 10, 2016), http://legalexecutiveinstitute.com/artificial-intelligence-in-law-the-state-of-play-2016-part-3 ("Note that cheaper is only one of the three words. Faster is important—companies measure cycle time, time to market, and other indicia of speed throughout their businesses, and increasingly expect their lawyers to do the same. And better is critical—big companies face ever-growing regulatory and operational complexity, for which traditional legal services on the medieval master craftsman model are simply inadequate."); Dykstra, *supra* note 4 ("It costs you almost nothing to be wrong. Ask your question and review the results. It should be quickly apparent[] whether you're asking a fruitful question or not. If not, ask another question. And another question. And another question. Eventually you will hit something relevant. Plus, if ROSS is doing its job correctly, it will hand you the most pertinent materials to review without having to conduct another search—that's a big time saver.").

¹⁵ See Beck, supra note 2 (Andrew Arruda stated, "[o]ur aim is to have ROSS on the legal

bronze protocol droid in a three-piece suit behind your desk drafting an opposition to a motion for summary judgment, then probably not. But, if you mean that certain menial parts of your jobs are going to be outsourced to technology, then you are probably right.").

¹¹ See Farhad Manjoo, Will Robots Steal Your Job? Software Could Kill Lawyers. Why That's Good for Everyone Else., SLATE (Sept. 29, 2011, 2:42 AM), http://www.slate.com/articles/ technology/robot_invasion/2011/09/will_robots_steal_your_job_5.html (""The law doesn't exist to provide jobs for lawyers,' Katz says. "That's not its function in society. It's there to help people solve problems—and if we could serve more people with fewer lawyers, I don't think that's an unreasonable path to take."").

more and more lawyers will need to acquire knowledge of how ROSS works, become proficient in properly and effectively using it, and learn how to spot mistakes and ensure that the answers provided are correct. Adequate training prior to implementing ROSS's outputs to client representation is crucial for lawyers to avoid malpractice suits and disciplinary actions. Further, law firms employing ROSS will need to have some verification process in place that determines whether ROSS's search results are in fact accurate and support the arguments that the human lawyer is trying to make. In other words, "the robot did it" cannot be an excuse when issues arise. With this in mind, the American Bar Association's (ABA) Model Rules of Professional Conduct (Model Rules) become relevant. The Model Rules prescribe baseline standards of legal ethics and professional responsibility for lawyers in the United States.¹⁶ Lawyers are regulated by this set of rules, which remind and incentivize them to make sure that the advice given to their clients fulfills their ethical standards.¹⁷ The ultimate issue then becomes how to account for a robot's work under the Model Rules, who is held responsible, and what are the repercussions.

This Note will proceed in three Parts. Part I provides a general overview of AI technology development within the legal sphere. Specifically, how ROSS, the world's first AI lawyer, mimics IBM Watson's function in that it learns with experience and provides natural language responses to complex legal questions. Part II analyzes the various practical challenges of applying the traditional Model Rules to up-and-coming legal technology. The existing language and content of the Model Rules is outdated¹⁸ and does not account for technological advancement, which leaves lawyers and courts deprived of any guidance on how to proceed when lawyers using ROSS violate ethical standards. Part III proposes to adopt an evolutionist approach¹⁹ to the Model Rules

team of every lawyer in the world ").

¹⁶ See Model Rules of Professional Conduct, ABA, https://www.americanbar.org/groups/ professional_responsibility/publications/model_rules_of_professional_conduct.html (last visited Feb. 23, 2018).

¹⁷ See RUSSELL G. PEARCE ET AL., PROFESSIONAL RESPONSIBILITY: A CONTEMPORARY APPROACH 41 (West Acad. Publ'g 2d ed. 2014).

¹⁸ See infra text accompanying notes 82–88 (The Model Rules of Professional Conduct were enacted in 1983.).

¹⁹ See Katherine E. Moran, Comparing and Contrasting the Constitutional Approaches of Justice Scalia and Justice Breyer Trough the Pending Supreme Court Case Schwarzenegger v. Entertainment Merchants Association (Apr. 25, 2011) (unpublished B.A. thesis, Claremont McKenna College), http://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1129&context=cmc_theses ("The Living Constitution, or evolutionist approach to constitutional interpretation, contends that the meaning of the Constitution evolves with the standards of society, and the purpose or intent behind the Constitution or an amendment is as important, if not more so, than the literal language when interpreting a Constitutional amendment as it applies to actual cases as they arise."). This Note applies this same logic to propose an evolutionist approach to the Model Rules of Professional Conduct.

and to amend them so as to guide lawyers in situations where they interact with AI tools.²⁰ Specifically, this Note proposes: (1) the addition of continuing legal education (CLE) requirements on "Legal Technology"; (2) the addition of the term "nonlawyer assistant" to the terminology section of the Model Rules; and (3) the addition of several comments that incorporate AI technology and account for technological advancement. Given the inevitable technological prevalence, the ABA needs to take action to revise the Model Rules in conformity with the new era.

I. BACKGROUND

A. The Evolution of Legal Technology

Electronics and computers are to the twentieth and twenty-first centuries what steam machines and the assembly line were to the nineteenth century—the "primary dynamo and symbol of progress."²¹ In 1973, four New York law firms subscribed to the Lexis legal information service.²² For many lawyers and legal scholars, this was the "liberation of word from print" and the start of a new era for legal technology.²³ The Lexis service rapidly expanded because for the first time lawyers had "comprehensive, searchable electronic access to case law,"²⁴ unprecedented in size and scope, which greatly simplified the research process. Not only was the new electronic service more convenient and efficient, it also allowed for around-the-clock access to information.²⁵ West Publishing Company followed Lexis, entering the

 $^{^{20}}$ This Note does not propose to regulate AI technology itself, but rather to regulate the lawyers that use it.

²¹ McGinnis & Pearce, *supra* note 10, at 3043 (citing HENRY ADAMS, THE EDUCATION OF HENRY ADAMS 379–90 (Henry Cabot Lodge ed., 1918)).

²² LEXIS-NEXIS Group, CO.-HISTORIES.COM, http://www.company-histories.com/ lexisnexis-Group-Company-History.html (last visited Feb. 23, 2018); see also About LexisNexis, LEXISNEXIS, http://www.lexisnexis.com/en-us/about-us/about-us.page (last visited Feb. 23, 2018). Lexis is a leading global supplier of content-enabled workflow solutions that provides customers with access to billions of searchable documents and records from legal, news, and business sources. Today, Lexis is a major electronic publisher and information provider, serving customers in more than 130 countries. See Company Snapshot, LEXISNEXIS, https:// www.lexisnexis.com/en-us/about-us/company-snapshot.page (last visited Feb. 23, 2018).

²³ See F. Allan Hanson, From Key Numbers to Keywords: How Automation Has Transformed the Law, 94 LAW LIBR. J. 563, 573 (2002); Stephen Miller, For Future Reference, a Pioneer in Online Reading, WALL ST. J. (Jan. 12, 2012, 9:39 PM), http://www.wsj.com/articles/ SB10001424052970203721704577157211501855648 ("Jerome Rubin helped liberate the printed word from paper, changing the way millions of lawyers, journalists and ultimately ordinary readers go about their daily routines.").

²⁴ Miller, *supra* note 23 ("Lexis changed legal practice from the ground up It inspired all the databases that came after it."); *see also* Hanson, *supra* note 23, at 575.

²⁵ See This Is LexisNexis Digital Library, LEXISNEXIS, http://www.lexisnexis.com/

electronic legal research market in 1975.²⁶

With platforms like Lexis and Westlaw as building blocks, computationally based services are continuously advancing. According to distinguished legal scholar and professor John McGinnis, there are several areas that machine intelligence will dramatically reshape in the near future.²⁷ First, machine intelligence is already extraordinarily advanced in discovery. Electronic discovery, also known as e-discovery, is the "process by which computers search a database for keywords that lawyers agree are marks of relevance."28 This service is a product of predictive coding of algorithms instructed to find specific words and phrases in various configurations. In simpler terms, it is a sophisticated CTRL + F feature for thousands of digitized documents. Predictive coding, however, is not perfect, as it may miss documents.29 Nevertheless, courts and the U.S. Department of Justice have approved predictive coding as a tool for discovery.³⁰ Specifically, the court in Moore v. Publicis Groupe³¹ held that computer-assisted review could now be considered "judicially-approved for use" in appropriate cases.32

²⁹ See Doug Austin, Five Common Myths About Predictive Coding—eDiscovery Best Practices, CLOUDNINE (Mar. 11, 2013), https://www.ediscovery.co/ediscoverydaily/five-common-myths-about-predictive-coding-ediscovery-best-practices/.

³⁰ See Geoffrey Vance & Alison Silverstein, *McDermott and DOJ Embrace Predictive Coding*, LEGALTECH NEWS (July 9, 2013, 12:00 AM), http://www.lawtechnologynews.com/id=1202609909310/McDermott-and-DOJ-Embrace-Predictive-Coding?slreturn=20140305004807.

Of course, predictive coding is imperfect, because it can miss some documents. But, imperfection is the norm even when lawyers perform document review, where fatigue, boredom, and other frailties—which do not affect machines—can substantially reduce the accuracy of document review. As a result, some courts have approved predictive coding as a tool of discovery that essentially will make the final decisions of relevance, because they believe the price and performance of [such technology] is at least equal to that of the traditional kind.

McGinnis & Pearce, *supra* note 10, at 3047 (citing Moore v. Publicis Groupe, 287 F.R.D. 182, 193 (S.D.N.Y. 2012)).

What the Bar should take away from this Opinion is that computer-assisted review is an available tool and should be seriously considered for use in large-data-volume cases where it may save the producing party (or both parties) significant amounts of legal fees in document review. Counsel no longer have to worry about being the 'first' or 'guinea pigs' for judicial acceptance of computer-assisted review. As with

documents/pdf/20130524040128_large.pdf (last visited Feb. 23, 2018).

²⁶ Westlaw, CRUNCHBASE, https://www.crunchbase.com/organization/westlaw (last visited Feb. 17, 2018). Westlaw is one of the primary online legal research services for lawyers and legal professionals in the United States. Information resources on Westlaw include more than 40,000 databases of case law, state and federal statutes, administrative codes, newspaper and magazine articles, public records, law journals, law reviews, treatises, legal forms and other information resources. Westlaw has the same reach as Lexis, with subscribers and users in over 68 countries.

²⁷ See McGinnis & Pearce, *supra* note 10, at 3046 (The areas include: "(1) discovery; (2) legal research; (3) document generation; (4) brief and memoranda generation; and (5) prediction of case outcomes").

²⁸ Id. at 3047.

³¹ Moore, 287 F.R.D. 182.

³² Id. at 193. The court held,

Second, electronic legal research development has been crucial since the late 1970s due to its convenience and efficiency.³³ Using IBM's Watson as a model, a significant change in legal research will be the transition from keyword and Boolean searches³⁴ to "[s]emantic search[es], [which] will allow lawyers to input natural language queries to computers, and the computers will respond semantically... with [highly targeted and] directly relevant information."³⁵ Professor McGinnis suggests that there are two phases in which legal research AI can be categorized. In the first phase, the AI machine will simply identify relevant cases pursuant to a lawyer's assessment of the specific issues at hand. In the second phase, the AI machine will itself identify the issues and suggest case law that is relevant.³⁶ ROSS, in its current stage, would likely fall in between the first and second phases of this framework, indicating how far complex legal research innovation has come.

Third, machine intelligence is continuing to revolutionize the use of legal forms by tailoring various forms to meet individual situations.³⁷ Mechanisms like LegalZoom³⁸ and Chatbot intake client information, draft wills, and handle trust and estate planning, as well as divorces.³⁹

Id.

³⁶ See McGinnis & Pearce, *supra* note 10, at 3051–52. In the first phase, the lawyer will do all the issue spotting and use the AI search engine only to identify the relevant cases. In the second phase, the role of the lawyer in legal research is further reduced. *Id.*

³⁷ *Id.* at 3052 (discussing how AI is able to tailor various legal forms to specific fact patterns).

³⁸ See Donald Patrick Eckler & Ashley S. Koda, Against the Wind: Practical and Ethical Implications of Artificial Intelligence in the Practice of Law, 26 IDC Q. 1, 1 (2016) (discussing the distinction between legal advice and legal information). LegalZoom has been a defendant in numerous lawsuits alleging the unauthorized practice of law. Some states have found it to be engaged in the practice of law while others, like South Carolina, have found otherwise. In Medlock v. LegalZoom.com, Inc., the Supreme Court of South Carolina characterized LegalZoom's business as the seller of "interactive self-help form documents" and described the consumer's role as "creat[ing] legal documents using an automated process." No. 2012-208067, 2013 S.C. LEXIS 362, at *4 (S.C. Oct. 25, 2013). South Carolina recognizes a "scrivener" exception to the practice of law: "A scrivener is 'someone who does nothing more than record verbatim' what the [customer] says." Id. at *17 (quoting Franklin v. Chavis, 640 S.E.2d 873, 876 (S.C. 2007)). The court distinguished this from the preparation of forms that actually "involves the giving of advice, consultation, explanation, or recommendations on matters of law." Id. at *15 (quoting State v. Despain, 460 S.E.2d 576, 578 (S.C. 1995)). To the extent the website's role is to take a user's information and insert it into a form and not to advise, consult, or recommend on matters of law, South Carolina would likely consider the Robot Lawyer to be more of a Robot Scrivener.

³⁹ See Reid Kress Weisbord, *Wills for Everyone: Helping Individuals Opt out of Intestacy*, 53 B.C. L. REV. 877, 918 n.159 (2012) ("LegalZoom, a leading provider of commercial forms, offers

keywords or any other technological solution to ediscovery, counsel must design an appropriate process, including use of available technology, with appropriate quality control testing, to review and produce relevant ESI

³³ See supra text accompanying notes 22–26.

³⁴ See Neary & Chen, supra note 5.

³⁵ See McGinnis & Pearce, *supra* note 10, at 3049; *see also* sources cited *supra* note 3.

Other programs have been developed that automatically create documents of incorporation for startup companies.⁴⁰ For example, "Kira Systems can automatically highlight and extract important contract provisions and helps organize data for analysis,"⁴¹ and the DoNotPay apparatus independently helps its users defeat traffic tickets.⁴² These areas of legal technology are still developing⁴³ and will indubitably advance in the near future.

Professor McGinnis also opines that AI will soon be able to draft legal briefs and memoranda⁴⁴ by partnering up with legal research programs and will be able to conduct predictive analytics to predict case outcomes by relying on data patterns.⁴⁵ "Applications such as Lex Machina and Premonition pore over thousands of verdicts and decisions and yield analysis on key issues such as plaintiff/defendant bias in courts, legal strategies offered by opposing counsel and accepted by courts, and other strategic information, allowing them to predict winners and losers."⁴⁶

The legal field is currently intrigued by the addition of AI technology in the workplace, and rightfully so.⁴⁷ Older lawyers have

⁴¹ Christina Couto, *The New Age of Lawyering: Artificial Intelligence Drives Change Throughout Legal Profession*, NYSBA, http://www.nysba.org/CustomTemplates/Content.aspx? id=69860 (last visited Feb. 23, 2018).

⁴² See Ethan Wolff-Mann, *This Chat Bot Lawyer Has Beaten 160,000 Parking Tickets*, TIME (June 29, 2016), http://time.com/money/4387657/donotpay-chat-bot-traffic-ticket-new-york-london; *Robots Change the Face of Legal Practice*, DISCIPLINARY BD. OF THE SUPREME COURT OF PA. (May 2017), http://www.padisciplinaryboard.org/attorneys/newsletter/2017/may.php.

⁴³ See Caraher E-mail, *supra* note 2 (Q: "Does ROSS make predictions as to the probable outcomes of cases? How does it support its conclusions?" A: "No, to my knowledge ROSS does not have a probability engine for the success of winning or losing a legal argument. This could be an interesting speculative feature, but again, with professional liability concerns, the best they could offer would be a decision tree type probability graph based upon historical case outcomes. Since every case has its nuances, every jurisdiction is different, judges and juries are unique, I don't know that ROSS will get into the betting game anytime soon."); McGinnis & Pearce, *supra* note 10.

44 See Neary & Chen, supra note 5 (discussing ROSS's ability to prepare basic memoranda of law on bankruptcy issues).

⁴⁵ See McGinnis & Pearce, *supra* note 10, at 3052 ("Indeed, law, with its massive amounts of data from case law, briefs, and other documents, is conducive to machine data mining that is the foundation of this new predictive science. Legal data include fact patterns, precedents, and case outcomes. For instance, one form of legal analytics would use fact patterns and precedent to predict a case's outcome, thereby better equipping lawyers to assess the likely result of litigation.").

⁴⁶ *Robots Change the Face of Legal Practice, supra* note 42.

⁴⁷ See Sterling Miller, Ten Things: Artificial Intelligence—What Every Legal Department Really Needs to Know, TEN THINGS YOU NEED TO KNOW AS IN-HOUSE COUNSEL (Aug. 15,

a simple three-step process that makes it fast, easy, and affordable to create a comprehensive will, complete with advanced provisions." (citation omitted)).

⁴⁰ See McGinnis & Pearce, *supra* note 10, at 3051 (Matt Kesner, Fenwick & West's technology officer in Silicon Valley stated, "[i]t reduced the average time we were spending from about 20 to 40 hours of billable time down to a handful of hours.... In cases with even extensive documents, we can cut the time of document creation from days and weeks to hours." (quoting Manjoo, *supra* note 11)).

never imagined such technological advancement and young lawyers are undoubtedly attracted to it. William Caraher stated that a great deal of lawyers have gravitated towards their firm because of the possibility of working with ROSS.⁴⁸ With this mindset, not only will the use of cutting-edge AI technology lure lawyers to firms, it will lure clients in as well.⁴⁹

B. Competitive, Comparative, and Differential Advantages of Legal Artificial Intelligence

The use of AI by legal professionals is inevitable due to its competitive, comparative, and differential advantages. AI tools, such as ROSS, allow law firms to dramatically reduce the labor-hours required for research.⁵⁰ First, this enables law firms to produce services at a lower cost.⁵¹ Second, it permits them to spend more time and money on high-value advisory tasks and complex legal matters. These elements of implementing AI technology generate margins superior to competing firms, thereby creating a competitive advantage.⁵²

By economizing on time and money,⁵³ law firms using ROSS will be able to sell their services at a price lower than their competitors which clients will undoubtedly appreciate.⁵⁴ As such, clients will choose

⁵⁰ See ROSS, supra note 2. Based on ROSS statistics, there has been an incredible impact on research efficiency. Particularly, ROSS has provided a "30.3% [increase in] time savings over Boolean based search[es]...22.3% [increase in] time savings over Natural Language based search[es, and a] \$13,067 annual revenue increase per attorney." *Id.*

⁵¹ See Caraher E-mail, *supra* note 2 (Q: "How does ROSS save the firm money?" A: "ROSS has saved research time, which translates into fewer billable hours. So, indirectly based upon solid research (getting to the right answer quickly) and directly by reducing the amount of time spent on research.").

⁵² See id.; Competitive Advantage, INVESTOPEDIA, http://www.investopedia.com/terms/c/ competitive_advantage.asp (last visited Feb. 23, 2018).

⁵³ See Caraher E-mail, *supra* note 2 (affirming that ROSS saves the firm money "directly" by reducing the amount of time spent on research and "indirectly" by providing attorneys with correct answers quickly); Manjoo, *supra* note 11 ("Because software will allow fewer lawyers to do a lot more work, it's sure to drive down both price and demand.").

⁵⁴ See McGinnis & Pearce, *supra* note 10, at 3054 ("Machine intelligence may also help lawyers, through skill or better organization, increase delivery of very low-priced services. Unmet legal needs exist across the nation, generally for low- and middle-income people who

^{2017),} https://sterlingmiller2014.wordpress.com/2017/08/15/ten-things-artificial-intelligence-what-every-legal-department-really-needs-to-know/?wpnd_cid=47e7eeb4c436bcb4.

⁴⁸ See Caraher E-mail, *supra* note 2 (Q: "Has the use of ROSS affected associate hiring?" A: "Yes, but in a very positive way. ROSS hasn't impacted in a negative way, in fact we have seen laterals and associates gravitate towards our firm because we are using such cutting-edge technology.").

⁴⁹ *Id.* (Q: "Do clients know if their attorneys are using ROSS? Is it discussed before retainment?" A: "There have been several very public articles written about our use of ROSS and some clients have taken notice. They have seen it as a positive benefit of working with our firm—to have access to the industry's best, cutting-edge technology. This is even further appreciated because we don't charge back for any fees associated with ROSS.").

the cheaper of any two perfect substitutes offered each time, giving those law firms using ROSS a comparative advantage. Higher margins for the lowest-cost producers will eventually provide the law firms with more resources for marketing, research and development, and administrative infrastructure improvements to support future growth.⁵⁵

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Further, factors such as more advanced technology drive differential advantages. A differential advantage is created when a firm's services differ from its competitors and are seen as superior to the competitive offerings.⁵⁶ By employing newly developed machines like ROSS, law firms will attract curious clients who will want to see what ROSS can do for them,⁵⁷ as well as top-talent lawyers who will want to work with such technology.⁵⁸ As a result, law firms looking to grow their practices will likely implement AI technology in the near future to obtain competitive, comparative, and differential advantages;⁵⁹ and if they decide not to, they will fall behind their competitors.⁶⁰

C. Regulatory Proposals

The incentives of employing ROSS are clear,⁶¹ and with an influx of legal AI technology entering the workforce,⁶² definitive guidelines for

⁶⁰ See Robert Ambrogi, This Week in Legal Tech: Ethics and Technology Competence, ABOVE THE LAW (July 11, 2016, 3:02 PM), http://abovethelaw.com/2016/07/this-week-in-legal-tech-ethics-and-technology-competence/?rf=1. Two partners at a twenty-five-lawyer firm admitted, "[w]hen it comes to technology, we are still in the dark ages They realized that, to remain competitive, their firm needs to change." *Id.*

⁶¹ See discussion *supra* Section II.B (discussing competitive, comparative, and differential advantages).

cannot afford the prices lawyers charge. These legal needs include matters as varied as counseling on small-business matters and writing prenuptial agreements. Lawyers can use machines to help generate relevant forms, thereby reducing the costs of providing services and making the services more broadly affordable.").

⁵⁵ See Competitive Advantage, supra note 52.

⁵⁶ Id.

⁵⁷ See Caraher E-mail, *supra* note 2 (Caraher stated, "[i]f our attorneys have access to the best tools and can continue to provide the best client outcomes in the most efficient way, the client comes out on top. That is the best that a firm can hope for when employing new technology like ROSS. Our attorneys are leading the charge when it comes to understanding and utilizing the latest technology in the industry. We have been recognized and received awards for our innovation which is all driven by providing the best service and advice to our clients"); ROSS, *supra* note 2 (Luis Salazar, managing partner at Salazar Law, stated, "ROSS quickly became an integral component to our pursuit of efficiency. In fact, it simultaneously became an integral component of our marketing because adopting cutting edge technology to work smarter, faster and more powerfully is something clients, especially general counsel, are very interested in.").

⁵⁸ See Caraher E-mail, supra note 2.

⁵⁹ See Success Directory, ROSS, https://rossintelligence.com/ross/success-directory (last visited Feb. 24, 2018) (Womble Carlyle's Vice Chair, Ellen Gregg, stated, "ROSS Intelligence's technology represents a bright future where talented lawyers are able to leverage artificial intelligence to analyze legal issues and make connections that would otherwise be invisible.").

lawyers and a set of reasonable expectations for clients are necessary. Top multidisciplinary scientists such as Elon Musk, Bill Gates, and Stephen Hawking have suggested that some sort of regulatory oversight over AI is necessary, on both the national and international level.⁶³ Similarly, in 2016, the White House announced that it had begun to brainstorm and conduct research to find methods by which to regulate and control AI.⁶⁴ Accordingly, there has been much discourse discussing the best course of action for regulating AI technology.

A noteworthy proposal has been to enact federal legislation, specifically the Artificial Intelligence Development Act (AIDA), which would create a federal agency tasked with certifying the safety of AI systems.⁶⁵ Matthew U. Scherer, an attorney and legal scholar who writes about the intersection of law and AI, argues:

Instead of giving [AIDA] FDA-like powers to ban products it believes to be unsafe, AIDA would create a liability system under

⁶² See Vanderbilt University, Andrew Arruda: Artificial Intelligence and the Law Conference at Vanderbilt Law School, YOUTUBE (May 6, 2016), https://www.youtube.com/watch?v= LF08X5_T3Oc ("The genie is out of the bottle. The cat is out of the bag. Things are changing.").

⁶³ See, e.g., Stephen Hawking, BIOGRAPHY.COM, http://www.biography.com/people/ stephen-hawking-9331710 (last updated Jan. 2, 2018) ("In 2014, Hawking, among other top scientists, spoke out about the possible dangers of artificial intelligence ... [and] call[ed] for more research to be done on all possible ramifications of AI." They contended that successful creation of artificial intelligence would be "the biggest event in human history" However, they warned that it "might also be the last, unless we learn how to avoid the risks."); Peter Holley, Bill Gates on Dangers of Artificial Intelligence: 'I Don't Understand Why Some People Are Not Concerned', WASH. POST (Jan. 29, 2015), https://www.washingtonpost.com/news/theswitch/wp/2015/01/28/bill-gates-on-dangers-of-artificial-intelligence-dont-understand-why-

some-people-are-not-concerned (Elon Musk stated, "[i]f I were to guess like what our biggest existential threat is, it's probably [artificial intelligence]. So we need to be very careful with the artificial intelligence. Increasingly scientists think there should be some regulatory oversight maybe at the national and international level, just to make sure that we don't do something very foolish."); Debra Cassens Weiss, *Artificial Intelligence in the Legal Profession Should Be Regulated*, *Op-Ed Argues*, ABA JOURNAL (July 14, 2016, 7:30 AM), http://www.abajournal.com/news/article/artificial_intelligence_in_the_legal_profession_should_be_regulated_op_ed_a

^{(&}quot;Hinshaw Culbertson partner, Wendy Wen Yun Chang, a member of the ABA's Standing Committee on Ethics and Professional Responsibility [stated], ... right now, there is no regulatory scheme.... The industry is moving along without us. Very quickly. We must act, or we will be left behind.").

⁶⁴ See NAT'L SCI. & TECH. COUNCIL COMM. ON TECH., EXEC. OFFICE OF THE PRESIDENT, PREPARING FOR THE FUTURE OF ARTIFICIAL INTELLIGENCE (Oct. 2016) [hereinafter AI REPORT]; April Glaser, *The White House Is Finally Prepping for an AI-Powered Future*, WIRED (May 30, 2016, 12:00 PM), http://www.wired.com/2016/05/white-house-finally-prepping-ai-poweredfuture ("The White House says the government needs to start thinking about how to regulate and use the powerful technology while it is still dependent on humans.").

⁶⁵ See Matthew U. Scherer, Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies, 29 HARV. J.L. & TECH. 353, 393–95 (2016). Though AIDA, specifically, has not been discussed for legislative action, the Executive Office has suggested that a federal agency should be the proper enforcement mechanism for setting regulatory policy for AI-enabled products. See AI REPORT, supra note 64, at 1 ("[T]he National Artificial Intelligence Research and Development Strategic Plan lays out a strategic plan for Federally-funded research and development in AI." (emphasis in original)).

which the designers, manufacturers, and sellers of agency-certified AI programs would be subject to limited tort liability, while uncertified programs that are offered for commercial sale or use would be subject to strict joint and several liability.⁶⁶

"This strong tort-based system would compel designers and manufacturers to internalize the costs associated with AI-caused harm, [which would] ensur[e] compensation for victims [This, in turn, will] forc[e] [AI] designers, programmers, and manufacturers to examine the safety of their systems" as they are being created "without the innovation-stifling effects of an agency empowered to ban certain AI systems outright."⁶⁷ AIDA would also be a good option, Scherer argues, because it is an ex ante regulation, ensuring that AI is progressing in a controlled environment.⁶⁸

In ROSS's case, adopting this proposal would mean that ROSS would have to be certified by the AIDA federal agency prior to entering the legal market. There are four issues with this, however. First, a federal agency may not be experienced enough with AI technology to understand how to regulate it. Second, even if the federal agency were comprised of "experts with prior education or experience with AI,"⁶⁹ it may not have enough knowledge about the specific AI apparatus in question to make a well-informed decision. Federal agencies may not necessarily know or understand how the algorithms work—not only because they are extremely complex, but also because autonomous machine learning makes the process dubious and unpredictable since its inner workings are invisible to the naked eye. Scherer would call these the "opacity" and "foreseeability" problems.⁷⁰

The third problem with Scherer's proposal is that it is aimed at regulating the AI machine itself, permitting federal agents to control it and, if need be, intervene in AI research and development. AI is continuously developing and advancing.⁷¹ An attempt to regulate something that is rapidly evolving is almost impossible because there is no way to effectively control machines that learn on their own,⁷² nor to

⁶⁶ Scherer, *supra* note 65, at 393.

⁶⁷ Id.

⁶⁸ *Id.* at 394 ("The purpose of AIDA would be to ensure that AI is safe, secure, susceptible to human control, and aligned with human interests, both by deterring the creation of AI that lack those features and by encouraging the development of beneficial AI that include those features. The Agency would be required to promulgate rules defining artificial intelligence and to update those definitional rules periodically.").

⁶⁹ Id. at 396.

⁷⁰ See John Danaher, *Is Regulation of Artificial Intelligence Possible*?, HUMANITY+ (July 15, 2015), http://hplusmagazine.com/2015/07/15/is-regulation-of-artificial-intelligence-possible.

⁷¹ See discussion supra Section I.A.

⁷² See Xavier Amatriain, Should Artificial Intelligence Be Regulated?, FORBES (Aug. 31, 2017,

^{2:15} PM), https://www.forbes.com/sites/quora/2017/08/31/should-artificial-intelligence-be-regulated/#334e3709331d.

oversee each machine that does so.⁷³ With that in mind, even if AIDA certifies the machine in its infancy stage, there is no way to know what it will become as it learns and develops. A viable option would be to require recertification for each "update," but this will not work for the very same reasons stated above.⁷⁴ Therefore, this Note takes the position that the better option would be to regulate the attorney using the AI instead. The fourth and final issue is that tort liability may not be a strong enough incentive to deter companies and engineers from violating regulations since the social and economic benefits of improving a piece of AI technology may be of greater value than the costs of an unfavorable tort verdict.⁷⁵

D. Legal Ethics and the Model Rules

Since most legal AI technologies are still in their infancy stages, lawyers do not fully trust them. Presently, human lawyers conduct independent searches to make sure that machines like ROSS provide them with applicable laws and do not miss other important information that could narrow a law's application.⁷⁶ Admittedly, it is possible that once lawyers get comfortable with ROSS's results and begin trusting its outputs they will cease verifying its answers with other legal research platforms.⁷⁷ This, however, may be deemed unethical by the Model Rules, which require lawyers to make competent and independent professional judgments when advising clients.⁷⁸ "The fact that the algorithms employed by AI systems are proprietary" and not open to

⁷³ See Hayley McDowell, Artificial Intelligence: Robo Rules & Regulation, TRADE (Apr. 11, 2016, 10:11 AM), https://www.thetradenews.com/Technology/Artificial-Intelligence--Robo-Rules---Regulation ("Regulating AI itself is really an unrealistic concept."); Glaser, *supra* note 64 ("The problem with trying to regulate these technologies is that they're still being developed, says Bryant Walker Smith, a law professor at the University of South Carolina and one of the nation's leading experts on self-driving cars.").

⁷⁴ See supra text accompanying note 66.

⁷⁵ See Scherer, supra note 65, at 392.

⁷⁶ Firms aim to demystify ROSS throughout its infancy stage by exploring its cognitive computing value. The more ROSS is used, the quicker it becomes a productive tool because lawyers get past the "unknowns" and begin to trust its outputs. The unknowns are the layers and layers of machine learning algorithms. *See* Caraher E-mail, *supra* note 2 (Q: "Once ROSS has provided an answer, what do attorneys do to ensure that the answer is correct?" A: "With any new system, the results need to be vetted before we can trust that it is providing accurate and on-point results. So, we did cross check ROSS with our other research platforms. The more our attorneys used it and found that it was accurate, the less they felt they needed to cross check with the other platforms.").

⁷⁷ Id.

⁷⁸ See MODEL RULES OF PROF'L CONDUCT pmbl. cmt. 4 (AM. BAR ASS'N 2014) (prescribing that, "[i]n all professional functions a lawyer should be competent, prompt and diligent"). "A lawyer should strive to attain the highest level of skill, to improve the law and the legal profession and to exemplify the legal profession's ideals of public service." *Id.* cmt. 7.

their purchasers makes requiring AI users to be critical of their legal search results all the more important.⁷⁹ Further, if lawyers rely on the answers of an AI machine, technically, their legal advice is not purely their own. The use of ROSS, therefore, needs human intervention in each step of the process.⁸⁰ With ROSS's incredible ability to learn, blind reliance on technology is an impending concern that should be addressed in public discourse and possibly by ABA ethics committees.⁸¹

There are currently no uniform standards designed specifically to regulate a lawyer's usage of AI in the workplace. The Model Rules presently in place are the ABA's third codification of legal ethics. The first were the Canons of Professional Ethics, promulgated in 1908, which consisted of little more than ideals and had limited influence on lawyers.⁸² The response was the ABA's Model Code of Professional Responsibility, adopted in 1970. Almost immediately, scholars and other commentators began to note deficiencies in the Model Code and the ABA appointed a committee to study overhauling it.⁸³ "By 1983, the ABA . . . recommended the adoption of an entirely new approach, the Model Rules of Professional Conduct."⁸⁴ The Model Rules are a set of fifty-seven rules, divided into eight sections, focusing on the client-lawyer relationship, a lawyer's duties as a counselor and advocate, and the means of maintaining the integrity of the legal profession.⁸⁵ Since

⁸⁴ Id.; see also Milan Markovic, Advising Clients After Critical Legal Studies and the Torture Memos, 114 W. VA. L. REV. 109, 114 (2011).

⁸⁵ The purpose of the Model Rules is to improve the quality of the legal profession, and to maximize excellence. These objectives necessarily go along with the functions of tort law, particularly, the law of legal malpractice. *See* MODEL RULES OF PROF'L CONDUCT pmbl. cmt. 5 (AM. BAR ASS'N 2014) ("A lawyer's conduct should conform to the requirements of the law, both in professional service to clients and in the lawyer's business and personal affairs."). "The Rules of Professional Conduct are rules of reason. They should be interpreted with reference to the purposes of legal representation and of the law itself." *Id.* at scope cmt. 14; *see also* Scott v. Robson, 597 P.2d 1150, 1154 (Mont. 1979) (A plaintiff must prove that the attorney owed him a duty of care, that the attorney breached his duty by failing to use reasonable care and skill, that the breach of the duty proximately caused the plaintiff's injury, and that the breach resulted in damages.); Neel v. Magana, 491 P.2d 421, 422–23 (Cal. 1971) ("Legal malpractice consists of the failure of an attorney 'to use such skill, prudence, and diligence as lawyers of ordinary skill and capacity commonly possess and exercise in the performance of tasks which they undertake."" (quoting Lucas v. Hamm 364 P.2d 685, 689 (Cal. 1961)); Jean E. Faure & R. Keith Strong, *The Model Rules of Professional Conduct: No Standard for Malpractice*, 47 MONT. L. REV. 363, 378

⁷⁹ See Neary & Chen, supra note 5, at 19.

⁸⁰ See Caraher E-mail, supra note 2 (Q: "To what extent is ROSS supervised?" A: "It has human intervention always." Q: "How are searches conducted? How are results and outputs translated into legal advice to the client?" A: "Searches are performed via the simple, yet elegant web based ROSS interface. The experienced (and licensed) attorney is still very much a key part of the process in that they interpret the results and determine the most applicable research for their case. The current ROSS roadmap requires human intervention to ask the questions and interpret the results. ROSS is not an autonomous system and doesn't have a license to practice law in any state.").

⁸¹ The Moore court forewarned the ABA of this issue. See 287 F.R.D. at 191.

⁸² See Fred C. Zacharias, Federalizing Legal Ethics, 73 TEX. L. REV. 335, 338 (1994).

⁸³ Id. at 339.

1983, the ABA has amended the Model Rules from time to time. The most recent amendments have resulted from the work of the ABA's Commission on Ethics 20/20, which revised the Model Rules in response to technological developments and the globalization of the legal practice.⁸⁶

"Professional regulation of lawyers has a variety of purposes, including the provision of guidance to lawyers [and courts,] and the maintenance of a public image that fosters client trust...."⁸⁷ As demonstrated, the regulation of legal ethics has previously developed with changing social, economic, and technological circumstances.⁸⁸ Given this history of professional regulation of lawyers and the modern developments that gave rise to the calls for reform, the current Model Rules fail to further their objectives. It is, therefore, again time to reevaluate and make a change to account for the rise of technological circumstances.

II. ANALYSIS

The Model Rules are intended to be guidelines that prescribe standards of legal ethics and professional responsibility for lawyers. However, they were promulgated in 1983, so the current language is outdated and does not account for technological advancement. Lawyers need instructions that spell out exactly how to apply the current interpretations of the Model Rules to a completely new situation, as they can no longer argue that they are technologically uneducated.⁸⁹ "Rather, the risk has been allocated to the party in the best position to employ

^{(1986) (&}quot;The Code and Model Rules are blueprints for the complicated scheme of the attorney's [civil] interlocking duties toward client and court [in tort law].").

⁸⁶ See PEARCE ET AL., supra note 17.

⁸⁷ Zacharias, *supra* note 82, at 344.

⁸⁸ See supra notes 82-86 and accompanying text.

⁸⁹ See People v. Barnes, 499 N.Y.S.2d 343 (N.Y. Sup. Ct. 1986). In People v. Barnes, an attorney relied on past precedent that he found while conducting a paper-based authentication of the authority. The court noted that if the lower court cases "were 'shepardized,' no appellate court cases would be discovered. Similarly, a search [through a local digest] for a higher court precedent would be fruitless." However, if the attorney used the electronic alternative, he would have discovered a binding decision by a higher court that was dispositive of the case. Strikingly, the court did not hold the attorney accountable, reasoning that the omission was "understandable, since the commonly used and most expedient research tools [were] not helpful in this instance" (referencing old-fashioned paper-based research) and electronic research techniques "may be unavailable to many attorneys who do not enjoy the luxury of computer-assisted research" Id. at 346. Today, this logic would not apply because technology is indeed the commonly used and most expedient research tool and it would be impossible to imagine a lawyer in today's world not having access to online research platforms. See, e.g., James v. Nat'l Fin. L.L.C., No. 8931-VCL, 2014 WL 6845560, at *12 (Del. Ch. Dec. 5, 2014) (noting that Delaware had adopted Model Rule 1.1's Comment 8, the court said, "Professed technological incompetence is not an excuse for discovery misconduct").

[safety measures to] protect client [interests]—the [lawyer]."⁹⁰ For purposes of this Note, the rules most relevant to the interaction between human lawyers and AI lawyers are Model Rules 1.1, 2.1, and 5.3.⁹¹

A. *Model Rule 1.1—Competence*

Historically, the concept of lawyers' competence referred to a lawyer's understanding of a particular area of law. Arguably, competence is the most important of a lawyer's ethical duties because lawyers are relied upon—due to their exclusive positions in the legal realm—by the citizenry. Model Rule 1.1 states that a lawyer must "provide competent representation" to his clients.⁹² Competent representation entails "the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation."⁹³ "[I]mportant legal skills [include] the analysis of precedent, the evaluation of evidence, and legal drafting"⁹⁴ "Technology's impact on the legal profession[, however,] has rendered this historical [notion] of [lawyer] competence [obsolete]."⁹⁵ Comment 8 to Model Rule 1.1 provides that to maintain competence, a lawyer should keep abreast of the benefits and risks associated with new legal technology.⁹⁶ Comment 8, however,

96 MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 8 (Am. BAR ASS'N 2014). ("To maintain

⁹⁰ Ash Mayfield, Decrypting the Code of Ethics: The Relationship Between an Attorney's Ethical Duties and Network Security, 60 OKLA. L. REV. 547, 563 (2007).

⁹¹ Model Rule 1.1 is a competency rule that requires lawyers to "provide competent representation to their clients." I chose this rule because being competent comprises understanding the technology that a lawyer works with. Without knowing how to operate and work with a tool that independently conducts legal research, like ROSS, a lawyer will not be able to provide quality advice to his clients. MODEL RULES OF PROF'L CONDUCT r. 1.1 (AM. BAR ASS'N 2014). Model Rule 2.1 defines a lawyer's role in his capacity as an advisor and requires him to use "independent professional judgment" when rendering advice to his clients. *Id.* at r. 2.1. I chose this rule because the application of AI technology and the reliance on its outputs curtails lawyers' independent judgments. Model Rule 5.3 sets out the responsibilities of supervisory lawyers, specifically, requiring them to supervise and monitor nonlawyer assistants. *Id.* at r. 5.3. I chose this rule because AI work can arguably be considered as nonlawyer assistance since AI tools perform the same tasks as paralegals, legal assistants, etc., and so should be monitored as such.

⁹² Id. at r. 1.1

⁹³ Id.

⁹⁴ Id. at r. 1.1 cmt. 2.

⁹⁵ Steven M. Puiszis, *Perspective: Technology Brings a New Definition of Competency*, BLOOMBERG LAW (Apr. 12, 2016), https://bol.bna.com/perspective-technology-brings-a-newdefinition-of-competency ("One of the trends in legal ethics over the past decade is the recognition of a duty of technological competence. Historically, the concept of a 'competent' attorney primarily focused on a lawyer's knowledge of a substantive area of the law coupled with his or her experience and ability to represent a client in a particular engagement. Technology's impact on the legal profession has rendered this historical view of competence outdated While attorneys need not become technology experts ... the dut[y] of ... competence ... do[es] require a basic understanding of the electronic protections afforded by the technology they use in their practice.").

is insufficient because it merely reminds lawyers to "keep abreast of changes" in the practice of law⁹⁷—it does not provide a concrete course of action for lawyers to take to avoid incompetence.⁹⁸ Further, "what constitutes 'the requisite knowledge and skill' for a lawyer has yet to be clarified by the courts and the state bar associations."⁹⁹

Several states have adopted regulatory measures to ensure that lawyers keep up with technology and understand the technology their firms use. For instance, Florida law suggests that continuing education may be necessary to understand the risks associated with technology use.¹⁰⁰ New York promulgated a rule that lawyers must use "reasonable care [in]...stay[ing] abreast of technological advances."¹⁰¹ Arizona issued a more stringent standard, requiring lawyers to "be competent [in] evaluat[ing] the nature of the potential threat to client[s]... and to evaluate and deploy appropriate computer [resolutions]."¹⁰² Further, the Delaware Supreme Court amended its rules as they relate to technology and created a new arm of the court, the Commission on Law and Technology, to educate both the bench and the bar on matters related to technology and the newly amended rules.¹⁰³ By calling for ethical compliance in the technological realm, states like Florida, New York,

99 Neary & Chen, supra note 5, at 19.

¹⁰⁰ See Fla. Bar Prof'l Ethics Comm., Op. 06-2 (2006) ("To maintain the requisite knowledge and skill [for competent representation], a lawyer should engage in continuing study and education.").

¹⁰¹ N.Y. State Bar Ass'n Comm. on Prof'l Ethics, Formal Op. 782 (2004) ("Reasonable care may, in some circumstances, call for the lawyer to stay abreast of technological advances and the potential risks . . . in order to make an appropriate decision "); *see also* N.Y. State Bar Ass'n, Comm. on Prof'l Ethics, Formal Op. 709 (1998).

¹⁰² State Bar of Ariz. Comm. on the Rules of Prof'l Conduct, Formal Op. 05-04 (2005).

¹⁰³ Order amending Rules 1.0, 1.1, 1.4, 1.6, 1.17, 1.18, 4.4, 5.3, 5.5, 7.1, 7.2, and 7.3 of the Delaware Lawyers' Rules of Professional Conduct (Del. Jan. 15, 2013), https:// courts.delaware.gov/rules/pdf/dlrpc2013rulechange.pdf; *In re* The Commission on Law and Technology Order (Del. July 1, 2013), https://www.courts.delaware.gov/forms/ download.aspx?id=69618.

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, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.").

⁹⁷ Id.

⁹⁸ *Id.* Comment 8 requires lawyers to be competent with the technology that they use, but does not tell lawyers how to do so to escape disciplinary action or sanctions. *See* KARIN S. JENSON, COLEMAN W. WATSON & JAMES A. SHERER, BAKERHOSTETLER, ETHICS, TECHNOLOGY, AND ATTORNEY COMPETENCE 2 (2016), http://www.law.georgetown.edu/cle/materials/eDiscovery/2014/frimorndocs/EthicsIneDiscoveryBakerHostetler.pdf. ("While at first blush Comment 8 seemingly creates a new duty running from lawyer to client, the ABA's position is that Rule 1.1 does not actually impose any new obligations on lawyers. In fact, 'the amendment is [only] intended to serve as a reminder to lawyers that they should remain aware of technology, including the benefits and risks associated with it, as part of a lawyer's general ethical duty to remain competent.' In other words, Rule 1.1 simply reiterates the obvious, particularly for seasoned eDiscovery lawyers, that in order for lawyers to adequately practice, they need to understand the means by which they zealously advocate for their clients.").

Arizona, and Delaware are "substantially ahead of the ethical curve in directly [holding lawyers] responsible for competent use of [new] technology."¹⁰⁴

Moreover, states like Oklahoma that have adopted the language of Model Rule 1.1¹⁰⁵ impose duties upon lawyers to remain "competent" during the course of client representation.¹⁰⁶ Such state competency rules shadowing the Model Rules, however, remain too ambiguous to lend an adequate sense of direction for lawyers using AI technology. For instance, what does it mean to be "reasonabl[e]"?¹⁰⁷ Model Rule 1.0(h) states that reasonable refers to "prudent and competent" conduct.¹⁰⁸ However, there are currently no standards in place about what it means to be a prudent or competent lawyer in relation to AI usage. Similarly, how can state bar associations require lawyers to use "methods and procedures meeting the standards of competent practitioners" if there are no such standards yet in place?109 Therefore, modern interpretations of Oklahoma's Rule 1.1, as well as other states' competency rules, require lawyers to achieve competency with new legal tools by participating in continuing education programs, sufficient practice, and preparation.110

"Model Rule 1.1's approach to defining competence without reference to outcomes or objective standards"¹¹¹ makes applying traditional interpretations to evolving social circumstances very difficult and leaves lawyers deprived of any guidance into the next era of the legal practice. While AI technology may be new to the legal profession, a lawyer's core ethical duty of competence remains constant. When using ROSS, a lawyer must be competent in terms of understanding how to properly operate it, ask it proper questions that will lead to the desired results, and properly interpret its analyses.¹¹² For example, if an AI tool performs legal research, was it asked the right questions? Did it grasp the legal issue? Did it research the pertinent jurisdiction? "Professor Roy D. Simon, who annually writes Simon's New York Rules of Professional Conduct Annotated[, states,]...[i]f a computer answers the wrong

109 Id. at r. 1.1 cmt. 5.

¹⁰⁴ Mayfield, *supra* note 90, at 562–63 (Florida and New York both regulate email and electronic communication; Arizona regulates cyber security of clients' electronic files.).

¹⁰⁵ *Compare* Okla. Rules of Prof'l Conduct r. 1.1 (Okla. Bar Ass'n 2016), *with* Model Rules of Prof'l Conduct r. 1.1 (Am. Bar Ass'n 2014).

¹⁰⁶ Mayfield, *supra* note 90, at 577 ("Oklahoma Rule of Professional Conduct 1.1 requires attorneys to 'provide competent representation to a client,' which includes 'the legal knowledge, skill, thoroughness, and preparation reasonably necessary for the representation.'").

¹⁰⁷ MODEL RULES OF PROF'L CONDUCT r. 1.1 (AM. BAR ASS'N 2014).

¹⁰⁸ *Id.* at r. 1.0(h) ("Reasonable' or 'reasonably' when used in relation to conduct by a lawyer denotes the conduct of a reasonably prudent and competent lawyer.").

¹¹⁰ See Mayfield, supra note 90, at 578.

¹¹¹ Barbara Graves-Poller, *Is Pro Bono Practice in Legal "Backwaters" Beyond the Scope of the Model Rules*?, 13 U.N.H. L. REV. 1, 30 (2015).

¹¹² See supra note 80.

question, its answer may be totally accurate, but also totally irrelevant."¹¹³ Thus, it is the lawyer's duty to remain competent in using these sophisticated tools correctly and interpreting their results correctly¹¹⁴ when providing legal advice to clients.¹¹⁵

B. Model Rule 2.1—Advisor

As an "advisor," a lawyer serves two conventional purposes: a zealous advocate and a regulatory officer of the court.¹¹⁶ A zealous advocate is loyal to his client and fights for his client's interests, and a regulatory officer upholds professional ethical standards to promote societal trust in the practice of law.¹¹⁷ Model Rule 2.1 states that a lawyer must "exercise independent professional judgment" in the course of client representation and must "render candid advice."¹¹⁸ In rendering such advice, a lawyer may use "moral, economic, social, and political [considerations], that may be relevant to the client's [circumstances]."¹¹⁹ The rationale behind this rule is that a lawyer's autonomy is worthy of respect, and that lawyers are in the best position to judge how to proceed because they know enough about the facts of the case to make

117 Id.

¹¹³ Couto, *supra* note 41; *see also* Caraher E-mail, *supra* note 2 (Q: "How are attorneys trained to spot ROSS's mistakes?" A: "ROSS provides answers to questions. If the question is not framed exactly right or the intent of the question was entered improperly, the results may not match the users' expectations.").

¹¹⁴ Unlike Lexis or Westlaw, where lawyers themselves carry out the mundane task of finding and analyzing cases, ROSS uses patterns and machine learning to find cases that it thinks are relevant. Specifically, a lawyer asks ROSS a question and ROSS must determine the "intent" of the question, requiring some sort of independent intellectual functioning. Considering the platform's youth, reliable results without human supervision are unlikely. Further, Lexis and Westlaw are platforms that have both historically proved themselves as reliable resources, unlike ROSS, which has only recently been approved for early firm access. Given the risk of error with using AI technology and the importance of client matters, lawyers using ROSS should remain prudent when interpreting ROSS's outputs. Telephone Interview with Andrew M.J. Arruda, CEO and Co-Founder, ROSS Intelligence (Sept. 8, 2016). ROSS's work is a "process by which a computer system is not just programed, but begins to draw connections on its own." *Id.*

¹¹⁵ See DAVID L. GORDON & REBECCA L. AMBROSE, JACKSON LEWIS, THE ETHICS OF ARTIFICIAL INTELLIGENCE (May 11, 2017), https://www.jacksonlewis.com/sites/default/files/ docs/Final_The%20Ethics%20of%20Artificial%20Intelligence_Gordon%20and% 20Ambrose.pdf.

¹¹⁶ See Keith A. Petty, Professional Responsibility Compliance and National Security Attorneys: Adopting the Normative Framework of Internalized Legal Ethics, 2011 UTAH L. REV. 1563, 1598 (2011).

¹¹⁸ MODEL RULES OF PROF'L CONDUCT r. 2.1 (AM. BAR ASS'N 2014).

¹¹⁹ *Id.* ("In representing a client, a lawyer shall exercise independent professional judgment and render candid advice. In rendering advice, a lawyer may refer not only to law but to other considerations such as moral, economic, social and political factors, that may be relevant to the client's situation.").

individualized decisions.¹²⁰

Sometimes analogized to Aristotelian practical wisdom, professional judgment is "neither a matter of simply applying general rules to particular cases nor a matter of mere intuition," but a process of bringing coherence to conflicting values within the framework of general rules and with sensitivity to highly contextualized facts and circumstances.¹²¹

In terms of implementing the work of an AI lawyer to a case, when a lawyer relies solely on ROSS's outputs, independent professional judgment—as required by Model Rule 2.1—vanishes because reliance on such outputs turns into dependence on the judgments of a technological apparatus.¹²² For instance, with ROSS's incredible capability of writing thorough legal memoranda, it is easy for a lawyer to accept ROSS's legal analysis as correct and fail to double check for accuracy, especially in situations where the lawyer is pressed for time.123 Pursuant to Comment 1 of Model Rule 2.1, a client is entitled to advice expressed by his lawyer's assessment.¹²⁴ If the lawyer is merely relying on ROSS's outputs, however, the client is not receiving the lawyer's assessment-the very thing that the client is paying for. In other words, when a lawyer relies on AI technology, he adopts the transmitted results. This willingness on the part of the lawyer to circumscribe his efforts and to compromise his thoroughness by offering clients legal advice attained from the blind reliance on technology is not in the best interests of the client and may be considered a violation of Model Rule 2.1 for failing to exercise independent professional judgment.¹²⁵

¹²⁰ Bruce A. Green & Fred C. Zacharias, *Permissive Rules of Professional Conduct*, 91 MINN. L. REV. 265, 273 (2006).

¹²¹ See ANTHONY T. KRONMAN, THE LOST LAWYER: FAILING IDEALS OF THE LEGAL PROFESSION 41 (1993); Katherine R. Kruse, Professional Role and Professional Judgment: Theory and Practice in Legal Ethics, 9 U. ST. THOMAS L.J. 250, 250 (2011); Gerald J. Postema, Moral Responsibility in Legal Ethics, 55 N.Y.U. L. REV. 63, 68 (1980); W. Bradley Wendel, Should Law Schools Teach Professional Duties, Professional Virtues, or Something Else? A Critique of the Carnegie Report on Educating Lawyers, 9 U. ST. THOMAS L.J. 497, 525 (2011).

¹²² For purposes of this Note, ROSS's "judgments" are of the relevancy and applicability of the cases that it provides lawyers, not the judgments one would make in actually analyzing case law. It is also unclear whether ROSS's outputs can even be considered judgments in the traditional sense—they are more so calculations based upon code patterns. Thus, when attorneys entirely accept ROSS's computations without double-checking them, judgment on all levels goes out the window.

¹²³ See What is Ross?, ROSS, https://rossintelligence.com/ross (last visited Feb. 24, 2018). The ROSS team properly markets the legal memoranda writing feature as a tool to "obtain a more comprehensive overview of a legal issue or to *double check the work of another researcher*." *Id.* (emphasis added). However, it is easy for lawyers to divert from such instruction, and actually use ROSS as the primary means for legal research. This would likely be deemed unethical.

¹²⁴ MODEL RULES OF PROF'L CONDUCT r. 2.1 cmt. 1 (AM. BAR ASS'N 2014).

¹²⁵ See PEARCE ET AL., *supra* note 17, at 254–55. The lawyer should not rely on ROSS, but rather merely incorporate ROSS into his own work.

Recall that ROSS is not an autonomous being¹²⁶—it is a tool that was designed merely to assist human lawyers in conducting legal research and other mundane tasks.¹²⁷ It is, therefore, unable to consider nonlegal factors such as morals, economics, and politics¹²⁸ when transmitting legal advice to a particular client (at least not in its current stage of maturity). To fulfill the duties of an advisor, and to protect clients from harm, lawyers "must assess their clients' sophistication, objectives, risk tolerance, and advocacy tone."¹²⁹ Since ROSS is nothing but a machine that produces results via coding patterns, ROSS is unable to make discretionary decisions and cannot simultaneously assess the nature, risks, and alternatives associated with the respective legal issues at hand.

In many instances, pure legal advice may not be enough because certain decisions have a broader impact on a client.¹³⁰ Thus, it is all the more incumbent for lawyers to use their own independent judgments to combine legal analysis, human morals, and current events to each representation. A machine cannot currently do so.¹³¹ A helpful analogy would be to think about how a lawyer in a law firm treats the work of an intern. Certainly, a lawyer does not blindly rely on an intern's legal research in providing advice to his clients. Likewise, a lawyer should not

¹²⁶ See source cited supra note 80.

¹²⁷ See Caraher E-mail, *supra* note 2 (Q: "What types of issues can you see arising with the technology? What types of legal ramifications do you foresee?" A: "ROSS is not an autonomous attorney, so right now you still need the human licensed expert to input questions and interpret the results. I don't see any legal ramifications unless this operating model changes.").

¹²⁸ See Larry O. Natt Gantt, II, More Than Lawyers: The Legal and Ethical Implications of Counseling Clients on Nonlegal Considerations, 18 GEO. J. LEGAL ETHICS 365, 388–97 (2005); Bruce A. Green, The Role of Personal Values in Professional Decisionmaking, 11 GEO. J. LEGAL ETHICS 19, 49–50 (1997) (giving an example of where, "in order to address the [client's] question competently, a lawyer must identify relevant non-legal considerations").

¹²⁹ Keith W. Rizzardi, *The Duty to Advise the Lorax: Environmental Advocacy and the Risk of Reform*, 37 WM. & MARY ENVTL. L. & POL'Y REV. 25, 25 (2012); Wendy Chang, *Time to Regulate AI in the Legal Profession? (Perspective)*, BLOOMBERG LAW (July 12, 2016), https://biglawbusiness.com/time-to-regulate-ai-in-the-legal-profession-perspective ("A lawyer must know, test, look, supervise, understand, and make all necessary adjustments so that while he or she may be using AI as a tool, the ultimate advice is still independently his or hers and is ethically compliant.").

¹³⁰ Thomas D. Morgan, National Symposium on the Role of a Corporate Lawyer: "The Clients of a Corporate Lawyer", 33 CAP. U. L. REV. 17, 39 (2004) ("[U]nder Model Rule 2.1, advice about what is narrowly legal simply may not be enough as to decisions that have a broader impact on the corporate client."); see also MODEL RULES OF PROF'L CONDUCT r. 2.1 cmt. 2 (AM. BAR ASS'N 2014) ("Advice couched in narrow legal terms may be of little value to a client, especially where practical considerations, such as cost or effects on other people, are predominant. Purely technical legal advice, therefore, can sometimes be inadequate. It is proper for a lawyer to refer to relevant moral and ethical considerations in giving advice. Although a lawyer is not a moral advisor as such, moral and ethical considerations impinge upon most legal questions and may decisively influence how the law will be applied.").

¹³¹ See Tromans, supra note 8 ("[R]eal lawyers, those flesh and blood professionals with minds that exude creativity, legal insight and the imagination to solve very human problems, are not going to be replaced.").

blindly rely on ROSS's work product because, like an intern, ROSS is incapable of orchestrating complex legal and factual analyses as an ABA-admitted lawyer can. In an ideal scenario, the lawyer will use ROSS's outputs as an instructive starting point to his independent search and will apply his own independent judgment to supply his client with the relevant advice.

The scarce available literature on Model Rule 2.1 is inapplicable to ethical issues regarding emerging technology.¹³² Further, the existing interpretations of the rule are exceptionally vague and fail to allude to situations where a lawyer's advice is not his own (perhaps when he relies on the work of another lawyer, nonlawyer, or an AI tool).¹³³ Given the fact that legal advice is a fundamental component of the practice of law, the lack of attention to Model Rule 2.1 is perplexing. To the extent that society expects clients to follow their lawyers' advice, lawyers must take their obligation to exercise independent professional judgment seriously and the ABA should equip the legal profession with intelligible standards to observe.¹³⁴

The best way to ensure that a lawyer provides his client with adequate representation in today's technologically advanced world is to require the lawyer to exercise supervisory control over AI tools like ROSS. With direct supervisory authority, a lawyer would monitor and double check the outputs ROSS generates before forming an opinion on how the client should proceed in the case and before relaying the information to the client. By doing so, the lawyer applies his independent professional judgment to ROSS's outputs as required by the Model Rules.

C. Model Rule 5.3—Responsibilities Regarding Nonlawyer Assistance

Model Rule 5.3 states that a supervisory lawyer must make reasonable efforts to ensure that nonlawyer assistants comply with professional legal obligations.¹³⁵ While what constitutes "reasonable

¹³² See Markovic, supra note 84, at 119 ("The few disciplinary cases concerning an attorney's violation of Rule 2.1 are based on the attorney's judgment having been clouded by, for example, having a sexual relationship with the client. Nor does any publicly available ethics advisory opinion offer any substantive analysis of Rule 2.1.").

¹³³ See Petty, *supra* note 116, at 1619.

¹³⁴ Markovic, *supra* note 84, at 120.

¹³⁵ MODEL RULES OF PROF'L CONDUCT, r. 5.3(b) (AM. BAR ASS'N 2014) ("With respect to a nonlawyer employed or retained by or associated with a lawyer: ... (b) a lawyer having direct supervisory authority over the nonlawyer shall make reasonable efforts to ensure that the person's conduct is compatible with the professional obligations of the lawyer"); see also RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS § 11 (2000).

efforts" will depend on the circumstances,¹³⁶ a supervising lawyer (in this context, the lawyer using ROSS) has a duty to monitor the nonlawyer (in this context, ROSS)¹³⁷ and review its completed work before that work reaches the client.¹³⁸ While Model Rule 5.3 was typically applied to humans, amendments to the rule have made clear that it extends to AI as well. In 2012, the ABA changed the title of Model Rule 5.3 from "Responsibilities Regarding Nonlawyer Assistants" to "Responsibilities Regarding Nonlawyer Assistance."¹³⁹ Similarly, several states have replaced "person" with "nonlawyer" in their ethics rules.¹⁴⁰ "[These] "change[s] show[] that the rule is intended to have reach beyond human assistants, to other nonlawyers, human or not, involved in the representation of a client."¹⁴¹

The reasoning behind Model Rule 5.3 is that clients hire lawyers to represent them and while they understand that lawyers may delegate aspects of their work to law firm staff, they expect lawyers to appropriately supervise the performance of those services.¹⁴² The interpretation of Model Rule 5.3 was at issue in the case of *In re Cater*.¹⁴³ There, the bar counsel determined that lawyer Cater failed to adequately supervise a nonlawyer employee in violation of D.C. Ethics Rule 5.3(b).¹⁴⁴ Cater delegated to a nonlawyer employee, Summers, tasks described by the hearing committee as the "routine aspects of the administration of the estates in [Cater's] charge."¹⁴⁵ For an entire year,

¹³⁶ See N.Y. MODEL RULES OF PROF'L CONDUCT r. 5.3 (N.Y. STATE BAR ASS'N 2009) ("[T]he degree of supervision required is that which is reasonable under the circumstances, taking into account factors such as the experience of the person whose work is being supervised, the amount of work involved in a particular matter and the likelihood that ethical problems might arise in the course of working on the matter.").

¹³⁷ For purposes of this Section, I will assume that an AI lawyer is considered a nonlawyer. Arkansas, Tennessee, Texas, and North Dakota have replaced "person" with "nonlawyer" in their ethics rules. This issue will be further discussed in Section IV.A.

¹³⁸ See In re Comish, 889 So. 2d 236, 245 (La. 2004) (per curiam) (Model Rule 5.3 "recognize[s] that lawyers generally employ non-lawyers in their practice, including secretaries, investigators, clerks, and paralegals, and that such individuals assist the lawyer in the efficient rendition of the lawyer's professional services. However, a lawyer is completely responsible for the work product of his non-lawyer assistants and must give the assistants appropriate instruction and supervision concerning the ethical aspects of their employment The key to appropriate delegation is proper supervision by the lawyer, which includes adequate instruction when assigning projects, monitoring of the progress of the project, and review of the completed project." (internal citations omitted)); Douglas R. Richmond, *Watching Over, Watching Out: Lawyers' Responsibilities for Nonlawyer Assistants*, 61 KAN. L. REV. 441, 446–47 (2012).

¹³⁹ GORDON & AMBROSE, *supra* note 115, at 6.

¹⁴⁰ See supra note 137.

¹⁴¹ GORDON & AMBROSE, *supra* note 115, at 6.

¹⁴² See RONALD D. ROTUNDA & JOHN S. DZIENKOWSKI, LEGAL ETHICS: THE LAWYER'S DESKBOOK ON PROFESSIONAL RESPONSIBILITY § 5.3-1, 1005–06 (2012); see also, e.g., Mahoning Cty. Bar Ass'n v. Lavelle, 836 N.E.2d 1214, 1217–18 (Ohio 2005) (invoking Restatement (Third) § 11 in disciplining lawyer for supervisory failures).

¹⁴³ In re Cater, 887 A.2d 1 (D.C. 2005).

¹⁴⁴ Id. at 3.

¹⁴⁵ Jonathan Putman, Catering to Our Clients: How In re Cater Exposes the Flaws in Model

Summers forged Cater's signature on thirty-four checks drawn against the funds in the client's estate account, and then fled.¹⁴⁶ Although Cater was aware that Summers disappeared, she made no effort to learn the status of the estate account for well over a year.¹⁴⁷ The hearing committee concluded that, although a review would have prevented the ongoing theft of the estate's assets, "Cater had perceived no undue risk... in adopting an office procedure in which she had entirely relied on Summers to handle estate affairs...."¹⁴⁸

The Board agreed with the hearing committee's conclusion that Cater did not engage in ethical misconduct¹⁴⁹—it refused to set a precedent that would prohibit lawyers from delegating administrative duties to nonlawyers, and one that would hold them accountable for not closely scrutinizing their nonlawyers when they did delegate such duties.¹⁵⁰ The Board's decision, however, purports to make the duty to supervise a nonlawyer virtually meaningless so long as the lawyer does not know that the employee is undependable.¹⁵¹ The decision becomes even more dangerous when applied to the newfound integration between lawyers and AI tools because it absolves the lawyer of any responsibility for the supervised nonlawyers' (in our context, ROSS's) systematic shortcomings.¹⁵²

Today, the *In re Cater* decision will not stand—it was called into question by the court in *People v. Calvert*.¹⁵³ In that case, a lawyer was disbarred from the practice of law because, among other things, he failed to supervise a nonlawyer while she: (1) filed bankruptcy petitions under his name, using his federal bankruptcy court electronic login and password and (2) provided direct legal services to two of his firm's clients, resulting in the dismissal of their claims.¹⁵⁴ The court explained that the lawyer could have learned of the paralegal's misconduct through "[b]asic oversight and simple diligence," but even if he had "no inkling" of the paralegal's misconduct, he still would have violated

¹⁵¹ See Frisch, supra note 148, at 356.

Rule 5.3—and How They Can Be Solved, 19 GEO. J. LEGAL ETHICS 925, 930 (2006).

¹⁴⁶ In re Cater, 887 A.2d at 7.

¹⁴⁷ *Id.* at 8.

¹⁴⁸ Michael S. Frisch, *No Stone Left Unturned: The Failure of Attorney Self-Regulation in the District of Columbia*, 18 GEO. J. LEGAL ETHICS 325, 355 (2005).

¹⁴⁹ *In re* Cater, Bar Docket No. 337–99 (D.C. Bd. Prof'l Responsibility June 26, 2003) (report and recommendation).

¹⁵⁰ *Id.* at 12. The board stated, "[w]e will not declare it impermissible... for a lawyer to delegate to a nonlawyer the role of reviewing bank statements for discrepancies and inconsistencies.... Nor will we state categorically that a lawyer who has effected such a delegation must closely scrutinize the nonlawyer bookkeeper's work in every situation." *Id.*

¹⁵² It could be argued, however, that the reasoning behind *Cater* does not apply to the use of newly developed AI technology because such technology is inherently risky and does indeed present an "undue risk" and so does warrant close scrutiny by the human supervising lawyer.

¹⁵³ People v. Calvert, 280 P.3d 1269 (Colo. 2011).

¹⁵⁴ Id. at 1280-81.

Model Rule 5.3(b) by inadequately supervising her work.¹⁵⁵ Similarly, in representations involving AI technology, lawyers too have a responsibility to adequately supervise ROSS's work since it carries out consequential tasks for client representation.¹⁵⁶ If, however, lawyers blindly rely on ROSS's outputs, they should be disciplined—as was the lawyer in *Calvert*—because they would be breaching their fundamental obligations to their clients for failing to properly supervise a nonlawyer assistant.¹⁵⁷

The current application of Model Rule 5.3 is excellently demonstrated in the following hypothetical:¹⁵⁸ A law firm

employs its own investigators. When a client comes to the firm, a lawyer discusses the matter with the client and, if appropriate, refers the case to the investigation department Once the investigation department completes its investigation, it turns over the file, including the information, admissions, and proposed settlements, to [the firm's] lawyers. The lawyers then routinely use the information and admissions for purposes of negotiation and, if necessary, at trial.¹⁵⁹

In the hypothetical, the firm lawyers could be disciplined under Model Rule 5.3 for failing to exercise reasonable supervision of the investigators and for blindly relying on their results.¹⁶⁰ Analogously, in a situation where a lawyer accepts ROSS's outputs as error-free, he may be subject to disciplinary action for failing to supervise and for failing to adequately ensure that the supervisee's results were correct.¹⁶¹

The hypothetical also illustrates that lawyers depend on the efforts of many different nonlawyer assistants to operate their practices. Once lawyers get comfortable with ROSS's results, they will increasingly rely on its outputs and may fail to conduct independent and thorough due diligence themselves.¹⁶² Importantly, William Caraher admitted that "[t]he more our attorneys used [ROSS] and found that it was accurate,

¹⁵⁵ *Id.* at 1283.

¹⁵⁶ See supra text accompanying note 8.

¹⁵⁷ Calvert, 280 P.3d 1269.

¹⁵⁸ See Ernest F. Lidge, III, Government Civil Investigations and the Ethical Ban on Communicating with Represented Parties, 67 IND. L.J. 549, 598–99 (1992).

¹⁵⁹ Id.

¹⁶⁰ Id. at 599.

¹⁶¹ See MODEL CODE OF PROF'L RESPONSIBILITY Preliminary Statement (AM. BAR ASS'N 1983) ("Obviously the... Disciplinary Rules cannot apply to non-lawyers; however, they do define the type of ethical conduct that the public has a right to expect not only of lawyers but also of their non-professional employees and associates in all matters pertaining to professional employment."); MODEL RULES OF PROF'L CONDUCT r. 5.3 cmt. 2 (AM. BAR ASS'N 2014) ("The measures employed in supervising nonlawyers should take account of the fact that they do not have legal training and are not subject to professional discipline.").

¹⁶² See Caraher Email, supra note 2.

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the less they felt they needed to cross check with the other platforms."¹⁶³ Such complacency is undesirable, but understandable—"[b]usy lawyers . . . delegate work to their staff and, absent red flags related to . . . competence, diligence, or reliability, it is easy to become [content and easily satisfied] as a supervisor."¹⁶⁴ As ROSS continuously produces satisfactory results, it will gain lawyers' trust, which will naturally dull supervisory instinct¹⁶⁵—"especially [with] AI technology, [as it] can be deceptive [since] its inner workings are invisible to the naked eye."¹⁶⁶ Lawyers, however, cannot escape professional responsibility for blindly relying on technology because clients, courts, and disciplinary authorities rely on them to uphold particular standards bestowed upon them by virtue of their profession.¹⁶⁷

III. PROPOSAL

The Model Rules are silent on the issue of technological advancement in the legal workplace, specifically on popular AI mechanisms, like ROSS.¹⁶⁸ Given the technological prevalence in recent years and the multitude of companies and firms investing in research and development, professional ethics are at stake when it comes to integrating AI to law firm practice. This Note proposes that the ABA adopt an evolutionist approach to the Model Rules. Specifically, the ABA should mandate continuing legal technology education, as well as amend the Model Rules by adding several advisory comments that account for ROSS and other technological advances. The purpose of the amendments is to add technology—specifically, AI technology—within the scope of Model Rules 1.1, 2.1, and 5.3. To accomplish this goal, an additional term to the terminology section should be added, as well as a comment to each relevant rule. Such amendments would be more

¹⁶³ Id.

¹⁶⁴ Richmond, *supra* note 138, at 443.

¹⁶⁵ Id.

¹⁶⁶ Chang, *supra* note 129 ("A user cannot see what is going on behind the scenes. One asks a question, and the answer appears."); *see also* Christian Mammen & Jason Lohr, *The Ethics of Artificial Intelligence in Law Practice*, LEGALTECH NEWS (Feb. 8, 2017), https:// ilta.personifycloud.com/productfiles/5970419/Ethics_of_Artificial_Intelligence.pdf ("AIs are 'black boxes'—in colloquial terms, either unwilling or unable to explain their reasoning to their human supervisors.").

¹⁶⁷ See Office of Disciplinary Counsel. v. Ball, 618 N.E.2d 159, 162 (Ohio 1993) ("[I]t is a lawyer's duty to establish a system of office procedure that ensures delegated legal duties are completed properly... a lawyer having direct supervisory authority over the nonlawyer shall make reasonable efforts to ensure that the person's conduct is compatible with the professional obligations of the lawyer.").

¹⁶⁸ See discussion *supra* Section II.A (Rule 1.1's Comment 8 takes technological advancement into account, but is inadequate.).

realistic than changing the language of the Model Rules themselves¹⁶⁹ and would provide specific directions to lawyers who newly encounter AI in the workplace.¹⁷⁰

A. Continuing Legal Education

Model Rule 1.1's Comment 8 is the only rule that takes technological advancement into account.¹⁷¹ Though this is a step in the right direction, the comment does not go far enough. In addition to the existing comment, the ABA should adopt the Florida172 and Oklahoma¹⁷³ approaches and require lawyers to attend mandatory CLE programs to obtain "specialty credits" in legal technology. For instance, these may include attending in-person or web seminars on the respective technology,¹⁷⁴ or even reading publications by the ABA's Legal Technology Resource Center.¹⁷⁵ Going even further, law schools can implement mandatory legal technology courses into their curricula or add the topic to the professional responsibility requirement. The primary purpose for technological education is for lawyers working in law firms that use AI technology to get accustomed to working with the technology and learn how to operate it before that knowledge is applied to client representation. Enforcing CLE requirements will ensure that lawyers' affirmative duty to understand the technology that is being used is met and that they are not unilaterally learning about the

¹⁶⁹ See PEARCE ET AL., supra note 17, at 179 ("An amendment to the Model Rules would be the least expensive, most [efficient and] effective means of providing [lawyers] a standard by which to measure their conduct. This is so because nearly all states require [lawyers] to pass the [MPRE], which tests lawyers' knowledge of the Model Rules. Therefore, lawyers entering practice would quickly become familiar with the amendment. Other attorneys would likely learn about the amendment through continuing legal education courses or by word of mouth.").

¹⁷⁰ See Michael J. Hoover, The Model Rules of Professional Conduct and Lawyer Malpractice Actions: The Gap Between Code and Common Law Narrows, 22 NEW ENG. L. REV. 595, 595 (1988) ("Codified ethical standards such as the ABA Model Rules of Professional Conduct (Model Rules) and their predecessor, the ABA Model Code of Professional Responsibility (Model Code), have become the principal basis for determining professional discipline.").

¹⁷¹ See supra note 96 (Model Rule 1.1's Comment 8).

¹⁷² See supra text accompanying note 100 (requiring continuing-education programs).

¹⁷³ See Mayfield, supra note 90, at 578 (requiring continuing-education programs).

¹⁷⁴ See id. at 562.

¹⁷⁵ See, e.g., ABA LEGAL TECH. RES. CTR., 2017 LEGAL TECHNOLOGY SURVEY REPORT: COMBINED VOLUMES 1-6 (2017). "[T]he findings of the survey are presented in six volumes: Technology Basics & Security, Law Office Technology, Litigation Technology and E-Discovery, Marketing & Communication Technology, Online Research, and Mobile Lawyers." Each volume features a trend report summarizing the year's notable results, detailed charts and tables, and highlights from previous years. *Publications*, ABA, https://www.americanbar.org/ groups/departments_offices/legal_technology_resources/publications.html (last visited Feb. 25, 2018).

technology by trial-and-error in the course of client representation.¹⁷⁶ Such precautions will safeguard firm reputation as well.

States currently require lawyers to obtain CLE specialty credits in various topics like professional responsibility, substance abuse, mental illness awareness, malpractice prevention, law and legal procedure, office management, etc.¹⁷⁷ Since legal technology is rapidly entering the workforce,¹⁷⁸ CLE seminars discussing the operations of AI technology are just as important, if not more important, than some of the topics already discussed. As such, the ABA should establish a "Legal Technology" section as an additional topic of discussion for CLE credits. Practically, states like Georgia require only trial lawyers to obtain specialty credits in trial practice.¹⁷⁹ This same logic can be applied to AI technology. For example, if law firms X, Y, and Z employ ROSS, only X, Y, and Z's lawyers utilizing the technology. Either way, lawyers using AI should be trained to work with such technology before the stakes get too high.

Law firms that currently use ROSS do not extensively train their lawyers on how to interact with the technology.¹⁸⁰ Rather, they adopt the "trial-and-error" approach and provide their lawyers with technical assistance.¹⁸¹ Such methods, however, may be expensive, timeconsuming, and unproductive. To reach the best results and avoid these dangers, lawyers must be adequately trained beforehand and should apply this preparation to their caseload. To achieve competency, the ABA must be the enforcement mechanism. Adding CLE requirements

¹⁷⁶ Such a requirement will not put an undue burden upon lawyers, as a simple twentyminute demonstration had been deemed sufficient to train staff attorneys in various firms and in-house teams. *See, e.g.*, ROSS INTELLIGENCE, LAND OF LINCOLN CASE STUDY (2017) [hereinafter LAND OF LINCOLN], https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source= web&cd=3&ved=0ahUKEwj7_PTslN3XAhWDl-AKHdulDKMQFggyMAI&url=https%3A% 2F%2Fs3.amazonaws.com%2Fmedia.wishpond.com%2Fmedia%2F011%2F520%2F111% 2Foriginal.pdf%3F1491852686&usg=AOvVaw2btpvdraqv04tF1l3eovZj.

¹⁷⁷ See Credit Information, PRACTICING LAW INST., https://www.pli.edu/Content/Credit_Information/_/N-1z13xu5Z7n?ID=34800 (last visited Feb. 25, 2018).

¹⁷⁸ See discussion supra Section I.A.

¹⁷⁹ See CLE: Georgia, ABA, http://www.americanbar.org/cle/mandatory_cle/mcle_states/ states_a-k/georgia.html (last visited Feb. 25, 2018) (requiring "1 hour of ethics credit; 1 hour of professionalism credit, per reporting period; 3 hours of trial practice credit for trial attorneys only").

¹⁸⁰ See LAND OF LINCOLN, supra note 176 ("Because of ROSS' ease of use, with a simple 20 minute demonstration we trained and onboarded all of Land of Lincoln's staff attorneys. We provide the team with free, unlimited access as well as ongoing technical assistance and updates as ROSS continues to learn new abilities and move into additional areas of the law."); see also Caraher E-mail, supra note 2 (Q: "Who has access to ROSS? How are they trained to use the technology?" A: "After working with ROSS for a few minutes, the end users just 'get it' and don't need to spend hours crafting the exact 'if then else' Boolean logic type statements. ROSS has some great automatic pop-up help modules if you get stuck or aren't finding the results quickly. They also have an amazing development team that will field support questions.").

¹⁸¹ See Caraher E-mail, supra note 2.

that will aid lawyers in meeting their Model Rule 1.1 competence duties is not unreasonable. Indeed, several states have amended their CLE rules in recent years to ensure that their lawyers stay competent on important issues.¹⁸² Taking preventive measures to help lawyers learn more about what to do to avoid disciplinary action for Model Rule 1.1 violations and possible malpractice claims is certainly an important issue. By amending CLE requirements rather than changing the language of the Model Rules themselves (or adding comments to the Rules), the ABA will be assured that lawyers are up-to-date with legal technology because each time new technology is introduced, or old technology is updated, lawyers will have access to seminars that will teach them how to operate it. This Note concludes that mandating additional CLE requirements is the best way to achieve Model Rule 1.1 competence in an ever-changing market, like technology.

B. Updating the Model Rules

Not only should the ABA equip lawyers with enough information to make sure they intermingle well with new legal AI technology, the ABA should also instruct lawyers who use AI that they cannot blindly rely on such technology. In representing their clients, lawyers must "exercise independent professional judgment."¹⁸³ By using legal AI technology the way firms currently do,¹⁸⁴ independent professional judgment ceases to exist and turns into dependence on the judgments of a robot because lawyers blindly rely on ROSS's outputs.¹⁸⁵ Since the Model Rules do not provide adequate instructions as to how a lawyer is to be a proper advisor¹⁸⁶ when incorporating the results of an AI machine, this Note proposes to add the following comment to Model Rule 2.1:

When using artificially intelligent technology, it is the lawyer's responsibility as advisor to cross-check the results with other traditional platforms before taking action based upon those results or offering advice to a client in accordance with said results. In exercising independent professional judgment, lawyers must confirm

¹⁸² See, e.g., CLE: Iowa, ABA, http://www.americanbar.org/cle/mandatory_cle/mcle_states/ states_a-k/iowa.html (last visited Feb. 25, 2018) ("Iowa amended its rules in February 2012 to expand the definition of ethics to include instruction specifically designed for lawyers regarding substance abuse and mental health and increased the biennial ethics requirement from 2 to 3 hours.").

¹⁸³ MODEL RULES OF PROF'L CONDUCT r. 2.1 (AM. BAR ASS'N 2014); see also discussion supra Section II.B.

¹⁸⁴ See supra text accompanying note 76.

¹⁸⁵ See supra note 76. By "blindly rely" I mean that attorneys are advising their clients based upon information that ROSS provides them, without cross-checking its accuracy.

¹⁸⁶ See sources cited supra note 183.

that AI results are on point and error-free before adopting those results as their own. AI technology shall be used as an assisting tool to the human lawyer, not as an autonomous agent.

This language provides a framework that adds more clarity and certainty to the ethical parameters of lawyer and AI technology collaboration to ensure optimal client outcomes. The need for vetting and cross-checking technological outputs will become more evident as law firms rely more heavily on AI technology as a means of obtaining and delivering information more efficiently.¹⁸⁷

Further, as the usage of AI technology becomes normalized in various legal markets, issues of supervision will inevitably arise. Model Rule 5.3 requires supervising lawyers to monitor nonlawyer assistants.¹⁸⁸ This Note proposes to add "nonlawyer assistant"¹⁸⁹ as a term to Model Rule 1.0's terminology section.¹⁹⁰ The proposed definition would state: "Nonlawyer assistant' denotes a person or artificially intelligent tool, working under the supervision of a lawyer, qualified through education, training, or requisite programming to perform substantive legal work that requires knowledge of legal concepts."¹⁹¹ As such, this Note also proposes to add the following comment to Model Rule 5.3:

A lawyer having direct supervisory authority over a nonlawyer assistant, including an artificially intelligent tool, shall supervise, monitor, and review the nonlawyer's work before it reaches the

188 See discussion supra Section II.C.

¹⁸⁷ Any reliance on ROSS's results (whether it be in early or later stages of development) without subsequent human "checking" welcomes the danger of missing valuable cases and/or statutes that ROSS might have failed to catch. By checking I mean for attorneys to conduct their own independent legal research after ROSS presents its results in order to check whether ROSS's results are on point and did not miss any important cases and/or statutes. As such, ROSS is a valuable tool to be utilized as a starting point for attorneys in the legal research process—ROSS cannot be a replacement for the legal research process.

¹⁸⁹ Technology is continuously generating new methods of providing legal services. Accordingly, in 2011, the ABA Commission on Ethics 20/20 published a revised proposal regarding Internet-based services, which declared that "the very technology that is used to create the structure of [such services] would constitute nonlawyer assistance, thereby requiring supervision and monitoring under [Model] Rule 5.3." Analogously, ROSS is a nonlawyer assistant in need of independent monitoring and supervision because it is a sophisticated piece of technology being used to create and deliver legal services. Stephanie L. Kimbro, Regulatory Barriers to the Growth of Multijurisdictional Virtual Law Firms and Potential First Steps to Their Removal, 13 N.C. J.L. & TECH. ON. 165, 211-12 (2012); see ABA COMM'N ON ETHICS 20/20, REVISED PROPOSAL—OUTSOURCING 4 (2011), http://www.americanbar.org/content/ dam/aba/administrative/ethics_2020/20110919_ethics_20_20_outsourcing_revised_resolution_ and_report_posting.authcheckdam.pdf ("The extent of this obligation will depend upon the circumstances, including the education, experience and reputation of the nonlawyer; the nature of the services involved; the terms of any arrangements concerning the protection of client information; and the legal and ethical environments of the jurisdictions in which the services will be performed, particularly with regard to confidentiality.").

¹⁹⁰ Some states have already amended their Rule 1.0 term definitions to modernize the language of the rules. *See* source cited *supra* note 182.

¹⁹¹ Legal assistant, WEST'S ENCYCLOPEDIA OF AM. L. (2d ed. 2005).

client. Responsible supervision does not mean that the lawyer must duplicate the nonlawyer's work or scrutinize and regulate it so closely that the economic and other advantages of the delegation are lost. Paragraphs (a) and (b) require reasonable efforts, not best efforts. Therefore, lawyer supervision may suffice with simple review that is not overly intricate or unduly burdensome.¹⁹²

The proposed language adds AI technology within the scope of the traditional meaning of nonlawyer assistant¹⁹³ and provides instructions to supervising lawyers that they must supervise AI technology as they would human nonlawyer assistants.

C. Counterarguments

The integration of legal AI technology is an unprecedented issue. It can be argued that there is no concrete evidence that lawyers are incompetent in using technology, nor that they are blindly relying on results that technological apparatuses provide. On the contrary, firms that use tools like ROSS claim that human intervention is a key part of the process—that licensed lawyers interpret the results and determine the most applicable research for their cases.¹⁹⁴ As such, extensive effort by the ABA to amend the Model Rules may not be necessary. This argument, however, is unpersuasive. The introduction of legal AI technology is not the first instance in recent history where new

¹⁹² *In re* Cater, 887 A.2d 1, 16 (D.C. 2005); *see* People v. Calvert, 280 P.3d 1269, 1283 (Colo. 2011) ("Basic oversight and simple diligence" will suffice under *Calvert*); 14 ROBERT L. HAIG, BUSINESS AND COMMERCIAL LITIGATION IN FEDERAL COURTS § 148:20 (4th ed. 2016). A "best efforts" obligation imposes a higher standard of performance than mere "reasonable efforts."; Richmond, *supra* note 138, at 460–61.

¹⁹³ See MODEL RULES OF PROF'L CONDUCT r. 5.3 cmt. 2 (AM. BAR ASS'N 2014) ("Lawyers generally employ assistants in their practice, including secretaries, investigators, law student interns, and paraprofessionals. Such assistants, whether employees or independent contractors, act for the lawyer in rendition of the lawyer's professional services. A lawyer must give such assistants appropriate instruction and supervision concerning the ethical aspects of their employment . . . and should be responsible for their work product.").

A lawyer may use nonlawyers outside the firm to assist the lawyer in rendering legal services to the client. Examples include the retention of an investigative or paraprofessional service, hiring a document management company to create and maintain a database for complex litigation, sending client documents to a third party for printing or scanning, and using an Internet-based service to store client information.

Id. at cmt. 3.

¹⁹⁴ See Caraher E-mail, *supra* note 2 (Q: "How are searches conducted? How are results and outputs translated into legal advice to the client?" A: "Searches are performed via the simple, yet elegant web-based ROSS interface. The experienced (and licensed) attorney is still very much a key part of the process in that they interpret the results and determine the most applicable research for their case. The current ROSS roadmap requires human intervention to ask the questions and interpret the results.").

technological advancements raised competency issues. Specifically, ediscovery was very controversial in its early stages because lawyers abdicated responsibility and blindly trusted the technology.¹⁹⁵ The year of 2009 was termed the "dark age[]... of e-discovery advancement" because lawyers were deficient in creating adequate search terms and lacked "careful thought, quality control, testing, and cooperation" in designing keywords.¹⁹⁶ The ABA subsequently added e-discovery as a topic of discussion for CLE requirements,¹⁹⁷ and courts began addressing and resolving e-discovery disputes.¹⁹⁸ Similar issues are likely to arise with AI technology as well in the foreseeable future, and what better way to mitigate risk than to take preventive measures early on?

It can also be argued that ROSS is neither a "person" nor a "lawyer," and so does not fit within the scope of the Model Rules for ABA regulation. It is true that ROSS is neither a person nor a lawyer,¹⁹⁹ but this Note does not aim to regulate AI technology,²⁰⁰ it aims to regulate lawyers that use AI technology. Specifically, this Note aims to educate lawyers that their use of AI technology is subject to ethical obligations, and to remind them that there should be no abdication of

¹⁹⁶ Hyles v. New York City, No. 10 Civ. 3119, 2016 WL 4077114, at *5 (S.D.N.Y. Aug. 1, 2016).

¹⁹⁷ See E-Discovery, ABA, http://www.americanbar.org/groups/litigation/resources/e-discovery.html (last visited Feb. 25, 2018).

¹⁹⁵ According to various data, problems with e-discovery included poor data management practices. "The consequences of poor data management practices—inadequate archiving, no ability to implement legal holds, lack of competence, etc.—include significant legal judgments, loss of corporate reputation, and an increased level of overall risk." OSTERMAN RESEARCH, INC., KEY ISSUES IN EDISCOVERY 1 (2012), https://www.globanet.com/sites/default/files/resources/ Key%20Issues%20in%20eDiscovery%20-%20Globanet.pdf. In *Green v. Blitz U.S.A.*, the court "issued a \$250,000 civil contempt sanction against [the defendant's attorney]" for a variety of failures, including "not putting a legal hold on relevant data, not coordinating his work with the defendant's IT department, and not performing keyword searches, all of which resulted in relevant documents not being produced." *Id.* at 8.

¹⁹⁸ State Bar of Cal. Standing Comm. on Prof'l Responsibility & Conduct, Formal Op. 193 (2015) ("Attorney competence related to litigation generally requires, among other things, and at a minimum, a basic understanding of, and facility with, issues relating to e-discovery, including the discovery of electronically stored information ("ESI"). On a case-by-case basis, the duty of competence may require a higher level of technical knowledge and ability, depending on the e-discovery issues involved in a matter, and the nature of the ESI."). Recent decisions suggest that litigants continue to fail to appreciate the seriousness and urgency of preserving e-discovery and imposing effective litigation holds. Companies and their counsel continue to fail to implement and monitor the protocols. This very issue caused Delta Airlines anguish in *In re Delta/AirTran Baggage Fee Antitrust Litig.*, 846 F. Supp. 2d 1335 (N.D. Ga. 2012). The Georgia federal court imposed sanctions after Delta failed to produce responsive ESI. Delta's failures stemmed from a failure to implement the litigation hold as several key emails were deleted due to regularly scheduled maintenance and backup-tape overwriting. Delta was also found to have exhibited poor collection protocols by failing to realize that several drives, which were preserved, were not made available to the adversary. *Id*.

¹⁹⁹ See Caraher E-mail, *supra* note 2 (Caraher stated, "[s]ince ROSS isn't providing direct legal advice and it is not a licensed attorney, it is a research platform for us.").

²⁰⁰ See supra text accompanying notes 71–73 (Regulating AI technology is impossible due to constant AI development.).

responsibility through blind reliance on technology. Rather than amending Model Rule 5.1, which addresses managerial supervision of lawyers,²⁰¹ this Note purposefully concludes that the more appropriate amendment would be of Model Rule 5.3,²⁰² which governs the managerial supervision of nonlawyer assistance—something that can be interpreted as human or technological. Further, this Note proposed to add the term nonlawyer assistant²⁰³ to the terminology section of the Model Rules to clear up any ambiguities about who or what can be considered a nonlawyer supervisee.

CONCLUSION

Considering the rapid adoption of legal AI technology in today's private practices,²⁰⁴ the current Model Rules are outdated because they are silent on issues of technological advancement. Specifically, the Model Rules do not provide adequate guidance to lawyers regarding what it means to be a competent advisor using AI, nor how to apply the various supervisory responsibilities to nonlawyer AI assistance. These shortcomings in the Model Rules suggest that several amendments by the ABA are necessary preventive measures. Mandating CLE specialty credits in legal technology would educate lawyers on how to properly operate legal AI before mistakes are made during client representation. Adding new terms and comments would place AI technology within the scope of Model Rules 1.1, 2.1, and 5.3, thereby providing lawyers with concrete instructions on how to stay competent, use independent professional judgment, and properly review the work that AI machines produce. As Benjamin Franklin once stated, "an ounce of prevention is worth a pound of cure."205

²⁰¹ MODEL RULES OF PROF'L CONDUCT r. 5.1(b) (AM. BAR ASS'N 2014). ("A lawyer having direct supervisory authority over another lawyer shall make reasonable efforts to ensure that the other lawyer conforms to the Rules of Professional Conduct.").

²⁰² See sources cited supra note 135.

²⁰³ See supra text accompanying notes 189–91

²⁰⁴ See Roland Vogl, *The Coming of Age of Legal Technology*, STANFORD LAW SCH. (Sept. 26, 2016), https://law.stanford.edu/2016/09/26/184188; *supra* text accompanying note 3.

²⁰⁵ Kris Ringwall, *BeefTalk: An Ounce of Prevention Is Worth a Pound of Cure*, N.D. STATE UNIV. AGRIC. COMM., https://www.ag.ndsu.edu/news/columns/beeftalk/beeftalk-an-ounce-of-prevention-is-worth-a-pound-of-cure (last visited Feb. 25, 2018).