ADVOCACY IN THE 21ST CENTURY: THE DUTY OF TECHNOLOGICAL COMPETENCE AND TODAY'S TRIAL LAWYER

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I. INTRODUCTION

In January 2023, Joshua Browder—the CEO of an artificial intelligence (AI) firm, DoNotPay—boldly proclaimed that on February 22nd, "history will be made. For the first time ever, a robot will represent someone in a US courtroom. DoNotPay A.I. will whisper in someone's ear exactly what to say. We will release the results and share more after it happens."[1] DoNotPay had

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1. Megan Cerullo, *AI-Powered "Robot" Lawyer Won't Argue in Court After Jail*

already received considerable publicity for its use of AI-generated form letters and chatbots to help people dispute parking tickets and auto-renewed subscriptions, but this time it had tapped into the zeitgeist.[2] Media all over the world covered the story with breathless headlines like, "In a world first, AI lawyer will help defend a real case in the US," and asked questions like, "can we wave goodbye to high attorney fees already?"[3] The legal media was not much better and peppered their coverage of the story with only slightly less hyperbole.[4] They chose instead to point out how ChatGPT had passed portions of law school exams[5] and the bar exam,[6] and speculated on how soon *robot lawyers* would be doing our jobs.[7]

But as it turns out, the sky did not fall and DoNotPay's bubble quickly burst, aided according to Josh Browder by unnamed state bar prosecutors who allegedly threatened Browder with "jail for 6 months if [he] follow[ed] through with bringing a robot lawyer into a physical courtroom."[8] More likely, cooler heads prevailed and advised Browder of what could constitute unauthorized practice of law, while others reminded him that a defendant being coached by any third party via headset would likely violate court rules in most jurisdictions.[9]

Threats, CBS NEWS, http://www.cbsnews.com/news/robot-lawyer-wont-argue-court-jail-threats-do-not-pay/ (Jan. 26, 2023, 1:08 PM); Joshua Browder (@jbrowder1), TWITTER (Jan. 20, 2023, 9:46 PM), http://twitter.com/jbrowder1/status/1616628244840579074?ref_src.

2. Cerullo, *supra* note 1; *What Artificial Intelligence Can Bring in for the Subscription Industry?*, SUBSCRIPTION FLOW (Dec. 26, 2019), http://www.subscriptionflow.com/2019/12/what-artificial-intelligence-can-bring-in-for-the-subscription-industry/.

3. Ameya Paleija, *In a World First, AI Lawyer Will Help Defend a Real Case in the US*, INTERESTING ENG'G (Jan. 6, 2023, 4:39 AM), http://interestingengineering.com/innovation/ai-defend-case-us.

4. *See* Karen Sloan, *ChatGPT Passes Law School Exams Despite "Mediocre" Performance*, REUTERS, http://web.archive.org/web/20230125212146/https://www.reuters.com/legal/transactional/chatgpt-passes-law-school-exams-despite-mediocre-performance-2023-01-25/ (Jan. 25, 2023, 1:40 PM); Jenna Greene, *Will ChatGPT Make Lawyers Obsolete? (Hint: Be Afraid)*, REUTERS, http://www.reuters.com/legal/transactional/will-chatgpt-make-lawyers-obsolete-hint-be-afraid-2022-12-09/ (Dec. 9, 2022, 2:33 PM).

5. Sloan, *supra* note 4.

6. *See* Karen Sloan, *Some Law Professors Fear ChatGPT's Rise as Others See Opportunity*, REUTERS, http://web.archive.org/web/20230112224018/https://www.reuters.com/legal/legalindustry/some-law-professors-fear-chatgpts-rise-others-see-opportunity-2023-01-10/ (Jan. 10, 2023, 7:19 PM).

7. *See* Greene, *supra* note 4.

8. *See* Mike Ege, *"Robot Lawyer" Yanked from Courtroom After Legal Outcry*, S.F. STANDARD (Jan. 25, 2023, 3:42 PM), http://sfstandard.com/business/robot-lawyer-yanked-from-courtroom-after-legal-outcry/.

9. *See id.*

Browder announced in the wake of the debacle that DoNotPay would be "sticking to consumer rights" moving forward, including cancelling subscriptions and disputing credit reports.[10]

Yet this entire episode, accompanied by the much-ballyhooed rise of ChatGPT as an AI tool that could perform any number of lawyerly tasks, has focused renewed attention on the importance of technological competence for lawyers.[11] This article will critically examine the importance of technology competence—now mandated by the vast majority of states—for trial lawyers practicing in the Digital Age.[12] Lawyers who years ago marched off to trial armed with yellow legal pads and lugging boxes of paper exhibits would today find it impossible to argue their cases without iPads, laptops, and an array of digital exhibits that include not just documents but photos, videos, computer-generated recreations, text messages, social media posts, emojis, and even memes.[13] Our journey will begin with a look at the adoption of technology competence and what it means for courtroom lawyers in particular.[14] This article will continue with a look at some cautionary tales for litigators in terms of technology competence.[15] Finally, this article will examine the boundary lines where technology competence is concerned; is a trial lawyer expected to master and incorporate every new innovation that comes along, or is a "wait and see" approach more prudent?[16] In particular, we will focus on one particular trial lawyer skill, that of jury selection, to illustrate that while technology competence is both expected and critical, potential dangers loom for those who may be too quick to adopt some technological tools.[17]

As this article will demonstrate, litigators should not fear the "robots" supposedly lurking in the shadows, waiting to "take our jobs."[18] Courtroom advocates must adapt to the changing needs of society, and must be conversant

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10. *Id.*
11. *See id.*; Sloan, *supra* note 6.
12. *See* discussion *infra* Part III; MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2013); ABA Comm. on Ethics 20/20, Rev. Resol. 105A (2012); ABA Comm. on Ethics 20/20, Summary Rep. (2012).
13. *See* discussion *infra* Part II; Michael H. Payne, *From Legal Pad to IPad*, LEGAL INTELLIGENCER (June 7, 2011, 12:00 AM), http://www.law.com/thelegalintelligencer/almID/1202496311667/ (subscription required).
14. *See* discussion *infra* Part II.
15. *See* discussion *infra* Part III.
16. *See* discussion *infra* Part IV.
17. *See* discussion *infra* Part IV.
18. *See* discussion *infra* Part III; John G. Browning, *Will Robot Lawyers Take Our Jobs?*, D MAG. (Mar. 11, 2019, 2:00 PM), http://www.dmagazine.com/publications/d-ceo/2019/march/will-robot-lawyers-take-our-jobs/.

in the technology relevant to the day-to-day practice of this specialty.[19] This includes being aware of how technology has impacted both substantive areas of the law and procedural practice, as well as being sufficiently well-versed in the technology necessary to perform the tasks of an advocate—whether that means engaging in e-discovery, electronic filing of court documents and pleadings, or competently using virtual conferencing platforms like Zoom for hearings, depositions, or even trial when necessary.[20] However, the role of a courtroom advocate also necessarily involves being sensitive to the limitations of technology.[21] That includes being aware that AI tools have limited utility for conducting voir dire, just as it may involve objecting to excessive reliance on technology-assisted remote proceedings where due process concerns exist.[22]

II. AN OVERVIEW OF TECHNOLOGICAL COMPETENCE AND ITS ADOPTION

"In 2012, a sea change occurred in the legal profession, particularly for those who came of age in the 'good old days'" when attorneys ventured to court armed with a legal pad rather than an iPad.[23] Back then, "being competent in representing one's clients meant staying abreast of recent case law and statutory or code changes in one's area of [practice]."[24] But in August 2012, the American

19. *See* State Bar of Cal. Standing Comm. on Pro. Resp. & Conduct, Formal Op. Interim 11-0004 (2014).

20. *Id.*; *see also* John G. Browning, *I Feel Your (Live-streamed) Pain: Virtual Bystander Recovery*, 75 BAYLOR L. REV. (forthcoming 2023) (manuscript at 10) (on file with author) (explaining the judicial acknowledgment that advances in communications technology are threatening to alter certain instances of recovery in lawsuits).

21. *See* State Bar of Cal. Standing Comm. on Pro. Resp. & Conduct, Formal Op. Interim 11-0004; Browning, *supra* note 20 (manuscript at 10).

22. *See, e.g.*, Kinder Morgan Prod. Co. v. Scurry Cty. Appraisal Dist., 637 S.W.3d 893, 896, 918–19 (Tex. App. 2021) (holding that issues with the use of the remote technology that prevented defense counsel's meaningful participation in trial violated the defendant's due process rights); George Christian, *In re East Update: SCOTX Grants Mandamus Vacating Trial Court Order for Remote Jury Trial Over Objection of Both Parties*, TEX. CIV. JUST. LEAGUE (Oct. 11, 2022), http://tcjl.com/in-re-east-update-scotx-grants-mandamus-vacating-trial-court-order-for-remote-jury-trial-over-objection-of-both-parties/ (citing *In re* Merrell, No. 01-22-00494-CV, 2022 WL 2657134, at *1 (Tex. App. July 8, 2022) (denying mandamus). The case drew amicus briefs arguing the unconstitutionality of the trial judge's order from three prominent trial lawyer organizations not known for agreement: the Texas Trial Lawyers Association, the Texas Association of Defense Counsel, and the Texas Chapters of the American Board of Trial Advocates. Christian, *supra*.

23. John G. Browning, *The New Duty of Digital Competence: Being Ethical and Competent in the Age of Facebook and Twitter*, 44 U. DAYTON L. REV. 179, 179 (2019) (footnote omitted); Payne, *supra* note 13.

24. Browning, *supra* note 23, at 179–80.

Bar Association ("ABA")—following the recommendations of its Ethics 20/20 Commission—formally approved a change in the Model Rules of Professional Conduct to make it clear that lawyers have a duty to be competent, not only in the law and its practice, but in the technology relevant to the practice as well.[25] Specifically, the ABA's House of Delegates voted to amend Comment 8 to Model Rule 1.1, which deals with competence, to read as follows:

> **Maintaining Competence**
>
> [8] To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, *including the benefits and risks associated with relevant technology*, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.[26]

Now, of course, the ABA Model Rules are precisely that—a model.[27] "They provide guidance to the states in formulating their own rules of professional conduct, [and] [e]ach state is free to adopt, . . . ignore, or modify the Model Rules."[28] For a duty of technological competence to apply to lawyers in a given state, that state's particular rule-making body (usually the state's highest court) would have to adopt it.[29]

In the ten years since Comment 8 to Rule 1.1 was amended, forty states have adopted the duty of technological competence by formally adopting either the revised comment to Rule 1.1 or some variation of it.[30] For some of these states, even before the formal adoption of a technological competence requirement, there are clear indications that lawyers would be held to a higher standard when it came to technology impacting the practice of law.[31] For

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25. ABA Comm. on Ethics 20/20, Rev. Resol. 105A (2012); ABA Comm. on Ethics 20/20, Summary; *see also* MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2013).

26. MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (emphasis added).

27. Robert J. Ambrogi, *Tech Competence: 40 States Have Adopted the Duty of Technology Competence*, LAWSITES, http://www.lawnext.com/tech-competence (last visited Apr. 28, 2023).

28. *Id.*

29. *Id.*

30. Bob Ambrogi, *Another State Adopts Duty of Technology Competence for Lawyers, Bringing Total to 40*, LAWSITES (Mar. 24, 2022), http://www.lawnext.com/2022/03/another-state-adopts-duty-of-technology-competence-for-lawyers-bringing-total-to-40.html.

31. MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8; *see also* State Bar of Cal. Standing Comm. on Pro. Resp. & Conduct, Formal Op. 2015-193 (2015); Dyane L. O'Leary, *"Smart" Lawyering: Integrating Technology Competence into the Legal Practice Curriculum*, 19

example, in a 2012 New Hampshire Bar Association ethics opinion on cloud computing, the Bar noted that "[c]ompetent lawyers must have a basic understanding of the technologies they use. Furthermore, as technology, the regulatory framework, and privacy laws keep changing, lawyers should keep abreast of these changes."[32]

Even the one state that has not adopted the ABA Model Rules, California, has joined the tidal wave of states adopting a duty of tech competence.[33] It adopted Comment 8 to Rule 1.1 in February 2021.[34] Yet even before this formal adoption, California acknowledged the importance of technological competence.[35] Its opinion even expressly cited Comment 8, stating "[m]aintaining learning and skill consistent with an attorney's duty of competence includes keeping 'abreast of changes in the law and its practice, including the benefits and risks associated with . . . technology . . . .'"[36]

Bring up the issue of "technological competence" in a group of lawyers, and chances are the reactions you will receive will vary along generational lines.[37] Older lawyers may shudder at the thought of having to *go back to school*, or dread the prospects for viral humiliation at being the next lawyer to mistakenly "adopt[] a cat persona as a visual overlay in a virtual court hearing . . . ."[38] Younger lawyers will likely chuckle at the thought of worrying about "old" technology like Facebook, Twitter, and email while they are communicating on

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U.N.H. L. REV. 197, 244 n.161 (2021); Bob Ambrogi, *California Becomes 39th State to Adopt Duty of Technology Competence*, LAWSITES (Mar. 24, 2021), http://www.lawnext.com/2021/03/california-becomes-39th-state-to-adopt-duty-of-technology-competence.html; *e.g.*, N.H. Bar Ass'n Ethics Comm., Advisory Op. 2012-13/4 (2013).

32. N.H. Bar Ass'n Ethics Comm., Advisory Op. 2012-13/4.

33. Kenneth C. Feldman & Jessica L. Beckwith, *The New Rules of Professional Conduct*, ADVOC. MAG., Feb. 2019, at 80, 80; Ambrogi, *supra* note 31; Ambrogi, *supra* note 27 (showing the ten states yet to adopt the duty of technology competence are Alabama, Georgia, Mississippi, South Dakota, Oregon, Nevada, Maine, Maryland, New Jersey, and Rhode Island).

34. Ambrogi, *supra* note 31; Cal. Rules of Pro. Conduct r. 1.1 cmt. 1 (CAL. BAR ASS'N 2021).

35. State Bar of Cal. Standing Comm. on Pro. Resp. & Conduct, Formal Op. 2015-193; *see also* Ambrogi, *supra* note 27.

36. State Bar of Cal. Standing Comm. on Pro. Resp. & Conduct, Formal Op. 2015-193 (quoting MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8).

37. *See* Bruce A. Green & Carole Silver, *TechnoCapital@BigLaw.com*, 18 NW. J. TECH. & INTELL. PROP. 265, 268–69, 309 (2021).

38. Lisa Z. Rosenof, Note, *The Fate of Comment 8: Analyzing a Lawyer's* Ethical *Obligation of Technological Competence*, 90 U. CINCINNATI L. REV. 1321, 1321 (2022) (footnote omitted); *see also* Guardian News, *"I'm Not a Cat": Lawyer Gets Stuck on Zoom Kitten Filter During Court Case*, YOUTUBE (Feb. 9, 2021), http://www.youtube.com/watch?v=lGOofzZOyl8.

collaborative platforms like Slack.[39] For the rest, they may have some sense of the importance of technological competence to the effective conduct of their lawyerly duties but aren't really sure what the standard means.[40]

And, truthfully, the ABA's standard in Comment 8 does *not* provide any bright line rules, "boundaries[,] or roadmap to follow in determining whether a lawyer has breached this ethical duty of technological competence."[41] There are lawyers who rely on data analytics in assessing probable trial outcomes, while others read verdict reports.[42] Similarly, some lawyers may use AI during voir dire "to correlate [information] on human behaviors based on patterns sourced from public data" sets, while other lawyers use the tried and true verbal questioning of prospective jurors to ascertain their viewpoints.[43] Can it be said that one group of lawyers is behaving ethically and competently while the other one is not?[44] Cost is another issue.[45] Use of technology that might be viewed as reasonable and economically feasible for one engagement may not make financial sense for another.[46]

In reality, the standard is purposefully vague, not merely because of the challenge of deciding on and articulating defined criteria for "technological competence."[47] Comment 8 refers to the "benefits and risks associated with

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39. *See* Zach Abramowitz, *Lawyers Thinking About Adopting Slack? Read This First*, ABOVE LAW (Mar. 29, 2016, 4:02 PM), http://abovethelaw.com/2016/03/lawyers-thinking-about-adopting-slack-read-this-first/; Casey C. Sullivan, *Slack Could Change How Lawyers Work, if They Ever Wanted to Use It*, FINDLAW, http://www.findlaw.com/legalblogs/technologist/slack-could-change-how-lawyers-work-if-they-ever-wanted-to-use-it/ (Mar. 21, 2019); Kevin Vermeulen, *Social Media for Lawyers: How Lawyers Can Grow Their Personal Brand Using Social Media*, GOOD2BSOCIAL (Sept. 29, 2022), http://good2bsocial.com/personal-brand-using-social-media/.

40. *See* Rosenof, *supra* note 38, at 1321.

41. *Id.*; *see also* MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (AM. BAR. ASS'N 2020).

42. *See Lawyers Leveraging AI for Trial Preparation Due to Growing Court Backlogs*, CISION PRWEB (June 23, 2021), http://www.prweb.com/releases/2021/06/prweb18011430.htm.

43. Rosenof, *supra* note 38, at 1321; *see also Voltaire Uses AI and Big Data to Help Pick Your Jury*, ARTIFICIAL LAW. (Apr. 26, 2017), http://www.artificiallawyer.com/2017/04/26/voltaire-uses-ai-and-big-data-to-help-pick-your-jury/.

44. *See* Rosenof, *supra* note 38, at 1321.

45. *Id.* at 1334; *see also* Bob Ambrogi*, D.C. Bar Mulls Rules Changes Governing Technology Competence, Data Storage*, LAWSITES (May 30, 2019), http://www.lawnext.com/2019/05/d-c-bar-mulls-rules-changes-governing-technology-competence-data-storage.html.

46. *See Lawyers Leveraging AI for Trial*, *supra* note 42.

47. *See* Rosenof, *supra* note 38, at 1321.

relevant technology . . . ."[48] Relevance, however, will differ by practice area.[49] Should a transactional lawyer doing estate planning be considered less "competent" because she is not conversant in certain technologies more germane to a litigation practice, like e-filing or e-discovery tools?[50] Of course not.[51] Another reason for the vagueness of this standard is the fact that the law and its practice can never keep pace with technological innovation.[52] Law practice management software is far different today than it was just fifteen years ago, and the practitioners of tomorrow may look back at what we viewed as "cutting edge," but which to them is merely "quaint."[53]

The standard of technological competence is meant to be viewed broadly, lest we place lawyers at constant risk of disciplinary violations and malpractice exposure in a world characterized by fast-paced technological changes.[54] Consequently, technological competence should be viewed as a bar that continually rises.[55] While a lawyer may never truly "attain" total technological competence, he should continually strive to stay informed and remain tuned in to the technological changes that are relevant to his practice.[56]

Rule 1.1 states that competence in representation demands the "legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation."[57] Black's Law Dictionary defines competence as "[t]he mental ability to understand problems and make decisions."[58] The same source defines technology as "[m]odern equipment, machines, and methods based on contemporary knowledge of science and computers."[59] Read in conjunction, technological competence may be defined as "the mental ability to understand

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48. MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2020); Rosenof, *supra* note 38, at 1321.

49. *See* MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8.

50. *See* Lori D. Johnson, *Navigating Technology Competence in Transactional Practice*, 65 VILL. L. REV. 159, 170 (2020); Browning, *supra* note 23, at 183.

51. *See* Johnson, *supra* note 50, at 170.

52. *See* Vivek Wadhwa, *Law and Ethics Can't Keep Pace with Technology*, MIT TECH. REV. (Apr. 15, 2014), http://www.technologyreview.com/2014/04/15/172377/laws-and-ethics-cant-keep-pace-with-technology/.

53. *See* Browning, *supra* note 18; Andrew Arruda, *An Ethical Obligation to Use Artificial Intelligence? An Examination of the Use of Artificial Intelligence in Law and the Model Rules of Professional Responsibility*, 40 AM. J. TRIAL ADVOC. 443, 451 (2017); Tom Caffrey, *Law Practice Management Systems*, GPSOLO, July–Aug. 2018, at 61, 61.

54. Rosenof, *supra* note 38, at 1322.

55. *Id.*

56. *Id.*

57. MODEL RULES OF PRO. CONDUCT r. 1.1 (AM. BAR ASS'N 2020).

58. *Competency*, BLACK'S LAW DICTIONARY (11th ed. 2019).

59. *Technology*, BLACK'S LAW DICTIONARY (11th ed. 2019).

problems and make decisions regarding and using modern equipment, machines, and methods based on contemporary knowledge of science and computers."[60]

Some of the disciplinary cases meant to serve as examples of a lack of technological competence actually reflect a deeper lack of core competencies.[61] For example, in 2021, the Supreme Court of Ohio upheld a disciplinary board finding that attorney Kimberly Valenti was not "sufficiently technologically competent" in her handling of multiple client matters.[62] Among other things, she had filed pleadings with the courts after deadlines had passed, scheduled a deposition the same day as a court hearing, and failed to notify either the court or her client about the scheduling conflict.[63] The board recommended Valenti's suspension from the practice of law for six months, along with a requirement that she complete six hours of continuing legal education ("CLE") in law office management with a focus on law-office technology and calendar management.[64] While calendaring tools and case management technology certainly would have been helpful to Ms. Valenti, viewing this solely as a lack of technological competence ignores a deficiency that has nothing to do with technology.[65] Plenty of lawyers still employ handwritten calendaring, whether solely or in conjunction with an electronic version.[66] Valenti's case speaks to deeper concerns with organization and time management skills.[67]

The reaction to Comment 8 by jurisdictions can be loosely categorized as follows: (1) those jurisdictions that have not yet adopted it or who have considered and rejected its language; (2) those states that have adopted Comment 8 verbatim; and (3) those states that have adopted a modified version of Comment 8.[68] In the first category, Washington, D.C. stands out as an example.[69] Its competency rule reads, "a lawyer should keep abreast of changes in the law and its practice, and engage in such continuing study and education as may be necessary to maintain competence."[70] According to one report, the D.C. committee tasked with reviewing the duty of technological competence

60. *See id.*; *Competency*, *supra* note 58.
61. *See* Disciplinary Couns. v. Valenti, 175 N.E.3d 520, 523 (Ohio 2021) (per curiam).
62. *Id.*
63. *Id.*
64. *Id.*
65. *See id.*
66. Rosenof, *supra* note 38, at 1326.
67. *See Valenti*, 175 N.E.3d at 523.
68. Rosenof, *supra* note 38, at 1331–32.
69. *Id.*
70. *Id.*; D.C. RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (D.C. BAR 2022).

explained its reasoning for refusing to adopt Comment 8 by pointing to concern over selectively listing a specific skill such as technology.[71]

The majority of the states adopting Comment 8 have adopted it verbatim.[72] They are: Alaska, Arizona, Arkansas, Connecticut, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Missouri, Nebraska, New Hampshire, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, Tennessee, Utah, Vermont, Washington, Wisconsin, and Wyoming.[73] A couple of these states went beyond mere adoption of the Comment itself.[74] Delaware also formed a Commission of Law and Technology, the purpose of which is to provide lawyers with "sufficient guidance and education in the aspects of technology and the practice of law" to facilitate compliance with the newly adopted duty of technological competence.[75] And New Hampshire's ethics committee added a further comment after Comment 8, noting that the "broad requirement [of Comment 8] may be read to assume more time and resources than will typically be available to many lawyers."[76] It clarified the practical application of the new standard, reading it as realistically limited to applications of technology used by the lawyer and by lawyers similarly situated.[77] To put it simply, lawyers do not need to run out and learn how to code; they just need to be proficient in the benefits and risks of what they are already using or what lawyers in their practice area should be using.[78]

A smaller number of states adopted Comment 8, but with minor modifications.[79] These are: California, Colorado, Massachusetts, Michigan, Montana, New York, North Carolina, South Carolina, Texas, Virginia, and West

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71. *See* Rosenof, *supra* note 38, at 1331.

72. *See id.* at 1331–32.

73. Ambrogi, *supra* note 30.

74. *See* Press Release, Del. Sup. Ct., Delaware Supreme Court Creates New Arm of Court—Commission on Law and Technology (July 5, 2013), http://courts.delaware.gov/forms/download.aspx?id=69618; *e.g.*, N.H. RULES OF PRO. CONDUCT r. 1.1 Ethics Comm. Cmt. (N.H. BAR ASS'N 2022).

75. Press Release, Del. Sup. Ct., *supra* note 74.

76. N.H. RULES OF PRO. CONDUCT r. 1.1 Ethics Comm. Cmt.

77. *Id.*

78. *See id.*

79. CAL. RULES OF PRO. CONDUCT r. 1.1 cmt. 1 (CAL. BAR ASS'N 2023); COLO. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (COLO. BAR ASS'N 2022); MASS. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (MASS. BAR ASS'N 2022); MICH. RULES OF PRO. CONDUCT r. 1.1 cmt. (MICH. BAR ASS'N 2022); MONT. RULES OF PRO. CONDUCT pmbl. 5 (MONT. BAR ASS'N 2022); N.Y. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (N.Y. BAR ASS'N 2022); N.C. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (N.C. BAR ASS'N 2022); S.C. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (S.C. BAR ASS'N 2021); TEX. RULES OF PRO. CONDUCT r. 1.01 cmt. 8 (TEX. BAR ASS'N 2022); VA. RULES OF PRO. CONDUCT r. 1.1 cmt. 6 (VA. BAR ASS'N 2022); W. VA. RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (W. VA. BAR ASS'N 2014).

Virginia.[80] New York's language refers to "keep[ing] abreast of the benefits and risks associated with technology the lawyer uses to provide services to clients or to store or transmit confidential information . . . ."[81] In doing so, New York specifies certain key areas in which a lawyer must be technologically competent, such as technologies involving cloud storage or encrypted email systems.[82] North Carolina also modified its Comment 8 language to align it more clearly with a lawyer's area of specialization; it states that "a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with the technology relevant to the lawyer's practice . . . ."[83] And while the remaining states' modifications are stylistic in nature, West Virginia imposed a stronger and mandatory duty.[84] Instead of the ABA's language saying "a lawyer *should* keep abreast of changes . . .," West Virginia uses mandatory language: "a lawyer *must* keep abreast of changes . . . ."[85]

Awareness of the risks—and benefits—of using relevant technology in practice should be part of any lawyer's duty of providing competent representation of her clients.[86] This encompasses everything from the technology used by every lawyer (such as email, document management software, or cloud storage) to technology more heavily used by certain specialties (like e-filing or e-discovery for litigators).[87] Even courts in states that have not yet formally adopted Comment 8 and a duty of technological competence have nevertheless acknowledged the use of technology as a part of a lawyer's providing competent representation.[88] In a Maryland case involving the authentication of content from social media platforms, the court observed that "both prosecutors and criminal defense attorneys are increasingly looking for potential evidence on the expanding array of Internet blogs, message boards, and chat rooms," and that "[i]t should now be a matter of professional competence for attorneys to take the

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80. *See* CAL. RULES OF PRO. CONDUCT r. 1.1 cmt. 1; COLO. RULES OF PRO. CONDUCT r. 1.1 cmt. 8; MASS. RULES OF PRO. CONDUCT r. 1.1 cmt. 8; MICH. RULES OF PRO. CONDUCT r. 1.1 cmt.; MONT. RULES OF PRO. CONDUCT pmbl. 5; N.Y. RULES OF PRO. CONDUCT r. 1.1 cmt. 8; N.C. RULES OF PRO. CONDUCT r. 1.1 cmt. 8; S.C. RULES OF PRO. CONDUCT r. 1.1 cmt. 8; TEX. RULES OF PRO. CONDUCT r. 1.01 cmt. 8; VA. RULES OF PRO. CONDUCT r. 1.1 cmt. 6; W. VA. RULES OF PRO. CONDUCT r. 1.1 cmt. 8.

81. N.Y. RULES OF PRO. CONDUCT r. 1.1 cmt. 8.

82. *See id.*

83. N.C. RULES OF PRO. CONDUCT r. 1.1 cmt. 8.

84. *See* W. VA. RULES OF PRO. CONDUCT r. 1.1 cmt. 8.

85. *Compare* MODEL RULES OF PRO. CONDUCT r 1.1 cmt. 8 (AM. BAR. ASS'N 2020) (emphasis added), *with* W. VA. RULES OF PRO. CONDUCT r. 1. 1 cmt. 8 (emphasis added).

86. *See* MODEL RULES OF PRO. CONDUCT r 1.1 & cmt. 8.

87. *See* Johnson, *supra* note 50, at 179.

88. *See* Griffin v. State, 995 A.2d 791, 801 (Md. Ct. Spec. App. 2010), *rev'd*, 19 A.3d 415 (Md. 2011).

time to investigate social networking sites."[89] And in a Georgia criminal case, the Court of Appeals considered a claim of ineffective assistance of counsel based in part on defense counsel's lack of familiarity with the courtroom technology and failure to use that technology in impeaching the alleged victim.[90]

III. "THERE BUT FOR THE GRACE OF GOD GO I": CAUTIONARY TALES FOR LITIGATORS

There has been a seemingly endless parade of cautionary tales involving lawyers and their technology misuse (or failure to use).[91] In fact, one needs to look no further than recent headlines.[92] In November 2022, journalists from *Politico* were able to obtain the privileged election litigation emails of law professor and Donald Trump's advisor, John Eastman, whose emails had been sought by the U.S. House of Representatives committee investigating the January 6, 2021, U.S. Capitol riot.[93] Eastman's lawyers had sent a Dropbox link to Douglas Letter, the general counsel for the January 6 committee, shortly before an October 28 deadline to do so.[94] Not knowing that the link was still active, Letter filed a brief with the Ninth U.S. Circuit Court of Appeals that had attachments that included this link.[95] With the filing being available on Public Access to Court Electronic Records ("PACER"), the intrepid *Politico* reporters were able to access the link, and therefore the privileged emails.[96] Mr. Letter sent an apologetic letter to the court, stating "[w]e were not aware that the links in Dr. Eastman's email remained active and had no intention to provide this type of public access to the materials at this stage . . . [p]roviding public access to this material at this point was purely inadvertent on our part."[97]

And just weeks earlier, in the highly-publicized Texas defamation trial of Infowars host Alex Jones, the public was treated to a Perry Mason moment for

89. *Id.* at 795, 801; Sharon Nelson et al., *The Legal Implications of Social Networking*, 22 REGENT U. L. REV. 1, 14 (2010).

90. Hartman v. State, 858 S.E.2d 39, 43, 48 (Ga. Ct. App. 2021). The court ultimately affirmed the criminal conviction, denying the claim of ineffective assistance of counsel. *Id.*

91. *See* discussion *infra* Part III.

92. *See, e.g.*, Debra Cassens Weiss, *Lawyer Flubs Allowed Politico to Access Law Professor's Election-Litigation Emails*, A.B.A. J. (Nov. 3, 2022, 12:26 PM), http://www.abajournal.com/news/article/lawyer-flubs-allowed-politico-to-access-law-professors-election-litigation-emails.

93. *Id.* (emphasis added).

94. *Id.*

95. *Id.*

96. *Id.* (emphasis added).

97. Weiss, *supra* note 92.

the Digital Age.[98] With Jones on the witness stand denying making certain statements in texts and emails, the plaintiffs' counsel impeached him in spectacular fashion—revealing that Jones' lawyer had inadvertently produced the entire contents of Jones' cellphone messages.[99] Jones' lawyer produced the messages (which contained attorney-client privileged communications), and despite opposing counsel alerting him to this inadvertent disclosure pursuant to the "snapback" provision of Texas procedure, failed to respond in a timely manner.[100] Legal analysts were quick to opine on the lessons to be learned by lawyers from the Jones debacle, including being more cognizant of the dangers of mistakenly disclosing electronically-stored information.[101] As one law professor observed:

> Texas, like most states, requires a lawyer to be competent, which includes being knowledgeable about the technology they use. On top of that, the failure to follow the Texas snapback . . . rule is almost incomprehensible. It is like a driver being told that their car's brakes are about to fail, and instead of stopping, the driver proceeds to go down a steep hill at a high rate of speed.[102]

Whether it is the use of file-sharing platforms like Dropbox, redaction software, e-discovery tools, or even just plain email, trial lawyers' failure to use technology in a competent manner can have devastating consequences, as the following examples demonstrate.[103]

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98. *See* Aja Romano, *Alex Jones's Lies Have Cost Him $965 Million in a Second Sandy Hook Trial*, VOX, http://www.vox.com/culture/23292298/alex-jones-sandy-hook-defamation-trial-heslin-lewis-infowars (Oct. 12, 2022, 5:09 PM); Infowars, LLC v. Fontaine, No. 03-18-00614-CV, 2019 WL 5444400 (Tex. App. Oct. 24, 2019).

99. David L. Hudson, Jr., *Alex Jones Case Shows Inadvertent Disclosure of Electronically Stored Information Is a Real Risk*, A.B.A. J. (Oct. 27, 2022, 1:49 PM), http://www.abajournal.com/web/article/alex-jones-case-shows-inadvertent-disclosure-of-electronically-stored-information-is-a-real-risk.

100. *Id.*; *see also* TEX. R. CIV. P. 193.3(d) (stating that the rule gives lawyers ten days to assert privilege in the event of inadvertent disclosure).

101. Hudson, *supra* note 99.

102. *Id.*

103. *See, e.g.*, Rollins v. Home Depot USA, Inc., 8 F.4th 393, 395 (5th Cir. 2021); Emerald Coast Utils. Auth. v. Bear Marcus Pointe, L.L.C., 227 So. 3d 752, 757 (Fla. 1st Dist. Ct. App. 2017).

A. *Check Your Email Filter, Part 1*

The opening line of the Fifth Circuit's opinion in *Rollins v. Home Depot USA, Inc.*[104] hints at the dire news to come: "This is a cautionary tale for every attorney who litigates in the era of e-filing."[105] Rollins brought a personal injury suit against his employer, Home Depot.[106] The defense counsel filed a motion for summary judgment after removing the case to federal court.[107] However, Rollins' attorney never saw the electronic notification of that filing because his computer's email system placed the matter in a spam folder that the lawyer did not regularly monitor.[108] In addition, even knowing that the deadline for dispositive motions had elapsed, Rollins' lawyer never checked the court's online docket.[109] As a result, he failed to file an opposition to the summary judgment motion, and it was granted.[110] In affirming the trial court's denial of Rollins' motion to alter the judgment, the Fifth Circuit was unsympathetic, referring to Rollins' lawyer as "plainly in the best position to ensure that his own email was working properly. . . ."[111] The court also noted that Rollins' counsel, in the exercise of diligence, "could have checked the docket after the agreed deadline for dispositive motions had already passed."[112]

B. *Check Your Email Filter, Part 2*

In *Emerald Coast Utilities Authority v. Bear Marcus Pointe, LLC*,[113] a Florida appellate court administered a tough lesson for the Pensacola law firm of Odom & Barlow: keep your email system's spam filter up to date, or risk the consequences.[114] Odom & Barlow were counsel to Emerald Coast in an eminent domain case.[115] On March 18, 2014, the trial court rendered judgment granting approximately $600,000 in attorneys' fees to Bear Marcus, starting the clock

104. 8 F.4th 393 (5th Cir. 2021).
105. *Id.* at 395.
106. *Id.*
107. *Id.*
108. *Id.*
109. *Rollins*, 8 F.4th at 395.
110. *Id.*
111. *Id.* at 396.
112. *Id.*
113. 227 So. 3d 752 (Fla. 1st Dist. Ct. App. 2017).
114. *See id.* at 758.
115. *Id.* at 753, 758.

running on a thirty-day window to appeal the ruling.[116] Emerald Coast's lawyers missed the deadline, but filed a May 12, 2014, motion for relief, citing Florida Rule of Civil Procedure 1.540(b), which gives courts discretion to set aside final judgments in cases due to "mistake, inadvertence, surprise, or excusable neglect."[117] They claimed they had not received the email within their system.[118]

The court engaged in extensive fact-finding, and the picture that emerged was not a flattering one for Odom & Barlow.[119] The IT director for the Clerk of Courts retrieved logs from the clerk's e-service system, showing that emails containing the order were sent to both primary and secondary emails designated by the firm on March 20, 2014, and that there were no error messages or bounce backs indicating that the email had not been delivered.[120] Another witness from an independent consulting firm reviewed the email log printouts and examined the servers and work stations at the firm.[121] While he found no evidence of destruction of the emails, he conceded that it was "fairly unusual for a company to configure their system to not create any email logs," and that if it had, he could have had complete logs to determine if the server had received the emails in question.[122]

Some of the most damning testimony came from Odom & Barlow's own IT consultant, who had provided services to the firm beginning in 2007.[123] He confirmed that the firm's "email filtering system was configured to drop and permanently delete emails perceived to be spam without alerting the recipient that the email was deleted."[124] The IT consultant further testified that he had advised the firm on the danger of this spam filtering due to the risk of legitimate emails being identified as spam.[125] He had recommended a vendor to the firm to handle spam filtering, but the firm rejected this recommendation because it "did not want to spend the extra money."[126]

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116. *Id.* at 753; Jim Little, *Spam Email Filter Could Cost ECUA Ratepayers up $400,000 in Lawsuit*, PENSACOLA NEWS J., http://www.pnj.com/story/news/2017/08/16/spam-email-filter-could-cost-ecua-ratepayers-up-400-000-lawsuit/568387001/ (Aug. 16, 2017, 6:25 PM).

117. *Emerald Coast Utils. Auth.*, 227 So. 3d at 753, 756; FLA. R. CIV. P. 1.540(b).

118. *See Emerald Coast Utils. Auth.*, 227 So. 3d at 753.

119. *See id.* at 754, 757.

120. *Id.* at 753–54.

121. *Id.* at 754.

122. *Id.*

123. *See Emerald Coast Utils. Auth.*, 227 So. 3d at 754.

124. *Id.*

125. *Id.*

126. *Id.*

Even the opposing counsel at Fixel & Willis got in a few jabs, describing their protocol to cover email loopholes.[127] The firm assigned a paralegal to check the court's website every three weeks in order to catch and respond to any posted orders.[128] The appellate court was not sympathetic to Odom & Barlow's plight either, affirming the trial court's ruling that the firm's misplaced reliance on its questionable email system did not constitute excusable neglect.[129] The court held that the firm "made a conscious decision to use a defective email system without any safeguards or oversight in order to save money."[130] On rehearing, the appellate court reiterated its reasoning, concluding that "[c]ounsel has a duty to have sufficient procedures and protocols in place . . . includ[ing] use of an email spam filter with adequate safeguards and independent monitoring . . . ."[131] With the passage of time on appeal, the attorneys' fee award at issue had grown to over $1 million.[132]

C. *Know Whether Your Redaction Is Really Redacted*

In January 2019, it made national headlines when lawyers for Paul Manafort (the ex-campaign manager for former President Trump) accidentally revealed sensitive information about his contacts with a suspected Russian spy, all due to a redaction error in a court filing they made on his behalf.[133] But it is hardly the only time lawyers have made a redacting mistake.[134]

In 2017, lawyers at the Department of Justice ("DOJ") learned—thanks to an alert *Law360* reporter—that the redactions they made in a motion had not been properly redacted.[135] The case was a high-profile Libor-rigging case against a former Deutsche Bank trader, Gavin Black, in which protected testimony was

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127. *Id.* at 755.
128. *Emerald Coast Utils. Auth.*, 227 So. 3d at 755.
129. *Id.* at 757–58.
130. *Id.* at 757.
131. *Id.* at 758.
132. *See* Little, *supra* note 116.
133. Jeff Mordock, *Manafort Attorney's Redaction Error Reveals He Provided Trump Polling Data to Russian Operative*, WASH. TIMES (Jan. 8, 2019), http://www.washingtontimes.com/news/2019/jan/8/manafort-attorneys-redaction-error-reveals-he-prov/. The lawyers submitted a PDF that had black boxes drawn over the text to be redacted but had neglected to delete the actual text underneath it. Rakesh Madhava, *What Happened to Paul Manafort's Redactions?*, NEXTPOINT, http://www.nextpoint.com/ediscovery-blog/what-happened-to-paul-manaforts-redactions/ (last visited Apr. 28, 2023).
134. Robert Ambrogi, *Stupid Lawyer Tricks: Legal Tech Edition*, ABOVE LAW (Oct. 16, 2017, 1:02 PM), http://abovethelaw.com/2017/10/stupid-lawyer-tricks-legal-tech-edition/.
135. *Id.*

included (in redacted form) in a motion filed in federal court in New York.[136] However, during the roughly twelve hours that the document was publicly-viewable in its original form, it was apparent that the redactions had not been done properly.[137] "One sentence was highlighted in black and written in a gray font that was clearly legible," while other portions that had been blocked out "were easily read by copying and pasting the contents of the brief into another text document," and word searches returned "text that was barely hidden behind the faulty redactions."[138] A DOJ spokesperson blamed the improper redactions on "a technical error in the electronic redaction process," but clearly the error was in fact human.[139] As a quick tip, it is always important to test whether a document is properly redacted by highlighting the redacted portion, copying it, and pasting it into a document and see if the underlying text still appears.*

D. *Technological Incompetence in E-Discovery Is No Excuse*

In *James v. Nat'l Fin. LLC*,[140] the Delaware Court of Chancery was not sympathetic to the defense counsel's explanation for failures to produce requested electronically-stored information—the explanation was that he was "not computer literate."[141] The case involved class action claims against a payday loan lender for violating the Delaware Consumer Fraud Act as well as the federal Truth in Lending Act.[142] National Financial had been ordered to produce electronically-stored information about each of its loans between September 2010 and September 2013.[143] After multiple deficient discovery responses, and several court orders, the court's patience was at an end, and it sanctioned the defense to deemed admissions and monetary sanctions.[144] But, it also turned a deaf ear to defense counsel's protests that "I am not computer literate. I have not found presence in the cybernetic revolution. . . . This was out of my bailiwick."[145] Pointing out that "technological incompetence is not an excuse for discovery misconduct[,]" the court reminded counsel that technological competence was specifically included in Rule 1.1 of the Delaware

136. *Id.*
137. *Id.*
138. *Id.*
139. Ambrogi, *supra* note 134.
140. No. 8931-VCL, 2014 WL 6845560 (Del. Ch. Dec. 5, 2014).
141. *Id.* at *12.
142. *Id.* at *1, *2.
143. *Id.* at *1.
144. *See id.* at *14.
145. *James*, 2014 WL 6845560, at *12.

Lawyers' Rules of Professional Conduct.[146] The court further stated that: "[D]eliberate ignorance of technology is inexcusable . . . [i]f a lawyer cannot master the technology suitable for that lawyer's practice, the lawyer should either hire tech-savvy lawyers tasked with responsibility to keep current, or hire an outside technology consultant . . . ."[147]

E. *Technological Incompetence in Regular Discovery Is Not Any Better*

The realities of practice in the Digital Age means use of file-sharing technology, whether doing so with clients or during discovery with adverse parties and their counsel.[148] But that only heightens the need to use such applications and sites in an ethical and competent manner.[149] Our next cautionary tale is the case of *Harleysville Ins. Co. v. Holding Funeral Home, Inc*.[150]

This was an insurance coverage case in which Harleysville Insurance, hereinafter Plaintiff, sought a declaratory judgment that it did not have to pay for a 2014 fire loss at Holding Funeral Home, hereinafter Defendants.[151] During the investigation, an investigator uploaded video surveillance footage to the filesharing site Box, Inc., sending a hyperlink to the National Insurance Crime Bureau.[152] The investigator also uploaded the insurance claims file and investigation file to the same Box site, sending the same hyperlink to Plaintiff's lawyers.[153] When counsel for Defendants sought discovery, an email with the hyperlink was produced to them (complete with a confidentiality notice that the email included privileged and confidential information).[154] Counsel for Defendants then used the hyperlink, gaining access to the entire claims file—privileged documents and all.[155]

Plaintiff's counsel only learned that privileged documents were in their opponent's possession when they received a thumb drive of documents from Defendants in response to discovery requests of their own.[156] They immediately

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146. *Id.*
147. *Id.* (quoting Judith L. Maulte, *Facing 21st Century Realities*, 32 MISS. C. L. REV. 345, 369 (2013)).
148. *See id.* at *11; Maulte, *supra* note 147, at 346–47.
149. *See James*, 2014 WL 6845560, at *11; Maulte, *supra* note 147, at 369.
150. No. 1:15CV00057, 2017 WL 1041600, at *1 (W.D. Va. Feb. 9, 2017).
151. *Id.*
152. *Id.*
153. *Id.* at *2.
154. *Id.*
155. *Harleysville Ins. Co.*, 2017 WL 1041600, at *2.
156. *Id.*

sought to disqualify defense counsel and belatedly assert privilege.[157] While the federal judge was not happy with the defense counsel's actions (she ruled that Defendant's attorneys should have realized the Box filesharing site might contain privileged or protected information), she declined to disqualify them.[158] But the judge reserved her most serious criticism for the Plaintiff, holding that the inadvertent disclosure waived the attorney-client privilege and also waived attorney work product protection as well.[159] Noting that the Box site was not password protected and that information uploaded to the site was available for viewing by anyone, Harleysville Insurance conceded that it had committed "the cyber world equivalent of leaving its claims file on a bench in the public square and telling its counsel where they could find it."[160] The court found it "hard to imagine an act that would be more contrary to protecting the confidentiality of information than to post that information to the world wide web."[161]

The court reasoned that its decision "foster[ed] the better public policy."[162] Calling for competence in the use of new and evolving technology, the court held that if a party chooses to use a new technology, "it should be responsible for ensuring that its employees and agents understand how the technology works, and, more importantly, whether the technology allows unwanted access by others to its confidential information."[163]

F. *Technological Incompetence Can Get You Disbarred*

James Edward Oliver was a veteran bankruptcy practitioner in Oklahoma for approximately thirty years, with a spotless disciplinary history.[164] But, thanks to his admitted "lack of expertise in computer skills," he lost his right to practice before a bankruptcy court and received a public censure.[165] Licensed since 1967, Oliver had practiced extensively, and the Oklahoma Supreme Court even acknowledged that "[n]o testimony nor any documents showed an insufficiency in [his] knowledge of substantive bankruptcy law."[166] The problem, it seemed,

157. *Id.*
158. *Id.* at *8.
159. *Id.* at *5.
160. *Harleysville Ins. Co.*, 2017 WL 1041600, at *5.
161. *Id.*
162. *Id.*
163. *Id.*
164. *See* State *ex rel.* Okla. Bar Ass'n v. Oliver, 369 P.3d 1074, 1074 (Okla. 2016).
165. *Id.* at 1076–77.
166. *Id.* at 1074–75.

was "technological proficiency."[167] Specifically, that means e-filing.[168] After Oliver repeatedly failed to properly submit documents electronically (even with assistance from court staff), Judge Sarah Hall of the U.S. Bankruptcy Court for the Western District of Oklahoma suspended him for thirty days.[169] When he failed to show improvement, Judge Hall suspended him for another sixty days after directing Oliver to "have a lawyer on board" to help him.[170] After Oliver failed to get such assistance and failed at nine "homework" documents that she told him to submit (error-free and without third-party assistance), Judge Hall permanently suspended Oliver on June 15, 2015, from practice before the bankruptcy court, after finding that Oliver had paid another lawyer to "ghost write" his assignments.[171]

When Oliver failed to report this discipline to the Oklahoma Bar, he wound up in front of the Oklahoma Supreme Court.[172] In its March 29, 2016 opinion, the Oklahoma Supreme Court imposed a public censure and encouraged Oliver "to continue to improve his computer skills, or better, to hire an adept administrative assistant to do his pleadings."[173] The dissent, however, took a harsher view, faulting Oliver for his "demonstrated incompetency to practice law before the [b]ankruptcy [c]ourt" and calling for a two-year plus one-day suspension.[174]

G. *Lack of Cybersecurity Shows a Lack of Technological Competence*

There have been a number of cases[175] in which a lawyer has been disciplined for falling for a cyberscam.[176] Lack of taking adequate cybersecurity

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167. *Id.* at 1075.
168. *See id.* at 1075.
169. *See Oliver*, 369 P.3d at 1075, 1077.
170. *Id.* at 1075.
171. *Id.* at 1075–76.
172. *Id.* at 1074.
173. *Id.* at 1077.
174. *Oliver*, 369 P.3d at 1078. In 2008, the Kansas Supreme Court suspended another bankruptcy lawyer for the same thing. *See In re* Harris, 180 P.3d 558, 564 (Kan. 2008) (per curiam).
175. *See* Iowa Sup. Ct. Att'y Disciplinary Bd. v. Wright, 840 N.W.2d 295, 300 (Iowa 2013).
176. *See, e.g.*, *id.* at 298–99. Attorney Robert Wright, Jr. fell for a "Nigerian prince" scam, resulting in the court suspending his license for one year. *See id.* at 301, 304; *Nigerian Scams*, AARP, http://www.aarp.org/money/scams-fraud/info-2019/nigerian.html (July 21, 2022). The court found that his failure to do any internet due diligence constituted a failure of his duty of competence under Iowa's rules. *Wright*, 840 N.W.2d at 301.

measures can also lead to legal malpractice claims and lawsuits.[177] In recent years, a trend has developed in which clients financially impacted by a law firm's failure to protect against hacking or other cyberattacks have sued their lawyers for breaching their professional duty to safeguard client information.[178]

In *Millard v. Doran*,[179] for example, the plaintiffs alleged that Doran, their real estate lawyer, had an outdated and compromised AOL email account that was hacked.[180] The cyber-criminals intercepted and read Doran's email and were alerted to the fact that the Millards were about to transfer a large sum of money (approximately $2 million) to the seller as part of the real estate purchase process.[181] They drafted false emails (made to appear as if they came from Doran) to the Millards, instructing the couple to send the funds via wire transfer to a bank account controlled by the hackers.[182] By the time either client or attorney realized that the email address in question did not, in fact, belong to the sellers, the $2 million had vanished into thin air.[183]

In another case, the law firm Warden Grier, LLP fell victim to a major ransomware attack in 2016.[184] Data belonging to a firm client, Hiscox Insurance Company, along with data of Hiscox's clients, was exfiltrated in the attack.[185] Unfortunately, Warden Grier did not notify their client; Hiscox learned of the breach indirectly two years later when one of its employees discovered insureds' personal information on the dark web.[186] Hiscox sued for breach of contract, breach of fiduciary duty, and negligence.[187] Warden Grier filed a motion to dismiss; the court denied the motion, permitting the case to go forward.[188]

In *Wengui v. Clark Hill, PLC*,[189] a well-known Chinese dissident and businessman retained a large law firm to represent him in his quest for political asylum in the United States.[190] Wengui informed his lawyers that the Chinese government's persecution of him was continuing, and that the firm could face

177. *See* Browning, *supra* note 23, at 192.
178. *See, e.g.*, *id.*
179. Complaint, No. 153262/2016 (Sup. Ct. N.Y. Cnty. 2016).
180. *See id.* at 2, 6.
181. *Id.* at 3, 15.
182. *Id.* at 3.
183. *See id.* at 3–4.
184. *See* Hiscox Ins. Co. v. Warden Grier, LLP, 474 F. Supp. 3d 1004, 1005–06 (W.D. Mo. 2020).
185. *See id.* at 1006, 1010.
186. *Id.* at 1006.
187. *Id.*
188. *Id.* at 1005, 1010.
189. 440 F. Supp. 3d 30, 30 (D.D.C. 2020).
190. *Id.* at 33.

cyberattacks.[191] The firm promised to take appropriate countermeasures, including keeping Wengui's confidential information off the firm servers.[192] But on September 12, 2017, the firm suffered a cyberattack targeting its servers.[193] Despite the firm's representations, a substantial amount of Wengui's confidential information was compromised.[194] Wengui sued for legal malpractice, breach of fiduciary duty, and breach of contract.[195] The law firm filed a motion to dismiss, which the court denied.[196]

For trial lawyers, inadequate cybersecurity measures can be disastrous to the point of erasing hard-won settlements, as a federal court case from Virginia illustrates.[197] Plaintiff Amangoua Bile and her lawyer, Uduak Ubom, settled an employment discrimination case against Denny's (represented by LeClairRyan) in 2015.[198] According to the trial court's findings, Ubom's email account, ubomlawgroup@yahoo.com, was compromised by hackers, and Ubom was apparently aware of this prior to the settlement.[199] When defense counsel received an email from that account, purporting to be from Ubom, they complied with the instructions to complete a wire transfer of the $63,000 in settlement funds.[200] When Ubom contacted LeClairRyan at a later date inquiring about the settlement monies, he was informed that it had already been paid.[201] LeClairRyan was unable to get the money back, plaintiff refused to dismiss the case, and the defendants refused to pay another $63,000.[202]

The court found that both Ubom and his client were aware that "a malicious third party was targeting this settlement for a fraudulent transfer to an offshore account . . . ."[203] The court further found that Ubom and his client both knew that his firm's email account "was implicated in that fraudulent activity."[204] The court observed that:

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191. *Id.* at 34.
192. *Id.*
193. *Id.*
194. *See Wengui*, 440 F. Supp. 3d at 34.
195. *Id.* at 35.
196. *Id.* at 35, 40.
197. *See* Bile v. RREMC, LLC, No. 15-CV-051, 2016 WL 4487864, at *1, *2, *13 (E.D. Va. Aug. 24, 2016).
198. *See id.* at *1.
199. *Id.* at *1, *3.
200. *See id.* at *1.
201. *See id.* at *2.
202. *Bile*, 2016 WL 4487864, at *2.
203. *Id.* at *3.
204. *Id.*

> As technology evolves and fraudulent schemes evolve with it, the Court has no compunction in firmly stating a rule that: where an attorney has actual knowledge that a malicious third party is targeting one of his cases with fraudulent intent, the attorney must either alert opposing counsel or must bear the losses to which his failure substantially contributed.[205]

Thus, the court held that by being more technologically competent, Ubom could have prevented the loss of the $63,000 and preemptively notified opposing counsel.[206]

The foregoing cautionary tales are just a sampling of the ways in which a litigator's failure to use relevant technology, or to use such technology properly, has led to serious adverse outcomes.[207] As these cases illustrate, even the most mundane technology that trial lawyers should be proficient at, such as email, requires some basic level of competence—and yet even that can trip up the unwary attorney.[208] As one California ethics opinion warned in 2014, lawyers who fail to adapt "as new technologies develop and then become integrated with the practice of law" face potentially grave consequences.[209]

IV. ARTIFICIAL INTELLIGENCE AND THE TRIAL LAWYER

A. *AI and the Legal Profession*

AI has been defined as "the capability of a machine to imitate intelligent human behavior."[210] Others have used the terms "machine learning" or "cognitive computing."[211] When you were a baby, just learning how to talk, you

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205. *Id.* at *13.

206. *See id.*

207. *See, e.g.*, *Bile*, 2016 WL 4487864, at *13; Wengui v. Clark Hill, PLC, 440 F. Supp. 3d 30, 34 (D.D.C. 2020).

208. *See, e.g.*, *Bile*, 2016 WL 4487864, at *13; *Wengui*, 440 F. Supp. 3d at 37–38.

209. *See* State Bar of Cal. Standing Comm. on Pro. Resp. & Conduct, Formal Op. Interim 11-0004 (2014).

210. *Artificial Intelligence*, MERRIAM WEBSTER, http://www.merriam-webster.com/dictionary/artificial%20intelligence (last visited Apr. 28, 2023); *see also* Scott Bailey et al., *Legal Ethics in the Use of AI*, *in* LAW LIBRARIANSHIP IN THE AGE OF AI 147–50 (Elyssa Kroski ed., 2020); Lisa Morgan, *4 Types of Machine Intelligence You Should Know*, INFORMATIONWEEK (Apr. 10, 2018), http://www.informationweek.com/ai-or-machine-learning/4-types-of-machine-intelligence-you-should-know.

211. Morgan, *supra* note 210; *see also* Bailey et al., *supra* note 210, at 148.

observed thousands of conversations.[212] You noticed that there was a cadence to the sounds being expressed, you noticed that some of those sounds were repeated over and over again, and you learned your first words.[213] After thousands of hours of training, you pumped out a single word.[214] From there, you probably started trying to string together *sentences* in a series of meaningless babbling, with an occasional coherent word thrown in.[215] The sentence did not achieve the desired outcome, and you tried again.[216] Over time and much trial and error, you learned to talk.[217]

Machine learning works in much the same way.[218] A program attempts to achieve an outcome by modeling its outputs against the data you provide it.[219] To carry the analogy forward, you provide the program with thousands of hours of speech recordings for it to listen to and model itself after.[220] The program tries to match cadence with meaning, and it eventually *learns* to synthesize speech.[221]

AI is already having a demonstrable impact on the legal profession, with many different ways in which lawyers today use AI to improve productivity, efficiency, and the quality of legal services for their clients.[222] Traditionally, legal research is one of the earliest and most obvious areas for AI adoption.[223] "With AI, lawyers can rely on natural language queries—rather than simple Boolean queries—to [achieve] more meaningful and more insightful results. AI can also be used to [generate] basic legal memos."[224] The ROSS Intelligence AI tool, for example, "uses IBM's Watson AI technology, [to] produce a brief memo in response to a lawyer's legal question."[225] Another popular use of AI is in e-discovery and predictive coding, in which lawyers essentially train the

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212. *See* Celia Genishi, *Young Children's Oral Language Development*, READING ROCKETS, http://www.readingrockets.org/article/young-children-s-oral-language-development (last visited Apr. 28, 2023).

213. *See* Heidi M. Feldman, *How Young Children Learn Language and Speech*, 40 PEDIATRICS REVIEW 399, 400–02 (2019).

214. *See* Genishi, *supra* note 212.

215. *See id.*; Feldman, *supra* note 213, at 400, 402.

216. *See* Genishi, *supra* note 212; Feldman, *supra* note 213, at 400.

217. *See* Feldman, *supra* note 213, at 402.

218. *See* Morgan, *supra* note 210.

219. *See id.*

220. *See id.*

221. *See id.*

222. *See* John Markoff, *Armies of Expensive Lawyers, Replaced by Cheaper Software*, N.Y. TIMES, Mar. 4, 2011, at A1; Dana Remus & Frank Levy, *Can Robots Be Lawyers?* Computers, Lawyers, and the Practice of Law, 30 GEO. J. LEGAL ETHICS 501, 502, 513 (2017).

223. *See* Bailey et al., *supra* note 210, at 150.

224. *Id.* (footnote omitted).

225. *Id.*

technology on how to categorize documents in a case.[226] The AI assists in classifying documents after extrapolating data gathered from a sample of documents classified by the attorney.[227] Yet another natural fit for the efficiencies that AI offers is predictive analytics, in which AI products are used to predict the outcome of litigation (or particular aspects of a litigated matter).[228] "AI tools utilize case law, public records, dockets, . . . jury verdicts to identify patterns in past and current data. The AI then analyzes the facts of a lawyer's case to provide an intelligent prediction of the outcome."[229] If, for example, you wanted to know how Judge Smith, in a particular federal district, has tended to rule in *Markman* hearings in patent infringement cases that have come before her, AI could be employed to analyze every such case she has ever had and to compare facts, patterns, and relevant law in those cases to the matter you are litigating.[230]

Each of these areas—legal research, document review and analysis, and predictive analytics—seems to be a natural, even expected, use of AI technology and its strengths.[231] Vast amounts of data are "fed" to the computer, analysis takes place with greater speed, efficiency, and accuracy than humans could do, and conclusions are reached.[232] But AI is also being used to do what many attorneys have traditionally regarded as work requiring "the human touch"—contract review, management, and drafting.[233] AI tools are increasingly being used in these areas.[234] They can flag termination dates, alert the lawyers about deadlines for sending a notice of renewal, and identify important provisions in agreements (such as indemnity clauses and choice of law provisions).[235] AI is also being utilized in automated due diligence review for corporate transactions, sharply reducing the cost and burden of reviewing vast quantities of

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226. *Id.* at 146.

227. *Id.*; Remus & Levy, *supra* note 222, at 515.

228. Bailey et al., *supra* note 210, at 147; *see also* Remus & Levy, *supra* note 222, at 548.

229. Bailey et al., *supra* note 210, at 147 (footnotes omitted).

230. *See id.* Despite this, some scholars have nevertheless concluded that experienced trial lawyers generally would be better than an AI at predicting case outcomes because they have more years of data with which to work. *See* Lauri Donahue, *A Primer on Using Artificial Intelligence in the Legal Profession*, HARV. J.L. & TECH. (Jan. 3, 2018), http://web.archive.org/web/20221230182341/http://jolt.law.harvard.edu/digest/a-primer-on-using-artificial-intelligence-in-the-legal-profession.

231. Bailey et al., *supra* note 210, at 146, 147, 150.

232. *See id.* at 151.

233. *See id.* at 148.

234. *Id.* at 145.

235. *Id.* at 148.

documents.[236] One AI tool offered by LawGeex, for example, provides contract analysis and review using algorithms and crowdsourced data to generate a summary, contract "score," and information, including sample language for missing clauses.[237]

A number of in-house legal departments have even turned to AI for contract-drafting.[238] At Coca-Cola, for example, AI-based tools have streamlined the contract-drafting process for a variety of matters, reducing the time that lawyers had been spending from as much as ten hours to about 15 minutes.[239] The result is not just increased efficiency, but more consistent agreements while freeing up in-house counsel for more strategic, challenging tasks.[240] "JP Morgan Chase [even] invested in its own proprietary AI platform[,] COIN (short for Contract Intelligence)[,] in 2017 to review commercial loan agreements."[241] The move has reaped significant dividends for the financial giant, with Chase estimating that "its automation of such work has saved it 360,000 hours of work by lawyers and loan officers annually.[242]

B. *AI and Litigators*

Of all the law-related AI applications, litigators are probably most familiar with its use in discovery, often referred to as "technology-assisted review" (TAR).[243] In fact, a number of courts have not just approved of, but even required, TAR in certain cases.[244] Of course, even technology-assisted document review can be far from perfect.[245] Courts have approved TAR protocols likely to retrieve only seventy-five percent of responsive documents.[246] AI can also be

236. Bailey et al., *supra* note 210, at 148–49.
237. Donahue, *supra* note 230.
238. Browning, *supra* note 18.
239. *Id.*
240. *Id.*
241. *Id.*
242. *Id.*
243. James Q. Walker, *What's Artificial About Intelligence? The Ethical and Practical Considerations When Lawyers Use AI Technology*, BLOOMBERG L. (Apr. 12, 2018, 4:21 PM), http://news.bloomberglaw.com/e-discovery-and-legal-tech/whats-artificial-about-intelligence-the-ethical-and-practical-considerations-when-lawyers-use-ai-technology.
244. *See id.*
245. *Id.*
246. Julia Voss & David J. Simmons, *Technology-Assisted Review Makes Main Street*, A.B.A., Summer 2018, at 2, 3.

used by litigators to search social media platforms for evidence relevant to the claim or defense of a civil lawsuit or criminal case.[247]

As AI adoption becomes more widespread among both litigators and the parties they represent, a failure to use AI tools for a variety of lawyerly tasks can certainly constitute a breach of the duty of tech competence.[248] As attorney and AI entrepreneur, Andrew Arruda (founder of ROSS Intelligence), once observed:

> It does not make sense to have one person look through a thousand binders for a combination of words. Not only does this not make sense from a time perspective, think about it in terms of accuracy. Who do you trust more? A human who read through a thousand binders—and probably became fatigued—or a computer's "find" feature? The computer does not . . . get tired, and it does not forget what it has read, so technology's efficiency clearly produces the best results for the client.[249]

Lawyers adhering to their duty of tech competence are expected to be sufficiently familiar with AI to effectively consult with their clients and third-party experts or vendors regarding[250] AI's use—whether for their own practices or an AI application to be used by or for their client in connection with a matter.[251] A lawyer who uses a particular AI tool must understand not only the capabilities and limitations of that tool, but also the benefits—and risks—that accompany the use of that tool.[252]

The duty of tech competence involves knowing enough about the client, the nature of the engagement, and the specific AI technology to advise the client not only when AI use will be beneficial and appropriate, but also when it will not be.[253] A lawyer needs to be sufficiently conversant to recommend AI use where it may make sense from an efficiency or cost standpoint, such as in its use for document review, predictive analytics, legal research, and other tasks.[254] At the

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247. *See* Phillip Bantz, *New Social Media Sleuth on the Scene: E-Discovery Company Touts AI Tech*, LAW.COM (Oct. 17, 2018, 3:55 PM), http://www.law.com/corpcounsel/2018/10/17/new-social-media-sleuth-on-the-scene-e-discovery-company-touts-ai-tech/?slreturn=20230109004037.

248. *See* Arruda, *supra* note 53, at 455.

249. *Id.* at 456.

250. *See* Walker, *supra* note 243; MODEL CODE OF PRO. CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2020).

251. *See* Walker, *supra* note 243.

252. Arruda, *supra* note 53, at 455.

253. *See id.* at 450, 455.

254. *See id.* at 456; Walker, *supra* note 243.

same time, an attorney should also be cognizant of the risks that the use of the AI might entail, including the AI's own limitations and potential biases.[255]

Have we reached a point at which to be considered competent in representing clients, trial lawyers *must* use AI?[256] Certain engagements may certainly warrant the use of AI, but as at least one author has observed, there does not appear to be any instance "in which AI software represents the standard of care in an area of legal practice, such that its use is necessary."[257] However, while that day may not have arrived in an American courtroom, it has already become reality for our neighbors to the north.[258]

The 2018 Canadian case of *Cass v. 1410088 Ontario Inc.*[259] was a premises liability case involving personal injuries sustained by Kristen Cass when she slipped and fell at a bar called My Cottage BBQ and Brew, operated by 1410088 Ontario Inc.[260] After summary judgment was granted in favor of the defendants, and the plaintiff was held liable for costs and attorney's fees, the plaintiff appealed what her counsel considered to be excessive fees, particularly with regard to legal research.[261] In ruling that the costs and fees awarded by the trial court were excessive, particularly in "this day and age of boiler plate pleadings and the instant applicability of drafting precedent," appellate Judge Whitten was particularly dubious about the time and expense for legal research.[262] Whitten noted: "[t]here was no need for outsider or third party research. *If artificial intelligence sources were employed, no doubt counsel's preparation time would have been significantly reduced.*"[263] As a result, the fee and cost request was slashed.[264]

Another 2018 case from Canada similarly dealt with the issue of costs and also encouraged the use of AI as a legal research tool.[265] In *Drummond v. Cadillac Fairview Corp., Ltd.*,[266] Cadillac Fairview objected to the award of costs for Westlaw research to the prevailing party, arguing that it constituted simply "a

255. *See* Arruda, *supra* note 53, at 455.
256. *See* Walker, *supra* note 243.
257. *Id.*
258. *See id.*; Cass v. 1410088 Ontario Inc., 2018 CanLII 6959, 1 (Can. Ont. Super. Ct. Just.); Drummond v. Cadillac Fairview Corp., 2018 CanLII 5350, 2 (Can. Ont. Super. Ct. Just.).
259. 2018 CanLII 6959 (Can. Ont. Super. Ct. Just.).
260. *Id.*
261. *Id.* at 2.
262. *Id.* at 5.
263. *Id.* at 7 (emphasis added).
264. *Cass*, 2018 CanLII 6959, at 7.
265. Drummond v. The Cadillac Fairview Corp., 2018 CanLII 5350, 2 (Can. Ont. Super. Ct. Just.).
266. 2018 CanLII 5350 (Can. Ont. Super. Ct. Just.)

lawyers' overhead expense that is not recoverable as a disbursement."[267] On appeal, the Ontario Superior Court of Justice found that the expenditure was "reasonable and appropriate for the particular legal problem," both "in terms of lawyer time and computer time."[268] The court went on to observe that "[t]he reality is that computer-assisted legal research is a necessity for the contemporary practice of law and computer-assisted legal research is here to stay *with further advances in artificial intelligence to be anticipated and to be encouraged*."[269]

While these Canadian courts calling for the implementation of AI—at least in the context of legal research—to be an expected use by lawyers have not yet been followed by their American counterparts, it is just a matter of time.[270] As use of AI has become more commonplace in the legal profession and as client expectations drive this adoption, the expectation that a lawyer will make use of AI tools—and not just for legal research—will become standard.[271] And just as lawyers have faced sanctions, disciplinary action, and even malpractice exposure for other "tech fails" resulting from their lack of tech competence, the failure to embrace AI under appropriate circumstances will undoubtedly be the undoing of some lawyers in the not too distant future.[272]

Judicial expectations about AI may be changing faster than we think—and not just for litigators' use of such tools, but for the courts' as well.[273] In January 2023, Colombian Judge Juan Manuel Padilla Garcia, who presides over the First Circuit Court in the city of Cartagena, made international headlines with the revelation that he had used AI tool ChatGPT to write a judicial opinion.[274] In a case involving a dispute with a health insurance company over whether coverage existed for certain treatments for an autistic child, Judge Garcia posed certain questions about the case (including queries about prior court precedent in similar cases) and included the ChatGPT chatbot's full responses in his decision.[275] Judge Garcia was quick to point out that he included his own insights regarding the precedents, and that the AI was merely used to "extend the

267. *Id.* at 2.
268. *Id.*
269. *Id.* (emphasis added).
270. *Id.* at 2; Voss & Simmons, *supra* note 246, at 2.
271. *See* Voss & Simmons, *supra* note 246, at 2, 3.
272. *See* Jamie J. Baker, *Beyond the Information Age: The Duty of Technology Competence in the Algorithmic Society*, 69 S.C. L. REV. 557, 560 (2018).
273. Voss & Simmons, *supra* note 246, at 2.
274. Janus Rose, *A Judge Just Used ChatGPT to Make a Court Decision*, VICE (Feb. 3, 2023, 12:28 PM), http://www.vice.com/en/article/k7bdmv/judge-used-chatgpt-to-make-court-decision; *see also* Juzgado de Circuito [Juzg. Circ.] [Circuit Court], enero 30, 2023, Sentencia No. 032, Consejos Superior de la Judicatura [C.S.J.] (No. 32 p. 6) (Colom.).
275. Rose, *supra* note 274.

arguments of the adopted decision."[276] As the judge noted, "[t]he purpose of including these AI-produced texts is in no way to replace the judge's decision."[277] "What we are really looking for is to optimize the time spent drafting judgments after corroborating the information provided by AI."[278]

C. *AI and Jury Selection*

Among the ways in which AI tools can assist litigators is in picking a jury.[279] After all, trial lawyers "face an overwhelming, if not impossible, amount of information to potentially sift through during jury selection," and the "time-saving capabilities" of AI tools seem like a perfect solution.[280] EmotionTrac, for example, was awarded a patent in 2021 for their AI-powered Emotional Intelligence facial software, which uses facial detection through an app that "captures the visceral reactions of focus group participants in the blink of an eye," then "interprets the emotional reactions and delivers quantitative data about your case."[281] For lawyers with cases serious enough to justify the time and expenditure of focus groups or mock trials, such a tool can yield critical insight.[282] Whether conducted in person or online, focus groups meeting desired demographics can be shown video footage (such as expert witness testimony, fact witness depositions, or camera footage of an incident), and their "emotional data" can be captured and analyzed.[283] One lawyer used this tool to gauge how jurors might react to the defendant's key expert witness.[284] In another example, a 20-year criminal defense lawyer used a video of a complaining witness to test the witness' credibility on potential jurors.[285] The lawyer was "floored" by the results, saying, "it's given me everything that I need to move forward with this case to attack this witness' credibility and to develop a juror profile."[286]

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276. *Id.*
277. *Id.*
278. *Id.*
279. *Voltaire Uses AI and Big Data to Help Pick Your Jury*, *supra* note 43.
280. *See id.*; Cassandre Coyer, *AI Can Help with Jury Selection—But Should It?*, LAW.COM (Oct. 5, 2022, 6:01 PM), http://www.law.com/legaltechnews/2022/10/05/ai-can-help-with-jury-selection-but-should-it/?slreturn=20230113150528.
281. *Lawyers Leveraging AI for Trial*, *supra* note 42.
282. *Id.*
283. *Id.*
284. *See id.*
285. *Id.*
286. *Lawyers Leveraging AI for Trial*, *supra* note 42.

Other AI tools use database-scraping and analysis to assist trial lawyers with jury selection.[287] By using a combination of machine learning and natural language processing capabilities, these tools can scour the internet, sifting through voluminous amounts of information about jurors' lives.[288] It would be virtually impossible for even the hardest-working associates to manually check every TikTok, Instagram, YouTube, and Facebook history for prospective jurors, while these AI tools can deliver results with blinding speed.[289] Companies like Voltaire and Vijilent, for example, both employ database-scraping processes before running the data collected through variations of IBM Watson's Personality Insights AI tool.[290] This AI uses natural language processing algorithms to categorize jurors within the "big five" personality traits model: openness to experience; agreeableness; introversion and extraversion; conscientiousness; and neuroticism.[291]

Voltaire starts with basic data—age, education, employment, addresses, and the like—before moving into the business and legal history of the individual, and then examining Twitter, Facebook, and other social media platforms for any indications of leanings or sentiments on certain issues that have a bearing on the trial.[292] All of this is accomplished in moments, with the results presented on the trial lawyer's iPad or laptop so that they may access the data as they stand before the venire panel in the courtroom.[293] As Voltaire founder Basit Mustafa explains, "[y]ou just click on the name of a juror and you see the profile . . . . This shows certain risk factors, for example, have they made political donations to certain causes . . . and how does that impact their bias in your case?"[294] As a lawyer learns more about the potential juror through questioning, the attorney "can add in and/or reject certain conclusions made by the AI," which then updates the profile accordingly.[295] While all the data is drawn from public sources, Voltaire

287. *See* Coyer, *supra* note 280.
288. *Id.*
289. *Id.*
290. Todd Feathers, *This Company Is Using Racially-Based Algorithms to Select Jurors*, VICE (Mar. 3, 2020, 8:00 AM), http://www.vice.com/en/article/epgmbw/this-company-is-using-racially-biased-algorithms-to-select-jurors; *Voltaire Uses AI and Big Data to Help Pick Your Jury*, *supra* note 43.
291. Feathers, *supra* note 290; *see also Warning, Bias Detected: AI in Voir Dire*, THINKING ABOUT JURIES BLOG (Mar. 1, 2020), http://juryclass.blogspot.com/2020/03/warning-bias-detected-ai-in-voir-dire.html; *The Big Five Personality Test*, OPEN-SOURCE PSYCHOMETRICS PROJECT, http://openpsychometrics.org/printable/big-five-personality-test.pdf (last visited Apr. 28, 2023).
292. *Voltaire Uses AI and Big Data to Help Pick Your Jury*, *supra* note 43.
293. *Id.*
294. *Id.*
295. *Id.*

correlates and cross-references it, employing algorithms to yield insights into how an individual might see a particular issue or react to a certain argument by the lawyer.[296] Yet for all of this technology, Mustafa is adamant that the role of the trial lawyer is safe.[297] As he notes, "Voltaire is there to help the attorney, it cannot replace their oratory in court or their emotional intelligence."[298]

Yet for all of these capabilities, valid concerns exist with using AI technology for jury selection.[299] The chief reservation from both an ethical and practical standpoint is potential bias.[300] As Anurag Bana, a senior legal adviser at the International Bar Association, observes, the question is "whether these programs that the companies are providing are specifically programmed for selection of [a] jury and whether these programs are being codified in a way that they do not consider race or gender."[301] A lawyer's duty to provide competent representation under Model Rule 1.1 is not the only ethical obligation implicated by the use of technology in jury selection.[302] So is Model Rule 8.4(g), which states that it is misconduct for a lawyer to engage in behavior that the attorney "knows or [should reasonably] know is harassment or discrimination on the basis of race, sex, religion, national origin, ethnicity, disability, age, sexual orientation, gender identity, marital status, or socioeconomic status in conduct related to the law."[303] Theoretically, using AI tools for jury selection without adequate investigation into whether the AI contains biases could violate this rule.[304]

Consider, for example, the AI company Momus Analytics, named by the *National Law Journal* as one of its 2020 emerging legal technologies.[305] The Coral Gables, Florida company maintains that its application uses algorithms to help lawyers select favorable juries, and claims that its methodology has led to more than $940 million in verdicts.[306] Like other AI tools, it scrapes publicly available sources, including jurors' social media profiles.[307] But Momus' algorithms assess scores for traits like "leadership," "personal responsibility,"

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296. *Id.*
297. *See Voltaire Uses AI and Big Data to Help Pick Your Jury*, *supra* note 43.
298. *Id.*
299. *See* Coyer, *supra* note 280.
300. *See id.*
301. *Id.*
302. Bailey et al., *supra* note 210, at 152–53; MODEL RULES OF PRO. CONDUCT r. 1.1 (AM. BAR ASS'N 2020).
303. Bailey et al., *supra* note 210, at 155; MODEL RULES OF PRO. CONDUCT r. 8.4(g).
304. *See* Coyer, *supra* note 280.
305. Feathers, *supra* note 290. Incidentally, Momus takes its name from Greek mythology's personification of mockery and blame. *Id.*
306. *Id.*
307. *Id.*

"social responsibility," and others.[308] According to the company's own patent application for its AI, a number of characteristics are tied to race: people of Asian, Central American, and South American descent—according to Momus—are more likely to be leaders, and thus more capable of influencing other jurors.[309] In contrast, those who identify "their race as 'other' are less likely to be leaders."[310] The algorithm leads to recommendations, including those based on such purported race-based traits, that are then communicated to the trial lawyer.[311]

Biases in AI tools are hardly new, and scholars have pointed out the potential for biased results from tools used to guide sentencing and parole decisions, among others.[312] But racially based peremptory strikes of jurors were declared unconstitutional back in 1986 with the U.S. Supreme Court's milestone decision in *Batson v. Kentucky*.[313] Given the importance of providing a racially neutral reason for striking a juror when faced with a *Batson* challenge, can an ethical trial lawyer employ an AI tool such as Momus' product, which admittedly makes recommendations based on purported race-based characteristics?[314] The answer is obvious and is just one example of the technology-related ethical traps awaiting unwary trial lawyers.[315]

Use of AI tools in an unbiased manner can nevertheless improve a trial lawyer's ability to secure an impartial jury and exclude potential jurors who do harbor biases or prejudices regarding a specific case.[316] When employed in conjunction with jury consultants or behavioral experts, a psychographic profile of an individual can be assembled ("psychographics is the science of understanding people based on their interests, activities, and opinions").[317] Psychographic data can be aided by neurolinguistics—the science of how language is represented in the brain—to yield insight into a prospective juror's values and beliefs.[318] Essentially, AI paired with such approaches can help a trial

308. *See id.*
309. *See* Feathers, *supra* note 290.
310. *Id.*
311. *See id.*
312. *See* Rhys Dipshan et al., *The United States of Risk Assessment: The Machines Influencing Criminal Justice Decisions*, LAW.COM (July 13, 2020, 7:00 AM), http://www.law.com/legaltechnews/2020/07/13/the-united-states-of-risk-assessment-the-machines-influencing-criminal-justice-decisions/.
313. 476 U.S. 79, 87 (1986).
314. *See* Feathers, *supra* note 290; Dipshan et al., *supra* note 312.
315. *See* Feathers, *supra* note 290.
316. *See id.*
317. *AI in Jury Selection*, JURY ANALYST (July 13, 2022), http://juryanalyst.com/blog/artificial-machine-intelligence/.
318. *Id.*

lawyer "decode" a would-be juror.[319] Not only can it help the attorney select those who will serve as jurors in the trial, but "psychographics and neurolinguistics can be reassessed to [determine] if external information is influencing the juror's perception of the case."[320]

V. CONCLUSION

While a number of scholars have examined the lawyer's duty of tech competence,[321] virtually none have focused on what that duty means for trial lawyers, although at least a handful have explored the impact of this evolving standard on transactional attorneys.[322] And though an occasional commentator may weigh in on how AI may impact a particular subset of litigators,[323] most treatments of AI's impact on the legal profession have been generalized overviews with little meaningful attention paid to the specific skills and tasks performed by courtroom advocates.[324] Even the occasional article that purports to focus exclusively on AI and litigators rarely goes beyond a superficial nod to specific areas, choosing instead to limit itself to broad statements about AI generally.[325]

In fact, it is more vital than ever for litigators to take their duty of technology competence seriously because the world of law practice—and trial practice in particular—has changed drastically in recent years thanks to technology.[326] For example, one of the most mundane tasks of every plaintiff's lawyer—perfecting service of process on a defendant—can now not only be achieved via traditional personal service, but also with the aid of technologies ranging from email to social media platforms to (most recently) non-fungible tokens (NFTs) being airdropped on the blockchain.[327] Litigators now must contend with new causes of action born out of technology, such as "revenge

319. *Id.*

320. *Id.*

321. *See, e.g.*, Baker, *supra* note 272, at 571; O'Leary, *supra* note 31, at 205.

322. *See, e.g.*, Johnson, *supra* note 50, at 170, 189.

323. *See id.* at 178; Peter N. Salib, *Artificial Intelligent Class Actions*, 100 TEX. L. REV. 519, 548 (2022) (arguing that AI may lead to more work for class action litigators and making the novel proposal that AI algorithms make class certification decisions).

324. *See, e.g.*, Ellen M. Gregg et al., *How Artificial Intelligence Is Impacting Litigators*, ALAS LOSS PREVENTION J., Summer 2019, at 48, 49, 59.

325. *See, e.g.*, *id.* at 49 (illustrating how skills such as "jury selection" and "cross-examinations" are limited to mentions in the lifecycle of a case, with no further amplification or discussion).

326. *See id.* at 51–52.

327. *See* John G. Browning, *You've Been . . . Airdropped? Service via NFTs as the Next Evolutionary Step*, 9 J. COMPLEX LITIG. (forthcoming 2023) (manuscript at 1).

porn" or "nonconsensual photography."[328] They have to be conversant in not just traditional sources of evidence, but also content from social media platforms and emerging sources of digital evidence like Fitbits, Ring cameras, and Apple Watches.[329] Even existing theories of recovery, such as bystander recovery for negligent infliction of emotional distress for witnessing the horrific injury or death of a loved one, are being transformed by technologies like live streaming apps.[330] The legal landscape has been irrevocably changed by technology, and in fact was changing well before the ABA formally adopted Comment 8 to Rule 1.1 in 2012.[331]

"The 'new normal' of requiring lawyers to be technologically competent encompasses much more than the mastery of substantive legal skills and knowledge that once defined 'competent representation.'"[332] Just as lawyers have not only accepted but have come to rely on technology-assisted legal research platforms like Westlaw and LEXIS instead of bound, printed volumes, and on word processing/document creation software instead of typewriters, so it is or will be with other technology.[333] Our practice environments have changed, and along with them the expectations of both clients and courts have changed.[334] In one 2005 Florida case, for example, the court admonished a lawyer for his reliance on a phone call to directory assistance for aid in finding a party's address.[335] Finding that a Google search was "obvious," the court stated that "advances in modern technology and the widespread use of the Internet have sent the investigative techniques of a call to directory assistance the way of the horse and buggy and the eight track stereo."[336]

That "duty to Google" first surfaced nearly twenty years ago.[337] Given the rapid advances in technology, who knows what innovations will become standard enough in their use by attorneys that their utilization will be viewed as

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328. Chance Carter, *An Update on the Legal Landscape of Revenge Porn*, NAT'L ASS'N OF ATT'Y GEN. (Nov. 16, 2021), http://www.naag.org/attorney-general-journal/an-update-on-the-legal-landscape-of-revenge-porn/.

329. John G. Browning & Melvin Dixon, *The Wearable Witness: Emerging Sources of Digital Evidence*, FOR DEFENSE, Nov.–Dec. 2022, at 34, 34.

330. *See* Browning, *supra* note 20 (manuscript at 1).

331. *See* Johnson, *supra* note 50, at 167; MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2013).

332. Browning, *supra* note 23, at 196; *see also* O'Leary, *supra* note 31, at 204.

333. *See* O'Leary, *supra* note 31, at 223, 237.

334. *See id.* at 207.

335. Dubois v. Butler, 901 So. 2d 1029, 1031 (Fla. 4th Dist. Ct. App. 2005).

336. *Id.* at 1030, 1031; Michael Thomas Murphy, *The Search for Clarity in an Attorney's Duty to Google*, 18 LEGAL COMMC'N & RHETORIC 133, 140 (2021).

337. *See, e.g.*, Murphy, *supra* note 336, at 134; Munster v. Groce, 829 N.E.2d 52, 64 n.3 (Ind. Ct. App. 2005); *Dubois*, 901 So. 2d at 1031.

a matter of basic competence?[338] "In today's era of Google, Snapchat, Facebook, Twitter, and cloud computing, lawyers must be knowledgeable of both the benefits and risks of the technology that is out there—including the functionality of the technology they are actually using (or, in some cases, should be [utilizing])."[339] Just as we would regard a lawyer using a quill and ink as an anachronism, future lawyers might view a lawyer who insists on using a laptop instead of the latest holographic display as a dinosaur or relic.[340]

Of course, implementing a duty of technology competence for lawyers is only part of the battle.[341] Making sure that lawyers can comply with this duty and providing them with continuing education that assists them in fulfilling this obligation is also necessary.[342] In 2017, Florida became the first state to adopt a technology CLE requirement, beefing up its required CLE to mandate the completion of three hours every three years in approved technology programs.[343] North Carolina implemented a similar measure not long afterward.[344]

Providing competent representation in the Digital Age also involves a heightened literacy when it comes to the importance of cybersecurity measures.[345] In 2022, New York became the first state to require attorneys to complete training in cybersecurity and data privacy and protection.[346] Now, "all [New York-licensed lawyers] must complete one hour of training every two years in either the ethical obligations surrounding cybersecurity, privacy and data protection or in the technological and practice-related aspects of protecting data" as part of their CLE requirements.[347] Calling cybersecurity protection "one of the most pressing and urgent issues facing our legal profession," the New York State Bar Association's Committee on Technology and the Legal Profession says

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338. *See* Murphy, *supra* note 336, at 134–35; Browning, *supra* note 23, at 180; O'Leary, *supra* note 31, at 200.

339. Browning, *supra* note 23, at 196–97.

340. *See, e.g.*, *id.* at 190; John G. Browning, *Ignorance Is Not Bliss: Educating Lawyers and Law Students About the High Cost of Shirking the Duty of Technology Competence*, 35 ST. THOMAS L. REV. (forthcoming 2023) (on file with author).

341. *See, e.g.*, Mark D. Killian, *Court Approves CLE Tech Component*, FLA. BAR NEWS (Oct. 15, 2016), http://www.floridabar.org/the-florida-bar-news/court-approves-cle-tech-component/.

342. *See id.*

343. *Id.*

344. Bob Ambrogi, *New York Becomes the First State to Mandate CLE in Cybersecurity, Privacy and Data Protection*, LAWSITES (Aug. 4, 2022), http://www.lawnext.com/2022/08/new-york-becomes-first-state-to-mandate-cle-in-cybersecurity-privacy-and-data-protection.html.

345. *See id.*

346. *Id.*

347. *Id.*

the new requirement will, among other things, "sensitize and educate lawyers on how to secure confidential and proprietary client and law firm electronic information."[348]

Whether it is promulgating and enforcing professional rules of conduct or mandating CLE requirements, the guiding principle behind the self-regulation of the legal profession has been a simple one: protect the interests of the public—our clients—while fostering confidence in the integrity of the justice system.[349] The public has come to expect, and even to demand, technological competence of lawyers.[350] The knowledge that lawyers are reasonably conversant in relevant technology will enhance the public's confidence in the administration of justice.[351] Technology is transforming society, and it has had a transformative impact on the legal system.[352] It has brought seismic changes to substantive and procedural law, as well as to the manner in which we deliver legal services.[353] And as demonstrated by the forty states that have already adopted a duty of technological competence and the growing number of states offering and even mandating technology education, the expectations we have for our profession have changed as well.[354] For trial lawyers, perhaps the most visible segment of the legal profession to the public, this duty of technology competence and the duties that come with it have to be taken seriously, at our own peril.[355] So-called "Perry Mason moments" do not occur very often, but the impeachment of Alex Jones with text messages his lawyer had inadvertently produced and failed to claw back was an object lesson in the importance of technology competence for trial lawyers, and it occurred on a very public stage.[356]

And in examining the benefits and risks of technology in general, we must be mindful of risks that may be unique to certain technologies, such as the potential risk of bias with AI.[357] As one commentator sagely noted, "nothing about advances in the technology, per se, will solve the underlying, fundamental

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348. *Id.*

349. *See* discussion *supra* Parts III, V; MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2020).

350. O'Leary, *supra* note 31, at 255 n.202; *see also* Browning, *supra* note 23, at 196–97.

351. *See* Browning, *supra* note 23, at 183.

352. *See* Walker, *supra* note 243.

353. *See id.*

354. *See* Ambrogi, *supra* note 30; Press Release, Del. Sup. Ct., *supra* note 74.

355. *See* discussion *supra* Part IV; MODEL RULES OF PRO. CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2020).

356. *See* discussion *supra* Part III; Romano, *supra* note 98.

357. *See* discussion *supra* Part IV; Jonathan Shaw, *Artificial Intelligence & Ethics*, HARV. MAG., Jan.–Feb. 2019, at 44, 45.

problem at the heart of AI, which is that even a thoughtfully designed algorithm must make decisions based on inputs from a flawed, imperfect, unpredictable, idiosyncratic real world."[358] Just as it is important for ethical issues like bias to be addressed in the AI development phase, it is integral to ensure that lawyers using AI technology—including trial lawyers—do so in a manner consistent with our profession's ethical obligations.[359] While the cutting-edge technologies we are required to be conversant in may be new, the ethical principles we adhere to remain the same.[360]

358. Shaw, *supra* note 357, at 45.

359. *See id.*; Donahue, *supra* note 230; *Lawyers Leveraging AI for Trial*, *supra* note 42.

360. *See* discussion *supra* Parts II, IV; MODEL CODE OF PRO. CONDUCT r. 1.1 cmt. 8.