

Journal of Technology Law & Policy

Volume 29

Spring 2025

Number 1

ARTICLES

THROUGH THE AI-LOOKING GLASS AND
WHAT CONSUMER FIND THERE

Ashley Krenelka Chase 1
Sam Harden

DEVELOPING LAWYERING SKILLS IN THE AGE
OF ARTIFICIAL INTELLIGENCE: A FRAMEWORK
FOR LEGAL EDUCATION

Julie L. Kimbrough 31

THE ROLE OF ANTITRUST AND POLE-ATTACHMENT
OVERSIGHT IN TVA BROADBAND DEPLOYMENT

Ben Sperry 73
Geoffrey A. Manne
Kristian Stout

NOTES

GAI-ENABLED REAL ESTATE FRAUD SCHEMES:
RISKS, PREVENTION AND REGULATIONS

Li Lin 97

WHEN DEEPPAKES MAKE CELEBRITIES A DIME
A DOZEN CAN THE RIGHT OF PUBLICITY SAVE
THEIR WORTH?

Danielle A. Arnwine 117

RESEARCH OVER REGULATION: WHAT MUST BE
DONE TO MANDATE WARNING LABELS ON
SOCIAL MEDIA

John L. Markel 149

Journal of Technology Law & Policy

Volume 29

Spring 2025

Number 1

EDITORIAL BOARD 2024–2025

EDITOR IN CHIEF
Ceon Wong

EXECUTIVE MANAGING EDITOR
Michael Gonzalez

EXECUTIVE ARTICLES EDITOR
Andrew Faul

EXECUTIVE STUDENT WORKS EDITOR
Ryan Chatoo

EXECUTIVE RESEARCH EDITOR
Vas Levin

EXECUTIVE GALLEYS EDITOR
Taylor Col

EXECUTIVE COMMUNICATIONS EDITOR
Li Lin

EXECUTIVE FORUM EDITOR
Benjamin Cynamon

GENERAL BOARD 2024–2025

Jorge Alvarez
Danielle Arnwine
Matthew Batteese
Kenneth Butler
Yufan Cao
Victor Dumitru
Seth Frye
Seth Garfield
Binbin Guo
Christopher Hanna
Alexandra Hess
Garrett Horton
Tyler Kendrick

Joel Kratt
William Moore
Sandra Nakhla
Daniel Ramos
Samuel Rappeport
Reese Sarnowski
Yedda Seixas
Jeffrey Shoenfelt
Jennifer St. George
Christopher Thomas
Sidney Thomas
Grayson Wallace
Xuan Wang

FACULTY ADVISOR
Jiaying Jiang

STAFF EDITOR
Lisa-Ann Caldwell

THROUGH THE AI-LOOKING GLASS AND WHAT CONSUMERS FIND THERE¹

Ashley Krenelka Chase* & Sam Harden**

Abstract

While a lack of internet regulation is the norm in the United States, generative artificial intelligence (AI) presents a series of new challenges, particularly in the legal field. Those who are trained in the law know to check their sources, whether they come from case law or a generative AI tool like ChatGPT, but the average consumer is not so discerning. When that average consumer is in the midst of dealing with legal issues and has to navigate those issues without a lawyer, he or she is less likely to sit back and evaluate the information they're being given, particularly if it looks bright, shiny, and full of knowledge and the ability to help navigate the legal system quickly and efficiently. This lapse in judgment, whether conscious or subconscious, may deepen the justice gap and cause those who are unfamiliar with the legal system to become even more distrustful of not only the system, but the resources that are meant to help self-represented litigants navigate that system in a meaningful way.

INTRODUCTION	2
I. "SOMEHOW IT SEEMS TO FILL MY HEAD WITH IDEAS": GENERATIVE ARTIFICIAL INTELLIGENCE.....	4
A. <i>Definitions and Role Broadly</i>	4
B. <i>Current Use in Legal Field</i>	5
C. <i>Global Regulatory Frameworks</i>	6
1. The European Union	6
2. China	8
3. The United States	10

1. LEWIS CARROLL, *THROUGH THE LOOKING-GLASS, AND WHAT ALICE FOUND THERE* (photo. reprt. 2013) (London, MacMillan & Co.1882). Literary analysts and critics have claimed Carroll's sequel to *Alice in Wonderland* symbolizes the conflict between the chaos of the real world and a rational ideal of what the world should be. Similarly, the conversations around the use of generative AI illustrate a conflict between what the legal profession believes should be ideal or perfect use of the platforms, while the platforms themselves represent a kind of chaos that has been thrust upon the profession.

* Assistant Professor of Law, Stetson University College of Law. The author thanks Sam Harden for his excellence and inspiration as a co-author and Stetson University College of Law for its support of this Article. The attendees of the 2024 Legal Services Corporation's Innovations in Technology Conference were aspirational in their pursuit of access to justice. Thanks to Professors Catherine Cameron, Alicia Jackson, Ellen Podgor, William Bunting, and Liz Boals for their thoughtful feedback and accountability throughout this process.

** J.D., Florida State University. Senior Innovation Manager, Probono Net.

II.	“IT SEEMS VERY PRETTY . . . BUT IT’S RATHER HARD TO UNDERSTAND.” ACCESS TO JUSTICE.....	11
A.	<i>Definitions and Existence Broadly</i>	11
B.	<i>Need for Technology to Fill the Void and the Way That’s Currently Being Done</i>	14
C.	<i>Current Regulatory Frameworks</i>	17
III.	“WHAT COULD BE SEEN . . . WAS QUITE COMMON AND UNINTERESTING, BUT ALL THE REST WAS AS DIFFERENT AS POSSIBLE.” A PROPOSED SCHEME FOR REGULATION	20
A.	<i>Disclosure of What Third-Party Generative AI Model, Large Language Model, and/or Application Programming Interface the Product is Using</i>	22
B.	<i>Disclaimer</i>	22
C.	<i>Data Deletion Policy</i>	23
D.	<i>Q&A Process & Expert Review</i>	23
IV.	“I WONDER, NOW, WHAT THE RULES OF BATTLE ARE”: A PROPOSED SCHEME FOR ENFORCEMENT	25
V.	THROUGH THE LOOKING GLASS: PREDICTIONS FOR THE FUTURE.....	28

INTRODUCTION

After fifteen years of marriage, three children, and opening a restaurant together, Sarah and John are divorcing. The divorce is amicable, and they hope to resolve things with a self-drafted marital settlement agreement and parenting plan (though neither of them knows they need both of those documents, or that those are the phrases for what they hope to draft). Sarah sits in front of her computer, opens an internet browser, and searches for “divorce agreement.” She is met with hundreds of thousands of results, but the first catches her eye: “Save Time with AI! Draft Your Legal Agreement Today—No Attorneys Needed!” Sarah is intrigued, navigates to the website, and gets started . . .

Currently, the website described above is an unregulated no-man’s land. With the appropriate disclaimers about legal advice, any company can put a consumer-facing generative AI product on the internet, call it whatever they want, and promise any outputs they think are most marketable to the average internet searcher. Search engine optimization can push sites like this to the top of any list of results, making even the most conspicuous and thoughtful internet user much more likely to click on the link.

While a lack of internet regulation is the norm in the United States, generative artificial intelligence presents a series of new challenges, particularly in the legal field. While those who are trained in the law know to check their sources,² whether they come from case law or a generative AI tool like ChatGPT, the average consumer is not so discerning. When that average consumer is in the midst of dealing with legal issues and has to navigate those issues without a lawyer, he or she is less likely to sit back and evaluate the information they're being given, particularly if it looks bright, shiny, and full of knowledge and the ability to help navigate the legal system quickly and efficiently. This lapse in judgment, whether conscious or subconscious, may deepen the justice gap and cause those who are unfamiliar with the legal system to become even more distrustful of not only the system, but the resources that are meant to help self-represented litigants navigate that system in a meaningful way. This gap could be filled with regulation.

This Article will begin with a brief explanation and analysis of generative artificial intelligence more broadly, as well as its current role in the legal field. It will go on to analyze global regulatory frameworks surrounding artificial intelligence and compare those frameworks to the current approaches in the United States. In Part II, this Article will discuss access to justice in the United States and the ways in which technology currently is and is not filling that gap, as well as the regulations to the industry. Part III will propose a scheme for regulating consumer-facing generative AI products and analyze the potential and pitfalls of regulation. Next, Part IV will discuss enforcement of any consumer-facing generative AI products that may be created to fill the justice gap, while Part V will look on the other side of the looking glass, and discuss predictions based on whether meaningful consumer-facing generative AI reaches those in the justice gap and whether regulating those products becomes a reality.

2. Or they should, anyway. The horror stories of attorneys failing to check their sources for relevance (or existence) date back decades. Notorious example include Marcia Clark being sanctioned for failing to use a citator to check her sources during the O.J. Simpson trial in the 1990s (<https://www.youtube.com/watch?v=QFOY0Glg0gU> [<https://perma.cc/74HN-2P3W>]) to, today, attorneys citing cases that have been entirely made up by generative AI and failing to check if their sources exist. See *Mata v. Avianca, Inc.*, 1:22-cv-01461 District Court, S.D. New York; Associated Press, *Michael Cohen says he unwittingly sent AI-generated fake legal cases to his attorney*, NPR (Dec. 30, 2023), <https://www.npr.org/2023/12/30/1222273745/michael-cohen-ai-fake-legal-cases#:~:text=Hourly%20News-,Michael%20Cohen%20sent%20AI%2Dgenerated%20fake%20legal%20cases%20to%20his,were%20submitted%20to%20a%20judge> [<https://perma.cc/EV4Q-UEZP>].

I. “SOMEHOW IT SEEMS TO FILL MY HEAD WITH IDEAS”³: GENERATIVE ARTIFICIAL INTELLIGENCE

In 2023, generative AI was a popular topic, grabbing headlines and distracting from other technologies.⁴ Generative AI is nothing more than a computer model that uses massive amounts of information to predict what language should come next and, while inspired by the functioning of the human brain, does not have any neural connections of its own.⁵ Generative AI is a term that covers many applications that create things like photos and human-like text, and “exemplify . . . [the] remarkable potential of generative AI [to] transform . . . content generation, and human-machine interaction, paving the way for further advances in” things like text generation and even the practice of law.⁶

A. Definitions and Role Broadly

Generative AI is not new. In fact, the first instances of generative AI emerged in the 1960s.⁷ Before generative AI became a mainstay in the consumer marketplace, its impact was being felt across a variety of industries. Part of the reason for lack of adoption across industries was the lack of investment in data. The training of Open AI’s GPT-3 cost more than four million dollars, and large models are expensive to train and run.⁸ Additionally, every time new technology (whether AI-related or otherwise) becomes a topic of conversation in popular culture, the fears about robots taking over human jobs run rampant.⁹ But the opportunity

3. CARROLL, *supra* note 1, at 24.

4. See Ananya, *Generative AI Grabbed Headlines this Year. Here’s why and what’s next*, SCI. NEWS (Dec. 11, 2023, 11:30 AM), <https://www.sciencenews.org/article/generative-ai-chatgpt-safety> [<https://perma.cc/4V8T-N57K>] (providing a brief, accessible explanation of generative AI and why it was such a major piece of news in 2023).

5. *Id.*

6. Ajay Bandi et al., *The Power of Generative AI: A Review of Requirements, Models, Input-Output Formats, Evaluation Metrics, and Challenges*, 15 FUTURE INTERNET 1, 2 (2023) (describing generative artificial intelligence and aiming to investigate the fundamental aspects of generative AI systems, including requirements, models, input-output formats, and evaluation metrics).

7. George Lawton, *What is Gen AI? Generative AI explained*, TECHTARGET, <https://www.techtartget.com/searchenterpriseai/definition/generative-AI#:~:text=The%20technology%2C%20it%20should%20be,in%20the%201960s%20in%20chatbots> [<https://perma.cc/AFF3-SZDD>] (last visited Feb. 1, 2025) (providing basic and easy-to-understand information about generative AI).

8. David Meyer, *The Cost of Training AI Could Soon Become Too Much to Bear*, YAHOO! FIN. (Apr. 4, 2024), <https://finance.yahoo.com/news/cost-training-ai-could-soon-101348308.html> [<https://perma.cc/8VCE-HWAF>].

9. See Ana Rico, *Will Robots Take Our Jobs*, BU ARTS & SCIS. (Aug. 28, 2023), <https://www.bu.edu/cas/the-big-question-will-robots-take-our-jobs/> [<https://perma.cc/9582-6ZVG>] (discussing what the popularity of generative AI means for things like society, privacy, transparency, and employment).

for users to create innovative usage ideas for AI, as opposed to just technologists, is significant, and some CIOs predict that workforces may use AI to inspire a more self-service,¹⁰ and entrepreneurial area within organizations.¹¹

B. Current Use in the Legal Field

The legal field is, perhaps, the ripest for this entrepreneurial use of generative AI to take hold. Indeed, there have already been reported cases of people seeking legal information and advice from generative AI models. In one instance, a woman in New York documented her use of ChatGPT when she drafted a prompt directing ChatGPT to “act as a housing lawyer” and write a letter to her landlord opposing a rent increase.¹² In cases where individuals are ensconced in vexatious litigation about matters they do not understand, ChatGPT can help understand court legalese and make the process easier to navigate—something that may have been difficult (or embarrassing) before the popularity of generative AI tools.¹³

Several “AI Lawyer” tools have recently been developed using large commercial generative AI models. One AI tool created for South Africa promises “to provide ordinary citizens with easy access to legal knowledge and justice, revolutionising [sic] the way legal services are delivered in South Africa.”¹⁴ Another AI tool, the “AI Lawyer” web application, claims that it is “ready to give you expert legal help anytime, anywhere.”¹⁵ Another AI tool, the Ask AI Lawyer website, offers “a

10. See Chris Louie, *Issue#11: Do We Want A Self-Serve AI Future?*, LINKEDIN (Apr. 7, 2024), <https://www.linkedin.com/pulse/issue-11-do-we-want-self-serve-ai-future-chris-louie-y6uxe/> [https://perma.cc/29Y9-LEZJ].

11. See generally Kylie King & Aishwarya Ganguli, *Impact of Artificial Intelligence (AI) on Entrepreneurship*, PENNSTATE SOC. SCI. RSCH. INST. (Mar. 20, 2024), [https://evidence2impact.psu.edu/resources/impact-of-artificial-intelligence-ai-on-entrepreneurship/#:~:text=Artificial%20intelligence%20\(AI\)%20has%20created,a%20rapidly%20changing%20business%20environment](https://evidence2impact.psu.edu/resources/impact-of-artificial-intelligence-ai-on-entrepreneurship/#:~:text=Artificial%20intelligence%20(AI)%20has%20created,a%20rapidly%20changing%20business%20environment) [https://perma.cc/WBZ8-S7EB] (discussing key advantages and disadvantages artificial intelligence poses for prospective entrepreneurs and existing businesses).

12. Urian B., *A New York Woman Used ChatGPT to Write a Letter Citing Legalities to Get Landlord to Fix Her Apartment Appliance*, TECH TIMES (updated Apr. 23, 2023), <https://www.techtimes.com/articles/290713/20230423/> [https://perma.cc/WU34-QMBC].

13. Jessica Klein, *How ChatGPT Can Help Abuse Survivors Represent Themselves in Court*, FAST CO. (Mar. 9, 2023), <https://www.fastcompany.com/90861189/how-chatgpt-can-help-abuse-survivors-represent-themselves-in-court> [https://perma.cc/C43G-5CKQ] (discussing ways in which generative AI products like ChatGPT can help certain populations navigate the legal process).

14. *South Africa's First AI Lawyer is Here*, LEGAL INTERACT, <https://legalinteract.com/ai-lawyer/> [https://perma.cc/9TU9-99TD] (introducing a product, the first of its kind in South Africa, designed to help citizens gain access to justice and increase the dispensation of legal knowledge).

15. *AI Lawyer: Your Personal Legal AI Assistant*, AILAWYER, <https://ailawyer.pro/> [https://perma.cc/8J8J-NXHC] (advertising an AI legal assistant for consumers and lawyers).

completely free service that utilizes the most advanced artificial intelligence technology to provide you with answers to your legal questions.”¹⁶ One tech firm even attempted to have a “robot lawyer” argue in court, but discontinued the effort after threats of criminal charges.¹⁷

C. Global Regulatory Frameworks

The race to regulate AI is not dissimilar from other global technology races: countries are either in, or they’re out.¹⁸ Where the U.S. is notoriously slow to regulate technology,¹⁹ other countries are often (if not always) eager to be at the front of the line. With varying degrees of success, the European Union and China have taken more straightforward approaches to regulating AI technologies than the United States.

1. The European Union

The European Union (EU) has had many successes regulating technology. From Net Neutrality to Consumer data protection and privacy, these nations don’t shy away from protecting consumers while still encouraging innovation within the European Union.²⁰ In 2023, the EU declared that its parliament was preparing the “world’s first set of comprehensive rules to manage the opportunities and threats of AI . . . to turn the EU into a global hub for trustworthy AI.”²¹ These opportunities and threats are debated around the world, but the EU has identified the

16. *Ask AI Lawyer – Free legal information online with the help of AI*, ASK AI LAWYER.COM, <https://www.askailawyer.com/> [<https://perma.cc/2JQG-AQTT>].

17. Megan Cerullo, *AI-powered “robot” lawyer won’t argue in court after jail threats*, CBS NEWS (Jan. 26, 2023), <https://www.cbsnews.com/news/robot-lawyer-wont-argue-court-jail-threats-do-not-pay/> [<https://perma.cc/DLF9-SMD2>] (explaining how a CEO planned on using an AI powered bot to help self-represented litigants in the courtroom and the fallout that resulted from his public attempts to do so).

18. *Project Runway: I Started Crying* (Bravo TV Nov. 21, 2007). During the introduction to the long-running televised fashion design competition, longtime host and supermodel, Heidi Klum, proclaims that in fashion “one day you’re in, and the next day you’re out.” *Id.* That remains true not only in fashion, but in legal technology.

19. Ian Prasad Philbrick, *The U.S. Regulates Cars, Radio, and TV. When Will It Regulate A.I.?*, N.Y. TIMES (Aug. 24, 2023), <https://www.nytimes.com/2023/08/24/upshot/artificial-intelligence-regulation.html> [<https://perma.cc/W4DD-48C9>] (discussing the need for U.S. regulators to move quickly regarding regulating artificial intelligence and the likelihood of that actually happening).

20. See generally *General Data Protection Regulation (GDPR)*, INTERSOFT CONSULTING, <https://gdpr-info.eu/> [<https://perma.cc/AM9C-ZPP3>].

21. *AI Rules: What the European Parliament Wants*, EUR. PARLIAMENT (Oct. 21, 2020, 8:58 AM), <https://www.europarl.europa.eu/news/en/headlines/society/20201015STO89417/ai-rules-what-the-european-parliament-wants> [<https://perma.cc/DN2A-2NWN>] (describing how MEPs are shaping artificial intelligence legislation in the EU in an effort to boost innovation while protecting civil liberties and ensuring safety for those who use the products).

benefits to people and consumers to include “health care, safer cars and other transport systems, tailored, cheaper and longer-lasting products and services . . . facilitate access to information, education, and training . . . make workplace[s] safer . . . and open new job positions.”²² Conversely, the identified risks include underuse and overuse of the technology: AI poses challenges determining liability, negative impacts on the labor market, and pervasive threats to individuals’ fundamental rights and the functioning of democracy.²³

Put in those terms, it seems that the threats to consumers and individuals far outweigh the benefits, making regulation even more essential to a society that functions with ever-advancing AI innovations. The initial rules from the EU aimed “to promote the uptake of human-centric and trustworthy AI and protect the health, safety, and fundamental rights and democracy from its harmful effects.”²⁴

To meet these ends, the EU Parliament created a list of banned uses of AI it deemed to be discriminatory and intrusive, including real time and post-biometric identification, predictive policing, emotion recognition systems, and untargeted scraping of facial images.²⁵

In addition to these outright bans, the EU proposed some obligations for AI identified as general purpose, including risk mitigation, registration, transparency requirements, and safeguards against illegal content.²⁶ Further, the EU sought to boost AI innovation and support and added exceptions for research activities and AI components provided under open-source licenses.²⁷ The final outcome of these proposals was the EU’s Artificial Intelligence (AI) Act, adopted on June 14, 2023.²⁸ The regulations included 771 amendments, and the entirety of the AI Act was then passed on for talks with EU Member Countries to determine the final form of the law, with a goal of having it completed by the end of 2023.²⁹

22. *Artificial Intelligence: Threats and Opportunities*, EUR. PARLIAMENT (Sept. 23, 2020, 9:08 AM), <https://www.europarl.europa.eu/news/en/headlines/priorities/artificial-intelligence-in-the-eu/20200918STO87404/artificial-intelligence-threats-and-opportunities> [https://perma.cc/PM4X-QTW8] (explaining how artificial intelligence impacts a human’s professional prospects, and threatens a society’s security and democracy).

23. *Id.*

24. *MEPs Ready to Negotiate First-Ever Rules for Safe and Transparent AI*, EUR. PARLIAMENT (June 14, 2023, 12:52 PM), <https://www.europarl.europa.eu/news/en/press-room/20230609IPR96212/meps-ready-to-negotiate-first-ever-rules-for-safe-and-transparent-ai> [https://perma.cc/JB9F-WHRE] (expounding upon the EU rules about artificial intelligence and how those rules aim to protect health, safety, and fundamental rights and keep them from experiencing any harmful effects).

25. *Id.*

26. *Id.*

27. *Id.*

28. *See id.*

29. *See generally* Jedidiah Bracy & Caitlin Andrews, *EU Countries Vote Unanimously to*

While the impacts of the AI Act will likely be positive for the European Union, its impact will be felt on a global scale.³⁰ The EU's propensity to be first-to-regulate and impact the rest of the world is called the "Brussels Effect," but to what extent the Brussels Effect will be felt with regard to AI remains to be seen.³¹ In the past, the Brussels Effect has taken two forms, *de facto* and *de jure*.³² Where the EU regulates only its internal market, and external, multinational corporations are incentivized to standardize their global production to adhere to the EU rules, there is a *de facto* Brussels Effect.³³ Once the companies adjust their businesses to meet the EU's standards, they are incentivized to convince their home governments to adopt the same standards in order "to level the playing field against their domestic, non-export-oriented competitors," creating the *de jure* Brussels Effect.³⁴

Because of its ability to affect global markets, the EU's regulatory agenda is often driven by entrenched domestic policy preferences that it forces on external markets, thereby making the external market regulation a byproduct of its internal goals, "rather than . . . some conscious effort to engage in 'regulatory imperialism.'"³⁵ The EU's position as the largest economy in the world gives it great success in impacting external market forces, but other countries like China and the U.S. are large enough to similarly use their markets as leverage.³⁶

2. China

While China technically took to regulating AI in advance of the EU, its regulation was not as widely discussed in global markets until after the EU announced the AI Act.³⁷ China began regulating AI in March of 2022

Approve AI Act, IAPP (Feb. 2, 2024), <https://iapp.org/news/a/eu-countries-vote-unanimously-to-approve-ai-act> [<https://perma.cc/X7NV-CPGQ>].

30. *Infra* note 31.

31. Alex Engler, *The EU AI Act Will Have Global Impact, but a Limited Brussels Effect*, BROOKINGS (June 8, 2022), <https://www.brookings.edu/articles/the-eu-ai-act-will-have-global-impact-but-a-limited-brussels-effect/> [<https://perma.cc/9MP9-28N6>] (explaining the Brussels Effect and how, while artificial intelligence may have some important impacts on global markets, the EU alone will not be in a position to set a comprehensive new standard for artificial intelligence that will be used internationally).

32. Anu Bradford, *The Brussels Effect*, 107 NW U. L. REV. 1, 6 (2012) (examining the underestimated global power exercised by the European Union through its legal institutions and standards, and how the European Union has successfully influenced the rest of the world).

33. *Id.*

34. *Id.*

35. *Id.*

36. *Id.* at 11.

37. Zeyi Yang, *China Isn't Waiting to Set Down Rules on Generative AI*, MIT TECH. REV. (May 31, 2023), <https://www.technologyreview.com/2023/05/31/1073743/china-generative-ai-quick-regulation/> [<https://perma.cc/VAV4-X5H2>] (discussing China's draft regulations as a

with its Algorithm Recommendation Regulation, which regulated the use of algorithm recommendation technologies to provide online services in China.³⁸ In November of 2022, China's Ministry of Public Security and Ministry of Industry and Information Technology jointly adopted the Deep Synthesis Regulation, which went into force on January 10, 2023.³⁹ The Deep Synthesis Regulation regulates technologies in China that provide information services to the public, when those technologies "utilize generative and synthetic algorithms, such as deep learning and virtual reality, to generate text, image, audio, video, virtual scenes, and other internet information."⁴⁰ On July 13, 2023, almost exactly one month after the EU's commission adopted the AI Act, the Cyberspace Administration of China, China's National Development and Reform Commission, the Ministry of Education, the Ministry of Science and Technology, the Ministry of Industry and Information Technology, and the Ministry of Public Security jointly published the Generative AI Regulation, which went into force on August 15, 2023.⁴¹ The Generative AI Regulation targets a broader scope of generative AI technologies than its regulatory predecessors, and applies to the use of all generative AI technologies to provide services to the public in China, but specifically excludes the development and application of generative AI technologies that have not been used to provide services to the public in China.⁴²

The Generative AI Regulation imposes requirements mainly on providers of services that use generative AI, including technical supporters who provide generative AI service technologies through APIs to consumers.⁴³ The Generative AI Regulation is extensive and imposes obligations on everything from AI service providers to algorithms that recommend products to consumers.⁴⁴ There are significant penalties for violating the Generative AI Regulation, some of which are explicitly set out and others which are not.⁴⁵ While the Generative AI Regulation is far more expansive and explicit than the EU's AI Act, it is unlikely that a similar global impact will be felt.

mixture of aggressive intervention in technology and sensible AI restrictions and the way western countries should follow suit).

38. Hui Xu et al., *China's New AI Regulations*, Latham & Watkins Client Alert Commentary, LATHAM & WATKINS LLP (Aug. 16, 2023), <https://www.lw.com/admin/upload/SiteAttachments/Chinas-New-AI-Regulations.pdf> [<https://perma.cc/464W-SQH3>] (citing Cyberspace Administration of China's Office of Cyberspace Affairs).

39. *Id.*

40. *Id.*

41. *Id.*

42. *Id.*

43. *Id.*

44. *Id.*

45. *Id.*

Many global businesses are unable or unwilling to do business in China for a variety of reasons, but the United States could learn from China's "targeted and iterative approach to AI governance."⁴⁶ China was able to move quickly to pass the Generative AI Regulation because the Algorithm Recommendation Regulation and the Deep Synthesis Regulation were already in existence; the Generative AI Regulation was merely an extension of the previous two regulations.⁴⁷ This approach to regulating generative AI is worth noting, particularly in the United States where lawmaking and regulating seem to be at a standstill due to the tumultuous happenings in Washington.

3. The United States

Because the United States has a haphazard way of legislating in the best of times, rulemaking in fast-moving areas like AI tends to fall to the executive branch—often directly to the President. On October 30, 2023, the Biden Administration issued Executive Order 14110, titled "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence."⁴⁸ Executive Order 14110 seeks to "advance and govern the development and use of AI in accordance with eight guiding principles and priorities . . ." including ensuring the safety of AI, responsible innovation practices and development, and requiring privacy for those who use the products, among other things.⁴⁹

The nebulous Executive Order 14110 does nothing to effectuate actual regulation of AI, and while 197 pieces of legislation referencing AI have been introduced in the 2023–2024 legislative session to date, not a single one has been signed into law, and only one—the National Defense Authorization Act for Fiscal Year 2024, which only references AI in passing—has passed both chambers.⁵⁰

Where the federal legislative and executive branches have failed to act in meaningful ways, states have taken up some of the slack. Six states passed AI laws that went into effect in 2023, and most of those laws relate to consumer privacy, allowing users to opt out of profiling and mandating data protection assessments of automated decision-making. Only New York City's law, titled Automated Employment Decision Tools,

46. Matt Sheehan, *What the U.S. Can Learn from China About Regulating AI*, FOREIGN POL'Y (Sept. 12, 2023, 3:04 PM), <https://foreignpolicy.com/2023/09/12/ai-artificial-intelligence-regulation-law-china-us-schumer-congress/> [<https://perma.cc/2QPL-2XJN>] (discussing the things the United States can learn from China's regulation of AI).

47. Matt Sheehan, *China's AI Regulations and How They Get Made*, CARNEGIE ENDOWMENT FOR INT'L PEACE (July 10, 2023), <https://carnegieendowment.org/research/2023/07/chinas-ai-regulations-and-how-they-get-made> [<https://perma.cc/JN4Y-MVSJ>].

48. Exec. Order No. 14,110, 88 Fed. Reg. 75,191 (Oct. 30, 2023).

49. *Id.*

50. National Defense Authorization Act for Fiscal Year 2024, Pub. L. No.118-31 (2023).

regulates any use of AI (requiring annual audits of AI tools used in hiring and allowing job candidates to request data used by AI tools in the hiring process).⁵¹

New York City's law requiring audits and disclosure of AI tools used in hiring is an admirable and useful first step to meaningfully regulate AI in the United States, and could have impacts in other jurisdictions in the future. In the short term, however, we are left to wonder what it may look like to regulate consumer-facing AI on a much broader scale.

II. "IT SEEMS VERY PRETTY . . . BUT IT'S RATHER HARD TO UNDERSTAND."⁵² ACCESS TO JUSTICE

"Access to justice" does not have a clear definition and is often described with specific populations in mind. More broadly, the idea of access to justice includes procedural and substantive elements that are dependent upon one another.⁵³ One of the most basic definitions of access to justice is when "a person facing a legal issue has timely and affordable access to the level of legal help they need to get a fair outcome on the merits of their legal issue, and can walk away believing they got a fair shake in the process."⁵⁴ This definition makes it clear that access to justice is possible for any person, navigating any legal issue, in any legal system. But unless people believe the access and outcome they've received are fair, access to justice cannot truly be achieved.

A. Definitions and Existence Broadly

In the United States, access to justice is currently guided by three principles:⁵⁵ the first is to promote accessibility by eliminating all barriers that may prevent litigants from understanding and exercising their rights

51. *New York City Department of Consumer and Worker Protection*, <https://rules.cityofnewyork.us/wp-content/uploads/2023/04/DCWP-NOA-for-Use-of-Automated-Employment-Decisionmaking-Tools-2.pdf> [<https://perma.cc/LMP5-28YD>] (establishing a rule that seeks to implement legislation required by the EEOC to monitor automated employment decision tools powered by artificial intelligence).

52. CARROLL, *supra* note 1, at 36.

53. Bob Graves, *What Do We Mean When We Say Access to Justice?*, CHI. BAR FOUND., <https://chicagobarfoundation.org/bobservations/what-do-we-mean-when-we-say-access-to-justice/> [<https://perma.cc/QYD5-TKA8>] (defining access to justice and the roles of individuals and corporations in aiding in access to justice).

54. *Id.*

55. As stated explicitly by the DOJ, the principles are: (1) Expanding Access – expanding access to legal systems by increasing the availability of legal assistance; (2) Accelerating Innovation – supporting research, data and innovative strategies to improve fairness and efficiency; and (3) Safeguarding Integrity – promoting policies and reforms that improve accountability” OFF. FOR ACCESS TO JUST., U.S. DEP’T OF JUST., <http://www.justice.gov/atj> [<https://perma.cc/743A-4DD8>].

in the American legal system.⁵⁶ The second principle seeks to accelerate innovation in legal systems.⁵⁷ The goals of a fair legal system are to deliver just outcomes to all parties to litigation, including those who can't afford counsel or face other disadvantages in navigating through the justice system, whether civil or criminal.⁵⁸ The final principle aims safeguard integrity in the system, with a primary goal being to promote "policies and reforms that improve the accountability, fiscal responsibility and integrity of legal systems and process[es]."⁵⁹

Historically, however, there are very few mentions of access to justice in the terms we think about today. Typically, when discussing access to justice or the courts, historical documents reference lawyers being required to serve the poor simply because law practice was, in medieval times, so technical that no person not trained in the law could navigate the rules without representation.⁶⁰ But despite references to assisting those who were not trained in the law, there is no way to know how frequently that kind of representation happened.⁶¹ Beginning in 1863, the Working Women's Protective Union began subsidizing programs to help poor people deal with social and legal problems by helping workers collect fraudulently withheld wages.⁶² The idea quickly spread and expanded, and legal aid societies began popping up in the early 20th century.⁶³ Around the same time lawyers attempted to raise standards within the profession by requiring different educational and bar exam requirements. A Carnegie Foundation Report titled *Justice and the Poor* was released indicting unequal access to justice making it the leading manifesto for legal aid organizations for the rest of the 20th century.⁶⁴

In 1965, as a part of his war on poverty, President Johnson funded the Office of Equal Opportunity Legal Service Program (since renamed Legal Services Corporation, or LSC) and national bar leaders began supporting the program; the budget quickly grew from \$5 million to \$489

56. *Id.*

57. *Id.*

58. *Id.*

59. *Id.*

60. Robert W. Gordon, *Lawyers, the Legal Profession & Access to Justice in the United States: A Brief History*, 148 DAEDALUS 177, 178 (2019) (examining the history of access to justice in the civil system and the role of attorneys and legal professionals in both promoting and restricting that access).

61. *Id.* at 178–79.

62. *Id.* at 179.

63. *Id.*

64. *Id.* at 180 (citing REGINALD HEBER SMITH, *JUSTICE AND THE POOR: A STUDY OF THE PRESENT DENIAL OF JUSTICE TO THE POOR AND OF THE AGENCIES MAKING MORE EQUAL THEIR POSITION BEFORE THE LAW WITH PARTICULAR REFERENCE TO LEGAL AID WORK IN THE UNITED STATES* (1919)).

million in 2022.⁶⁵ Despite a national interest in providing assistance to those who couldn't afford legal counsel, widespread adoption of pro bono hours by practicing attorneys has not been the norm in the United States. "[R]eliable estimates are that, nationwide, American lawyers, on average, perform about half an hour of pro bono work, broadly defined, per year."⁶⁶

While some blame the complexities of the law—and therefore the justice gap—on lawyers themselves, the highest barriers to access the legal system in the United States are both complexity and cost.⁶⁷ It follows that both attorneys and the public who need to access the criminal or civil justice system would like to reduce both, but attorneys have an inherent and protectionist interest in limiting the accessibility of the system.⁶⁸ In addition to attorneys' reluctance to lead by example and make the system more accessible, the judiciary is not keen on opening the justice system up to outsiders, often declaring people to be engaged in the unauthorized practice of law when they are simply living their lives, trying to understand the way the law applies to their lives or the lives of people around them, or trying to innovate to make the law more accessible for others who may not be lucky enough to have a basic understanding.⁶⁹

The current access-to-justice crisis in the U.S. has been well-documented: "On an annual basis, 55 million Americans experience 260 million legal problems. Of those legal problems, . . . 120 million legal problems are not resolved fairly every year."⁷⁰ Only 49% of legal problems are typically resolved.⁷¹ In legal problems that become court cases, the percentage of cases where both sides have legal representation

65. *Fiscal year 2023 Budget Request*, LEGAL SERVS. CORP., <https://www.lsc.gov/our-impact/publications/budget-requests/fiscal-year-2023-budget-request#:~:text=LSC's%20appropriation%20has%20increased%20only,over%20the%20last%20three%20decades> [https://perma.cc/ZU34-W4CJ].

66. Gordan, *supra* note 60, at 181.

67. *Id.* at 185.

68. See generally Ashley Krenelka Chase, *Aren't We Exhausted Always Rooting for the Anti-Hero? Publishers, Prisons, and the Practicing Bar*, 56 TEX. TECH. L. REV. 525, 551–54 (2024) (arguing that the practicing bar should be held responsible for advocating for access to justice for all).

69. See Diane Leigh Babb, *Take Caution When Representing Clients Across State Lines: The Services Provided May Constitute the Unauthorized Practice of Law*, 50 ALA. L. REV. 535 (1999) (illustrating cases where attorneys have been found to be practicing law in an unauthorized manner & across state lines).

70. *Justice Needs and Satisfaction in the United States of America*, THE HAGUE INST. FOR INNOVATION OF L. 1, 7 (2021), <https://www.hiil.org/wp-content/uploads/2019/09/Justice-Needs-and-Satisfaction-in-the-US-web.pdf> [https://perma.cc/Z4ZV-9UTR].

71. *Id.*

has declined dramatically over the past decades.⁷² In 1992, the percentage of cases where both plaintiffs and defendants had legal representation was 95%.⁷³ In 2015, that percentage had dropped to just 24%.⁷⁴ In cases where neither party was represented by an attorney, studies have found that judges rarely offer information about courtroom procedures, and when unrepresented parties ask the judge to explain or clarify things, the judge often refuses to answer, or, in some cases, even criticizes them.⁷⁵

The human element, then, makes it hard for access to justice to be achieved for every person, in every case, every time. Technology has filled the void in other areas of practice where humans have needed assistance achieving the desired outcome,⁷⁶ and it's likely that technology can help to fill the justice gap and provide additional access to the system for those who need it most.

B. *Need for Technology to Fill the Void and the Way That's Currently Being Done*

The impact of these unresolved legal issues can be far-reaching. When surveyed, 45% people reported experiencing negative consequences as a result of their legal problems.⁷⁷ Those consequences included things such as: negative impacts on mental health, loss of money, debt, and loss of job/limited ability to work.⁷⁸

There is an obvious medium that can help those in the justice gap: technology. The internet has been the most transformative technology to date in the delivery of legal services across consumers of all income levels.⁷⁹ Even before the advent of generative artificial intelligence tools

72. National Center for State Courts, *Civil Justice Initiative: The Landscape of Civil Litigation in State Courts*, 1, 31 (2015), https://www.ncsc.org/__data/assets/pdf_file/0020/13376/civiljusticereport-2015.pdf [<https://perma.cc/DK33-599G>].

73. *Id.*

74. *Id.*

75. Anna E. Carpenter et al., *Judges in Lawyerless Courts*, 110 GEO. L.J. 509, 540–45 (2022) (theorizing that civil courts were not designed for unrepresented litigants and that judicial role failure is one symptom of the mismatch between courts' lawyer-driven dispute resolution design and the social, economic, and interpersonal problems they are supposed to solve for users who have no legal training).

76. Efforts have been made, for instance, to make the law more accessible to those who do not have access to legal materials or law libraries, or even the internet. See Ashley Krenelka Chase, *Let's All Be...Georgia? Expanding Access to Justice for Incarcerated Litigants by Rewriting the Rules for Writing the Law*, 74 S.C. L. REV. 389 (2022) (discussing methods for publishing and disseminating the law that would increase access to justice).

77. Justice Needs and Satisfaction, *supra* note 70, at 70.

78. *Id.*

79. Drew Simshaw, *Ethical Issues in Robo-Lawyering: The Need for Guidance on Developing and Using Artificial Intelligence in the Practice of Law*, 70 HASTINGS L.J. 173, 179 (2018) (presenting an early exploration of artificial intelligence in the legal profession and identifying characteristics of what were then emerging services).

like ChatGPT, Bard, or Lexis AI, attorneys had another enemy lurking around the corner: DoNotPay. DoNotPay began as an application to help individuals get out of parking tickets.⁸⁰ It expanded quickly into a larger-scale operation that seeks to get people out of everything from parking tickets to recurring monthly fees they've unwittingly agreed to pay while clicking through online contracts.⁸¹ And as quickly as DoNotPay began helping people who didn't want or need attorneys to handle small-scale issues, practicing attorneys jumped in to argue about the existential threat to their jobs.⁸²

The proposed class action against DoNotPay argues that the application is engaged in the unauthorized practice of law, because it claims to be "the world's first robot lawyer," but without the benefit of legal training, admittance to the bar, or supervision by a properly-licensed attorney.⁸³ DoNotPay, the class action complaint alleges, merely relies on "substandard [] legal documents . . . based on information input by customers" and flouts the regulation of lawyers that is the norm in every state in the country.⁸⁴ And DoNotPay is not the first "robot lawyer" that has been accused of practicing law.⁸⁵ In January of 2018, the Florida Bar filed a petition against TIKD Services, LLC and Christopher Riley,

80. DoNotPay started off as an app for contesting parking tickets, and currently sells services which generate documents on legal issues ranging from consumer protection to immigration rates, generated via automation and artificial intelligence. Jaclyn Kelley, *ROBOT LAWYER: App allows you to sue anyone with press of a button*, Fox 5 DC (Oct. 18, 2018), <https://web.archive.org/web/20191016012118/https://www.fox5dc.com/news/robot-lawyer-app-allows-you-to-sue-anyone-with-press-of-a-button> [http://perma.cc/7EJH-AJW8]. In 2021, DoNotPay raised \$10 million from investors and became a global phenomenon, causing many people to talk about the demise of lawyers and the rise of robolawyers. Gillian Tan, *Robot Lawyer DoNotPay, valued at \$210 Million, Plans to Target Small Businesses*, INS. J. (Aug. 2, 2021), <https://web.archive.org/web/20220920171015/https://www.insurancejournal.com/news/national/2021/08/02/625401.htm> [https://perma.cc/SY7W-DJEY].

81. See DoNotPay, <https://donotpay.com/> [https://perma.cc/UP43-JHCP].

82. Sara Merken, *Lawsuit Pits Class Action Firm Against 'Robot Lawyer' DoNotPay*, REUTERS (Mar. 9, 2023, 3:10 PM), <https://www.reuters.com/legal/lawsuit-pits-class-action-firm-against-robot-lawyer-donotpay-2023-03-09/> [https://perma.cc/78BK-3ADC].

83. *Faridian v. DoNotPay, Inc.*, CGC-23-604987 (Super. Ct. of Cal., San Francisco County 2023), <https://fingfx.thomsonreuters.com/gfx/legaldocs/dwvkdzbjxpm/Faridian%20v.%20DoNotPay%20Complaint.pdf> [https://perma.cc/DZQ8-T94Y] (explaining the alleged misconduct performed by DoNotPay and the ways in which it may or may not be engaging in unauthorized conduct).

84. *Id.*

85. Bobby Allen, *A robot was scheduled to argue in court, then came the jail threats*, HEALTH NEWS FLA. (Jan. 25, 2023, 6:05 PM), <https://health.wusf.usf.edu/2023-01-25/a-robot-was-scheduled-to-argue-in-court-then-came-the-jail-threats> [https://perma.cc/UJB7-SF6B] (noting that DoNotPay is facing other legal challenges, some of which should not be ignored. The CEO of the company, Joshu Browder, took to Twitter to ask someone to argue their case using DoNotPay and an AI Text Generator, which would be able to observe the hearing through an earbud in the pro se litigants' ear and make arguments. Browder quickly faced threats of criminal charges for his actions and backed off).

seeking to enjoin them from engaging in the unauthorized practice of law.⁸⁶ TIKD, the Florida Bar argued, “practices law” by using an algorithm to examine traffic tickets and determine whether it should provide “services” to the driver who added the information to the application.⁸⁷ “If TIKD accepts a ticket, the driver is charged a percentage of the ticket’s face value, and his or her contact information is forwarded to a Florida-licensed attorney whom TIKD has contracted with to provide traffic ticket defense services to its customers.”⁸⁸

The Florida Supreme Court found that this process of analyzing a ticket and referring the ticketholder to a licensed attorney to pursue a potential legal claim constituted the unauthorized practice of law. Interestingly, in the same opinion, the Court seemed to acknowledge the value of a resource like TIKD:

It could be argued . . . that TIKD in some ways *increases* affordable access to our justice system. However, irrespective of any benefits arguably created by TIKD’s unique, and perhaps temporary, niche, we cannot address the access to justice problem by allowing nonlawyer corporations to engage in conduct that, under this Court’s sound precedent, constitutes the practice of law.

We recognize that advances in technology have allowed for *greater access* to the legal system . . .⁸⁹

It seems, then, that the judiciary and the practicing bar are accepting of technology until they are not, and a high level of skepticism surrounding generative AI can be expected.

Artificial intelligence has the potential to have an enormous impact on access to justice.⁹⁰ But there is currently a great deal of uncertainty around whether the outputs of generative AI could be considered legal advice. The Florida Bar’s committee on generative AI has reportedly discussed “whether legal advice provided by generative AI ‘could be considered the unauthorized practice of law.’”⁹¹ In their advisory opinion, set to be heard, the committee insinuated that a generative AI model could potentially perform acts that constitute the practice of law: “First and foremost, a lawyer may not delegate to generative AI any act that could constitute the practice of law such as the negotiation of claims or any

86. The Florida Bar v. TIKD Servs. LLC, 326 So. 3d 1073, 1076 (Fla. 2021).

87. *Id.*

88. *Id.*

89. *Id.* at 1081 (emphasis added).

90. *See generally id.*

91. Jim Ash, *AI Tools & Resources Committee to Draft Rules and an Ethics Opinion*, THE FLA. BAR (Sept. 20, 2023), <https://www.floridabar.org/the-florida-bar-news/ai-tools-resources-committee-to-draft-rules-and-an-ethics-opinion/> [https://perma.cc/6GE9-K92P].

other function that requires a lawyer's personal judgment and participation."⁹²

Given the Florida Supreme Court's tendency to see all technology as threatening, it is hard to believe that they *won't*, when the time comes, find generative AI to be engaged in the unauthorized practice of law.⁹³

On the opposite side of the spectrum, the California Committee on Professional Responsibility and Conduct (COPRAC) released its "Recommendations from Committee on Professional Responsibility and Conduct on Regulation of Use of Generative AI by Licensees." In these recommendations, COPRAC called for the California Board of Trustees to:

Work with the Legislature and the California Supreme Court to determine whether the unauthorized practice of law should be more clearly defined or articulated through statutory or rule changes; and . . . determine whether legal generative AI products should be licensed or regulated and, if so, how.⁹⁴

It seems that California's cautious approach to generative AI makes the most sense given the popularity of the platforms and their ability to change the landscape of access to justice. While there are conversations about regulating AI happening throughout the country, few regulatory frameworks are exemplary.

C. Current Regulatory Frameworks

For their parts, state bars have always had the power to regulate the practice of law, and that regulatory power extends to the regulation of the unlawful practice of law by non-lawyers.⁹⁵ Simply disclosing one's status as a non-lawyer to the public does not permit a non-lawyer to practice law,⁹⁶ which often leaves lawyers and non-lawyers alike wondering what, exactly, constitutes the practice of law. The definition of "legal advice" in many states is determined on a case-by-case basis and "ascertaining

92. *Proposed Advisory Opinion 24-1 Regarding Lawyer's Use of Generative Artificial Intelligence – Official Notice*, THE FLA. BAR (Nov. 13, 2023), <https://www.floridabar.org/the-florida-bar-news/proposed-advisory-opinion-24-1-regarding-lawyers-use-of-generative-artificial-intelligence-official-notice/> [<https://perma.cc/Q9KF-39X2>].

93. See Chase, *supra* note 68, at 555–56.

94. *Practical Guidance for the Use of Generative Artificial Intelligence in the Practice of Law: Executive Summary*, STATE BAR OF CALIFORNIA STANDING COMMITTEE ON PROFESSIONAL RESPONSIBILITY AND CONDUCT 1, 3–5, <https://www.calbar.ca.gov/Portals/0/documents/ethics/Generative-AI-Practical-Guidance.pdf> [<https://perma.cc/K4M6-SXBW>].

95. See *W. Va. State Bar v. Earley*, 109 S.E.2d 420, 439–40 (W. Va. 1959) (holding that the State Compensation Commissioner, as an administrative agency or tribunal, did not have the power or authority to permit a non-attorney agent to act as an attorney in cases before him).

96. See *The Fla. Bar v. TIKD Servs. LLC*, 326 So. 3d 1073, 1082 (Fla. 2021).

whether a particular activity falls within [the practice of law] may be a formidable endeavor⁹⁷

Some state bars have attempted to regulate the publication of books under their authority to regulate the “practice of law.”⁹⁸ Several decades later, the online legal forms provider LegalZoom has been accused of the unlicensed practice of law by a number of states, including North Carolina, Missouri, and California.⁹⁹ Because the regulation of the practice of law and the giving of legal advice is under the authority of the states, it is entirely possible that one state may find that an AI model is giving legal advice, while another state finds that it does not. Further complicating things, generative AI models’ behavior differs not just from model to model, but from time to time even when using the same model.¹⁰⁰ An example of this can be found in Google Bard’s “View Other Drafts” feature, where users can see and rate other draft responses the model created.¹⁰¹ So, if a state does choose to regulate generative AI, it would need to do so in a way that meaningfully encompasses all of these factors.

To address these challenges, several states have attempted to create language that specifically deals with technology, artificial intelligence, or both. Florida, usually among the first to ring the alarm about issues caused by technology, issued a proposed advisory opinion stating: “[L]awyers using generative AI must take reasonable precautions to

97. *Baron v. City of L.A.*, 469 P.2d 353, 358 (Cal. 1970) (en banc). This issue is particularly salient for those working in libraries as well as paralegals. The line for what constitutes UPL for these groups seems to be moving constantly, and people working in those professions often pontificate about what UPL means for them and how to avoid it. *See generally* Wendi Arant & Brian Carpenter, *Where is the Line? Legal Reference Service and the Unauthorized Practice of Law (UPL)—Some Guides That Might Help*, 38 LEGAL REFERENCE SERVS. Q. 235, 236 (1999); *Ethical landmines on using nonlawyer staff*, ABA (Nov. 2017), <https://www.americanbar.org/news/abanews/publications/youraba/2017/november-2017/ensure-your-paralegals-ethics-align-with-yours/> [<https://perma.cc/A3EG-SUH3>].

98. *See* N.Y. Cnty. Law.s’ Ass’n v. Dacey, 28 A.D.2d 161, 162 (N.Y. App. Div. 1967), *rev’d*, 21 N.Y.2d 694 (N.Y. 1998).

99. 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, 940–41 (2019) (examining three allegations of unauthorized practice of law involving LegalZoom around the United States, and the responses to each of those allegations).

100. Fergal McGovern, *Why does GenAI give different answers when you ask the same question?*, LINKEDIN (June 6, 2024), <https://www.linkedin.com/pulse/why-does-genai-give-different-answers-when-you-ask-same-mcgovern-yr1qe/> [<https://perma.cc/E5V3-RT3Q>]. Notably, these companies are not seeking to be transparent about the way their generative AI products work, instead keeping the algorithms proprietary and using elaborate marketing to make people think they’re reliable, without having to prove it.

101. Use the Gemini web app, GEMINI APPS HELP, <https://support.google.com/gemini/answer/13275745?hl=en&co=GENIE.Platform%3DAndroid#:~:text=For%20some%20prompts%2C%20you%20can,draft%20you%20want%20to%20review> [<https://perma.cc/NE67-CQMT>].

protect the confidentiality of client information, develop policies for the reasonable oversight of generative AI use, ensure fees and costs are reasonable, and comply with applicable ethics and advertising regulations.”¹⁰² Prior to the advent of generative AI, but still relevant to the current state of legal technology, Texas specifically carved out an exception for technology, stating:

(c) [T]he “practice of law” does not include the design, creation, publication, distribution, display, or sale, including publication, distribution, display, or sale by means of an Internet web site, of written materials, books, forms, computer software, or similar products if the products clearly and conspicuously state that the products are not a substitute for the advice of an attorney.¹⁰³

In January of 2024, North Carolina published its Proposed Ethics Opinion on the Use of Artificial Intelligence in Law Practice, which discussed professional responsibility issues arising when using AI in the legal profession.¹⁰⁴ North Carolina’s approach sought to answer questions including: whether a lawyer can be permitted to use AI; whether a lawyer can put a client’s data into a third-party AI program; whether a lawyer has to disclose use of AI to clients; and how a lawyer may bill for time spent using AI, considering the savings generated by the AI tool.¹⁰⁵ North Carolina’s approach seems to ask the right questions about how generative AI is used in practice, but leans toward the trend of anthropomorphizing AI tools as “non-lawyers” that must be supervised, like in Florida.¹⁰⁶ It’s clear that the people or organizations who seek to monitor or regulate generative AI don’t really understand what AI is or is not, and the line between what may or may not be considered legal advice is very fuzzy.

California took another approach, acknowledging that the state’s Rules of Professional Conduct did not expressly address the use of generative AI, which created significant uncertainty about the ethical duties for attorneys who might seek to use those resources.¹⁰⁷ In recognizing that the technology will likely change quickly, California issued “Practical Guidance” based on MIT’s Task Force on Responsible

102. *supra* note 92.

103. TEX. GOV. CODE § 81.101(c) (2011).

104. *Proposed Opinions*, N.C. STATE BAR, https://www.ncbar.gov/for-lawyers/ethics/proposed-opinions/?utm_source=substack&utm_medium=email [https://perma.cc/MDA5-3KF6] (last visited Sept. 17, 2024).

105. *Id.*

106. *Supra* note 92.

107. *Recommendations on Regulation & Use of Generative AI by Licensees*, THE STATE BAR OF CAL. COMM. ON PROF’L RESPONSIBILITY & CONDUCT (Nov. 16, 2023), <https://aboutblaw.com/bbpZ> [https://perma.cc/8BD8-EAER].

Use of Generative AI for Law, which seeks to remind lawyers of their existing professional responsibility obligations and to apply those obligations to any new technology created to assist lawyers.¹⁰⁸

California's COPRAC explicitly stated an intention to study generative AI and make recommendations to the Board regarding: balancing rules for the use of AI to protect clients and the public; supervising on non-human assistance; and determining whether attorney competency should extend to the AI product and whether AI use needs to be communicated to clients.¹⁰⁹

The concerns and potential recommendations from the Board in California echo concerns that are being heard around the United States: what are these robots, can they practice law, and how do we let people know what's going on?

Liability is also a potential issue. A generative AI provider could face criminal liability for the unauthorized practice of law, as well as civil liability from a user getting "bad advice."¹¹⁰ With the need to fill the justice gap so great, and the potential of generative AI to be an effective tool to help self-represented litigants pave their own way through the criminal and civil legal systems, users need and deserve clarity around whether the outputs of generative AI tools are legal advice. Regulation could provide this clarity and illuminate what consumers can and cannot expect when they encounter generative AI tools that, presumably, seek to provide additional opportunities for access to the justice system.

III. "WHAT COULD BE SEEN . . . WAS QUITE COMMON AND UNINTERESTING, BUT ALL THE REST WAS AS DIFFERENT AS POSSIBLE."¹¹¹ A PROPOSED SCHEME FOR REGULATION

Regulation is never easy and has grown increasingly unpopular in the United States.¹¹² While there are potential risks for some people to receive bad legal advice because of the implementation of consumer-facing AI to help fill the justice gap, the potential benefits far outweigh

108. *Id.*

109. *Id.*

110. See generally Peter Henderson, *Who is Liable When Generative AI Says Something Harmful*, STANFORD UNIV. HUMAN-CENTERED A.I. (Oct. 11, 2023), <https://hai.stanford.edu/news/who-liable-when-generative-ai-says-something-harmful> [https://perma.cc/LF5E-TRBB] (discussing the ways in which courts will have to determine the liability of generative AI products which academics believe will likely be protected by the First Amendment).

111. CARROLL, *supra* note 1.

112. In the wake of *West Virginia v. EPA*, 142 S. Ct. 2587 (2022) (holding that administrative agencies must point to clear congressional authorization when they issue politically or economically significant regulations), this seems especially true. See Louis J. Capozzi II, *The Past and Future of the Major Questions Doctrine*, 84 OHIO ST. L.J. 191 (2023) (demonstrating that the major questions doctrine has a long and robust history and arguing that courts should not struggle when they seek to apply it).

them. The Hague Institute for Innovation of Law conducted a study, and “[t]hrough interviews with innovators and those working within the justice institutions, [they] observe[d] a growing awareness that technology presents risks. The benefits that digital tools bring, however, far outweigh the risks—especially in providing access to justice in low and lower middle income countries.”¹¹³

But with the opportunities and risks associated with using generative AI to increase access to justice so great, regulation of consumer-facing platforms is the best way to ensure that those who need access to the justice system receive exactly what they need and nothing they don’t, with transparency along the way. In regulating consumer-facing AI applications for those who need assistance with the justice system, two goals must be centered: (1) the public must be protected from bad and negligent actors; and (2) the public must be able to access affordable and effective legal help through generative AI models.

To accomplish these goals, it is necessary to remove uncertainty around the question of whether a company offering a “legal AI model” could be liable for their model’s legal advice. To solve this problem, this framework suggests that if the providers of public-facing legal AI tools can meet the proposed requirements, they will be entitled to two legal presumptions:

- (1) a liability presumption that their products meet the prevailing standard of care¹¹⁴, and
- (2) a statement by state and local bars and any other authoritative body that the AI tool cannot be found to “practice law” by giving legal advice.

This regulatory scheme is incentive-based. An AI company or developer would not be legally required to comply to offer a product or service. Rather, compliance with the regulations will offer them a shield from potential liability.

As with any regulatory framework, it is important to start with requirements to ensure the needs of both the regulatory body and the entity being regulated are met. To regulate consumer-facing AI, the following requirements are proposed:

113. Kanan Dhru et al., *Use of digital technologies in judicial reform and access to justice cooperation*, HAGUE INST. FOR INNOVATION OF L. 1, 4–5 (2021), <https://www.hiil.org/wp-content/uploads/2021/11/HiiL-Use-of-digital-technologies-in-judicial-reform-and-access-to-justice-cooperation.pdf> [<https://perma.cc/Q8X9-LGAA>].

114. This presumption would apply if the company offering an AI tool is sued in any action that requires a negligence standard, such as defects in design, or failure to provide an adequate warning as outlined in the Model Uniform Product Liability Act, 44 Fed. Reg. 62,714, 62,721 (Oct. 31, 1979).

Disclosure, upon request, of any built-in prompting or instructions that are sent to the AI model along with the user's input.

In generative AI applications, typically the user's input is sent to the model alongside special instructions, such as "You are a helpful researcher, please answer this question:" followed by the user's input.¹¹⁵ Such instructions are typically used to increase the model's effectiveness and the quality of its response; however, they can also be used to manipulate the response in certain ways which may be detrimental to the user. For example, a generative AI tool marketed as a "mental health chatbot" could be instructed behind the scenes to recommend a certain medication.¹¹⁶

A. Disclosure of What Third-Party Generative AI Model, Large Language Model, and/or Application Programming Interface the Product is Using

While there are businesses out there that may have the financial, technological, and personnel resources necessary to produce a home-grown generative AI product that can be used in a consumer-facing legal application, many who seek to enter this space may wish to do so using an existing third-party generative AI model. An example of this language might read as simply as: "This product is using the GPT-4 model by OpenAI"

B. Disclaimer

A prominent disclaimer that includes the following information:

- Hallucinations are possible
- If a person is seeking legal advice, or experiencing a legal problem, they should consult with an attorney.

Hallucinations are misleading or incorrect information produced by a generative AI product when responding to a user-created prompt.¹¹⁷ Hallucinations are probable—if not likely—when using generative AI for legal applications. While attorneys using these products are aware of (and often indifferent to) the risks, consumers may not be so aware. A

115. See *What are AI Hallucinations?*, *infra* note 118.

116. Eva Wolfangel (@evawolfangel), CHAOS.SOCIAL (Apr. 13, 2023, 9:43 AM), <https://chaos.social/@evawolfangel/110191797774375124> [<https://perma.cc/A7DG-VB8K>]; Eva Wolfangel, *Der hinterlistige Therapeut*, ZEIT ONLINE (Apr. 17, 2023, 8:09 PM), <https://www.zeit.de/digital/2023-04/chatbot-psychologie-therapie-pharmaindustrie-manipulation> [<https://perma.cc/CV68-L4HH>].

117. *What are AI Hallucinations?*, IBM (Sept. 1, 2023), <https://www.ibm.com/topics/ai-hallucinations> [<https://perma.cc/JBM4-6MJX>].

prominent disclaimer explaining not only what hallucinations are, but also that they are possible, will be important to building trust with consumers and making a product successful.

A disclaimer about legal advice is often required when using any web-based application seeking to aid those in legal trouble, whether AI-framed or not. By clearly stating that those seeking legal advice should consult with an attorney, it will be clearer that any information provided by an AI tool is a starting point, not an ending point, for dealing with the justice system.

C. Data Deletion Policy

Most data deletion policies operate consistently and effectively. At a minimum, a successful data deletion scheme for generative AI in consumer-facing legal applications would provide:

- An option for the user to select “delete my data after use,” and the inputs will be deleted, along with responses from the system.
- A statement that the system cannot use user data for future refinement, training, or Q&A purposes without consent.
- An option for the user to select “I agree to let this organization use my anonymized data for future refinement, training, and quality assurance.”

Allowing users a level of transparency regarding how their data is stored and used will go a long way to building confidence in the use of generative AI for all applications, but particularly those in the legal field.

D. Q&A Process & Expert Review

Testing is a core part of industry-standard “responsible AI practices.”¹¹⁸ In cases where consumer-facing products provide users with question-and-answer-type resources, it is important to use a defined set of inputs to ensure the information provided remains consistent, trustworthy, and verifiable. The Legal Innovation & Technology Lab at Suffolk Law School has created Spot, an issue-spotting tool that creates standard language for discussing client needs.¹¹⁹ Spot is used with computer programs to automate issue identification and make access to the justice system more accessible to those who may not have an

118. See, e.g., *AI Principles*, GOOGLE AI, <https://ai.google/responsibility/responsible-ai-practices/> [<https://perma.cc/M3TV-34UJ>]; Patrick Farley et al., *Overview of Responsible AI practices for Azure OpenAI models*, MICROSOFT (Feb. 27, 2024), <https://learn.microsoft.com/en-us/legal/cognitive-services/openai/overview> [<https://perma.cc/8K KA-PABC>].

119. SUFFOLK LIT LAB, <https://spot.suffolklitlab.org/> [<https://perma.cc/5HUY-KDLR>].

understanding of what it is they need from the system.¹²⁰ If a consumer-facing AI product or application put in place a set of inputs like those provided by Spot, it would be easier for regulators (and even consumers) to understand what the consumer-facing AI product or application is doing, thereby increasing usability and trustworthiness.

Similarly, any outputs provided by consumer-facing legal AI should be regularly reviewed by a licensed attorney for accuracy and bias. Developers of consumer-facing products should be required to keep the results of these tests—both inputs and outputs—available in a reproducible way, to maintain the product's consistency and allow the general public to understand any changes made to the products.

The regulatory framework built out of the seven requirements listed cannot exist in a vacuum, and it will be essential that the providers following these regulations can be certified in some way to demonstrate to consumers that their tool meets the framework. Certification is tricky, however, and requiring a regulatory body to also be a certification body presents additional challenges. A potential solution exists with self-certification.

If a provider can prove they meet the five requirements, it would be simple to state that they are providing a certified generative AI product to the legal marketplace, and a specified seal or marking on the product would allow some degree of assurance for any self-represented litigant (or general consumer) that the product meets, at a minimum, these five requirements. If a provider is sued by a consumer and the provider can prove they met the standards, then the provider would be entitled to a rebuttable presumption that they met the applicable standard of care in providing the public with a product that utilizes generative AI. In addition, the presumption would allow any organization providing a generative AI tool to the general public a rebuttable presumption that, as a matter of law, their product is not engaged in the unauthorized practice of law. By allowing these presumptions to attach to any product that follows the regulations and is self-certified, the risk of an onslaught of lawsuits related to the use of these products will be, if not minimized, then streamlined.

The acts of regulation (or self-regulation) and certification (or self-certification) seem relatively easy compared to the bigger issue at hand: enforcing the regulations against bad actors. Because artificial intelligence products are being created quickly and marketed to consumers even more quickly, a method of enforceability would be ideal to make the regulations meaningful. But what is the best way to enforce?

120. *Id.*

IV. “I WONDER, NOW, WHAT THE RULES OF BATTLE ARE”¹²¹: A PROPOSED SCHEME FOR ENFORCEMENT

The problem with enforcement is that it is difficult. This proposed scheme—where producers of products utilizing generative AI self-certify that they have followed the regulations—helps front-load some of the logistics regarding enforcement and ensuring products in the marketplace aren’t created by bad actors. But what if the best way forward isn’t a ban on “unsanctioned” (or uncertified) artificial intelligence for self-represented litigants or those seeking legal self-help in the early stages of an issue? What if the better path forward is a liability shield for providers that, if they meet certain standards, there is a shifting presumption in their favor that they are not liable for any harm that may come from use of the product?

. . . Sarah is intrigued, navigates to the website, and gets started. She uses the AI product to help her split the marital assets but, during that process, the artificial intelligence tool incorrectly identifies a marital asset as non-marital, and doesn’t include it in the marital settlement agreement it ultimately drafts . . .

Where the provider is self-certified pursuant to the proposed regulatory scheme and claims the certification on its site, it would be subject to a presumption that the work it produces (or the product itself, or both) has not engaged in the unauthorized practice of law. If Sarah sues the company that provided the generative AI tool that ultimately drafted the marital settlement agreement, the company would not have the benefit of the rebuttable presumption that, while an injury may have occurred, the company met the applicable standard of care. In the alternative, the company could be subject to a presumption that their conduct was willful, wanton, or reckless, because they failed to self-certify.

This proposed enforcement scheme allows the company to include a clear and unambiguous waiver of liability on their site, which would allow for a decided advantage at the summary judgment stage of a case. That waiver also provides significant notice to the consumer that, regardless of their intent in using the generative AI tool, that tool will not act as an attorney or practice law for them, which should provide many users with the information needed to get a second opinion on any documents or information with which they want to move forward in the justice system.

In the alternative, if the provider above does not meet the benchmarks and does not self-certify, there is no presumption. They will be subject to a state or federal jurisdiction’s statutes and regulations regarding

121. CARROLL, *supra* note 1, at 131–32.

unauthorized practice of law, as well as potential civil or criminal liability for the information they provide.

In the scheme proposed herein, there is no regulating body.¹²² Given how little the legal field seems to understand technology, generally, and generative artificial intelligence, specifically, it may be a good thing to not have a formal body regulating these tools. On the other hand, courts are no better equipped to do so. It is up to the court to determine if the provider adequately met the benchmarks for self-certification and the initial burden is on the provider to prove compliance with those benchmarks. Sarah could, of course, work to overcome these presumptions. Perhaps the company's statement regarding transparency is overblown. Perhaps Sarah can produce documentation that shows her data was not being deleted and, instead, was being used to further the company's development of AI products. The case would then proceed as any other case, and Sarah would be entitled to damages reasonable for her particular situation under the laws and regulations of her local jurisdiction.

Some scholars have suggested that courts should bar self-represented litigants from using artificial intelligence until the user (or the court) can be assured of its utility or, in the alternative, courts should allow pro se litigants to use vetted artificial intelligence products, but only if the use of those products is disclosed to the court.¹²³ This is challenging—and maybe impractical—because it will be extremely difficult for a court to find out that a self-represented litigant is using an “unsanctioned” form of artificial intelligence? Requiring disclosure is fine, but what happens if the litigant doesn't disclose? It would be very hard to enforce a scheme where products must be proven to be useful and use is required to be disclosed to the court (by the very people who may not understand the legal system in the first place).

Another proposal, of course, is to simply ban all generative AI products that may offer “legal advice,” and put enforcement in the realm of a total ban. There are significant problems with attempting to ban something altogether, not the least of which being the difficulty in enforcement. First, users would need to understand that they are receiving legal advice for them to report that advice to an authority that can issue a ban. That level of understanding is not likely for users of consumer-facing

122. Given how little the legal field seems to understand technology, generally, and generative artificial intelligence, specifically, it may be a good thing to not have a formal body regulating these tools. On the other hand, Courts are no more equipped to do that.

123. Jessica Gunder, *Why Can't I Have a Robot Lawyer? Limits on the Right to Appear Pro Se*, 98 TUL. L. REV. 363, 406–10 (2024) (studying historic limitations on the right to appear pro se and considering how those limits impact litigants who are hoping to use artificial intelligence to assist them in court).

generative AI applications who may not have any familiarity with the legal system—which is what led them to use the product in the first place.

Next, if companies are required to instruct their generative artificial intelligence models to “not give legal advice,” there is no clear definition of legal advice. “Many courts have attempted to set forth a broad definition of the practice of law. Being of the view that such is nigh onto impossible and may injuriously affect the rights of others not here involved, we will not attempt to do so here. Rather we will do so only to the extent required to settle the issues of this case.”¹²⁴ While courts are reluctant to define legal advice, those who work in professional responsibility (and even other attorneys) would likely say they recognize legal advice when they see it—but what if they don’t see it? Banning the offering of legal advice is not akin to other directives like eliminating bias or excluding harmful content; those two things (arguably) have universal meanings. Every determination of legal advice, law practice, or unauthorized practice of law is made post-hoc, which makes it nearly impossible to stop before it happens. And generative AI will give legal advice no matter how well-trained or well-prompted; artificial intelligence is generative, not definitive.

In addition to these problems, banning generative AI from offering legal advice has the potential to stifle innovation in a massive and problematic way. The advent of generative AI is inspiring law schools to think about their curricula,¹²⁵ offering a variety of potential functions in the healthcare sector like routine information gathering and diagnosis,¹²⁶ and detecting errors, alerting users to fraud, and monitoring transactions in the financial field.¹²⁷ A complete ban of generative AI in the legal field could have a trickle-down, chilling effect in other industries that can damage innovation and progress overall and can significantly limit access to justice.

124. *State v. Sperry*, 140 So.2d 587, 591 (Fla. 1962).

125. See generally Jonathan H. Choi et al., *ChatGPT Goes to Law School*, 71 J. OF LEGAL EDUC. 387 (2022) (describing law professors’ process of using ChatGPT to generate answers on four real exams from the University of Minnesota Law School, and discussing implications for legal education and lawyering in light of the results of the exams).

126. Niam Yaraghi, *Generative AI in health care: Opportunities, challenges, and policy*, BROOKINGS (Jan. 8, 2024), <https://www.brookings.edu/articles/generative-ai-in-health-care-opportunities-challenges-and-policy/#:~:text=The%20proliferation%20of%20generative%20AI,%20diagnosis%20and%20even%20treatment> [https://perma.cc/7GRD-SNQN] (discussing the increased reliance on AI-assisted decision-making in the healthcare industry).

127. *Gen AI: Why finance should lead*, KPMG (last visited Feb. 7, 2025), <https://kpmg.com/us/en/articles/2024/gen-ai-why-finance-should-lead.html#:~:text=Many%20of%20Gen%20AI's%20unique,execution%20for%20the%20entire%20enterprise> [https://perma.cc/K8HS-EGCX] (opining that the utilization of AI in corporate finance makes good business sense).

V. THROUGH THE LOOKING GLASS¹²⁸: PREDICTIONS FOR THE FUTURE

. . . Sarah presents her faulty marital settlement agreement to John, who agrees to take a look. Without Sarah's knowledge, John has performed his own research using a generative AI product he found online, but the site John used has prominent disclaimers about legal advice, discloses the data it is gathering and how it is being used (and then deleted), provides transparency about the generative AI model on which it is built, and provides a seal of certification, so John believes it to be helpful and performing in a way that legal professionals have deemed trustworthy.

John compares his draft to Sarah's and notices a glaring error. Sarah's form doesn't include the 25-foot fishing boat they purchased shortly after they were married. John wonders how Sarah could have missed such a major asset, and he immediately begins to question what else may be wrong and what her intentions were in providing him the document . . .

Even when lawyers *are* involved, situations like the one described between Sarah and John are common. Emotions are typically high during family law cases and, even where the parties seek to work together amicably, things can go awry. Sarah did not approach the use of the unregulated generative AI tool any differently than John. She likely added similar information to the tool that built the marital settlement agreement, and believed it would correctly classify their assets based on advertising and testimonials on the site. It's probable that John took the same approach, but the site he self-selected was certified under the scheme provided above.

Were John and Sarah to go to a hearing to hammer out this marital settlement agreement and both were to discuss their use of generative AI in helping them navigate their divorce, a court would be able to look at the regulatory guidelines in this article, the self-certification provided (and not provided) on the websites used by John and Sarah, and presume that the tool used by John has, if not more legitimacy, then more credibility in the eyes of the court. Sarah, then, could pursue action against the website she used for failing to use due diligence in providing legal services to the public. The presumptions regarding legal advice would not attach to the site, nor would the assumption that the providers of the site acted with the appropriate standard of care for a case like Sarah's.

In all of this, whether a case like the one described herein or an actual case, it is hard to identify at what point these generative AI models are engaging in "problematic" behavior. They are typically generically

128. CARROLL, *supra* note 1.

marketed and, depending on what users ask them to do, may never cross over into actual legal advice, create documents, or provide information that impacts anyone. With that in mind, for future-looking applications it would be best to create a generic foundational model on which other generative AI products for self-represented litigants could be built. At a minimum, a generic foundational model should offer a robust disclaimer that recommends that users seek legal help from an organization or attorney and not rely solely on the generative AI product.

Today, because of the hullabaloo surrounding generative AI, most websites marketing these tools to self-represented people (or people who are at the early stages of navigating the system who may have not-yet hired an attorney) *do* provide a disclaimer about legal advice. A model disclaimer, however, that takes into account the proposed regulations in this article, could read something like this:

By accessing, viewing, or engaging with _____ service, this website, and anything it may produce, you agree that you understand that you are asking a legal question and should seek qualified help from an attorney or legal aid organization in your area. The _____ model/service is providing general information and not specific legal advice, and the information provided by you is not privileged and does not create an attorney-client relationship.

Any assertion that regulation, self-certification, model platforms, or even model disclaimers will solve the problems inherent with consumer-facing generative AI is probably oversimplifying the issue. People are using—and will continue to use—generative AI as a triage system for legal problems. The success of that triage does not depend on regulations or disclaimers, but on the transparency with which we discuss generative AI, its issues, and its opportunities—and the conversation is just beginning.

DEVELOPING LAWYERING SKILLS IN THE AGE OF ARTIFICIAL INTELLIGENCE: A FRAMEWORK FOR LEGAL EDUCATION

*Julie L. Kimbrough**

Abstract

This Article explores the emergence of generative artificial intelligence technology in legal education and law practice. It first offers historical perspective by examining the development of online legal research systems and other existing law practice technology tools that leverage artificial intelligence. This Article then proposes a framework for legal education based on twenty-first-century competencies that advance human interaction with legal technology tools. Next, this Article recommends that law schools incorporate these competencies into learning outcomes along with a holistic approach to teaching technology-driven lawyering skills as a strategy to narrow the learning gap between legal education and law practice. It concludes by using legal research instruction as a model for integrating twenty-first-century competencies into the law school curriculum.

INTRODUCTION	32
I. THE INTEGRATION OF ARTIFICIAL INTELLIGENCE	37
A. <i>The Evolution of AI in Legal Research</i>	38
B. <i>Other AI-Enhanced Law Practice Technology Tools</i>	44
II. A FRAMEWORK FOR INCORPORATING TECHNOLOGY	49
A. <i>Calls for Change in Legal Education</i>	52
B. <i>A Framework for 21st Century Competencies</i>	55
1. Professional Judgment	56
2. Collaborative Problem-Solving.....	59
3. Commitment to Ongoing Professional Development	60
4. Service Orientation.....	61
III. 21ST CENTURY COMPETENCIES APPLIED IN LAW SCHOOL	64
A. <i>How a Framework of 21st Century Competencies Narrows the Gap</i>	65
B. <i>21st Century Competencies in Legal Research Courses</i>	67
CONCLUSION.....	71

INTRODUCTION

Integrating new technology into the practice of law has always been a complex endeavor. Historically, the introduction of a new law practice technology tool signaled the beginning of significant changes in the day-to-day work of legal professionals and in the delivery of legal services. These developments generally require lawyers and legal educators, sometimes with great reluctance, to adapt and accept change. In 2020, the American Bar Association (ABA) Commission on the Future of Legal Education published *Principles for Legal Education and Licensure in the 21st Century*.¹ Fear of technology was one of the systemic obstacles the Commission believed would hold back much-needed changes in legal education and licensure. According to their report, “Technology is all too often viewed as a danger rather than as a force to enable transformative change.”² It offers tremendous opportunities to enhance service and efficiency, broaden client bases, and improve access to those in need of legal services.”³

Enter the age of artificial intelligence.⁴ A seismic shift is underway in the legal profession, and technology is once again a major source of the disruption.⁵ While the legal profession and its traditional business model make transformative change difficult,⁶ legal technology tools, including artificial-intelligence-enhanced legal research databases, e-discovery platforms, data analytics resources, and document automation and

1. *Principles for Legal Education and Licensure in the 21st Century*, AM. BAR ASS'N (Mar. 18, 2020), <https://www.americanbar.org/content/dam/aba/administrative/future-of-legal-education/cfle-principles-and-commentary-feb-2020-final.pdf> [https://perma.cc/4652-YK62].

2. *Id.* at 4.

3. *Id.*

4. The term artificial intelligence was first introduced in 1950 by British computer scientist Alan Turing in his article “Computing Machinery and Intelligence.” Turing introduced “the imitation game,” more widely known as the Turing Test. A.M. Turing, *Computing Machinery and Intelligence*, 59 MIND 433, 433–34 (1950), <http://www.jstor.org/stable/2251299> [https://perma.cc/W2H4-AKVJ].

Artificial Intelligence (AI) vs. Machine Learning, COLUMBIA ENGINEERING, <https://ai.engineering.columbia.edu/ai-vs-machine-learning/> [https://perma.cc/4UAB-M3KP] (“Artificial Intelligence is the field of developing computers and robots that are capable of behaving in ways that both mimic and go beyond human capabilities. AI-enabled programs can analyze and contextualize data to provide information or automatically trigger actions without human interference.”).

5. *Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1, at 3.

6. *Id.* at 4. The Commission named systemic obstacles in the way of transformational change in legal education. Among the obstacles: entrenched service delivery models in legal practice; one-size fits all model in legal education; fear of technology; misguided approach to disruption, and deep-rooted adherence to the status quo.

analysis features are already well-established in legal practice.⁷ Generative artificial intelligence⁸ currently grabs all the headlines, but the essential challenge for the future of the profession is one lawyers have faced many times in the age of artificial intelligence—striking the right balance between human and machine interaction in the practice of law and figuring out how that impacts delivery of legal services.⁹ As one law firm partner put it:

Our analogy at the firm is, It's Iron Man, it's not Terminator It's a really smart person surrounded by incredible technology, extending the capabilities of that very smart person. . . . People ask me all the time, is AI [going to] replace lawyers? No. But lawyers who use AI are going to replace lawyers who don't use AI.¹⁰

Naturally, there are already examples of lawyers who misused generative AI tools and then fell short of their professional obligations.¹¹ In June 2023, a New York federal district judge sanctioned two attorneys who submitted a brief that relied on nonexistent case law.¹² The attorneys failed to correct their mistake when it was pointed out by opposing counsel.¹³ The judge then ordered the attorneys to produce the cases they

7. I credit my wonderful *North Carolina Legal Research*, 3d co-authors for developing the tools for the lawyer's toolbox theme that we used throughout the book. The idea that research and technology applications (including artificial intelligence-enhanced legal research systems) are "tools" for your legal research and day-to-day work is also well-established in the law librarian community. Even the most advanced legal research and technology tools still, for now at least, need human lawyers to analyze results, apply the law, and use professional judgment about the information provided.

8. *AI for Legal Professionals*, BLOOMBERG L. (Aug. 1, 2023), <https://pro.bloomberglaw.com/brief/ai-in-legal-practice-explained/> [<https://perma.cc/K8ZD-NYHT>] ("A generative AI tool generates 'output,' typically in response to instructions, called the 'input' or 'prompt,' from a user. The output is based on an algorithmic model trained on vast amounts of data, which could be text, images, music, computer code, or virtually any other type of content.").

9. *Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1, at 6. See RICHARD SUSSKIND, TOMORROW'S LAWYERS: AN INTRODUCTION TO YOUR FUTURE 1, 5–6 (3d ed. 2023).

10. Tracey Read, *Generative AI Is The Hot New Practice At Law Firms*, LAW360 PULSE (May 12, 2023, 3:52 PM), <https://www.law360.com/pulse/articles/1607276/generative-ai-is-the-hot-new-practice-at-law-firms> [<https://perma.cc/K53H-NT4X>] (quoting Bennett Borden, Partner, DLA Piper, chief data scientist of the firm's newly created artificial intelligence and data analytics practice).

11. Lars Daniel, *How Smart Lawyers Make Dumb AI Mistakes— And How To Avoid Them*, FORBES (Feb. 26, 2025, 3:53 PM), <https://www.forbes.com/sites/larsdaniel/2025/02/26/how-smart-lawyers-make-dumb-ai-mistakes-and-how-to-avoid-them/> [<https://perma.cc/8NGH-YB XV>].

12. Sara Merken, *New York lawyers Sanctioned for using fake ChatGPT cases in legal brief*, REUTERS (June 26, 2023, 4:28 AM), <https://www.reuters.com/legal/new-york-lawyers-sanctioned-using-fake-chatgpt-cases-legal-brief-2023-06-22/> [<https://perma.cc/4PJJ-3Y6T>].

13. See *infra* note 14, at 461.

cited. After a series of missteps, the attorneys finally admitted the cases were hallucinated by ChatGPT.¹⁴ In the order imposing Rule 11 sanctions on the attorneys and their firm, the judge wrote, “Technological advances are commonplace and there is nothing inherently improper about using a reliable artificial intelligence tool for assistance. But existing rules impose a gatekeeping role on attorneys to ensure the accuracy of their filings.”¹⁵ The June 2023 New York case was the first time generative artificial intelligence appeared in court in the context of lawyer professional responsibility.¹⁶ In December 2023, Michael Cohen admitted providing his attorney with fake cases generated by Google Bard.¹⁷ Cohen used the chatbot to generate case citations for inclusion in a brief his attorney filed.¹⁸

As legal educators in the age of artificial intelligence, we have some important choices to make. In this chaotic moment, many of us feel uncomfortable about the prospect of using generative artificial intelligence tools in our law school classrooms or prescribing how our students may use these tools for coursework. Our own legal training is working against us. Lawyers, whether we work in academic or professional settings, embrace developing deep expertise on a particular topic. We emphasize precision, accuracy, and perfection in our work. We are reluctant to make assertions on unfamiliar topics without first studying the issues in depth and taking time to consider all the possible outcomes. Yet, as this Article describes, the story of artificial intelligence in the context of legal education and law practice is already one of striking the right balance between human and machine interaction, and we have

14. *Mata v. Avianca, Inc.*, 678 F. Supp. 3d 443, 458 (S.D.N.Y. 2023) (“The narrative leading to sanctions against Respondents includes the filing of the March 1, 2023 submission that first cited the fake cases. But if the matter had ended with Respondents coming clean about their actions shortly after they received the defendant’s March 15 brief questioning the existence of the cases, or after they reviewed the Court’s Orders of April 11 and 12 requiring production of the cases, the record now would look quite different. Instead, the individual Respondents doubled down and did not begin to dribble out the truth until May 25, after the Court issued an Order to Show Cause why one of the individual Respondents ought not be sanctioned.”).

15. *Id.* at 448. FED. R. CIV. P. 11.

16. I conducted Westlaw and Lexis searches to confirm (Dec. 2023).

17. *See infra* note 18.

18. Pranshu Verma, *Michael Cohen used fake cases created by AI in bid to end his probation*, WASH. POST (Dec. 29, 2023), <https://www.washingtonpost.com/technology/2023/12/29/michael-cohen-ai-google-bard-fake-citations/> [<https://perma.cc/EGR5-YJ3J>] (“In the filing, Cohen wrote that he had not kept up with ‘emerging trends (and related risks) in legal technology and did not realize that Google Bard was a generative text service that, like ChatGPT, could show citations and descriptions that looked real but actually were not.’ To him, he said, Google Bard seemed to be a ‘supercharged search engine.’”).

never had as much control of our online interactions as we might think we do.¹⁹

While the law practice technology revolution is well under way, the vast majority of American law schools are behind the technology curve.²⁰ Recent surveys of legal professionals consistently show two trends: (1) lawyers believe generative AI will make legal practice more efficient, and (2) they don't yet understand all the opportunities and challenges generative AI presents for the legal profession.²¹ Studies also show that generative AI will eventually be able to automate many legal tasks.²² There are remarkable career opportunities waiting for our law students when they graduate, *if* they receive ample opportunities to incorporate technology-driven lawyering skills into their law school learning experience.

Indeed, law students need to be prepared for the shifting landscape they will face in practice. As Dean Andrew Perlman of Suffolk University School of Law describes it, law schools should be teaching students “a new kind of issue spotting” in order for students to “understand how a particular legal service is delivered and identify how technology and other innovative methods can deliver those services better, faster, and cheaper.”²³ While most current law students are “digital natives,” our students do not possess an innate ability to effectively understand and

19. See generally NOAH WAISBERG ET AL., *AI FOR LAWYERS: HOW ARTIFICIAL INTELLIGENCE IS ADDING VALUE, AMPLIFYING EXPERTISE, AND TRANSFORMING CAREERS* (2021).

20. Manit Butalia, *AI vs Law Schools: The Cost of Ignoring the Future*, AM. BAR ASS'N (Nov. 26, 2024), https://www.americanbar.org/groups/law_practice/resources/law-technology-today/2024/ai-vs-law-schools/ [<https://perma.cc/X5CG-PHMF>]. There are some notable exceptions. Stanford, Duke, Vanderbilt, Suffolk, and others. These technology-forward law schools have programs that are driven by experts from within those law schools and often have the benefit of private funding from external donors.

21. *Wolters Kluwer's Future Ready Lawyer Survey: industry embraces generative AI, but is not yet very prepared for ESG demands*, WOLTERS KLUWER (Nov. 8, 2023), <https://www.wolterskluwer.com/en/news/future-ready-lawyer-2023-report> [<https://perma.cc/U938-BYYQ>]. This annual survey of legal professionals in law firms and corporate legal departments across the U.S. and Europe revealed key issues and trends affecting the future of the legal profession. It emphasized the integration of generative AI into legal work, with 73% of lawyers expecting to incorporate generative AI in the next year. Moreover, 87% of attorneys acknowledged that AI technology has improved their day-to-day work, although only 46% feel they are fully leveraging it. This survey suggests a growing expectation for new lawyers to be familiar with AI and other emerging technologies.

22. A 2023 Goldman Sachs report estimated that generative AI could automate 44% of legal tasks in the U.S. Rhys Dipshan, *Generative AI Could Automate Almost Half of All Legal Tasks, Goldman Sachs Estimates*, ALM LAW.COM (Mar. 29, 2023, 1:27 PM), <https://www.law.com/legaltechnews/2023/03/29/generative-ai-could-automate-almost-half-of-all-legal-tasks-goldman-sachs-estimates/> [<https://perma.cc/PRP7-HZSB>].

23. Andrew Perlman, *Foreword, Celebrating 50 Years*, 50 SUFFOLK U. L. REV. 385, 386 (2017).

utilize sophisticated legal technology tools without formal instruction.²⁴ And that learning needs to take place in a simulated practice setting where students have the chance to conduct research, create a work product, receive substantive feedback, and reflect on their experience.²⁵ Ultimately, law schools have an obligation to help students comprehend the importance of learning new technology they will be expected to use in practice.²⁶ That can only happen with a holistic approach to teaching lawyering skills, with a specific focus on technology skills, throughout the law school curriculum.

Part I of this Article examines the rise of legal generative artificial intelligence tools through the lens of existing legal technology, with a focus on the development of online legal research systems and other established law practice technology tools. Part II introduces a framework for law students and legal educators seeking to build competency with generative artificial intelligence tools and other emerging legal technologies. The framework builds on the ABA's *Principles for Legal Education and Licensure in the 21st Century*,²⁷ as well as the goals identified by recent reform legal education reform efforts, including the professional identity formation movement. As Part III will describe, law schools can begin to close this educational gap by applying twenty-first-century competencies to learning outcomes and adopting a holistic approach to teaching technology-driven lawyering skills. Finally, this Article demonstrates application of these competencies in the context of legal research instruction. Given the implications for our students, the

24. The term “digital natives” suggests that individuals born in the digital age are naturally skilled in navigating, understanding, and applying technology. Alternatively, copious research demonstrates this is a false narrative. See Iantha M. Haight, *Digital Natives, Techno-Transplants: Framing Minimum Technology Standards for Law School Graduates*, 44 J. LEGAL PRO. 175, 193 (2020); Dyane L. O’Leary, “Smart” Lawyering: Integrating Technology Competence into the Legal Practice Curriculum, 19 U.N.H. L. REV. 197, 224 (2021); Kristen E. Murray, *Take Note: Teaching Law Students to Be Responsible Stewards of Technology*, 70 CATH. U. L. REV. 201, 211 (2021).

25. *Id.*

26. LexisNexis allowed law faculty to test its new generative AI product, Lexis+ AI, in the fall of 2023. Following a faculty survey, Lexis has added Lexis AI+ to 2L and 3L law student accounts. 1L access was coordinated in consultation with LRW faculty and law library faculty. Some law schools will not open up 1L access until the end of the Spring 2024 semester. “Law firms have indicated they expect their summer and fall associates to be well-versed on the most advanced legal research tools, including generative AI.” *LexisNexis Collaborates with U.S. Law Schools to Roll Out Lexis+ AI, Marking First Widespread Use of Legal Generative AI Solution in Law School Education*, LEXISNEXIS (Dec. 20, 2023), <https://www.lexisnexis.com/community/pressroom/b/news/posts/lexisnexis-collaborates-with-u-s-law-schools-to-roll-out-lexis-ai-marking-first-widespread-use-of-legal-generative-ai-solution-in-law-school-education> [https://perma.cc/8X8Z-2M34].

27. *Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1.

legal profession, and society, it is imperative that law schools evolve to prepare our students for the shifting landscape they will face in practice.

I. THE INTEGRATION OF ARTIFICIAL INTELLIGENCE

As legal educators and lawyers face the new challenges presented by generative artificial intelligence tools, there are technological precedents to guide us. Online legal research, electronic discovery, legal data analytics, and document automation are older AI tools that are now embedded in law practice. To become proficient with each of these earlier technological innovations, lawyers and legal educators needed to develop competencies. These competencies included providing appropriate human oversight of the technology, developing a full understanding the strengths and weaknesses of the technology, continuing to adapt and build professional skills as the technology changed, and keeping a strong service orientation when interacting with technology. Those same strategies apply in the context of generative artificial intelligence.

This Article will discuss the use of artificial intelligence as it is implemented in legal education and law practice. It is important to note, however, that artificial intelligence encompasses a wide range of technologies used in many industries and for various purposes.²⁸ Artificial intelligence is “an umbrella term to describe technologies that rely on data to make decisions.”²⁹ In the context of legal technology tools, artificial intelligence may also be called cognitive computing.³⁰ “Cognitive computing uses AI systems that simulate human thought to solve problems using neural networks and other technology. Cognitive tools are trained vs. programmed—learning how to complete tasks traditionally done by people.”³¹

Although generative artificial intelligence tools are still in their infancy, earlier types of artificial intelligence have powered Westlaw, Lexis, and other legal technology platforms since the introduction of

28. Artificial intelligence technologies are employed in healthcare for diagnosis and treatment recommendations, in automotive industries for self-driving cars, in finance for algorithmic trading, and in customer service as chatbots. There are more basic AI-driven systems, for example those used in gaming applications, and there are more advanced systems including those used to power modern legal research platforms and other law practice technology tools. As described in Part Two, these legal systems incorporate machine learning and natural language processing.

29. Sterling Miller, *Generative AI: What In-House Legal Departments Need to Know*, THOMSON REUTERS (Nov. 30, 2023), <https://legal.thomsonreuters.com/blog/generative-ai-what-in-house-legal-departments-need-to-know/#What-is-artificial-intelligence?> [<https://perma.cc/CV G3-WS6A>].

30. *See id.* (“[A] better description is ‘cognitive computing’”).

31. *Id.*

natural language processing.³² While legal research platforms represent the first widespread use of AI tools in law practice, there are also well-developed AI tools in electronic discovery, legal data analytics, and document automation.

A. *The Evolution of AI in Legal Research*

Before the 1970s, the history of legal research was written in law libraries.³³ Public and private law libraries in the United States amassed collections of hundreds of thousands of volumes and regularly ran out of space because of the amount of legal information produced by our federal and state governments.³⁴ With the rise of the administrative state, the vast majority of print legal information was created by governmental bodies during the 20th century.³⁵ Conducting legal research before computers meant spending hours in a library poring over law books.

In the United States, foundational legal information sources that cataloged, classified, and explained the law were developed and published in the late 19th century and early 20th century by small (at the time) legal publishing companies.³⁶ West and LexisNexis, which grew from or consolidated these companies, developed titles that include Shepard's Citation System, West's National Reporter System, and the West Digest System. By introducing comprehensive organization and classification schemes to legal information, these iconic publications transformed the practice of law in the United States.

All of this content was created by people. Human editors with legal training read virtually every new judicial opinion created at both the federal and state levels, and then summarized, organized, and classified that information.³⁷ Attorneys and citizens with access to a law library

32. David Badertscher, *The Evolution of AI in Law Libraries*, CRIM. L. LIBR. BLOG (May 28, 2024), <https://www.criminallawlibraryblog.com/the-evolution-of-ai-in-law-libraries/> [https://perma.cc/7Z2H-T8H4].

33. See James Wier, *Beyond the Stacks: The Modern Evolution of Law Libraries*, 2024 U. MICH. L. SCH. SCHOLARSHIP REPOSITORY 14, 17.

34. JESSE D. GRIFFIN, JR., *DESELECTION CRITERIA USED BY ACADEMIC LAW LIBRARIANS IN SELECTED ACADEMIC LAW LIBRARIES IN THE SOUTHEASTERN UNITED STATES* 2 (2017).

35. See Susan E. Dudley, *Milestones in the Evolution of the Administrative State*, 2021 DAEDALUS 33, 33–34.

36. See West Group, *COMPANY-HISTORIES.COM*, <https://www.company-histories.com/West-Group-Company-History.html> [https://perma.cc/9H59-4HLB].

37. West Publishing, which is now a part of Thomson Reuters, has employed a remarkably large number of attorneys over the years. To manage their foundational classification system for U.S. law, West Publishing has historically employed attorney editors. These editors are tasked with categorizing published opinions into the Key Number System. Additionally, they are responsible for determining the categories and creating the headnote annotations that contribute to effective legal research. This process is based on the human attorney editors' interpretation of the opinions. For more information on this topic see Bill Voedisch, *WESTLAW: An Early History*, U. MINN. L. SCH. SCHOLARSHIP REPOSITORY 1 (2015).

could locate relevant case law and build legal arguments from an ever-expanding collection of primary and secondary legal information sources in print.³⁸ These “editorial enhancements” attached to legal primary sources became integral to the practice of law.³⁹ That editorial work continues today, and West and LexisNexis are still in business, albeit with a very different business model.⁴⁰ Increasingly, however, this kind of editorial work is accomplished through automation using artificial intelligence tools.

With the introduction of computer-assisted legal research (CALR), law practice and legal education entered a new era, but initial progress was slow.⁴¹ Early CALR platforms were fairly modest electronic databases of legal information—containing case law from a few jurisdictions—digitized by the major legal publishers.⁴² LexisNexis launched the first computer terminal for legal research in 1973, and a similar Westlaw terminal was introduced in 1975. These dedicated CALR terminals required dial-up access and introduced the concept of Boolean

38. “Primary sources . . . are the official pronouncements of the governmental lawmakers: the court decisions, legislation, and regulations that form the basis of legal doctrine. Secondary sources are works that are not themselves law, but that discuss or analyze legal doctrine.” KENT C. OLSON ET AL., *PRINCIPLES OF LEGAL RESEARCH* 1, 11 (3d ed. 2020) [hereinafter *Principles of Legal Research*].

39. The concept of editorial enhancements to legal information sources is still in use today. According to Thomson Reuters’ marketing campaign for the addition of generative AI to Westlaw Precision: “What do you get when you combine generative AI with Westlaw Precision’s industry-leading legal content, unmatched editorial enhancements, and over 150 years of legal industry expertise? The answer:” AI-Assisted Research. *Westlaw Precision with CoCounsel*, THOMSON REUTERS, <https://legal.thomsonreuters.com/en/c/westlaw/westlaw-precision-generative-ai> [https://perma.cc/5LQL-94PR]; see generally *Georgia v. Public.Resource.Org, Inc.*, 590 U.S. 255, 260 (2020) (explaining the significance of primary sources like the Official Code of Georgia (OGCA)).

40. West Publishing is now owned by Thomson Reuters, and LexisNexis is now owned by RELX. From the press release announcing the launch of Westlaw Precision with generative AI: “Thomson Reuters (TSX/NYSE: TRI), a global content and technology company, today announced a series of GenAI initiatives designed to transform the legal profession. Headlining these initiatives is the debut of GenAI within the most advanced legal research platform, AI-Assisted Research on Westlaw Precision.” *Thomson Reuters Launches Generative AI-Powered Solutions to Transform How Legal Professionals Work*, THOMSON REUTERS (Nov. 15, 2023), <https://www.thomsonreuters.com/en/press-releases/2023/november/thomson-reuters-launches-generative-ai-powered-solutions-to-transform-how-legal-professionals-work.html> [https://perma.cc/P4EM-SEVJ].

41. See Lourdes M. Fuentes, *Lessons from Legal Research’s Past for the GenAI-Powered Legal Technology of Tomorrow*, AM. BAR ASS’N (Sept. 18, 2024), https://www.americanbar.org/groups/law_practice/resources/law-technology-today/2024/lessons-from-legal-researchs-past-for-the-genai-powered-legal-technology-of-tomorrow/ [https://perma.cc/DQ3F-4DM8].

42. *The LexisNexis Timeline: Celebrating Innovation . . . and 30 Years of Online Legal Research*, STUDYLIB (2003), <https://studylib.net/doc/18502828/the-lexisnexis-timeline> [https://perma.cc/4WKG-KMGG].

or “terms and connectors” searching to legal research.⁴³ Until the 1990s, Boolean searching was the only option for CALR, and proficient Boolean searching was a lawyering skill—one that required precision and a clear understanding of legal language and syntax.⁴⁴

In 1992, West introduced Westlaw is Natural (WIN), still in the form of a standalone computer terminal. WIN was powered by AI-based natural language processing (NLP).⁴⁵ Natural language processing interprets the user’s search query and works together with a machine learning algorithm that uses this interpretation to retrieve relevant information.⁴⁶ For the first time, legal researchers could phrase their search queries in plain English, much like they would in conversation with a colleague. With this innovation, the process of conducting legal research changed radically, but most lawyers and law students had no idea they were already encountering a type of artificial intelligence.

43. In Boolean searches, “[s]pecific terms or phrases are joined by logical connectors such as and, or by proximity connectors indicating the maximum number of words that can separate the search terms. . . .” *Principles of Legal Research*, *supra* note 38, at 22. This search method is named after George Boole, a 19th-century mathematician. *Boolean Search Terms*, LEXISNEXIS, <https://www.lexisnexis.com/en-us/professional/research/glossary/boolean-search-terms.page> [https://perma.cc/54U6-NU63].

44. Boolean searching is ultimately less flexible than AI-based natural language searching but highly effective in the hands of an experienced legal researcher. *See generally Prepare to Practice Resources*, ALA. L., <https://guides.library.law.ua.edu/c.php?g=1228537&p=10218281> [https://perma.cc/EW46-H22K].

45. WIN was the first commercial search engine to use NLP. It predates Google. WAISBERG ET AL., *supra* note 19, at 114. Natural Language Processing (NLP) is a field of artificial intelligence that focuses on the interaction between computers and human language. It involves enabling computers to understand, interpret, and respond to human language in a useful way. NLP is used in many applications including legal research, language translation, chatbots, voice assistants, and text summarization.

46. As described by the lead engineer of the now-defunct ROSS Intelligence, legal research systems contain “millions of legal decisions and hundreds of millions of passages that have already been processed by machine learning algorithms. The ingestion of legal data happens daily. The algorithms are trained against a corpus of queries and legal decisions. Once the algorithms meet acceptable statistical thresholds, they are then let loose to perform searches against the millions of decisions and hundreds of millions of passages.” Stergios Anastasiadis, *How is Natural Language Search Changing The Face of Legal Research?*, ROSS (Apr. 8, 2019), <https://blog.rossintelligence.com/post/how-natural-language-search-changing-face-of-legal-research> [https://perma.cc/W58R-NPRL]. In 2020, Thomson Reuters sued ROSS Intelligence alleging copyright infringement. Thomson Reuters claimed a third-party company, LegalEase, downloaded large portions of Westlaw’s content and passed that content along to ROSS in order to build the ROSS legal research database. ROSS went out of business in 2021, blaming the cost of litigation. The case is set to go to trial in 2024. Thomson Reuters Enterprise Centre GmbH et al. v. ROSS Intelligence Inc., case number 1:20-cv-00613. Adam Lidgett, *Thomson Reuters, ROSS IP Row Must Go To Trial, Judge Says*, LAW360 (Sept. 25, 2023, 7:59 PM), <https://www.law360.com/articles/1725495/thomson-reuters-ross-ip-row-must-go-to-trial-judge-says> [https://perma.cc/UK3A-BUE7].

At the turn of the 21st century, increases in computing power, advances in artificial intelligence, the advent of widespread high-speed internet connections, and innovations in networked information protocols all contributed to another significant shift in the way legal researchers accessed and interacted with legal information.⁴⁷ Web-based online legal research platforms became the industry standard.⁴⁸ In 2001, Westlaw began to use machine learning algorithms to assist their attorney editors with classification of cases into the Key Number System.⁴⁹ According to the Columbia Engineering's website, "[m]achine learning is a pathway to artificial intelligence. This subcategory of AI uses algorithms to automatically learn insights and recognize patterns from data, applying that learning to make increasingly better decisions."⁵⁰ Continual development of natural language processing and machine learning (ML) drastically improved the efficiency and scope of online legal research.⁵¹

Legal research systems are a great example of the power of machine learning. The machine learning algorithm can identify relationships—the context—among cases, statutes, regulations, and other legal information sources that a human researcher might miss. Machine learning advancements allowed West and LexisNexis to expand their platforms to include the following now-standard features: source recommendation (ML algorithm suggests the most relevant primary and secondary sources based on the context of the user's search query); citation analysis (ML helps in understanding how often a case is cited, which can be an indicator of its importance or relevance in a particular legal context); and document management tools (ML can automatically organize, tag, and classify documents, which saves considerable time and effort).⁵² All of the artificial intelligence enhancements that powered these new features remained behind the scenes. More important, these systems continuously learn and adapt based on new data and user interactions, refining their algorithms to become more accurate and efficient.⁵³

47. Carolyn Elefant, *Part 1: A Brief History of Legal Research Tools, According to Someone Who Actually Uses Them*, MY SHINGLE (May 16, 2017), <https://myshingle.com/2017/05/articles/web-tech/part-brief-history-legal-research-tools-according-someone-actually-uses/> [<https://perma.cc/F6V9-PYFU>].

48. *Id.*

49. WAISBERG ET AL., *supra* note 19, at 115.

50. *Artificial Intelligence (AI) vs. Machine Learning*, *supra* note 4. Columbia Engineering is Columbia University's online graduate engineering program focused on artificial intelligence.

51. HIRAL MODI, LEVERAGING NATURAL LANGUAGE PROCESSING FOR LEGAL RESEARCH: TRENDS AND FUTURE DIRECTIONS 2 (2023).

52. WAISBERG ET AL., *supra* note 19, at 115.

53. MARC SERRAMIA ET AL., COLLABORATIVE FILTERING TO CAPTURE AI USER'S PREFERENCES AS NORMS 5–6 (2023).

Current legal research systems continue to rely heavily on natural language processing and machine learning algorithms.⁵⁴ The lack of accountability and transparency regarding the design of this technology is the subject of considerable debate and legal scholarship.⁵⁵ In 2017, Susan Nevelow Mart conducted a research study comparing the top ten search results from identical searches across different legal research databases (Westlaw, Lexis, Fastcase, Google Scholar, Ravel, and Casetext).⁵⁶ An average of 40% of the top ten cases retrieved were unique to one database, and the relevance of results also varied by database.⁵⁷ When only Westlaw and Lexis Advance results were compared, 72% of the top ten cases returned were unique.⁵⁸ Thus, users of one legal research database will predictably encounter a different list of cases compared to those provided for the same search query in a different database. Mart's influential research demonstrates the human variability baked into the design of these sophisticated legal research databases.⁵⁹

Another significant issue in the legal research and technology space is incomplete coverage of court decisions in major legal databases including Westlaw and LexisNexis.⁶⁰ Many legal scholars have examined the effect of technology on the availability of court decisions, and they have consistently shown large numbers of judicial decisions are unavailable on Westlaw or Lexis.⁶¹ These “missing decisions” or “submerged precedent” are often only accessible through individual court dockets on PACER (Public Access to Court Electronic Records).⁶² Further, “submerged precedent” challenges the perception that Westlaw and LexisNexis provide users with a comprehensive set of primary legal

54. *Artificial Intelligence*, U. WASH. SCH. L. GALLAGHER L. LIBR., <https://lib.law.uw.edu/AI> [<https://perma.cc/22VE-UQ4J>].

55. See Susan Nevelow Mart, *The Algorithm as a Human Artifact: Implications for Legal [Re]Search*, 109 LAW LIBR. J. 387, 389 (2017). See also Paul D. Callister, *Law, Artificial Intelligence, and Natural Language Processing: A Funny Thing Happened on the Way to My Search Results*, 112 LAW LIBR. J. 161, 204–05 (2020).

56. Mart, *supra* note 55, at 390.

57. Mart, *supra* note 55, at 412.

58. See Mart, *supra* note 55, at 415.

59. “It is fair to say that each different set of engineers brought very different biases and assumptions to the creation of each search algorithm.” *Id.* at 390.

60. See McAlister, *infra* note 62, at 1101.

61. See McAlister, *infra* note 62, at 1106.

62. See Merritt E. McAlister, *Missing Decisions*, 169 U. PA. L. REV. 1101, 1104 (2021); Elizabeth Y. McCuskey, *Submerged Precedent*, 16 NEV. L.J. 515, 516 (2016). PACER is an online public access service of the United States federal judiciary. It allows users to obtain case and docket information from federal appellate, district, and bankruptcy courts, and the PACER Case Locator. PACER requires users to create an account and pay fees. The PACER fee structure has long been a topic of debate and litigation, with many legal scholars arguing for making the system free to increase public access to legal information. See *Nat'l Veterans Legal Servs. Program v. United States*, 968 F.3d 1340 (Fed. Cir. 2020).

information sources.⁶³ Moreover, the selective nature of case inclusion by major legal research systems highlights the importance of evaluation of these sources and the need for a diversified approach to legal research including comparison of results from different platforms. Westlaw and LexisNexis also exercise a degree of editorial discretion in the cases they select to include or not include in their databases.⁶⁴ The criteria for selection and the rationale behind these editorial choices are typically not transparent, raising concerns about the potential for bias and gaps in legal research conducted using these platforms.⁶⁵

The latest evolution in the legal research space is the integration of generative artificial intelligence tools into legal research databases.⁶⁶ Unfortunately, Westlaw and LexisNexis tend to roll out new product enhancements to law firms well before these features are added to academic accounts. This practice presents significant challenges for legal educators and puts the burden on legal employers to pay for technology training.⁶⁷ Recent survey results reveal strong interest in generative AI research tools within the legal community.⁶⁸ Lawyers and law students consistently rank legal research at the top of potential use cases for generative AI.⁶⁹ Lawyers currently using generative AI tools are most often using them to conduct legal research.⁷⁰

63. *Id.*

64. See McCuskey, *supra* note 62, at 536–37.

65. See *id.*

66. Robert Ambrogì, *LexisNexis Enters the Generative AI Fray with Limited Release of New Lexis+ AI, Using GPT and other LLMs*, LAW SITES (May 4, 2023), <https://www.lawnext.com/2023/05/lexisnexis-enters-the-generative-ai-fray-with-limited-release-of-new-lexis-ai-using-gpt-and-other-llms.html#:~:text=Today%2C%20LexisNexis%20is%20announcing%20the%20launch%20of%20Lexis%2B,documents%20such%20as%20demand%20letters%20or%20client%20emails> [https://perma.cc/7VZD-7TPT].

67. This has held true for the rollout of generative AI tools. It is a source of frustration for legal educators and a practice that works against efforts to bridge the technology gap between law schools and the legal profession. Law library faculty, for example, are experts who are well-positioned to provide feedback on product enhancements in legal research systems.

68. *Wolters Kluwer's Future Ready Lawyer Survey: industry embraces generative AI, but is not yet very prepared for ESG demands*, *supra* note 21.

69. According to the *LexisNexis International Legal Generative AI Study*, 65% of lawyers surveyed believe generative AI tools have the most potential for use in the area of legal research. Legal research ranked higher than drafting documents (56%), document analysis (44%) and email writing (35%). *How Generative AI Can Enhance Legal Research Responsibly*, LEXISNEXIS (Oct. 25, 2023), <https://www.lexisnexis.com/community/insights/legal/b/thought-leadership/posts/how-generative-ai-can-enhance-legal-research-responsibly> [https://perma.cc/A4K4-ZRDR].

70. 59% of attorneys surveyed have used generative AI tools for legal research. Placing second and third in professional use of generative AI: drafting documents (45%) and writing emails (38%). *Generative AI & The Legal Profession 2023 Survey Report*, LEXISNEXIS 1, 5 (2023) https://www.lexisnexis.com/pdf/ln_generative_ai_report.pdf (last visited Mar. 1, 2025).

In the 21st century, the Thomson Reuters (Westlaw) and RELX (LexisNexis) “duopoly” is no longer only about legal research.⁷¹ They are no longer strictly legal publishers. The most valuable assets these companies have are data. Both companies have created new data-driven law practice technology tools and incorporated those tools into their research platforms.⁷² The newest versions of these platforms include AI-assisted document review and analysis features, data analytics tools, and public records databases.⁷³ It is important to recognize and understand this gradual transformation in the business model of legal information providers and the information-seeking behaviors of legal researchers. This shift in both the business of legal research and the resulting changes in individual user behavior have significant implications for the future of law practice.⁷⁴

B. Other AI-Enhanced Law Practice Technology Tools

Sophisticated technology tools have already transformed day-to-day legal work by automating routine tasks and improving efficiency and accuracy of work product.⁷⁵ Pressure on law firms to invest in emerging technologies and meet client demands for efficient use of these technology tools is intense and will only continue to grow.⁷⁶ A sizeable

71. SARAH LAMDAN, DATA CARTELS 74 (2023).

72. In the 21st century, both Westlaw and LexisNexis have integrated data analysis and public records tools into their legal research platforms, though public records are restricted or unavailable on academic accounts. In recent years, LexisNexis acquired legal tech startups Lex Machina and Ravel. LexisNexis Risk Solutions is the company’s consumer credit-reporting branch. Thomson Reuters has acquired public and court records service companies over the years and now owns CLEAR, an online investigation software provider for law enforcement. Lower cost competitor FastCase has been purchased by vLex and their integrated platform includes DocketAlarm. vLex also has a new generative AI assistant called Vincent.

73. Increasingly, these kinds of tools are not optional add-ons, although the new Westlaw and LexisNexis generative AI chatbots are currently separately priced.

74. Legal scholars have commented on this transformation of legal publishing since the 1990s. “The dominant role played by the book in legal information is now ending. My contention is that its demise will not manifest itself in the form of a clean break with tradition. There will be at least a decade, perhaps a generation, involved in constructing the new information environment. Many lawyers, law professors and judges remain creatures of the old information and will never change their views of how things ought to be. However, they are being superseded by newer researchers, who come to the profession as devotees of electronic information.” Robert Berring, *Chaos, Cyberspace and Tradition: Legal Information Transmogrified*, 12 BERKELEY TECH. L.J. 189, 190 (1997).

75. See Daniel Martin Katz, *Quantitative Legal Prediction—or—How I Learned To Stop Worrying and Start Preparing for the Data-Driven Future of the Legal Services Industry*, 62 EMORY L.J. 909, 913 (2013); WAISBERG ET AL., *supra* note 19, at Chapter 8 “AI in Legal Research.”

76. *Wolters Kluwer’s Future Ready Lawyer Survey: industry embraces generative AI, but is not yet very prepared for ESG demands*, *supra* note 21 (discussing the increasing pressure on law firms to adopt emerging technologies and navigate post-pandemic transformations).

gap still exists, however, between the research and technology skills of new law school graduates and the competencies legal employers expect newly licensed lawyers to have on day one.⁷⁷

Electronic discovery (e-discovery) first gained prominence in law practice in the late 1990s and early 2000s.⁷⁸ Its emergence was closely tied to the rapid expansion of electronic communication and Electronically Stored Information (ESI), which quickly warranted the development of new methods to manage and analyze electronic data in legal proceedings. The pivotal moment for the formal recognition of e-discovery in the United States came in 2006, when the Federal Rules of Civil Procedure (FRCP) were amended to specifically address e-discovery.⁷⁹ These amendments acknowledged the growing importance of electronic evidence in litigation and provided guidelines for the discovery process involving ESI.⁸⁰

Early e-discovery systems, like their predecessors in the legal research space, relied solely on Boolean logic for keyword searching.⁸¹ Once again, keyword searching lacked some important features. In the vast sea of electronic evidence, often in the form of millions of emails, searching for relevant information often required many junior lawyers to be paid for document review. It was a low-level legal task but one that was incredibly time-consuming and expensive for law firms.

In 2012, Technology-Assisted Review (TAR) was first recognized as an appropriate method of review in *Da Silva Moore v. Publicis Groupe*.⁸²

77. A survey of 300 hiring partners and senior associates who supervise new attorneys found that 95% “believe recently graduated law students lack key practical skills at the time of hiring.” *White Paper: Hiring Partners Reveal New Attorney Readiness for Real World Practice*, LEXISNEXIS 1,1 (2015), https://www.lexisnexis.com/documents/pdf/20150325064926_large.pdf?srltid=AfmBOoruYqPTevr0JzlsrM-OreJ-ZV_ID8Tbiyavcpk85KdCSr3JG0lu [<https://perma.cc/EHZ5-Y86L>].

78. E-discovery is the process of collecting, analyzing, and producing electronic information during litigation and investigations. See *What is the eDiscovery Process?*, CASEPOINT, <https://www.casepoint.com/resources/spotlight/everything-you-need-to-know-about-e-discovery/> [<https://perma.cc/AT5M-HMN7>].

79. The FRCP amendments redefined the scope of discoverable material by adding the phrase “electronically stored information” to Rules 26(a)(1), 33, and 34. See *E-Discovery Amendments to the Federal Rules of Civil Procedure Go Into Effect Today*, K&L GATES (Dec. 1, 2006), <https://www.ediscoverylaw.com/2006/12/01/e-discovery-amendments-to-the-federal-rules-of-civil-procedure-go-into-effect-today/> [<https://perma.cc/UR6B-A4QY>].

80. Amendments to Rule 26(b)(2) mandated that producing parties need not produce ESI from sources that are not “reasonably accessible” because of undue burden or expense. Rule 37(f) creates a “safe harbor” limit for sanctions where ESI is lost through the routine, good-faith operation of computer systems. FED. R. CIV. P. 26(b)(2), FED. R. CIV. P. 37(f). See *E-Discovery Amendments to the Federal Rules of Civil Procedure Go Into Effect Today*, *supra* note 79.

81. See generally FindLaw Attorney Writers, *eDiscovery Processing: Searching*, FINDLAW (June 20, 2016), <https://www.findlaw.com/legal/technology/ediscovery-guide/pro-cessing-searching.html> [<https://perma.cc/ZPM2-3ZF9>].

82. *Da Silva Moore v. Publicis Groupe*, 868 F. Supp. 2d 137 (S.D.N.Y. 2012).

TAR quickly gained acceptance in law practice, establishing it as an efficient and effective tool for handling large volumes of data in e-discovery. TAR uses predictive coding, a form of machine learning that automates many tasks in the e-discovery process, such as document extraction and categorization.⁸³ Predictive coding employs algorithms to categorize documents based on a training set coded by humans.⁸⁴ Over time, the algorithm learns from the training set to make increasingly accurate predictions about the relevance of new documents.⁸⁵ This process helps streamline the review of large datasets by prioritizing relevant documents.⁸⁶ TAR is another example of balancing human and machine interaction to improve efficiency and accuracy in law practice.

Another AI-driven innovation offers a window into the transformation of the delivery of legal services. Data analytics introduced “evidence-based decision-making,”⁸⁷ disrupting how lawyers approach legal strategy, track court dockets, and build and understand their client base. Data analytics is a field of computer science that leverages data science techniques to extract insights from data.⁸⁸ By analyzing historical legal data, machine learning algorithms can predict potential outcomes of current legal matters.⁸⁹ Legal data ranges from court cases, dockets, and filings to business transactions and legal market trends. The legal profession was initially slow to accept this new technology, but the growth of available electronic data about legal matters and increases in computing power and capacity contributed to the rise of data-driven decision-making in law practice.⁹⁰ Different types of legal data analytics

83. *How to make the e-discovery process more efficient with predictive coding*, THOMSON REUTERS, <https://legal.thomsonreuters.com/en/insights/articles/how-predictive-coding-makes-e-discovery-more-efficient> [<https://perma.cc/WVA2-Z492>] (last visited Mar. 1, 2025).

84. *Id.*

85. *See id.*

86. *See* Maura R. Grossman & Gordon V. Cormack, *Technology-Assisted Review in E-Discovery Can Be More Effective and More Efficient than Exhaustive Manual Review*, 17 RICH. J.L. & TECH. 1, 8 (2011).

87. Data analytics plays an instrumental role in evidence-based decision making, and this is demonstrated in multiple steps in the decision-making process. *See Data Analytics for Evidence-based Decision-making emphasizes the importance data-driven insights in shaping policies, enabling informed decisions that effectively address societal needs.*, TECH. INNOVATORS, <https://www.technology-innovators.com/data-analytics-for-evidence-based-policy-making-and-decision-making/> [<https://perma.cc/4YSK-TWUP>].

88. Stephen Eldridge, *data analysis*, BRITANNICA (last updated Mar. 14, 2025), <https://www.britannica.com/science/data-analysis> [<https://perma.cc/FCG5-KKZL>].

89. *See* Katz, *supra* note 75, at 939–40.

90. ED WALTERS, *DATA-DRIVEN LAW: DATA ANALYTICS AND THE NEW LEGAL SERVICES* 1–10 (2018).

serve various purposes, and they fit broadly into two main categories: “practice of law” analytics and “business of law” analytics.⁹¹

The most widely used law practice analytics are litigation analytics, focusing on understanding patterns and trends in litigation.⁹² It involves analyzing historical court data to predict outcomes of current cases, understand judicial behavior, and identify trends in case law.⁹³ Lawyers use these insights to develop legal strategies, anticipate potential challenges in cases, and advise clients more effectively. Subcategories of litigation analytics include data on courts, judges, law firms, and attorneys.⁹⁴

The myriad of information from different branches of government serving as the foundation of litigation data reflects the complexity of the U.S. legal information ecosystem. This complexity arises from the multifaceted nature of legal issues and sources of law. Each facet of data offers unique insights. Together, they provide a comprehensive view of the legal landscape, allowing practitioners to draw nuanced conclusions and craft more informed legal strategies. Case law, court records and dockets, regulatory information, and public records all contribute to the data sets that make up litigation analytics.⁹⁵

Lawyers need to be aware of the inherent problems with government data. Data issues can be traced back to a lack of funding as well as a failure to prioritize innovations in the government’s technology infrastructure.⁹⁶ For example, PACER and state court dockets and these systems are far from perfect. Typos and mistakes in Nature of Suit (NOS) codes are quite common in PACER, and state docket systems are even more challenging.⁹⁷ Further complicating PACER data issues, the federal courts’ Case Management/Electronic Case Files (CM/ECF) database is

91. Kara Wen, *What Are the Different Types of Legal Data Analytics?*, SIMPLELEGAL (Feb. 22, 2022), <https://www.simplelegal.com/blog/legal-data-analytics> [<https://perma.cc/5KTD-MZ65>].

92. Lyle Moran, *Nearly 70% of law firm professionals use legal analytics*, LEGAL DIVE (Feb. 7, 2024), <https://www.legaldive.com/news/legal-analytics-trends-law-firms-lex-machina-lexisnexis/706900/> [<https://perma.cc/8BX4-CHF8>].

93. *Litigation Analytics: The Types of Data You Need in Court*, LEXISNEXIS (Apr. 3, 2023), <https://www.lexisnexis.com/community/insights/legal/b/thought-leadership/posts/taking-analytics-to-court> [<https://perma.cc/ZN2X-DWTD>].

94. *Id.*

95. *Id.*

96. *See Nascio and EY US study reveals majority of states lack data quality programs to support GenAI-ready data*, EY (Sept. 10, 2024), https://www.ey.com/en_us/newsroom/2024/09/nascio-and-ey-us-study-reveals-majority-of-states-lack-data-quality [<https://perma.cc/5R6D-TYHJ>].

97. *Data in the Court: Judicial Analytics in Practice*, HARV. L. SCH. CTR. ON LEGAL PRO., <https://clp.law.harvard.edu/knowledge-hub/magazine/issues/judicial-decision-making/data-in-the-court/> [<https://perma.cc/38SA-9WN9>].

integrated with PACER.⁹⁸ Attorneys use the ECF to upload information and documents related to their cases before some of the federal courts, but not all. Attorneys may introduce mistakes unintentionally. One well-known issue occurs when an attorney changes firms and attempts to update their integrated ECF and PACER login information. If the attorney fails to follow one of the complex steps in the update process, the system will change the name of the attorney's law firm not only for cases going forward but also for all the attorney's prior cases.⁹⁹ A significant challenge in deploying legal analytics tools is the need for transparency and accountability in the underlying data used to create the predictions. Lawyers and their clients need to understand how the model arrived at a prediction to trust and effectively use it.

The second broad category of legal data analytics focuses on the business of legal practice. It involves using external (legal industry) and internal (firm or in-house) data to identify new market opportunities, better understand client needs, and tailor legal services to meet those needs. This area of legal data analytics includes analyzing industry trends, client histories, and competitor activities to inform business strategies. Law firms can use this data to target marketing efforts more effectively, develop new service offerings, and improve client relationships.

Each category of legal data analytics has its own set of tools and methodologies. The common thread among them is the use of advanced artificial intelligence data analysis techniques, including machine learning and natural language processing, to extract meaningful insights from large volumes of legal data. This not only helps in making more informed decisions but also enhances the efficiency and effectiveness of legal practice and delivery of legal services. In fact, legal data analytics tools are "expanding our understanding of what it means to conduct legal research—that legal research is not just about cases and statutes; it's about gaining insights into the judges and lawyers and parties involved in a matter and how we adapt those cases and statutes and our own strategies based on those insights that we've gained"¹⁰⁰

Yet another example of our expanded understanding of legal research comes in the form of document automation. The integration of AI-based

98. *Electronic Filing (CM/ECF)*, U.S. Cts., <https://www.uscourts.gov/court-records/electronic-filing-cmecf> [<https://perma.cc/JD42-2HDM>].

99. According to one attorney, PACER attributes this to user error. "However, it has happened in thousands of cases, and if everyone is making the same mistakes, it's not user error." Terri Williams, *Out of Pace With Reality? PACER's Flaws Run Counter to Original Purpose of Increasing Access to Law*, ABA J. (Apr. 30, 2020, 8:00 AM), <https://www.abajournal.com/web/article/out-of-pace-with-reality-pacer> [<https://perma.cc/4X2K-PU89>].

100. The Practice, *Data in the Court*, HARV. L. SCH. CTR. ON THE LEGAL PRO. (Mar/Apr. 2022), <https://clp.law.harvard.edu/knowledge-hub/magazine/issues/judicial-decision-making/data-in-the-court/> [<https://perma.cc/NK5D-6Z25>] (quoting Robert Ambrogi, legal tech journalist and media lawyer, author of the LawSites blog and creator of the LawNext podcast).

machine learning in legal document automation is transforming how complex legal documents are created, reviewed, and managed. This is another example of technology innovations leading to increased efficiency, accuracy, and cost savings for lawyers and their clients. Document automation is particularly useful for high-volume document production, for example in contract management, due diligence, and regulatory compliance reporting.¹⁰¹ These tools are typically in the form of an AI-assistant that generates first drafts of documents, thus reducing the time spent on drafting and editing tasks. Presently, this AI-assistant operates behind the scenes on both Westlaw and Lexis, but generative AI chatbots have the potential to turn this process into a more personalized human/machine interaction.

II. A FRAMEWORK FOR INCORPORATING TECHNOLOGY

Part Two presents a legal education framework for incorporating technology-driven lawyering skills. The framework builds on the foundation created by influential legal education reform efforts. From the MacCrate and Carnegie Reports to *Principles for Legal Education and Licensure in the 21st Century*¹⁰² and the professional identity formation movement, these calls for reform deserve renewed attention in the age of artificial intelligence.¹⁰³ This framework also draws inspiration from information and library science scholars and information professionals.¹⁰⁴ Their research on twenty-first-century information

101. Knowledge Team, *AI and Document Automation for Lawyers*, PAGELIGHTPRIME (Oct. 10, 2023), <https://www.pagelightprime.com/blogs/ai-document-automation-lawyers> [https://perma.cc/52DL-AJYY].

102. The Commission calls for collective action and systemic change in legal education and licensure. It recommends re-envisioning legal education models, rethinking law school accreditation, implementing targeted licensure, updating the bar exam, and addressing access to justice issues. *See generally Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1, at 1.

103. *See generally* PATRICK EMERY LONGAN ET AL., *THE FORMATION OF PROFESSIONAL IDENTITY: THE PATH FROM STUDENT TO LAWYER* (2020); *see generally* NEIL W. HAMILTON & LOUIS D. BILIONIS, *LAW STUDENT PROFESSIONAL DEVELOPMENT AND FORMATION: BRIDGING LAW SCHOOL, STUDENT, AND EMPLOYER GOALS* (2022).

104. In 2016, the Association of College and Research Libraries (ACRL) published the *Framework for Information Literacy for Higher Education* (Framework). The Framework was created in response to the evolving higher education landscape along with the dynamic and unpredictable nature of the information ecosystem in our society. *Framework for Information Literacy for Higher Education*, ASS'N COLL. & RSCH. LIBRS. (Jan. 11, 2016), <https://www.ala.org/acrl/standards/ilframework> [https://perma.cc/9F6D-XQ43]. Digital literacy skills are not generally taught in law school outside of legal research, writing, and technology courses, but these are key skills that successful lawyers in the age of artificial intelligence need to possess. The American Library Association (ALA) Digital Literacy Task Force defines digital literacy as “the ability to use information and communication technologies to find, evaluate,

literacy is particularly relevant to legal educators given the rapidly evolving nature of our legal information and technology infrastructure.¹⁰⁵ Too often, law schools and legal employers rely on the myth that digital natives have an inherent advantage in comprehending and utilizing the latest legal technology tools.¹⁰⁶ Applying this skill to AI-generated content is another step in what learning sciences researchers have defined as metaliteracy.¹⁰⁷

The framework presented here is intended to empower legal educators and law students to become proficient in using the wide variety of available legal technology tools. Law schools with sufficiently funded law libraries provide academic versions of Westlaw and LexisNexis for their students and faculty. While law school faculty and students are generally familiar with the legal research functions of these powerful technology platforms, many academic users are unaware of the included AI-enhanced technology tools discussed in Part One.¹⁰⁸ Further, academic users often rely only on either Westlaw or LexisNexis and end up missing the wide array of legal research and technology tools that academic law libraries provide.¹⁰⁹ Bloomberg Law, a more recent

create, and communicate information, requiring both cognitive and technical skills.” *Digital Literacy*, AM. LIBR. ASS’N, <https://www.ala.org/pla/initiatives/digitalliteracy> [<https://perma.cc/ACW2-HYW6>].

105. Framework draws significantly upon the concept of metaliteracy, which offers a renewed vision of information literacy as an overarching set of abilities in which students are consumers and creators of information who can participate successfully in collaborative spaces. Metaliteracy demands behavioral, affective, cognitive, and metacognitive engagement with the information ecosystem.

106. Haight, *supra* note 24, at 193–94; see JOHN PALFREY & URS GASSER, *BORN DIGITAL: HOW CHILDREN GROW UP IN A DIGITAL AGE* 168 (2016).

107. “The concept of metaliteracy expands the scope of traditional information skills (determine, access, locate, understand, produce, and use information) to include the collaborative production and sharing of information in participatory digital environments (collaborate, produce, and share). This approach requires an ongoing adaptation to emerging technologies and an understanding of the critical thinking and reflection required to engage in these spaces as producers, collaborators, and distributors.” THOMAS P. MACKAY & TRUDI E. JACOBSON, *METALITERACY: REINVENTING INFORMATION LITERACY TO EMPOWER LEARNERS* 2–3 (2014).

108. Law students generally adopt a preference for either Westlaw or Lexis based on their first-year research and writing experience. If they do not enroll in an elective upper-level research course or join a law journal, students generally miss all the other research tools available to them. Law librarians who serve as account administrators for law school electronic subscriptions have access to usage statistics for Westlaw, Lexis, and other legal technology platforms. The usage statistics vary in both accuracy and completeness depending on what the vendor is willing to provide. See generally *infra* note 109.

109. Robert Ambrogi, *Which Legal Research Service Do Law Students Prefer? The Answer May Surprise You*, *LAW SITES* (Nov. 13, 2019), <https://www.lawnext.com/2019/11/which-legal-research-service-do-law-students-prefer-the-answer-may-surprise-you.html> [<https://perma.cc/P9SE-8S7K>] (discussing how people in academia have a legal research tool preference and the reasoning for that preference, which generally prompts academics to exclude other legal research tools during research).

competitor of Westlaw and LexisNexis, is provided by many academic law libraries, but that extra access often depends on the law library's budget and the specialized focus of a particular law school. Many of the other research tools provided in law schools are particularly useful in specialized legal practice, including Bloomberg Law and Wolters Kluwer VitalLaw.¹¹⁰

As legal educators, our own outlook on emerging technologies can significantly influence how our students perceive and engage with legal technology tools.¹¹¹ Whether a specific technology tool is a formal part of a faculty member's classroom instruction or not, a holistic approach to technology-driven lawyering skills helps our students understand the importance and inevitability of technology in law practice. As described below, this approach can also empower our students to embrace the practice of lifelong learning. Demonstrating a collaborative and innovative approach to teaching technology-driven lawyering skills sends a powerful message to our students.

One real-world example of the importance of collaboration and innovation comes from the corporate legal marketplace. Recent legal scholarship and multiple surveys reveal that corporate clients value three things in their in-house counsel and the firms they hire: (1) a commitment to diversity, equity, and inclusion (DE&I), (2) collaboration, and (3) innovation.¹¹² Corporations are looking to their lawyers to collaborate with outside partners including technologists, engineers, and data scientists, and they are demanding that the lawyers themselves become proficient with technology and provide technology recommendations to their corporate clients.¹¹³ Empirical studies have shown that law firms prioritizing collaboration and innovation have higher profit margins and retain legal talent at higher rates than firms resistant to those changes.¹¹⁴

110. See *About Wolters Kluwer Legal & Regulatory U.S.*, WOLTERS KLUWER, <https://www.wolterskluwer.com/en/solutions/legal-regulatory/about-us> [https://perma.cc/2SJ7-2H7N] ("we're your single source for specialized information, practical solutions, and subject matter expertise").

111. Ambrogio, *supra* note 109.

112. Michele DeStefano, *Chicken or Egg: Diversity and Innovation in the Corporate Legal Marketplace*, 91 FORDHAM L. REV. 1209, 1215–25 (2023). See DEBORAH L. RHODE, *THE TROUBLE WITH LAWYERS* 60–86 (2015); *Wolters Kluwer's Future Ready Lawyer Survey: industry embraces generative AI, but is not yet very prepared for ESG demands*, *supra* note 21.

113. DeStefano, *supra* note 112, at 1222. "This is especially true of legal departments in multinational companies (MNCs) for which joining the digital transformation has become an enterprise-wide imperative. Clients need in-house and firm lawyers that are proactive co-collaborators who find opportunities and help lead and manage teams to innovate and offer integrated solutions...."

114. Heidi K. Gardner & Ivan Matviak, *Implementing a Smart Collaboration Strategy, Part 1: Building the Case for Change*, HARV. L. SCH. CTR. ON LEGAL PRO. 1, 2 (June 2020), https://clp.law.harvard.edu/wp-content/uploads/2022/10/Gardner-Matviak_Implementing-a-Smart-Collab-Strategy_Part-1.pdf [https://perma.cc/DJ8H-GS9K].

Finally, several recent studies show that “the call for innovation and collaboration is inextricably intertwined with the call for DE&I—research demonstrates that when diverse teams collaborate, they are more creative, better at problem-solving, and better at innovation.”¹¹⁵

A. *Calls for Change in Legal Education*

In recent decades, legal education reforms have focused attention on the importance of integrating skills instruction throughout the law school curriculum. Published in 1992, the report of the ABA Task Force on Law Schools and the Legal Profession, now widely known as the MacCrate Report, highlighted the divide between existing legal education and the realities of the practice of law.¹¹⁶ The MacCrate Report urged law schools to place greater emphasis on practical skills and ethics training, and it enumerated ten “Fundamental Lawyering Skills” that are “essential for competent representation.”¹¹⁷ The first skill set on the list is problem-solving, which includes: “(1) Identifying and diagnosing the Problem; (2) Generating Alternative Solutions and Strategies; (3) Developing a plan of action; (4) Implementing the plan; and (5) Keeping the planning process open to new information and new ideas.”¹¹⁸ Although the MacCrate Report predated most of the current legal technology tools, the problem-solving skills are easily translated to modern technological challenges in legal education and law practice. Law students need instruction and experience with these tools to understand the capabilities and limitations of generative AI, apply critical thinking to interpret AI-generated information, and adapt legal strategies based on new insights provided by AI technology tools.

In 2007, the Carnegie Report, formally titled *Educating Lawyers: Preparation for the Profession of Law*, provided a comprehensive assessment of the state of legal education in the United States and offered recommendations for reimagining the legal education through the lens of civic professionalism.¹¹⁹ The Carnegie Report’s three apprenticeships—the cognitive apprenticeship focusing on legal knowledge and analytical

115. “[S]tudies report that companies that outperform in DE&I have higher rates of innovation and almost 20 percent higher revenues as a result [of] innovation.” DeStefano, *supra* note 112, at 1228 (citing WORLD ECON. DIVERSITY, EQUITY, AND INCLUSION 4.0 (2020), <https://www.weforum.org/publications/diversity-equity-and-inclusion-4-0-a-toolkit-for-leaders-to-accelerate-social-progress-in-the-future-of-work/> [<https://perma.cc/32GR-QNZ5>]).

116. AM. BAR ASS’N, LEGAL EDUCATION AND PROFESSIONAL DEVELOPMENT—EDUCATIONAL CONTINUUM: REPORT OF THE TASK FORCE ON LAW SCHOOLS AND THE PROFESSION: NARROWING THE GAP 135 (1992).

117. *Id.* at 138–40.

118. *Id.* at 138.

119. See generally WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (2007) [hereinafter CARNEGIE REPORT].

skills,¹²⁰ the apprenticeship of practical skills,¹²¹ and the apprenticeship of professional identity¹²²—provided a blueprint for renewing legal education with a goal of bridging the gap between the existing model of legal education and the competencies legal employers and clients ultimately expect from new lawyers. In fact, the appeal for an integrated approach to education in law schools is the first recommendation of the Carnegie Report.¹²³ According to the Carnegie Report’s authors:

The dramatic results of the first year of law school’s emphasis on well-honed skills of legal analysis should be matched by similarly strong skill in serving clients and a solid ethical grounding. If legal education were serious about such a goal, it would require a bolder, more integrated approach that would build on its strengths and address its most serious limitations. In pursuing such a goal, law schools could also benefit from the approaches used in education of physicians, teachers, nurses, engineers and clergy, as well as from research on learning.¹²⁴

Building on these influential reform efforts, the professional identity formation (PIF) movement, a collective effort by leading legal scholars, also calls for a holistic approach that integrates ethical and professional development into the law school curriculum.¹²⁵ In their recent book, *Law Student Professional Development and Formation: Bridging Law School, Student, and Employer Goals*, Neil Hamilton and Louis Bilionis offer law faculty, staff, and administrators a blueprint for incorporating four foundational professional identity formation goals into learning outcomes:¹²⁶

120. *Id.* at 47–86.

121. *Id.* at 87–125.

122. *Id.* at 126–61.

123. “To build on their strengths and address their shortcomings, law schools should offer an integrated, three-part curriculum: (1) the teaching of legal doctrine and analysis, which provides the basis for professional growth; (2) introduction to the several facets of practice included under the rubric of lawyering, leading to acting with responsibility for clients; and (3) exploration and assumption of the identity, values and dispositions consonant with the fundamental purposes of the legal profession. Integrating the three parts of legal education would better prepare students for the varied demands of professional legal work.” William M. Sullivan et al., *Summary, Educating Lawyers: Preparation for the Profession of Law*, THE CARNEGIE FOUND. FOR THE ADVANCEMENT OF TEACHING, 1, 8 (2007), http://archive.carnegiefoundation.org/publications/pdfs/elibrary/elibrary_pdf_632.pdf [<https://perma.cc/99XB-UTKL>].

124. *Id.* at 4.

125. See Benjamin V. Madison III, *Professional Identity and Professionalism*, 24 PROF. LAW. 1, 1–2 (2017), https://www.americanbar.org/content/dam/aba/publications/professional_lawyer/24-3/professional-identity-and-professionalism.pdf [<https://perma.cc/H9WY-HYX7>].

126. NEIL W. HAMILTON & LOUIS D. BILIONIS, *LAW STUDENT PROFESSIONAL DEVELOPMENT AND FORMATION: BRIDGING LAW SCHOOL, STUDENT, AND EMPLOYER GOALS* 1–2 (2022).

- (1) ownership of continuous professional development toward excellence at the major competencies that clients, employers, and the legal system need;
- (2) a deep responsibility and service orientation to others, especially the client;
- (3) a client-centered problem-solving approach and good judgment that ground each student's responsibility and service to the client; and
- (4) well-being practices.¹²⁷

From the 2007 Carnegie Report to the later professional identity formation movement, the imperative is the same: break down the skills-doctrine divide in law school pedagogy, thereby improving student learning outcomes and better preparing students for the competencies they will need to thrive in the legal profession.

However, professional identity formation differs from the traditional law school professional responsibility curriculum.¹²⁸ The professional identity formation movement emphasizes a holistic approach to teaching practical skills, building professional competencies, encouraging self-regulated learning, and emphasizing personal well-being.

Further strengthening the push for professional development and formation goals, the ABA recently approved changes to Standard 303 that require law schools to “provide substantial opportunities” each year for professional identity development.¹²⁹ Interpretation 303-5 further explains that professional identity development “requires reflection and growth over time....”¹³⁰ Thus, a “variety of courses and co-curricular and professional development activities” should be provided to help law students achieve this goal.¹³¹ While changes in the ABA Standards over the years have not necessarily transformed law school curricula, several factors, including the rapid growth of artificial intelligence-enhanced legal technology tools may favor the professional identity formation

127. *Id.*

128. *Professional Identity Formation*, LSAC 1, 1 (2023), https://www.lsac.org/sites/default/files/media/Professional-Identity-Formation_Solution-Sheet.pdf [<https://perma.cc/RH7V-UUBY>].

129. The revised standard states: “A law school shall provide substantial opportunities to students for: (1) law clinics or field placement(s); (2) student participation in pro bono legal services, including law-related public service activities; and (3) the development of a professional identity. *Chapter 3: Program of Legal Education*, AM. BAR ASS'N 17, 18 (2023), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/standards/2023-2024/23-24-standards-ch3.pdf [<https://perma.cc/8LHP-4AW6>] (citing section 303(b)).

130. *Id.* at 19.

131. *Id.*

movement. While there is no ABA mandate for credit-bearing professional identity formation courses, several law schools have created innovative programs in this area.¹³²

In *Principles for Legal Education and Licensure in the 21st Century*, the ABA Commission on the Future of Legal Education emphasizes the need for significant reform in legal education and licensure in the United States.¹³³ The report outlines a critical disconnect between current legal education and the evolving needs of legal service delivery. Key issues include the high cost and one-size-fits-all model of legal education, outdated licensure models, and the effect of technology.¹³⁴ The report advocates for changes based on “foundational principles” that include stewardship, inquiry, access, service, inclusivity, and adaptability.¹³⁵ It also outlines “operational principles” to guide reform, including focusing on value, problem-solving, leveraging technology, and promoting well-being in the legal profession.¹³⁶ The framework introduced below will build on the principles articulated by these influential calls for legal education reform.

B. A Framework for 21st Century Competencies

The framework described below consists of four competencies that law students and legal professionals need to develop when they encounter new legal technology tools. First, lawyers need to exercise professional judgment in the context of legal technology. This includes ensuring effective human supervision of technology and managing change. Second, lawyers need a collaborative, problem-solving focus. They must develop expertise with legal technology tools including a real-world, collaborative approach to solving technology problems. Third, lawyers need to commit to ongoing professional development—a lifelong learning approach to legal technology as integral to the practice of law. Fourth, lawyers must have a service orientation that includes a client-centered approach to technology, and a commitment to improving access to the law and the legal system through technology.

132. The national leader in the professional identity formation movement is the Holloran Center for Ethical Leadership in the Professions at the University of St. Thomas School of Law. University of St. Thomas School of Law, *Holloran Center for Ethical Leadership in the Professions*, <https://law.stthomas.edu/about/centers-institutes/holloran-center/> [https://perma.cc/QC34-VA2T]; University of Richmond School of Law, *Professional Identity Formation Program*, <https://law.richmond.edu/academics/centers/pif/index.html> [https://perma.cc/E7MQ-GYEJ].

133. See *Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1, at 3.

134. *Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1, at 4.

135. *Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1, at 6.

136. *Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1, at 6.

1. Professional Judgment

Professional judgment for lawyers includes the application of specialized knowledge, skills, and ethical considerations in making decisions that are in the best interest of clients and society.¹³⁷ Professional judgment in the context of legal technology involves understanding how technology impacts the lawyer's decision-making process; ensuring effective and expert human supervision of legal technology tools; and balancing ethical considerations in making decisions that are in the best interests of clients.¹³⁸ As increasingly sophisticated legal technology tools become more integral to legal education and law practice, this competency is particularly important.

In 2012, the ABA amended Comment 8 to Rule 1.1 of the *Model Rules of Professional Conduct* (MRPC) to include a provision on technological competence.¹³⁹ This change requires lawyers to stay informed about the benefits and risks associated with relevant technology in the practice of law. Although the specific requirements vary by state, the *Model Rules of Professional Conduct* obligate lawyers to maintain a high level of technical literacy to practice effectively in today's shifting legal technology landscape.¹⁴⁰ Forty states have included some version of the MRPC duty of technology competence.¹⁴¹

Naturally, the use of emerging technologies in law practice will raise new ethical considerations. Lawyers must exercise judgment in ensuring client confidentiality while using generative AI tools. They need to understand the security protocols of their technology tools and assess the

137. *Model Rules of Professional Conduct: Preamble & Scope*, AM. BAR ASS'N, https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/model_rules_of_professional_conduct_preamble_scope/ [https://perma.cc/4Y84-RGUA].

138. Hilary Gerzhoy et al., *AI and Legal Ethics: What Lawyers Need to Know*, LEXISNEXIS PRACTICAL GUIDANCE (last updated Mar 3, 2025), <https://advance.lexis.com/document/lpadocument?crid=d233052a-79e7-43ab-afd6-24568231f65e&pddocfullpath=%2Fshared%2Fdocument%2Fanalytical-materials%2Furn%3AcontentItem%3A681W-MT71-JB7K-22H8-00000-00&pdsourcgroupingtype=&pdcontentcomponentid=500749&pdmfid=1000522&pdisurlapi=true> [https://perma.cc/PRM4-FXHH].

139. *Rule 1.1 Competence – Comment*, AM. BAR ASS'N, https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/rule_1_1_competence/comment_on_rule_1_1/ [https://perma.cc/EPM6-QFNF] (“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.”).

140. Tad Simons, *For a Lawyer, What Does “Technology Competence” Really Mean?*, THOMSON REUTERS (Apr. 20, 2018), <https://www.thomsonreuters.com/en-us/posts/legal/lawyers-technological-competence/> [https://perma.cc/YD57-RC2V].

141. Robert Ambrogi, *Tech Competence*, LAWSITES, <https://www.lawnext.com/tech-competence> [https://perma.cc/AF5P-EZNX].

risks associated with electronic communication and data storage. A 2012 amendment to the comments of MRPC Rule 1.6, “Confidentiality of Information,” introduced ethical obligations for attorneys in the context of legal technology and cybersecurity.¹⁴² Attorneys “should take reasonable measures and act competently so that the confidential and/or privileged client information will not be revealed to unintended third parties.”¹⁴³ Amendments to the comments of Rule 1.1 and Rule 1.6 were part of the recommendations from the ABA Commission on Ethics 20/20 regarding technology and confidentiality.¹⁴⁴

Open AI’s ChatGPT launched in November 2022, and the shock waves are still reverberating.¹⁴⁵ ChatGPT is a large language model (LLM)¹⁴⁶ made easily accessible online in the form of a “conversational chatbot . . . that can take directions in natural language and produce human-quality responses . . . on a wide range of topics.”¹⁴⁷ LLMs like ChatGPT and its chatbot competitors Google Gemini, Microsoft CoPilot, and Claude have been trained on freely available internet content using machine learning techniques.¹⁴⁸ Legal information sources from

142. *Formal Opinion 477*, A.B.A. STANDING COMM. ON ETHICS AND PRO. RESP. 1, 3–5 (May 11, 2017), <https://docs.tbpr.org/pub/aba%20formal%20opinion%20477.authcheckdam.pdf> [<https://perma.cc/4LLE-TRFK>] (interpreting MRPC Rule 1.6 Amended Comment 18, and providing guidance for complying with this rule when using new technology in legal practice).

143. *Rule 1.6: Confidentiality of Information*, AM. BAR ASS’N, https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/rule_1_6_confidentiality_of_information/ [<https://perma.cc/U9L3-M9M2>].

144. See David G. Ries, *Cybersecurity for Attorneys: The Ethics of Securing Your Virtual Practice*, AM. BAR ASS’N (Oct. 15, 2021), https://www.americanbar.org/groups/law_practice/resources/law-practice-today/2021/cybersecurity-for-attorneys-the-ethics-of-securing-your-virtual-practice/ [<https://perma.cc/225S-JNRL>].

145. Megan Morrone, *How ChatGPT changed the future*, AXIOS (Nov. 30, 2024), <https://www.axios.com/2024/11/30/chatgpt-open-ai-health-education-relationships> [<https://perma.cc/BZ3Z-CQZL>] (reflecting on how generative AI’s capabilities are still being explored, although it has had a widespread impact on society that is effecting multiple industries).

146. “OpenAI, the creator of ChatGPT, has been investing heavily in building large language models (LLMs) that combine the power of explanatory AI to understand an immense body of text and predictive AI to generate novel responses. You use LLM technology every day through the type-ahead suggestion feature in most email and texting applications or in your conversations with Alexa and Siri.” Matt Coatney, *Navigating the Legal Landscape of Generative Artificial Intelligence: The Risks and Opportunities of ChatGPT*, 49 LITIGATION J. 11 (Summer 2023), <https://www.americanbar.org/groups/litigation/resources/litigation-journal/2023-summer/navigating-legal-landscape-artificial-intelligence/> [<https://perma.cc/WYU2-MG89>].

147. *Id.*

148. “What makes generative AI different from more familiar algorithm-based machine learning (ML) technology is that it draws on enormous sources to almost instantaneously create seemingly new, task-appropriate rich content: essays, blog posts, poetry, designs, images, videos, and software code.” *Artificial Intelligence for Lawyers Explained*, BLOOMBERG L. (Aug. 1, 2023), <https://pro.bloomberglaw.com/brief/ai-in-legal-practice-explained/> [<https://perma.cc/QD3A-CYMN>].

reputable government sites were included in the corpus of internet content used to train the current LLMs.¹⁴⁹

There are two fundamental problems, however, for anyone hoping to conduct legal research on one of these LLMs. First, the data set (content scraped from free websites) includes more than just legal information sources, and much of that internet content is riddled with inaccuracies.¹⁵⁰ Second, ChatGPT is a “general-purpose language model not specifically trained to provide legal analysis or write [law school] exams.”¹⁵¹ The LLM was not specifically guided or corrected for each response it generated. Instead, the LLM was).¹⁵² “In RLHF, humans manually tag the best responses produced by an initial language model to improve its performance at specific tasks. Through these repeated machine-human interactions, ChatGPT was trained to engage in dialogue, be more truthful, and avoid inflammatory or offensive language.”¹⁵³

Finally, professional judgment is key to appropriate selection and use of any technology solution provided by a third-party vendor, including the most widely used integrated research platforms. The MRPC specifically state that lawyers have a duty to supervise junior lawyers and other employees who report to them.¹⁵⁴ Additionally, lawyers must appropriately select and supervise third party providers.¹⁵⁵ In the context of technology, this means that lawyers must appropriately select and manage their subscriptions to technology platforms. This failure of professional judgment was a key factor leading to Rule 11 sanctions for the attorneys in the June 2023 New York case, *Mata v. Avianca*.¹⁵⁶

149. Jinqi Lai et al., *Large language models in law: A survey*, 5 AI OPEN 181, 185 (2024), <https://www.sciencedirect.com/science/article/pii/S2666651024000172?via%3Dihub> [<https://perma.cc/2LYC-HXHL>] (explaining how “legal big data”, which includes court records and government files, are used to train LLMs for legal matters).

150. *See generally id.* at 188–89 (analyzing the defects in existing legal datasets, and the underlying factors contributing to those defects).

151. Jonathan H. Choi et al., *ChatGPT Goes to Law School*, 71 J. LEGAL EDUC. 387, 397 (2022).

152. “One step towards building safe AI systems is to remove the need for humans to write goal functions, since using a simple proxy for a complex goal, or getting the complex goal a bit wrong, can lead to undesirable and even dangerous behavior. In collaboration with DeepMind’s safety team, we’ve developed an algorithm which can infer what humans want by being told which of two proposed behaviors is better.” Dario Amodei et al., *Learning from human preferences*, OPENAI (June 13, 2017), <https://openai.com/research/learning-from-human-preferences> [<https://perma.cc/MTB7-CJR4>].

153. Choi et al., *supra* note 151, at 388.

154. MODEL RULES OF PRO. CONDUCT r. 5.1–5.3 (AM. BAR ASS’N 2020).

155. MODEL RULES OF PRO. CONDUCT r. 5.3 cmts. 1–4 (AM. BAR ASS’N 2020).

156. *Mata v. Avianca, Inc.*, 678 F. Supp. 3d 443, 456–57 (S.D.N.Y. 2023).

2. Collaborative Problem-Solving

Legal problem-solving generally refers to the ability to identify, analyze, and resolve complex legal issues effectively and efficiently.¹⁵⁷ Competency with legal problem-solving also means that a lawyer is proficient in applying the law in a way that addresses the specific needs and challenges of each client.¹⁵⁸ Law students need to develop this competency in the context of rapidly evolving legal technology since they will eventually be responsible for leveraging legal technology tools to improve delivery of legal services. Since technology is already transforming how legal work is done, lawyers must be adept at identifying and implementing technology-based solutions that enhance their ability to serve clients.

The legal education framework described here deliberately includes collaboration as essential to legal problem-solving. This competency responds to the call for future-ready lawyers to “develop exceptional problem-solving, legal reasoning, and communication skills for a multi-disciplinary, team-oriented world.”¹⁵⁹ Adapting to technological innovations requires lawyers to collaborate and not be siloed. We are the domain experts in law. But we are not generally experts in systems engineering, information technology, or artificial intelligence. Lawyers should cultivate effective collaboration with professionals from these fields and beyond; this is particularly important for lawyers in corporate settings and in specialized legal practice areas.

This kind of collaboration can provide innovative AI-driven solutions to complex legal problems. Generative AI chatbots are already in use in law firms around the country.¹⁶⁰ Most of these chatbots were created using OpenAI’s GPT-4 technology.¹⁶¹ Naturally, legal technology vendors are already in a race to offer generative AI solutions using this

157. See Elizabeth Beesley, *The Role of Creativity in Legal Problem-Solving*, ALLABOUTLAW.CO.UK (Apr. 12, 2024), <https://www.allaboutlaw.co.uk/school-leaver-law-careers/becoming-a-lawyer/the-role-of-creativity-in-legal-problem-solving> [https://perma.cc/N6LV-QVAS].

158. See *Rule 1.1 Competence – Comment*, *supra* note 139.

159. *Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1, at 6.

160. Rhys Dipshan, *Forget ChatGPT — Law Firms Are Launching Their Own Gen AI Chatbots*, ALM LAW.COM (Sept. 7, 2023, 4:14 PM), <https://www.law.com/2023/09/07/forget-chatgpt-law-firms-are-launching-their-own-gen-ai-chatbots/> [https://perma.cc/A7TL-YGPU].

161. Law firms can create their own unique in-house chatbots using OpenAI’s API. OpenAI sells their Application Programming Interface (API). API is a set of rules and protocols for building and interacting with software applications. The API acts as a bridge between the law firm’s chatbot application and OpenAI’s advanced AI large language models like GPT-4. This leverages GPT-4’s natural language processing capabilities. See *The Most Powerful Platform for Building AI Products*, OPENAI, <https://openai.com/product> [https://perma.cc/9ER7-6SXX]; see also *Harvey: Harvey Partners with OpenAI to Build a Custom-Trained Model for Legal Professionals*, OPENAI, <https://openai.com/index/harvey/> [https://perma.cc/5W47-3BMF].

technology.¹⁶² Casetext launched its legal assistant CoCounsel using that platform in March 2023, and the company was acquired by Thomson Reuters in June. Law firms received access to the integrated CoCounsel product through Westlaw Precision in November 2023.¹⁶³

3. Commitment to Ongoing Professional Development

For law students learning to be lawyers, the current legal education model does little to encourage a personal commitment to lifelong learning. Law schools use a “one size fits all education model” that does not “do enough consistently to teach [students] to learn how to learn for a long career in a rapidly transforming world.”¹⁶⁴ The traditional focus on Socratic teaching methods, appellate case law, and a single formative assessment is a legacy of the nineteenth century. As two of my UNC Law faculty colleagues and their co-authors noted, “[t]oday, legal education faces a different set of challenges that requires a different set of solutions.”¹⁶⁵ Further, as empirical studies and practitioner surveys have regularly demonstrated, our current legal education model generally fails to prioritize technology competence.¹⁶⁶ Building on the first foundational goal of the professional identity formation movement in legal education, “ownership of continuous professional development” is a competency that is demonstrated when students engage in self-regulated learning.¹⁶⁷ Self-regulated learning is “an active and reflective process in which a learner monitors and controls their own learning to reach their ultimate

162. Patrick Austin, *LexisNexis and Westlaw Will Launch AI Legal Research Tools*, NAT'L BUS. INST., <https://nbi-sems.com/blogs/news/lexisnexis-and-westlaw-will-launch-ai-legal-research-tools> [<https://perma.cc/84K7-AQMG>] (last visited Mar. 7, 2025) (explaining the “arms race to achieve dominance in the AI legal research tools marketplace” between Lexis and Westlaw).

163. “Behind the scenes, the AI in Westlaw is using retrieval augmented generation (RAG). That means that it uses traditional research methods to pull relevant resources out of Westlaw, which it then sends to the large language model (LLM) to analyze and generate an answer. For its LLMs, [Thomson Reuters] is using a combination of Microsoft Azure OpenAI and a direct commercial API to OpenAI’s GPT-4. *Importantly, TR says no user data is being directly shared outside the TR environment.*” (emphasis added); Robert Ambrogi, *Major Thomas Reuters News: Westlaw Gets Generative AI Research Plus Integration with Casetext CoCounsel; Gen AI Coming Soon to Practical Law*, LAW SITES (Nov. 15, 2023), <https://www.lawnext.com/2023/11/major-thomson-reuters-news-westlaw> [<https://perma.cc/CY2H-Y9ZV>].

164. *Principles for Legal Education and Licensure in the 21st Century*, *supra* note 1, at 4.

165. Rachel Gurvich et al., *Reimagining Langdell’s Legacy: Puncturing the Equilibrium in Law School Pedagogy*, 101 N.C. L. REV. F. 118, 147 (2023).

166. See generally O’Leary, *supra* note 24; see also *Law School Preparedness Survey*, BLOOMBERG L., <https://pro.bloomberglaw.com/insights/law-school/law-school-preparedness-survey/> [<https://perma.cc/LZ74-YCQ9>] (finding that 8% of law students surveyed have taken a Legal Technology course and 21% have taken an Advanced Legal Research course).

167. NEIL W. HAMILTON & LOUIS D. BILIONIS, *LAW STUDENT PROFESSIONAL DEVELOPMENT AND FORMATION: BRIDGING LAW SCHOOL, STUDENT, AND EMPLOYER GOALS* 3 (2022).

learning objectives.”¹⁶⁸ It involves students taking an active role in their education, setting goals, employing strategies to meet these goals, and reflecting on their progress.¹⁶⁹ Reflection is a powerful component of self-regulated learning.¹⁷⁰ Opportunities to reflect on assignments with instructor-engaged feedback give students space to critically analyze their learning experiences, understand their strengths and weaknesses, and adapt their learning strategies accordingly.¹⁷¹

Further, encouraging law students to become competent at professional development can empower them to take ownership of their law school experience and their own well-being. As described above, well-being practices are included in the goals and associated learning outcomes of the professional identity formation movement.¹⁷² There is an abundance of empirical evidence that law students are at high risk for anxiety, depression, and substance abuse during their law school careers.¹⁷³ Both the 2014 and 2021 *Survey[s] of Law Student Well-Being* found that law students face significant mental health challenges, often exacerbated by the competitive and high-pressure environment of law school.¹⁷⁴ Empowering students to take ownership of their law school learning experience has benefits for their mental health as well as encouraging lifelong learning practices.¹⁷⁵ In this way, two professional formation goals come together to create a path to professional *and* personal well-being for future lawyers.

4. Service Orientation

Richard Susskind stresses the importance of legal information to the law and legal service:

Look at the law and legal services from another vantage point. At the heart of law and legal service is legal

168. Kelsey Urgo & Jaime Arguello, *Goal-setting in Support of Learning During Search: An Exploration of Learning Outcomes and Searcher Perceptions*, 60 INFO. PROCESSING & MGMT.: AN INT’L J., 1, 3 (2023).

169. *Id.* at 2.

170. *See id.*

171. *See* Neil W. Hamilton, *The Foundational Skill of Reflection in the Formation of a Professional Identity*, 12 ST. MARY’S J. ON LEGAL MALPRACTICE & ETHICS 1, 19 (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3921251 [<https://perma.cc/FC2S-TYT4>].

172. HAMILTON & BILIONIS, *supra* note 167, at 2.

173. David Jaffe et al., “*It Is Okay to Not Be Okay*”: *The 2021 Survey of Law Student Well-Being*, 60 U. LOUISVILLE L. REV. 1, 3 (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4127297# [<https://perma.cc/YW2P-ZRWZ>].

174. *See id.* at 22–28; *see* Jerome M. Organ, *Suffering in Silence: The Survey of Law Student Well-Being and the Reluctance of Law Students to Seek Help for Substance Use and Mental Health Concerns*, 66 J. LEGAL EDUC. 116, 136–40 (2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2839290 [<https://perma.cc/LUS6-Z8EJ>].

175. *Id.* at 150.

information (from raw law such as legislation through to deep expertise held in specialists' heads). Pause now and think about information. We are currently witnessing a change in the information substructure of society.¹⁷⁶

The Preamble of the Model Rules of Professional Conduct highlights a lawyer's duty as a public citizen: "a lawyer should seek improvement of the law, access to the legal system, the administration of justice and the quality of service rendered by the legal profession."¹⁷⁷ With appropriate human supervision and training, generative AI has great potential for bridging access to justice gaps.¹⁷⁸ Information technology and computer science experts have already begun to create a "intelligent conversation agent" that will provide legal advice and assistance.¹⁷⁹ In the context of legal technology, the domain experts are lawyers.¹⁸⁰ Thus, lawyers have an obligation to pursue improvements in legal technology tools and public access to legal information.

The 2022 Justice Gap Study, conducted by the Legal Services Corporation (LSC), provides data on the unmet legal needs of low-income Americans.¹⁸¹ According to the study, a staggering 92% of civil legal problems reported by low-income Americans did not receive adequate or any legal help.¹⁸² The most common legal needs were housing, healthcare, income maintenance, and consumer issues.¹⁸³ This significant gap highlights the vast disparity between the legal needs of low-income citizens and the resources available to meet those needs. The

176. SUSSKIND, *supra* note 9, at 263.

177. *Model Rules of Professional Conduct: Preamble & Scope* ¶ 6, AM. BAR ASS'N, https://www.americanbar.org/groups/professional_responsibility/publications/model_rules_of_professional_conduct/model_rules_of_professional_conduct_preamble_scope/?login [https://perma.cc/4Y84-RGUA] ("All lawyers should devote professional time and resources and use civic influence to ensure equal access to our system of justice for all those who because of economic or social barriers cannot afford or secure adequate legal counsel.").

178. Ashley Krenelka Chase & Sam Harden, *Through the AI-looking Glass and What Consumers Find There*, 29 J. TECH. L. & POL'Y 1, 13–16 (2025) (discussing the impact generative AI and other technologies can have on the American justice gap for indigent clients).

179. See Flora Amato et al., *An Intelligent Conversational Agent for the Legal Domain*, 14 INFO. 307, 307 (2023).

180. See Roland Vogl, *The Coming of Age of Legal Technology*, SLS (Sept. 26, 2016), <https://law.stanford.edu/2016/09/26/roland-vogl-the-coming-of-age-of-legal-technology/> [https://perma.cc/C965-PYYD].

181. *The Justice Gap: The Study*, LEGAL SERVS. CORP., <https://justicegap.lsc.gov/the-study/> [https://perma.cc/N8PN-T7ZH].

182. *The Justice Gap: Executive Summary*, *infra* note 183.

183. *The Justice Gap: Executive Summary*, LEGAL SERVS. CORP., <https://justicegap.lsc.gov/resource/executive-summary/> [https://perma.cc/K6SX-YKNL] (last visited Mar. 8, 2025) ("The study leverages LSC's 'intake census' conducted among LSC-funded legal aid organizations as well as a nationally representative survey of more than 5,000 adults conducted by NORC at the University of Chicago using its AmeriSpeak® Panel.").

MRPC Preamble emphasizes that lawyers “. . . should be mindful of deficiencies in the administration of justice and of the fact that the poor, and sometimes persons who are not poor, cannot afford adequate legal assistance.”¹⁸⁴

Despite efforts in individual states and municipalities to provide free broadband access, the digital divide persists across the United States.¹⁸⁵ Many households cannot afford internet access or computers.¹⁸⁶ Citizens with legal problems often end up at their local public libraries.¹⁸⁷ Public-access versions of Westlaw and Lexis are generally only available in adequately funded public law libraries. Thus, low-income Americans with unmet legal needs often conduct legal research on public library computers using free legal websites that may not include the most recent updates to the law.

In the age of artificial intelligence, legal information is data. Two multinational corporations, Thomson Reuters (Westlaw) and RELX (LexisNexis), have a powerful hold on the legal research and technology market.¹⁸⁸ Yes, digitized versions of our laws are freely available and searchable online, but free access does not translate to equal access.¹⁸⁹ Powerful legal research platforms that leverage artificial intelligence have revolutionized many areas of legal practice, but that access is cost-prohibitive for small firms, solo practitioners, nonprofits, and individual citizens attempting to handle their own legal matters.¹⁹⁰ As Chief Justice Roberts put it, those who can afford to pay for access conduct legal research in first class while citizens attempting to find and understand the law on free websites are stuck in economy class:

Imagine a Georgia citizen interested in learning his legal rights and duties. If he reads the economy-class version of the Georgia Code available online, he will see laws requiring political candidates to pay hefty qualification fees (with no

184. *Model Rules of Professional Conduct: Preamble & Scope* ¶ 6, *supra* note 177.

185. Rick Barrett, *The digital divide is not in just in rural America. In poorer urban neighborhoods, internet access remains elusive.*, MILWAUKEE J. SENTINEL (Dec. 8, 2021, 9:00 AM), <https://www.jsonline.com/in-depth/news/2021/12/08/millions-urban-households-cant-afford-decent-internet-service/8742282002/> [<https://perma.cc/4FSN-7QJ7>].

186. *See id.*

187. Public Library Association, *2020 Public Library Technology Survey Summary Report*, ALA 1, 8, 19 (2020), <https://www.ala.org/sites/default/files/pla/content/data/PLA-2020-Tech-nology-Survey-Summary-Report.pdf> [<https://perma.cc/S5RT-CSUF>].

188. *Company History*, THOMSON REUTERS, <https://www.thomsonreuters.com/en/about-us/company-history.html> [<https://perma.cc/BQ29-ZZ4M>]; *Perspectives*, RELX, <https://www.relx.com/our-business/perspectives/types/story> [<https://perma.cc/EY85-NASY>].

189. *See* LAMDAN, *supra* note 71, at 74–93.

190. *Firms at Risk: Small Firms Lack Time and Cash to Spend on New Tech*, THE SOLIC. GRP. (June 29, 2022), <https://thesolicitorsgroup.co.uk/news/2022/firms-at-risk-small-firms-lack-time-and-cash-to-spend-on-new-tech> [<https://perma.cc/QS6A-A75K>].

indigency exception), criminalizing broad categories of consensual sexual conduct, and exempting certain key evidence in criminal trials from standard evidentiary limitations—with no hint that important aspects of those laws have been held unconstitutional by the Georgia Supreme Court. *See* OCGA §§ 21–2–131, 16–6–2, 16–6–18, 16–15–9 (available at www.legis.ga.gov). Meanwhile, first-class readers with access to the annotations will be assured that these laws are, in crucial respects, unenforceable relics that the legislature has not bothered to narrow or repeal¹⁹¹

The digitization of vast amounts of legal information has led to the creation of technology tools that have revolutionized legal research for those who can afford to pay for it, but that revolution has come at a cost that is too high for low-income and even middle-income Americans. Access to legal information is a cornerstone of access to justice in the United States.¹⁹² Free, open, and up-to-date access to judicial opinions, statutes, regulations, and other legal information empowers individual citizens, promotes fairness and transparency, and upholds the rule of law.¹⁹³ Accordingly, a lawyer’s obligation encompasses advocacy and service in the areas of legal information and legal technology.

III. 21ST CENTURY COMPETENCIES APPLIED IN LAW SCHOOL

Given the rapid rise of generative AI, early guidance for educators is limited. At the federal level, the U.S. Department of Education published *Artificial Intelligence and the Future of Teaching and Learning* in May 2023.¹⁹⁴ The report defines AI use in schools: “AI can be described as enabling two broad shifts from today’s use of technology in schools: (1) from capturing data to detecting patterns in data and (2) from providing access to instructional resources to automating decisions about teaching and learning processes.”¹⁹⁵

Key recommendations from this report include several insights that are broadly applicable. First, AI can enable new educational interactions and address variability in student learning.¹⁹⁶ This has important implications for supporting students with disabilities and students with

191. *Georgia v. Public.Resource.Org, Inc.*, 590 U.S. 255, 275–76 (2020).

192. *See Chase & Harden, supra* note 178, at 13–16.

193. *See generally id.*

194. *Artificial Intelligence and the Future of Teaching and Learning: Insights and Recommendations*, U.S. DEP’T OF EDUC. OFF. OF TECH. 1, 1 (2023), <https://www.ed.gov/sites/ed/files/documents/ai-report/ai-report.pdf> [<https://perma.cc/Y3MK-Y7FS>].

195. *Handout: AI and the Future of Teaching and Learning*, U.S. DEP’T OF EDUC. OFF. OF TECH. 1, 1, <https://www.ed.gov/sites/ed/files/documents/ai-report/ai-report-core-messages.pdf> [<https://perma.cc/T5DM-926X>].

196. *Id.* at 2.

limited English language abilities.¹⁹⁷ Second, AI enhances the quality and quantity of feedback, provides resource suggestions to students, and supports educator involvement in development of AI tools.¹⁹⁸ Third, the report recognizes that AI can increase existing educational technology data privacy and security risks as well as introducing new risks of bias in data and automated decision-making.¹⁹⁹

As the report concludes: “We envision a technology-enhanced future more like an electric bike and less like robot vacuums. On an electric bike, the human is fully aware and fully in control, but their burden is less, and their effort is multiplied by a complementary technological enhancement.”²⁰⁰ Again, the call for educators is to embrace the potential of generative AI and other emerging technologies to complement the expertise we already have in our fields of study. We should encourage our students in the same regard.

Technology does not replace the human lawyer’s expertise and professional judgment, but it has enormous capacity to augment that expertise. Legal tech journalists and lawyers have already made the comparison to the medical profession, asserting that generative AI will allow lawyers to “work at the top of their license.”²⁰¹ Similarly, other lawyers suggest that AI will remove more mundane, time-consuming tasks from the daily routine and empower lawyers to make the most of their expertise in “provid[ing] the last mile of solution delivery.”²⁰²

A. *How a Framework of 21st Century Competencies Narrows the Gap*

Legal generative AI tools have the potential to transform the way all lawyers work in the future. In the near term, incorporating 21st century competencies into learning outcomes and a holistic approach to teaching technology-driven lawyering skills can greatly improve our students’ learning experience and job prospects.²⁰³ Despite the Carnegie Report’s imperative and resulting changes to ABA standards leading to required

197. *Id.*

198. *Id.*

199. *Id.* at 2–3.

200. *Id.* at 2.

201. Ivan Moreno, *AI Practices Law ‘At The Speed Of Machines.’ Is It Worth It?*, LAW360 (June 7, 2023, 2:27 PM) (quoting Kate Orr, head of innovation at Orrick Herrington & Sutcliffe LLP), <https://www.law360.com/articles/1686205> [<https://perma.cc/AD4Q-863P>]; William A. Ryan et al., *Practical Lessons from the Attorney AI Missteps in Mata v. Avianca*, ASS’N OF CORP. COUNS. (Aug. 8, 2023), <https://www.acc.com/resource-library/practical-lessons-attorney-ai-missteps-mata-v-avianca> [<https://perma.cc/C9RL-A3ZA>].

202. Anthony E. Davis, *The Future of Law Firms (and Lawyers) in the Age of Artificial Intelligence*, AM. BAR ASS’N (Oct. 2, 2020), https://www.americanbar.org/groups/professional_responsibility/publications/professional_lawyer/27/1/the-future-law-firms-and-lawyers-the-age-artificial-intelligence [<https://perma.cc/VY85-75FG>].

203. Butalia, *supra* note 20.

upper-level experiential credits, there are structural challenges in law schools that continue to leave most law graduates with incomplete and uneven training in essential lawyering skills.²⁰⁴

While progress remains incremental, legal education has made some important steps forward with regards to lawyering skills instruction in the twenty-first century.²⁰⁵ In 2014, following calls for reform including the MacCrate Report, the Carnegie Report, and Best Practices for Legal Education, the ABA added a requirement that students complete a minimum of six experiential course credits.²⁰⁶ Most recently, in November 2023, the ABA Council of the Section of Legal Education and Admissions to the Bar, reported the results of a survey and working group recommendation to increase the number of required experiential course credits.²⁰⁷ The Council requested input from stakeholders on several factors that will inform its decision.²⁰⁸ Among the factors considered: employer expectations and costs of training new lawyers; options for integrating doctrinal and experiential courses; whether to incorporate experiential learning into the 1L curriculum and ways to do that other than legal writing courses; and creative options for meeting the experiential requirement.²⁰⁹

204. See Karen Sloan, *Law school courses to become more uniform under new ABA accreditation rule*, REUTERS (Aug. 20, 2024, 6:45 AM), <https://www.reuters.com/legal/legal-industry/law-school-courses-become-more-uniform-under-new-aba-accreditation-rule-2024-08-16/> [<https://perma.cc/7UCZ-HG6G>] (implementing course uniformity and performance reviews to address concerns related to law school's structure).

205. *12 Elite Law Schools Recognized for Innovative Teaching Methods to Bridge Skills Gap*, PUBLICLAWLIBRARY.ORG (Jan. 25, 2024), <https://publiclawlibrary.org/12-elite-law-schools-recognized-for-innovative-teaching-methods-to-bridge-skills-gap/> [<https://perma.cc/WEJ8-T44W>].

206. ABA STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS 2014–2015 16 (2014), https://www.americanbar.org/content/dam/aba/publications/misc/legal_education/Standards/2014_2015_aba_standards_and_rules_of_procedure_for_approval_of_law_schools_bookmarked.pdf [<https://perma.cc/5GV4-Q8EG>].

207. Memorandum from the Experiential Credits Working Grp. of the Standards Comm. to the Council (Nov. 1, 2023), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/council_reports_and_resolutions/nov23/23-nov-experiential-learning-working-group-memo-to-council.pdf [<https://perma.cc/M8LS-LKDZ>].

208. *Id.*

209. *Memorandum from Council of the Section of Legal Educ. and Admissions to the Bar to Interested Parties and Entities*, AM. BAR. ASS'N (Dec. 11, 2023), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/2023/23-dec-experiential-learning-memo.pdf [<https://perma.cc/SDE3-RFMK>]. In November 2023, a working group reported the results of their survey. “56.6% (47/83) of the schools who responded to the survey favored increasing the number of required credits, with nine credits being the number most cited for an increase.” Memorandum from the Experiential Credits Working Grp. of the Standards Comm. to the Council (Nov. 1, 2023), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/council_reports_and_resolutions/nov23/23-nov-experiential-learning-working-group-memo-to-council.pdf [<https://perma.cc/M8LS-LKDZ>].

Creativity in teaching is key for twenty-first-century legal educators regardless of the kind of innovation we encounter. Whether the technological innovation is part of our in-class instruction, part of an externship or clinic experience, or part of the student's independent learning, faculty can model the appropriate professional response. Thus, our reaction to legal generative AI-enhanced technology should include optimism and enthusiasm along with a healthy, informed skepticism.²¹⁰ As lawyers, the latter should be easy for us. Ultimately, we need to provide our students with a roadmap for success with twenty-first-century lawyering competencies.

Finally, our students need to internalize and develop a service orientation as it relates to technology-driven lawyering. Creating space for students to develop a service orientation in the context of technology requires more than just sending students off to conduct online research. We need our future lawyers to think innovatively about how technology can solve complex legal problems in the present.

The framework described in this Article is intended to be flexible to allow its application to learning outcomes in a wide range of law school courses. It is my hope that experiential and doctrinal law faculty will collaborate and innovate together to develop thoughtful applications of legal generative AI technology tools within the law school curriculum. With emerging technologies, our collaboration and innovation as faculty colleagues and domain experts necessarily involves a measured approach and a risk-benefit analysis. Ultimately, as a law librarian and legal educator, it is my assessment that avoiding the change is not an option with generative AI.

B. 21st Century Competencies in Legal Research Courses

Legal research skills are essential for success in the practice of law.²¹¹ Ask newly licensed lawyers how they spend a good portion of their work time, and the answer is likely to be the same: conducting legal research.²¹² Associates and lawyers with less than ten years of experience spend

210. See Casey Fiesler, *Innovating like an Optimist, Preparing like a Pessimist: Ethical Speculation and the Legal Imagination*, 19 COLO. TECH. L.J. 1, 4 (2021), <https://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1072&context=ctlj> [<https://perma.cc/7TE4-PUWU>] (“While AI is not designed to produce negative consequences, it *is* designed to produce the unforeseen.”).

211. *Legal Research Basics: A Step-By-Step Guide to Brushing Up on Your Skills*, LEXISNEXIS (Nov. 18, 2022), <https://www.lexisnexis.com/community/insights/legal/b/product-features/posts/an-introduction-to-legal-research> [<https://perma.cc/9ZTG-6JTP>] (“Legal research is imperative to the practice of law.”).

212. Robert Ambrogio, *For Research, Lawyers Turn First to Free Sources, ABA Survey Says*, LAW SITES (Sept. 14, 2015), <https://www.lawnext.com/2015/09/for-research-lawyers-turn-first-to-free-sources-aba-survey-says.html> [<https://perma.cc/CY3K-QLQN>] (“Lawyers spend an average of 20 percent of their work time conducting legal research.”).

roughly one out of every four work hours researching the law.²¹³ Even experienced attorneys spend about twenty percent of their time on research.²¹⁴ Yet there remains a noticeable lack of uniformity in how legal research is taught in American law schools.²¹⁵ The inconsistency is on display in several areas: the timing of when students are taught legal research; the amount of class time devoted to formal research instruction; the specific research topics and technology tools included; and the learning outcomes identified.²¹⁶

Set to debut in July 2026, the NextGen Bar Exam represents a significant shift in bar examination methodology.²¹⁷ Applicants will be assessed on a broad range of foundational lawyering skills along with foundational legal concepts and principles relevant to modern law practice.²¹⁸ For the first time in its history, the bar exam will evaluate legal research skills.²¹⁹ The National Conference of Bar Examiners (NCBE) released sample question sets that reflect an integrated approach to testing lawyering skills along with doctrinal concepts.²²⁰ This evolution in the bar exam has significant implications for legal education.

Advanced legal research courses, including other upper-level specialized legal research courses, are a natural fit for using the competencies as a framework to introduce generative AI in the classroom. Law library faculty are well-positioned to be early adopters because we live in two worlds: the world of law and the world of information and library science. I have no doubt that my law librarian colleagues around the country are hard at work creating and implementing innovative pedagogical solutions and producing scholarship that introduces those solutions. Since we are still dealing with the first wave of the “technological tsunami”²²¹ that is generative AI, I

213. 2023 ABA LEGAL TECHNOLOGY SURVEY REPORT: VOL. 1 - ONLINE RESEARCH (2023).

214. *Id.*

215. See Sloan, *supra* note 204.

216. Caroline L. Osborne, *The State of Legal Research Education: A Survey of First-Year Legal Research Programs, or “Why Johnny and Jane Cannot Research”*, 108 L. LIBR. J. 403, 404 (2016), <https://scholarlycommons.law.wlu.edu/cgi/viewcontent.cgi?article=1507&context=wlufac> [https://perma.cc/J4TF-AAVN] (exploring inconsistencies in legal research education throughout the top 200 American law schools to understand why law school graduates have insufficient legal research skills).

217. *NextGen (July 2026)*, NAT’L CONF. OF BAR EXAM’RS, <https://www.ncbex.org/exams/nextgen> [https://perma.cc/DC89-7YV3] (last visited Mar. 9, 2025).

218. *Id.*

219. *NextGen Content Scope Outlines*, NAT’L CONF. OF BAR EXAM’RS, <https://nextgenbarexam.ncbex.org/reports/content-scope/> [https://perma.cc/8SZ4-PSWQ].

220. *NextGen Bar Exam Sample Questions*, NAT’L CONF. OF BAR EXAM’RS, <https://nextgenbarexam.ncbex.org/nextgen-sample-questions/> [https://perma.cc/K6F9-NRSQ].

221. Sterling Miller, *Generative AI: What in-house legal departments need to know*, THOMSON REUTERS (Nov. 30, 2023), <https://legal.thomsonreuters.com/blog/generative-ai-what->

offer an early example from business education that applies to my proposed legal education framework and more widely to the use of LLMs in education.²²² The authors detail a series of approaches and assignment examples for educators including generative AI tools in their classes: “AI-tutor, AI-coach, AI-mentor, AI-teammate, AI-tool, AI-simulator, and AI-student, each with distinct pedagogical benefits and risks.”²²³

Conversational search is the process of talking with generative AI assistants (the chatbots).²²⁴ When it comes to legal research, conversational search can simplify and streamline the research process.²²⁵ In advanced legal research courses, search strategy is already a well-established part of the learning process. Thus, professional judgment is already essential to a student’s online legal research process. Faculty need to help law students recognize that generative AI tools create new data from existing content, and that output is only as good as the data set used to train the LLM. The introduction of generative AI legal research tools is the first step in solving both the dataset problem and the domain expertise problem.²²⁶ For our students, who have varying degrees of experience with legal research, it is also important to encourage them to develop their professional judgment regarding their AI-assisted

in-house-legal-departments-need-to-know/#What-is-artificial-intelligence? [https://perma.cc/4C BR-HSK9].

222. Ethan Mollick & Lilach Mollick, professors at the Wharton School of the University of Pennsylvania & Wharton Interactive, have already introduced an innovative approach to assigning AI to students. Ethan Mollick & Lilach Mollick, *Assigning Ai: Seven Approaches for Students with Prompts*, THE WHARTON SCH. RSCH. PAPER (2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4475995 [https://perma.cc/E5LC-62MQ].

223. *Id.* at 1.

224. Brandi Pack, *The Dawn of Advanced Conversational AI in the Legal Tech Landscape*, ALM LAW.COM (Mar. 1, 2023, 3:14 PM), <https://www.law.com/legaltechnews/2023/03/01/the-dawn-of-advanced-conversational-ai-in-the-legal-tech-landscape/> [https://perma.cc/3U7B-HQ QP].

225. *See id.*

226. In the last quarter of 2023, Westlaw and LexisNexis introduced their generative AI chatbots as add-ons to their research platforms Westlaw Precision and Lexis+. According to a recent survey conducted by LexisNexis, of 450 law faculty surveyed (law library faculty teaching research and law practice technology and LRW faculty) who participated in the initial test offering of Lexis+ AI, 78% intend to include generative AI tools in the spring 2024 curriculum. *LexisNexis Collaborates with U.S. Law Schools to Roll Out Lexis+ AI, Marking First Widespread Use of Legal Generative AI Solution in Law School Education*, LEXISNEXIS (Dec. 20, 2023), <https://www.lexisnexis.com/community/pressroom/b/news/posts/lexisnexis-collaborates-with-u-s-law-schools-to-roll-out-lexis-ai-marking-first-widespread-use-of-legal-generative-ai-solution-in-law-school-education> [https://perma.cc/W45K-F4L8].

research.²²⁷ They must take ownership of the process and “remain the ‘human in the loop.’”²²⁸

As we teach professional judgment in the context of generative AI, we must also teach the importance of cybersecurity. Our students need to understand that ChatGPT is not the place to upload any kind of client information. Legal information platforms including Westlaw and LexisNexis have existing structures in place to protect confidential information. Legal research courses generally include a class session on professional responsibility (PR) in the context of research, so ethical use of generative AI is another facet to add to PR class discussions. Creating ethical prompts is another learning opportunity that has broad applicability beyond the legal research classroom.²²⁹

Perhaps the most important skill for working with generative AI is prompt engineering. Prompt engineering has already been recognized as an increasingly important skill for lawyers.²³⁰ It involves crafting questions and prompts in a way that effectively guides the AI-assistant to produce the most relevant and accurate responses.²³¹ This skill is crucial because the quality of the input (a user’s prompt) significantly influences the quality of the output (generated content) from the AI chatbot.²³² Also, strategies for prompt engineering are similar to skills students need to develop to conduct client interviews. In both cases, the quality and specificity of the prompt determine the usefulness and relevance of the response. We need to provide instruction to our students about the opportunities and limitations of collaborative problem-solving with legal and general AI-assistants—the human/machine collaboration.

227. See *infra* note 230.

228. Mollick & Mollick, *supra* note 222, at 3 (“Our guidelines challenge students to remain the ‘human in the loop’ and maintain that not only are students responsible for their own work but they should actively oversee the AIs output, check with reliable sources, and complement any AI output with their unique perspectives and insights. Our aim is to encourage students to critically assess and interrogate AI outputs, rather than passively accept them. This approach helps to sharpen their skills while having the AI serve as a supportive tool for their work, not a replacement.”).

229. *The Practice, Ethical Prompts: Professionalism, Ethics, and ChatGPT*, HARV. L. SCH. CTR. ON THE LEGAL PRO. (Mar./Apr. 2023), <https://clp.law.harvard.edu/knowledge-hub/magazine/issues/generative-ai-in-the-legal-profession/ethical-prompts/> [<https://perma.cc/H2FT-B7FW>].

230. *What is prompt engineering?*, IBM, <https://www.ibm.com/think/topics/prompt-engineering#:~:text=Prompt%20engineering%20helps%20generative%20AI%20models%20better%20comprehend,rule%20is%20that%20good%20prompts%20equal%20good%20results> [<https://perma.cc/7DRG-GEEQ>].

231. *Id.*

232. Pack, *supra* note 224.

CONCLUSION

Generative artificial intelligence, with its associated opportunities and challenges, is the next step in the technological transformation of law practice and legal education. It is our responsibility as legal experts to ensure reliability, predictability, and equity in the application of artificial intelligence technology in law schools and in the legal system. A law school curriculum that emphasizes repetition and reinforcement of essential twenty-first-century competencies and technology-driven lawyering skills will empower our graduates as they navigate the overwhelming array of legal technology tools in their professional lives.

THE ROLE OF ANTITRUST AND POLE-ATTACHMENT OVERSIGHT IN TVA BROADBAND DEPLOYMENT

Ben Sperry, Geoffrey A. Manne,** & Kristian Stout****

INTRODUCTION	73
I. THE LAW & ECONOMICS OF STATE-OWNED LPCS AND RURAL ELECTRICAL COOPERATIVES (RECs)	75
A. <i>The Competition Economics of State-Owned Enterprises</i>	75
B. <i>The Economics of Co-Ops</i>	78
1. Why Do We Have So Many RECs?	79
2. The Competition Economics of RECs and Pole Attachments	83
II. THE COMPLICATED NATURE OF ANTITRUST IMMUNITIES.....	85
A. <i>Federal Sovereign Immunity and the TVA</i>	85
B. <i>State Action Immunity and the LPCs</i>	88
III. SECTION 224 OF THE FCC ACT.....	90
CONCLUSION.....	92

INTRODUCTION

As part of the Infrastructure Investment and Jobs Act (IIJA), signed by President Joe Biden in November 2021, Congress provided \$42.5 billion for broadband deployment, mapping, and adoption projects through the Broadband Equity, Access, and Deployment (BEAD) program, with the stated goal of directing the funds to close the so-called “digital divide.”¹ But actions by pole owners—such as refusing to allow broadband companies to attach their lines on reasonable and nondiscriminatory terms—threaten to slow broadband deployment significantly.

In a letter dated June 22, 2023 to then-Assistant Attorney General Jonathan Kanter, Senator Mike Lee (R-Utah) argued that the U.S.

* Ben Sperry is a senior scholar of innovation policy at the International Center for Law & Economics (ICLE). ICLE has received financial support from numerous companies and individuals, including firms with interests both supportive of and in opposition to the ideas expressed in this and other ICLE-supported works. Unless otherwise noted, all ICLE support is in the form of unrestricted, general support. The ideas expressed here are the authors’ own and do not necessarily reflect the views of ICLE’s advisors, affiliates, or supporters.

** Geoffrey A. Manne is ICLE’s president and founder.

*** Kristian Stout is ICLE’s director of innovation policy.

1. 47 U.S.C. § 1702(b) (2018).

Department of Justice (DOJ) should take action to address abuses of the pole-attachment process by local power companies (LPCs) regulated by the Tennessee Valley Authority (TVA).² Senator Lee's concern is that such abuses threaten to slow broadband deployment, especially to rural areas served by the TVA and the LPCs.³ Among the abuses he details are:

- Delaying or refusing to negotiate pole-attachment agreements with competitive broadband-service providers, including when the TVA LPC provides broadband service (itself or through a joint venture agreement) or is interested in doing so;
- Initially refusing to negotiate pole-attachment agreements that would enable competitive broadband-service providers to obtain permits in sufficient time to meet federal grant deadlines;
- Refusing to review pole-attachment applications on a scale or at the pace necessary to complete broadband projects in a timeframe required by federal grant programs;
- Refusing to follow the standard industry practice of approving a contractor to process pole-access applications in a timely manner when the utility's staff is insufficient to do the work, even when the broadband-service provider is willing to pay the entire bill for the contractor; and
- Refusing to process pole-attachment applications and failing to respond to provider outreach regarding the processing of applications for months on end.⁴

Section 224 of the Communications Act exempts municipal and electric-cooperative (co-op) pole owners, such as the LPCs, from oversight by the Federal Communications Commission (FCC).⁵ At the same time, the TVA's authority over pole attachments is not subject to oversight by state governments.⁶ This loophole means that it is the TVA, not the FCC, that sets the rates for pole attachments. The TVA's rates are

2. See *infra* Appendix A [hereinafter "Lee Letter"].

3. *Broadband Assessment Report*, TENN. VALLEY AUTH. (Dec. 2022), <https://www.tva.com/energy/technology-innovation/connected-communities/broadband-assessment-report> [<https://perma.cc/MG67-6UX8>].

4. See Lee Letter, *supra* note 2, at 1–2.

5. See 47 U.S.C. § 224(a)(1) (2018) ("The term 'utility' means any person who is a local exchange carrier or an electric, gas, water, steam, or other public utility, and who owns or controls poles, ducts, conduits, or rights-of-way used, in whole or in part, for any wire communications. Such term does not include any railroad, any person who is cooperatively organized, or any person owned by the Federal Government or any State.").

6. See Lee Letter, *supra* note 2, at 1.

significantly higher than those of the FCC,⁷ and the TVA's LPCs often can avoid the access requirements typically required by states and the FCC.⁸

But avoiding state and FCC regulatory oversight is not the only loophole that the TVA and its LPCs can exploit: the TVA and the government-owned LPCs also may not be subject to antitrust law.⁹ The TVA and its LPCs hold a resource critical for broadband deployment, while it is essentially impossible for private providers to build competing pole infrastructure.¹⁰ In situations like this, government entities that participate as firms in the marketplace—known in the literature as “state-owned enterprises” (SOEs)—should be subject to antitrust law in order to ensure access by private competitors.

Senator Lee is correct that the DOJ should examine the practices of the TVA and its LPCs under antitrust law. Antitrust clearly applies to those LPCs that are private co-ops, which have no immunities. But Congress should clarify that the TVA and government-owned LPCs are likewise subject to antitrust law when they act according to their “commercial functions” or as “market participants.” Congress should also consider bringing the TVA and all of its LPCs under the purview of the FCC's Section 224 authority over pole attachments.

I. THE LAW & ECONOMICS OF STATE-OWNED LPCS AND RURAL ELECTRICAL COOPERATIVES (RECs)

A. *The Competition Economics of State-Owned Enterprises*

SOEs' incentives differ from those of privately owned businesses. Most notably, while a private business must pass the profit-and-loss test, SOEs often are not subject to the same constraints.¹¹ This difference may

7. *Appendix L: Pole Attachment Fee Formulas Adopted by TVA and the FCC*, TENN. ADVISORY COMM'N ON INTERGOVERNMENTAL RELS. (Jan. 2017), https://www.tn.gov/content/dam/tn/tacir/commission-meetings/january-2017/2017January_BroadbandAppL.pdf [<https://perma.cc/6K4C-3UT7>].

8. *See* Lee Letter, *supra* note 2, at n.4.

9. *See* Webster Cnty. Coal Corp. v. Tenn. Valley Auth., 476 F. Supp. 529, 532 (W.D. Ky. 1979) (“This Court finds . . . and holds that [the TVA], as an agency and instrumentality of the federal government, is exempt from liability under the antitrust laws.”).

10. *See, e.g.,* Ben Sperry, *Antitrust and FCC Oversight Are Needed to Promote Broadband Deployment in the Tennessee Valley*, TRUTH ON THE MARKET (Aug. 2, 2023), https://truthonthe market.com/2023/08/02/antitrust-and-fcc-oversight-are-needed-to-promote-broadband-deployment-in-the-tennessee-valley/?utm_source=chatgpt.com [<https://perma.cc/H5W6-QQ8Q>].

11. Organisation for Economic Co-operation and Development, *State-Owned Enterprises as Global Competitors*, OECD 134 (Dec. 8, 2016), https://www.oecd.org/en/publications/state-owned-enterprises-as-global-competitors_9789264262096-en.html [<https://perma.cc/P388-TM LK>] (“While most of these policies explicitly give public and private businesses equal rights and obligations, the extent to which competition policies and laws apply to different types of government businesses differs.”).

manifest through: (1) setting up legal SOE monopolies against which no other firm can compete; (2) exempting SOEs from otherwise generally applicable laws; (3) extending explicit subsidies to SOEs, whether in the form of taxpayer-financed appropriations or government-backed bonds (which the government explicitly or implicitly promises to repay, if necessary); or (4) cross-subsidies from other government-owned monopoly businesses.

As a result, SOEs do not need to maximize profits (with Armen Alchian's caveat that private market participants may be modeled as profit maximizers even if that isn't their true motivation¹²) and can pursue other goals.¹³ In fact, this is exactly why some supporters of SOEs like them so much: SOEs can pursue the so-called "public interest" by providing ostensibly high-quality products and services at what are often below-market prices.¹⁴

But this freedom comes at a cost: not only can SOEs inefficiently allocate societal resources away from their highest-valued uses, but they may have greater incentives than private entities to abuse their positions in the marketplace.¹⁵ As David E.M. Sappington and J. Gregory Sidak put it:

[W]hen an SOE values an expanded scale of operation in addition to profit, it will be less concerned than its private, profit-maximizing counterpart with the extra costs associated with increased output. Consequently, even though an SOE may value the profit that its anticompetitive activities can generate less highly than does a private profit-maximizing firm, the SOE may still find it optimal to pursue aggressively anticompetitive activities that expand its own output and revenue. To illustrate, the SOE might set the price it charges for a product below its marginal cost of production, particularly if the product is one for which demand increases substantially as price declines. If prohibitions on below-cost pricing are in effect, an SOE may

12. See generally Armen A. Alchian, *Uncertainty, Evolution, and Economic Theory*, 58 J. POL. ECON. 211 (1950).

13. Brigitta Jakob, *Performance in Strategic Sectors: A Comparison of Profitability and Efficiency of State-Owned Enterprises and Private Corporations*, 25 PARK PLACE ECONOMIST 9, 9 (2017) (stating that traditionally SOEs have been used to assist the government to achieve non-economic goals rather than focusing on maximizing profits).

14. See, e.g., JONATHAN SALLET, BROADBAND FOR AMERICA'S FUTURE: A VISION FOR THE 2020s 50–51 (2019), https://www.benton.org/sites/default/files/BBA_full_F5_10.30.pdf [<https://perma.cc/E9NU-LR9F>].

15. Organisation for Economic Co-operation and Development, *State-Owned Enterprises and Corruption*, OECD 34–36 (Aug. 27, 2018), https://www.oecd.org/content/dam/oecd/en/publications/reports/2018/08/state-owned-enterprises-and-corruption_g1g90cb1/9789264303058-en.pdf [<https://perma.cc/P7PT-K5D3>] (discussing how SOEs and their employees are susceptible to abusing their power).

have a strong incentive to understate its marginal cost of production or to over-invest in fixed operating costs so as to reduce variable operating costs. A public enterprise may also often have stronger incentives than a private, profit-maximizing firm to raise its rivals' cost and to undertake activities designed to exclude competitors from the market because these activities can expand the scale and scope of the SOE's operations.¹⁶

Here, entities like the TVA and many of the government-owned LPCs that sell the electricity it produces are simply not subject to the same profit-and-loss test that a private power company would be. Even more importantly for the discussion of broadband buildout, many of these government-owned LPCs also provide (or intend to provide) broadband services, effectively using their position as a monopoly provider of electricity to cross-subsidize their entry into the broadband marketplace. Moreover, LPCs often own the electric poles and control decisions about whether and at what rates to rent them to third parties (subject to TVA rate regulations), including to private broadband providers that may compete with the LPCs' municipal-broadband offerings.¹⁷

This raises two significant issues for competition policy:

- 1) Because government-owned municipal-broadband providers focus on speed and price, rather than profitability, they can sometimes offer greater speeds at lower prices than private providers, deterring private buildout and competition using what, in other contexts, would be referred to as “predatory pricing” (*i.e.*, the government can use its unique monopoly advantages to indefinitely set prices too low)¹⁸; and
- 2) LPCs that offer municipal-broadband services can raise rivals' costs by refusing to deal with private broadband providers that want to attach equipment to their poles (an “essential facility” or

16. David E.M. Sappington & J. Gregory Sidak, *Competition Law for State-Owned Enterprises*, 71 ANTITRUST L.J. 479, 499 (2003).

17. See *Proposed Board Resolution (Pole Attachments)*, TENN. STATE GOV'T 6–9, https://www.tn.gov/content/dam/tn/tacir/commission-meetings/2016-december/2016December_BroadbandAppJ.pdf [<https://perma.cc/8NLW-YLR5>] (providing background information on pole ownership and how usage rates are calculated).

18. See Ben Sperry, *Islands of Chaos: The Economic Calculation Problem Inherent in Municipal Broadband*, TRUTH ON THE MARKET (Sept. 3, 2020), <https://truthonthemarket.com/2020/09/03/islands-of-chaos-the-economic-calculation-problem-inherent-in-municipal-broadband> [<https://perma.cc/4JHR-3Q4P>].

“critical input”) or by offering access only on unreasonable and discriminatory terms.

In *Verizon Communication Inc. v. Law Offices of Curtis V. Trinko LLP*,¹⁹ the U.S. Supreme Court explained the reasoning behind a very limited duty to deal under antitrust law: “Compelling . . . firms to share the source of their advantage is in some tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities.”²⁰

In sum, a private market participant is constantly looking to acquire monopoly power by innovating and better serving customers, and temporary monopolies—acquired through a legitimate competitive process—are not unlawful. If successful, this process provides incentive for more innovation and competition, including incentives for competitors to build their own infrastructure.

This is not so when it comes to SOEs, which can prevent competition in a way that private market participants cannot, due to their special access to legal mechanisms like eminent domain, taxes, below-market-rate loans, government grants of indefinite monopolies, and cross-subsidies from their own monopolies in adjacent markets.²¹ As a result, SOEs possess both a special ability and incentive to raise rivals’ costs through refusals to deal or predatory pricing.

Ironically, the lack of a profit motive makes SOEs uniquely positioned to harm competition.²² Thus, it makes sense to impose on SOEs a duty to deal on reasonable and nondiscriminatory terms when it comes to pole attachments.

B. *The Economics of Co-Ops*²³

According to the National Rural Electric Cooperative Association, the trade association for RECs:

19. *Verizon Commc’ns v. Law Offices of Curtis v. Trinko, LLP*, 540 U.S. 398 (2004).

20. *Id.* at 408–09.

21. *Corporate Governance of State-Owned Enterprises*, WORLD BANK GRP. 1, 36–37, <https://openknowledge.worldbank.org/server/api/core/bitstreams/f01135d1-9f3c-5b85-9c1c-1a765bda00f5/content> [<https://perma.cc/DSH9-8YYE>] (reviewing the legal benefits SOEs throughout the world receive like tax exemptions, favorable government loan arrangements, land-use benefits, and generally preferential treatment).

22. *State-Owned Enterprises as Global Competitors*, *supra* note 11, at 98–99 (considering the how the benefits SOEs are granted inherently hinder private companies).

23. Adapted from Ben Sperry, *Broadband Deployment, Pole Attachments, & the Competition Economics of Rural-Electric Co-ops*, TRUTH ON THE MARKET (Aug. 16, 2023), <https://truthonthemarket.com/2023/08/16/broadband-deployment-pole-attachments-the-competition-economics-of-rural-electric-co-ops/> [<https://perma.cc/594J-65QS>].

- Co-ops serve 56% of the U.S. landmass and 88% of the nation's counties, including 93% of the 353 persistent poverty counties.
- Co-ops account for roughly 13% of all electricity sold in the United States.
- More than 90% of electric co-ops serve territories where the average household income is below the national average. One in six co-op consumer-members lives at or below the poverty line.
- Co-ops serve an average of eight consumer-members per-mile of electric line, but this average masks the extremely low-density population of many co-ops. If the handful of large co-ops near cities were removed, the average would be lower.
- More than 100 electric co-ops provide broadband service and more than 200 co-ops are exploring the option and conducting feasibility studies to do so.²⁴

There are some important differences between electric co-ops and investor-owned power companies. Most importantly, co-ops are owned by their consumers.²⁵ Economics helps explain why this form of organization could be pro-competitive in some situations, but the history of RECs suggests that government support and corporate rules particular to co-ops are the main reasons that we continue to rely on co-ops to distribute electricity in rural areas of the United States.²⁶ As a result, RECs—especially those that distribute electricity generated and transmitted by the TVA—have incentives more like those of SOEs than private firms.

In other words, RECs also have the incentive and ability to act anticompetitively—*e.g.*, by refusing to deal with private broadband providers who wish to attach to the poles they own.

1. Why Do We Have So Many RECs?

The classic law and economics examination of firms' choice of business organization comes from Henry Hansmann, in his book *The Ownership of Enterprise*.²⁷ He explained that the choice of ownership for any firm is driven by costs. The form that is chosen by a particular firm “minimizes the total costs of transactions between the firm and all of its patrons.”²⁸ These costs include both transaction costs with those patrons

24. See Brian O'Hara, *Rural Electrical Cooperatives: Pole Attachment Policies and Issues*, NRECA 2 (June 2019), https://www.cooperative.com/programs-services/government-relations/regulatory-issues/documents/2019.06.05%20nreca%20pole%20attachment%20white%20paper_final.pdf [https://perma.cc/BGS8-P2RJ].

25. *Id.* at 4.

26. See *infra* Part I.B.1.

27. HENRY HANSMANN, *THE OWNERSHIP OF ENTERPRISE* (2000).

28. *Id.* at 21.

who are not owners, and the costs of ownership, such as monitoring and controlling the firm.²⁹

Hansmann argued that the form of consumer-owned co-ops predominates in the distribution of electricity in rural areas because of the threat of natural monopoly, where high barriers to entry and startup costs suggest that one firm is likely to dominate.³⁰ This is particularly true in geographic areas with low population densities, because the costs of building out infrastructure are extremely high per individual consumer. As such, consumers would likely be subject “to serious price exploitation if they were to rely on market contracting with an investor-owned firm.”³¹ Thus, the choice is among rate regulation of an investor-owned utility, municipal ownership, or consumer ownership through a co-op.

Hansmann argued that consumer co-ops best align “the firm’s interests with those of its consumers” because they have lower overall costs than other forms of ownership in rural areas.³² This is because electricity is a “highly homogeneous [commodity] with few important quality variables that affect different users differently.”³³ Moreover, relatively stable farm and nonfarm residential households account for the overwhelming majority of the membership and demand for electricity in rural areas, “creating a dominant group of patrons with relatively homogenous interests.”³⁴

As a result, the costs of monitoring and controlling these natural monopolies are relatively lower for the consumers as owners than they would be as citizens overseeing a public utility commission in charge of regulating an investor-owned utility, or a board in charge of a municipally owned utility.

On the other hand, the history of RECs suggests that their formation and persistence may be more due to government intervention than as a market response to consumer demand.³⁵ As Hansmann himself recognized, RECs received significant public subsidies in the form of below-market loans from the Rural Electrification Administration (REA), though he argues that these loans were not significant subsidies for the first fifteen years; exemption from federal corporate income tax; and preferential access to power generated by the TVA.³⁶ On top of that, the REA essentially organized many co-ops in their early days.³⁷

29. *Id.*

30. *See id.* at 169.

31. *Id.*

32. *Id.* at 170.

33. HANSMANN, *supra* note 27, at 170.

34. *Id.*

35. *See infra* notes 39-45 and associated text.

36. *See* HANSMANN, *supra* note 27, at 173.

37. *See id.*

Nonetheless, Hansmann argues:

These subsidies have undoubtedly been important in encouraging the formation and growth of cooperative utilities, and therefore the great proliferation of rural electric cooperatives does not provide an unbiased test of the viability of the cooperative form. Evidently, however, the federal subsidies have not been critical to the success of cooperatives in the electric power industry. Even before the federal programs were enacted, there already existed forty-six rural electric cooperatives operating in thirteen different states. Also, as already noted, there was no net interest subsidy to the cooperatives for the first fifteen years of the REA. And in its early years, the REA also offered low - interest loans to investor-owned utilities that wished to extend service into rural areas, but found little interest in these loans among the latter firms.³⁸

However, in a 2018 law-review article, Debra C. Jeter, Randall S. Thomas, & Harwell Wells systematically detail the great lengths to which the REA went to organize co-ops in rural areas.³⁹ The authors convincingly argue that the co-op model was not adopted as a market response, but primarily due to the REA's organizational efforts and the subsidies bestowed upon them.

Even if RECs were a market response to natural monopoly in rural areas at the time of their adoption, that does not mean that they would necessarily continue to be the most economically efficient model. At a given point in time, economies of scale and high costs of entry may mean that the market can only support one firm (*i.e.*, natural monopoly). But over the last eighty to ninety years, underlying conditions that may have made co-ops the most efficient model may have changed. As identified by scholars from the International Center for Law & Economics:

[I]n any given market at a given time, there is likely some optimal number of firms that maximizes social welfare. That optimal number—which is sometimes just one and is never the maximum possible—is subject to change, as technological shocks affect the dominant paradigms controlling the market. The optimal number of firms also varies with the strength of scale economies, such that consumers may benefit from an increase in concentration if economies of scale are strong enough And it is

38. *Id.* at 173.

39. See Debra C. Jeter et. al., *Democracy and Dysfunction: Rural Electrical Cooperatives and the Surprising Persistence of the Separation of Ownership and Control*, 70 ALA. L. REV. 361, 372–95 (2018) (noting extensive subsidies and REA organization efforts).

important to remember that the market process itself is not static. When factors change—whether a change in demographics or population density, or other exogenous shocks that change the cost of deployment—there will be corresponding changes in available profit opportunities. Thus, while there is a hypothetical equilibrium for each market—the point at which the entry of a new competitor could reduce consumer welfare—it is best to leave entry determinations to the market process.⁴⁰

In fact, as Jeter, Thomas, & Wells argue, rules particular to the co-op model make it nearly impossible to change the form of ownership through merger or acquisition.⁴¹ These rules—adopted as part of the model acts promoted by the REA—prevent what the great Henry Manne called “the market for corporate control” that would otherwise discipline co-op managers.⁴²

As has been noted by even the strongest supporters of the co-op model⁴³—and seemingly undermining Hansmann’s assessment that consumer-ownership is the most effective form of organization for these entities—RECs suffer from a lack of oversight by consumer-owners, with very few ever showing up to even vote for their board of directors.⁴⁴

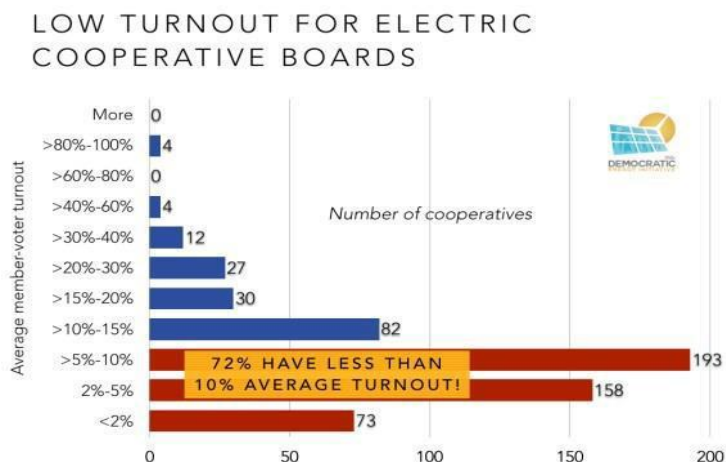
40. Geoffrey A. Manne et al., *A Dynamic Analysis of Broadband Competition: What Concentration Numbers Fail to Capture*, ICLE 28, 32 (June 2021), <https://laweconcenter.org/wp-content/uploads/2021/06/A-Dynamic-Analysis-of-Broadband-Competition.pdf> [<https://perma.cc/4TJC-5S2G>].

41. Jeter et al., *supra* note 39, at 419–39.

42. See Henry G. Manne, *Mergers and the Market for Corporate Control*, 73 J. POL. ECON. 110, 110 (1965).

43. See John Farrell et al., *Report: Re-Member-ing the Electric Cooperative*, INST. FOR LOCAL SELF-RELIANCE (Mar. 29, 2016), <https://ilsr.org/report-remembering-the-electric-cooperative/#Missing%20Members> [<https://perma.cc/DWD9-XTEG>] (“More than percent of cooperatives have voter turnouts of less than 10 percent [] including Wilson’s Jackson Energy Cooperatives, which averages just under 3 percent turnout.”).

44. *Id.*



This lack of oversight from the ownership means that the board of directors can engage in all kinds of abuses, as detailed extensively by Jeter, Thomas, and Wells.⁴⁵

Without sufficient incentives for consumer-owner oversight or a functioning market for corporate control, there is no basis to conclude that RECs remain the best business model for distributing electricity. Their ubiquity is more due to the REA's organizational efforts and ongoing government benefits—in the form of subsidies, tax exemptions, and preferences from the TVA—than market demand.

2. The Competition Economics of RECs and Pole Attachments

Due to the privileged position enjoyed by RECs, particularly those that distribute electricity from the TVA, RECs have a unique ability and incentive to act anticompetitively toward broadband providers that want to attach to the poles the RECs own.⁴⁶

Much like municipally owned electricity distributors, RECs are not motivated solely by profit maximization. RECs also have similar advantages, like access to eminent domain, below-market loans, tax exemptions, and the ability to cross-subsidize entry into a new market (like broadband) from its dominant position in electricity distribution.

On the other hand, unlike municipally owned electricity distributors, RECs can go out of business and thus must earn sufficient revenues, which remain an ongoing concern.⁴⁷ This means that the incentives for RECs to act anticompetitively are at least as strong as those of investor-

45. Jeter et al., *supra* note 39, at 397–400.

46. Sperry, *supra* note 23.

47. *Id.*

owned firms and may be even as strong as those of state-owned enterprises. This is especially notable, when so many RECs either have entered or are planning to enter the broadband market.⁴⁸

In such cases, there are strong incentives for RECs to refuse to deal with private broadband providers that are trying to deploy in—and introduce competition to—their rural areas, as Senator Lee’s recent letter to the U.S. Department of Justice suggests, many of these co-ops have done exactly that.⁴⁹

The economic logic that drives a limited duty to deal under antitrust law is that enforced sharing rarely makes sense because it reduces the incentives to build infrastructure.⁵⁰ However, creating new rural infrastructure (like poles) is cost-prohibitive—at least, without the same subsidies, eminent-domain power, and other advantages that RECs have historically enjoyed.⁵¹ Thus, RECs may rightfully have a duty to deal with broadband providers on a reasonable and nondiscriminatory basis.

Moreover, many RECs receive little oversight from rate regulators when it comes to pole attachments. And when they do, like those RECs that distribute electricity from the TVA, the formula allows for much higher rates than the FCC would allow.⁵² As a result, pole costs are much higher for broadband companies dealing with poles owned by co-ops and municipalities that are not subject to the FCC’s authority.⁵³

Runaway Pole Costs

REGULATED:

\$6.84 per pole
X **18** poles per mile

\$123.12 poles per mile

CO-OP OWNED:

\$15.39 per pole
X **18** poles per mile

\$277.02 poles per mile

MUNI OWNED:

\$14.86 per pole
X **18** poles per mile

\$267.48 poles per mile

48. *Id.*

49. See Lee Letter, *supra* note 2, at 1–2.

50. See *Trinko*, 540 U.S. at 408–09.

51. *Undergrounding: Hidden Lines, Hidden Costs*, NORTH AM. WOOD POLE COUNCIL, 3, 3–4, https://woodpoles.org/wp-content/uploads/TB_Undergrounding.pdf [<https://perma.cc/2K3M-3RER>] (explaining that installation costs for overhead power lines in rural areas range from \$86,700 to \$903,000 per mile).

52. See Appendix L: Pole Attachment Fee Formulas Adopted by TVA and the FCC, *supra* note 7.

53. See Michelle Connolly, *The Economic Impact of Section 224 Exemption of Municipal and Cooperative Poles*, SSRN (July 12, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4267326 [<https://perma.cc/4Q4A-J76A>].

II. THE COMPLICATED NATURE OF ANTITRUST IMMUNITIES

There is, however, a complication. In his letter to the DOJ, Senator Lee rightly complains that:

TVA's regulatory practices enable such behavior: there is no reason why TVA's regulation of the pole rental rates charged by its LPCs requires TVA to somehow exempt those LPCs from generally-applicable rules that protect competition by requiring pole owners to provide pole access to third parties on reasonable terms. TVA should be using its authority over LPC distribution contracts to require LPCs to offer reasonable, non-discriminatory, and prompt pole access to third-party broadband providers (particularly recipients of taxpayer-funded broadband grants) in unserved areas, rather than giving its LPCs a free pass from those requirements.⁵⁴

Unfortunately, while Senator Lee's letter is addressed to the DOJ's antitrust chief, it isn't clear whether antitrust laws even apply to the behavior he observes. This uncertainty primarily stems from two legal doctrines: federal sovereign immunity from lawsuit and state-action immunity from antitrust.

A. Federal Sovereign Immunity and the TVA

Normally, the federal government is immune from lawsuit under the ancient (and deeply flawed⁵⁵) doctrine of sovereign immunity, except where explicitly waived by statute.⁵⁶ The TVA is a wholly owned corporate agency and instrumentality of the federal government.⁵⁷ Thus, federal courts have typically found that the TVA and other federal entities operating in the marketplace are exempt from antitrust.⁵⁸ This is despite the fact that the TVA's enabling statute states:

54. Lee Letter, *supra* note 2, at 2.

55. See Ben Sperry, *When Violations of the Law Have No Remedy: The Case of Warrantless Wiretapping*, COMPETITIVE ENTER. INST. (Aug. 8, 2012), <https://cei.org/blog/when-violations-of-the-law-have-no-remedy-the-case-of-warrantless-wiretapping> [<https://perma.cc/8F2E-CR4Z>].

56. *Sovereign Immunity*, CORNELL L. SCH. LEGAL INFO. INST., https://www.law.cornell.edu/wex/sovereign_immunity?utm_source=chatgpt.com [<https://perma.cc/4CL8-82AA>].

57. *What is TVA?*, TVA KIDS, <https://www.tva.com/kids/what-is-tva> [<https://perma.cc/E5XY-QNM5>].

58. See, e.g., *Webster Cty. Coal v. Tenn. Valley Auth.*, 476 F. Supp. 529, 532 (W.D. Ky. 1979) (finding the TVA is exempt from antitrust law); *Sea-Land Serv. Inc. v. Alaska R.R.*, 659 F.2d 243, 246 (D.C. Cir. 1981), *cert. denied*, 455 U.S. 919 (1982) (finding the Alaska Railroad exempt from antitrust law).

“Except as otherwise specifically provided in this chapter, the Corporation... may sue and be sued in its corporate name.”⁵⁹

There is nothing in the chapter that explicitly states the agency can’t be sued for antitrust violations. The older cases finding the TVA to be exempt from antitrust are likely to be found wrongly decided under the logic of the U.S. Supreme Court’s most recent case dealing with TVA’s immunity from suit. In 2019, the Court took up *Thacker v. TVA*,⁶⁰ which asked whether the TVA was immune from lawsuits for negligence. The Court rejected the lower court’s reasoning that the TVA was immune for torts arising from its “discretionary functions,” substituting a new test as to whether the TVA was acting pursuant to its governmental function or a commercial function. As the Court stated:

Under the clause—and consistent with our precedents construing similar ones—the TVA is subject to suits challenging any of its commercial activities. The law thus places the TVA in the same position as a private corporation supplying electricity. But the TVA might have immunity from suits contesting one of its governmental activities, of a kind not typically carried out by private parties.⁶¹

The Court also gave examples to help distinguish the two:

When the TVA exercises the power of eminent domain, taking landowners’ property for public purposes, no one would confuse it for a private company. So too when the TVA exercises its law enforcement powers to arrest individuals. But in other operations—and over the years, a growing number—the TVA acts like any other company producing and supplying electric power. It is an accident of history, not a difference in function, that explains why most Tennesseans get their electricity from a public enterprise and most Virginians get theirs from a private one. Whatever their ownership structures, the two companies do basically the same things to deliver power to customers.⁶²

The test to be applied, therefore, is “whether the conduct alleged to be negligent is governmental or commercial in nature . . . if the conduct is commercial—the kind of thing any power company might do—the TVA

59. 16 U.S.C. § 831c(b) (2018).

60. 139 S. Ct. 1435 (2019).

61. *Id.* at 1439.

62. *Id.* at 1443–44.

cannot invoke sovereign immunity.”⁶³ This suggests that, when the TVA is acting pursuant to its commercial function, it should not receive immunity from antitrust suit.

On the other hand, Congress gave the TVA broad ratemaking authority and contractual powers.⁶⁴ One federal court (prior to *Thacker*) rejected an antitrust challenge to the TVA’s ratemaking formula because it was a “valid governmental action and [therefore] exempt from the antitrust laws of the United States.”⁶⁵

As noted above, some LPCs have entered into the municipal-broadband market and act as competitors to private broadband companies who want to attach to poles owned by LPCs.⁶⁶ Thus, even though competition economics would suggest that LPCs would have a greater incentive to raise rivals’ costs by charging a monopoly price, the TVA would likely argue that it is acting in its government function when it sets those rates.⁶⁷ If courts agree, then antitrust law would not be able to reach that problem.

Consistent with the Court’s reasoning in *Thacker*, however, courts could find that antitrust law reaches agreements between wholesalers (like the TVA) and retailers (like the LPCs) to charge certain rates for pole attachments to competitors in an adjacent market. This would

63. *Id.* at 1444.

64. *See TVA Executes the Largest Electric Rate Increase in More Than a Decade, While Providing the Least Amount of Information of Any Major Utility*, CLEANENERGY.ORG (Aug. 21, 2024), <https://www.cleanenergy.org/news-and-resources/tva-executes-the-largest-electric-rate-increase-in-more-than-a-decade-while-providing-the-least-amount-of-information-of-any-major-utility/> [https://perma.cc/8RZZ-SL7E].

65. *City of Loudon v. Tenn. Valley Auth.*, 585 F. Supp. 83, 87 (E.D. Tenn. 1984).

66. *Proposed Board Resolution (Pole Attachments)*, *supra* note 17.

67. The TVA could also argue that the rate formula for pole attachments that it sets is subject to the filed rate doctrine and thus exempted from antitrust scrutiny. The filed rate doctrine does not allow courts to second-guess agency determinations of rates. *See Keogh v. Chicago & Northwest Ry. Co.*, 260 U.S. 156 (1922). While the original case on the filed rate doctrine dealt with the literal situation of regulated entities filing rates which were approved by a regulator, courts have extended the doctrine to other situations where a regulator uses its authority to set rates. *Cf. Wortman v. All Nippon Airways*, 854 F.3d 606, 611 (9th Cir. 2017) (“While the filed rate doctrine initially grew out of circumstances in which common carriers filed rates that a federal agency then directly approved, we have applied the doctrine in contexts beyond this paradigmatic scheme.”). The unique situation with the TVA is that there is no clear statutory ratemaking authority over pole attachments, but they have asserted the ability to do so under their contract powers, raising the same issue of whether this is a governmental function or market function. *See TVA DETERMINATION OF REGULATION ON POLE ATTACHMENTS 2* (2016), <https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/about-tva/guidelines-reports/determination-on-regulation-of-pole-attachments-7-12-2023.pdf> [https://perma.cc/KVP9-NECV]. Even if the filed rate doctrine applies, though, it would *not* stop an enforcement action aimed at an injunction or declaratory relief by the DOJ, just treble damages sought by a private litigant. *See Keogh*, 260 U.S. at 162 (“[T]he fact that these rates had been approved by the Commission would not, it seems, bar proceedings by the Government.”).

arguably be an example of the TVA acting as any other power generator would, pursuant to its commercial function, through some type of price-maintenance agreement. As it stands, it is unclear how the courts will rule.

Congress should strongly consider clarifying that the TVA is not exempt from antitrust scrutiny when it acts pursuant to a commercial function, including when it sets anticompetitive rates for pole attachments that would slow broadband buildout. This clearly affects the market for access to LPC-owned utility poles.

B. *State Action Immunity and the LPCs*

Even if the commercial-versus-government distinction is clarified with respect to the TVA, there is another wrinkle as it relates to antitrust scrutiny of LPCs. This concerns how the TVA's actions interact with state-action immunity in antitrust law.

Grounded in the Tenth Amendment, the Supreme Court has found there is immunity from antitrust laws for conduct that is the result of "state action."⁶⁸ This doctrine has been interpreted to immunize anticompetitive conduct pursuant to state and local government action from antitrust claims, so long as "the State has articulated a clear . . . policy to allow the anticompetitive conduct, and second, the State provides active supervision of [the] anticompetitive conduct."⁶⁹ When it comes to municipalities, however, the Court has found that "[o]nce it is clear that state authorization exists, there is no need to require the State to supervise actively the municipality's execution of what is a properly delegated function."⁷⁰

The Supreme Court has also left open the possibility of an exception to state-action immunity when government entities themselves are acting as market participants.⁷¹ In one case dealing with a local municipally owned power plant in Louisiana, the Supreme Court did *not* grant broad immunity from antitrust laws, in part because:

Every business enterprise, public or private, operates its business in furtherance of its own goals. In the case of a

68. See, e.g., *Parker v. Brown*, 317 U.S. 341, 351 (1943) and its progeny.

69. *N.C. State Bd. of Dental Exam'rs v. FTC*, 574 U.S. 494, 506 (2015) (internal citations omitted).

70. *Town of Hallie v. City of Eau Claire*, 471 U.S. 34, 47 (1985).

71. See, e.g., *City of Columbia v. Omni Outdoor Advert. Inc.*, 499 U.S. 365, 379 (1991) ("We reiterate that, with the possible market participant exception, any action that qualifies as state action is '*ipso facto* . . . exempt from the operation of the antitrust laws...'"); *FTC v. Phoebe Putney Health Sys. Inc.*, 568 U.S. 216, 226 ("An amicus curiae contends that we should recognize and apply a 'market participant' exception to state-action immunity because Georgia's hospital authorities engage in proprietary activities. . . . Because this argument was not raised by the parties or passed on by the lower courts, we do not consider it.").

municipally owned utility, that goal is likely to be, broadly speaking, the benefit of its citizens. But the economic choices made by public corporations in the conduct of their business affairs, designed as they are to assure maximum benefits for the community constituency, are not inherently more likely to comport with the broader interest of national economic well-being than are those of private corporations acting in furtherance of the interests of the organization and its shareholders.⁷²

While there are a few cases applying this distinction in lower federal courts,⁷³ there is no Supreme Court caselaw determining how to differentiate when, for the purposes of state-action immunity, municipal corporations act as market participants versus when they act as government entities. Jarod Bona and Luke Wake have proposed applying a test similar to the one the courts use in dormant Commerce Clause cases.⁷⁴ The distinction made by the Supreme Court in *Thacker* and discussed above may also be applicable.

Government-owned LPCs are creatures of states or municipalities. As such, they would certainly argue they are immune from antitrust scrutiny, even when they refuse to deal with private broadband providers with whom they compete while withholding a critical input (*i.e.*, the ability to attach to their poles). But there are two problems with this argument.

First, it is unlikely that the LPCs could argue that they are acting pursuant to a clearly articulated policy of displacing competition when they refuse to deal with broadband providers. As Senator Lee pointed out in his letter, there are state laws that would impose a duty to deal on reasonable and nondiscriminatory terms, but for any exemptions to that authority due to the TVA.⁷⁵ For instance, North Carolina and Kentucky require all pole owners not subject to FCC Section 224 authority to offer nondiscriminatory pole access.⁷⁶

72. *City of Lafayette v. La. Power & Light Co.*, 435 U.S. 389, 403 (1978).

73. *See, e.g.*, *Edinboro Coll. Park Apartments v. Edinboro Univ. Found.*, 850 F.3d 567 (3d Cir. 2017); *VIBO Corp. v. Conway*, 669 F.3d 675 (6th Cir. 2012); *Freedom Holdings Inc. v. Cuomo*, 624 F.3d 38 (2d Cir. 2010); *Hedgcock v. Blackwell Land Co.*, 52 F.3d 333 (9th Cir. 1995).

74. *See* Jarod M. Bona & Luke A. Wake, *The Market-Participant Exception to State-Action Immunity from Antitrust Liability*, 23 J. ANTITRUST & UNFAIR COMPETITION L. SECTION STATE BAR CA., 156, 176–77 (2014), <https://www.theantitrustattorney.com/files/2014/05/Market-Participant-Exception-Article.pdf> [<https://perma.cc/3E6C-UP2P>].

75. *See* Lee Letter, *supra* note 2, at 2.

76. *Id.* at n.4; N.C. Gen. Stat. § 62-350(a) (requiring all pole owners to offer non-discriminatory pole access); 807 Ky. Admin. Regs. 5:015 § 2(1).

On the other hand, the LPCs could appeal to the TVA's contract authority,⁷⁷ in addition to the TVA's stated policy that its purpose is "to provide for the . . . industrial development" of the Tennessee Valley.⁷⁸ But even if this grants the TVA authority to regulate rates for pole attachments, it doesn't mean the TVA has enunciated an articulable policy of displacing competition in refusing to deal with broadband providers. It also would appear to be contrary to the purpose of promoting industrial development to forestall broadband deployment in the Tennessee Valley because LPCs that also have municipal-broadband systems don't want that competition. In other words, their refusal to deal is not protected by an appeal to any articulable policy to displace competition, either by a state or the TVA.

Second, under existing caselaw, government-owned LPCs are market participants that should not receive antitrust immunity. For instance, in one case, a private arena owner challenged under antitrust law an exclusive contract between a municipal-arena owner and LiveNation.⁷⁹ The court held that state-action immunity was "less justified" because the municipality's "entertainment contracts" reflected "commercial market activity," not "regulatory activity."⁸⁰ Here, the LPCs' actions as both power companies and municipal-broadband providers reflect commercial-market activity more than regulatory activity. They shouldn't be able to claim immunity from antitrust for this refusal to deal, any more than a private broadband provider could.

In sum, the LPCs' anticompetitive refusal to deal appears to be separate from the rates set by the TVA pursuant to its ratemaking authority or contractual powers. The LPCs should be subject to antitrust law. However, due to uncertainty in this area, Congress should clarify that LPCs are not immune from antitrust scrutiny, and consider codifying the market-participant exception to state-action immunity in antitrust statutes.

III. SECTION 224 OF THE FCC ACT

In his letter, Senator Lee noted that, under Section 224 of the Communications Act, "Congress determined that poles and conduits are essential facilities that lack a viable market-based alternative, which led it to require utilities to extend nondiscriminatory access to utility poles to

77. 16 U.S.C. § 831i (2018) ("Board is authorized to include in any contract for the sale of power such terms and conditions, including resale rate schedules, and to provide for such rules and regulations as in its judgment may be necessary or desirable for carrying out the purposes of this Act.").

78. 16 U.S.C. § 831 (2018).

79. *See* Delta Turner Ltd. v. Grand Rapids-Kent Cnty. Convention/Arena Auth., 600 F. Supp. 2d 920, 926 (W.D. Mich. 2009).

80. *Id.* at 929.

cable operators and competitive telecommunications providers.”⁸¹ While acknowledging that TVA distributors are not subject to Section 224, Senator Lee argued that “the congressional conclusion that poles are essential facilities that lack a viable market-based alternative holds for all poles.”⁸² Senator Lee further noted that the “TVA’s regulation of its LPCs’ pole attachment rates also impedes competition by setting rates well above the rates set by the FCC and deemed compensatory by the U.S. Supreme Court, inflating the cost for competitive broadband providers unaffiliated with TVA LPCs to offer service.”⁸³

Theoretically, government-owned LPCs and cooperative LPCs are subject to *some* oversight when they run services like municipal broadband, either from voters or member-owners. But it is implausible that such oversight can be truly effective, given that these pole owners are not subject to normal market incentives and have their own conflicts of interest that encourage hold-up problems. Combined with their ability to cross-subsidize operations in broadband from their electricity customers, it should be clear that these entities pose a host of potential public-choice problems.⁸⁴

Indeed, as FCC Commissioner Brendan Carr has noted:

I continue to hear concerns from broadband builders about unnecessary delays and costs when they seek to attach to poles that are owned by municipal and cooperative utilities. Unlike what we are doing in today’s item, there is a strong argument that Section 224 does not give us authority to address issues specific to those types of poles. Therefore, I encourage states and Congress to take a closer look at these issues—and revisit the exemption that exists in Section 224—so that we can ensure deployment is streamlined, regardless of the type of pole you are attaching to.⁸⁵

We echo both Senator Lee’s and Commissioner Carr’s sentiments here. The FCC’s important work on this matter stands to benefit millions of Americans trapped on the wrong side of the digital divide. The co-op-and-municipal loophole poses a major obstacle to achieving these ends.

81. Lee Letter, *supra* note 2, at n.5.

82. *Id.*

83. *Id.* at n.3.

84. See VINCENT OSTROM & ELINOR OSTROM, ALTERNATIVES FOR DELIVERING PUBLIC SERVICES: TOWARD IMPROVED PERFORMANCE 9 (1979) (“[I]nstitutions designed to overcome problems of market failure often manifest serious deficiencies of their own. Market failures are not necessarily corrected by recourse to public sector solutions.”).

85. Statement of Commissioner Brendan Carr, *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Second Further Notice of Proposed Rulemaking (Mar. 16, 2022), <https://docs.fcc.gov/public/attachments/FCC-22-20A3.pdf> [<https://perma.cc/6MBA-6C36>].

Insofar as Congress prioritizes quick and efficient broadband buildout, the TVA and its LPCs should not be able to thwart these goals through anticompetitive rates and refusals to deal. Congress should revisit this issue and grant the FCC jurisdiction over these types of pole owners.

CONCLUSION

Senator Lee's letter to the DOJ highlights issues that are extremely important to closing the digital divide. Broadband deployment could be harmed as a result of the practices by the TVA and the LPCs. If DOJ Antitrust Division chief Jonathan Kanter is serious about taking on gatekeeper power,⁸⁶ he should start here: with public entities granted a truly unassailable gatekeeper position over private markets. But even more importantly, Senator Lee's letter highlights the need to reform antitrust immunities that apply to SOEs and co-ops. Economics suggests government monopolies are a greater harm to competition than private ones. Antitrust law should reflect that reality.

86. See *Assistant Attorney General Jonathan Kanter Delivers Opening Remarks at the Second Annual Spring Enforcers Summit*, U.S. DEP'T OF JUST. (Mar. 27, 2023), <https://www.justice.gov/opa/pr/assistant-attorney-general-jonathan-kanter-delivers-opening-remarks-second-annual-spring> [<https://perma.cc/6TXK-KZVW>] ("Gatekeeper power has become the most pressing competitive problem of our generation at a time when many of the previous generations' tools to assess and address gatekeeper power have become outmoded.").

Appendix A: Senator Mike Lee's Letter to the DOJ

MICHAEL S. LEE
UTAH

ALLYSON BELL
CHIEF OF STAFF

United States Senate
WASHINGTON, DC 20510-4404

COMMITTEES:
JUDICIARY
ENERGY AND
NATURAL RESOURCES
JOINT ECONOMIC
COMMITTEE
BUDGET

June 22, 2023

Jonathan Kanter
Assistant Attorney General, Antitrust Division
United States Department of Justice
950 Pennsylvania Avenue NW
Washington, DC 20530

Re: Tennessee Valley Authority (TVA) - Supporting Broadband Deployment

Dear Mr. Kanter:

I write with concern regarding potentially anticompetitive behavior by certain electric distributors that purchase power from the Tennessee Valley Authority (TVA), and whose relationship to TVA places them beyond the reach of state laws that might otherwise regulate their pole access practices as monopolies. Through its rules and regulations for Local Power Companies ("LPCs") that distribute TVA power, TVA has assumed the role of regulator for those LPCs' pole access charges,¹ displacing state regulators that would otherwise exercise jurisdiction.² Unfortunately, I have received troubling reports that certain LPCs regulated by TVA have been impeding federal broadband investments by:

- Delaying or refusing to negotiate pole attachment agreements with competitive broadband service providers, including when the TVA LPC itself provides broadband service (itself or through a joint venture agreement) or is interested in doing so;
- Initially refusing to negotiate pole attachment agreements that would enable competitive broadband service providers to obtain permits in sufficient time to meet federal grant deadlines;
- Refusing to review pole attachment applications on a scale or at the pace necessary to complete broadband projects in a timeframe required by federal grant programs;

¹ TVA has the power to include rules, terms and conditions in its contracts with electric distributors. *See* 16 U.S.C. § 831i. TVA interprets this power as giving it the authority to set rental rates for third-party pole access, while declining to take any other action to supervise its distributors' pole access practices. *See* TVA Board Resolution on Pole Attachments (approved Feb. 11, 2016), <https://bit.ly/31C5WoS>.

² *See* Order, *In re Petition of Kentucky Cable Telecommunications Association*, Case No. 2012-00544, Ky. Pub. Serv. Comm'n (Oct. 30, 2015) (concluding that, due to TVA regulation, state public utilities commission lacks "jurisdiction over the pole attachment rates, terms, or conditions of the TVA Cooperatives."), *available at* https://psc.ky.gov/pscscf/2012%20Cases/2012-00544/20151030_PSC_ORDER.pdf; *see also* Ga. Code § 46-3-200.4(b) (exempting TVA distributors from otherwise-applicable pole attachment regulation by Georgia Public Service Commission).

Refusing to follow the standard industry practice of approving a contractor to process pole access applications in a timely manner when the utility's staff is insufficient to do the work, even when the broadband service provider is willing to pay the entire bill for the contractor; and

Refusing to process pole attachment applications at all, and failing to respond to provider outreach regarding the processing of applications for months on end.

These practices not only frustrate federal broadband deployment policies, they raise serious competition questions regarding prohibited anticompetitive conduct. Moreover, TVA's regulatory practices enable such behavior: there is no reason why TVA's regulation of the pole rental rates charged by its LPCs³ requires TVA to somehow exempt those LPCs from generally-applicable rules that protect competition by requiring pole owners to provide pole access to third parties on reasonable terms.⁴ TVA should be using its authority over LPC distribution contracts to require LPCs to offer reasonable, non-discriminatory, and prompt pole access to third-party broadband providers (particularly recipients of taxpayer-funded broadband grants) in unserved areas, rather than giving its LPCs a free pass from those requirements.

Over the past several years, the Federal government has appropriated billions of taxpayer dollars to build out broadband networks in unserved rural America. While I have questioned whether this is an appropriate use of taxpayer funds, now that it is law I want to ensure that those taxpayers' money is not wasted. To that end, recipients of federal broadband funding should be able to access utility poles without unreasonable delays or excessive charges to deploy their networks and compete on a level playing field.⁵ It is therefore important to ensure that pole owners, such as electric distributors, not leverage their position or manipulate regulatory schemes to impede broadband deployment by competitors or extract unreasonable prices. Such anticompetitive behavior frustrates successful execution of federal programs, denies subscribers the benefits of free and fair competition, and hurts unserved Americans by delaying their access to the economic, healthcare, and education benefits of high-speed connectivity.

You recently acknowledged to me that "pole attachments are especially critical to the deployment of next-generation broadband services" and that to the extent a "pole owners'

³ TVA's regulation of its LPCs' pole attachment rates also impedes competition by setting rates well above the rates set by the FCC and deemed compensatory by the U.S. Supreme Court, inflating the cost for competitive broadband providers unaffiliated with TVA LPCs to offer service. *See* n.2, *supra*.

⁴ *See, e.g.*, Tenn. Code Ann. § 65-25-134(a)(3) (requiring electric cooperatives that offer broadband to offer nondiscriminatory pole access); N.C. Gen. Stat. § 62-350(a) (requiring all pole owners to offer non-discriminatory pole access); 807 Ky. Admin. Regs. 5:015 § 2(1) (same); Georgia Public Service Comm'n, Pole Attachment Regulations at 10, 17 (Dec. 30, 2020), *available at* <https://services.psc.ga.gov/api/v1/External/Public/Get Document/DownloadFile/183713/65552> (setting pole access rules for electric cooperatives).

⁵ Congress determined that poles and conduits are essential facilities that lack a viable market-based alternative, which led it to require utilities to extend nondiscriminatory access to utility poles to cable operators and competitive telecommunications providers. *See* Pub. L. 95-234, § 6 (1978) (enacting Section 224 of the Communications Act); Pub. L. 104-104, § 703, (1996) (extending Section 224 to cover attachments by telecommunications carriers and enacting non-discriminatory access requirement). While TVA distributors are not subject to Section 224, the congressional conclusion that poles are essential facilities that lack a viable market-based alternative holds for all poles.

actions raise competition issues,” the Department “will review them” in order to “create and protect economic opportunity in the marketplace for broadband Internet access services. . . .”

With that in mind, I urge the Department to investigate this problematic behavior, and, where and if appropriate, to take steps to ensure that (1) TVA LPCs are providing fair and timely access to poles at reasonable costs; and (2) federal entities with authority over pole access, including the TVA, are utilizing the powers provided to them by Congress to promote rather than impede fair competition.

I appreciate your attention to these important issues.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael S. Lee".

Sen. Michael S. Lee
Ranking Member
Senate Judiciary Subcommittee on
Competition Policy, Antitrust, and Consumer Rights

cc: Mr. Jeffrey J. Lyash
Mr. Willam Kilbride TVA
Board of Directors

Responses from the Department of Justice to Written Questions for the Record from the U.S. Senate Committee on the Judiciary Subcommittee on Competition Policy, Antitrust, and Consumer Rights Following a Hearing on September 20, 2022, entitled “Oversight of Federal Enforcement of the Antitrust Laws,” at 21.

GAI-ENABLED REAL ESTATE FRAUD SCHEMES: RISKS, PREVENTION AND REGULATIONS

*Li Lin**

INTRODUCTION	97
I. CONTEMPORARY GAI DEVELOPMENT AND APPLICATION IN FRAUD.....	98
A. <i>Defining AI and GAI</i>	98
B. <i>How AI and GAI Are Used in Fraud</i>	100
II. GAI-ENABLED FRAUD SCHEMES IN MODERN REAL ESTATE MARKET	103
A. <i>How GAI Can Be Used to Further Real Estate Fraud Schemes</i>	103
B. <i>Real Estate Fraud in the Growing Florida Market</i>	108
III. GAI-ENABLED FRAUD PREVENTION, REGULATIONS, AND POLICY SUGGESTIONS.....	109
A. <i>GAI-Enabled Real Estate Fraud Prevention</i>	109
B. <i>Current Real Estate Fraud Prevention Programs and Statutes</i>	110
C. <i>U.S. Regulations Regarding GAI Use in Fraud</i>	112
D. <i>Discussion</i>	114
CONCLUSION AND SUGGESTIONS	115

INTRODUCTION

The emergence of generative artificial intelligence (GAI) has posed both opportunities and challenges to our society. On the one hand, GAI drives economic growth by improving automation on the supply side and providing personalization on the demand side.¹ On the other hand, the use

* J.D. expected 2025, the University of Florida Levin College of Law; Bachelor of Laws degree from Sun Yat-sen University. I would like to express my gratitude to John Carroll, a practicing attorney in South Carolina, who inspired me to write this Note and provided exceptional guidance. Special thanks are also extended to Ceon Wong and the *Journal of Technology Law and Policy* for their insightful feedback, as well as to Professor Jiaying Jiang and Advisor Alisha Tabag for their invaluable mentorship. Finally, the author would like to thank her family, friends, and partner for their unwavering support and encouragement throughout the journey.

1. Danxia Chen et al., *Exploring Generative Artificial Intelligence (GAI): Business Professionals' Surveys and Perceptions on GAI*, 24 J. BEHAVIORAL & APPLIED MGMT. 79, 80 (2024), <https://www.semanticscholar.org/reader/413dfda358df6e360805189f93b95ec71dc6caea> [https://perma.cc/GFX5-2FX6].

of GAI raises many ethical and security concerns.² This Note focuses on how GAI can be used in real estate fraud schemes and how governments and other entities are fighting that trend. The first section of this Note discusses the contemporary development and application of GAI in fraud. The second section examines common types of GAI-enabled real estate fraud schemes and particularly their impact on the Florida real estate market. The third section explores how GAI can combat GAI-enabled fraud such as deepfake impersonation and phishing attacks and reviews the legislation and programs many states have adopted to address these issues. The fourth section digs deeper and discusses why federal and state regulations lag behind the technological advances in artificial intelligence (AI), particularly GAI. Finally, this Note concludes by analyzing the prospects of preventing GAI-enabled real estate fraud and providing policy suggestions.

I. CONTEMPORARY GAI DEVELOPMENT AND APPLICATION IN FRAUD

A. *Defining AI and GAI*

If you are an iPhone user and want to find something on your phone as fast as possible, what would you do? You would probably ask Siri, a popular AI product. Similarly, if you have difficulty answering a question posed by your professor, or are confused about the meaning of your dream last night, you would probably go to ChatGPT, one of the most popular GAI products on the market. These are all daily examples of AI and GAI use in our lives.

Indeed, the development of AI and GAI has transformed the technological landscape and impacted almost every aspect of our lives.³ The term *artificial intelligence* first appeared in 1956 when John McCarthy, a computer scientist at Stanford, hosted the eight-week-long *Dartmouth Summer Research Project on Artificial Intelligence* at Dartmouth College.⁴ There is no agreed-upon definition of AI, but an important idea beneath the creation of AI is to make machines and computers imitate human intelligence.⁵ However, AI systems are not humans. They are efficient statistical predictors of information rather than

2. Abenezer Golda et al., *Privacy and Security Concerns in Generative AI: A Comprehensive Survey*, 12 IEEE ACCESS 48126, 48126 (2024), <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=10478883> [<https://perma.cc/Z8GG-F2V5>].

3. Gianluca Riccio, *2 Years of ChatGPT: How Its Impact Has Already Changed the World*, FUTURO PROSSIMO (Nov. 25, 2024), <https://en.futuroprossimo.it/2024/11/2-anni-di-chatgpt-come-il-suo-impatto-ha-gia-cambiato-il-mondo/> [<https://perma.cc/CZ4E-QLEV>].

4. Michael Haenlein & Andreas Kaplan, *A Brief History of Artificial Intelligence: On the Past, Present, and Future of Artificial Intelligence*, 61 CAL. MGMT. REV. 1, 3 (2019), <https://journals.sagepub.com/doi/epub/10.1177/0008125619864925> [<https://perma.cc/M558-SFGE>].

5. HAROON SHEIKH ET AL., *MISSION AI: THE NEW SYSTEM TECHNOLOGY* 15 (2023).

entities that possess the anthropomorphic attribute of “common sense.”⁶ Nevertheless, AI possesses its unique strength and has successfully outperformed humans in different task assignments, such as playing chess.⁷

GAI is an AI model or algorithm that generates brand-new content in response to a prompt.⁸ Unlike other forms of AI that take existing information to answer specific questions or generate new content, GAI creates new information from scratch.⁹ GAI uses a computing process known as deep learning to analyze patterns in large sets of data and then replicates the patterns to create new data that appears human-generated.¹⁰ Deep learning is a subset of machine learning models inspired by the human brain that utilizes artificial neural networks.¹¹ It comprises different layers of interconnected nodes and data flows through these layers to provide a final result or prediction.¹² GAI can generate various types of content, including text, audio, image, video, and even three-dimensional models.¹³ In December 2023, Professor Shen Yang, with the assistance of GAI, spent three hours creating a science fiction novel entitled *The Land of Machine Memories*, which won second prize in the Jiangsu Popular Science and Science Fiction Competition.¹⁴ Industry experts predict that GAI could raise global domestic product (GDP) by

6. J.E. (Hans) Korteling et al., *Human- Versus Artificial Intelligence*, 4 FRONTIERS IN A.I. 1, 3 (2021).

7. See Jon M. Garon, *Prometheus' Digital Fire: The Civic Responsibilities of Artificial Intelligence*, 20 OHIO ST. TECH. L.J. 225, 231 (2024). There are different types of AI systems classified based on task assignments. Predictive AI is a computer program's ability to use statistical analysis to identify patterns, anticipate behaviors, and predict future events. Although the predictions are not necessarily accurate, they help businesses make better decisions and personalize experiences for their customers. Automating AI refers to AI systems that automate processes within businesses or other entities, often resulting in the replacement of human workers. Extractive AI involves extracting information from existing sources, such as text summarization. Conversational AI combines Natural Language Processing (NLP) to imitate conversations with human beings. See *id.* at 233–35.

8. *Id.* at 234.

9. *Id.*

10. Megan Crouse, *Generative AI Defined: How it Works, Benefits and Dangers*, TECHREPUBLIC (Oct. 24, 2024), <https://www.techrepublic.com/article/what-is-generative-ai/> [https://perma.cc/PY9P-WLYL].

11. Faisal Kalota, *A Primer on Generative Artificial Intelligence*, EDUC. SCI. 1, 5 (2024).

12. *Id.*

13. Fiona Fui-Hoon Nah et al., *Generative AI and ChatGPT: Applications, Challenges and AI-human Collaboration*, 25 J. INF. TECH. CASE AND APP. RSCH. 277, 279 (2023), <https://www.tandfonline.com/doi/epdf/10.1080/15228053.2023.2233814?needAccess=true> [https://perma.cc/5RS9-FKKC].

14. Garon, *supra* note 7, at 235.

7% and replace 300 million jobs of knowledge workers.¹⁵ In this Note, both terms *AI* and *GAI* are used and discussed, but *GAI* is the main focus of this Note.

B. *How AI and GAI Are Used in Fraud*

Fraud exists in all walks of life, and detecting and preventing fraud is relevant to many stakeholders in society. With the rise of AI and GAI, new opportunities have emerged to detect and prevent fraud.¹⁶ However, fraudsters also leverage AI to commit fraud and crimes.¹⁷ The global AI software market is expected to reach \$22.6 billion by 2025, and AI applications have expanded into numerous industries, including agriculture, commerce, education, and social media.¹⁸ Understanding how AI and GAI interact with fraud schemes thus is crucial for safeguarding many industries and stakeholders. A study summarizing AI-enabled crimes highlighted six major concerns: (1) audio/video impersonation; (2) driverless vehicles as weapons; (3) tailored phishing; (4) disrupting AI-controlled systems; (5) large-scale blackmail; and (6) AI-authored fake news.¹⁹ Among them, audio/video impersonation, tailored phishing, and AI-authored fake news are fraud-related crimes that are enabled by GAI.

Humans have a strong tendency to believe in what they see and hear, but GAI-enabled impersonation technologies are challenging this inclination.²⁰ GAI has produced advanced image-editing and generation tools that generate audio, images, or videos nearly indistinguishable from real ones.²¹ When the generated audio, images, or videos contain impersonations, they are commonly referred to as “deepfakes,” a term derived from the underlying deep learning processes of GAIs.²² As early

15. *Generative AI could raise global GDP by 7%*, GOLDMAN SACHS (Apr. 5, 2023), <https://www.goldmansachs.com/insights/pages/generative-ai-could-raise-global-gdp-by-7-per-cent.html> [https://perma.cc/EHA2-DC5Z].

16. See generally Yang Bao et al., *Artificial Intelligence and Fraud Detection*, 1 INNOVATIVE TECH. AT THE INTERFACE OF FIN. AND OPERATIONS 223 (2021).

17. M. Caldwell et al., *AI-enabled future crime*, CRIME SCI. 1, 1 (2020), <https://crimesciencejournal.biomedcentral.com/counter/pdf/10.1186/s40163-020-00123-8.pdf> [https://perma.cc/H7NA-M8DX].

18. *Applications of Artificial Intelligence Across Various Industries*, FORBES (Jan. 6, 2023, 1:33 PM), <https://www.forbes.com/sites/qai/2023/01/06/applications-of-artificial-intelligence/> [https://perma.cc/Q6KC-4RT2].

19. Caldwell et al., *supra* note 17, at 1.

20. *Id.* at 6.

21. Jinjin Gu et al., *AI-enabled image fraud in scientific publications*, 3 PATTERNS 1, 1 (2022).

22. MD Shohel Rana et al., *Deepfake Detection: A Systematic Literature Review*, 10 IEEE 25494, 25494 (2022), <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9721302> [https://perma.cc/EHE6-EYUH]. The GAI technology used to create deepfakes is a combination

as 2018, a deepfake video that showed a realistic impersonation of former President Obama speaking directly to the viewer went viral.²³ Actor-director Jordan Peele, who impersonated President Obama's voice, created the video to illustrate the dangers of deepfake audio and video content depicting people saying or doing things they never actually said or did.²⁴ Currently, audio/video impersonation ranks as the most concerning type of AI-enabled crime due to its difficulty to defeat and high potential for profit.²⁵

Social engineering is the act of manipulating humans to gain access to certain confidential information,²⁶ and phishing is a social engineering attack rapidly rising in prominence. Phishing can be defined as a scalable act of deception whereby impersonation is used to obtain information from a target.²⁷ There are five stages of phishing: (1) collecting targets; (2) collecting information about the targets; (3) creating emails; (4) sending emails; and (5) finally validating and improving the emails.²⁸ Because GAI tools can generate human-like text and interact like humans, they can be used in every stage of phishing. There are two types of phishing: spear phishing and traditional phishing.²⁹ Spear phishing attacks are personalized while traditional phishing attacks are general and mass-scale.³⁰ Consequently, spear phishing attacks are expensive but effective, while traditional phishing attacks are less effective but less

of two neural networks called a Generative Adversarial Network (GAN). A GAN is a deep learning architecture that trains the two neural networks, a generative network and a discriminative network, to compete in generating authentic new data from a training dataset. The generative network uses an encoder and decoder to take an input data sample and modify it as much as possible. The discriminative network tries to predict whether the data generated by the generative network belongs in the original dataset. In other words, the two neural networks are adversarial because the generative network creates fake data while the discriminative network tries to predict whether the fake data is fake or real. As a result, the generative network generates improved versions of fake data until the discriminative network can no longer distinguish fake data from the original. *Id.*; *What is a GAN?*, AWS, <https://aws.amazon.com/what-is/gan/> [<https://perma.cc/AFG4-32PZ>].

23. Bloomberg, *How Faking Videos Became Easy — And Why That's So Scary*, FORTUNE (Sept. 11, 2018, 1:22 PM), <https://fortune.com/2018/09/11/deep-fakes-obama-video/> [<https://perma.cc/ZB4E-GKNE>].

24. *Id.*

25. Caldwell et al., *supra* note 17, at 1.

26. Amy Hetro Washo, *An interdisciplinary view of social engineering: A call to action for research*, 4 COMPUTS. IN HUM. BEHAV. REPS. 1, 1 (2021).

27. Elmer EH Lastdrager, *Achieving a consensual definition of phishing based on a systematic review of the literature*, 3 CRIME SCI. 1, 1 (2014).

28. Fredrik Heiding et al., *AI Will Increase the Quantity — and Quality — of Phishing Scams*, HARV. BUS. REV. (May 30, 2024), <https://hbr.org/2024/05/ai-will-increase-the-quantity-and-quality-of-phishing-scams> [<https://perma.cc/ZU4S-UVPF>].

29. *Id.*

30. *Id.*

expensive.³¹ Currently, most phishing attacks are relatively indiscriminate, using generic messages that can be expected to be of interest to some fraction of users purely by chance.³² The attackers then rely on the ease of sending huge numbers of digital messages for a profitable gain. GAI enhances phishing by making messages appear more genuine and believable, thus increasing the response rate.³³ GAI methods also employ active learning to optimize phishing strategies and automate spear phishing, making it more cost-effective.³⁴ As a result, GAI-enabled phishing has proved to be successful. One study shows that about 60% of participants fell victim to AI-automated phishing, which is comparable to the success rates of non-AI phishing messages created by human experts.³⁵ Moreover, the entire phishing process can be automated using language learning models (LLMs), reducing the cost of phishing attacks by more than 95%.³⁶ In the last few years, AI has made phishing tactics more efficient and convincing, allowing scammers to rake in over \$12.5 billion in 2023 alone.³⁷

Finally, fake news creates fake, yet seemingly authentic, information that appears to be from a trusted source.³⁸ GAI could generate many versions of a particular content from multiple sources to boost its visibility, credibility, and impact.³⁹ Other less concerning GAI-enabled frauds include snake oil (sale of fraudulent services under the guise of AI), data poisoning (manipulation of machine learning training data to deliberately introduce specific biases), tricking face recognition (attacks on face recognition systems), and forgery (generation of fake content sold under false pretenses as to its authorship).⁴⁰

31. *Id.*

32. See Maria Vergelis et al., *Spam and Phishing in 2018*, SECURELIST (Mar. 12, 2019), <https://securelist.com/spam-and-phishing-in-2018/89701/> [<https://perma.cc/7CT4-PKU5>].

33. Caldwell et al., *supra* note 17, at 8.

34. *Id.*

35. Heiding et al., *supra* note 28.

36. *Id.*

37. Rebecca Holland, *Cybercrime cost Americans \$12.5 billion in 2023 — how to avoid becoming another scam statistic*, MONEYWISE (Feb. 21, 2025), <https://moneywise.com/life/cybercrime-cost-americans-125-billion-in-2023-how-to-avoid-becoming-another-scam-statistic> [<https://perma.cc/ZD4N-4J98>] (discussing how AI's evolution has made phishing scams and other cybercrimes more effective, and easier for criminals to use).

38. Caldwell et al., *supra* note 17, at 8.

39. *Id.*

40. *Id.* at 9-11.

II. GAI-ENABLED FRAUD SCHEMES IN MODERN REAL ESTATE MARKET

A. *How GAI Can Be Used to Further Real Estate Fraud Schemes*

Purchasing property should be an exciting experience, but real estate fraud tarnishes it. From the previous section, we see that GAI-enabled fraud and crimes are increasing and are potentially dangerous to society and many industries. The real estate industry is no exception to being the victim of GAI-enabled fraud. CertifID's *2024 State of Wire Fraud Report* showed that real estate is a leading target for fraud.⁴¹ In 2024, nearly 1 in 4 Americans were targeted with suspicious communications during their closing process, while approximately 1 in 10 became targets of fraud, and more than 1 in 20 became victims.⁴²

To understand how real estate fraud is committed and how AI and GAI can be used during the process, we must first understand how real estate transactions are made. Generally, there are two major types of real estate transactions: commercial real estate (CRE) and residential real estate (RRE).⁴³ In short, CRE transactions involve the buying, selling, or leasing of properties used for business purposes, while RRE transactions mainly focus on private occupancy for residential purposes.⁴⁴ A CRE deal usually involves the following phases: (1) identification and origination; (2) underwriting; (3) due diligence; and (4) closing.⁴⁵ To manage risks, parties involved in the transaction will arrange a third party as an escrow agent to hold funds or assets.⁴⁶ Sellers are usually paid in full by escrow agents on the closing date.⁴⁷ An RRE deal is simpler but also follows a similar procedure. Normally, during a real estate closing, the seller signs a warranty deed, which transfers ownership of the property from the seller

41. *2024 State of Wire Fraud Report*, CERTIFID, <https://www.certifid.com/state-of-wire-fraud> [https://perma.cc/5KYW-SP3X].

42. *Id.*

43. *Commercial v. Residential Real Estate What's The Difference? What Does a Commercial Real Estate Lawyer Do?*, THE ORLANDO L. GRP., PL (Feb. 1, 2023), <https://www.theorlandolawgroup.com/blog/all/commercial-v-residential-real-estate/> [https://perma.cc/898L-DFTJ] [hereinafter *Commercial v. Residential Real Estate*].

44. *Id.*

45. *Overview of the Commercial Real Estate Transaction Lifecycle*, FIRST NAT'L REALTY PARTNERS (Feb. 12, 2021), https://fnrpusa.com/blog/overview-of-the-commercial-real-estate-transaction-lifecycle/?utm_term=blog%2Boverview-of-the-commercial-real-estate-transaction-lifecycle [https://perma.cc/5KS3-DVCG].

46. *Commercial v. Residential Real Estate*, *supra* note 43.

47. Jennifer Ferri, *Understanding the Role of Escrow in a Real Estate Transaction*, TITLE JUNCTION (Oct. 24, 2024), <https://title-junction.com/2024/10/24/escrow-in-a-real-estate-transaction/> [https://perma.cc/XP2V-A5CV].

to the buyer.⁴⁸ The deed then gets recorded, making the transaction official.⁴⁹

With the rapid development of digitalization and the increasing use of GAI, a potential buyer may face fraudulent property listings,⁵⁰ imposter scams, and deed fraud.⁵¹ A 2023 study found that 41% of recent buyers took the first step in the buying process by looking online at properties for sale, while only 21% of buyers first contacted a real estate agent.⁵² It is reported that a \$1.6 million house that appeared on Zillow in Kansas City recently listed for \$10,200 turned out to be a scam listing.⁵³ The fake seller required all interested buyers to send a nonrefundable amount of \$200 for a walk-through at a house that was not for sale.⁵⁴ Some scammers also target vacant land and properties that have no mortgages or other liens.⁵⁵ They will pose as the actual landowner, asking a real estate agent to list the property.⁵⁶ To make it more convincing, they will present fraudulent deeds to make the deal go through.⁵⁷

How do fraudsters obtain fraudulent deeds? In Florida, for a deed to be recorded properly, it must have the signed names of the persons conveying and receiving property, the two witnesses, and the notary

48. *What Documents Are Needed for a Real Estate Closing in Florida*, ST PETERSBURG REAL EST. ATT'Y BATTAGLIA, ROSS, DICUS & MCQUAID, P.A. (Mar. 4, 2023), <https://www.727realestatelaw.com/what-documents-are-needed-for-a-real-estate-closing-in-florida/> [<https://perma.cc/FVF7-BG9A>] (reviewing key documents for real estate closings in Florida).

49. *What You Need to Know About a Deed in a Real Estate Transaction*, FED. STANDARD ABSTRACT (July 17, 2023), <https://www.federalstandardabstract.com/what-you-need-to-know-about-a-deed-in-a-real-estate-transaction/> [<https://perma.cc/UM9C-SGFB>].

50. *Protecting Your Most Valuable Asset, Your Real Estate*, GOMEZ L., <https://gomezlawla.com/blog/navigating-the-intersection-of-ai-and-real-estate-insights-risks-and-legal-implications/> [<https://perma.cc/U7TP-YGHM>] (“Be vigilant of scams involving AI-generated images and descriptions for non-existent properties.”).

51. Aleyshea Velez Vazquez, *AI Fraud Threatens Mortgage Security*, SIMPLY TITLE (Mar. 7, 2025), <https://www.simply-title.com/post/ai-fraud-threatens-mortgage-security> [<https://perma.cc/GVS5-Q8F2>].

52. *Highlights From the Profile of Home Buyers and Sellers*, NAT'L ASS'N OF REALTORS, <https://www.nar.realtor/research-and-statistics/research-reports/highlights-from-the-profile-of-home-buyers-and-sellers> [<https://perma.cc/FT3R-L873>].

53. Joseph Hernandez, *Scam listed KC home for sale & charged \$200 for tours. What to know about fake listings*, THE KAN. CITY STAR (July 11, 2024, 12:55 PM), <https://www.kansascity.com/kc-city-guides/tips/article289176969.html> [<https://perma.cc/Z8A3-6VB3>].

54. *Id.*

55. Melissa Dittmann Tracey, *Scammers Are Plotting to Sell Vacant Land Fraudulently*, NAT'L ASS'N OF REALTORS (Oct. 23, 2023), <https://www.nar.realtor/magazine/real-estate-news/law-and-ethics/scammers-are-plotting-to-sell-vacant-land-fraudulently> [<https://perma.cc/7RR9-EEY7>].

56. *Id.*

57. *Id.*

public or other officers authorized to take acknowledgments.⁵⁸ Fraudsters use property register databases to look for target properties and then use property records as templates to forge deeds and find a phony notary service to complete the transfer.⁵⁹ They usually target vulnerable property that meets most of the following criteria: (1) vacant; (2) located in a blighted area; (3) not maintained by property owner; (4) delinquent on taxes; (5) unencumbered by liens; or (6) whose owner does not live nearby.⁶⁰ Once they have the deeds recorded in front of the county clerk, they become the “rightful” owner of the property and sell it to one or more good-faith buyers for money or use it as collateral on a loan.⁶¹

This is a growing problem in many states, especially Florida.⁶² In fact, more than 54% of real estate professionals experienced deed fraud firsthand in the second half of 2023.⁶³ In March 2024, a community organizer in Detroit, Michigan, named Zina Thomas was charged with stealing more than thirty homes in and around the city by forging quitclaim deeds transferring the properties to fictitious entities, and then selling them to unwitting third parties.⁶⁴ The harm of this type of fraud is certainly destructive because, for most Americans, a home is their most valuable asset, and having it stolen and transferred to third parties can be a devastating event. The rightful homeowner will end up hiring an attorney to keep the innocent third-party buyer off his property, which can be time-consuming and costly.

Fraudsters may even find a way to trick buyers into a legitimate deal by impersonating the true seller or the escrow agent.⁶⁵ In February 2024,

58. FLA. STAT. § 695.26 (2024).

59. Ryan Toohil, *How Can Someone Steal Your House Deed?*, IDENTITY GUARD (Oct. 16, 2023), <https://www.identityguard.com/news/how-can-someone-steal-your-house-deed> [https://perma.cc/PUX8-NLKW].

60. Jennifer Coddling, *Florida - Leading The Fight In Preventing Deed Fraud*, ALEXANDER S. BUCHANAN, PLLC (Oct. 24, 2023), <https://www.attorneybuchanan.com/florida-leading-the-fight-in-preventing-deed-fraud> [https://perma.cc/YV2N-X8YC].

61. Larry Silverstri, *Florida property title fraud is a problem. Here's a way to protect yourself*, TAMPA BAY TIMES (Feb. 22, 2024), <https://www.tampabay.com/opinion/2024/02/22/florida-property-title-fraud-is-problem-heres-way-protect-yourself/> [https://perma.cc/7HMM-JNRP].

62. *Property deed fraud growing problem in Florida; state offers assistance in detection*, FOX 13 TAMPA BAY (Mar. 1, 2024, 8:49 AM), <https://www.fox13news.com/news/property-deed-fraud-growing-problem-in-florida-state-offers-assistance-in-detection> [https://perma.cc/JR9B-KLLN].

63. *Id.*

64. Keith Griffith, *Deed fraud is on the rise — here's how to protect your home*, N.Y. POST (Apr. 1, 2024), <https://nypost.com/2024/04/01/real-estate/deed-fraud-is-on-the-rise-heres-how-to-protect-your-home/> [https://perma.cc/F5QZ-ZTRQ].

65. Danica De Vera, *The 10 Most Common Scams in Business Sales*, CONSULTANTS, LLC (Mar. 1, 2024, 10:42 AM), <https://cfoconsultants.net/the-10-most-common-scams-in-business-sales/> [https://perma.cc/QDW5-YACA] (“In this scam, fraudsters impersonate escrow services to deceive sellers into transferring their business assets or sensitive information.”).

a British multinational design and engineering company in Hong Kong fell victim to a deepfake scam, suffering a loss of \$25 million to fraudsters.⁶⁶ According to Hong Kong police, the employee, a finance worker, was duped into attending a video call with people he believed were the chief financial officer and other staff members, all of whom turned out to be deepfake recreations.⁶⁷ The scam first started with a phishing email allegedly from the company's U.K. office, specifying a need for a secret transaction to be carried out.⁶⁸ The employee was suspicious at first, but his doubts were put aside after he had a video with the CFO and several other corporate executives he recognized.⁶⁹ However, a week later when he checked with the company's home office to ask about the status of the secret deal, he realized that there was no secret deal at all and that he was scammed.⁷⁰

As of today, the Author has not found reporting of fraudsters using deepfake videos in a real estate transaction to scam buyers.⁷¹ Nevertheless, fraudsters conduct impersonation through other, easier means such as phishing emails.⁷² It is reported that a couple purchasing a house received a legitimate email from the title company before closing on their home purchase.⁷³ The email alerted them that they would receive wiring instructions the next day, and when they received the email with an identical email signature and wiring instructions the next day, they moved forward and sent the payment.⁷⁴ However, it turned out that the second email was sent by a fraudster impersonating the contact at the title company.⁷⁵

The application of GAI will increase both the likelihood of these scams and their success rates to a new level. First of all, fraudsters can apply GAI to trick buyers into illegitimate deals.⁷⁶ They can successfully target more vacant land or other not-for-sale properties to create fake property listings on a large scale using GAI.⁷⁷ They can make images of

66. Kathleen Magramo, *British engineering giant Arup revealed as \$25 million deepfake scam victim*, CNN BUS. (May 17, 2024), <https://www.cnn.com/2024/05/16/tech/arup-deepfake-scam-loss-hong-kong-intl-hnk/index.html> [https://perma.cc/X3FZ-EB5U].

67. *Id.*

68. *Id.*

69. *Id.*

70. *Id.*

71. *See id.*

72. *See infra* note 73.

73. Breck Dumas, *Real estate fraud risk is on the rise, and victims are sounding the alarm*, FOX BUS. (Feb. 6, 2024, 8:00 AM), <https://www.foxbusiness.com/lifestyle/real-estate-fraud-risk-on-rise-victims-sounding-alarm> [https://perma.cc/2TNV-7LFL].

74. *Id.*

75. *Id.*

76. *See id.*

77. *AI-Driven Fraud: The Hidden Threat in Real Estate*, FIRST AM. (Feb. 20, 2025),

the properties look deceptively better to attract more potential buyers. They can also use deepfake technologies to create fake images, videos, or voices of persons such as real estate agents or sellers to trick buyers into believing that the deal is legitimate.⁷⁸ Deepfakes can also be used to create false identification documents in creating a fraudulent deed.⁷⁹ Second, fraudsters may use GAI to impersonate important parties in a legitimate deal.⁸⁰ Fraudsters may utilize GAI to create specific and tailored phishing emails to trick buyers into making payments to them or downloading malware that steals their personal and financial information.⁸¹ They can also use deepfakes to impersonate sellers, escrow agents, or even lawyers in a virtual meeting to harvest the funds through fraud.⁸²

Increasing digitalization makes GAI-enabled real estate frauds a more pressing issue. According to the National Association of Realtors, 96% of realtors use a smartphone with wireless email and internet capabilities daily.⁸³ Zoom had 10 million daily meeting participants in December of 2019, but now it averages 300 million daily active users in meetings.⁸⁴ In the meantime, more and more people are working remotely.⁸⁵ As of 2023, 12.7% of full-time employees work from home, while 28.2% work a hybrid model.⁸⁶ It is expected that 32.6 million Americans will work

<https://www.firstam.com/home-buying-guide/ai-driven-fraud-the-hidden-threat-in-real-estate/#:~:text=AI%2Dpowered%20fraud%20in%20real%20estate%20is%20growing%2C%20with%20scammers,staying%20informed%20about%20AI%20scams> [https://perma.cc/GLJ4-L4S3] (“Properties without an owner-occupant, such as a vacant lot, a second home, or a rental property, are common targets for scammers since it's less likely the owner will discover the fraud.”).

78. *Id.*

79. *Id.* (“AI tools also make it easier to quickly fabricate correspondence, identification, deeds, mortgages, video, and voices, which can be indistinguishable from a real document or person.”).

80. *Id.* (“In real estate transactions, scammers can use deepfake audio or video to impersonate real estate agents or other professionals involved in the transaction, leading to fraudulent communications that provide false information or instructions.”).

81. Sharon Shea, *How is AI making phishing attacks more dangerous*, TECHTARGET (Oct. 22, 2024), <https://www.techtargget.com/searchsecurity/tip/Generative-AI-is-making-phishing-attacks-more-dangerous> [https://perma.cc/P9G5-S3BF].

82. *AI-Driven Fraud: The Hidden Threat in Real Estate*, *supra* note 77.

83. *Real Estate in a Digital Age*, NAT'L ASS'N OF REALTORS, <https://www.nar.realtor/research-and-statistics/research-reports/real-estate-in-a-digital-age> [https://perma.cc/4SDN-6ZRK] (last visited Mar. 11, 2024).

84. Matthew Woodward, *Zoom User Statistics: How Many People Use Zoom in 2025?*, SEARCH LOGISTICS (June 23, 2023), <https://www.searchlogistics.com/learn/statistics/zoom-user-statistics/> [https://perma.cc/4XX3-3LM6].

85. *The Future of Work: Remote Work Trends and Business Continuity*, PREPARIS (Jan. 30, 2024), <https://www.preparis.com/article/future-work-remote-work-trends-and-business-continuity> [https://perma.cc/TVB6-4TKB].

86. *Id.*

remotely by 2025.⁸⁷ Therefore, it can be expected that fraudsters will have more scenes to commit their scams. For example, they may impersonate an attorney's voice using GAI and call the buyer using a number spoofing software to make the call appear as though it was from the actual attorney to trick the buyer into making the payment to the fraudster's account or hold a Zoom meeting with the buyer acting as their attorney or agent.

B. Real Estate Fraud in the Growing Florida Market

In recent years, Florida has experienced rapid population growth,⁸⁸ which has contributed to the increasing demand for housing, consequently driving the Florida residential real estate market growth.⁸⁹ The Sunshine State shines equally bright in the commercial real estate industry.⁹⁰ In 2024, the Florida real estate market remains a focal point of attention for investors, homeowners, and economists.⁹¹ As of March 2024, Florida's median home price increased by 3.7% from the previous year, reaching \$415,300.⁹² Because of its growing and lucrative real estate market, Florida has become a target for fraudsters who specialize in real estate fraud.⁹³ About 54% of real estate professionals in Florida have experienced property deed fraud firsthand in just the second half of 2023.⁹⁴ Many fraudsters commit deed and title scams by stealing a person's identity; therefore, it is no surprise that Florida ranked second in a Federal Trade Commission (FTC) identity theft report that analyzed identity theft rates for every state in the U.S.⁹⁵ Because of its growing real estate marketing and increasing fraud incidents, Florida has become a pioneer in promulgating programs and laws regarding real estate fraud prevention.

87. Katherine Haan, *Top Remote Work Statistics and Trends*, FORBES (last updated June 12, 2023, 5:29 AM), <https://www.forbes.com/advisor/business/remote-work-statistics/> [https://perma.cc/32GH-LM89].

88. Marc Perry et al., *New Florida Estimates Show Nation's Third-Largest State Reaching Historic Milestone*, U.S. CENSUS BUREAU (Dec. 22, 2022), <https://www.census.gov/library/stories/2022/12/florida-fastest-growing-state.html> [https://perma.cc/893D-TSLN].

89. Ed DiMarco, *Florida Real Estate Market in 2024: Overview & Predictions*, NAPLES.ED.COM (May 5, 2024), <https://www.naplesed.com/post/florida-real-estate-market-in-2024> [https://perma.cc/TDY4-YYTJ].

90. *Id.*

91. *Id.*

92. *Id.*

93. Griffith, *supra* note 64.

94. *Id.*

95. Jennifer Streaks, *States with the Most and Least Identity Theft*, BUS. INSIDER (July 31, 2024, 10:10 AM), <https://www.businessinsider.com/personal-finance/credit-score/identity-theft-by-state> [https://perma.cc/6LNJ-ZMQ4].

III. GAI-ENABLED FRAUD PREVENTION, REGULATIONS, AND POLICY SUGGESTIONS

A. *GAI-Enabled Real Estate Fraud Prevention*

In real estate fraud, GAI is a double-edged sword. It can either be used by fraudsters to commit real estate fraud or used by real estate professionals and government officers to detect and prevent real estate fraud.⁹⁶ By leveraging GAI-powered transaction monitoring and identity verification systems, real estate professionals can identify and prevent suspicious activities early on.⁹⁷

First, GAI technologies can be applied in four ways to detect phishing attacks: (1) deep learning; (2) machine learning; (3) hybrid learning; and (4) scenario-based techniques or phishing attack detection.⁹⁸ Deep learning methods can learn to detect phishing attacks by processing batches of input data and assigning weights to the data to distinguish phishing attacks from legitimate traffic.⁹⁹ To train a machine learning model for a learning-based detection system, the data at hand must have features that are related to phishing and legitimate website classes.¹⁰⁰ Different classifiers are used to detect a phishing attack.¹⁰¹ Deep learning algorithms, particularly convolutional neural networks (CNNs), long short-term memory (LSTM), and gated recurrent unit (GRU) models, have shown promising potential on different classification tasks.¹⁰² Scenario-based detections are only applicable to a particular environment, and a hybrid learning approach has relatively inconsistent accuracy rates.¹⁰³ Therefore, deep learning and machine learning algorithms are great tools for detecting phishing emails and, consequently, preventing real estate fraud. Moreover, these algorithms can analyze transaction patterns, thus helping professionals identify other fraudulent activities in real estate transactions.¹⁰⁴ For example, some researchers have proposed that clustering analysis can help distinguish fake real estate listings from real ones based on datasets curated by industry experts.¹⁰⁵

96. Abdul Basit et al., *A comprehensive survey of AI-enabled phishing attacks detection techniques*, 76 TELECOMM. SYS. 139, 139 (2021).

97. *See id.*

98. *Id.* at 141.

99. *Id.* at 143.

100. *Id.* at 144.

101. Basit et al., *supra* note 96, at 144.

102. *Id.* at 143.

103. *Id.* at 149.

104. Maifuza Mohd Amin et al., *Clustering analysis for classifying fake real estate listings*, PEERJ COMPUT. SCI. June 2024, at 1, 2.

105. *Id.* at 1.

Second, researchers have put forward new approaches to recognize deepfake content to prevent the misuse of deepfakes. Since the influx of deep learning software that allows any user to create fabricated content, many initiatives have been proposed to create anti-deepfake tools. The United States Defense Advanced Research Projects Agency promoted the Media Forensics program¹⁰⁶ to encourage the development of anti-deepfake methodologies, and Facebook started the Deepfake Detection Challenge to advance anti-deepfake technologies.¹⁰⁷ Christopher Chun Ki Chan proposed a deep learning algorithm that combined multiple LSTMs with a CNN to track and trace digital content as a first step to combat deepfakes.¹⁰⁸ Yang suggested a new visual speaker authentication scheme based on a deep convolutional neural network to combat deepfakes.¹⁰⁹ Experiments have demonstrated that the Yang approach can achieve an accurate authentication result against human imposters.¹¹⁰ Jayashre and Amsaprabhaa have proposed a hybrid-optimized, deep feature, fusion-based deepfake detection that utilizes a spotted hyena optimizer to detect deepfake videos.¹¹¹ The Jayashre and Amsaprabhaa framework successfully detected deepfake videos with an accuracy exceeding 90% on subsets like DeepFakes, FaceSwap, and Face2Face.¹¹²

Although researchers are working on new technologies to combat deepfakes, new threats may materialize before effective solutions are created to prevent deepfake-assisted fraud. There are many highly sophisticated and difficult-to-distinguish deepfakes that are being used for criminal purposes, affecting a wide range of industries including real estate. Therefore, the regulation of GAI-enabled technologies is imminent.

B. Current Real Estate Fraud Prevention Programs and Statutes

Most states have statutes addressing fraud and theft. For example, in Florida, any person engaged in a scheme to defraud and obtain property

106. *MediFor: Media Forensics*, DARPA, <https://www.darpa.mil/program/media-forensics> [<https://perma.cc/AY6Q-HJ3J>].

107. Eliza Strickland, *Facebook AI Launches Its Deepfake Detection Challenge*, IEEE SPECTRUM (Dec. 11, 2019), <https://spectrum.ieee.org/facebook-ai-launches-its-deepfake-detection-challenge> [<https://perma.cc/4KDS-H8ST>].

108. Christopher Chun Ki Chan et al., *Combating deepfakes: Multi-LSTM and blockchain as Proof of Authenticity for Digital Media*, 2020 IEEE/ITU INT'L CONF. ON A.I. FOR GOOD (AI4G) 2020, at 55, 55.

109. Chen-Zhao Yang et al., *Preventing DeepFake Attacks on Speaker Authentication by Dynamic Lip Movement Analysis*, 16 IEEE TRANSACTIONS ON INFO. FORENSICS AND SEC. 1841, 1841 (2021).

110. *Id.*

111. Jayashre K. & Amsaprabhaa M., *Safeguarding media integrity: A hybrid optimized deep feature fusion based deepfake detection in videos*, 142 COMPUT. & SEC. 1, 1 (2024).

112. *Id.*

with an aggregate value of \$50,000 or more is guilty of a felony of the first degree.¹¹³ Similarly, under Virginia Code § 18.2-186, it is a Class 1 misdemeanor to make fraudulent misrepresentations to obtain property.¹¹⁴ Due to increasing real estate fraud, some states have adopted targeted legislation to prevent it from happening. For example, in 2023, the Florida legislature enacted § 28.2225 of the Florida Statutes, establishing an identity verification pilot program to prevent title fraud.¹¹⁵ The new law requires anyone who records a deed to present a government-issued photo ID before the deed is processed.¹¹⁶ The requirement for photo ID makes it easier for law enforcement to verify the identity of the parties engaged in property-related transactions and investigate fraudulent activity more thoroughly.¹¹⁷ Moreover, it also requires the address of each witness to a real estate conveyance be included on any real property conveyance.¹¹⁸ Similarly, in 2024, Georgia passed House Bill 1292, which requires clerks of the superior courts to obtain photographic identification cards of individuals who present deeds or other instruments for recording.¹¹⁹ These laws add another layer of protection against fraudsters by verifying the identities of the parties engaged in property-related transactions before final conveyance.

Other than legislation, many states have encouraged their citizens to opt into a free property fraud alert system where a property owner will receive an email or phone notification regarding transactions of their property.¹²⁰ The sign-up procedure usually requires a simple entry of an email address and some type of property identification information (such as individual name, business name, or parcel number) for a property owner to receive an alert.¹²¹ Even though these fraud alert systems are fully voluntary and do not prevent fraud from happening, they provide early warnings for property owners to take appropriate actions before the fraud develops further.

113. FLA. STAT. § 817.034(4) (2023).

114. VA. CODE ANN. § 18.2-186(A) (2020).

115. FLA. STAT. § 28.2225 (2023).

116. *Id.*

117. *Pilot Program's Goal is to Stem Property Fraud*, THE FLA. BAR (June 30, 2023), <https://www.floridabar.org/the-florida-bar-news/pilot-programs-goal-is-to-stem-property-fraud/> [https://perma.cc/FJA9-L6F4].

118. *See id.*

119. H.B. 1292, 2023-2024 Leg., Reg. Sess. (Ga. 2024).

120. *See, e.g.*, Recording Notification Services, ALACHUA CNTY. CLERK OF THE CT., <https://isol.alachuaclerk.org/RecordingNotificationWebLive/Subscribe> [https://perma.cc/2VZ7-FKHM].

121. *Id.*

C. U.S. Regulations Regarding GAI Use in Fraud

Currently, there are no known regulations specifically addressing GAI-enabled real estate fraud. In general, AI-related regulations in the United States are relatively scarce.¹²² The world's first and currently most comprehensive law is the EU AI Act.¹²³ Proposed by the European Commission in April 2021, the EU AI Act categorizes AI systems into various risk levels and regulates them accordingly.¹²⁴ Even though the United States has not adopted a comprehensive AI law so far, it has noticed the threats brought by certain GAI technologies like deepfakes. There is no federal regulation specifically overseeing deepfake technologies, but a patchwork of federal and state laws governs their use. On December 20, 2019, President Trump signed the Deepfake Report Act of 2019, the nation's first federal law related to deepfakes.¹²⁵ The law directs the Department of Homeland Security to issue annual reports on deepfake technology.¹²⁶ In the same year, Virginia and Texas enacted laws criminalizing certain deepfakes.¹²⁷ Virginia became the first state in the nation to impose criminal penalties on the distribution of nonconsensual deepfake pornography, while Texas became the first state in the nation to prohibit the creation and distribution of deepfake videos that intend to harm candidates for public office or influence elections.¹²⁸

On September 21, 2023, Congresswoman Yvette D. Clarke (D-NY) and Congressman Glenn Ivey (D-MD) introduced the DEEPFAKES Accountability Act of 2023 to require creators to digitally watermark deepfake content.¹²⁹ Similarly, the Protecting Americans from Deceptive AI Act introduced March of 2024 requires the National Institute of Standards and Technology to work on setting standards and guidelines relating to the identification of AI-generated content.¹³⁰ Around the same time, the Senate introduced the NO FAKES Act of 2024, which creates

122. Yoon Chae, *US AI Regulation Guide: Legislative Overview and Practical Considerations*, 3 J. ROBOTICS, A.I. & L. 17, 17 (2020).

123. Yoshija Walter, *Managing the Race to the Moon: Global Policy and Governance in Artificial Intelligence Regulation—A Contemporary Overview and an Analysis of Socioeconomic Consequences*, 4 DISCOVER A.I. at 1, 4 (2024).

124. *Id.*

125. Jason C. Chipman & Stephen W. Preston, *First Federal Legislation on Deepfakes Signed Into Law*, WILMERHALE (Dec. 23, 2019), <https://www.wilmerhale.com/insights/client-alerts/20191223-first-federal-legislation-on-deepfakes-signed-into-law> [<https://perma.cc/RQ3N-H7XT>].

126. *Id.*

127. *Id.*

128. *Id.*

129. DEEPFAKES Accountability Act, H.R. 5586, 118th Congress (2023-2024).

130. Protecting Consumers from Deceptive AI Act, H.R. 7766, 118th Congress (2023-2024).

new federal intellectual property rights over a person's digital replica that can be enforced through a civil action.¹³¹

In the 2024 legislative session, at least forty-five states, Puerto Rico, the Virgin Islands, and Washington, D.C., introduced AI bills, and thirty-one states, Puerto Rico and the Virgin Islands adopted resolutions or enacted legislation.¹³² On April 26, 2024, Florida's Governor signed into law an act relating to artificial intelligence use in political advertising.¹³³ The act provides that a political advertisement must state a disclaimer if it contains digital content created with GAI, depicting something that did not happen, and created with the intent to injure a candidate or to deceive.¹³⁴ Although this disclaimer is not required in other AI-generated content, it is a sign that legislatures have noticed the harm of AI-automated content.¹³⁵ Similarly, Oklahoma House Bill 3453, if passed, would require a watermark on AI-generated content to verify the authenticity of a creative product and to approve derivative media generated by AI that uses a person's audio recordings or images.¹³⁶ Ohio also has similar watermark requirements, and Utah requires disclosure of AI use.¹³⁷

The executive branch also promulgated rules to combat AI-enabled fraud.¹³⁸ In 2019, President Trump issued the executive order Maintaining American Leadership in Artificial Intelligence, aiming to enhance United States capabilities in AI.¹³⁹ It also directly impacts the regulation of AI in the U.S., as the Office of Management and Budget and the National Institute of Standards and Technology were ordered to establish standards to enable the regulation of AI.¹⁴⁰ On October 30, 2023, President Biden issued the landmark executive order Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence to

131. NO FAKES Act of 2024, S. 4875, 118th Congress (2023-2024).

132. *Artificial Intelligence 2024 Legislation*, NAT'L CONF. OF STATE LEGISLATURES (Sept. 9, 2024), <https://www.ncsl.org/technology-and-communication/artificial-intelligence-2024-legislation> [<https://perma.cc/FBX3-5PSV>].

133. FLA. STAT. § 106.145 (2024).

134. *Id.* The disclaimer must be stated prominently and read: "Created in whole or in part with the use of generative artificial intelligence (AI)."

135. *Id.*

136. Owen Davis & David Stauss, *A look at proposed US state private sector AI legislation*, IAPP (Feb. 28, 2024), <https://iapp.org/news/a/a-look-at-proposed-u-s-state-private-sector-ai-legislation> [<https://perma.cc/FAB8-JZRU>].

137. *Artificial Intelligence 2024 Legislation*, *supra* note 132.

138. See John Frank Weaver, *Everything is not the Terminator: What Does the Executive Order Calling for Artificial Intelligence Standards Mean for AI Regulation?*, 2 J. ROBOTICS, A.I. & L. 373, 373 (2019).

139. *Id.*

140. *Id.*

establish new standards for AI safety and security.¹⁴¹ One of the goals of the 2023 Executive Order is to protect Americans from AI-enabled fraud and deception by establishing standards and best practices for detecting AI-generated content and authenticating official content.¹⁴² To achieve this goal, the Department of Commerce will develop guidance for content authentication and watermarking to clearly label AI-generated content.¹⁴³ Considering surging complaints around impersonation fraud, another executive department, the FTC, has proposed rules prohibiting AI impersonation of individuals, government, and businesses.¹⁴⁴ The proposed rules would enable the FTC to directly seek monetary relief in federal court from scammers that use government seals or business logos, spoof government and business emails and web addresses, and falsely imply government or business affiliation.¹⁴⁵

D. Discussion

For bad actors, the profits of using GAI technologies such as deepfakes to commit real estate frauds are extremely high. Even though many states have realized the potential threat of GAI-enabled real estate frauds, there is limited legal protection. Many states rely on voluntary fraud alert systems, general identify theft, and impersonation laws to punish fraudsters. Why would there be inadequate legal regulations concerning GAI and fraud? Some believe that the U.S. government purposefully delays the adoption of comprehensive AI laws to keep the AI industry growing.¹⁴⁶ Since the United States could potentially get into a head-to-head competition with China, the second-largest leader in the AI race, the United States is motivated not to put on too many regulatory blocks too fast.¹⁴⁷

Another reason why laws lag behind technological development is the relatively slow pace at which laws are adopted.¹⁴⁸ The pacing problem

141. *WHAT THEY ARE SAYING: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence*, THE WHITE HOUSE (Oct. 30, 2023), <https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/10/31/what-they-are-saying-president-biden-issues-executive-order-on-safe-secure-and-trustworthy-artificial-intelligence/> [https://perma.cc/UP58-ZDLT].

142. *Id.*

143. *Id.*

144. *FTC Proposes New Protections to Combat AI Impersonation of Individuals*, FED. TRADE COMM'N (Feb. 15, 2024), <https://www.ftc.gov/news-events/news/press-releases/2024/02/ftc-proposes-new-protections-combat-ai-impersonation-individuals> [https://perma.cc/M4TG-R8MA].

145. *Id.*

146. Walter, *supra* note 123, at 12.

147. *Id.* at 7.

148. GARY E. MARCHANT, *THE GROWING GAP BETWEEN EMERGING TECHNOLOGIES AND LEGAL-ETHICAL OVERSIGHT* 1, 28 (Gary E. Marchant et al. eds., 1st ed. 2011).

faced by legal institutions has two dimensions. On the one hand, many existing legal frameworks are based on a static, rather than dynamic, view of society and technology.¹⁴⁹ On the other hand, legal institutions are slowing down with respect to their ability to adjust to changing technologies.¹⁵⁰ Issues are often not addressed based on their importance but rather on their perceived political urgency.¹⁵¹ Therefore, it often takes some type of crisis to shock the Legislature into opening this legislative window.¹⁵²

Partly because laws are harder to pass, the Executive Branch utilizes its capabilities to make regulations to combat challenges brought by AI development. Professors Ariel Bendor and Sharon Yadin point out that regulatory agencies often hold all three governmental functions, including judicial-like punitive sanctioning powers and comprehensive legislative powers for setting major regulations, with almost no supervision by other branches of government.¹⁵³ They also indicate that courts tend to grant de facto immunity from judicial review to many regulatory actions of administrative agencies under different types of deference doctrines, leading to substantial misalignment between constitutional separation of powers and regulatory mechanisms.¹⁵⁴

CONCLUSION AND SUGGESTIONS

Real estate and AI are two growing markets. Ill-intended fraudsters can use GAI-enabled technologies such as deepfake and phishing attacks to commit high-stakes real estate fraud. Many states have noticed this problem and have promoted voluntary property fraud alert programs and some regulations to combat deed fraud. For example, § 28.2225 of the Florida Statutes requires anyone who records a deed to present a government-issued photo ID before the deed is processed. There is also a growing consensus among states and the federal government to require watermarks or disclaimers on deepfake-created content.¹⁵⁵

However, there remains a huge gap between GAI development and regulation since there currently is no comprehensive AI act in the United States or an Act specifically targeting deepfakes. To prevent GAI-enabled real estate fraud, we can take advantage of other GAI technologies. For example, we can create voluntary or mandatory training modules

149. *Id.* at 23.

150. *Id.*

151. *Id.*

152. *Id.*

153. Ariel Bendor & Sharon Yadin, *Regulation and the Separation of Powers*, 28 S. CAL. INTERDISC. L.J. 357, 357 (2019).

154. *Id.*

155. Examples include the DEEPFAKES Accountability Act of 2023, Florida H.B. 919 and Oklahoma H.B. 3453.

powered by GAI to educate real estate professionals about real estate fraud schemes and fraud prevention techniques. We can also use GAI-driven virtual assistants to educate potential buyers about common fraud schemes and warning signs. The real estate industry can work with the government to create GAI-powered collaborative platforms that facilitate secure information among real estate agents, banks, and law enforcement. Technologies that can detect deepfake content or other GAI impersonation technologies should be encouraged to use in high-stakes virtual meetings. On the other hand, county clerks should verify the authenticity of government-issued photo IDs before recording the deed. The executive and legislature branches should establish incentives for individuals and professionals to report suspected fraud, invest more energy and resources into research on AI fraud prevention, and publish laws that target GAI-enabled fraud in general business transactions.

By adopting these measures, we will be in a stronger position to prevent and tackle real estate fraud effectively in the age of GAI.

WHEN DEEPPAKES MAKE CELEBRITIES A DIME A DOZEN CAN THE RIGHT OF PUBLICITY SAVE THEIR WORTH?

*Danielle A. Arnwine**

Abstract

Recent advancements in deepfake technology exemplify Oscar Wilde’s counter to the traditional view of the relationship between reality and art in a way never before seen. The proliferation and sophistication of artificial intelligence and digital art create previously inconceivable opportunities for celebrity revenue streams and foster a fundamental shift in how society interacts with media online and the importance of truth. Such achievements, while impressive when considered on their own merits, illuminate known deficiencies in legal frameworks. With the potential for unique catastrophic consequences for individual victims and national security, deepfake technology cannot evolve uncontrolled within a black box as is typical for American regulatory regimes. Therefore, this article first critiques the current legal landscape as unprepared to meet the challenges of this technology and inadequate in protecting plaintiffs from their deepfake counterparts, assessing remedies to protect celebrities in the age of social media, where notoriety directly translates into economic opportunities. This Note focuses on celebrities because of the availability of case law, examples, and the protections applicable legislation currently offers. However, this focus on celebrities does not mean that the vulnerabilities and urgency presented by deepfakes are not generally applicable to regular people. Accordingly, a key focus is on the right of publicity, detailing its legal foundations, potential as a cause of action, and the obstacles it faces. Nevertheless, this Note proposes the right of publicity as the most well-suited tool currently available to address these issues without federal regulation and concludes with an evaluation of the recently proposed NO FAKES bill and recommendations for improving existing legislation that protect a celebrity’s image and likeness.

* J.D. expected 2025, University of Florida Levin College of Law; M.P.A., Florida State University. The author extends sincere thanks to all who supported her in this research—especially Jennavieve “Jenna” Brown for her inspiration; Ceon Wong and the Journal of Technology Law and Policy for their thoughtful feedback; and Professors Thomas Haley, Derek Bambauer, Lyrissa Lidsky, and Dr. Jasmine McNealy for their invaluable input and expertise.

INTRODUCTION	118
I. DEEPFAKES EXPLAINED.....	120
A. <i>How are They Being Used</i>	122
1. Celebrities Using Deepfakes	123
2. Unauthorized Celebrity Deepfakes	124
B. <i>Celebrity Defined</i>	126
II. RIGHT OF PUBLICITY IS THE BEST ILL-FITTING TORT AVAILABLE.....	127
A. <i>Evaluating Other Torts</i>	129
B. <i>Right of Publicity Explained</i>	131
1. As a Cause of Action.....	132
2. Challenges Posed Currently by the Right of Publicity	134
III. WHAT CAN WE DO?.....	137
A. <i>Recharacterization</i>	137
B. <i>Friendly Forums</i>	141
IV. CONGRESS MUST ACT	144
CONCLUSION.....	146

INTRODUCTION

Oscar Wilde wrote in his 1889 essay *The Decay of Lying* that “Life imitates Art far more than Art imitates Life.”¹ His provocative challenge of the traditional assumption that life is art’s muse has never been more plainly illustrated than through the advent of deepfakes. Technological advancements in artificial intelligence (AI), epitomizes Wilde’s viewpoint of art (in this instance digital) as the creator rather than reflector of reality. Like Wilde’s suggestion that art influenced the admiration of sunsets no matter how mundane, so too have deepfakes influenced society’s perception of truth in media.² Consequently, deepfakes personify Wilde’s assertion that art (or digital fabrication) molds society’s idea of reality more than reality molds art. Accordingly, deepfakes are shaping politics, marketing, entertainment, and social interactions. For example, soccer superstar Lionel Messi brokered a deal with PepsiCo to use his deepfake lookalike in advertisements for Lay’s

1. OSCAR WILDE, INTENTIONS: THE DECAY OF LYING: PEN, PENCIL AND POISON, THE CRITIC AS ARTIST, THE TRUTH OF MASKS 32 (Percival Pollard ed., Brentano’s 1905), <https://archive.org/details/cu31924079601617> [<https://perma.cc/Q97Y-J9R4>].

2. *Id.* at 42.

chips, monetizing his name, image, and likeness (NIL) through AI.³ Messi is not alone in this trend, with some celebrities going so far as to sign away all their image rights for deepfake advertisements like Singaporean actress, model, and former radio DJ Jamie Yeo.⁴ As a result, technological renditions of celebrity likenesses and voices are gaining their own followings.⁵

But what happens when someone else uses a celebrity's NIL to monetize an AI-generated lookalike? What recourse do celebrities have? For example, Miles Fisher, a Harvard alumnus with an uncanny resemblance to Tom Cruise, embraced his role as the celebrity's doppelganger, after years of resenting this quirk that overshadowed his accomplishments, by rebranding himself with the help of deepfake technology as "The Deep Tom Cruise" on TikTok.⁶ Soon, Fisher's new persona amassed a large following and generated a fandom.⁷ If Tom Cruise wanted to pursue legal action against Fisher, could he? How? Now suppose Fisher was maliciously personifying a private citizen, unequipped with social capital and an unlimited budget to hire experts to digitally track and stop his parody. What does the individual do then? Critics of First Amendment, privacy, and cybersecurity law worry that the legal system is unprepared to meet many of the challenges technology presents.⁸ The legal system, as this Note will highlight, is taking a

3. Nick Marsh, *Why some celebrities are embracing Artificial Intelligence deepfakes*, BBC (July 19, 2023), <https://www.bbc.com/news/business-65995089> [<https://perma.cc/Q6QU-NVU7>] (explaining actor Bruce Willis and soccer legend David Beckham using deepfake technology in advertisement deals).

4. *Id.*

5. See @DeepTomCruise on TikTok and "Digital Jack." Patrick Coffee, *Celebrities Use AI to Take Control of Their Own Images*, WALL ST. J. (June 18, 2023, 10:00 AM), <https://www.wsj.com/articles/ai-deepfakes-celebrity-marketing-brands-81381aa6> [<https://perma.cc/YSSU-97WT>].

6. Miles Fisher, *How I Became the Fake Tom Cruise*, THE HOLLYWOOD REP. (July 21, 2022), <https://www.hollywoodreporter.com/feature/deepfake-tom-cruise-miles-fisher-1235182932/> [<https://perma.cc/UJF9-2LC8>].

7. *Id.*

8. See Lyria Bennett Moses, *Recurring Dilemmas: The Law's Race to Keep Up with Technological Change*, 21 UNSW L. & JUST. 1, 5–6 (2007) (discussing the reasons for legal adaptation to new technological challenges and rejecting "technological neutrality" in future legislation); see also Danielle Citron & Robert Chesney, *Deep Fakes: A Looming Challenge for Privacy, Democracy, and National Security*, 107 CAL. L. REV. 1753, 1757–59 (2019) explores the potential of law in addressing the challenges posed by deepfakes, considering both criminal and civil liabilities. It argues against an outright ban on deepfakes, noting that not all digital manipulations are harmful and that a ban could stifle beneficial uses in various fields. Instead, it suggests a more nuanced approach, focusing on specific harmful uses of deepfake technology. The text also discusses the complexities of imposing civil liability on deepfake creators and distributors, highlighting the difficulties in attribution and jurisdiction, especially when dealing with online platforms. It examines the limitations of current laws, like Section 230 of the

reactionary approach to unprecedented problems—as it often does. However, the consequences of a passive approach to this novel, unbridled, and black-box industry might be the biggest risk the legal system has ever taken. Therefore, the goal of this Note is to highlight yet another reason why Congress must pass a federal right of publicity law, and recommend amendments to the current proposed legislation.

This Note will explore the pressing issue of deepfakes and their implications for individuals. Because of the available examples and the limited legislation often focusing on this demographic, it will focus on the unauthorized use of celebrity likenesses. It begins with an introduction to deepfakes, detailing their applications, including unauthorized celebrity representations and instances where celebrities themselves utilize this technology. The Note goes on to critically examine the right of publicity, the most relevant but currently inadequate legal remedy available for addressing these violations, along with an analysis of other potential torts and the challenges inherent in enforcing the right of publicity. Moving forward, this Note proposes actionable solutions, including an endorsement of using the defendant's physical location for digital transgressions.⁹ Finally, this Note emphasizes the urgent need for congressional action to create robust legal protections against the misuse of deepfake technology, providing recommendations for proposed legislation.

I. DEEPFAKES EXPLAINED

Most people are now familiar with Photoshop and have seen a doctored image. But the art of photo manipulation started as early as the nineteenth century, when it was done by hand, progressing to the Photoshop graphics editing program, introduced in 1989, and the synthetic media applications of today.¹⁰ While other synthetic media applications predated the term “deepfake,” a Reddit user of the same name coined the term in 2017 through sharing obscene images created

Communications Decency Act, which shields online platforms from liability for user-generated content and suggests possible amendments to hold platforms more accountable. Finally, the text touches on the role of criminal liability, acknowledging its limitations but suggesting it could complement civil liability in addressing certain extreme cases of deepfakes.

9. See Alan M. Trammell & Derek E. Bambauer, *Personal Jurisdiction and the Interwebs*, 100 Cornell L. Rev. 1129, 1162 (2015), <http://scholarship.law.cornell.edu/clr/vol100/iss5/3> [<https://perma.cc/S8SQ-9H4U>].

10. *Photoshopped: The Art of Early Photo Manipulation*, UC RIVERSIDE LIBR. (Mar. 24, 2023), [https://scua.ucr.edu/exhibits/photoshopped-art-early-photo-manipulation#:~:text=AI though%20Adobe%20Photoshop%20was%20not,printed%20appearance%20of%20a%20photo graph](https://scua.ucr.edu/exhibits/photoshopped-art-early-photo-manipulation#:~:text=AI%20though%20Adobe%20Photoshop%20was%20not,printed%20appearance%20of%20a%20photo%20graph) [<https://perma.cc/LQK5-KUFX>]; see also Companies History, *Adobe*, COS. HISTORY.COM (June 17, 2023), <https://www.companieshistory.com/adobe-systems/> [<https://perma.cc/Q8MH-SALX>].

using “open-source face swapping technology,”¹¹ and the term grew to encompass its predecessors and descendants, such as StyleGAN, which creates photorealistic images of fictional people.¹² The twenty-first century has seen image manipulation extend far beyond traditional media, introducing new complexities in assessing digital authenticity.¹³ Deepfakes are created using artificial neural networks, which are computer systems inspired by the human brain that can recognize patterns in data.¹⁴ To develop a deepfake photo or video, an artificial neural network is trained using a process called “deep learning,” in which hundreds or thousands of images are fed into the artificial neural network, training it to identify and replicate patterns, such as the features of a celebrity’s voice or face.¹⁵ Deep learning for deepfakes employs various AI technologies, notably autoencoders and generative adversarial networks (GANs).¹⁶ An autoencoder is an artificial neural network designed to reconstruct input from a simpler representation.¹⁷ In contrast, a GAN consists of two competing neural networks—one generating a fake and the other attempting to detect it.¹⁸ This competition, repeated over many cycles, produces more realistic renderings, eventually creating lifelike avatars of celebrities.¹⁹

While, in the past, creating deepfakes required extensive, specialized knowledge and software, apps are making it increasingly easier for

11. Meredith Somers, *Deepfakes, explained.*, MIT SLOAN SCH. OF MGMT. (July 21, 2020), <https://mitsloan.mit.edu/ideas-made-to-matter/deepfakes-explained> [https://perma.cc/P68S-ZM2E].

12. *Id.* (discussing AI and deepfake technology expert Henry Ajder’s explanation of the evolution of the term. Ajder points out that while the term “deepfake” has a negative connotation, it has many beneficial uses in marketing and advertising, which are already being employed by major brands. He further explained that the term “artificial intelligence-generated synthetic media” is now preferred because it includes deepfakes but excludes computer-generated movie images and photoshopped pictures, which are also technically modified content).

13. Ian Sample, *What are deepfakes – and how can you spot them?*, THE GUARDIAN (Jan 13., 2020, 5:00 AM), <https://www.theguardian.com/technology/2020/jan/13/what-are-deepfakes-and-how-can-you-spot-them> [https://perma.cc/6JK9-CF3B].

14. *Science & Tech Spotlight: Deepfakes*, GAO (Feb. 2020), <https://www.gao.gov/assets/gao-20-379sp.pdf> [https://perma.cc/LL49-8PZ8]; Bloomberg Originals, *It’s Getting Harder to Spot a Deep Fake Video*, YOUTUBE (Sept. 27, 2018), <https://www.youtube.com/watch?v=gLoI9hAX9dw> [https://perma.cc/JT6F-4T4J].

15. *Science & Tech Spotlight: Deepfakes*, GAO (Feb. 2020), <https://www.gao.gov/assets/gao-20-379sp.pdf> [https://perma.cc/57BV-TLXY]; An avatar is “an electronic image (as in a video game) that represents and may be manipulated by a computer user”. *Avatar*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/avatar> [https://perma.cc/BR7M-6L79]. Throughout this Note, “avatar” is used interchangeably with “deepfakes.”

16. *Id.*

17. *Id.*

18. *Id.*

19. *Id.*

novices to make their own deepfakes.²⁰ One such app is DeepFaceLab, which prompts users to first select the source video containing the desired face and the target video to be edited.²¹ Then, the software assists users break both videos into individual frames identifying the facial features in each frame to feed into the AI model, training it to understand and replicate the source face.²² Finally, the software superimposes the source face onto the target video frames, resulting in the completed deepfake video.²³

A. How Deepfakes Are Used

While not all uses of deepfakes are harmful,²⁴ and in some cases are useful,²⁵ there is apparent use of the technology for nefarious activities.²⁶ As a result, deepfake technology poses significant threats and challenges to policy and legal issues.²⁷ Actor and comedian Jordan Peele illustrated how deepfakes can be abused through his rendition of a speech by Barack Obama as an avatar of the former President.²⁸ The video is utterly life-like and indistinguishable from former President Obama's authentic speech and image, making the use of deepfakes limitless and potentially perilous. From inception, deepfakes have been primarily used to insert female celebrities into pornographic videos.²⁹ In 2019, Deeptech, an AI company, identified 14,678 deepfakes online.³⁰ 96% of those videos were erotic, with 99% of those avatars resembling female celebrities.³¹

20. Cliff Weitzman, *Free Deepfake Video Maker: How to Use AI For Fun And Creativity*, SPEECHIFY, <https://speechify.com/blog/free-deepfake-video-maker/> [https://perma.cc/F34L-CBEK]; see generally iperov et al., *iperov/DeepFaceLab*, GITHUB (Apr. 9, 2020), <https://github.com/iperov/DeepFaceLab> [https://perma.cc/Q8JZ-8293].

21. *Id.*

22. *Id.*

23. *Id.*

24. Sample, *supra* note 13 (deceased actor James Dean stars in Vietnam war movie Finding Jack).

25. See CereProc, a company that makes digital voices for those who have lost their voice due to illness. Henry Baker & Christian Capestany, *It's Getting harder to spot a deep fake video*, YOUTUBE (Sept. 27, 2018), <https://www.youtube.com/watch?v=gLoI9hAX9dw> [https://perma.cc/W2TX-WP7Z].

26. John Villaseñor, *Artificial intelligence, deepfakes, and the uncertain future of truth*, BROOKINGS (Feb. 14, 2019), <https://www.brookings.edu/articles/artificial-intelligence-deepfakes-and-the-uncertain-future-of-truth/> [https://perma.cc/F3KS-GQ9H].

27. *Id.*

28. See Jordan Peele, *Deep Fake of Barack Obama*, UNIV. CAL. DAVIS INFO. & EDUC. TECH. (Feb. 22, 2021), https://video.ucdavis.edu/media/Deep+Fake+of+Barack+Obama/1_6zmvebuf [https://perma.cc/96U8-UAJ3].

29. Sample, *supra* note 13.

30. *Id.*; Ajder, Henry et al., *The State of Deepfakes: Landscape, Threats, and Impact*, DEEPTRECE 1, 6–7 (Sept. 2019), https://regmedia.co.uk/2019/10/08/deepfake_report.pdf [https://perma.cc/Q3LY-GYUA].

31. *Id.*; Sample, *supra* note 13.

Because deepfakes can erode the public's trust in videos and images, bad actors can attempt to hide problematic behavior by claiming they were the victim of a deepfake.³² These AI-generated synthetic media can be used to create convincing but entirely fabricated images or videos of individuals, leading to serious concerns about misinformation, privacy, and security.³³ Businesses also face risks, including corporate espionage and fraud, as deepfakes can be used to mimic executives or manipulate stock prices.³⁴ As this technology advances, it offers a dual-edged potential: on one hand, enhancing creative possibilities; and on the other, raising ethical concerns regarding consent and authenticity.

1. Celebrities Using Deepfakes

One such creative use is the trend of celebrities adopting deepfakes of themselves to capitalize on their image.³⁵ These virtual avatars allow public figures to appear in commercials, social media campaigns, or even

32. Villaseñor, *supra* note 26; Baker & Capestany, *supra* note 25; Citron & Chesney, *supra* note 8, at 1785–86 (discussing how deepfakes can ironically aid liars in avoiding accountability for their real words and actions. As the public becomes more aware of deepfakes, genuine video or audio evidence supporting accusations might be dismissed as fake. This growing skepticism about the authenticity of audio and video evidence, termed the “liar’s dividend,” increases as the public learns more about deepfake technology. The resulting erosion of trust and truth creates an environment more susceptible to authoritarianism).

33. Lu Zhang & Wei Wei, *Influencer Marketing: A Comparison of Traditional Celebrity, Social Media Influencer, and AI Influencer*, BU SCH. OF HOSP. ADMIN. (Oct. 4, 2021), <https://www.bu.edu/bhr/2021/10/04/influencer-marketing-a-comparison-of-traditional-celebrity-social-media-influencer-and-ai-influencer/> [https://perma.cc/A4JR-Y3S4]; Dave Yost, *Consumer Advocate: Beware of deepfake celebrity-endorsement scams*, OHIO ATT’Y GEN. (Apr. 11, 2024), <https://www.ohioattorneygeneral.gov/Media/Newsletters/Consumer-Advocate/April-2024/Beware-of-deepfake-celebrity-endorsement-scams> [https://perma.cc/888B-4Y5M] (explaining, “Recent news reports have unveiled a concerning trend involving famous personalities such as Jennifer Aniston, Taylor Swift and Selena Gomez. They and others have been the subject of ‘deepfake’ celebrity endorsement videos spread on social media that have ensnared unsuspecting consumers. Aniston was supposedly giving away expensive Apple MacBook laptops, and Swift and Gomez appeared to be endorsing Le Creuset cookware. In reality, none of these celebrity endorsements was legitimate. All were faked, likely through artificial intelligence (AI) software.”).

34. See Catherine Stupp, *Fraudsters Used AI to Mimic CEO’s Voice in Unusual Cybercrime Case*, WALL ST. J. PRO CYBERSECURITY (Aug. 30, 2019, 12:52 PM), <https://www.wsj.com/articles/fraudsters-use-ai-to-mimic-ceos-voice-in-unusual-cybercrime-case-11567157402> [https://perma.cc/526E-K2FJ].

35. David G.W. Birch, *Celebrity Deepfakes Vs. Deepfake Celebrities And Valid Vs. Real Media*, FORBES (May 15, 2024, 5:28 AM), <https://www.forbes.com/sites/davidbirch/2024/05/15/celebrity-deepfakes-vs-deepfake-celebrities-and-valid-vs-real-media/> [https://perma.cc/WW7X-W6LQ] (describing a British pop star FKA Twigs who testified “...before a US Senate Judiciary subcommittee. She revealed that she has created a personalized deepfake version of herself, which is trained to mimic her personality and can speak French, Korean, and Japanese. This allows her to let the deepfake interact with journalists and fans, giving her more time to concentrate on her music.”).

entertainment content without having to be physically present, thus opening new revenue streams. Some celebrities have embraced AI and deepfake technology to ‘immortalize’ themselves, a trend that reflects the growing intersection of technology and personal legacy.³⁶ Through deepfake technology, celebrities can create digital replicas of themselves that can be used long after they have aged or even posthumously.³⁷ This application ranges from creating younger versions of themselves for movies or television series to preserving their youthful appearance for future projects.³⁸ Some celebrities use this to maintain control over their image and continue their artistic legacy indefinitely.³⁹

In addition to the use of deepfakes as revenue tools for celebrities, these avatars are becoming personalities in their own right — distinct from their human muse, and gaining fans because they are synthetic.⁴⁰ The @deepptomcruise account on TikTok created by Chris Umé’s company Metaphysic is one such example.⁴¹ The account showcases Miles Fisher parodying Tom Cruise with his striking resemblance, well-practiced mannerisms, and entertainment value amassing a fanbase captivated by the technology.⁴²

2. Unauthorized Celebrity Deepfakes

Conversely, deepfake technology has also spawned the polarizing practice of parodying celebrities’ likenesses, typically without permission.⁴³ Increasingly, celebrities discover their images used in

36. See Samantha Dorisca, *Meet Digital Melo, NBA Star Carmelo Anthony’s Long-Lost Twin*, AFRO TECH (July 1, 2022), <https://afrotech.com/meet-digital-melo-nba-star-carmelo-anthonys-long-lost-twin/> [<https://perma.cc/SSM7-2EL5>].

37. See Justin P’ng, *The Resurrection Will Not Be Televised: Legal Remedies for Posthumous Deepfakes*, 8 GEO L. TECH. REV. 338, 340 (2024) (citing *Tupac Shakur Dies*, HISTORY (Nov. 13, 2009), <https://www.history.com/this-day-in-history/tupac-shakur-dies> [<https://perma.cc/HT8U-4V5U>] (describing an example of a posthumous celebrity deepfake of Tupac Shakur who died in 1996 but appeared on stage at Coachella Valley Music and Arts Festival in 2012)).

38. See Partner Content, *Celebrities Tap Digital Twins to Interact with Millions of Fans at Once*, VARIETY (July 6, 2022, 8:00 AM), <https://variety.com/2022/biz/news/soul-machines-digital-twin-jack-nicklaus-1235307106/> [<https://perma.cc/7G5F-9F85>].

39. *Id.*

40. See Rachel Metz, *How a Deepfake Tom Cruise on TikTok Turned into a Very Real AI Company*, CNN BUS. (Aug. 6, 2021, 8:00 AM), <https://www.cnn.com/2021/08/06/tech/tom-cruise-deepfake-tiktok-company/index.html> [<https://perma.cc/PWR3-7NK6>] (discussing the Tom Cruise deepfakes’ rise to fandom).

41. See @DeepTomCruise’s X (formerly Twitter) account with 5.1 million followers: @DeepTomCruise, X, <https://x.com/deeptomcruise?lang=en> [<https://perma.cc/7MVX-R9WS>].

42. See Metz, *supra* note 40.

43. See Content, *supra* note 38 (explaining Katy Perry’s mother was duped by an AI photo of what looked like her daughter at the Met Gala but was really a deepfake).

unauthorized contexts, ranging from harmless spoofs⁴⁴ to damaging or defamatory scenarios, potentially harming their reputation and public image.⁴⁵ For example, Scarlett Johansson, an acclaimed actress, is reportedly suing Lisa AI: 90s Yearbook & Avatar for its use of her name—without her consent, to endorse the AI-generating app.⁴⁶ Notably, the ad clarified in fine print that Johansson was not affiliated with the video.⁴⁷

While digital renditions of celebrities are not new, as seen in video games like NBA 2K24 and the soccer video game FIFA 23, deepfake technology and AI advancements have broken the fourth wall in a way never before seen.⁴⁸ The sophistication of deepfakes manufacture a synthetic sense of realism and intimacy between the public and the platform wherein the audience often directly engages with the avatar.⁴⁹ Furthermore, because the technology is so advanced, viewers are often dooped into thinking the artificial parody is reality creating the opportunity for meta-awareness similar to a nod to the audience.⁵⁰ Thus, viewers are becoming less passive consumers and more active co-creators transcending the boundary between media and audience. For example, Meta, the parent company of Instagram and Facebook, created AI chatbots to encourage dialogue between users and AI-generated celebrity

44. Eriq Gardner, “Back to the Future II” From a Legal Perspective: Unintentionally Visionary, THE HOLLYWOOD REP. (Oct. 21, 2015, 3:51 PM), <https://www.hollywoodreporter.com/business/business-news/back-future-ii-a-legal-833705/> [https://perma.cc/3FPT-FY9K].

45. Nadeem Badshah, *Nearly 4,000 celebrities found to be victims of deepfake pornography*, THE GUARDIAN (Mar. 21, 2024, 5:18 PM), <https://www.theguardian.com/technology/2024/mar/21/celebrities-victims-of-deepfake-pornography> [https://perma.cc/7EHV-JPK2].

46. Ethan Shanfeld, *Scarlett Johansson Takes Legal Action Against AI app That Ripped Off her Likeness in Advertisement*, VARIETY (Nov. 1, 2023, 11:57 AM), <https://variety.com/2023/digital/news/scarlett-johansson-legal-action-ai-app-ad-likeness-1235773489/> [https://perma.cc/LRC5-47H3]; Cheyenne DeVon, *An AI app clones Scarlett Johansson’s voice for an ad—but deepfakes aren’t just a problem for celebrities*, CNBC (Nov. 3, 2023, 3:59 PM), <https://www.cnbc.com/amp/2023/11/03/why-deepfakes-arent-just-a-problem-for-celebrities.html> [https://perma.cc/F2DE-PNQJ].

47. *Id.*

48. *Fourth Wall*, BRITANNICA, <https://www.britannica.com/art/fourth-wall> (last visited Apr. 28, 2025) (explaining that Denis Diderot birthed this theatrical concept in the 1700s when he suggested actors should perform as if there was a wall—the fourth wall—between themselves and the audience to encourage a more natural performance, which grew in popularity in the 19th-century realistic theater and transformed in the 20th century when actors began talking directly to the audience “breaking the fourth wall.”).

49. See Tim Marcin, *What are Meta’s AI Personas, and how do you chat with them?*, MASHABLE (Oct. 15, 2023), <https://mashable.com/article/meta-ai-personas-explained> [https://perma.cc/BLJ2-PUJL].

50. John D. Dunne et al., *Mindful Meta-Awareness: Sustained and Non-Propositional*, 28 CURRENT OPINION IN PSYCH. 307, 308 (2019), <https://doi.org/10.1016/j.copsyc.2019.07.003> (defining “meta-awareness” as the sporadic conscious recognition of one’s thoughts).

bots.⁵¹ Meta explained that its goal in this development is to increase user interaction with its platforms through personalized and curated celebrity-look-alike chatbots that can respond to users by mimicking the celebrity's tone, style, and speech patterns.⁵² As a result, these AI-generated personas, created to portray realistic human traits and behaviors, are becoming increasingly popular, often acquiring a fanbase akin to that of real-life celebrities.⁵³ Notably, there are increasing concerns about how these artificial representations might affect the public perception of the actual celebrities, especially if the chatbot's behavior deviates from the celebrity's real-life persona.⁵⁴ Nevertheless, these AI-manufactured interactions with the public can be so convincingly realistic that they blur the line between truth and fabrication, making it increasingly difficult for individuals to discern real from fake media.⁵⁵

B. *Celebrity Defined*

As mentioned, this Note focuses on celebrities rather than the general public when assessing the need for a federal right of publicity law because most examples, laws, and cases tend to involve celebrities. However, that is not to say that private citizens are not similarly, if not moreso, vulnerable to the unauthorized use of their NIL through deepfake technology. That said, before moving forward, it is helpful to understand "celebrity" to distinguish this group from the general population better, who are also vulnerable to technological advancements but are afforded less protection. "The word celebrity traces its origins in a Latin word 'celebritatem' which means 'the condition of being famous.'"⁵⁶ Celebrities are famous because of their accomplishments.⁵⁷ These individuals often possess exceptional talents, skills, or personalities that

51. Pete Syme, *Meta is paying the celebrity faces behind its AI chatbots as much as \$5 million for 6 hours of work, report says*, BUS. INSIDER (Oct. 9, 2023, 5:53 AM), <https://www.businessinsider.com/meta-paying-celebrity-faces-of-ai-chatbots-as-much-as-5-million-2023-10> [<https://perma.cc/7W4T-TW8M>].

52. *supra* note 41; Tim Marcin, *What are Meta's AI Personas, and how do you chat with them?*, MASHABLE (Oct. 15, 2023), <https://mashable.com/article/meta-ai-personas-explained> [<https://perma.cc/BLJ2-PUJL>] (describing AI chatbot Billie, who has the face and voice of Kendall Jenner and acts as "...an older sister of sorts designed to give young folks life advice").

53. *See supra* note 41.

54. *Id.*

55. Tiffany Hsu & Steven Lee Myers, *Can We No Longer Believe Anything We See?*, THE N.Y. TIMES (Apr. 8, 2023), <https://www.nytimes.com/2023/04/08/business/media/ai-generated-images.html> [<https://perma.cc/UW4Z-49ZB>].

56. Naman Jain & Sai Srinivas Reddy, *Authorship and Ownership in Respect of Celebrities and Cinematographic Work*, ALLIANCE U. 1, 7 (2021) (citing *White v. Samsung Elec. Am. Inc.*, 971 F.2d 1395, 1397 (9th Cir. 1992), cert denied 113 S. Ct. 2443 (1993) (defining the origin of "celebrity")).

57. *Id.* (discussing ways to characterize celebrities).

captivate the public's attention and contribute to their popular status.⁵⁸ Celebrities can emerge from various backgrounds, including acting, music, sports, and social media.⁵⁹ Their influence extends beyond their professional accomplishments, as they often become cultural icons and role models.⁶⁰ In fact, public perception is the primary criterion for determining whether an individual is considered a celebrity.⁶¹ The public's fascination with celebrities is fueled by media coverage, social media, and the constant flow of information, creating a dynamic relationship between celebrities and their fans.⁶²

The term "public figure" is more often used in the legal field than "celebrity" in fields such as First Amendment law whereas the right of publicity interchanges "celebrity" and "fame."⁶³ The law defines a "public figure" for liability purposes regarding torts involving free speech and freedom of the press as someone who has gained "general fame or notoriety in the community, and pervasive involvement in the affairs of society." For this Note, and the right of publicity specifically, the direct commercial exploitation of identity test is used to define a celebrity: when an unauthorized use of a person's identity is made that is both direct in nature and commercial in motivation, the person whose identity has been misappropriated is a celebrity.⁶⁴

II. RIGHT OF PUBLICITY IS THE BEST ILL-FITTING TORT AVAILABLE

As AI becomes increasingly adept at mimicking human behavior and appearance, blurring the lines between reality and fiction, there is a potential for confusion, manipulation, and misinformation.⁶⁵ Further exacerbating this phenomenon is the lack of cohesive and comprehensive regulation over this technology that is becoming increasingly accessible lifelike.⁶⁶ For celebrities, the proliferation of

58. *Id.*

59. Tabrez Ahmad & Satya Ranjan Swain, *Celebrity Rights: Protection under IP Laws*, 16 J. INTELL. PROP. RTS. 7, 7 (2011).

60. *See id.* at 8; for example, Kobe Bryant, Taylor Swift, and Oprah Winfrey.

61. *Id.* at 7 (discussing definition of celebrity).

62. *Id.*

63. *See Gertz v. Robert Welch*, 418 U.S. 323 (1974); *see* Robert Post & Jennifer E. Rothman, *The First Amendment and the Right(s) of Publicity*, 130 Yale L.J. 86 (2020).

64. Ahmad & Swain, *supra* note 59 (discussing the test for determining a celebrity).

65. *See* Oscar Schwartz, *You thought fake news was bad? Deep fakes are where truth goes to die*, THE GUARDIAN (Nov. 12, 2018, 5:00 PM), <https://www.theguardian.com/technology/2018/nov/12/deep-fakes-fake-news-truth> [<https://perma.cc/BBT6-63Q5>]; *see also* Jordan Peele, *Star Uses AI, President Obama in Fake News PSA*, ABC NEWS (Apr. 18, 2018), <https://abcnews.go.com/GMA/News/video/star-ai-president-obama-fake-news-psa-54550809> [<https://perma.cc/7KAG-CQET>].

66. Lutz Finger, *Overview of How to Create Deepfakes – It's Scarily Simple*, FORBES (Sept. 8, 2022, 8:00 AM), <https://www.forbes.com/sites/lutzfinger/2022/09/08/overview-of-how-to-create-deepfakesits-scarily-simple/?sh=61395c702bf1> [<https://perma.cc/TKD7-LDRY>].

sophisticated deepfake software threatens their control and authenticity of their image and brand. Similarly, for private citizens, this technology increases the opportunity and potential devastating impact of online scams and identity theft. As a result, these artificial advancements exacerbate concerns about privacy and exploitation of one's identity online. Despite these concerns, people might opt to interact with and follow celebrity AIs rather than the celebrities themselves for several reasons. First, AI celebrities can offer a curated and idealized version of their human counterparts, free from the flaws and controversies often associated with real personalities. Additionally, interacting with AI celebrities provides a sense of novelty and escapism, offering a break from the mundane realities of everyday life. Furthermore, AI celebrities may offer a sense of control and predictability, as their behaviors and responses can be programmed and tailored to suit individual preferences. The potential for deepfake celebrities to eclipse their human counterparts raises questions about the impact on traditional entertainment industries and the livelihoods of real celebrities. If celebrity deepfakes gain a following and notoriety as a celebrity separate from their real-life muse, the legal system is the only means of recourse for Oscar Wilde's metaphor.

The internet has cemented itself as a central part of our society. However, safeguards for this digital world are severely lacking. One of the many reasons why this is troubling in the advent of deepfake technology is because nefarious users were already using social media to impersonate others at alarming rates⁶⁷. Now, the tools are inconceivably sophisticated. Moreover, in this digital world, many users use other social media accounts as backup accounts and login credentials for other sites.⁶⁸ Moreover, in the internet age, the influencer was born—a new job market at the tips of everyone's fingertips with little barrier to access or glass

67. Grace McKenzie, *Hiding In Plain (Web)Site*, CTR. FOR RSCH. & EVIDENCE ON SECURITY THREATS (Oct. 10, 2023), <https://crestresearch.ac.uk/comment/hiding-in-plain-site/> [<https://perma.cc/FU46-G23F>] (explaining that as of January 2023, about 4.76 billion people, or 59.4% of the global population, use social media. Facebook, with 2.59 billion users, estimates that 4–5% of its active accounts are fake, amounting to approximately 103.6 million to 129.5 million accounts; see also Martin Moore, *Fake accounts on social media, epistemic uncertainty and the need for an independent auditing of accounts*, INTERNET POL'Y REV. (Feb. 7, 2023), <https://policyreview.info/articles/analysis/fake-accounts-social-media-epistemic-uncertainty-and-need-independent-auditing> [<https://perma.cc/2ZAF-9Z5U>]).

68. Caroline Johnson, *SSO vs. Social Login: What's the Difference?*, MEDIUM (Oct. 7, 2022), <https://medium.com/@carolinejohnsonLA/sso-vs-social-login-whats-the-difference-3dafde1075c7> [<https://perma.cc/X36D-Y3RC>] (explaining that Single Sign-On (SSO) allows users to access multiple applications and software systems using a single set of login credentials, eliminating the need to authenticate separately for each platform. Social Login, a type of SSO, enables users to log into third-party websites using their existing social media accounts, such as Facebook, Twitter, or Instagram, rather than having to create a new account).

ceiling for earnings.⁶⁹ To effectively combat the challenges posed by deepfake technology, it is crucial to address the economic harm caused by the unauthorized use of an individual's NIL, which falls under the right of publicity.

A. *Evaluating Other Torts*

At first blush, some might suggest other torts such as copyright, trademark, and passing off, given the obvious limitations of the right of publicities and the complexities of litigating this claim. However, these distinct torts fail to fully address the issue of celebrity deepfakes. Copyright law provides rights and remedies at the federal level.⁷⁰ This protection is intended to “promote the creation of original works of literature, art, music, and drama . . . to grant authors a limited intangible property right in their creative works.”⁷¹ To bring a copyright suit, the plaintiff must establish that: “(1) the work is original, sufficiently creative and within the subject matter of copyright . . . ; (2) the plaintiff is the registered owner of a valid copyright . . . ; and (3) the defendant has wrongfully exercised one or more of the six exclusive rights granted to the copyright owner.”⁷² Trademark law offers legal protection to words, symbols, phrases, logos, etc. by distinguishing them from other products on the market. However, “[r]egistration of a mark is not mandatory. The owner of an unregistered mark may still use it in commerce and enforce it against infringers.”⁷³ Moreover, “registration gives trademark owners valuable benefits . . . [including the] ‘prima facie evidence’ . . . and forecloses some defenses in infringement actions.”⁷⁴ “Generally, a trademark is eligible for registration, and receipt of benefits, if it is ‘used

69. Influencer Marketing Hub, What is an influencer? – social media influencers defined [updated 2024] Influencer Marketing Hub (August 2024) (defining an influencer as an individual who can sway the purchasing choices of others due to their expertise, authority, or connection with their audience, often leveraging social media platforms like Instagram, TikTok, YouTube, Facebook, and X. They usually focus on a specific niche—such as fashion, travel, beauty, or fitness—creating content that resonates with followers interested in those topics.); What’s the value of a social media following?, Hook Agency (2023) (explaining that The value of a social media following is significant, with brands paying about \$10 per 1,000 Instagram followers and around \$20 per 1,000 YouTube subscribers. However, the influencer space is marred by fraudulent activities, costing advertisers an estimated \$1.3 billion annually due to fake followers and engagement. Historically, companies have leveraged individuals with followings for product promotions, and they calculate the worth of these engagements through Earned Media Value, using the CPM (Cost Per Thousand Impressions) metric. This allows advertisers to assess the financial potential of a following based on impressions relative to standard advertising rates.).

70. M. Elaine Buccieri, *Cause of Action for Copyright Infringement Under the Federal Copyright Act of 1976*, 9 CAUSE OF ACTION 2d (2013).

71. *Id.*

72. *Id.*

73. *Iancu v. Brunetti*, 588 U.S. 388, 391 (2019).

74. *Id.*

in commerce.”⁷⁵ “Passing off” is the act of imitating someone else’s work and portraying it as one’s own.⁷⁶ “Passing off typically occurs when someone seeks to imitate another’s property by means of similar labeling, packaging, or advertising, so as to deceive the public into confusing the goods or services of one party for those of the other.”⁷⁷ To bring a claim of passing off, one must prove either “(1) that the defendant has acted unfairly, or (2) that the defendant’s activities have caused confusion or are likely to cause confusion with the plaintiff’s product, terms, or activities because they have acquired what is called secondary meaning.”⁷⁸ Secondary meaning is derived from “the plaintiff’s identification in the public’s mind as the source of particular products or services.”⁷⁹ Finally, false endorsement under the Lanham Act shares a lot of elements with the right of publicity, and therefore, both torts are often brought together.⁸⁰ However, false endorsement requires evidence that the unauthorized use of the person’s likeness is misleading or false, giving rise to the inference that they endorsed a product when they did not.⁸¹ Conversely, the right of publicity requires the unauthorized use of another’s identity irrespective of falsity or suggestion of endorsement.⁸² While celebrity is not a formal element necessary to bring a false endorsement claim under the Lanham Act, it may be a barrier to success for private individuals.⁸³ A non-celebrity plaintiff, therefore, must establish that their identity is sufficiently recognizable and commercially relevant within the context it was used.⁸⁴ Thus, success hinges not necessarily on fame, but on the likelihood of consumer confusion and the level of recognition or value the non-celebrity’s identity has to mislead consumers into thinking they endorsed the product or service.⁸⁵

State right of publicity laws and federal and state trademark laws both aim to protect individuals from unauthorized uses of their identity, particularly their name or likeness.⁸⁶ However, there are key differences

75. *Id.*

76. A.L.A. Schechter Poultry Corp. v. U.S., 295 U.S. 495, 531–32 (1935).

77. THOMAS D. SELZ ET AL., ENTERTAINMENT LAW: LEGAL CONCEPTS AND BUSINESS PRACTICES § 18:5 (3d ed. 2024).

78. *Id.* (citing Renofab Process Corp. v. Renotex Corp., 158 N.Y.S.2d 70, 76 (N.Y. App. Div. 1956) and G. & C. Merriam Co. v. Saalfield, 198 F. 369 (6th Cir. 1912)).

79. *Id.*

80. J. Thomas McCarthy, *McCarthy on Trademarks and Unfair Competition* § 28:14 (5th ed. 2024).

81. *Id.*

82. *Id.*

83. J. Thomas McCarthy, *McCarthy on Trademarks and Unfair Competition* § 28:17 (5th ed. 2024).

84. *Id.*

85. *Id.*

86. Jennifer E. Rothman, *Navigating the Identity Thicket: Trademark’s Lost Theory of Personality, the Right of Publicity, and Preemption*, 135 HARV. L. REV. 1271, 1278 (2022).

between them. Trademark law safeguards individuals by preventing the unauthorized use of their identity in a way that could mislead consumers about source or sponsorship.⁸⁷ On the other hand, the right of publicity offers broader protection. It is not focused on identifying the source of products or services, but rather on preventing unauthorized use of an individual's identity regardless of whether it pertains to commercial activities.⁸⁸ This means the right of publicity can apply without considering issues like consumer confusion or dilution.⁸⁹ While the Lanham Act provides avenues for addressing trademark infringement and related claims—like false endorsement or dilution—these protections are rooted in the concept of a mark.⁹⁰ In contrast, state right of publicity laws exist solely to protect personal identity, extending protections that are not tied to the identity's status as a trademark or its connection to specific goods or services.⁹¹ Additionally, the Sixth Circuit ruled in *ETW Corporation v. Jireh Publishing, Inc.* that a person's likeness or image cannot be considered a trademark.⁹² As a result, the right of publicity provides more comprehensive coverage of an individual's identity than trademark and unfair competition laws.

B. Right of Publicity Explained

The right of publicity can be defined as the right to control the commercial use of celebrities' NIL based on an economic interest.⁹³ Another way of defining this right is that it protects celebrity personas⁹⁴ from appropriation and economic exploitation. The right of publicity is derived from the right of privacy and is a property right.⁹⁵ “The right of publicity can be classified as a kind of ‘intellectual property’ and infringement of it as a form of ‘unfair competition.’”⁹⁶ “Publicity rights damages are calculated using (1) “the fair market value of the celebrity's

87. *Id.*

88. *Id.* at 1278–79.

89. *Id.* at 1279.

90. *Id.*

91. *Id.*

92. *ETW Corp. v. Jireh Publ'g, Inc.*, 332 F. 3d 915, 922 (6th Cir. 2003).

93. Mark P. McKenna, *The Right of Publicity and Autonomous Self-Definition*, 67 U. PITT. L. REV. 225, 232–33 (2005); Restatement (second) of Torts § 652C cmt. a (Am. Law Inst. 1977); The Am. Coll. of Trust & Estate Couns., *Understanding Rights of Publicity or Name, Image, Likeness (NIL)*, YOUTUBE (Apr. 5, 2022), <https://www.youtube.com/watch?v=1gQwRoKeN8c> [<https://perma.cc/C9NX-5MQH>].

94. Persona is defined as “the way you behave, talk, etc., with other people that causes them to see you as a particular kind of person.” *Persona*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/thesaurus/persona> [<https://perma.cc/8GZD-74WY>]. Throughout this Note, I will use “persona” interchangeably with NIL.

95. The Am. Coll. of Trust & Estate Couns., *supra* note 93.

96. J. THOMAS MCCARTHY & ROGER E. SCHECHTER, *THE RIGHTS OF PUBLICITY & PRIVACY* (2d ed. 2023) (citing § 1 of the Lanham Act).

identity, (2) the profits of the person infringing on that right, and (3) damages to the celebrity's licensing opportunities because of that infringement."⁹⁷

In the 1950s, the right of publicity was established in American common law in *Haelan Labs., Inc. v. Topps Chewing Gum, Inc.*, 202 F.2d 866 (2d Cir. 1953) (The Second Circuit recognized that "infringement of this right causes economic harms that are entirely distinct from the type of harm caused when individuals have 'their feelings bruised through public exposure of their likeness.'").⁹⁸ After California statutorily codified the right of publicity in 1972, the right was later acknowledged by the United States Supreme Court in 1977.⁹⁹ Thereafter, the Court, for the first and last time, ruled on the right of publicity in *Zacchini v. Scripps-Howard Broadcasting Co.*, holding that Zacchini, a "human cannonball" performer, could prohibit his complete live performance from being broadcasted on television against his wishes without violating the First and Fourteenth Amendments "based on Ohio's right of publicity."¹⁰⁰ Samuel Warren and Louis Brandeis can be credited with the genesis of privacy law in their article *The Right to Privacy*.¹⁰¹ Their article highlighted concerns presented by technological advances responsible for the possibility of a person's photograph being used without the person's consent in an age of "[i]nstantaneous photographs and newspaper enterprise."¹⁰² From there, American privacy law took shape, contouring the then-generalized field of privacy through scholarship such as William Prosser's article *Privacy*, which defined four distinct privacy torts one of which being the right of publicity.¹⁰³

1. As a Cause of Action

To bring a right of publicity claim, a plaintiff must: (1) have jurisdiction based on their domicile states' laws; (2) demonstrate "the validity of the plaintiff's right of publicity; and (3) show that this right

97. The Am. Coll. of Trust & Estate Couns., *supra* note 93.

98. Mark Roesler & Garrett Hutchinson, *What's in a Name, Likeness, and Image? The Case for a Federal Right of Publicity Law*, A.B.A. (Sept. 16, 2020), https://www.americanbar.org/groups/intellectual_property_law/resources/landslide/archive/what-s-name-likeness-image-case-federal-right-publicity-law/ (last visited Feb. 26, 2025).

99. *Id.*; *Zacchini v. Scripps-Howard Broad. Co.*, 433 U.S. 562, 579 (U.S. 1977) (holding that Ohio's Supreme Court does not have to give press the privilege of publishing a performance against the performer's will under the right of publicity because it does not run afoul of the First and Fourteenth Amendments).

100. *Id.*

101. *Id.*; Samuel Warren & Louis Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193, 193(1890).

102. *Id.* at 195.

103. William L. Prosser, *Privacy*, 48 CAL. L. REV. 383, 407 (1960), <https://doi.org/10.15779/Z383J3C> [<https://perma.cc/HVJ4-528G>] (listing the four privacy torts and defining "[p]ublicity" [as] . . . plac[ing] the plaintiff in a false light in the public eye.").

has been infringed upon by the defendant.¹⁰⁴ To begin, the plaintiff must establish that the persona (living or late) was domiciled in a state that acknowledge the right of publicity as a cause of action.¹⁰⁵ Thereafter, the plaintiff must establish whether that jurisdiction has any additional stipulations such as the right being exclusively available to celebrities or for veterans.¹⁰⁶ Lastly, the plaintiff, if regarding a deceased persona, must determine the length of time after the celebrity's death that their persona is protected by the right of publicity (for example, California caps this right at seventy-five years post-death, Nevada at fifty, and Florida at forty).¹⁰⁷ Notably, Tennessee theoretically allows for the longest postmortem right of publicity protection provided the rights continue to be used beyond the initial ten year guarantee which will otherwise lapse after two-years of no commercial use.¹⁰⁸

However, in determining whether the plaintiff's right of publicity is valid, the courts apply one of two tests usually based on the right's source in that jurisdiction.¹⁰⁹ Usually, where the right of publicity is found in common law, the plaintiff must establish: (1) the defendant used the plaintiff's identity or persona; (2) such appropriation was for the defendant's advantage, commercial or otherwise; (3) the plaintiff did not consent to the use of the plaintiff's identity; and (4) the appropriation is likely to cause injury to the plaintiff.¹¹⁰

On the other hand, the second, streamlined approach mirrors the *Third Restatement of Unfair Competition*, which requires the plaintiff to establish: "(1) the defendant, without permission, has used some aspect of the plaintiff's identity or persona in such a way that the plaintiff is identifiable from the defendant's use; and (2) the defendant's use is likely to cause damage to the commercial value of that persona."¹¹¹

This second approach removes the additional element of proving the defendant gained commercial benefits.¹¹² This delineation of tests reflects a tailored approach to protecting the commercial interest of an individual's identity. By either demonstrating harm or unauthorized usage, plaintiffs have clear, albeit distinct, legal avenues to challenge the

104. Roesler & Hutchinson, *supra* note 98; *Martin Luther King, Jr., Ctr. for Soc. Change, Inc. v. Am. Heritage Prods., Inc.*, 296 S.E.2d 697, 704 (Ga. 1982); *Cabaniss v. Hipsley*, 151 S.E.2d 496, 499 (Ga. Ct. App. 1966) (describing that the plaintiff would be entitled to recovery if the jury found that the defendants had used her photo without her consent for financial gain).

105. *Id.*

106. *Id.*

107. *Id.*

108. Tenn. Code Ann. § 47-25-1104(a), (b)(2)(A) (2024).

109. Roesler & Hutchinson, *supra* note 98.

110. *Id.*

111. *Id.*; Restatement (Third) of Unfair Competition § 46 (AM. L. INST. 1995).

112. Roesler & Hutchinson, *supra* note 98.

misappropriation of their persona, ensuring their right to control the commercial use of their identity is upheld.

2. Challenges Posed by the Right of Publicity

While many states recognize the right of publicity, there is no uniform application of the right in the absence of a federal right to privacy.¹¹³ As of 2020, roughly thirty-five of the fifty states recognize the right of publicity in some fashion.¹¹⁴ Therefore, a celebrity's right to publicity depends on where they live, which poses significant challenges given that a celebrity's persona is not similarly confined to the boundaries of states.¹¹⁵ Furthermore, given its similarities to other causes of action, the right of publicity is often misused due to its sophistication ("the right of publicity 'is not a form of trademark, copyright, false advertising, or right of privacy;' instead, the right of publicity 'declares its mandate, because no other area of the law addresses the needs and issues it encompasses.'").¹¹⁶

The right of publicity also poses challenges in determining liability. When determining liability, some courts have turned to one approach,

113. *Id.*

114. *Id.* ("As of 2020, the following states recognizing the right of publicity: Alabama (ALA. CODE § 6-5-770), Arizona (ARIZ. REV. STAT. ANN. § 12-761 (applies only to soldiers)) [Arizona courts have recognized a postmortem right of publicity (*See also In re Estate of Reynolds*, 1 CA-CV 13-0274, 2014 WL 1672958, at 10 ¶ 26 (Ariz. Ct. App. Apr. 24, 2014) ("We hold that Arizona recognizes a right of publicity.")], Arkansas (ARK. CODE ANN. § 4-75-1101), California (CAL. CIV. CODE § 3344), Colorado (Donchez v. Coors Brewing Co., 392 F.3d 1211 (10th Cir. 2004)), Connecticut (*In re Jackson*, No. 19-480 (2d Cir. Aug. 19, 2020)), Florida (FLA. STAT. § 540.08), Georgia (Bullard v. MRA Holding, LLC, 740 S.E.2d 622 (Ga. 2013)), Hawaii (HAW. REV. STAT. § 482P-1), Illinois (765 Ill. Comp. Stat. 1075/1), Indiana (Ind. Code § 32-36-1-1), Kentucky (KY. REV. STAT. ANN. § 391.170), Massachusetts (Mass. Gen. Laws ch. 214, § 3A), Michigan (Hauf v. Life Extension Found., 547 F. Supp. 2d 771 (W.D. Mich. 2008)), Minnesota (Ventura v. Titan Sports, Inc., 65 F.3d 725 (8th Cir. 1995)), Missouri (Doe v. TCI Cablevision, 110 S.W.3d 363 (Mo. 2003)), Nebraska (NEB. REV. STAT. § 20-201), Nevada (NEV. REV. STAT. § 597.770), New Hampshire (Doe v. Friendfinder Network, Inc., 540 F. Supp. 2d 288 (D.N.H. 2008)), New Jersey (Estate of Presley v. Russen, 513 F. Supp. 1339 (D.N.J. 1981)), New Mexico (Moore v. Sun Publ'g Corp., 881 P.2d 735 (N.M. Ct. App. 1994)), New York (N.Y. Civ. Rights Law §§ 50–51 (applies only to living individuals)), Ohio (OHIO REV. CODE ANN. § 2741.01), Oklahoma (Okla. Stat. tit. 21, § 839.1), Pennsylvania (42 Pa. Cons. Stat. § 8316), Rhode Island (9 R.I. Gen. Laws § 9-1-28.1), South Carolina (Gignilliat v. Gignilliat, Savitz & Bettis, L.L.P., 684 S.E.2d 756 (S.C. 2009)), South Dakota (S.D. Codified Laws § 21-64-2), Tennessee (TENN. CODE ANN. § 47-25-1101), Texas (Tex. Prop. Code Ann. § 26.001), Utah (UTAH CODE ANN. § 45-3-1), Virginia (VA. CODE ANN. § 8.01-40), Washington (WASH. REV. CODE § 63.60.010), West Virginia (Crump v. Beckley Newspapers, Inc., 320 S.E.2d 70 (W. Va. 1983)), and Wisconsin (Hirsch v. S.C. Johnson & Son, Inc., 280 N.W.2d 129 (Wis. 1979))."; Jennifer E. Rothman, *Right of Publicity State-by-State*, ROTHMAN'S ROADMAP TO THE RIGHT OF PUBLICITY, <https://rightofpublicityroadmap.com/> [<https://perma.cc/2PWE-Q8R8>] (detailing a state-by-state breakdown of the right of publicity).

115. *See, e.g., id.*

116. Roesler & Hutchinson, *supra* note 98.

which asks “whether the work sufficiently transforms the celebrity’s identity or likeness.”¹¹⁷ The Third and Ninth Circuits embraced this approach, which stemmed from the California Supreme Court’s opinion in *Comedy III Products v. Gary Saderup*.¹¹⁸ Furthermore, this approach “. . . draws from the ‘fair use’ defense in copyright law and is known as the ‘transformative use’ test.”¹¹⁹ Conversely, the Rogers test, which the Second and Sixth Circuits adopted, examines “whether the use of a celebrity’s name or likeness was ‘wholly unrelated to the [defendant’s work] or was simply a disguised commercial advertisement for the sale of goods or services.’”¹²⁰ Alternatively, the Eight and Tenth Circuits adopted a balancing test between the “celebrity’s interest in his or her publicity [and] . . . the public’s interest in freedom of expression.”¹²¹

Another challenge presented by inconsistencies in the right of publicity as we know it is the “descendible right of publicity,” wherein the right to publicity can be inherited in a similar way as other property.¹²² Most states recognize a postmortem right of publicity, but some states do not.¹²³ Additionally, what is available as a postmortem interest in persona rights is vaguely outlined and inconsistently applied, creating additional challenges.¹²⁴ An example of this difference in application of a postmortem right of publicity can be seen in the cases of the late Marilyn Monroe and Elvis Presley.¹²⁵ While the heirs of Monroe’s right of publicity interests were denied, the heirs of Presley maintained their claim to his right of publicity.¹²⁶ The difference? The specificities of the two late personalities’ domiciles.¹²⁷ In Monroe’s case, her heirs were denied their interests because Indiana, the place Monroe passed, did not have a retroactive postmortem right of publicity.¹²⁸ Therefore, the court held that she was not entitled to rights she lacked before her death.¹²⁹ On the other hand, Presley’s heirs maintained their interests in his persona

117. Alex Wyman, *Defining the Modern Right of Publicity*, 15 TEX. REV. ENT. & SPORTS L., Sept. 26, 2014, at 2, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2500879 [<https://perma.cc/RDW6-GCBX>].

118. *Id.*

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. *Id.* at 2–3.

125. Raymond J. Dowd, *Rights of Publicity: Elvis, Marilyn, and the Federal Courts*, THE FED. LAW. 13 (2007).

126. *Id.* at 12.

127. *Id.* at 13.

128. *Id.*

129. *Id.*

because he was domiciled in Tennessee, which lacked the confines of Indiana law.¹³⁰

The clash between the right to privacy and the First Amendment has been an enduring challenge. When Samuel Warren and Louis Brandeis advocated for the recognition of the right to privacy in their 1890 article, they acknowledged the inherent tension between the right to speak and the “right to be let alone.”¹³¹ Seven decades later, William L. Prosser described the relationship between privacy and free speech as a “head-on collision” that gradually evolved into a “slow compromise.”¹³² Today, this compromise remains delicate, with courts grappling particularly with the concept of newsworthiness at the intersection of privacy and the First Amendment.¹³³ Essentially, courts aim to prevent the infringement of the right to privacy by the right to free speech.¹³⁴ Notably, in numerous cases involving the media, the courts have consistently tilted the balance in favor of the press.¹³⁵ In terms of determining the boundary between privacy and the First Amendment—specifically, how to define a “subject of legitimate interest” or “newsworthiness”—they openly admitted lacking a “wholly accurate or exhaustive definition.”¹³⁶

The issue of deepfakes and the lack of a federal right of publicity statute is increasingly urgent, as these technologies are not limited to celebrities; everyday individuals are becoming targets of fake social media profiles and deceptive impersonations. The sophistication of deepfake video and voice technology exacerbates the risk of identity theft and reputational harm, particularly as facial recognition systems are increasingly used to safeguard sensitive information.¹³⁷ Without a clear legal framework, regular individuals face a significant threat without recourse, as existing torts fail to adequately address the unique harms caused by deepfakes. The absence of a right of publicity leaves them vulnerable, highlighting the need for immediate legislative action to protect all individuals from these emerging dangers.

130. *Id.*

131. Erin C. Carroll, *Making News: Balancing Newsworthiness and Privacy in the Age of Algorithms*, 106 GEO. L.J. 69, 74 (2017).

132. *Id.* at 74–75.

133. *Id.* at 75.

134. *Id.*

135. *Id.*

136. *Id.* at 76

137. Jessica Hallman, *Deepfakes expose vulnerabilities in certain facial recognition technology*, PENN STATE (Aug. 11, 2022), <https://www.psu.edu/news/information-sciences-and-technology/story/deepfakes-expose-vulnerabilities-certain-facial> [<https://perma.cc/ZS6T-JE4S>] (explaining that many facial recognition technologies are vulnerable to deepfakes as they often fail to detect synthetic images).

III. WHAT CAN WE DO?

In cases where a celebrity lacks access to a right of publicity statute, the options for recourse are severely limited. Many have advocated for the federal government to establish a comprehensive federal right of publicity to address these concerns and protect individuals from unauthorized use of their identities.¹³⁸ However, as deepfakes proliferate in the absence of such legislation, this Note will explore creative and ambitious solutions that, while potentially theoretical, could offer some protection for celebrities navigating this complex landscape. The proposed solutions include judicial activism and forum shopping.¹³⁹ Yet, in the absence of a federal right, there is nothing to lose.

A. *Recharacterization*

The suggestion to recharacterize the right of publicity is aimed at overcoming the significant challenge of personal jurisdiction, which often complicates a plaintiff's ability to bring a case in a favorable forum that has a right of publicity statute. Mary LaFrance puts forth such a solution by recharacterizing the right of publicity as an intellectual tort rather than a property interest.¹⁴⁰ The legal basis for conceptualizing the right of publicity as an intellectual tort is rooted in its origins in the

138. See Kevin L. Vick & Jean-Paul Jassy, *Why a Federal Right of Publicity Statute Is Necessary*, 28 COMM'N LAW. 14, 14 (2011); Mary LaFrance, "Choice of Law and the Right of Publicity: Rethinking the Domicile Rule", 2019 SCHOLARLY WORKS 1, 2; Jennifer E. Rothman, *Federal right of Publicity Takes Center Stage in Senate hearing on AI*, ROTHMAN'S ROADMAP TO THE RIGHT OF PUBLICITY (July 27, 2023), https://rightofpublicityroadmap.com/news_commentary/federal-right-of-publicity-takes-center-stage-in-senate-hearing-on-ai/ [<https://perma.cc/V3N8-Z2U5>]; Woods Drinkwater, *Personality Beyond Borders: The Case for a Federal Right of Publicity*, 3 MISS. L. REV. 115, 132 (2013); Alyssa Devine, *Why You Should Care About a Federal Right of Publicity*, IP WATCHDOG (Dec. 15, 2023, 8:15 AM), <https://ipwatchdog.com/2023/12/15/why-you-should-care-about-a-federal-right-of-publicity/id=170583/> [<https://perma.cc/H8RJ-W24L>]; *AI and the Right of Publicity: A Patchwork of State Laws the Only Guidance, For Now*, CROWELL (Dec. 12, 2023), https://www.crowell.com/en/insights/client-alerts/ai-and-the-right-of-publicity-a-patchwork-of-state-laws-the-only-guidance-for-now#_ftn7 [<https://perma.cc/RNY7-LU3N>].

139. The decision to propose these solutions was reached after extensive research and deliberation of various options, including: (1) suing the federal government for abrogation of duty under the IP clause, ultimately abandoned due to its permissive nature and sovereign immunity; (2) bringing a claim against the federal government under the Federal Tort Claims Act, but dispensed with as unrealistic due to prima facie challenges, (3) pursuing remedies for regulatory takings related to celebrity rights of publicity, but this was set aside due to lack of government affirmative action; (4) creative pleading in state courts under the minimum contacts theory, abandoned due to case law requiring more substantial connections; and (5) revitalizing Professor Currie's conflict of laws theory, which was discarded over concerns regarding the Dormant Commerce Clause.

140. LaFrance, *supra* note 138, at 25–26.

intersection of privacy and intellectual property law.¹⁴¹ Warren and Brandeis initially justified the right to privacy using common law copyright principles, and the Supreme Court's decision in *Zacchini v. Scripps-Howard Broadcasting* solidified this connection by placing the right of publicity within the intellectual property framework.¹⁴² In *Zacchini*, the Court emphasized the need to protect individuals' proprietary interests in their performances, arguing that such protection serves as an economic incentive for creativity and production, like patent and copyright laws.¹⁴³ This shift in perspective allowed the right of publicity to extend beyond mere privacy concerns, providing broader protections that can even survive an individual's death and encompass various uses of a person's identity, thus framing it as a form of intellectual property.¹⁴⁴

LaFrance grounds this proposal in the critique that courts, in applying the domicile rule to right of publicity choice of law cases, conflate the issue and subsequent legal analysis of cases of property ownership and liability with tortious injury to property.¹⁴⁵ LaFrance highlights that this reliance on domicile law contrasts sharply with the principles governing other tort cases, which typically emphasize *lex loci delicti* or the jurisdiction with the "most significant relationship" to the case.¹⁴⁶ LaFrance further underscores this point with examples of cases where courts ignored choice of law principles in right of publicity cases

141. Jennifer E. Rothman, *The Right of Publicity's Intellectual Property Turn*, 42 COLUM. J.L. & ARTS 277, 280 (2019) (explaining the historical analogizing of the right of publicity as an intellectual property).

142. *Id.* at 302 ("In the Supreme Court's 1977 decision in *Zacchini v. Scripps-Howard Broadcasting*, the Court both created and cemented the right of publicity's break from the right of privacy and its placement into the intellectual property framework... *Zacchini* is often described as a quasi-copyright case."); Warren & Brandeis, *supra* note 101, at 200–09.

143. Rothman, *supra* note 141, at 302, 304 ("[Justice] Blackmun worried that if the news could broadcast performances like *Zacchini's* without permission, there was nothing to prevent broadcasts of entire symphonies or boxing matches or plays—if those performances were not protected by copyright laws.").

144. *Id.* at 305–06 ("The Court explicitly analogized the right of publicity to patent and copyright laws, and imported the justifications used for these IP laws, particularly the incentive rationale and the labor-reward rubric, to justify the state law.").

145. LaFrance, *supra* note 138, at 3; *see also id.* at 6 ("In the absence of a rule specific to the right of publicity, most courts have applied the default choice of law principles that apply to property disputes, on the theory that the right of publicity is a property interest.").

146. LaFrance, *supra* note 138, at 6 (citing Sonja Larsen & Karl Oakes, 16 AM. JUR. 2D CONFLICT OF LAWS § 99, at 164–66 (2018)); § 102, at 168–70 & RESTATEMENT (SECOND) OF CONFLICT OF LAWS §§ 6, 158, 145 (AM. L. INST. 1971).

involving non-domiciliaries wherein the place of injury forum's law was applied.¹⁴⁷

Another solution could be recharacterizing the right of publicity tort as an intentional tort.¹⁴⁸ An intentional tort occurs because of the defendant's purposeful action (or inaction).¹⁴⁹ This Note suggests recharacterizing the right of publicity as an intentional tort because creating a deepfake is a deliberate act involving multiple steps that reflect a clear intention to manipulate and misrepresent an individual's likeness. The mental state required to produce a deepfake aligns with the essence of intentional harm, as it involves conscious decisions to deceive and exploit someone's image.¹⁵⁰ Recharacterizing the right of publicity as an intentional tort would emphasize the intentional nature of actions that infringe on a person's right to control the commercial use of their identity. By framing the right of publicity as an intentional tort, the focus shifts to deliberately exploiting an individual's persona for profit, aligning it more closely with other intentional torts that protect against harm caused by willful actions.

In framing the right of publicity in this way, the plaintiff may follow the established structure of litigating an intentional tort. While the elements of a right of publicity claim do not require proof of the defendant's mental state, the inherently complex nature of creating deepfakes suggests a deliberate intent aligned with the frameworks of intentional torts. This is particularly relevant when considering the nuances of privacy laws, such as those outlined in *Restatement of the Law, Second, Torts* § 652, which addresses intrusion upon seclusion.¹⁵¹

147. LaFrance, *supra* note 138, at 18–19 (discussing cases where courts have ignored the plaintiff's domicile at the potential risk of altering the legal outcome for instance, in *Estate of Elvis Presley v. Russen*, 513 F. Supp. 1339 (D.N.J. 1981), the New Jersey District Court overlooked the implications of choice of law, applying only the law of where the infringement occurred. Similarly, in *Zacchini v. Scripps-Howard Broadcasting Co.*, No. 33713, 1975 WL 182619 (Ohio Ct. App. July 10, 1975), *rev'd*, 351 N.E.2d 454 (Ohio 1976), *rev'd*, 433 U.S. 562 (1977), the court's exclusive focus on Ohio law ignored the potentially more relevant Florida law, where Zacchini was likely domiciled and had existing right of publicity protections).

148. *Staub v. Proctor Hosp.*, 562 U.S. 411, 417 (2011) (quoting *Kawaauhau v. Geiger*, 523 U.S. 57, 61–62 (1998) where it is explained that intentional torts, unlike negligent or reckless torts, typically necessitate that the person intends the outcomes of their actions rather than just the actions themselves); *see also* RESTATEMENT (SECOND) OF TORTS § 870 cmt. b (AM. L. INST. 1979) (stating, “[a]n intentional tort is one in which the actor intends to produce the harm that ensues; it is not enough that he intends to perform the act. He intends to produce the harm when he desires to bring about that consequence by performing the act.”); *see also* RESTATEMENT (SECOND) OF TORTS § 8A(b) (AM. L. INST. 1965) (explaining, “[i]ntent is not, however, limited to consequences which are desired. If the actor knows that the consequences are certain, or substantially certain, to result from his act, and still goes ahead, he is treated by the law as if he had in fact desired to produce the result.”).

149. RESTATEMENT (SECOND) OF TORTS § 870(b) (AM. L. INST. 1979).

150. *Id.*, *supra* note 147.

151. RESTATEMENT (SECOND) OF TORTS § 652B (AM. L. INST. 1977).

According to this section, an individual who intentionally intrudes upon another's solitude or private affairs can be held liable if such intrusion would be deemed highly offensive by a reasonable person.¹⁵² Notably, this form of invasion does not rely on publicity given to the individual affected; rather, it emphasizes the intentional interference with one's privacy. William Prosser's classification of privacy torts further delineates the distinctions between appropriation and the right of publicity, noting that the latter primarily seeks to address economic harm.¹⁵³ Given the deliberate nature of deepfake creation, it is reasonable to conceptualize the right of publicity as an intentional tort, especially as it pertains to the psychological and financial harm inflicted upon individuals through these technologies. If the right of publicity were treated as an intentional tort, legal precedent would dictate that plaintiffs could bring suit in jurisdictions where the court has proper jurisdiction over the defendant, theoretically expanding the available forums for remedies. Accordingly, courts could definitively use the defendant's physical location as the proper jurisdiction to determine whether there is a right of publicity protection. Doing so would promote predictability and fairness and align with existing legal frameworks governing torts and online activity.¹⁵⁴

152. *Id.* § 652B cmt. a.

153. William L. Prosser, *Privacy*, 48 CAL. L. REV. 383, 389, 406 (1960) (detailing in his 1960 article *Privacy*, William Prosser identified four privacy torts: intrusion, disclosure, false light, and appropriation, a framework now widely accepted in legal circles. He defined "appropriation" as the unauthorized commercial use of a person's identity. Prosser synthesized the distinction between different uses of a person's name, image, and likeness from New York cases, which highlighted varying implications of such uses: economic exploitation and embarrassment from false light). Courts have also honed in on this delineation. *See, e.g.*, Thomas McCarthy & Roger E. Schechter, *Rights of Publicity and Privacy* § 5:56 (2d ed. 2024) (quoting *Scott v. Citizen Watch Co. of Am., Inc.*, 2018 WL 1626773, *3 (N.D. Cal. 2018)) (recognizing both a common law right of publicity tort and a common law appropriation-privacy tort "with the difference being the harm the plaintiff suffers: lost opportunity to benefit commercially from his own public identity on the one hand, and injury to feelings or peace of mind on the other"); *Overhead Sols., Inc. v. A1 Garage Door Serv., L.L.C.*, 2022 WL 602864, *2 (D. Colo. 2022) (holding that recovery in a privacy claim for appropriation is limited to damages for "mental anguish and injured feelings . . . [including] emotional injury, harm to reputation and related financial losses, but not damages based upon the commercial value of one's persona"); *see Allison v. Vintage Sports Plaques*, 136 F.3d 1443, 1446 (11th Cir. 1998) (quoting McCarthy and Schechter's view with approval); Comment, *Descendability of the Right of Publicity*, 1983 S. ILL. U. L.J. 547, 564 ("Where the right of privacy protects one's emotional psyche, the right of publicity guards against a purely pecuniary injury."); *Dora v. Frontline Video, Inc.*, 15 Cal. App. 4th 536, 541, 1993 (the court quotes with approval the distinction drawn by the treatise between appropriation privacy and the right of publicity. "The difference between the two is found not in the activity of the defendant, but in 'the nature of the plaintiff's right and the nature of the resulting injury.'").

154. *See* Alan M. Trammell & Derek E. Bambauer, *Personal Jurisdiction and the*

B. Friendly Forums

A third potential solution to the challenge posed by the lack of right of publicity statutes available based on domicile is to bring the case in a state like Indiana,¹⁵⁵ which allows individuals to file a cause of action “regardless of a personality’s domicile, residence, or citizenship,” provided that the event occurred within the state.¹⁵⁶ This approach would require the plaintiff to demonstrate that the unauthorized use of their identity took place in Indiana. Here, the boundless nature of technology offers a unique opportunity to plead a case outside of the plaintiff’s domicile, but challenges remain.

The most obvious challenge is bypassing jurisdictional restraints to exercise these long-arm statutes.¹⁵⁷ A court cannot exercise jurisdiction over an individual unless that person voluntarily appears in the court, is

Interwebs, 100 CORNELL L. REV. 1129, 1134 (2015) (arguing that the internet’s novelty highlights weaknesses in current personal jurisdiction jurisprudence but does not necessitate a complete overhaul of existing legal regimes. Instead, the authors advocate for a narrow, location-based approach to jurisdiction in cases involving intangible harms per their “...tripartite view of personal jurisdiction’s deep structure: constitutionally compelled restrictions (imposed by the Due Process Clauses); prudential common law restrictions (crafted by the Supreme Court); and state-specific restrictions (embodied in long-arm statutes)”).

155. Indiana law was proposed because, like Washington, it is broad and arguably the most accessible. Thus, this forum, similar to Washington, could potentially support plaintiffs in pursuing right of publicity cases if they can establish jurisdiction. Indiana’s statute includes a long-arm provision stating that any person engaging in prohibited conduct within the state submits to its jurisdiction if they create or transport goods or disseminate advertising in violation of the relevant provisions. *See* IND. CODE ANN. § 32-36-1-9 (West 2002); WASH. REV. CODE ANN. § 63.60.010 (West 2008) (“Every individual or personality, as the case may be, has a property right in the use of his or her name, voice, signature, photograph, or likeness, and such right shall be freely transferable, assignable, and licensable, in whole or in part, by any otherwise permissible form of inter vivos or testamentary transfer, including without limitation a will, trust, contract, community property agreement, or cotenancy with survivorship provisions or payable-on-death provisions, or, if none is applicable, under the laws of intestate succession applicable to interests in intangible personal property. The property right does not expire upon the death of the individual or personality, as the case may be. The right exists whether or not it was commercially exploited by the individual or the personality during the individual’s or the personality’s lifetime.”).

156. *See* IND. CODE ANN. § 32-36-1-1 (West 2002) (amended 2012) (this chapter applies to actions occurring within Indiana, regardless of a person’s domicile, while specifying that it does not affect existing rights related to news reporting or entertainment; it also outlines exceptions for various uses of a personality’s identity, such as in artistic works, newsworthy material, truthful identification in authored or recorded performances, and reporting on public interest topics, while noting that commercial value derived solely from criminal charges or convictions is also excluded).

157. A “long-arm” statute refers to a state’s ability to exercise jurisdiction over a non-domiciliary without violating the Constitution. *See e.g.*, CAL. CIV. PROC. CODE, § 410.10 (West 1970) (stating that California courts may exercise jurisdiction “on any basis not inconsistent with the Constitution of this state or of the United States”).

physically present in the state, resides there, or has property in the state that the court can seize.¹⁵⁸ The Due Process Clause mandates that for a court to impose a personal judgment on a defendant who is not physically present in the forum, there must be sufficient minimum contacts with that jurisdiction so as not to transgress “traditional notions of fair play and substantial justice.”¹⁵⁹ Washington attempted to extend protection under its right of publicity statute to non-domiciliary plaintiffs, but these efforts have faced constitutional challenges, suggesting that exceptions to the Dormant Commerce Clause or the Due Process Clause are unlikely to be upheld.¹⁶⁰

The internet creates additional obstacles (or opportunities) regarding the utility of long-arm statutes. The legal framework for internet jurisdiction has evolved significantly since *Zippo Manufacturing Co. v. Zippo Dot Com, Inc.*, which established a foundational approach to personal jurisdiction based on website operations.¹⁶¹ This case, decided during the early days of widespread internet use, categorized websites into three types—commercial, passive, and interactive—and set the stage for determining jurisdiction based on their interactivity.¹⁶² As nearly all modern websites incorporate interactive elements, this has broadened the potential for jurisdiction across state lines.¹⁶³ Subsequent cases, such as *Calder v. Jones*, further developed the concept by emphasizing the effects test, where jurisdiction is established based on the intentional actions of a defendant that target a specific state.¹⁶⁴ Moreover, simply posting

158. *Pennoyer v. Neff*, 95 U.S. 714, 723–44 (1878) (describing how a court may exercise jurisdiction over a non-resident in accordance with the Due Process Clause).

159. *Int'l Shoe Co. v. Wash.*, 326 U.S. 310, 316 (1945).

160. *See, e.g., WASH. REV. CODE ANN.* § 63.60.010 (West 2008) (“This chapter is intended to apply to all individuals and personalities, living and deceased, regardless of place of domicile or place of domicile at time of death.”) Constitutionality of the statute was assessed in *Experience Hendrix L.L.C. v. Hendrixlicensing.com Ltd.*, 762 F.3d 829, 836–37 (9th Cir. 2014) (explaining that the district court found that applying Washington’s Right of Publicity Act (WPRA) instead of New York law, where Jimi Hendrix was domiciled, violated choice-of-law principles under the Due Process and Full Faith and Credit Clauses. While the court acknowledged that Washington had relevant contacts due to lost sales of licensed goods, it also ruled that applying the WPRA could violate the Dormant Commerce Clause by potentially affecting transactions outside the state. However, the specific case did not involve such transactions, and there was no evidence that enforcing the WPRA would significantly burden interstate commerce).

161. *Zippo Mfg. Co. v. Zippo Dot Com, Inc.*, 952 F. Supp. 1119, 1124 (W.D. Pa. 1997).

162. *Id.*

163. Gretchen Yelmini, *Internet Jurisdiction and the 21st Century: Zippo, Calder, and the Metaverse*, 55 CONN. L. REV. 578, 584 (2023) (explaining “[a]s one court put it, *Zippo* ‘effectively removes geographical limitations on personal jurisdiction over entities that have interactive websites.’” (citing *Kindig It Design, Inc. v. Creative Controls, Inc.*, 157 F. Supp. 3d 1167, 1174 (D. Utah 2016))).

164. In *Calder v. Jones*, 465 U.S. 783, 789 (1984), the Supreme Court determined that California could exercise jurisdiction over *The National Inquirer*, a Florida-based corporation,

content available to other states not aimed at or connected to events or sources within the forum state is insufficient to establish personal jurisdiction.¹⁶⁵ The Supreme Court's ruling in *Ford Motor Co. v. Montana Eighth Judicial District Circuit* in 2021 reinforced that personal jurisdiction arises from a defendant's contacts with the forum state, maintaining a balance between broad jurisdictional reach and the need for relevant connections.¹⁶⁶ This ongoing development leaves plaintiffs with yet another legally ambiguous landscape.¹⁶⁷

Unauthorized deepfakes are typically created by individuals or informal groups rather than incorporated businesses, making it challenging to bring legal action against them in their respective jurisdictions.¹⁶⁸ This difficulty is compounded by the need for plaintiffs

because its national circulation and the alleged libel were directly related to the activities of a California resident. The Court emphasized that the defendant's deliberate actions targeting California meant they could reasonably expect to be sued there. Therefore, the central issue is whether the forum state acts as the focal point for both the tort and the resulting harm, allowing courts to establish jurisdiction based on the effects of the defendant's actions in that state.

165. *Revell v. Lidov*, 317 F.3d 467, 475–76 (5th Cir. 2002).

166. *Yelmini*, *supra* note 163, at 601; *Ford Motor Co. v. Mont. Eighth Jud. Distr. Ct.*, 141 S. Ct. 1017, 1026 (2021) (communicating that Ford's argument rests upon interpretations of *Bristol-Myers Squibb Co. v. Super. Ct. Cal.*, 137 S. Ct. 1773 (2017) and *Walden*, which, in Ford's view, support a causal approach to personal jurisdiction). *See id.* at 1026–27 (arguing that "[j]urisdiction attaches 'only if the defendant's forum conduct gave rise to the plaintiff's claims.'") While unsuccessful, this argument is simply the other half of the causal connection articulated in *Calder*, concerning itself not with the effect, but the cause at issue in a particular lawsuit (quoting Brief for Petitioner at 13, *Ford Motor Co. v. Mont. Eighth Jud. Distr. Ct.*, 142 S. Ct. 1773 (No. 19-368), 2020 WL 1154744, at *13).

167. To solve this issue, Zoe Niesel proposed that personal jurisdiction be established when a defendant intentionally uses the internet, knowing their actions could affect the forum state. Zoe Niesel, *#PersonalJurisdiction: A New Age of Internet Contacts*, 94 INDIANA L.J. 104, 144 (2019). An even more ambitious approach might involve litigating against tech companies primarily based in California, a state with its own right of publicity statute. However, this strategy is complicated by the fact that the California statute limits protections to plaintiffs domiciled in the state, making it an unviable option for many. *See Cairns v. Franklin Mint Co.*, 120 F. Supp. 2d 880 (C.D. Cal. 2000) (holding that the California statute on post-mortem publicity rights is not a choice of law provision and does not change the rule that personal property rights are governed by the law of the person's domicile). Additionally, any attempt to target these companies could run into issues with Section 230 immunity, an area the Supreme Court has shown reluctance to address. *See Twitter, Inc. v. Taamneh*, 598 U.S. 471, 505–06 (2023) (holding a social media platform cannot be held civilly responsible under the Anti-Terrorism Act for assisting a user in carrying out an act of international terrorism, provided that the platform has treated this user in the same manner as its other users and that the user did not utilize the platform to organize the terrorist activity.); *see Gonzalez v. Google LLC*, 598 U.S. 617, 621–22 (2023) (referencing its ruling in *Twitter v. Taamneh*, the Court chose not to address the issue at hand in this case, vacating the Ninth Circuit's judgment and sending it back for further proceedings in line with that opinion. While this outcome may seem to benefit Gonzalez on the surface, it ultimately results in the dismissal of Gonzalez's claim upon remand.).

168. Quentin Ullrich, *Is This Video Real? The Principal Mischief of Deepfakes and How the*

to accurately identify and serve the creators of the deepfake within the statute of limitations.¹⁶⁹ Given that these deepfakes are posted online, they often involve interstate interests, necessitating the use of long-arm statutes to establish personal jurisdiction.¹⁷⁰ To effectively address these cases, the concept of personal jurisdiction must be reexamined, as plaintiffs may find themselves unable to sue the platforms hosting the infringing content while also lacking the means to pursue the unidentified defendants. This situation leaves plaintiffs vulnerable, especially if the forum state has a right of publicity statute that does not accommodate non-domiciliary plaintiffs.

IV. CONGRESS MUST ACT

Therefore, while states can take steps to address the gaps in protection for individuals affected by unauthorized deepfakes and identity misuse, these efforts are likely to fall short given the complexities of the internet and evolving technology.¹⁷¹ In states without a right of publicity statute, the lack of legislative support can hinder the development of meaningful laws, making it difficult for plaintiffs to seek justice. Additionally, reliance on common law or existing torts in these states can lead to inconsistent case law, resulting in unpredictable outcomes for those trying to assert their rights. Plaintiffs may also face a higher burden of proof, as they would need to navigate existing tort categories—such as defamation or invasion of privacy—that often do not fully encompass the unique challenges posed by deepfakes.¹⁷² Moreover, without a statutory

Lanham Act Can Address It, 55 COLUM. J.L. & SOC. PROBS. 1, 20 (2021) (emphasizing that anonymous website users are the average unauthorized deepfake content creator, which creates a challenge for unauthorized deepfake victims seeking a legal remedy).

169. *Id.*

170. See Michael MacClary, *Personal Jurisdiction and the Internet*, 3 SUFFOLK J. TRIAL AND APP. ADVOC. 93, 95 (1998) (explaining that a party seeking relief in an interstate matter must obtain personal jurisdiction over an out-of-state defendant using a state long-arm statute). See generally Judith Mercier, *Bloggers Beware: Florida's Long-Arm Statute Reaches Nonresidents Who Post Material Online*, HOLLAND & KNIGHT (Nov. 2010), <https://www.hklaw.com/en/insights/publications/2010/09/bloggers-beware-floridas-quos-longarm-statute-reac> [<https://perma.cc/WBJ9-FAU4>].

171. See Paven Malhotra, *Report on deepfakes: what the Copyright Office found and what comes next in AI regulation*, REUTERS (Dec. 18, 2024, 8:55 AM), <https://www.reuters.com/legal/legalindustry/report-deepfakes-what-copyright-office-found-what-comes-next-ai-regulation-2024-12-18/> [<https://perma.cc/Y523-BB5M>]; see generally *AI and the Right of Publicity: A Patchwork of State Laws the Only Guidance, For Now*, CROWELL (Dec. 12, 2023), https://www.crowell.com/en/insights/client-alerts/ai-and-the-right-of-publicity-a-patchwork-of-state-laws-the-only-guidance-for-now#_ftn7 [<https://perma.cc/PU4Q-RZJU>].

172. See Sarah Jodka, *Manipulating reality: the intersection of deepfakes and the law*, REUTERS (Feb. 1, 2024, 12:01 PM), <https://www.reuters.com/legal/legalindustry/manipulating-reality-intersection-deepfakes-law-2024-02-01/#:~:text=Defamation%20and%20false%20light>

framework, courts may be hesitant to establish new precedents that address these modern issues, further complicating the legal landscape.¹⁷³ Thus, while states can attempt to enact protections, they are unlikely to provide the comprehensive solutions necessary to effectively combat the widespread misuse of personal identity online.

Consequently, Congress must take action to establish a federal right of publicity law for several compelling reasons. First, the intersection of the right of publicity with free speech issues under the First Amendment necessitates a framework that balances personal identity protection with freedom of expression, clarifying how these rights can coexist.¹⁷⁴ Additionally, the Commerce Clause grants the federal government the authority to regulate interstate commerce, and a federal statute would provide the uniformity and predictability necessary for individuals and entities engaged in cross-state publicity rights issues.¹⁷⁵ Furthermore, the Fourteenth Amendment's Due Process and Equal Protection Clauses suggest that everyone should have a fair opportunity to safeguard their rights, including publicity rights, regardless of state jurisdiction.¹⁷⁶ By establishing a federal law, Congress would create a foundation for federal jurisdiction in disputes involving publicity rights, addressing the complexities that arise when individuals from different states are involved. Ultimately, a federal approach would ensure justice and consistency, mitigating the legal challenges varying state laws pose.

Encouragingly, the landscape regarding a federal right of publicity may be shifting, as indicated by the January 2024 Congressional Legal Sidebar titled *Artificial Intelligence Prompts Renewed Consideration of a Federal Right of Publicity*, which surveyed existing state right of publicity laws and their intersection with federal intellectual property torts suggesting that a more unified federal framework may be closer than not.¹⁷⁷ Most promisingly, the NO FAKES Act, introduced on July 31,

%20laws&text=If%20a%20deepfake%20falsely%20represents,laws%20can%20offer%20some%20recourse [https://perma.cc/4Q2S-9GAS].

173. See generally Mathilde Cohen, *Sincerity and Reason-Giving: When May Legal Decision Makers, Lie?*, 59 DEPAUL L. REV. 1091, 1091, 1101 (2010) (informing readers that when the lawfulness of a judge's decision is assessed the judge's reasoning is scrutinized. Thus, judges generally rely on a variety of sources like constitutional provisions, statutory texts, and case law to justify their decisions).

174. *Id.* at 6.

175. See *id.* at 5–6.

176. See Nathan Chapman & Kenji Yoshino, *Common Interpretation of The Fourteenth Amendment Due Process Clause*, NAT'L CONST. CTR., <https://constitutioncenter.org/the-constitution/articles/amendment-xiv/clauses/701> [https://perma.cc/JBV6-XB9L].

177. CHRISTOPHER. T. ZIRPOLI, CONG. RSCH. SERV., LSB11052, *ARTIFICIAL INTELLIGENCE PROMPTS RENEWED CONSIDERATION OF A FEDERAL RIGHT OF PUBLICITY 1* (2024); other recently proposed federal legislation targeting deepfake content includes the Protecting Consumers from Deceptive AI Act, H.R. 7766, 118th Cong. (2024) (proposing that the National Institute of

2024, by Senators Chris Coons, Marsha Blackburn, Amy Klobuchar, and Thom Tillis, seeks to protect individuals from unauthorized digital replicas in audiovisual works by holding creators and platforms accountable for such violations.¹⁷⁸ While this legislation is a crucial first step toward safeguarding rights and balancing First Amendment concerns,¹⁷⁹ it still needs to pass to become effective. However, one notable critique of the legislation is its lack of provisions to help plaintiffs identify perpetrators, who are often technologically sophisticated and challenging to trace. While removal of unauthorized synthetic content is an important first step, the legislation must also prioritize deterrence which is only possible if wrongdoers cannot evade accountability simply because they are technologically savvier than their victim. Therefore, to increase its effectiveness, the NO FAKES Act should include support for plaintiffs in identifying deepfake creators such as reimbursement for hiring third-party forensic experts. Alternatively, it might be more effective and cost-efficient to build a dedicated task force within the Federal Trade Commission (FTC) to assist plaintiffs in identifying defendants. This approach would benefit individual plaintiffs and national security by enabling the development of a database of known offenders, potentially revealing patterns of illegal online behavior and helping the federal government stay ahead in detecting evolving synthetic content.

CONCLUSION

In conclusion, the challenges posed by unauthorized deepfakes and identity theft highlight the urgent need for a comprehensive federal right of publicity statute. Existing legal frameworks and proposed workarounds fail to adequately protect all plaintiffs in an increasingly complex digital landscape. With the rise of social media and influencer culture, individuals' online identities hold significant value, yet they remain vulnerable to exploitation without effective legal recourse. As security measures evolve to safeguard sensitive personal information—like biometric data that cannot be altered once compromised—victims are left with insufficient protections.

Standards and Technology (NIST) form task forces to develop a framework for identifying and labeling AI-generated or altered content and empowers the Federal Trade Commission (FTC) to enforce these regulations); the DEFIANCE Act of 2024, S. 3696, 118th Cong. (2024) (attempting to provide victims of non-consensual deepfake pornography a civil right of action through the expansion of legal definitions to include AI-created or doctored images); and the DEEPFAKES Accountability Act, H.R. 5586, 118th Cong. (2023) (proposing a requirement that deepfake-created content is clearly labeled as such, specifically targeting election interference, foreign influence, pornographic content, and harassment through civil and criminal penalties).

178. S. 4875, 118th Cong. (2024) (introduced July 31, 2024).

179. *Id.*

Moreover, deepfake creators often operate anonymously, complicating the process of identification and legal action.¹⁸⁰ The patchwork of state laws, which frequently favor celebrities and residents, does not account for the interconnected nature of the internet. Additionally, constitutional constraints such as the Dormant Commerce Clause and Due Process principles hinder state-based solutions. As the federal government delays action, wrongdoers are incentivized to exploit these gaps, targeting an increasingly vulnerable population. The complexity of current right of publicity claims further underscores the necessity for a unified federal statute that addresses these multifaceted issues, ensuring all individuals have the protection they deserve in the digital age.

180. Danielle F. Bass & Nathaniel Penning, *The Legal Issues Surrounding Deepfakes*, HONIGMAN (July 25, 2023), <https://www.honigman.com/the-matrix/the-legal-issues-surrounding-deepfakes> [<https://perma.cc/3KME-LUVP>].

RESEARCH OVER REGULATION: WHAT MUST BE DONE TO MANDATE WARNING LABELS ON SOCIAL MEDIA

*John L. Markel**

Abstract

Recently, outcry for social media regulation has risen after leaks, whistleblowers, and new research suggest that youth social media use has negative impacts on mental health. These claimed negative impacts can range from a variety of symptoms and diagnoses such as depression, anxiety, eating disorders, body image issues, envy, sleep loss, addiction, and even ADHD. Of course, technology companies adamantly deny such accusations and instead point to the benefits social media has for the youth and our society overall. Additionally, they make clear that this research is far from conclusive. This situation is simply a modernization of the previous situation the United States dealt with less than a decade ago, in the battle against “big tobacco.” For decades, tobacco companies claimed that their products were not only safe, but beneficial. However, it wasn’t until decades of research established the risks of tobacco use and a 1964 report from the Surgeon General’s Advisory Committee on Smoking and Health that tobacco products were finally regulated, with regulations such as age verification, warning labels, and advertisement restrictions. Now facing the battle against technology companies, many are advocating for similar regulations against social media to protect the youth and make them aware of the potential negative impacts of social media use. Yet, the research available supporting these claims is not yet at the level of what was available when tobacco products were finally regulated. Because of this, an attempt to mandate warning labels on social media is currently unlikely to withstand a constitutional challenge. Premature regulation of social media may create legal precedent through the inevitable litigation that will only make it more difficult to regulate social media in the future. For now, advocates must push for additional research before regulation.

INTRODUCTION	150
I. THE CURRENT STATE OF RESEARCH REGARDING SOCIAL MEDIA’S IMPACT ON YOUTH	153
II. MANDATING WARNING LABELS ON SOCIAL MEDIA IS LIKELY UNCONSTITUTIONAL	156
A. <i>Applying the Compelled Speech Doctrine to Mandated Warning Labels on Social Media</i>	158

* Candidate for Juris Doctor, West Virginia University College of Law, 2026; Bachelor of Science in Business Administration, University of Tennessee at Chattanooga, 2023.

B. <i>Applying the Compelled Commercial Speech Doctrine to Mandated Warning Labels on Social Media</i>	160
1. What Part of a Social Media Platform Is Commercial Speech?	162
2. The Current Circuit Split for Determining Whether Mandated Warning Labels Are Constitutional Under the Compelled Commercial Speech Doctrine	165
a. The Sixth Circuit's Test	166
b. The D.C. Circuit's Test	167
c. Under Either Test, Mandated Warning Labels on Social Media Are Likely Unconstitutional	170
III. WHAT MUST BE DONE TO MAKE MANDATED WARNING LABELS ON SOCIAL MEDIA CONSTITUTIONAL	172
A. <i>The Surgeon General's 2023 Advisory Must Be Followed to Achieve the Level of Research Required</i>	173
B. <i>How This Research Must Be Conducted</i>	176
CONCLUSION	177

INTRODUCTION

If the government had attempted to force tobacco companies to disclose the risks of using their tobacco products 100 years ago, before enough causative research existed establishing their harm, an interesting dilemma would've occurred. On the one hand, informing the public about the unknown risks of tobacco use would've saved countless lives had the government forced tobacco companies to disclose the potential for these risks. On the other hand, this premature regulation against a risk not yet fully established by research would directly go against the core of the First Amendment. Put simply, what can legally be done to warn the public during a possible health emergency when the health risk does not yet have enough evidence to establish its existence? In this dilemma, the government would have to answer the First Amendment's question of what compelling interest the government has in forcing the tobacco companies to disclose the risk of their products. Yet, as frustrating as it seems, a risk not fully established by research is no risk at all in the eyes of the First Amendment. The freedom to speak, or not to speak, is held higher than a good intentioned premature disclosure of a possible risk. Thus, in this dilemma the government can provide no answer, as the government cannot have a compelling interest in preventing a risk that

has yet to be proven. As a result, this dilemma concludes with tobacco products continuing to enter commerce without any disclosure of their newly discovered possible health risks, and Americans continue to consume these products without any warning of what it may be doing to their body. Unfortunately, this dilemma must be faced again with renewed urgency due to the prevalence of social media.¹

The high usage of social media in American youth has led to many calls for concern and accusations that social media use is a cause of the youth mental health crisis.² Former Surgeon General Vivek Murthy recently claimed that “[t]he mental health crisis among young people is an emergency—and social media has emerged as an important contributor.”³ In 2023, former Surgeon General Murthy issued *Social Media and Youth Mental Health: The U.S. Surgeon General’s Advisory*, which emphasized that the brain undergoes a highly sensitive period of development between ages ten and nineteen, and frequent social media use can have a significant impact on how regions of the brain develop.⁴ This has led to forty-two state attorneys general to rally support behind the Surgeon General in urging Congress to mandate warning labels on social media.⁵ In response, Congress introduced the Stop the Scroll Act, which would “require the Federal Trade Commission, with the concurrence of the Secretary of Health and Human Services acting through the Surgeon General, to implement a mental health warning label on social media platforms.”⁶ Additionally, the Biden-Harris Administration created the Kids Online Health and Safety Task Force in

1. For the purposes of this Note, social media will be defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content,” with Web 2.0 being described as a period beginning in 2004 that introduced platforms being continuously modified by all users in a collaborative fashion, rather than an individual. Andreas M. Kaplan & Micheal Haelelin, *Users of the world, unite! The challenges and opportunities of Social Media*, 53 BUS. HORIZONS 59, 60–61 (2010).

2. Kathy Katella, *How Social Media Affects Your Teen’s Mental Health: A Parent’s Guide*, YALE MED. (June 17, 2024), <https://www.yalemedicine.org/news/social-media-teen-mental-health-a-parents-guide> [https://perma.cc/JSP9-QQXN].

3. Vivek H. Murthy, *Surgeon General: Why I’m Calling for a Warning Label on Social Media Platforms*, NY TIMES (June 17, 2024), <https://www.nytimes.com/2024/06/17/opinion/social-media-health-warning.html> (last visited May 12, 2025) [hereinafter *Warning Label*].

4. VIVEK H. MURTHY, *SOCIAL MEDIA AND YOUTH MENTAL HEALTH: THE U.S. SURGEON GENERAL’S ADVISORY* 5 (2023) [hereinafter *Surgeon General’s Advisory*].

5. *42 State AGs Endorse Warning Labels on Social Media*, AM. BAR ASS’N (Sept. 27, 2024), https://www.americanbar.org/advocacy/governmental_legislative_work/publications/washingtonletter/september-24-wl/stage-ags-endorse-warning-labels-0924wl/ (last visited May 12, 2025).

6. Stop the Scroll Act, S. 5150, 118th Cong. (2024).

2023 to “protect youth mental health, safety, and privacy online,”⁷ with hopes of developing guidelines by 2024.⁸ Furthermore, multiple organizations have been created to bring awareness to the dangers of youth social media use. Yet, the Surgeon General admitted in the 2023 Advisory that we currently lack enough evidence to determine if social media is safe for youth, regardless of the growing amount of research regarding harms.⁹

For a mandated warning label on social media to withstand an inevitable First Amendment challenge by technology companies, advocates must first conduct high-quality research that will pass the existing legal tests before attempting to enact any regulation. When warning labels were mandated on tobacco products, a 1964 report by the Surgeon General’s Advisory Committee on Smoking and Health showed decades of extensive research establishing all of the health-related risks tobacco products cause.¹⁰ Yet, even with that level of research, litigation over the constitutionality of those warning labels has continued for over a decade and created two high-standard tests for warning labels to be upheld.¹¹ Mandating a warning label for social media would be premature and result in similar extensive litigation. The only way to overcome these constitutional hurdles is through causative longitudinal research that provides concrete evidence of the negative impact of social media usage on youth mental health. Once this research is available, the acting Surgeon General can generate a report establishing the validity of the risk which would likely allow for the government to successfully claim a

7. *Online Health and Safety for Children and Youth: Best Practices for Families and Guidance for Industry*, SAMHSA 1, 68 (2023), <https://www.samhsa.gov/kids-online-health-safety-task-force> [<https://perma.cc/E9XV-JPKP>].

8. See *It’s Time To Log Off*, LOG OFF MOVEMENT, <https://www.logoffmovement.org/> [<https://perma.cc/3PPT-97Q6>] (committing to helping youth “build healthy relationships with social media and online platforms”); *Childhood is Not For Sale*, WIRED HUMAN, <https://wiredhuman.org/> [<https://perma.cc/MHS3-EBRJ>] (advocating for protecting children from online exploitation and abuse); *Making Social Media Safe for Everyone*, ORG. FOR SOC. MEDIA SAFETY, <https://www.socialmediasafety.org/> [<https://perma.cc/2HHY-49C2>] (protecting against cyberbullying, hate speech, sexual harassment, propaganda, and depression/suicide).

9. Surgeon General’s Advisory, *supra* note 4, at 4 (“At this time, we do not yet have enough evidence to determine if social media is sufficiently safe for children and adolescents. We must acknowledge the growing body of research about potential harms, increase our collective understanding of the risks associated with social media use, and urgently take action[.]”).

10. See *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*, U.S. DEP’T OF HEALTH, EDUC., AND WELFARE (1964), <https://www.govinfo.gov/content/pkg/GPO-SMOKINGANDHEALTH/pdf/GPO-SMOKINGANDHEALTH.pdf> [<https://perma.cc/565R-4D7S>].

11. Dorothy Atkins, *Tobacco Cos. Ask Justices To Review FDA’s New Warnings*, LAW360 (Aug. 21, 2024, 9:22 PM), <https://www.law360.com/healthcare-authority/articles/1872339/tobacco-cos-ask-justices-to-review-fda-s-new-warnings> [<https://perma.cc/744D-8V4R>]. See *infra* Section II.B.2.

compelling interest in regulating social media. Until then, those calling for regulation must instead shift their call to action towards research.

This Note will examine the legal hurdles that a mandated warning label on social media, such as proposed in the Stop the Scroll Act, would have to overcome, and what advocates need to do to clear those hurdles. Part I will provide an analysis on the current state of research regarding social media usage's impact on youth and the current pitfalls of such research. This Part will also argue the current research does not yet fully support the claim that social media usage has a negative impact on youth mental health, and that evolutions of social media platforms may invalidate the existing research. Part II will explain the two possible First Amendment doctrines that could be applied to a mandated warning label on social media in determining whether they are constitutional. The compelled speech doctrine will be applied first, ultimately proposing the government cannot currently claim the compelling interest of warning youth about the risk of using social media because not enough evidence exists proving that the risk is real. Next, the compelled commercial speech doctrine will be applied to the mandated warning labels on social media, ultimately proposing it would fail for the previous reason in addition to limiting where the warning label could appear on a social media platform. Finally, Part III will advocate for what must be done in order to satisfy the strict demands of either doctrine, thus allowing mandated warning labels on social media to be held as constitutional. First, the Surgeon General's 2023 Advisory must be followed to quickly accumulate the research necessary for the acting Surgeon General to claim that social media usage has a negative effect on youth mental health. Lastly, depending on which First Amendment doctrine applies to warning labels on social media, it may be required that the research is conducted in a specific manner and by a specific agency.

I. THE CURRENT STATE OF RESEARCH REGARDING SOCIAL MEDIA'S IMPACT ON YOUTH

Currently, the research regarding social media usage's impact on youth mental health is in its infancy and contains several flaws.¹² While data is clear on the usage rate of social media in American youth, the impacts social media usage has is primarily correlative and only somewhat causative.¹³ Further, technology companies failing to be

12. For the purposes of this Note, "youth" will be defined as ages 0-17. While some of the research and case law in this Note use the terms "children" and "minors," they are used interchangeably and each refer to those under 18 years of age. If research refers to a specific age range within the youth, it will be explicitly stated.

13. See, e.g., Kira E. Riehm et al., *Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth*, JAMA PSYCHIATRY 1266, 1266

transparent with data and research leaves critical questions about these impacts unanswered. Finally, social media presents a unique problem where past research can become invalidated as social media platforms rapidly evolve in their designs and functions.

Social media use in American youth has become so prevalent that the percentage of youth who use social media is almost double the percentage who participate in sports.¹⁴ In a 2020 study, over one-third of parents said their child began interacting with smartphones before they were five years old.¹⁵ By the time children are fourteen, 92% have access to a smartphone, increasing to 97% by the time they reach seventeen.¹⁶ Social media use in children aged thirteen to seventeen is high, with some children going as far as describing their social media usage as “almost constant.”¹⁷ Regarding specific social media applications, children in this age group use YouTube the most at 93%, TikTok at 63%, Snapchat at 60%, and Instagram at 59%.¹⁸ Of these children who use those social media applications, 54% of them claim they would be hard to give up.¹⁹

The current research on social media usage’s impact on youth mental health shows some correlation to negative mental impacts.²⁰ Children who spend three or more hours a day on social media face double the risk

(2019) (“... spending more than 30 minutes of time on social media, compared with no use, was associated with increased risk of internalizing problems alone”).

14. *Compare State of Play 2024: Participation Trends*, PROJECT PLAY: ASPEN INST., <https://projectplay.org/state-of-play-2024-participation-trends> [https://perma.cc/2E45-QMXQ] (showing that 54% of youth aged 6-17 played sports in 2022), *with Social Media and Teens*, AM. ACAD. OF CHILD & ADOLESCENT PSYCHIATRY (Mar. 2018), https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Social-Media-and-Teens-100.aspx#:~:text=Social%20media%20plays%20a%20big,not%20including%20time%20for%20homework [https://perma.cc/BF39-CR24] (showing that 90% of teens ages 13-17 have used social media).

15. Brooke Auxier et al., *I. Children’s Engagement with Digital Devices, Screen Time*, PEW RSCH. CTR. (July 28, 2020), <https://www.pewresearch.org/internet/2020/07/28/childrens-engagement-with-digital-devices-screen-time/> [https://perma.cc/259J-4CAX].

16. Ani Petrosyan, *Percentage of Teenagers in the United States Who Have Access to a Smartphone at Home as of October 2023, by Age Group*, STATISTA (Feb. 28, 2024), <https://www.statista.com/statistics/476050/usage-of-smartphone-teens-age/#:~:text=Share%20of%20U.S.%20teenagers%20with%20smartphone%20access%202023%2C%20by%20age&text=According%20to%20a%202023%20survey,stated%20owning%20a%20smartphone%20device> [https://perma.cc/A6VN-PLBY].

17. Monica Anderson et al., *Teens, Social Media and Technology 2023*, PEW RSCH. CTR. (Dec. 11, 2023), <https://www.pewresearch.org/internet/2023/12/11/teens-social-media-and-technology-2023/> [https://perma.cc/55GQ-4C43].

18. *Id.*

19. Emily A. Vogels et al., *Teens, Social Media and Technology 2022*, PEW RSCH. CTR. (Aug. 10, 2022), <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/> [https://perma.cc/F82C-BYU6].

20. *See infra* note 21.

for depression and anxiety.²¹ The average teen spends 4.8 hours on social media per day.²² This excessive social media use has been shown in small studies to change brain structure in a similar nature that occurs in gambling addicts.²³ Additionally, about half of adolescents self-reported that social media makes them feel worse about their body, lonely or isolated, and that their life is worse than others.²⁴ Continually, social media promotes upward social comparison, comparing yourself to someone who is “better off,” which has been linked to increased body dissatisfaction and eating disorders in adolescent girls.²⁵ This has also led to body shame in adolescents going through puberty, as social media promotes impossible cultural body standards such as muscularity for boys and thinness for girls.²⁶ The reasoning for these findings has been shown through neuroscience research, which established three risk characteristics for adolescents having a negative reaction to social media: “(1) the heightened sensitivity to social cues; (2) increased emotional responses as a product of underdeveloped judgment regions and more mature emotion processing regions; and (3) social media’s ability to activate reward processing regions in the brain to motivate continued engagement.”²⁷ Furthermore, social media algorithms have been found to promote self-harm, suicide, hate content, and cyberbullying that creates a constant and influential impact on adolescent brains.²⁸ Finally, a

21. Kira E. Riehm et al., *Associations Between Time Spent Using Social Media and Internalizing and Externalizing Problems Among US Youth*, JAMA PSYCHIATRY (Sept. 11, 2019), <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2749480> [https://perma.cc/G3LS-KEAV].

22. Jonathan Rothwell, *Teens Spend Average of 4.8 Hours on Social Media Per Day*, GALLUP (Oct. 13, 2023), <https://news.gallup.com/poll/512576/teens-spend-average-hours-social-media-per-day.aspx> [https://perma.cc/X99U-XZQ8].

23. Qinghua He et al., *Brain anatomy alterations associated with Social Networking Site (SNS) addiction*, 7 SCI. REP., Mar. 23, 2017, at 1, <https://www.nature.com/articles/srep45064> [https://perma.cc/CYG5-HWYP]; Holly Shannon et al., *Problematic Social Media Use in Adolescents and Young Adults: Systematic Review and Meta-analysis*, 9 JMIR MENTAL HEALTH, Apr. 14, 2022, at 2, <https://mental.jmir.org/2022/4/e33450> [https://perma.cc/C6GM-XYZQ].

24. David Brickham et al., *Adolescent Media Use: Attitudes, Effects, and Online Experiences*, DIGIT. WELLNESS LAB, Aug. 2022, at 14, https://digitalwellnesslab.org/wp-content/uploads/Pulse-Survey_Adolescent-Attitudes-Effects-and-Experiences.pdf [https://perma.cc/BQ6J-Z5KS].

25. Federica Pedalino & Anne-Linda Camerini, *Instagram Use and Body Dissatisfaction: The Mediating Role of Upward Social Comparison with Peers and Influencers Among Young Females*, 19 INT’L J. ENV’T RSCH. PUB. HEALTH 1, 3, 7–9 (Jan. 29, 2022).

26. Illyssa Salomon & Christia Spears Brown, *The Selfie Generation: Examining the Relationship Between Social Media Use and Early Adolescent Body Image*, 39 J. EARLY ADOLESCENCE 539, 548–52 (2022).

27. Nancy Costello et al., *Algorithms, Addiction, and Adolescent Mental Health: An Interdisciplinary Study to Inform State-Level Policy Action to Protect Youth from the Dangers of Social Media*, 49 AM. J.L. & MED. 135, 146–47 (2023).

28. Surgeon General’s Advisory, *supra* note 4, at 8.

systematic review of multiple studies from the past several years established an association between social media use and negative mental health problems, however some complexities exist.²⁹

The two primary issues with the current research on social media's impact on youth is the low amount of causative longitudinal research showing its impact and the rapid elusiveness of the social media platforms nullifying previous research. First, the Surgeon General has stated in the 2023 Advisory that several critical questions remain unanswered due to the lack of transparency and data from technology companies about the impact social media has on users, including questions that would establish possible benefits.³⁰ Second, the rapid changes in the models and functions of social media can invalidate previous studies and research as their insight is limited to outdated models.³¹ While the first issue can be remedied over time with additional research, the second issue will pose a constant challenge as social media platforms will continue to evolve and research based on outdated models may be considered inapplicable to arguments about its risks to youth mental health.

Overall, while some causative research is beginning to emerge about social media usage's impact on youth mental health, not enough exists yet for the Surgeon General to conclusively state that a risk exists. As the correlative research discussed above clearly shows the theory of the risk is valid, more longitudinal and causative research will need to be done to support the claim that social media has a negative impact on youth mental health.

II. MANDATING WARNING LABELS ON SOCIAL MEDIA IS LIKELY UNCONSTITUTIONAL

When a mandated warning label on social media, such as proposed in the Stop the Scroll Act, is inevitably challenged as the mandated warning labels on tobacco products were,³² courts will likely apply the First Amendment to analyze their constitutionality. This is because the First

29. Betül Keles et al., *A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents*, 25 INT'L J. OF ADOLESCENCE & YOUTH 79, 90 (Mar. 21, 2019).

30. Surgeon General's Advisory, *supra* note 4, at 11–12.

31. Costello et al., *supra* note 27, at 143–44.

32. See *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205 (D.C. Cir. 2012), *overruled by* *Am. Meat Inst. v. U.S. Dep't of Agric.*, 760 F.3d 18 (D.C. Cir. 2014); *Am. Meat Inst. v. U.S. Dep't of Agric.*, 760 F.3d 18 (D.C. Cir. 2014) (holding that *Zauderer* now applies to problems beyond deception, where the *R.J. Reynolds* Court held *Zauderer* could only be applied to deception); *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509 (6th Cir. 2012). See generally Ian McKay, *Up in Smoke: Why Regulating Social Media Like Big Tobacco Won't Work (Yet!)*, 97 NOTRE DAME L. REV. 1669 (2022) (providing in part a historical analysis of big tobacco litigation against mandated warning labels).

Amendment protects a speaker's right to not speak (whether an individual or a corporation) just as much as it protects the speaker's right to speak.³³ Therefore, anytime the government compels a speaker to say something against their will it is subject to strict scrutiny.³⁴ This is known as the compelled speech doctrine,³⁵ and this level of scrutiny can only be survived if the compulsion is "narrowly tailored to promote a compelling Government interest, and if a less restrictive alternative would serve the Government's purpose, the legislature must use that alternative."³⁶ However, courts have recognized that some types of speech are afforded less constitutional protection, and thus are subject to a lower level of scrutiny.³⁷ Among these lesser protected types of speech is commercial speech, which is generally defined as speech that proposes an economic transaction, like an advertisement.³⁸ Thus, when the government compels speech in a commercial context, it will only be subject to intermediate scrutiny, or sometimes even rational basis.³⁹ Based on these two doctrines, and their varying levels of scrutiny, a mandated warning label on social media has two separate ways it could navigate a First Amendment challenge, and the likelihood for a mandated warning label on social media to be upheld depends on which doctrine is applied.

In addition to which doctrine is applied to mandated warning labels on social media, the likelihood of a court upholding their constitutionality is dependent on the text and actual location of the warning label on a social media platform. For the purposes of this analysis, it will be assumed that the warning label would appear inside the social media

33. See *W. Virginia State Bd. of Educ. v. Barnette*, 319 U.S. 624, 645 (1943); *Pac. Gas & Elec. Co. v. Pub. Utils. Comm'n of Cal.*, 475 U.S. 1, 11 (1986).

34. VICTORIA L. KILLION, CONG. RSCH. SERV., R47986, *FREEDOM OF SPEECH: AN OVERVIEW* 4 (2024) (explaining that strict scrutiny is generally applied to laws regulating speech based on its content or message, barring an exception such as commercial speech).

35. See William M. Howard, *Constitutional Challenges to Compelled Speech—Particular Situations or Circumstances*, 73 A.L.R. 6th 281 (2012) (explaining the compelled speech doctrine and surveying jurisdiction-specific caselaw).

36. *United States v. Playboy Ent. Grp., Inc.*, 529 U.S. 803, 804 (2000).

37. KILLION, *supra* note 34, at 4–8 (explaining the levels of scrutiny applied to different types of speech, noting that commercial speech and content-neutral laws receive lesser constitutional protection).

38. Dayna B. Royal, *Resolving the Compelled-Commercial-Speech Conundrum*, 19 VA. J. SOC. POL'Y & L. 205, 207, 213 (2011).

39. See *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205, 1217 (D.C. Cir. 2012) (holding that compelled commercial speech was subject to intermediate scrutiny via the *Central Hudson* test); see *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509, 559 (6th Cir. 2012) (holding that compelled commercial speech was subject to rational basis via the *Zauderer* test). Additionally, this Note will not discuss the complex relationship of commercial speech and compelled speech and will provide later analysis using the current understanding of the hybrid compelled commercial speech doctrine. For a more in-depth explanation of the doctrine and the debate over the doctrine, See Robert Post, *Compelled Commercial Speech*, 117 W. VA. L. REV. 867 (2015).

platform, as the proposed Stop the Scroll Act would require.⁴⁰ More specifically, the warning label would appear each time a user accesses the social media platform within the United States, and would only disappear when either the user exited the platform or acknowledged the potential harm and chose to continue despite the risk.⁴¹ The text of the warning label would provide a warning of the “potential negative mental health impacts of accessing the social media platform[]” and provide access to resources to assist with the negative impacts, such as the number and website for the national suicide prevention hotline.⁴² These specifics of the mandated warning label on social media will not have an impact when applying the compelled speech doctrine, yet it will demonstrate why the compelled commercial speech doctrine limits where and how the warning label may be applied.

First, the compelled speech doctrine will be applied to the mandated warning labels on social media proposed in the Stop the Scroll Act. By applying strict scrutiny to the warning label, it will be shown that it likely fails to survive that standard because of the current lack of research supporting the claim that social media is harmful to youth mental health. Second, the compelled commercial speech doctrine will be applied. While having the lower scrutiny standards, this doctrine is also likely to fail because of the lack of research along with the complex argument of determining which part of a social media platform is considered commercial speech. Although both doctrines provide a path for regulation to be upheld, it is unlikely that either doctrine will prevent a mandated warning label on social media being held as unconstitutional because of the lack of research establishing that a risk currently exists.

A. Applying the Compelled Speech Doctrine to Mandated Warning Labels on Social Media

Under the compelled speech doctrine, strict scrutiny would be employed to assess the constitutionality of the mandated warning labels on social media.⁴³ These mandated warning labels would have to be “narrowly tailored to promote a compelling Government interest.”⁴⁴ The mandated warning label would only be narrowly tailored “if it targets and eliminates no more than the exact source of the ‘evil’ it seeks to remedy.”⁴⁵ Therefore, if “a less restrictive alternative would serve the

40. Stop the Scroll Act, S. 5150, 118th Cong. (2024).

41. *Id.*

42. *Id.*

43. See *United States v. Playboy Ent. Grp., Inc.*, 529 U.S. 803, 813 (2000); *FCC v. Pacifica*, 438 U.S. 726, 751 (1978).

44. *Playboy*, 529 U.S. at 811.

45. *Ward v. Rock Against Racism*, 491 U.S. 781, 804 (1989).

Government's purpose" the mandated warning labels would not be narrowly tailored.⁴⁶

Starting with the requirement for a compelling government interest, this is unlikely to be satisfied because the government cannot have an interest in a risk that hasn't been established. In the Stop the Scroll Act, the government interest claimed is to "warn the user of potential negative mental health impacts of accessing the social media platform."⁴⁷ Although the Supreme Court has repeatedly held that protecting the psychological and physical well-being of youth is a compelling interest,⁴⁸ this cannot be applied here until causative research shows that social media use is harmful to youth mental health.⁴⁹ Between the Surgeon General's 2023 Advisory conceding that "at this time we currently do not yet have enough evidence to determine if social media is sufficiently safe for children and adolescents,"⁵⁰ and technology companies claiming that their products are actually beneficial,⁵¹ it is unlikely a court would yet agree with the claim that the psychological well-being of the youth is at risk because of social media usage. Thus, it is unlikely that a compelling government interest can be established until the Surgeon General has enough evidence to report that youth social media use is a risk to their psychological and physical well-being.

Next, even if the compelling government interest was established, it is still required that the mandated warning labels are narrowly tailored to achieve the interest of "warn[ing] the user of potential negative mental health impacts of accessing the social media platform."⁵² However, this language causes concern over whether these warning labels are narrowly tailored. Proponents of mandated warning labels on social media use youth and user interchangeably. The Act proposing the mandated warning labels on social media is not specifically targeted to protect youth psychological well-being, but rather is directed at protecting users.⁵³ Yet, former Surgeon General Murthy, whose 2023 Advisory

46. *Playboy*, 529 U.S. at 813.

47. Stop the Scroll Act, S. 5150, 118th Cong. (2024).

48. *Sable Commc'ns of Cal., Inc. v. FCC*, 492 U.S. 115, 126 (1989); see *Ashcroft v. ACLU*, 542 U.S. 656, 675 (2004).

49. See generally *Warning Label*, *supra* note 3; Costello et al., *supra* note 27, at 143; Michaelleen Doucleff, *The truth about teens, social media and the mental health crisis*, NPR (Apr. 25, 2023, 9:28 AM), <https://www.npr.org/sections/health-shots/2023/04/25/1171773181/social-media-teens-mental-health> [<https://perma.cc/6UDK-9RZ8>].

50. Surgeon General's Advisory, *supra* note 4, at 4.

51. Zach Rausch et al., *Social-Media Companies' Worst Argument*, THE ATLANTIC (Sept. 12, 2024), <https://www.theatlantic.com/ideas/archive/2024/09/social-media-lgbtq-teens-harms/679798/> [<https://perma.cc/5FKU-4MJF>].

52. *United States v. Playboy Ent. Grp., Inc.*, 529 U.S. 803, 813 (2000); Stop the Scroll Act, S. 5150, 118th Cong. (2024).

53. See Stop the Scroll Act, S. 5150, 118th Cong. (2024).

sparked the forty-two state attorneys general to advocate for these mandated warning labels,⁵⁴ called for the mandated warning labels specifically because of the mental health crisis in young people.⁵⁵ This contradiction may not be deemed narrowly tailored, as the Supreme Court has struck down First Amendment restrictions that are targeted for youth but end up impacting adults.⁵⁶ However, this discrepancy could be fixed in two ways. First, legislators and advocates for this mandate would have to commit to the language of protecting all users, not just the youth, and focus research on all age ranges. Second, the proposed Act would need to be rephrased to specifically target youth, and the mandated warning labels would only be placed on users who self-identify as seventeen years old or younger. Regardless, until this discrepancy is fixed, a court may find that the warning labels proposed in the Stop the Scroll Act are not narrowly tailored.

Overall, for mandated warning labels on social media to survive strict scrutiny through the compelled speech doctrine, more research is needed to establish that there is a risk to have a substantial interest in as well as clarifying who this mandate is really trying to protect.

B. Applying the Compelled Commercial Speech Doctrine to Mandated Warning Labels on Social Media

Under the compelled commercial speech doctrine, the law that would be applied to mandated warning labels on social media would likely come from litigation by tobacco companies that challenged mandated warning labels on cigarettes. This is because the existing mandated warning labels for cigarettes and the mandated warning labels for social media proposed in the Stop the Scroll Act are both created and regulated by an agency that Congress empowers through an act. In 2009, the Food and Drug Administration (FDA) was given the authority through the Family Smoking Prevention and Tobacco Control Act (TCA) to mandate warning labels for tobacco products, including cigarettes.⁵⁷ The Stop the Scroll Act is functionally identical, with the Stop the Scroll Act giving the Federal Trade Commission (FTC) the authority to create and mandate warning labels on social media.⁵⁸ Although the mandated warning labels that were litigated following the TCA came from the inclusion of

54. 42 State AGs *Endorse Warning Labels on Social Media*, *supra* note 5.

55. *Warning Label*, *supra* note 3.

56. See *Sable Commc'ns of Cal., Inc. v. FCC*, 492 U.S. 115, 126 (1989) (holding that an attempt to filter out youth callers on obscene telephone messages unintentionally restricted some adult access to the telephone messages, and thus far exceeded what was necessary to serve the compelling interest of restricting minor access to the telephone messages).

57. Family Smoking Prevention and Tobacco Control and Federal Retirement Form, Pub. L. No. 111–31, 123 Stat. 1776 (2009) (codified in scattered sections of 15 U.S.C. and 21 U.S.C.).

58. Stop the Scroll Act, S. 5150, 118th Cong. (2024).

graphics, and not the existing textual part of the warning label,⁵⁹ the law from this litigation is still applicable to textual warning labels on social media because, like the graphics, it is unlikely that they are yet purely factual, uncontroversial, or effective.⁶⁰ Thus, the litigation that came from the TCA regarding the constitutionality of the mandated warning labels on cigarettes would likely be applied to mandated warning labels on social media, and applying the legal standards used in those cases show that mandated warning labels on social media is also likely to be held as unconstitutional under the compelled commercial speech doctrine.

The litigation resulting from tobacco companies' challenges to the mandatory warning labels on cigarettes was based on First Amendment grounds, yet a circuit split occurred over how to apply the First Amendment to the mandated warning labels.⁶¹ Both the D.C. and Sixth Circuits, in determining which level of scrutiny applies to the mandates, applied the commercial speech doctrine to the mandates as the cigarette's packaging was considered an advertisement of the cigarettes themselves.⁶² The application of this doctrine is important because it lowers the scrutiny level that a required mandate on speech has to survive, thus making it easier to regulate the speech compared to the compelled speech doctrine.⁶³ By classifying the warning labels in these cases as commercial speech, instead of compelled speech, the government had a higher chance to have the mandated warning labels upheld due to the lower burden it had to prove. The commercial speech doctrine is applied if a regulation mandates additional information within a commercial speech context, with commercial speech being generally defined as speech that proposes an economic transaction like an advertisement.⁶⁴ While the commercial speech doctrine is traditionally a separate doctrine from the compelled speech doctrine, the two have recently been blurred together in cases regarding commercial speech contexts, resulting in the

59. *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509, 525–26 (6th Cir. 2012); *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205, 1211 (D.C. Cir. 2012) *overruled by* *Am. Meat Inst. v. U.S. Dep't of Agric.*, 760 F.3d 18 (D.C. Cir. 2014); *see* *Am. Meat Inst. v. U.S. Dep't of Agric.*, 760 F.3d 18, 20 (D.C. Cir. 2014) (holding that *Zauderer* now applies to problems beyond deception, where the *R.J. Reynolds* court held *Zauderer* could only be applied to deception).

60. *See infra* Section II.B.2.

61. *See* *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205 (D.C. Cir. 2012); *see* *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509 (6th Cir. 2012).

62. *See* *R.J. Reynolds*, 696 F.3d; *see* *Disc. Tobacco City & Lottery, Inc.*, 647 F.3d.

63. *KILLION*, *supra* note 34, at 4–8.

64. Dayna B. Royal, *Resolving the Compelled-Commercial-Speech Conundrum*, 19 VA. J. SOC. POL'Y & L. 205, 207, 213 (2011).

hybrid compelled commercial speech doctrine.⁶⁵ This new hybrid doctrine is what resulted in the circuit split here, as both circuits understood the doctrine differently and applied a different level of scrutiny to the mandated warning labels on cigarettes when deciding the cases.⁶⁶ Thus, a compelled commercial speech application will require applying the legal standard from both circuits to determine whether a court would uphold a mandated warning label on social media.

First, an analysis will discuss how far the compelled commercial speech doctrine could be applied to a social media platform. As the doctrine is limited to speech that generally proposes an economic transaction, it is likely that a warning label could not be placed within a social media platform, but only on its download page or signup page. Next, after establishing which parts of a social media platform can be considered commercial speech, the two approaches from the D.C. Circuit and Sixth Circuit will be applied. This application will show that, again, because of a lack of research establishing the psychological risk of social media usage on the youth, it is likely a mandated warning label on social media would currently be held unconstitutional.

1. What Part of a Social Media Platform Is Commercial Speech?

The Supreme Court stated that commercial speech is “usually defined as speech that does no more than purpose a commercial transaction[.]”⁶⁷ Yet, “speech that does not propose a commercial transaction on its face can still be commercial speech.”⁶⁸ In *Bolger v. Youngs Drug Products Corp.*,⁶⁹ the Court laid out a three-part test,⁷⁰ which has later been characterized by several circuits⁷¹ as asking “1. [w]hether the communication is an advertisement; 2. [w]hether it refers to a specific product or service; and 3. [w]hether the speaker has an economic

65. Anderson Chang, *The Family Smoking Prevention and Tobacco Control Act, Graphic Warning Labels, and the Future of Compelled Commercial Speech*, 11 FIRST AMEND. L. REV. 441, 447 (2013). See Royal, *supra* note 64; see Timothy J. Straub, *Fair Warning?: The First Amendment, Compelled Commercial Disclosures, and Cigarette Warning Labels*, 40 FORDHAM URB. L.J. 1201, 1205 (2013).

66. See *R.J. Reynolds*, 696 F.3d at 1211; see *Disc. Tobacco*, 647 F.3d at 554.

67. *United States v. United Foods, Inc.*, 533 U.S. 405, 409 (2001) (defining “commercial speech” as expression related solely to the economic interests of the speaker and its audience).

68. *Ariix, LLC v. NutriSearch Corp.*, 985 F.3d 1107, 1115 (9th Cir. 2021) (holding that speech need not explicitly propose a commercial transaction to qualify as commercial speech).

69. *Bolger v. Youngs Drug Prods. Corp.*, 463 U.S. 60 (1983) (establishing a three-part test for determining what constitutes commercial speech).

70. *Id.* at 66–67 (outlining the three-part test).

71. See, e.g., *U.S. Healthcare, Inc. v. Blue Cross of Greater Phila.*, 898 F.2d 914, 933 (3d Cir. 1990) (applying the *Bolger* test to assess commercial speech); *Porous Media Corp. v. Pall Corp.*, 173 F.3d 1109 (8th Cir. 1999); *Ass’n of Nat. Advertisers, Inc. v. Lungren*, 44 F.3d 726, 728 (9th Cir. 1994); see generally GOVDISCRIM § 11:10. Freedom of expression—Commercial speech (providing extensive case law by Circuit regarding commercial speech and its application).

motivation for the speech.”⁷² While one of these factors alone cannot establish commercial speech,⁷³ all three are not required.⁷⁴ The Supreme Court later clarified that the third factor requires the speaker to primarily act out of economic motivation, and not just some economic motivation.⁷⁵

Applying this test to a social media platform shows the limitation this classification would have for mandated warning labels on social media. While the Stop the Scroll Act requires the warning labels to appear inside the social media platform, this is likely unobtainable under this doctrine.⁷⁶ If this doctrine is applied, it is likely that the warning label could only appear in a few specific places.

Applying the first *Bolger* factor, what part of a social media platform is an advertisement? As the tobacco cases from the D.C. Circuit and Sixth Circuit explained, the cigarette packages were considered to be communicating an advertisement to purchase and use the cigarettes themselves.⁷⁷ Thus, the question becomes: which part of a social media platform is communicating an advertisement to use the platform itself? Starting broadly, a social media platform’s download page on the Google Play or Apple Store could easily be considered an advertisement to use the platform itself because the features and promotions of the page are solely for marketing purposes.⁷⁸ Additionally, this logic could possibly be applied to the desktop version of social media platforms.⁷⁹ For example, on Facebook’s desktop version, the home page offers the ability

72. 20A2 MNPRAC § 20:26. *Commercial advertising or promotion—Commercial speech* (discussing factors courts consider in determining whether speech is commercial).

73. *Bolger v. Youngs Drug Prod. Corp.*, 463 U.S. 60, 66–67 (1983) (discussing when advertising speech is considered commercial and noting that an ad with a product focus and economic motive is commercial speech despite also addressing public issues).

74. *Id.* at 68.

75. *Ariix, LLC v. NutriSearch Corp.*, 985 F.3d 1107, 1115–17 (9th Cir. 2021) (applying *Bolger*’s three-factor test as “guideposts” for commercial speech and holding that a purportedly independent product review guide can be treated as commercial promotion if secretly paid-for).

76. *See* Stop the Scroll Act, S. 5150, 118th Cong. (2024).

77. *See* *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205, 1214 (D.C. Cir. 2012) (holding that the FDA’s required graphic warnings on cigarette packages violated the First Amendment); *see also* *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509, 525 (6th Cir. 2012).

78. *See* Meghana M. & Chris C., *Get started with app discovery and marketing*, APPLE DEVELOPER, <https://developer.apple.com/videos/play/tech-talks/110358/#:~:text=Below%20your%20app%20icon%2C%20name,new%20version%20to%20App%20Review> [<https://perma.cc/8T3A-KK9N>] (explaining how the Apple App Store functions, how to advertise your app, and different marketing mechanisms you can use to advertise your app); *see also* *Promoting your apps and games*, APPLE DEVELOPER, <https://developer.apple.com/app-store/promote/#:~:text=App%20Store%20marketing%20tools,apps%20in%20your%20advertising%20efforts> [<https://perma.cc/2YGD-HH8C>] (last visited May 9, 2025).

79. For the purposes of this argument, “desktop version” is defined as the version of a social media that is accessed via the internet through a web browser, rather than the version that is accessed through an app on a smart phone.

to create a new account and includes language such as “[c]onnect with friends and the world around you on Facebook” and “[c]reate a [p]age for a celebrity, brand, or business.”⁸⁰ Thus, a mandated warning label that only appeared on these specific parts of a social media platform would likely satisfy the first *Bolger* factor in establishing that the social media platform is commercial speech. However, it is very unlikely that this reasoning would extend to allow a warning label inside of a social media platform itself, which is what the Stop the Scroll Act would require.⁸¹ Going back to the tobacco cases, the arguments up to this point have been analogous: the cigarette packaging is communicating an advertisement to buy and use the cigarettes themselves, and a social media platform’s download page or home page is communicating an advertisement to use the platform itself. But by requiring the warning label to appear inside the platform, for example on your Facebook feed as you scroll, it must be established that the functionality of the Facebook feed is communicating an advertisement to keep using Facebook.⁸² Again, as an analogy, this is making the argument that by smoking the individual cigarette, the cigarette itself is communicating an advertisement to the user to continue smoking cigarettes. While insiders and early research have suggested that social media platforms are as addictive as cigarettes,⁸³ it has never been held by a court that a product’s addictiveness alone constitutes an advertisement for continued use in the First Amendment sense. Thus, the first *Bolger* factor would likely limit a mandated warning label on social media to only appear on a social media platform’s download page or home page.

The second *Bolger* factor is much easier to establish for a social media platform. The communication, from the platform’s download page or home page, is clearly referencing a specific product in its communication, the social media platform itself. Thus, the second factor should easily be satisfied.

The third and final *Bolger* factor would not be as easy to establish as the second but is still likely to be proven. Initially, it appears that a social

80. Facebook, FACEBOOK, <https://www.facebook.com/?rdr> (last visited May 9, 2025).

81. See Stop the Scroll Act, S. 5150, 118th Cong. (2024) (proposing to require health or safety warning labels on social media platforms to address excessive usage and associated harms).

82. This analysis is assuming that the Facebook feed is an empty and contentless algorithm, with no other First Amendment protections implicated by the inclusion of posts and expressions from Facebook’s users. However, if the Facebook feed is being looked at in conjunction with the content produced from Facebook users, then the Facebook feed would lose its commercial speech classification (if at all possible it could obtain that classification) as it would be “inextricably intertwined with otherwise fully protected speech.” *Riley v. Nat’l Fed’n of the Blind of N. Carolina, Inc.*, 487 U.S. 781, 796 (1988).

83. Juan Flores, *Ex-Facebook Executive Says Company Made Its Products as Addictive as Cigarettes*, CBS NEWS (Oct. 2, 2020, 7:22 AM), <https://www.cbsnews.com/news/facebook-addictive-as-cigarettes-former-executive-says> [<https://perma.cc/GEN6-FY2K>].

media platform has no economic motivation for its communication on its download page or home page because they are typically free to download or to sign up for an account.⁸⁴ However, this is because the user is the product.⁸⁵ First, social media platforms make their money through advertising.⁸⁶ Additionally, they make money by selling user data to advertisers.⁸⁷ This business model incentivizes one thing over anything else, maximizing retention time on the social media to maximize revenue.⁸⁸ This is measured through the average revenue per user (ARPU).⁸⁹ ARPU gives the profitability of the social media product based on how much money each user generates, and it is calculated by dividing the total revenue by the number of users.⁹⁰ Thus, a social media platform's download page or home page is likely to be considered commercial speech. Because of this, a mandated warning label would be restricted to appearing only on these areas of a social media platform under the compelled commercial speech doctrine. While less invasive than the Stop the Scroll Act calls for,⁹¹ it is still an alternate method that can be pursued if the mandated warning labels on social media fail under or are not applied to the compelled speech doctrine.

2. The Current Circuit Split for Determining Whether Mandated Warning Labels Are Constitutional Under the Compelled Commercial Speech Doctrine

After establishing which part of a social media platform is commercial speech, the mandated warning label would still have to pass the lessened constitutional requirements. It is important to note that while the following two cases disputed the inclusion of graphics on the warning labels for cigarettes, and not the textual element, they are still applicable because the same reasons the graphics failed are likely to be the same reasons a textual warning label on social media would fail. To determine whether a mandated warning label on social media would pass

84. Greg McFarlane, *How Facebook (Meta), X Corp (Twitter), Social Media Make Money From You*, INVESTOPEDIA (Dec. 2, 2022), <https://www.investopedia.com/stock-analysis/032114/how-facebook-twitter-social-media-make-money-you-twtr-lnkd-fb-goog.aspx> [https://perma.cc/A5H2-E9M4].

85. *Id.*

86. *Id.*

87. Tom Muha, *Social Media Prioritizes Profit Over People*, THE MICHIGAN DAILY (Oct. 9, 2022), <https://www.michigandaily.com/opinion/social-media-prioritizes-profit-over-people> [https://perma.cc/JTV2-3VEC].

88. *Id.*

89. McFarlane, *supra* note 84.

90. Will Kenton, *Average Revenue Per Unit (ARPU): Definition and How To Calculate*, INVESTOPEDIA (Oct. 1, 2024), <https://www.investopedia.com/terms/a/arpu.asp> [https://perma.cc/84LK-ST9S].

91. *See* Stop the Scroll Act, S. 5150, 118th Cong. (2024).

constitutional muster, it must first be determined the level of scrutiny to be applied.⁹² By applying the different scrutiny tests from the D.C. Circuit and the Sixth Circuit,⁹³ it is unlikely that either Circuit's level of scrutiny could be met if warning labels were mandated onto social media.⁹⁴

a. The Sixth Circuit's Test

Starting in the Sixth Circuit, in *Discount Tobacco City & Lottery, Inc. v. United States*,⁹⁵ tobacco manufacturers and sellers claimed that the TCA⁹⁶ mandating graphic warnings on tobacco products violated their First Amendment rights.⁹⁷ The analysis by the Sixth Circuit started with determining whether the regulation was a mandatory disclosure requirement or a restriction on speech.⁹⁸ The Sixth Circuit determined that because the regulation included a mandatory disclosure requirement, the test that the Supreme Court applied in *Zauderer v. Office of Disciplinary Counsel*⁹⁹ would be applied to determine the constitutionality of the regulation.¹⁰⁰ Under the *Zauderer* test, a regulation receives a rational basis review if the required disclosure is "reasonably related to the State's interest in preventing deception of consumers[]" and includes "purely factual and uncontroversial information[.]"¹⁰¹ However, a failure to establish these requirements would subject the mandatory disclosures to strict scrutiny.¹⁰² For the first requirement of the *Zauderer* test, the Sixth Circuit found the graphic warnings to be reasonably related to the State's interest of preventing consumer deception because there was "more than substantial evidence" to support that graphic warning labels were effective in making

92. *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509, 522 (6th Cir. 2012).

93. *See R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205 (D.C. Cir. 2012); *see Disc. Tobacco*, 674 F.3d at 509.

94. These cases, in applying different levels of scrutiny, may be compromised in the future as some argue that after the Supreme Court's recent ruling in *N.Y. State Rifle & Pistol Ass'n v. Bruen*, 142 S. Ct. 2111 (2022), most scrutiny classifications are up for reconsideration or elimination based on the Court moving towards a historical analysis. *See* GOVDISCRIM § 11:10. Freedom of expression—Commercial speech.

95. *Disc. Tobacco*, 674 F.3d at 521.

96. Family Smoking Prevention and Tobacco Control Act, Pub. L. No. 111-31, 123 Stat. 1776 (2009) (codified in scattered sections of 15 U.S.C. and 21 U.S.C.).

97. *Disc. Tobacco*, 674 at 518.

98. *Id.* at 522–23.

99. *Zauderer v. Off. of Disciplinary Couns. of Supreme Ct. of Ohio*, 471 U.S. 626, 651 (1985).

100. *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509, 523 (6th Cir. 2012).

101. *Zauderer*, 471 U.S. at 651; *but see* Chang, *supra* note 65, at 460 (explaining a contradicting view of the *Zauderer* rule based on the separate opinion); *see Repackaging Zauderer*, 130 HARV. L. REV. 972, 979 (2017) (explaining the variety of interpretation the *Zauderer* test has received).

102. *Disc. Tobacco*, 674 F.3d at 554.

adolescents process cigarette warnings after being deceived about the risks for decades.¹⁰³ For the second requirement of the *Zauderer* test, the Sixth Circuit found that the textual element of the graphic warning labels satisfied the factual and uncontroversial requirement, however the Sixth Circuit split on whether the graphics were neutral.¹⁰⁴

b. The D.C. Circuit's Test

The D.C. Circuit required a stricter level of scrutiny in *R.J. Reynolds Tobacco v. FDA*.¹⁰⁵ *R.J. Reynolds* had an analogous First Amendment claim as *Discount Tobacco*, where the FDA's mandated graphic warnings were again challenged.¹⁰⁶ The D.C. Circuit first noted the flaws with how the FDA selected and justified the nine graphic warnings it mandated.¹⁰⁷ The FDA received thousands of public comments, including criticism from cancer researchers and academics, that there was a lack of longitudinal research showing that these warning labels would have any impact on smoking rates.¹⁰⁸ The FDA itself even admitted that it lacked long-term support that the warning labels would be effective.¹⁰⁹ Despite these critiques and other noted flaws with the research,¹¹⁰ the FDA concluded that the existing scientific research would be effective in achieving its substantial interest of reducing the number of Americans who smoke to prevent health consequences.¹¹¹

Next, the D.C. Circuit viewed the regulation as compelled commercial speech,¹¹² and therefore subject to strict scrutiny absent two exceptions: the rational-basis test under *Zauderer* or the intermediate-level scrutiny test set out by the Supreme Court in *Central Hudson Gas & Electric Corp. v. Public Service Commission*.¹¹³ The D.C. Circuit first applied *Zauderer*, holding that the test was not met because the images were inflammatory, didn't convey any warning information, and didn't convey any accurate statements regarding cigarettes.¹¹⁴ However, while the D.C.

103. *Id.* at 566.

104. *Id.* at 525–26.

105. *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205 (D.C. Cir. 2012).

106. *Id.* at 1208–09.

107. *Id.* at 1210–11.

108. *Id.* at 1210.

109. *Id.*

110. *Id.* at 1210–11 (criticizing the FDA's flawed studies used to support warning label effectiveness, the FDA's claims contradicting studies that showed warning labels had no significant impact on smoking rates, and the overall lack of evidence).

111. *Id.* at 1209–11.

112. *Id.* at 1211.

113. *Id.* at 1212; *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n of N.Y.*, 447 U.S. 557, 573 (1980). The reason for the difference in levels of scrutiny is because the Supreme Court has found that factual disclosures and speech restrictions are not the same, as factual disclosures only require providing information and do not prevent speech. *See Chang, supra* note 65, at 454.

114. *R.J. Reynolds*, 696 F.3d at 1216–17.

Circuit in *R.J. Reynolds* reasoned that *Zauderer* established that a disclosure requirement was only valid if the government showed at least a potentially real danger that consumers would be misled absent a warning label,¹¹⁵ the D.C. Circuit later rejected this reasoning. In *American Meat Institute v. United States Department of Agriculture*,¹¹⁶ the D.C. Circuit held that the broad language of *Zauderer* allows the test to be applied to problems beyond deception and overruled *R.J. Reynolds* in part for that reasoning.¹¹⁷ However, the D.C. Circuit has made it clear that this extension only applies to commercial speech, and does not extend *Zauderer* to non-advertising compelled speech.¹¹⁸ While the D.C. Circuit has revisited and reanalyzed one case relying on this new *Zauderer* interpretation,¹¹⁹ the *Zauderer* test is still met with confusion and it is still unclear to what it now extends to.¹²⁰ Regardless, because the D.C. Circuit found that the graphic warnings were not factual disclosures subject to *Zauderer*'s rational basis review, it applied the stricter *Central Hudson* intermediate-scrutiny test for compelled commercial speech.¹²¹

While the Sixth Circuit took the narrow approach that *Central Hudson* only applies to speech restrictions and not disclosure requirements,¹²² the D.C. Circuit adopted a broader analysis in *R.J. Reynolds*. The Supreme Court in *Central Hudson* created a four-part test for commercial speech cases to determine whether First Amendment protections apply to the expression.¹²³ First, the speech at issue must not be misleading and concern lawful activity.¹²⁴ Second, it must be asked whether there is substantial government interest.¹²⁵ If the previous two prongs are both satisfied, the third prong asks whether "the regulation directly advances the government interest asserted."¹²⁶ The fourth prong asks "whether it is

115. *Id.* at 1214.

116. *Am. Meat Inst. v. U.S. Dep't of Agric.*, 760 F.3d 18 (D.C. Cir. 2014).

117. *Id.* at 22–23.

118. *Nat'l Ass'n of Manufacturers v. S.E.C.*, 800 F.3d 518, 522 (D.C. Cir. 2015).

119. *Id.* at 520–21.

120. *See id.* Additionally, the Author would like to note that clarification may be coming. Now Justice Kavanaugh was a Judge on the D.C. Circuit and contributed to this opinion, expressing his frustrations in the *Zauderer* test and the compelled speech doctrine as a whole. In August 2024, *R.J. Reynolds Tobacco Co.* is "urging the U.S. Supreme Court to review a Fifth Circuit decision" which affirmed the FDA's new warning labels, on the grounds that the second round of warning labels still fail the *Zauderer* test. *Atkins*, *supra* note 11.

121. *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205, 1217 (D.C. Cir. 2012).

122. *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509, 552 (6th Cir. 2012).

123. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n of New York*, 447 U.S. 557, 566 (1980).

124. *Id.*

125. *Id.*

126. *Id.*

not more extensive than is necessary to serve that interest.”¹²⁷ The Supreme Court has clarified that the fourth prong does not require the government to use the least restrictive means, rather a reasonable fit between the means used to accomplish the asserted ends.¹²⁸

In *R.J. Reynolds*, the D.C. Circuit first acknowledged that, as the case was a constitutional challenge to an agency’s action, the D.C. Circuit was required to set aside and hold unlawful agency findings, actions, and conclusions that were held to be unsupported by substantial evidence.¹²⁹ Next, applying the *Central Hudson* test, the D.C. Circuit first assumed that the FDA’s claimed interest of reducing smoking rates, specifically in children and adolescents, was substantial.¹³⁰ Moving to the third prong, after noting that the government had the burden to justify its speech restriction,¹³¹ the D.C. Circuit concluded that the FDA did not present “a shred of evidence—much less the ‘substantial evidence’ required” that their graphic warnings would be effective in reducing smoking rates.¹³² The D.C. Circuit emphasized that research showing warning labels made people think more about quitting smoking and attempt to quit smoking didn’t advance the government interest, as the evidence must show that the warning labels “*actually* led to a reduction in smoking rates.”¹³³ Finally, the D.C. Circuit noted that *Central Hudson* requires an agency to present supporting data before imposing a burden onto commercial speech.¹³⁴ Thus, the graphic warnings were struck down.¹³⁵ The issue of *R.J. Reynolds* continues to be litigated after the FDA conducted more studies and created new graphic labels, and the tobacco companies are currently trying to bring the issue under Supreme Court review.¹³⁶

127. *Id.*

128. *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 556 (2001) (quoting *Fla. Bar v. Went For It, Inc.*, 515 U.S. 618, 632 (1995)).

129. *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205, 1217–18 (D.C. Cir. 2012); 5 U.S.C.A. § 706(2) (West); *see* 5 U.S.C.A. § 706(2)(B).

130. *R.J. Reynolds*, 696 F.3d at 1218.

131. *Id.* (citing *Edenfield v. Fane*, 507 U.S. 761, 770 (1993)).

132. *Id.* at 1219.

133. *Id.*

134. *Id.* at 1221; *see Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n of New York*, 447 U.S. 557 (1980).

135. *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205, 1221–22 (D.C. Cir. 2012).

136. *Cigarette Labeling and Health Warning Requirements*, FDA (Jan. 15, 2025), <https://www.fda.gov/tobacco-products/labeling-and-warning-statements-tobacco-products/cigarette-labeling-and-health-warning-requirements> [https://perma.cc/NX33-KL99].

c. Under Either Test, Mandated Warning Labels on Social Media Are Likely Unconstitutional

By applying either the rational-basis *Zauderer* test adopted by the Sixth Circuit or the intermediate-scrutiny *Central Hudson* test adopted by the D.C. Circuit, a mandated warning label on social media would likely fail to withstand a constitutional challenge. While the warning label on social media proposed in the Stop the Scroll Act is purely textual, it is still likely to fail both Circuit's requirements because there is currently not enough evidence establishing social media usage's negative impact on youth mental health and the effectiveness of a warning label on social media.

Under the Sixth Circuit's rational basis analysis, a mandated warning label on social media would likely fail to meet both prongs. First, the disclosure would have to be "reasonably related to the State's interest in preventing deception of consumers."¹³⁷ In *Discount Tobacco*, this prong was established because the Sixth Circuit found substantial evidence that a warning label on tobacco products was reasonably related to the State's interest of preventing consumer deception regarding the true health risks of tobacco use.¹³⁸ Here, however, it is unlikely a state interest can be claimed as not enough causative evidence exists that social media use is harmful for youth for the acting Surgeon General to endorse the existence of the risk.¹³⁹ Until the State interest that social media use is harmful to youth mental health can be established by enough causative and longitudinal research, it is unlikely any deception exists that would allow for a restriction on social media companies' commercial speech.

The second *Zauderer* prong would likely fail to be established for the same reasons as the first prong. The current state of research on social media usage's impact on youth mental health is far from the "purely factual and uncontroversial information"¹⁴⁰ that is necessary for a mandated warning label on social media to be constitutional. When the TCA was enacted in 2009, the landmark 1964 report from the Surgeon General's Advisory Committee on Smoking and Health that established substantial evidence regarding the risks of smoking¹⁴¹ had existed for forty-five years. In 2014, the Surgeon General released a fifty-year

137. *Zauderer v. Off. of Disciplinary Couns. of Supreme Ct. of Ohio*, 471 U.S. 626, 651 (1985).

138. *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509, 566 (6th Cir. 2012).

139. See generally *Warning Label*, *supra* note 3; Costello et al., *supra* note 27; Michaelaileen Doucleff, *The truth about teens, social media and the mental health crisis*, NPR (Apr. 25, 2023, 9:28 AM), <https://www.npr.org/sections/health-shots/2023/04/25/1171773181/social-media-teens-mental-health> [<https://perma.cc/NC3W-NFT5>].

140. *Zauderer*, 471 U.S. at 651.

141. *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the United States*, *supra* note 10.

progress report, continuing to provide new and substantial research about the risks of smoking, trends, and new developments.¹⁴² The research regarding the harms of social media use to youth, in comparison, cannot rely on decades of data collection. The Surgeon General has addressed the impacts of social media use on youth mental health in the 2023 Advisory, but admitted that “at this time we do not have enough evidence to determine if social media is sufficiently safe for children and adolescents.”¹⁴³ With a mandated warning label on social media unable to contain enough “factual” information, it would also be far from uncontroversial. In copying the playbook on tobacco companies’ response to risk accusations, technology companies not only claim their products are mostly harmless but also that their products actually benefit youth.¹⁴⁴ With the combination of a lack of factual support and technology companies claiming their products are beneficial, the second prong of the *Zauderer* test is likely to fail.

Moving to the D.C. Circuit’s intermediate scrutiny test under *Central Hudson*, it is unlikely that mandated warning labels on social media could establish the test’s second or third prong due to the lack of research on the negative impacts of social media use and whether textual warning labels on social media are effective. First, the speech at issue is not misleading and concerns lawful activity, however what component of a social media platform is speech remains to be unclear.¹⁴⁵ Next, the substantial government interest claimed here would be to “warn the user of potential negative mental health impacts of accessing the social media platform.”¹⁴⁶ This is unlikely to satisfy the second prong, even though the government’s substantial health interest in *R.J. Reynolds* was upheld,¹⁴⁷ because again the lack of research establishing social media usage having a negative impact on youth mental health means no substantial interest can exist. For the sake of analysis, even if these two prongs were established, it now must be asked whether a mandated warning label on social media products would “directly advance the government interest asserted.”¹⁴⁸ Here, the mandated warning labels on social media would be struck down without having to change the verbiage from the *R.J. Reynolds* opinion at all, as not “a shred of evidence—much less the

142. U.S. DEP’T OF HEALTH & HUMAN SERVS., THE HEALTH CONSEQUENCES OF SMOKING—50 YEARS OF PROGRESS: A REPORT OF THE SURGEON GENERAL 1 (2014).

143. Surgeon General’s Advisory, *supra* note 4, at 4.

144. Rausch et al., *supra* note 51.

145. See *supra* Section II.B.1.

146. Stop the Scroll Act, S. 5150, 118th Cong. (2024).

147. *R.J. Reynolds Tobacco Co. v. Food & Drug Admin.*, 696 F.3d 1205, 1218 (D.C. Cir. 2012).

148. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n of New York*, 447 U.S. 557, 566 (1980).

‘substantial evidence’ required”¹⁴⁹ exists or can be provided to show that a textual warning label on social media would be effective in warning the user of the potential negative mental health impacts. While the government cannot rely on “speculation or conjecture,”¹⁵⁰ the task of establishing substantial evidence to satisfy this prong is not as difficult as it was in *R.J. Reynolds*. In *R.J. Reynolds*, the government was required to show that the warning labels *actually* caused a decline in smoking rates,¹⁵¹ while here all that would need to be established by longitudinal research is that a textual warning label on social media actually communicates that a potential risk exists to the user’s mental health. Regardless, while the third prong of the *Central Hudson* test could be established in due time, the current lack of research establishing the negative impacts of social media use makes a mandated warning label on social media unlikely to survive a constitutional challenge.

Thus, under the current law relating to mandated warning labels under compelled commercial speech, the current lack of research establishing substantial evidence of social media usage’s negative impact on youth mental health is likely to result in any attempted social media warning label mandate to be struck down under either rational basis or intermediate scrutiny review.

III. WHAT MUST BE DONE TO MAKE MANDATED WARNING LABELS ON SOCIAL MEDIA CONSTITUTIONAL

For mandated warning labels on social media to be held constitutional under either doctrine, advocates need to conduct enough longitudinal and causative research that allows for the Surgeon General to conclusively report that social media usage is harmful to youth mental health. This is because a court would likely give great deference to the Surgeon General’s medical opinion, as the courts in the tobacco cases did when analyzing the government’s interest in regulating cigarettes.¹⁵² While tobacco products were not regulated until after the 1964 Smoking and Health Report was published, which contained decades of supporting research and studies for the claim that tobacco use was harmful,¹⁵³ former Surgeon General Murthy has stated that the youth mental health crisis is an emergency which doesn’t have the luxury to wait for this level of

149. *R.J. Reynolds*, 696 F.3d at 1219.

150. *Nat’l Ass’n of Manufacturers v. S.E.C.*, 800 F.3d 518, 526 (D.C. Cir. 2015) (quoting *Edenfield v. Fane*, 507 U.S. 761, 770 (1993)).

151. *R.J. Reynolds*, 696 F.3d at 1219.

152. See *R.J. Reynolds*, 696 F.3d; see *Disc. Tobacco City & Lottery, Inc. v. United States*, 674 F.3d 509 (6th Cir. 2012).

153. *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*, *supra* note 10.

research.¹⁵⁴ Yet, it is clear that both the compelled speech doctrine and the compelled commercial speech doctrine will not allow for mandatory warning labels on a risk that has not been confidently established.¹⁵⁵ Until then, a premature mandate risks being struck down on First Amendment grounds, only wasting taxpayer dollars through litigation and creating legal precedent that further protects technology companies from future regulation attempts on social media. Thus, until the acting Surgeon General provides a report claiming that social media usage puts youth mental health at risk, as was required to regulate tobacco products, the substantial interest required by the First Amendment is unlikely to be proven.

First, advocates of mandating warning labels on social media should focus on following and implementing the Surgeon General's 2023 Advisory to achieve the level of research required for the warning labels to be constitutional. Second, the methodology of how the research is conducted must be adjusted depending on which First Amendment doctrine is applied.

A. The Surgeon General's 2023 Advisory Must Be Followed to Achieve the Level of Research Required

For the 1964 Smoking and Health Report, the Surgeon General at the time created an advisory committee of ten medical experts who reviewed all available research over the course of two years.¹⁵⁶ While the Surgeon General today could form an advisory committee on the impact of social media use, have them review and summarize all available research, and then generate a report like 1964, this would be futile because the research on the impacts of social media use is not as strong as it was when the 1964 advisory committee was formed. However, the Surgeon General has issued the 2023 Advisory on social media usage's impact on youth mental health, and can issue new advisories in response to further research on social media use in the future.¹⁵⁷ In the 2023 Advisory, after noting that "[o]ur children and adolescents don't have the luxury of waiting years until social media's impact[.]" the Surgeon General claimed that the burden of taking action towards protecting the youth from social media

154. *Warning Label*, *supra* note 3.

155. *See supra* Part II.

156. *See Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*, *supra* note 10, at 7–10.

157. *About the Office of the Surgeon General*, U.S. DEP'T OF HEALTH & HUMAN SERVS., <https://www.hhs.gov/surgeongeneral/about/index.html#:~:text=The%20Surgeon%20General%20brings%20the,a%20number%20of%20communication%20channels> [https://perma.cc/M3EG-T42Y]. Surgeon General's Advisory, *supra* note 4.

must be a collaborative effort by children, parents, technology makers, and law makers.¹⁵⁸

The 2023 Advisory's first call to action was directed at policymakers.¹⁵⁹ The most important of the suggestions within this call to action is "[s]upport[ing] increased funding for future research" on the impact of social media use on children.¹⁶⁰ If advocates of warning labels want them to survive the guaranteed constitutional challenge, funding must be allocated by policymakers at levels that allow for extensive and advanced research showing not only that social media use has a negative impact on children, but also that textual warning labels bringing awareness of these risks are effective in creating knowledge of social media risk in child users. The next crucial suggestion of the 2023 Advisory was ensuring the sharing of data regarding the health impacts of social media use by technology companies to independent researchers.¹⁶¹ This can decrease the amount of time needed to get causative research as it provides insider data and a foundation for researchers to build off. However, constitutional concerns are raised by the suggestion of the 2023 Advisory to pursue policies that limit access to social media for all children in order to minimize risk.¹⁶² This suggestion should be approached with caution, as similar suggested regulations, such as age verification and an outright ban for child social media access, all come with equally complex flaws and First Amendment complications.¹⁶³ Regardless, pursuing funding for research and advocating for data sharing and transparency from technology companies should be the priority for policymakers if they want to mandate warning labels on social media in the future.

The 2023 Advisory's second call to action is directed at the technology companies who develop these social media products.¹⁶⁴ The primary suggestions here are data transparency with researchers, risk assessment, and prioritization of user health.¹⁶⁵ To further ensure these requested actions are actually conducted by technology companies, policymakers can create laws that require risk audits for certain aspects of technology, such as algorithm risk audits.¹⁶⁶ Technology companies that develop social media products have data and research on the impacts of their products, as the leaks from the Kentucky Attorney General's

158. Surgeon General's Advisory, *supra* note 4, at 13.

159. *Id.* at 15.

160. *Id.*

161. *Id.*

162. *Id.*

163. See McKay, *supra* note 32.

164. Surgeon General's Advisory, *supra* note 4, at 16.

165. *Id.*

166. See Costello et al., *supra* note 27.

Office in 2024 have shown.¹⁶⁷ Thus, if the technology companies don't comply with this call to action, which would speed up research significantly, policymakers should consider legal alternatives to compel data transparency.

The 2023 Advisory's last call to action is directed at researchers.¹⁶⁸ The primary suggestion is for researchers to develop a shared agenda that prioritizes collaborative research establishing the impact of youth social media use.¹⁶⁹ This collaborative research would focus on "establish[ing] standardized definitions and measures" that can be applied broadly to a variety of different social media research areas.¹⁷⁰ The research would involve longitudinal and experimental studies that would focus on social media usage's impact on sleep, depression, anxiety, body image, and attention across a variety of populations and different types of social medias.¹⁷¹ Finally, the research must be "publicly accessible and digestible" to ensure the productivity and development of research in this area.¹⁷² Following the 2023 Advisory's final call to action will ensure that research is focused on the issues that can produce hard data needed to mandate a warning label on social media, along with the necessity of collaboration and publicization of research to ensure a more swift and communal research development.

Overall, advocates for mandated warning labels on social media must follow these actions by developing longitudinal research regarding the impact of social media use on youth mental health. The Stop the Scroll Act, the Surgeon General's 2023 Advisory, and other lawmakers' calls for action to regulate social media through mandated warning labels or other restrictions will implicate First Amendment challenges that are unlikely to survive without adequate research. Even after over 100 years of research,¹⁷³ tobacco companies have successfully drawn-out litigation

167. Bobby Allyn et al., *TikTok executives know about app's effect on teens, lawsuit documents allege*, NPR (Oct. 11, 2024, 5:30 AM), <https://www.npr.org/2024/10/11/g-s1-27676/tiktok-redacted-documents-in-teen-safety-lawsuit-revealed> [https://perma.cc/F6WY-E68T].

168. Surgeon General's Advisory, *supra* note 4, at 19.

169. *Id.*

170. *Id.*

171. *Id.*

172. *Id.*

173. See *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*, *supra* note 10; U.S. DEP'T OF HEALTH & HUMAN SERVS., *supra* note 142; Robert N. Proctor, *The history of the discovery of the cigarette–lung cancer link: evidentiary traditions, corporate denial, global toll*, 21 TOBACCO CONTROL, Feb. 16, 2012 at 87; *Achievements in Public Health, 1900-1999: Tobacco Use – United States, 1900-1999*, CDC (Nov. 5, 1999), <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm4843a2.htm#:~:text=Smoking%2D%2Donce%20a%20socially,cigarette%20smoking%20and%20lung%20cancer> [https://perma.cc/NB67-WW3B].

over mandatory warning labels for over a decade.¹⁷⁴ With the current research establishing social media usage's negative impact on the youth being a grain of sand in comparison, a similar result would likely occur if warning labels were mandated on social media. Thus, until the Surgeon General reports that enough causative research is present to conclude that social media use is a risk to the youth, mandatory warning labels on social media will likely fail under the First Amendment until a risk can be established for the government to have an interest in regulating.

B. *How This Research Must Be Conducted*

Depending on the doctrine that is pursued, how the research is conducted will vary greatly. Under the compelled speech doctrine, there are no established requirements for who and how the research can be conducted, thus this section is largely irrelevant under that approach. However, the compelled commercial speech doctrine has specific requirements for who, how, and when the research is conducted that would support the claim that social media use has a negative impact on youth mental health. By following the requirements of the Stop the Scroll Act, under the compelled commercial speech doctrine, the FTC must conduct this research prior to any attempted regulation.

While the previous section explained the need for the research on social media usage's impact on youth mental health to be collaborative and publicized, legal precedent regarding warning labels on compelled commercial speech will require the government agency assigned to mandate warning labels on social media to conduct the research prior to any proposed mandate. As the FTC would be the federal agency mandating warning labels on social media through the Stop the Scroll Act,¹⁷⁵ it is required under the *Central Hudson* test that the FTC would need to "find and present data supporting its claims *prior to* imposing a burden on commercial speech."¹⁷⁶ This supporting data must be "substantial evidence" that social media use has a negative mental impact on youth mental health and that warning labels on social media are effective at "warn[ing] the user of potential negative mental health impacts of accessing the social media platform."¹⁷⁷ While the FTC currently creates reports, studies, and research, it is primarily limited to business and consumer areas and has not delved into any research in or

174. See Atkins, *supra* note 11.

175. Stop the Scroll Act, S. 5150, 118th Cong. (2024).

176. R.J. Reynolds Tobacco Co. v. Food & Drug Admin., 696 F.3d 1205, 1221 (D.C. Cir. 2012).

177. 5 U.S.C.A. § 706(2)(E) (West). Stop the Scroll Act, S. 5150, 118th Cong. (2024).

around this area.¹⁷⁸ Thus, unless a new agency was created or assigned to mandate warning labels on social media, under the current proposals the FTC will have to embark on completely unrelated research on a quest to establish the negative impacts social media use has on youth mental health.

CONCLUSION

A premature mandated warning label on social media could create legal precedent that gives technology companies a future stronghold against any further regulation attempts on social media. Until evidence of social media usage's negative impact on youth mental health is established through research that is endorsed by the Surgeon General, mandated warning labels on social media will likely not survive a First Amendment challenge. However, once this risk is established, the two avenues explained in this Note will provide the considerations and arguments needed to show that the government's interest in regulating social media is both compelling and substantial as social media usage is harmful to youth mental health. By following the Surgeon General's 2023 Advisory, regulations on social media could finally be a possibility.

178. See *Reports*, FTC, <https://www.ftc.gov/policy/reports#:~:text=Policy,-Advocacy%20and%20Research&text=The%20FTC%20produces%20a%20number,reports%20about%20the%20agency's%20activities> [https://perma.cc/3BCJ-FRUG]; *Studies*, FTC, <https://www.ftc.gov/policy/studies#:~:text=As%20part%20of%20its%20policy,on%20competition%20and%20consumer%20protection> [https://perma.cc/T96J-K2J3].