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Generative Artificial Intelligence and the Practice of Law: Impact, Opportunities, and Risks

John Villasenor*

I. INTRODUCTION

Generative artificial intelligence (AI), which uses "deep-learning models that can generate high-quality text, images, and other content based on the data they were trained on,"[1] is having a transformative impact on the practice of law. The full impact will not happen overnight, and it will not happen in the manner of the most overhyped predictions. But over the coming years (and for early adopters, today), it will gradually but profoundly shape how practicing attorneys engage with writing—an activity that plays a far more central role in the legal profession than it does in most other occupations.

The ability to produce highly coherent written content easily, quickly, and at minimal cost will not only change how attorneys write. By extension, it will also alter how law firms work, reshape the expectations of clients, broaden access to legal services, and alter legal education and training.

A key premise of this Article is that generative AI, due to its capacity to produce output that previously would have required human creativity, will in some ways have a more profound impact on how attorneys work than previous technological disruptions. While there have been highly publicized mishaps involving generative AI "hallucinations" (where an AI system makes up citations or assertions of fact out of thin air),[2] it is

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1. Kim Martineau, *What is Generative AI?*, IBM RSCH. BLOG (Apr. 20, 2023), https://research.ibm.com/blog/what-is-generative-AI.

2. *See, e.g.*, Benjamin Weiss, *Here's What Happens When Your Lawyer Uses ChatGPT*, N.Y. TIMES (May 27, 2023),

important to keep in mind that we are currently in the early days of what will become a decades-long evolution of this technology. Today's generative AI systems are no more representative of future generative AI capabilities than early mobile phones were of today's smartphones.

This Article thus aims to engage with the longer-term impact of generative AI in the legal profession. It argues that for some legal research and writing tasks, generative AI will lead to considerable efficiency improvements. It also argues that there are aspects of legal writing—including reasoning and performing highly fact- and case-specific detailed analysis—where generative AI will offer little help. The Article also examines the potential for generative AI to broaden access to legal services, exploring how the efficiencies it provides can allow legal service providers to reach a broader client base. In addition, it argues that law schools should view generative AI not as a threat but as an opportunity, and update policies and curricula accordingly. In short, generative AI is an extraordinarily powerful tool, but as with any tool, using it effectively requires an understanding of its strengths as well as of its shortcomings and limitations.

While there have been many news articles, podcasts, and blog posts since late 2022 about generative AI and the law, there has been far less formal legal scholarship to date focused on this topic, with exceptions including the work of Choi, Hickman, Monahan, and Schwarcz, and (separately) Hodge.[3] That is sure to change in the coming years given the extraordinary interest

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https://www.nytimes.com/2023/05/27/nyregion/avianca-airline-lawsuit-chatgpt.html; Pranshu Verma & Will Oremus, *These Lawyers Used ChatGPT to Save Time. They Got Fired and Fined*, WASH. POST (Nov. 16, 2023, 6:00 AM), https://www.washingtonpost.com/technology/2023/11/16/chatgpt-lawyer-fired-ai.

3. In addition to the other academic publications by one or more of these authors cited herein, *see, e.g.*, Jonathan H. Choi, Kristin E. Hickman, Amy B. Monahan & Daniel Schwarcz, *ChatGPT Goes to Law School*, 71 J. LEGAL EDUC. 387 (2022) (exploring the performance of ChatGPT on law school exams); Jonathan H. Choi, Amy B. Monahan & Daniel Schwarcz, *Lawyering in the Age of Artificial Intelligence*, MINN. L. REV. (forthcoming 2024) (examining how lawyers can use widely-available LLMs like GPT-4 and Bing Chat efficiently and ethically in the context of typical legal research and writing tasks); Samuel D. Hodge Jr., *Revolutionizing Justice: Unleashing the Power of Artificial Intelligence*, 26 SMU SCI. & TECH. L. REV. 217 (2023) (exploring the impact of AI, including generative AI, on legal practice).

in generative AI, including among legal practitioners and scholars.

Before proceeding, it is important to underscore that any attempt to predict the future impact of a technology is fraught. In the mid-1990s, it was easy to foresee that mobile phones and cellular networks would become more technologically sophisticated and that the Internet would grow in size and scope. But few people then foresaw that the *combination* of those technologies would lead to the emergence of the social media and app ecosystems that we have today. By analogy, the future impacts of generative AI may in part depend on its interactions among multiple technologies in ways that are difficult to envision today.

A. TECHNOLOGY CONTEXT

To explore the likely future impact of generative AI, it can be instructive to look to previous transformations to legal practice spurred by technological advances. Consider the three decades spanning from the mid-1970s through the mid-2000s. Over this period, through a combination of improved computer and communications technologies and the growth of the Internet, information storage and access transitioned from largely paper to predominantly (though by no means completely) digital.

The technology used in legal practice developed in a manner reflecting this broader transition. In the mid-1970s, legal research was still done by going to law libraries and paging through paper records. By the mid-2000s, legal research had been completely reshaped through a continued series of innovations initially led by companies including West Publishing Company through its Westlaw product,[4] Mead Data Central (now LexisNexis) through its Lexis product,[5] and later

4. In 1979, Westlaw was "offered via dial-up connection" for digital access to court decisions. *See* Bill Voedisch, WESTLAW . . . An Early History 20 (2015) (unpublished manuscript) (available at https://librarycollections.law.umn.edu/documents/William_Voedisch_An_Early_History_of_Westlaw_2015.pdf).

5. LEXISNEXIS, THE LEXISNEXIS TIMELINE 3–4 (2003). The timeline notes for example, that in 1979, the "UBIQ terminal is introduced, putting the Lexis service directly on the desktops of senior attorneys." *Id.* at 3. In 1994, "the company [became] known as LexisNexis." *Id.* at 4.

by companies such as Google, which introduced Google Scholar in 2004.[6]

Another related transformation is the emergence of e-discovery. By the early 2000s, e-mails had become a major focus of discovery in litigation.[7] In 2006, the Federal Rules of Civil Procedure were amended to provide that "discovery of electronically stored information stands on equal footing with discovery of paper documents."[8] With continuing declines in the cost of digital storage, disputes where the volume of data produced in discovery was in the dozens of Gigabytes became possible, and then common.

As important as these past technological changes were, they in some respects acted in a complementary manner that actually had the result of creating a lower impact than if they had occurred in isolation. The mushrooming volume of discovery materials would have generated even more dislocation if it had not been accompanied by advances in the ability to search digital documents. And while legal research tools have advanced enormously in recent decades, they now are called on to locate information in databases of information that are orders of magnitude larger than in the past. In short, the legal research technology advances since the late 20th century have involved the combination of growing amounts of digital information with increasingly powerful tools to search and access that information.

Generative AI is fundamentally different. Unlike the technologies described above, which were designed to help attorneys efficiently find information that they could then use in formulating and supporting arguments, generative AI can directly contribute to the process of articulating arguments. It thus impacts a completely different part of the workflow than the storage, search, and information access advances that have been the focus of most of the technology change in the legal profession in recent decades.

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6. Rita Vine, *Google Scholar*, 94 J. MED. LIBR. ASS'N 97, 97 (2006) (stating Google Scholar was launched in November 2004).

7. Lesley Friedman Rosenthal, *Electronic Discovery Can Unearth Treasure Trove of Information or Potential Land Mines*, 75 N.Y. ST. BAR ASS'N J. 32 (2003).

8. FED. R. CIV. P. 34 (advisory committee's note to 2006 amendment).

B. AVAILABILITY OF GENERATIVE AI

AI has been a topic of academic interest since the mid-20th century,[9] and is now well established commercially. Generative AI, however, has only recently attracted wide public interest. In late 2022, OpenAI released ChatGPT,[10] a chatbot capable of responding with longform answers to text prompts. In the subsequent weeks, news stores highlighted its ability to produce "frighteningly good essays,"[11] observing that it "composes Shakespearean poetry, tells jokes and writes computer code."[12] An article in Harvard Business Review called it a "tipping point" for AI,[13] and the Atlantic published a story titled "The End of High School English."[14] ChatGPT attracted more than a million users within a week after its launch,[15] and within two months, it was "estimated to have reached 100 million monthly active users . . . making it the fastest-growing consumer application in history."[16]

The capabilities of ChatGPT came as a surprise to many people because AI prior to 2022 was better known for its use for

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9. The beginnings of AI are often traced to the work of computer scientist Alan Turing, who in 1950 published a now-famous scientific paper titled "Computing Machinery & Intelligence" and asking the question "Can machines think?" Alan M. Turing, *Computing Machinery & Intelligence*, 59 MIND 433, 433 (1950).

10. *Introducing ChatGPT*, OPENAI (Nov. 30, 2022), https://openai.com/blog/chatgpt.

11. Samantha Murphy Kelly, *This AI Chatbot is Dominating Social Media with its Frighteningly Good Essays*, CNN (Dec. 5, 2022, 3:30 PM), https://web.archive.org/web/20221205203209/https://www.cnn.com/2022/12/05/tech/chatgpt-trnd/index.html.

12. Max Zahn, *What is ChatGPT, the Artificial Intelligence Text Bot that Went Viral? The Chatbot Composes Shakespearean Poetry, Tells Jokes and Writes Computer Code*, ABC NEWS (Dec. 9, 2022, 4:04 PM), https://abcnews.go.com/Technology/chatgpt-artificial-intelligence-text-bot-viral/story?id=94857599 ("[ChatGPT] drew more than a million users in its first week").

13. Ethan Mollick, *ChatGPT Is a Tipping Point for AI*, HARV. BUS. REV. (Dec. 14, 2022), https://hbr.org/2022/12/chatgpt-is-a-tipping-point-for-ai.

14. Daniel Herman, *The End of High-School English*, ATLANTIC (Dec. 9, 2022), https://www.theatlantic.com/technology/archive/2022/12/openai-chatgpt-writing-high-school-english-essay/672412.

15. Zahn, *supra* note 12.

16. Krystal Hu, *ChatGPT Sets Record for Fastest-Growing User Base - Analyst Note*, REUTERS (Feb. 2, 2023, 9:33 AM), https://www.reuters.com/technology/chatgpt-sets-record-fastest-growing-user-base-analyst-note-2023-02-01 (citing a UBS study).

tasks such as powering Internet search[17] and making purchase recommendations for online shopping at sites such as Amazon.[18] The underlying technology in generative AI chatbots such as ChatGPT is a large language model (LLM); i.e., "a deep learning algorithm that can recognize, summarize, translate, predict and generate text and other content based on knowledge gained from massive datasets."[19] While generative AI has received the most attention in relation to text, it can also be applied to producing images. In January 2021, OpenAI announced the initial release of DALL·E, a neural-network based AI system that "creates images from text captions for a wide range of concepts expressible in natural language."[20] A newer version, DALL·E 3, was released in October 2023.[21] Other generative AI-based image generation tools include Stable Diffusion from stability.ai,[22] and Midjourney, from the company of the same name.[23]

While there has been significant scholarship regarding the impact of AI on the legal field,[24] and in fact since 1992 there has

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17. James A. Martin, *Inside RankBrain: What Google's New Search Algorithm Means to You*, CIO (Nov. 24, 2015), www.cio.com/article/242727/inside-rankbrain-what-googles-new-search-algorithm-means-to-you.html.

18. Dan Catchpole, *How Spotify and Amazon Are Using A.I. to Learn Your Preferences—And Even Read Your Mood*, FORTUNE (Nov. 9, 2021, 2:45 PM), www.fortune.com/2021/11/09/spotify-amazon-ai-alexa-artificial-intelligence-preferences-mood.

19. Angie Lee, *What are Large Language Models Used For?*, NVIDIA (Jan. 26, 2023), https://blogs.nvidia.com/blog/2023/01/26/what-are-large-language-models-used-for.

20. *DALL·E: Creating Images from Text*, OPENAI (Jan. 5, 2021), https://openai.com/research/dall-e.

21. *DALL·E 3 is Now Available in ChatGPT Plus and Enterprise*, OPENAI (Oct. 19, 2023), https://openai.com/blog/dall-e-3-is-now-available-in-chatgpt-plus-and-enterprise.

22. *Stable Diffusion XL*, STABILITY.AI, https://stability.ai/stable-diffusion (last visited Nov. 7, 2023).

23. MIDJOURNEY, https://www.midjourney.com/home (last visited Nov. 7, 2023).

24. *See, e.g.*, John Armour & Mari Sako, *AI-Enabled Business Models in Legal Services: From Traditional Law Firms to Next-Generation Law Companies?*, 7 J. PROS. & ORG. 27 (2020); Alyson Carrel, *Legal Intelligence Through Artificial Intelligence Requires Emotional Intelligence: A New Competency Model for the 21st Century Legal Professional*, 35 GA. ST. U. L. REV. 1153 (2019); Daniel W. Linna Jr., *Evaluating Artificial Intelligence for Legal Services: Can 'Soft Law' Lead to Enforceable Standards for Effectiveness?,* 40

been a journal titled "Artificial Intelligence in Law,"[25] there is not yet a substantive body of scholarship on the specific impact of *generative* AI on legal practice.[26] This Article aims to help fill that gap. The remainder of this Article is organized as follows. Part II considers how generative AI can impact drafting of motions and how it can broaden access to legal services. It also considers tasks *not* well suited to generative AI. Part III addresses how law firms and law schools can help build a generative AI-capable workforce. Conclusions are offered in Part IV.

II. EXEMPLARY APPLICATIONS

Generative AI can be applied in law in many different ways. It can be used to accelerate legal research and to produce drafts of text for use in contracts, regulatory filings, court rulings, academic papers, wills, trusts, patent specifications, affidavits, articles of incorporation, and more. AI will rarely create any of these documents from scratch but will rather create them using a combination of template databases, input data, and prompts. One of the tasks for designers of these systems will be to ensure that they have the flexibility and capacity to produce high-quality outputs while also being sufficiently user-friendly to enable broad adoption.

Early evidence suggests that the efficiency improvements accessible through the use of generative AI will be significant. In a paper describing the results of "the first randomized controlled trial of AI assistance's effect on human legal analysis," Choi, Monahan, and Schwarcz "found that access to GPT-4 slightly and inconsistently improved the quality of participants' legal analysis but induced large and consistent increases in speed."[27]

IEEE TECH. & SOC'Y MAGAZINE 37 (2021); Gary E. Marchant, *Artificial Intelligence and the Future of Legal Practice*, 14 A.B.A. SCITECH LAW. 21 (2017).

25. Serena Villata et al., *Thirty Years of Artificial Intelligence and Law: The Third Decade*, 30 A.I. & L. 561, 561 (2022) ("The first issue of *Artificial Intelligence and Law* journal was published in 1992.").

26. The number of publications (academic or otherwise) addressing how generative AI will impact legal practice is growing rapidly. *See, e.g.*, Suzanne McGee, *Generative AI and the Law*, LEXISNEXIS, https://www.lexisnexis.com/html/lexisnexis-generative-ai-story (last visited Apr. 10, 2024); *Introducing the March 2023 Issue*, PRAC., Mar. 2023, https://clp.law.harvard.edu/knowledge-hub/magazine/issues/generative-ai-in-the-legal-profession.

27. Choi, Monahan & Schwarcz, *supra* note 3, at 1.

This section explores two potential areas of impact: drafting motions and broadening access to legal services. These two areas can potentially overlap—for instance, access to legal services can be improved in part through software that speeds the drafting of motions. However, because the sectors of the legal profession they will impact will in many instances be distinct, they are addressed separately.

A. DRAFTING MOTIONS

Motion practice is central to many disputes and provides a useful context to explore the potential uses of generative AI. When litigating a case, attorneys may file and respond to motions asking a court to dismiss or stay a case, permit a party to amend a pleading, permit a party to intervene, compel production of documents or answers to interrogatories, strike expert opinions, prohibit particular testimony to a jury (motions *in limine*), issue summary judgment, issue an injunction or directed verdict, or order a new trial.[28] In the months leading up to and immediately following a trial in a complex case, motion deadlines can arrive in quick succession, and sometimes simultaneously.[29]

In addition, each motion can involve a sequence of multiple filings. For example, (1) the moving party files a motion and accompanying memorandum containing the arguments supporting the motion; (2) the party opposing the motion files a response (also called an opposition); (3) the moving party files a reply; and (less commonly) (4) the party opposing the motion may have an opportunity to file a sur-reply. In combination, this involves a lot of writing, often under tight time constraints. For example, under the local civil rules for federal courts in the Western District of Texas, responses (other than for amended pleadings)[30] are due within seven days "for discovery and case management motions" and fourteen days for other motions.[31] Reply motions are due within seven days after responses.[32] An

28. This list is exemplary, not exhaustive.

29. For instance, a court may set a single date on which all dispositive motions must be filed.

30. W.D. TEX. CIV. R. CV-15.

31. W.D. TEX. CIV. R. CV-7(d)(2).

32. W.D. TEX. CIV. R. CV-7(e)(2).

additional constraint is length, as courts routinely impose a word limit on motion filings.[33]

It is an understatement to say that it would be a mistake to entrust today's generative AI systems to generate ready-to-file motions at the push of a button. But consider a thought experiment involving two changes. First, think not of today's generative AI technology, but rather the technology that will be available in five, ten, or fifteen years. Second, imagine asking an AI system to create an initial draft, rather than expecting it to produce a ready-to-file final version at the push of a button.

With those changes in mind, consider how an attorney of the future, when tasked with writing a response to a motion in a civil federal district court case, could use generative AI. They would start by carefully reviewing the motion to which they are responding,[34] just as they would in a world without AI tools. Using their knowledge of the case, they would then work (potentially along with their colleagues) to identify several of what they believe to be the strongest bullet-point-level arguments to make in the response. Identifying these key arguments is a core intellectual contribution that the attorney is providing, and it has very little to do with AI.

Next, they could turn to a generative AI system, using it to dramatically streamline the process of drafting the response. They could provide the AI system with the motion to which they are responding and ensure that it has access to all the documents and authorities (e.g., cases and laws) it cites. They could also ensure that the AI system has access to the full set of documents in the case *not* cited in the motion, as those might be useful in the response. In addition, they could ensure that the AI system has access to other publicly available motions from courts in the district and circuit on similar topics, as well as the responses, replies, and the court decisions on those motions (as well as the rulings more generally in relation to the cases for which those motions were filed, and documents filed pursuant to any appeal). Then, after providing the key arguments in bullet point form, they could ask the AI system to produce a draft of a

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33. *See, e.g.,* W.D. TEX. CIV. R. CV-7(c)(2); FED. R. APP. P. 27(d)(2) (providing length limits for motions).

34. The term "motion" is used here to include the memorandum presenting the arguments supporting the motion.

response, conforming to the length, citation guidelines, formatting, and structure required under the local rules.

Nearly instantaneously, the attorney would receive a draft produced in light of the information and constraints above. Even allowing for five, ten, or fifteen years of technological advances, that draft will not be perfect, and will need wordsmithing and fact checking. But it will be available immediately, and significant portions of it may not need much wordsmithing.

Hallucinations are likely to be much less common in the future. Companies making AI systems for drafting legal filings will presumably include a feature that automatically runs system outputs through verification to ensure that all citations and other assertions of fact are accurate. Using this process, the attorney may be able to produce in an afternoon a document that without AI would have required multiple days of drafting and revising.

As an additional option, the speed at which generative AI works could also be leveraged to create several independent drafts of a motion. Generative AI systems typically have an element of randomization, so that providing the same input multiple times will not necessarily lead to a repeated set of outputs. This can be illustrated by providing ChatGPT with the prompt "tell me a Haiku" twice in a row in the same session. Even though the prompt in each instance is the same, the two responses will generally be different. Randomness can similarly be leveraged in future generative AI systems to generate two or three drafts of a document. Because the cost and time to produce multiple drafts from the same input information is essentially zero, it can in some circumstances be beneficial to see several different approaches to making and supporting the same arguments, and to then manually combine the best of those approaches into a single document.

Alternatively, instead of asking an AI system to produce a first draft, an attorney could ask it to streamline a rough early draft, filling out arguments and adding citations. Yet another option would be to use AI to revise arguments to present them more convincingly or concisely, or to identify potential rebuttals that the attorney might want to address. AI could also be used to find apparent or actual inconsistencies with statements made in earlier filings. It could also be used to identify earlier cases involving similar questions that the court, or the relevant appeals court, has found persuasive.

Notwithstanding the above, it is important not to let the tool obscure the task. Generative AI makes it easy to produce text, but that does not mean that the resulting text will optimally advance and support an argument. The best arguments will often involve knowing which specific details among thousands or millions are best suited to include in court filing. Identifying those details, and convincingly using them in an argument is something that a person can do far better than a computer. In a world where high performance generative AI tools are common, the most effective attorneys will not be those who use AI the most, but rather will be those who use it judiciously and carefully while also knowing when *not* to use it.

Even allowing for multiple years of future progress in generative AI and in AI-based document analysis, a good attorney will still have a far more comprehensive grasp of a case than does an AI system. A good attorney will know the goals, budget, and risk tolerance of the client, the strengths and weaknesses of the parties' arguments, the anticipated effectiveness of trial witnesses, and much more. A good attorney will be able to weigh all these factors in guiding decisions regarding how and in what form to present arguments, both on paper and in court. In short, generative AI can be an extraordinarily powerful tool, but at the end of the day it is still just a tool.

B. BROADENING ACCESS TO LEGAL SERVICES

As Linna has written, "[a]ccelerating responsible adoption of AI for legal-services delivery can help expand access to legal services."[35] According to the 2022 Justice Gap Survey published by the Legal Services Corporation based on a survey conducted in 2021, 74% of "low-income households experienced 1+ civil legal problems in the past year,"[36] and 55% of "low-income Americans who personally experienced a problem say these problems substantially impacted their lives."[37] The topics that were the most common source of legal problems were "consumer issues, health care, housing, [and] income maintenance."[38] As

35. Linna Jr., *supra* note 24, at 48.

36. LEGAL SERVS. CORP, THE JUSTICE GAP: EXECUTIVE SUMMARY 1 (2022), https://justicegap.lsc.gov/resource/executive-summary (last visited Nov. 7, 2023).

37. *Id.*

38. *Id.*

generative AI technology matures, it can help address these longstanding and pervasive challenges in access to the legal system.

Consider how generative AI could be used to help low-income tenants and/or tenants living in rent-stabilized dwellings access legal services in relation to tenant harassment. Many cities have ordinances prohibiting tenant harassment. For instance, Los Angeles has an ordinance prohibiting a "landlord's knowing and willful course of conduct directed at a specific tenant or tenants that causes detriment and harm, and that serves no lawful purpose."[39]

These ordinances can be hard to enforce. One challenge is that tenants may not be aware of their rights. In addition, even when tenants are aware of their rights, they may not have the legal resources to pursue claims. AI can help solve both of these challenges. Ye and colleagues report using machine learning (without mentioning generative AI) to enable the New York City Public Engagement Unit to better identify tenants at risk of harassment.[40] In addition, generative AI can be used to speed the process of creating the documents needed to file claims.

1. Supporting *Pro Se* Litigants

Generative AI could be used to lower the barriers facing *pro se* litigants. The New York Legal Aid Society explains that tenants in New York City can initiate a harassment claim without an attorney.[41] To file a claim, a tenant can obtain the forms from the Clerk of the Housing Court, and then "[f]ully fill out the forms provided by the Clerk, including the dates and other details of the incidents of harassment."[42] An exemplary future generative AI system, designed specifically to support tenants engaging in this process, could make it much easier for tenants to initiate a complaint.

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39. L.A., CAL., MUN. CODE § 45.33 (2021). The ordinance provides 16 examples of harassment including "failing to perform and timely complete necessary repairs and maintenance required by Federal, State, County, or local housing, health, or safety laws." *Id.*

40. Teng Ye et al., *Using Machine Learning to Help Vulnerable Tenants in New York City*, COMPASS '19 248, 248 (2019).

41. *What You Need to Know About Tenant Harassment in NYC*, LEGAL AID SOC'Y, https://legalaidnyc.org/get-help/housing-problems/what-you-need-to-know-about-tenant-harassment (last visited Apr. 10, 2024) (answering the question "How do I sue my landlord for harassment without an attorney?").

42. *Id.*

The system could be highly interactive and available in multiple languages. It could ask the tenants to provide basic information such as their name, address, the landlord's name and address, and a short description of the alleged incidents. The system could then ask for clarification and additional information as needed. For instance, if a tenant writes that an incident occurred "last Monday," the AI system could ask "By last Monday, do you mean Monday, January 8?" The AI system could also ask the tenant to upload documentation, including any relevant text, email, or photos of paper correspondence with the landlord, photos or videos documenting problems (e.g., a leak).[43]

Through analyzing the descriptions and other information provided by the tenant as well as photos and videos, the AI system could then produce a proposed draft of the forms to be submitted to the court. It could then prompt the tenant to either approve the forms, or to identify and revise any portions that need revision. Once the content is finalized, the system could (if needed) translate it into English and create the ready-to-file documents.

2. In-house Generative AI Tools

With some modifications, the same approach to generating documents described above could also be used to create in-house tools for city governments and/or private legal services organizations to assist tenants. Generative AI could enable these organizations to make it much more efficient to generate the documents associated with filing a claim. AI systems could also be used prior to filing a claim, e.g., for generating a letter to a landlord describing the alleged violations, supporting the allegations with documentation, and informing a landlord that a claim will be filed if the issues are not promptly resolved.

Such systems will not be used in a fully automated, push-button manner, as there is far too much variation in the fact patterns involved. But staff members at a city tenants' rights organization who become experienced and skilled at using a high-quality generative AI system customized for this particular

43. These tasks are more akin to traditional software-driven form-filling than to generative AI. But there is no requirement that a generative AI system *only* perform generative AI tasks. In this hypothetical, the process of gathering the right information is a necessary precursor to using generative AI to create a filing based on that information.

application will be able to serve a far broader number of people than would be possible without AI.

There are also possibilities to adopt a hybrid approach where a tenants' rights organization provides tenants with a link for them to enter the information necessary for a claim, just as described above for the *pro se* litigant. Once draft documents are created by a generative AI system based on the tenants' input, staff members at the tenants' rights organization can review them, making any necessary changes.

3. Technical, Regulatory and Legal Considerations

From a technology standpoint, the above scenarios are very much within reach. However, for them to become a widely deployed reality, there are a series of further considerations. One question is how good such systems should be before they are deployed. On the one hand, there is a pressing need to broaden access to legal services. On the other hand, the premature deployment of generative AI systems that are not of sufficient quality would have the opposite of the intended effect, creating frustration for users, producing low-quality court filings, and generating a reputation that would disincentivize people from using future, more capable AI systems.

Another issue is that by definition, such a system would need to collect personally identifiable information and other information with privacy and privilege implications. The system's designers would need to ensure that appropriate technological measures are in place to protect the information and that its collection is performed in a manner that complies with all applicable privacy requirements.

For AI solutions for *pro se* litigants, the act of providing assistance using a generative AI system would itself spur litigation. As a consequence of providing automated legal services (regardless of any use of AI), LegalZoom was targeted with multiple lawsuits alleging unauthorized practice of law.[44] There would almost certainly be similar claims targeting the

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44. *See* Caroline Shipman, *Unauthorized Practice of Law Claims Against LegalZoom—Who Do These Lawsuits Protect, and is the Rule Outdated?*, 32 GEO. J. LEGAL ETHICS 939, 940 (2020) (analyzing unauthorized practice of law claims against LegalZoom). *See also* Sara Merken, *New York Asks Court to Allow State to Police Nonprofit's Legal Advice Program*, REUTERS (Oct. 6, 2022, 3:21 PM), https://www.reuters.com/legal/legalindustry/new-york-asks-court-allow-state-police-nonprofits-legal-advice-program-2022-10-06.

provider of a generative AI system intended for use by *pro se* litigants.

In combination, these considerations mean that wide deployment of high-quality generative AI systems to improve access to justice will not occur overnight. Performing the requisite software development and testing, navigating the litigation that may accompany releases of products in this category of generative AI systems, and updating regulatory frameworks to permit their deployment while ensuring appropriate levels of consumer protection will take years.[45] But in the not-too-distant future, it seems reasonable to expect that generative AI will become a key mechanism for lowering the barriers to obtaining legal services.

III. BUILDING A GENERATIVE AI-CAPABLE WORKFORCE

For generative AI to reach its potential in the legal profession, it will need to be easy to use, including by practitioners with little interest in the details of the underlying technology. Once again, the technology changes in recent decades provide a useful analogy. In the early days of the Internet, using it required some measure of technical knowledge. The extraordinary growth of the Internet starting in the mid-1990s was fueled by the introduction of easy-to-use web browsers and—behind the scenes—the development of communications protocols enabling those browsers to be useful. It was the environment making the technology easy to use as much as the underlying technology itself that was key to driving adoption.

This will hold true with generative AI as well, and to some extent it already has. The rapid growth in users of ChatGPT in the months following its late 2022 release occurred in large part because it was so easy to use, even though the technology for large language models underlying chatbots such as ChatGPT

45. Both Utah and Arizona have made changes that remove some regulatory restrictions involving law firms, though these changes are not specifically directed to AI. *See* Arthur J. Lachman & Jan L. Jacobowitz, *Arizona and Utah Jumpstart Legal Regulatory Reform*, L. PRAC. TODAY (Nov. 13, 2020), https://www.lawpracticetoday.org/article/arizona-utah-jumpstart-legal-regulatory-reform.

had already been in existence years earlier.[46] For generative AI solutions to gain widespread adoption among legal practitioners, they will also need to be easy to use.

There are many companies currently working on developing generative AI products, and at least one such product, CoCounsel, has been commercially released and is in use by some law firms.[47] As with any technology, generative AI will take time to mature, and its earliest manifestations will be far less powerful than technology generations that follow. Generative AI in law will reflect a complex ecosystem that includes legal technology startup companies, established companies, individual practitioners, professional organizations such as the American Bar Association, state bar associations, regulatory agencies, law firms, clients of law firms, law schools, and law students. The following discussion explores how two of these constituencies—law firms and law schools—can engage with the opportunities and challenges associated with generative AI.

A. LAW FIRMS

Law firms have an obvious interest in tracking new legal technology developments and in providing their employees with best-in-class tools to allow them to work more effectively. As Armour and Sako have written, the impact of AI on law firms will depend on a multiplicity of factors including firm business models and organizational structures.[48]

Law firms that are early adopters of generative AI will be at the cutting edge of this new technology but will need to navigate a nascent and rapidly changing marketplace of products, some of which may later vanish from the marketplace or quickly become obsolete. And while generative AI will indeed be

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46. *See* Tom Brown et al., *Language Models Are Few-Shot Learners*, *in* ADVANCES IN NEURAL INFORMATION PROCESSING SYSTEMS 33 (Hugo Larochelle et al. eds., 2020), available at https://arxiv.org/pdf/2005.14165.pdf (describing large language models over two years before ChatGPT was launched).

47. *See, e.g.*, *DLA Piper to Utilize CoCounsel, the Groundbreaking AI Legal Assistant Powered by OpenAI Technology*, DLA PIPER (Mar. 15, 2023), https://www.dlapiper.com/en/news/2023/03/dla-piper-to-utilize-cocounsel-the-groundbreaking-ai-legal-assistant-powered-by-openai-technology; Matt Perez, *McGuireWoods Latest to Adopt Casetext's AI Assistant Tool*, LAW360 (Aug. 23, 2023, 4:30PM), https://www.law360.com/pulse/articles/1714369/mcguirewoods-latest-to-adopt-casetext-s-ai-assistant-tool.

48. Armour & Sako, *supra* note 24, at 28.

transformative, that transformation will not occur as fast as suggested by some of its most enthusiastic proponents.

As the history of technology development in other domains makes clear, early versions of generative AI tools for the legal market will be expensive relative to what will be available a few years later, both in direct dollar terms, and in terms of the costs of training employees to learn how to use them. Furthermore, like any emergent digital technology, generative AI will improve over time as it becomes more performant and easier to use. By definition, that means earlier versions of generative AI will leave plenty of opportunities for improvement, some of which may only become evident when they are rolled out and used by large numbers of people. Not all law firms will want to take on the burden that accompanies being an early adopter.

At the other end of the spectrum, it would be a mistake for a law firm to disregard generative AI completely, as it will offer efficiency advantages that will become increasingly difficult to pass up as the technology matures. Over the long term, firms that fail to take advantage of those efficiency advantages will incur more costs relative to their competitors in delivering services. Just as it would be unthinkable today for a law firm not to provide its attorneys with access to search tools for finding relevant court decisions, it will be unthinkable for a law firm of the future not to provide its attorneys with access to high-quality generative AI tools.

For most law firms, the best approach will balance engagement with generative AI with full consideration of the financial and other costs involved in its use, as well as the ethical and logistical considerations.[49] For example, for large firms, this could mean appointing a committee of attorneys to track the market for generative AI tools, testing those it deems promising, and then recommending for adoption by the full firm only those tools that the committee is confident will (1) be effective at streamlining workflows without imposing too steep a training barrier, (2) protect the confidentiality of client data, and (3) have staying power in the market. Once a tool is made available firm-wide, the firm will also need to facilitate training opportunities for the firm's attorneys as well as ensure that they have access to ongoing support.

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49. A logistical consideration could be client-specific requests to use (or avoid using) specific generative AI tools.

It will be important for law firms to observe market dynamics, and to recognize that the early generative AI market leaders may not stay in that position. It may turn out that a large incumbent company is able to develop (or acquire) the best generative AI solution for the 2030s. Or it may turn out that some as-yet-unknown company will capture the largest market share. It is worth bearing in mind that, as the history of technology in other domains such as Internet search[50] and smartphones[51] makes clear, early technology leaders commonly do not remain leaders over the longer term.

B. LAW SCHOOLS

A young J.D. recipient entering the legal profession in the mid-2020s may be professionally active into the 2070s. While it is impossible to foresee the specifics of how technology will evolve over that long a time span, it is clear that today's law students will practice their careers in an environment where powerful generative AI tools are a part of the landscape, just as Internet search is a part of the landscape today. Law schools should prepare students for the technology environment they will inhabit, as opposed to the technology environment their teachers may view as most familiar. Law graduates who enter the job market with proficiency using generative AI will work more efficiently and be viewed as stronger job candidates.

That said, some of the same cautions noted above with respect to how law firms engage with the generative AI market also apply for law schools. Like law firms, law schools will receive pitches from companies offering generative AI legal solutions. Companies will be particularly motivated to get law schools to adopt their products, as it provides a mechanism to get students to test the products, thereby generating valuable data for use in improving the product, and because adoption by a law school confers prestige on the company that it can then leverage in making other sales. Law schools will need to be aware of this dynamic, and understand the costs that can

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50. In the second half of the 1990s, Yahoo was the top search engine. *See* Steven Vaughan-Nichols, *The Rise and Fall of Yahoo*, ZDNET (July 25, 2016, 1:10 PM), https://www.zdnet.com/article/the-rise-and-fall-of-yahoo.

51. *Smartphone*, BRITANNICA, https://www.britannica.com/technology/smartphone (last visited Nov. 9, 2023) ("The first smartphone was designed by IBM and sold by BellSouth . . . in 1993.").

accompany early adoption, even if the initial subscription dollar amounts are low or even free.

To be most effective in helping students develop that proficiency, law schools should update their legal research and writing instruction to specifically teach students the skills to responsibly use generative AI. In addition, they should permit the responsible use of generative AI in law school student paper assignments, including in courses that are not specifically focused on legal writing.[52] Of course, there are complex considerations associated with developing the rules for when and in what manner students should use AI.

There is also the issue of how it will impact student learning and the quality of the written work they are able to produce. In a study examining the impact of allowing students to use AI for law school exams, Choi and Schwarcz "found that students consistently benefited from AI assistance only on simple multiple-choice questions and that GPT-4 alone outperformed both students alone and students with AI assistance with effective prompt engineering."[53] In addition, they observed a "large variation in the effect of AI assistance, with the worst-performing students seeing the largest gains, and the best-performing students seeing declines in performance."[54] The observed decline in the best-performing students is particularly interesting, though it is likely reflects the combination of (1) the fact that most of today's students have little experience using AI for exams, and (2) current generative AI tools are rudimentary relative to those that will be available a few years from now. With better AI tools and greater student skill in using them, there is every reason to expect that access to AI will enable law students (and attorneys) to improve the quality of their written work.

1. Legal Research and Writing

As a condition for law school accreditation, the American Bar Association requires that a J.D. curriculum include "one

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52. There is also a separate question of when use of generative AI should be permitted in law school exams. Given the variety of approaches to conducting exams, this Article does not address that question.

53. Jonathan H. Choi & Daniel Schwarcz, *AI Assistance in Legal Analysis: An Empirical Study*, 73 J. LEGAL EDUC. (forthcoming 2024) (manuscript at 35, available at https://ssrn.com/abstract=4539836).

54. *Id.*

writing experience in the first year and at least one additional writing experience after the first year, both of which are faculty supervised."[55] While different law schools have chosen different approaches to satisfying this requirement, all J.D. students do significant writing, both in courses focused on teaching writing as well as in courses on other topics that include a paper assignment.

Law schools should view generative AI as an opportunity as opposed to a threat.[56] Rather than banning student use of ChatGPT for assignments, they should help students learn how to use generative AI tools, while also instructing them on their appropriate use. Students should be told that they are fully accountable for any writing that they turn in listing them as an author. This includes independently checking citations and assertions of fact for accuracy and running the output of a generative AI system through a plagiarism checker to see if there are any matches. It also includes recognizing the shortcomings of generative AI.

For instance, while current generative AI tools are quite good at producing relatively short form answers of a few paragraphs in length, they are not yet particularly good at producing multiple high-quality pages of contiguous text. Students will often need to do substantive editing on generative AI outputs to create a well-written, coherent document that reflects their own thinking on a topic. They will also need to learn how to most effectively use generative AI, including how to construct effective prompts. The December 2023 announcement that LexisNexis is making its Lexis+AI generative AI tool available to many law students underscored the need for law schools to adapt to the growing availability of this technology.[57]

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55. STANDARDS AND RULES OF PROC. FOR APPROVAL OF L. SCHOOLS 2023-2024, Standard No. 303(a)(2) (AM. BAR ASS'N 2023).

56. John Villasenor, *How ChatGPT Can Improve Education, Not Threaten It*, SCI. AM. (Feb. 20, 2023), https://www.scientificamerican.com/article/how-chatgpt-can-improve-education-not-threaten-it.

57. Julianne Hill, *Law Students Will Gain Access to LexisNexis' Generative Artificial Intelligence Platform*, A.B.A. J. (Dec. 20, 2023, 8:14 AM), https://www.abajournal.com/web/article/law-students-gain-access-to-lexis-ai-generative-ai ("[Lexis+ AI] will become available to 100,000 second- and third-year law and master of laws students at ABA-accredited law schools during the upcoming spring [2024] semester.").

Furthermore, putting aside for a moment the policy questions raised by generative AI in law schools, from a purely technological perspective, a school ban prohibiting students from using generative AI for writing papers would be problematic. As there is currently no sufficiently reliable way to identify text created by generative AI, law schools that attempt to enforce a ban would inevitably falsely accuse some students of using AI even when they did not.[58] Even if the number of false positives is low in percentage terms, it would be high in numerical terms given the size of the law student population. This alone would make law schools' use of technologies for detecting generative AI unjust. And while these technologies will improve over time, so too will the quality of generative AI output, meaning the false positive problem will not be going away.

That said, there is an interesting question of what disclosures law schools may require in relation to generative AI. One approach is for law schools to mandate that students disclose the fact of its use and the manner in which they used it. Another approach is for schools to affirmatively decide *not* to have such a mandate, on the theory that just as today's attorneys have no need to disclose when they used grammar-checking tools in their writing, future attorneys will not necessarily be expected to disclose their use of generative AI.[59]

2. What About Plagiarism?

In law schools and beyond, generative AI creates a set of interesting questions with respect to plagiarism. It might be argued that anything outputted by a generative AI system by definition is not original work and is therefore plagiarized.[60] But that seems overly simplistic. Consider a writer who instructs a generative AI system to "write an introductory paragraph of about 150 words making these three key points," and then provides the system with the three points expressed in bullet

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58. Geoffrey A. Fowler, *We Tested a New ChatGPT-Detector for Teachers. It Flagged an Innocent Student*, WASH. POST (Apr. 3, 2023), https://www.washingtonpost.com/technology/2023/04/01/chatgpt-cheating-detection-turnitin.

59. That said, there will also be circumstances in which such a disclosure is expected. For instance, a client might require attorneys to disclose when and how they have used AI in their work.

60. For avoidance of doubt, none of the text in this Article was produced using generative AI!

point form. It could be argued that the resulting paragraph is not plagiarized but is instead the writer's own ideas expressed with the assistance of a useful tool.

Another complicating factor is that standards and expectations regarding originality vary significantly across different domains within law. A law professor writing an academic article must rigorously identify and cite any text obtained from other sources. But an attorney drafting a motion does not need to make sure that every sentence it contains is original. Motions often contain sections on legal standards that are very similar across many different cases, and an attorney who starts the motion drafting process by copying and pasting useful text (including citations therein) from a document written by a colleague is saving time, not committing plagiarism. A more interesting fact pattern occurs when an attorney drafting a motion copies text from a document written by a completely different firm. This undoubtedly happens frequently, and it doesn't usually lead to accusations of plagiarism or of copyright violation, even though it may be both.[61]

The entire purpose of a motion is to make an argument. In most cases, the court and opposing party are not likely to spend much time worrying about whether the words used to express the argument are original.[62] They are focused on the strength of the argument, regardless of its originality. A similar point can be made about contracts, wills, and trusts. In fact, for those categories of documents it is often an *advantage* to copy time-tested language that has been proven in court to provide the desired outcome. For efficiency, most attorneys write contracts by copying relevant text from other contracts and then making modifications as appropriate. If a contract is ever litigated, no one will typically care whether the language it contains may have been derived in part from another source. What matters is the language, not its source. By contrast, in an academic publication, originality is of paramount importance. A legal

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61. The use of copyrighted materials in legal filings raises interesting fair use questions. *See, e.g.*, *Can a Patent Application Violate the Copyright Laws?*, JONES DAY: INSIGHTS (Dec. 3, 2013), https://www.jonesday.com/en/insights/2013/12/can-a-patent-application-violate-the-copyright-laws.

62. Of course, to the extent that any of the text is from previously published sources such as court rulings, academic papers or treatises, or news articles, it needs to be properly attributed and cited.

scholar is expected to produce scholarship that is original not only in the ideas presented but also in the words used to present them.

These differences have important consequences in relation to generative AI. In forming policies regarding student use of and instruction in generative AI, law schools should keep in mind that the large majority of their students will pursue careers as law practitioners, not legal academics. Law schools should help students view and use generative AI with full contextual awareness—i.e., that for academic writing, originality is foundational, while for many other types of documents written by attorneys, including court filings and contracts, it is often far less important. To state the obvious, this is not to suggest that practitioners can or should be sloppy or careless. On the contrary, a practitioner needs to ensure that documents are rigorously written, strongly argued (when an argument is at issue), and properly cited. But while a practitioner's argument can still be strong even if an identical or similar argument was previously made in a different case, an academic paper that breaks no new ground over previously published papers adds little to the scholarly record.

IV. CONCLUSIONS

Generative AI is an extraordinarily powerful emerging technology that will alter how much of legal writing is accomplished. Law firms and legal practitioners who learn to use generative AI tools effectively will be able to work more efficiently. This efficiency applies not only to writing but also to the creation of images and videos, including for demonstratives for use in trial. But as powerful as generative AI is, it is not now—and will not in the future ever become—a replacement for some of the most important tasks that attorneys do.

Formulating and delivering an effective opening or closing statement at trial, responding on the fly to the twists and turns of a legal proceeding, developing relationships with clients and colleagues, advising clients on strategic options, mentoring younger professionals, cultivating a professional environment where people can thrive, identifying ways in which law can be used to promote socially beneficial policy—these are all things that no AI system can do. The field of law has always, and will always, have people at its center. A key goal of this Article has been to explore how generative AI can be used to help those

people be more efficient, effective, and impactful in practicing their profession.