Access to A.I. Justice: Avoiding an Inequitable Two-Tiered System of Legal Services

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Artificial intelligence (AI) has been heralded for its potential to help close the access to justice gap. It can increase efficiencies, democratize access to legal information, and help consumers solve their own legal problems or connect them with licensed professionals who can. But some fear that increased reliance on AI will lead to one or more two-tiered systems: the poor might be stuck with inferior AI-driven assistance; only expensive law firms might be able to effectively harness legal AI; or, AI's impact might not disrupt the status quo where only some can afford any type of legal assistance. The realization of any of these two-tiered systems would risk widening the justice gap. But the current regulation of legal services fails to account for the practical barriers preventing effective design of legal AI across the landscape, which make each of these two-tiered systems more likely.

Therefore, this Article argues that jurisdictions should embrace certain emerging regulatory reforms because they would facilitate equitable and meaningful access to legal AI across the legal problem-solving landscape, including by increasing competition and opportunities for collaboration

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across the legal services and technology industries. The Article provides a framework that demonstrates how this collaboration of legal and technical expertise will help stakeholders design and deploy AI-driven tools and services that are carefully calibrated to account for the specific consumers, legal issues, and underlying processes in each case. The framework also demonstrates how collaboration is critical for many stakeholders who face barriers to accessing and designing legal-AI due to insufficient resources, resilience, and relationships. The Article then advocates for regulatory priorities, reforms, and mechanisms to help stakeholders overcome these barriers and help foster legal AI access across the landscape.

Introduction

Technological innovation has transformed virtually all stages and settings of legal problem solving. Individuals seeking help navigating the legal system can access free guides from nonprofit organizations online.[1] Legal services organizations can automate their intake to quickly direct clients to the most relevant and helpful resources for their issues,[2] or even automatically generate a legal document for them.[3] These services can also help consumers recognize when a legal issue requires a licensed legal professional, and can help connect those consumers with appropriate legal service providers.[4]

For issues that require licensed legal professionals, technology, broadly speaking, is streamlining and fundamentally changing how law is practiced,[5] with law firms

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[1] *See* Raymond H. Brescia et al., *Embracing Disruption: How Technological Change in the Delivery of Legal Services Can Improve Access to Justice*, 78 ALB. L. REV. 553, 563 (2015).

[2] *See, e.g.*, Kristen Sonday, *Tech-Enabled A2J: From Text to Machine Learning, How Legal Aid Is Leveraging Technology to Increase Access to Justice,* THOMSON REUTERS (Feb. 4, 2020) https://www.thomsonreuters.com/en-us/posts/legal/tech-enabled-a2j-legal-aid (describing how legal services organizations "are now incorporating tools like AI classifiers in their intake flow to direct inbound clients to the most relevant resources").

[3] *See, e.g.*, Sherley E. Cruz, *Coding for Cultural Competency: Expanding Access to Justice with Technology*, 86 TENN. L. REV. 347, 360 (2019) (describing software-based programs that can conduct "guided interviews" to "by walking the end user through a series of simple questions and then using the answers to draft the legal document for the end user"); Sonday, *supra* note 2 (describing that, for legal service organizations, "document automation is becoming the standard for generating repetitive documents").

[4] *See* Cruz, *supra* note 3, at 364 ("Chatbots provide basic information that helps individuals decide among their options, including whether they need further legal assistance. Chatbots can also connect individuals to legal service providers after the program helps the individual identify their legal issue.").

[5] *See* Agnieszka McPeak, *Disruptive Technology and the Ethical Lawyer*, 50 U. TOL. L. REV. 457, 461 (2019) ("Lawtech is changing the way lawyers

now spending over a billion dollars per year on a broad array of different technology.[6] "Chatbots" are conducting client intake.[7] Legal research tools, including some of the most popular databases on the market, are processing natural language questions and providing highly individualized results.[8] Similar technologies are transforming document management processes, like e-discovery, that historically have been a drain on lawyers' time and clients' funds.[9] Not only can machines complete discovery faster than humans, many can also do it more accurately.[10] When it comes to legal writing,

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work and, in some instances, may fundamentally alter law practice entirely.").

[6] *See* Melody Finnemore, *Starting Up or Starting Over: Law Firms of All Sizes Need to Consider Their Tech Options*, OR. ST. B. BULL., April 2020, at 25, https://www.osbar.org/bulletin/issues/2020/2020April/offline/download.pdf (noting "estimates putting total expenditures [on technology] at more than $1.2 billion in 2019 alone" for large and small firms).

[7] *See* Nicole Black, *What you need to know about virtual and chatbot assistants for lawyers,* ABA J. (Jan 27, 2020), https://www.abajournal.com/web/article/what-you-need-to-know-about-virtual-and-chatbot-assistants-for-lawyers (describing how AI-powered chatbots are streamlining client intake in law firms).

[8] *See* Ed Walters, *The Model Rules of Autonomous Conduct: Ethical Responsibilities of Lawyers and Artificial Intelligence*, 35 GA. ST. U. L. REV. 1073, 1077 (2019); *see also* McPeak, *supra* note 5, at 461 (explaining that "natural language processing enables more accurate research results").

[9] *See* Frank Pasquale & Glyn Cashwell, *Four Futures of Legal Automation*, 63 UCLA L. REV. DISCOURSE 26, 34 (2015) ("Fewer young associates pore over boxes of documents to find mentions of a query term anymore. EDiscovery reigns instead.").

[10] *See* McPeak, *supra* note 5, at 463 (explaining how "technology assisted review" "dramatically alter[s] the time, effort, and mode of performing document review"); Pasquale & Cashwell, *supra* note 9, at 34 (explaining that "predictive coding" has been shown to "decrease time spent in discovery by 75 percent"); Sylvie Delacroix, *How could AI impact the justice system?,* THOMSON REUTERS LEGAL INSIGHTS EUROPE (Nov. 30, 2018), https://blogs.thomsonreuters.com/legal-uk/2018/11/30/how-could-ai-impact-the-justice-system/ (describing how "[a]utomated document management (and discovery) is already becoming commonplace, saving lawyers a lot of dull workhours"); Walters, *supra* note 8, at 1076 (describing

machines can mine vast data from previous cases to help craft legal arguments thanks to predictive coding and legal analytics.[11] Though these tools come with challenges, there is little doubt that the future of legal problem solving will be increasingly data-driven, and many legal technologies will be increasingly assisted by artificial intelligence.[12]

Many legal technologies have been rightly praised as promising tools to help close the access-to-justice gap.[13] They have the potential to increase the efficiency and cost effectiveness of work done by lawyers, law firms, and legal

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how AI-driven e-discovery "has been shown to surpass human review in both accuracy and recall").

[11] *See* Brescia et al., *supra* note 1, at 572 (describing how automated system "now have the potential to create legal arguments based on predictive tools about a particular type of case"); *see also* McPeak, *supra* note 5, at 461-62 (2019) (describing how "lawtech is booming with the use of predictive analytics, such as judicial analytics or other predictive modeling").

[12] *See* Walters, *supra* note 8, at 1078 (explaining how these tools enable "quantitative, fact-driven assessments about litigation strategy" that helps make key strategic decisions in a case); Peter K. Yu, *The Algorithmic Divide and Equality in the Age of Artificial Intelligence*, 72 FLA. L. REV. 331, 333 (2020) (explaining that, "without the enhancements that algorithms provide, machines will not be able to acquire the 'intelligence' needed to effectively function in today's fast-evolving technological environment"); McPeak, *supra* note 5, at 461 ("Artificial intelligence, and natural language processing in particular, is playing a big part in the new boom of lawtech developments."). Legal AI is a subset of broader "legal technology"; this Article discusses both, because the ways in which legal technologies are being aided by AI are rapidly evolving, and this Article aims to address the opportunities and challenges presented by both current and future data-driven tools.

[13] *See* Sonday, *supra* note 2 (explaining how "document automation breaks down the economic, geographic, and temporal barriers to justice . . . [and] expands the affordable, flat fee services that are accessible to those who can't afford hourly rates" (quoting Dorna Moini, founder of Documate)); *see also id.* (explaining that, with the right data and if properly scaled, "[f]or access to justice, this might mean getting resources to those in need more quickly or freeing up professionals' time by minimizing the time spent on a mechanical task, allowing them to do more human work"); *see generally* Brescia et al., *supra* note 1 (explaining how technological change in the delivery of legal services can improve access to justice).

services organizations,[14] as well as to help people solve their own legal problems or connect them with licensed legal professionals who can.[15] Increased efficiencies and reduced costs have been credited with making legal services more accessible broadly to the masses, as well as specifically to historically underserved groups.[16] The potential benefits of technology are especially great for solo and small-firm lawyers looking to cut costs and serve more clients,[17] lawyers practicing in specialty areas looking to help more underrepresented

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[14] *See, e.g.*, McPeak, *supra* note 5, at 466 (explain how "lawtech" can "use access to data and processing power to streamline legal-related tasks" resulting in "more accurate results, for less cost, and in a much quicker timeframe"); James E. Cabral et al., *Using Technology to Enhance Access to Justice*, 26 HARV. J.L. & TECH. 241, 257 (2012) ("In an age of cutbacks in funding for legal services and courts, the increased use of technology is often identified as a source of savings and efficiency."); Lucille A. Jewel, *The Indie Lawyer of the Future: How New Technology, Cultural Trends, and Market Forces Can Transform the Solo Practice of Law*, 17 SMU SCI. & TECH. L. REV. 325, 340 (2014) (explaining that, "with technology, lawyers can . . . reduce costs through automation and systemization of some tasks"); Sonday, *supra* note 2 (explaining how "LSOs are increasingly turning to new technology internally to produce higher volumes of work").

[15] Cruz, *supra* note 3, at 364.

[16] *See, e.g.*, Cruz, *supra* note 3, at 349 ("Lawyers are using technology to make the practice of law more efficient, more affordable, and more accessible."); Lori D. Johnson, *Navigating Technology Competence In Transactional Practice*, 65 VILL. L. REV. 159, 163 (2020) ("[T]echnological advances that reduce costs and increase efficiency typically open up services to a broader and more diverse group of consumers.").

[17] *See* Finnemore, *supra* note 6, at 26 (explaining how using more third-party, cloud-based technology tools could especially help solo and small-firm lawyers ultimately cut costs by reducing their need for physical space and expensive, bulky equipment).

people and entities,[18] and legal aid programs trying to reach physically isolated individuals who have unmet legal needs.[19]

But some fear that increased reliance on and legitimization of technology-driven legal services, and especially those that rely on AI, will lead to one or more inequitable two-tiered systems. Some fear an eventual system with expensive—but superior—human lawyers and inexpensive—but inferior—AI-driven legal assistance.[20] Others fear almost the reverse problem: that AI will be superior to human lawyers but will be expensive and available only to large law firms and their wealthy clients.[21] Still others fear that AI's impact will not overcome the status quo where some can afford legal services while others cannot.[22]

The realization of any combination of these two-tiered systems would risk widening the justice gap. But the current regulation of legal services fails to account for the practical barriers preventing effective design of legal AI across the landscape, which make each of these two-tiered systems more likely.[23]

Therefore, this Article argues that jurisdictions should embrace certain regulatory reforms because they would facilitate more equitable and meaningful access to legal AI across the legal problem-solving landscape, including by

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[18] *See* Johnson, *supra* note 16, at 163 ("An increase in the technological efficiency of lawyers, particularly transactional lawyers, could . . . improve access to representation for additional clients like non-profits, small businesses, and entrepreneurs.") (citing 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, 176-77 (2018).

[19] *See* Cabral et al., *supra* note 14, at 269 ("Many legal aid programs must serve large geographic areas with few attorneys. . . . Legal aid programs have turned to innovative uses of technology to overcome these geographic challenges.").

[20] *See infra* Section II.A.

[21] *See infra* Section II.B.

[22] *See infra* Section II.C.

[23] *See infra* Sections IV, V.

increasing competition and opportunities for collaboration across the legal services and technology industries. While some scholars have commented on the importance of being able to access technology broadly[24] and legal technology specifically,[25] few have comprehensively explored the wide-ranging practical and regulatory barriers inhibiting stakeholders from gaining meaningful access to the emerging technologies that are reshaping the legal problem-solving landscape[26] and the resulting impact on access to justice.

Part I of this Article provides an overview of the myriad factors contributing to the perpetuation of the access to justice gap and the ways that legal technologies, and especially those that are AI-driven, can help combat these factors. Part II explores scenarios where the justice gap could widen instead of narrow, either because of or in spite of increased reliance on legal AI. Specifically, it categorizes and analyzes fears expressed throughout the literature that increased reliance on AI will lead to one or more inequitable two-tiered systems. Part III provides a taxonomy of important considerations that stakeholders face when working to "calibrate" an appropriate level of AI use in light of the specific consumers, legal issues, and underlying processes involved, and argues that this calibration is key to avoiding a two-tiered system. Part IV identifies barriers to engaging in this necessary calibration that stem from some stakeholders' lack of resources, resilience, and relationships across the legal and technology fields. Finally, Part V advocates for policy priorities and regulatory reforms to help stakeholders overcome these barriers and help foster effective legal-AI calibration across the landscape. In particular, it encourages jurisdictions to follow the lead of early

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[24] *See, e.g.,* Yu, *supra* note 12 (explaining the importance of access to algorithms in light of the "algorithmic divide").

[25] *See, e.g.*, Katherine Alteneder et al., *Consumer Centric Design: The Key to 100% Access*, 16 J.L. SOCIETY 5, 19 (2014) (noting in the context of design of technology-driven self-help that "[m]odels [for legal-self-help] abound, and the work on self-help is now about ensuring that consumers in every jurisdiction have access to a range of high quality services").

[26] *See* Clark D. Asay, *Artificial Stupidity*, 61 WM. & MARY L. REV. 1187, 1194 (2020) ("Scholarly conversations about how best to incentivize AI innovation have been lacking.").

regulatory innovators by implementing mechanisms such as regulatory "sandboxes" or "laboratories" to allow innovative lawyers and technology companies to test AI-driven legal tools and services that would otherwise be prohibited by current regulations.

As jurisdictions confront imminent challenges concerning regulating legal AI and closing the justice gap, this framework will inform academics, practitioners, regulators, and law and policy makers in the important dialogue ahead.

I. Legal AI's Promise: Tools to Help Close the Justice Gap

Legal AI is on the rise, but the availability of legal services is not. In 2017, only fourteen percent of low-income Americans received adequate legal attention to the legal problems they reported.[27] In 2021, a nationwide survey found that there were only 10,479 civil legal aid attorneys in the U.S., equaling just over one for every 10,000 people whose incomes fall below 200% of the federal poverty level.[28] The goal of increasing "access to justice" emerged in the legal aid context in the mid-twentieth century.[29] It has since often been associated with mere access to courts,[30] but the term's meaning

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[27] *See* LEGAL SERVS. CORP., JUSTICE GAP REPORT: MEASURING THE UNMET CIVIL LEGAL NEEDS OF LOW-INCOME AMERICANS 30 (2017), https://www.lsc.gov/sites/default/files/images/TheJusticeGap-FullReport.pdf.

[28] *NCAJ Launches Updated Justice Index*, NATIONAL CENTER FOR ACCESS TO JUSTICE (May 18, 2021), https://ncaj.org/ncaj-launches-updated-justice-index; *see also* Karen Sloan, *New Report Highlights Which States Are Leading on Access to Justice, and Which Are Falling Short,* LAW.COM (May 18, 2021), https://www.law.com/2021/05/18/new-report-highlights-which-states-are-leading-on-access-to-justice-and-which-are-falling-short.

[29] *See* Rebecca Kunkel, *Rationing Justice in the 21st Century: Technocracy and Technology in the Access to Justice Movement,* 18 U. MD. L.J. RACE, RELIGION, GENDER & CLASS 366, 367 (2019) ("The contemporary understanding of the term access to justice emerged from the legal profession's mid-century debates over provision of legal representation to the poor, where it was often used to describe the purpose of legal aid.").

[30] *See* Amy J. Schmitz, *Measuring "Access to Justice" in the Rush to Digitize,* 88 FORDHAM L. REV. 2381, 2393 (2020).

has broadened more recently to account for wider and systemic barriers to accessing legal services.[31] Chief among concerns has been the high cost of acquiring legal services in the first place, which are generally only available to those with sufficient educational and economic resources.[32] This has excluded from the legal services market not only low-income individuals, but also many middle-income individuals.[33] But cost is far from the only barrier, and assuming that it is risks underestimating the myriad social disparities that keep legal services elusive for many groups.[34] As Amy J. Schmitz has recognized, "the majority of consumers remain silent [when needing legal services] because they lack the knowledge, experience, or resources to artfully and actively pursue their interests."[35] Moreover, those with limited English proficiency, including recent immigrants, are particularly affected by the justice gap.[36]

But the justice gap is not solely the result of challenges faced by those seeking legal services; it is also the result of certain challenges faced by those trying to provide them. Many law school graduates who might be inclined to serve those affected by the justice gap are instead drawn to higher-paying

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[31] *See, e.g.*, *id.* at 2393.

[32] *See* Cruz, *supra* note 3, at 377 ("Low-income individuals simply cannot afford legal services at 'market' rate."); Schmitz, *supra* note 30, at 2386 ("[T]hose without educational and economic resources tend to go without legal services.").

[33] *See* Brescia et al., *supra* note 1, at 591 ("One of the reasons so many low-income people go without representation, and so many middle-income people as well, is clearly the cost of legal services.").

[34] *See* Emily S. Taylor Poppe, *The Future Is ~~Bright~~ Complicated: AI, Apps & Access to Justice*, 72 OKLA. L. REV. 185, 202 (2019) (arguing that the narrative that tech will increase access to justice because it is cheaper than human attorneys "depends on an assumption that cost is a significant—or even the most significant—barrier to accessing legal representation," and that "[t]he validity of this assumption is questionable"); *see also id.* ("[E]mpirical evidence on civil legal needs . . . generally, . . . finds that cost is not the barrier to legal representation that it is assumed to be.").

[35] Schmitz, *supra* note 30, at 2382.

[36] *See* Cruz, *supra* note 3, at 376.

jobs due to high student debt.[37] Others simply find themselves under- or unemployed after law school, leading to what has been called an "access to justice paradox."[38] While there have been efforts in some markets to increase legal aid pro bono services, those in rural areas are often left out due to a lack of lawyers and funds in particular regions.[39]

To make matters worse, economic recessions exacerbate the justice gap.[40] The economic distress from the COVID-pandemic has been no exception, with increasingly numerous accounts of ways in which the pandemic has widened the justice gap.[41]

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[37] *See* Andrea Fuller et al., *Law School Loses Luster as Debts Mount and Salaries Stagnate,* WALL STREET J. (Aug. 3, 2021), https://www.wsj.com/articles/law-school-student-debt-low-salaries-university-miami-11627991855 (discussing the gap between debt and earnings of recent law school graduates).

[38] Kunkel, *supra* note 29, at 372 (describing "the existence of an 'access to justice paradox' in that high levels of potential clients who cannot afford the services of attorney currently exist alongside high levels of underemployment or unemployment among recent law graduates") (citing Jules Lobel & Matthew Chapman, *Bridging the Gap Between Unmet Legal Needs and an Oversupply of Lawyers: Creating Neighborhood Law Offices—The Philadelphia Experiment*, 22 VA. J. SOC. POL'Y & L. 71, 72 (2015)).

[39] *See* Courtney D. Sommer, *Rural Access to Justice Through Mentoring*, 50 COLO. LAW. 14 (2021) (discussing "legal deserts" in the U.S.); Cabral et al., *supra* note 14, at 261 ("Legal aid programs in rural areas face even greater challenges than those in urban areas as there are fewer traditional sources of pro bono legal work and fewer funding resources."); *id.* at 269 ("Many legal aid programs must serve large geographic areas with few attorneys.").

[40] *See* Gillian K. Hadfield, *Legal Infrastructure and the New Economy*, 8 J. LAW & POL'Y FOR INFO. SOC'Y 1 (2012) (discussing the legal infrastructure and access to law in the "disaster economy" of 2012); Brescia et al., *supra* note 1, at 588 (explaining that "[t]he 'Great Recession' of 2008 increased the need for legal services for low- and moderate-income individuals").

[41] *See, e.g.*, Pamela R. Metzger & Gregory J. Guggenmos, *COVID-19 and the Ruralization of U.S. Criminal Court Systems*, U. CHI. L. REV. ONLINE (2020), https://lawreviewblog.uchicago.edu/2020/11/16/covid-metzger/ (discussing how the pandemic is impacting justice in rural areas); Randall S. Abate, *Anthropocene Accountability Litigation: Confronting Common Enemies to Promote a Just Transition*, 46 COLUM. J. ENVTL. L. 225 (2021)

Moreover, the effects of the justice gap are not limited to the United States, nor are they limited to the individuals who are denied access. The justice gap is a world-wide crisis,[42] and society as a whole suffers from the disengagement and distrust in the law and legal institutions that results when legal systems fail to serve all.[43] This may be especially true in the United States, where some causes of the justice gap can be attributed to politically-motivated cuts to legal aid.[44]

In the years ahead, this multifaceted crisis will require multifaceted solutions. There is a growing realization among many that increased pro bono work alone will not close the justice gap.[45] Rather, revolutionary change is necessary.[46] This change must recognize that access to justice can take many

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(discussing how climate change and COVID-19 have combined to impact the justice gap); Sandie Okoro & Paul Prettitore, *Will COVID-19 widen the gender justice gap?,* WORLD BANK BLOGS (June 15, 2020), https://blogs.worldbank.org/voices/will-covid-19-widen-gender-justice-gap; *see generally* William H. Neukom & Elizabeth Anderson, *Covid-19 and the Access-to-Justice Crisis*, 37 GP SOLO 36 (2020); Elizabeth Slagle Todaro, *Access to Justice in the Time of Covid-19*, 57 TENN. B.J. 20 (2021).

[42] *See* Schmitz, *supra* note 30, at 2396 ("We have a justice crisis in the United States and the world . . . .").

[43] *See* Schmitz, *supra* note 30, at 2396 ("[D]isengagement and distrust . . . is problematic not only for those that lack access to remedies but also for society as a whole. Negative consequences emerge when individuals no longer trust the rule of law or communal institutions charged with protecting justice.").

[44] *See* Kunkel, *supra* note 29, at 378 (criticizing "accounts of the failure of legal aid [that] ignore its highly politicized history").

[45] *See* Deno G. Himonas & Tyler J. Hubbard, *Democratizing the Rule of Law*, 16 STAN. J. C.R. & C.L. 261, 268 (2020) ("Empirical results conclusively demonstrate that we can neither volunteer ourselves across the gap nor rely on public services."); Jack A. Guttenberg, *Practicing Law in the Twenty-First Century in a Twentieth (Nineteenth) Century Straightjacket: Something Has to Give*, 2012 MICH. ST. L. REV 415, 416, 436 (2012) ("Pro bono, while well meaning, cannot begin to address the lack of access to legal services.").

[46] *See* Renee Newman Knake, *Democratizing the Delivery of Legal Services*, 73 OHIO ST. L.J. 1, 3 (2012) (arguing that current, more modest solutions "are not likely to offer the revolutionary sort of change that is needed for the delivery of legal services today").

forms depending on a client or other consumer's needs. As some commenters have advocated in the litigation context, access to justice means that, "[a]t minimum, a person should be able to learn about her rights and then give effective voice to them in a neutral and nondiscriminatory, formal or informal, process that determines the facts, applies the rule of law, and enforces the result."[47] But access to transactional legal services necessarily looks much different. Although transactional legal services are often viewed as "less important" or less deserving of scarce legal aid,[48] access to justice for transactional clients such as community organizers and small businesses helps ensure that these clients can "foster a connection between the community's goals and the legal and business avenues to meet th[ose] goals."[49]

The potential of legal technology, broadly defined, to transform legal services, lower prices, and increase access to justice has been discussed widely by scholars, commenters, and practitioners.[50] In addition, scholars are increasingly recognizing that AI, specifically, will be a necessary driver of

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[47] Schmitz, *supra* note 30, at 2393.

[48] *See* Paul R. Tremblay, *Transactional Legal Services, Triage, and Access to Justice*, 48 WASH. U. J. L. & POL'Y, 11, 12 (2015) (observing that "transactional legal services (TLS) tend to be viewed as less important matters when compared to litigation legal services (LLS) and evaluated using a triage-driven social justice metric").

[49] *See* Leah Duncan, *The Role of Transactional Law Clinics in Promoting Social Justice*, MICH. J. RACE & L. BLOG (Mar. 18, 2019), https://mjrl.org/2019/03/18/the-role-of-transactional-law-clinics-in-promoting-social-justice/.

[50] *See, e.g.*, Delacroix, *supra* note 10 ("There is little doubt that advancements with computer systems will play an essential role within the legal profession, and that this could transform it for the better."); McPeak, *supra* note 5, at 461 ("Lawtech is changing the way lawyers work and, in some instances, may fundamentally alter law practice entirely."); Richard Tromans, *Does Legal Tech Share A Common Cause?,* ARTIFICIAL LAW. (Jun. 3, 2020), https://www.artificiallawyer.com/2020/06/03/does-legal-tech-share-a-common-cause/ ("Technology is—over a long-term pathway—helping to reduce the cost of legal services to society—or it should if it is to have any justifiable purpose."); Sonday, *supra* note 2 ("[T]here is no doubt that these tools, when applied correctly, will make meaningful strides in the way clients actually access justice.").

this legal technology, and technology more broadly, if it is going to make a positive impact on the law and broader society.[51] As Agnieszka McPeak describes, "[t]hese innovations capture the thought processes and connections lawyers make between legal concepts. They expand the universe of materials that can be located and thus expand lawyers' knowledge. They catalogue and characterize legal concepts in ways that enhance legal analysis."[52]

Although the emergence of legal AI is often perceived as a recent development, many of the hallmarks of legal AI are not new. Scholars have addressed the more basic automation of legal processes as far back as the 1960s.[53] Some have suggested that, under a broad definition, the evolution of modern-day AI in law practice dates back to the advent of tools like spellcheck.[54] Although some legal service providers might be learning about AI-driven legal tools for the first time,[55] many have been using tools that are AI-driven, like e-Discovery, without knowing it.[56] But AI is no longer just

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[51] *See, e.g.,* Asay, *supra* note 26, at 1194 (noting that "AI is not some niche technology" and that "AI increasingly pervades nearly every major modern-day technological system"); McPeak, *supra* note 5, at 461 ("Artificial intelligence, and natural language processing in particular, is playing a big part in the new boom of lawtech developments."); Yu, *supra* note 12, at 333 ("[W]ithout the enhancements that algorithms provide, machines will not be able to acquire the 'intelligence' needed to effectively function in today's fast-evolving technological environment.").

[52] McPeak, *supra* note 5, at 472.

[53] *See* Pasquale & Cashwell, *supra* note 9, at 28 (citing JULIUS STONE, LEGAL SYSTEM AND LAWYERS' REASONINGS 37 (1964)).

[54] *See, e.g.,* Walters, *supra* note 8, at 1080 ("Lawyers have been using AI in their practices for years. When Microsoft Word autocorrects a spelling error, it's using AI.").

[55] *Id.* at 1078 ("Many lawyers are just learning about these tools for the first time . . . .").

[56] *See* Finnemore, *supra* note 6, at 27 ("Even the solos and smalls are using [AI] and they may not even know it." (quoting Sharon Nelson)); Walters, *supra* note 8, at 1080 ("Lawyers already use AI all the time in performing legal services, even if the tools tend to fade into the background once they work.").

operating behind the scenes, as venture funding for AI start-ups has increased exponentially in recent years.[57]

The rise of legal technology has illuminated the breadth of the legal problem-solving landscape and the number of stakeholders involved in meeting the diverse needs of consumers with legal problems, including in the self-help, legal aid, and law firm settings. In the early days of technology-driven access to justice efforts, "legal aid societies, state justice commissions, public defender offices, courts, and administrative agencies" led the way in trying to implement the data-sharing capabilities needed across the system for transformative access to justice results.[58] By 2012, James E. Cabral et al., envisioned an even broader landscape, anticipating

> a world in the near future where access to justice means that a potential litigant can easily find legal information about her rights, apply for legal aid electronically, talk to a legal aid attorney over her tablet computer, find and complete the forms she needs to file in court, access the court's e-filing system to file her response and check on the progress of her case, and communicate over the Internet with a lawyer in a larger city if her case becomes complicated.[59]

In 2013, William Henderson recognized the dawn of the commodification of legal services:

> Stated bluntly, the legal profession is becoming a subset of a larger legal industry that is increasingly populated by nonlawyers, technologists, and entrepreneurs. . . . Virtually every other aspect of a legal problem can be

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[57] Asay, *supra* note 26, at 1238 ("Venture funding for AI start-ups has 'turned into a torrent,' and the industry has experienced 'exponential growth' recently in the overall number of AI start-ups.").

[58] Ronald W. Staudt, *All the Wild Possibilities: Technology That Attacks Barriers to Access to Justice*, 42 LOY. L.A. L. REV. 1117, 1145 (2009).

[59] Cabral et al., *supra* note 14, at 247.

> broken down into its component parts, reengineered, streamlined, and turned into a legal input or legal product that is better, cheaper, and delivered much faster.[60]

In 2015, Raymond Brescia et al. echoed Henderson's observation, recognizing that "the provision of legal services is becoming commodified: carried out by lawyers and nonlawyers alike in a way that is far less expensive than the traditional, 'bespoke' model of lawyering."[61] Indeed, by 2020, the landscape was recognized as one made up of many "legal services businesses," which include "law firms, [alternative legal service providers], [limited practice officers], law companies, the Big Four, [lawyers-on-demand] companies, . . . consumer self-serve sites and more."[62] This landscape "is vast and complex and serves a wide range of buyers, from Fortune 500 companies that want to do an IPO, to refugees looking for help with settlement documentation."[63]

A large part of this growing landscape is an emerging market for self-help services. Part of access to justice includes being able to access legal information, and for many legal problems, this does not necessarily require access to the courts or even a lawyer.[64] Legal self-help dates back to as early as 1965, which saw the publication of the first "how-to" manuals assisting consumers in areas such as probate.[65] Many forms of self-help walk users through "guided interviews," which ask

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[60] William D. Henderson, *A Blueprint for Change*, 40 PEPP. L. REV. 461, 462-63 (2013).

[61] Brescia et al., *supra* note 1, at 553; *see also* D. James Greiner et al., *Self-Help, Reimagined*, 92 IND. L.J. 1119, 1132 (2017) ("Fundamentally, we believe that many aspects of law can be usefully commoditized.").

[62] Tromans, *supra* note 50.

[63] *Id.*

[64] *See* Alteneder et al., *supra* note 25 ("[W]e [can't] assume everyone seeking legal information will ultimately find themselves in a courtroom."); Schmitz, *supra* note 30, at 2393 ("[T]rue A2J must look beyond the basic data regarding the courts themselves. This is because most justiciable issues that arise in society never get as far as consultation with a lawyer, let alone reach the courts.").

[65] *See* Brescia et al., *supra* note 1, at 566.

consumers a series of questions in easy-to-understand terms and use the answers to simplify the completion of legal forms or other documents.[66] This process is particularly well-suited for simple software that can use consumer answers to automate the completion of these documents.[67] Similarly, "chatbots" can follow the same process to help self-represented litigants identify their legal issues,[68] which addresses one of the biggest barriers to clients seeking assistance in the first place.[69] Self-help chatbots can also help consumers identify their options, including identifying situations where licensed legal assistance is necessary.[70] By simplifying these processes, these services help bring individuals into the legal problem-solving landscape who might otherwise have been left out.[71] Although self-help is not appropriate for all consumers or all legal issues, the self-help market is expanding and diversifying with new and innovative models for helping consumers solve their own problems or connecting them with licensed professionals who can.[72]

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[66] *See* Cruz, *supra* note 3, at 360 (describing the "guided interview" process).

[67] *Id.*

[68] *Id.* at 364.

[69] *See* Sonday, *supra* note 2 (describing "identify[ing] legal issues" as "one of the biggest barriers to clients seeking help at the outset").

[70] *See* Cruz, *supra* note 3, at 364.

[71] *See* Poppe, *supra* note 34, at 190 ("Those who favor the potential of substitutive legal technology foresee increases in clients' capacity for self-help." (citing BENJAMIN H. BARTON, TECHNOLOGY CAN SOLVE MUCH OF AMERICA'S ACCESS TO JUSTICE PROBLEM, IF WE LET IT, IN BEYOND ELITE LAW: ACCESS TO CIVIL JUSTICE IN AMERICA 459 (Samuel Estreicher & Joy Radice eds., 2016))); Cruz, *supra* note 3, at 360 ("As an access to justice tool, guided interviews simplify the ability to draft and complete complicated legal forms and documents."); *id.* at 364 (explaining how "[c]hatbots expand access to justice by providing self-represented litigants with 'personalized' legal guidance to help identify legal issues" and noting that "[c]hatbots can also connect individuals to legal service providers after the program helps the individual identify their legal issue").

[72] *See* Alteneder et al., *supra* note 25, at 19 ("The justice sector is on an impressive trajectory when it comes to enriching and diversifying self-help resources. Models abound, and the work on self-help is now about ensuring

When a consumer's legal issue does require individualized human assistance, licensed legal professionals who are not attorneys can sometimes help.[73] Rebecca Love Kourlis and U.S. Supreme Court Justice Neil Gorsuch have compared this range of options to the medical field, where someone would not go to a surgeon to treat a sore throat, but rather a different licensed specialist.[74] In the legal context, their point rings especially true in areas such as mediation and family law.[75] Recognizing this, some jurisdictions have created special licenses to perform limited legal work in specific practice areas,[76] and some have predicted that legal technology will enhance the productivity of these professionals in a way that increases their viability and effectiveness, thereby increasing their ability to help expand access to justice.[77]

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that consumers in every jurisdiction have access to a range of high quality services.").

[73] *See* Guttenberg, *supra* note 45, at 434-35 (2012) ("Not all legal work requires the personal engagement of a highly experienced specialist."); *see also* RICHARD SUSSKIND, THE END OF LAWYERS? RETHINKING THE NATURE OF LEGAL SERVICES 90 (2008) ("[M]any lawyers exaggerate the extent to which their performance depends on deep expertise. . . . Lawyers often overstate the extent to which the content of their work is creative, strategic, and novel.").

[74] *See* Rebecca Love Kourlis & Neil M. Gorsuch, *Legal advice is often unaffordable. Here's how more people can get help,* USATODAY (Sep. 17, 2020), https://www.usatoday.com/story/opinion/2020/09/17/lawyers-expensive-competition-innovation-increase-access-gorsuch-column/5817467002/.

[75] Brescia et al., *supra* note 1, at 593 ("[I]ncreased participation of nonlawyers may be useful in mediation and family law cases.").

[76] *See, e.g., Limited License Legal Technicians*, WASH. ST. BAR ASS'N (Jan. 14, 2021), https://wsba.org/for-legal-professionals/join-the-legal-profession-in-wa/limited-license-legal-technicians; Himonas & Hubbard, *supra* note 45, at 269-71 (describing Utah's Licensed Paralegal Professionals program); Lyle Moran, *Minnesota will launch legal paraprofessional pilot program,* ABA J. (Oct. 1, 2020), https://www.abajournal.com/news/article/minnesota-to-launch-legal-paraprofessional-pilot-program.

[77] *See, e.g.,* Poppe, *supra* note 34, at 210 (predicting "the expanded use of non-lawyers interacting with legal technology to expand access to legal services" and noting that "[t]his would build upon the increasing

Some issues, though, ultimately require attorneys. Within this group of legal service providers, those providing legal aid, serving in legal services organization, and providing pro bono or "low bono" services are particularly well-positioned to benefit from the efficiencies of AI-driven tools and services due to these providers' limited resources and the unique challenges faced by those they serve. Legal services organizations have historically used basic technology like text messages to increase communication with consumers, as well as to overcome geographic barriers in the large areas they must serve.[78] In keeping with this spirit of service, some scholars have predicted that these lawyers are the ones who will bring about "true disruption" when it comes to technology in the legal services market.[79] Today, these organizations are exploring the streamlined benefits of document automation, as well as projects driven by AI and machine learning to, among other benefits, help themselves and their clients identify legal issues in the first place.[80]

AI is also helping lawyers work better and more efficiently in the traditional law firm setting. In the same way that document generation can assist consumers directly, similar technology can help attorneys manage their time and

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recognition of the potential for non-lawyer providers to meet client needs and for technology to enhance human productivity").

[78] *See* Sonday, *supra* note 2 (describing legal services organizations' "past success in reaching clients through basic tools like texting"); Cabral et al., *supra* note 14, at 269 ("Many legal aid programs must serve large geographic areas with few attorneys. . . . Legal aid programs have turned to innovative uses of technology to overcome these geographic challenges.").

[79] *See* Brescia et al., *supra* note 1, at 554 ("True disruption is likely to come from those serving the 'lower end' of the market: the solo practitioners, legal services lawyers, and 'low bono' providers of legal services.").

[80] *See* Sonday, *supra* note 2 (noting that legal services organizations "are now moving to more advanced platforms like document automation to better streamline internal processes," that "[s]ome are even going one step further by embarking on artificial intelligence (AI) and machine learning (ML) projects," and that machine learning "has the potential to improve the way clients and LSOs use technology to identify legal issues").

workloads.[81] The time and cost savings from these efficiencies can be passed on to consumers in the form of increased flat-fee service options, as opposed to hourly billing.[82] As Kristen Sonday has explained, this "document automation breaks down the economic, geographic, and temporal barriers to justice."[83] AI is also assisting lawyers with the creative and analytical aspects of their work, including by using analytics in litigation to help develop arguments and strategies based on past results.[84] If AI and machine learning can appropriately complete or assist with once-time-consuming tasks, lawyers and other providers can spend less time on the mechanical aspects of legal problem solving and more time on the human and creative aspects.[85]

While legal AI has the potential to have a profound impact in each of these settings, its true power lies in its ability to transform and expand the legal services market as a whole to include those who have been historically excluded.[86] To this

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[81] *See* Brescia et al., *supra* note 1, at 573 ("[A]utomated document generators have the potential for sustaining the practice of law by assisting lawyers dealing with massive workloads.").

[82] *See* Sonday, *supra* note 2 (describing an example of a no-code platform that attorneys can use to "expand[] the affordable, flat fee services that are accessible to those who can't afford hourly rates" "[b]ecause it takes fewer lawyer-hours to generate the same documents" (quoting Dorna Moini, founder of Documate)).

[83] *Id.*

[84] *See* Walters, *supra* note 8, at 1084 ("Law firms are looking at litigation analytics more than ever to analyze the merits of arguments and litigation strategies—in no small part because the tools of analysis are improving quickly.").

[85] *See* Sonday, *supra* note 2 ("If you can frame a problem as a prediction problem and you have the right data, it can give you repeatable and scalable solutions. For access to justice, this . . . minimiz[es] the time spent on . . . mechanical task[s], allowing [attorneys] to do more human work." (quoting David Colarusso, Director of the Legal Innovation & Technology Lab at Suffolk Law School)).

[86] *See* Brescia et al., *supra* note 1, at 554 ("If disruption is indeed coming to the legal services market, and few can doubt that it is, technological innovation, one of the main drivers of this disruption, can serve to widen access to justice in communities desperate for legal assistance—low- to moderate-income communities, the working poor, and the middle class.");

end, some have equated the "justice gap" with a "market opportunity."[87] With greater efficiency and increased commodification, consumers benefit from more sources of legal information and services, greater competition, and lower prices, and service providers benefit from higher volume of consumers.[88]

But these optimistic prognostications for an efficient, accessible AI-driven legal problem-solving landscape presume that a wide range of stakeholders will be able to effectively harness AI. The following section will explore why, under current conditions, this might not be the case.

II. Legal AI's Peril: The Threat of an Inequitable Two-Tiered System of Legal Services

Despite the promise of legal AI, increased reliance on and legitimization of these technologies could create inequities—widening, rather than closing, the justice gap. In many cases, scholars and commenters express this fear in terms of potential two-tiered systems of access to legal services. Three predominant two-tiered-system fears have emerged in the literature: (1) one with expensive, but superior, human lawyers and inexpensive, but inferior, AI-driven legal assistance; (2) one where only large law firms will effectively harness superior

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Johnson, *supra* note 16, at 163 ("An increase in the technological efficiency of lawyers, particularly transactional lawyers, could . . . improve access to representation for additional clients like non-profits, small businesses, and entrepreneurs."); Poppe, *supra* note 34, at 190 (explaining in the AI context that some "see technology reducing the costs of legal practice, allowing lawyers to expand their practices into latent legal markets."); *see also* Albert H. Yoon, *The Post-Modern Lawyer: Technology and the Democratization of Legal Representation*, 66 U. TORONTO L.J. 456, 469-71 (2016)).

[87] *See* Brescia et al., *supra* note 1, at 580.

[88] *See* Poppe, *supra* note 34, at 188 ("[D]isaggregation [of legal work] creates the possibility for multiple sources of legal information and services, leading to commodification and increasing competition."); Tromans, *supra* note 50 ("[I]f you make legal services more efficient and automate the process work lawyers will be able to better respond to market needs with lower prices. Lower legal costs won't mean poorer lawyers, it just means a business model where more matters are handled . . . .").

but expensive AI, thereby increasing their power and making more affordable service providers obsolete; and (3) one where AI's impact will not overcome the status quo and there will continue to be only a small portion of the public that can afford legal services. None of these scenarios is inevitable, and it is possible that the future is one in which parts of all three scenarios are realized. This section explores the risk of each two-tiered scenario in turn.

A. Superior Human Lawyers vs. Inferior Machines

The first two-tiered system concern reflects fear that technology-driven legal solutions will be accepted—or worse, expected—as the predominant source of legal assistance for those who cannot afford what are assumed to be superior human-driven legal services. Indeed, such a trend may already be occurring.[89] At best, this scenario could result in a landscape where widely-available tech-driven solutions might be "better than nothing"[90] but still worse than assistance from full-service licensed legal professionals.[91] At worst, some fear the "lower" tier will be rife with services that are not better than nothing,

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[89] *See* Jewel, *supra* note 14, at 328 ("'Traditional, hand-crafted, one-to-one, consultative professional service[s], highly tailored for the specific needs of particular clients' are falling by the wayside in favor of off-the-rack legal products." (quoting Susskind, *supra* note 73 at 29-32, 237, 247)).

[90] *See, e.g.,* Brescia et al., *supra* note 1, at 579 ("[T]he provision of these services, whether they are legal services per se, or not, are arguably better than no services at all."); Poppe, *supra* note 34, at 201 ("[I]f we lack the will and resources to expand access to justice in other ways, *anything* may be better than *nothing*."); *see also* Yu, *supra* note 12, at 352 (explaining that, throughout society, "[n]otwithstanding the different problems that algorithm-enhanced technological products and services may generate, the many promises these technologies provide suggest that individuals will be, on balance, better off having the technologies than not having them in the first place").

[91] *See, e.g.,* Kunkel, *supra* note 29, at 382-83; Brescia et al., *supra* note 1, at 554, 605-606 ("[O]ne must ask the question: are these types of innovations a 'substitute' for true access to justice? In many respects, the clear answer is 'no.'"); CATHY O'NEIL, WEAPONS OF MATH DESTRUCTION: HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY 8 (2016).

and in fact cause consumers harm.[92] Indeed, even today, some online legal services are predatory or engage in unfair and deceptive trade practices.[93] Moreover, harms from legal AI can often be difficult to detect when consumers lack not only legal but also technical sophistication.[94]

The notion that AI-driven technologies and their algorithms are inferior to humans and increase inequality is not new, nor is it confined to the legal services context. In her book "Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy," Cathy O'Neil argues that algorithms "tend to punish the poor" due to the same characteristics that contribute to algorithms' appeal: "they are engineered to evaluate large numbers of people. They specialize in bulk, and they're cheap."[95] She further explains that "[t]he wealthy, by contrast, often benefit from personal input," such as how "[a] white-shoe law firm . . . will lean far more on recommendations and face-to-face interviews" than entities with fewer resources could.[96] She concludes that, increasingly, "[t]he privileged . . . are processed more by people, the masses by machines."[97]

Many of these fears in the legal context focus on the emerging tech-driven self-help market, a domain where some fear less-wealthy consumers will be stuck because it offers the

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[92] *See* Brescia et al., *supra* note 1, at 554.

[93] *See* Margaret Hagan, *The User Experience of the Internet as a Legal Help Service: Defining Standards for the Next Generation of User-Friendly Online Legal Services*, 20 VA. J.L. & TECH. 394, 422-428 (2016) (discussing an experiment that determined many internet users cannot tell the difference between a scam or real legal service); Lauren Moxley, *Zooming Past the Monopoly: A Consumer Rights Approach to Reforming the Lawyer's Monopoly and Improving Access to Justice*, 9 HARV. L. & POL'Y REV. 553, 558-69 (2015) (discussing unfair and deceptive practices used by online legal services).

[94] *See* Poppe, *supra* note 34, at 205 (2019) (discussing the issue of consumer sophistication and asking, "Will the individual know whether the legal tech has succeeded?").

[95] O'Neil, *supra* note 91, at 8.

[96] *Id.*

[97] *Id.*

only form of service they will be able to afford, regardless of the quality of the service.[98] These concerns reflect an inherent tension between embracing technology that could make inroads in closing the justice gap, and devaluing traditional legal aid efforts.[99] Some fear that investing in technology to close the justice gap will signal an abandonment of the traditional "full-representation model" of legal aid, creating at least a perception in society that low-income individuals do not have access to full justice.[100] Others fear that technological innovations may actually lead to a decline in the availability of in-person assistance.[101]

Some also anticipate the possibility that traditional legal services, with the use of technology, might perpetuate these two tiers during the initial intake of cases by pushing some consumers to lawyers and other consumers to technology-driven solutions.[102] To the extent that some lawyers who serve individuals embrace tech-driven processes, under this scenario, those services might also be viewed as inferior to the more expensive face-to-face services offered by larger law firms.

Consumers relegated to a "lower" tier in this scenario would be at a number of disadvantages, at least in theory, compared to consumers of traditional, human-driven, full-

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[98] *See, e.g.,* Brescia et al., *supra* note 1, at 554 (describing claims "that the new modes of providing legal services—websites, mobile applications, do-it-yourself programs—threaten the consumer, who may receive services at a discounted price, yet those services may be of such low quality that they might end up causing more harm than good").

[99] *Id.* at 611 ("[T]he arguments in favor of technology-enabled access to justice programming must thread the needle between making arguments that embrace the existing and future disruptions, while not undermining the effort to ensure full access to justice for all Americans in any way.").

[100] Cabral et al., *supra* note 14, at 306-307.

[101] *See, e.g.,* Poppe, *supra* note 34, at 202.

[102] Kunkel, *supra* note 29, at 382-83 (explaining that under some initiatives, "technology would play a key gatekeeping role in determining the extent of the services available to prospective clients in the initial 'triage' step," where "technology would be used to determine which clients would be provided with full service by an attorney and which would be relegated to some form of self-help, technologically assisted or otherwise").

service representation. As Brescia et al. explain, "[r]epresentation by an attorney provides not just competent but zealous services rendered in a way that is unique to the needs of the individual, and those services are backed up by the disciplinary machinery that ensures they are rendered in a way that satisfies the attorney's ethical obligations to the individual."[103] Moreover, "an app will not empower pro se consumers to take the aggressive steps a lawyer might take against his or her adversaries, the types of steps and tactics honed by a lawyer over years of practice and experience."[104]

As a result of these inequities, under this scenario, a struggling "lower" tier of consumers and providers desperately resorts to AI-driven legal technologies, but fails to effectively design and use them, while a relatively comfortable "higher" tier continues offering traditional legal services, which are not overly reliant on AI-driven technologies, to those who can afford them. While some consumers might benefit from "better-than-nothing" AI-driven services, others might be harmed by ineffective services whose harms are not fully realized by individual consumers or the public at large. Moreover, an inaccurate perception of the effectiveness of AI-driven services could lead to the further abandonment of more traditional human-centered legal aid solutions to the justice gap.[105]

B. Well-Resourced "Cyborg" Lawyers vs. Inferior Humans and Machines

A second two-tiered scenario is rooted in greater faith in the potential power of legal AI, but fears that the power will not be evenly distributed throughout the landscape, to the ultimate detriment of consumers. Under this scenario, AI-driven legal technologies will be harnessed by those stakeholders who have the necessary resources, resilience, and relationships to do so effectively, while those who do not will be quickly antiquated and left at an even greater competitive

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[103] Brescia et al., *supra* note 1, at 605.

[104] *Id.* at 605-606.

[105] *See infra* Section II.C.

disadvantage than they experience today. This system, it is feared, would result in a "higher" tier of those stakeholders who successfully integrate AI-driven legal technologies into their process, mostly serving wealthy clients and corporations,[106] and a "lower" tier of those who do not.

The literature alludes to this type of scenario in discussions of why some entities—such as large law firms—are better situated to realize the benefits of emerging technologies than others—like small law firms. One factor that would lead to further inequality is the disparity of important organizational resources across the legal services landscape. Large law firms tend to have greater capital and funds to pursue new technologies,[107] including by hiring in-house information technology personnel or outside consultants.[108] By contrast, smaller firms and solo practices are often limited to less expensive technology that serves fewer people,[109] ultimately making them less efficient and less competitive.[110] While the benefits experienced by large firms might increase their capacity to serve more clients, those firms' expertise and practice areas might not be suited to meet the needs of those who otherwise would have sought providers who specialize in serving those affected by the justice gap.

The economic and human resources available to wealthier providers make them better able to tailor their technology to their specific needs, which historically have been serving corporate clients. More specifically-tailored, all-inclusive services are available to large firms than to small ones.[111] The

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[106] *See* Brescia et al., *supra* note 1, at 554 ("Many assess the impact of these disruptions on the delivery of services to wealthier clients and corporations . . . ."); Jordan Furlong, *The New Legal Economy: What Will Lawyers Do?* WIS. LAW., Feb. 2020, at 55, 56 (predicting that, unlike most individuals and businesses, "rich people and large in-house law departments will experience a golden age of law").

[107] *See* Guttenberg, *supra* note 45, at 480-81.

[108] *See* Finnemore, *supra* note 6, at 26.

[109] *Id.*

[110] *See* Guttenberg, *supra* note 45, at 480-81.

[111] *See* Finnemore, *supra* note 6, at 26 (explaining that for small firms, "there are few all-in-one products like those available to larger firms").

vendor platforms designed for large firms "reduce costs and uncertainties of litigation through longer-term arrangements, standardization across litigation matters, and use of broader information-governance services that integrate litigation support."[112] By contrast, the products that are available to small firms might not account for the many differences among those practicing across the diverse landscape.[113]

Technology also empowers large law firms to be more effective consumers and providers of services on the national and global stages.[114] Large firms can more easily outsource routine administrative tasks for automation, whereas small firms tend to still be self-reliant for such tasks, such as document review.[115] National and multinational firms can also harness communication and information technology across their organizations, allowing them to exploit the information for further growth,[116] ultimately resulting in greater size and geographic expansion that far exceeds any modest competitive edge gained by smaller regional firms' use of technology.[117] Moreover, the lack of transparency into the algorithms being used by innovative entities means that the benefits of AI might never be accessible to non-experts,[118] ultimately disadvantaging

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[112] Daniel N. Kluttz & Diedra K. Mulligan, *Automated Decision Support Technologies and the Legal Profession*, 34 BERKELEY TECH. L.J. 853, 874 (2019).

[113] *See* Finnemore, *supra* note 6, at 26 (explaining that "a product that works well for one small firm won't necessarily be the best for another").

[114] *See* Guttenberg, *supra* note 45, at 441 (describing how "[a]dvances in communication and information technology have greatly facilitated the growth of national and global law practices and national and multinational law firms").

[115] See Pasquale & Cashwell, *supra* note 9, at 35-36.

[116] *See* Guttenberg, *supra* note 45, at 441.

[117] Guttenberg, *supra* note 45, at 441; *see also* Leslie C. Levin, *Preliminary Reflections on the Professional Development of Solo and Small Law Firm Practitioners*, 70 FORDHAM L. REV. 847, 853 (2001); JOHN P. HEINZ ET AL., URBAN LAWYERS: THE NEW SOCIAL STRUCTURE OF THE BAR 37-38 (2005).

[118] *See* Alteneder et al., *supra* note 25, at 29 ("[W]ithout transparency [into coding], the system can easily slide back into the realm of experts only.").

those who cannot afford or are otherwise unable to establish relationships with such experts.

Some believe it is inevitable that lawyers who augment their work with AI—sometimes referred to as "cyborg lawyers"[119]—will create superior work product compared to those who do not.[120] Therefore, some legal service providers who lack access to powerful algorithms could experience what Peter K. Yu describes as the "vicious cycle in which the technology rich will get richer and the gap between the have and have-nots will widen even further."[121]

This scenario's seeming optimism regarding the potential power of legal AI is eventually engulfed by the fear that the power will not be equitably distributed across the landscape in a way that would ultimately benefit those affected by the justice gap. Although increased capacity of large firms might result in greater access for some clients who have traditionally been served by newly-disadvantaged or displaced smaller providers, such increased capacity, it is feared, would not make the necessary inroads to meaningfully progress toward closing the justice gap. As a result, the power disparity among legal service providers would ultimately be projected onto the segments of society that the two tiers serve, further widening the justice gap.

C. The Status Quo: Perpetuation of the Existing Two-Tiered System

Under a third scenario, others believe that there already exists a two-tiered system of those who can and cannot access legal services, and that technological innovation will not

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[119] *See, e.g.*, KEVIN RHODES, CYBORG LAWYERS (2017).

[120] *See, e.g.*, Thomas R. Moore, *The Upgraded Lawyer: Modern Technology And Its Impact On The Legal Profession*, 21 U. D.C. L. REV. 27 (2019); Walters, *supra* note 8, at 1076 (explaining that "the quality of work product created by lawyers augmented with AI [will] surpasses the work created without AI . . . ."); Jewel, *supra* note 14, at 340 ("If society is going to connect technology with lawyering, the norm of participation and the collaborative model suggest that the best approach may be a hybrid approach that uses technology along with human, legal counseling.").

[121] Yu, *supra* note 12, at 334.

meaningfully alleviate the powerful causes of the justice gap. This scenario would ultimately result in a failure to significantly alter the landscape and a perpetuation of the unacceptable justice-gap status quo.

Some believe that the landscape will not be significantly altered because AI simply will not meet current optimistic expectations. Underperformance and failure of technology in the pursuit of access to justice are not uncommon.[122] As many scholars have noted, AI is not yet poised to deliver on many expectations, including concerning the development of general AI,[123] more widespread automation,[124] the ability to effectively utilize the explosion of new data,[125] the ability to assist with complex tasks,[126] and the ability of AI to translate into net increased efficiency for users.[127] There are also technical limits on what legal tasks can even be automated in the first place.[128]

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[122] *See* Staudt, *supra* note 58, at 1122 ("Overheated expectations and early unbridled enthusiasm for breaking technologies have contributed to disappointment when projects in law and information technology produced only modest improvement or even resulted in failure.").

[123] Furlong, *supra* note 106, at 55, 56 ("The development of artificial general intelligence is a very long distance away. . . . The machines still need us more than we need the machines.").

[124] *See* Pasquale & Cashwell, *supra* note 9, at 40 ("The acceleration of automation beyond its present level . . . appears doubtful for many reasons.").

[125] *See* Delacroix, *supra* note 10 ("[W]e are still a long way from harnessing the full potential of the data now available.").

[126] *See* Asay, *supra* note 26, at 1193 ("Our computerized world is . . . plagued with an artificial stupidity confined to carrying out particular, narrow tasks, and not often very well.").

[127] *See* Kunkel, *supra* note 29, at 386 (questioning the "rather bold assumption that technology will necessarily deliver on this promise of efficiency"); Guttenberg, *supra* note 45, at 480 ("Artificial intelligence and document assembly promise heightened efficiencies in the years to come, but they may prove to be far more expensive and time consuming than previously believed.").

[128] *See* Pasquale & Cashwell, *supra* note 9, at 45 ("[An] important source of attorney revenue is associated with providing expert advice, investigating facts, organizing materials, and applying facts to law. There is no clear computational replacement for many of these activities on the horizon—

While some predictions for technology do eventually meet expectations, they often do so more slowly than initially anticipated.[129] The development of some anticipated legal AI might continue to lag due to lengthy development timelines and slow returns on investments.[130] Traditionally "bespoke" legal services involving more novel and complex tasks will continue to require more technological sophistication before the landscape is truly disrupted,[131] and they may require more time and money to develop than originally anticipated.[132]

In addition, some predict that the status quo might also be perpetuated by the legal profession's conservatism and pessimism toward technology's potential for broad impact, including on the justice gap. Many lawyers still hold an "old ways are best" mentality.[133] Others have noted that some lawyers have a "propensity to 'seek equilibrium in the status quo and resist change.'"[134] Though the COVID-19 pandemic forced many lawyers to use new technology, the challenges experienced also underscored the profession's history of resistance to new technology.[135]

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particularly in complex and fast-changing areas of law, legislation, and policy.").

[129] *See* Staudt, *supra* note 58, at 1122 ("Usually the predictions are not completely wrong but are almost always overblown or mistimed.").

[130] *See* Asay, *supra* note 26, at 1253 (noting that investors "are often reluctant to invest in innovations that only promise returns, if at all, after a long period of risky trial and error").

[131] *See* Poppe, *supra* note 34, at 188-89 ("Because the higher echelons of the legal market concern matters of greater complexity and novelty—where 'bespoke' legal services have been the norm—disruption in this area is anticipated to require more sophisticated technology.").

[132] *See* Guttenberg, *supra* note 45, at 480.

[133] *See* Johnson, *supra* note 16, at 161 (citing Antigone Peyton, *Kill the Dinosaurs, and Other Tips for Achieving Technical Competence in Your Law Practice*, 21 RICH. J.L. & TECH. 7, *1 (2015)).

[134] *Id.* (citing Michael Simon et al., Lola v. Skadden *and the Automation of the Legal Profession*, 20 YALE J.L. & TECH. 234, 238 (2018)).

[135] *See generally* Jan L. Jacobowitz, *Chaos or Continuity? The Legal Profession: From Antiquity to the Digital Age, the Pandemic, and Beyond*, 23 VAND. J. ENT. & TECH. L. 279, 297-300 (2021).

Still others believe that impactful technology is here, but that its impact on the justice gap has been overblown.[136] Moreover, to the extent that there are well-intentioned startups that focus on affordable access, these entities may eventually cave to other demands and interests,[137] limiting their ability to make long-term impact on the justice gap and perpetuating the existing two-tiered system.

Sections III and IV will demonstrate that the fears underlying each of these two-tiered scenarios reflect the reality of a system where many stakeholders across the legal-problem-solving landscape are not able to access and effectively design legal AI. Without widespread reforms, this will continue to risk inequitable innovation across the legal problem-solving landscape and ultimately inequitable access to justice. The taxonomy that follows will establish the importance of comprehensive "calibration" of legal AI, current barriers to widespread calibration, and policies that will help overcome those barriers.

III. Calibrating Legal AI Effectively: Balancing Reliance and Restraint

In order for legal AI to maximize its potential and reduce the risk of an undesirable two-tiered system of legal services, it must be effectively "calibrated." The concept of AI "calibration" has been alluded to throughout the literature on legal AI, as well as AI more broadly.[138] For the purposes of this

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[136] *See, e.g.*, Kunkel, *supra* note 29, at 366 (describing the "barrage of policy discussions proposing modest technical interventions" and how they have obscured larger political questions surrounding the justice gap).

[137] *See* Tromans, *supra* note 50 ("[A]s [legal tech] startups grow into larger businesses they inevitably change focus. What started out as a revolutionary act to smash inefficiency ends up as a mission to grow a company, satisfy investors, and manage a growing workforce—while of course keeping clients happy.")

[138] For example, Rebecca Crootof discusses the importance of "calibrating trust" of machines in "hybrid human-AI judicial systems." Rebecca Crootof, *"Cyborg Justice" and the Risk of Technological-Legal Lock-in*, 119 COLUM. L. REV. F. 233, 243 (2019). Frank Pasquale and Glyn Cashwell have discussed in the context of the emerging "machine age" the need to

Article, calibration refers to the comprehensive design of AI with careful consideration of the appropriate level of reliance on the technology depending on the (1) consumers, (2) legal issues, and (3) underlying processes involved with each case. While some of these considerations might weigh in favor of relying on AI to complete or assist with certain aspect of legal problem-solving, others might warrant restraint. Although much of the current dialogue surrounding legal AI focuses on the comparative virtues and shortcomings of technology and humans, the effective legal solutions of the future will increasingly be driven by a combination of both technology and humans. With the proper resources, resilience during the design process, and cross-industry relationships, innovative licensed legal professionals will be able to engage the expertise of technologists, and technologists will be able to engage legal experts in developing AI-driven tools for consumers and legal service providers alike. By engaging in effective calibration, these stakeholders can more effectively balance the appropriate role for humans and machines in any given case. Therefore, calibration is not about maximizing AI use. Rather, it is about making more informed decisions about what AI should, and should not, be used for.[139]

Calibration is not important just for tech-minded, innovative access-to-justice advocates. Those who choose to forego any form of legal AI (and its necessary calibration) will not only miss important opportunities to help close the justice gap. They might also jeopardize their own viability in the marketplace. Legal service providers across the spectrum are facing increasing pressure to adopt emerging technologies, and this pressure could grow as a result of the "hype," potential, and high expectations of legal AI. This pressure is often reinforced by business demands to increase efficiency and stay

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"calibrate" machines that "enhance and respect the abilities and needs of workers" rather than "extend the power of machine owners." Pasquale & Cashwell, *supra* note 9, at 46.

[139] *See* Yu, *supra* note 12, at 362-63 (explaining in the context of "algorithmic literacy" the importance of individuals not only "realiz[ing] the full potential of machine learning and artificial intelligence," but also having the ability to "choos[e] away from undesirable technological products and services that fail to protect privacy or other individual rights").

on the cutting edge,[140] with the most vocal pressure often coming from one's own clients.[141] Many of these pressures compounded during the COVID-19 pandemic with an increase in remote practice and other practical challenges.[142] Indeed, AI and its proper calibration are essential for all lawyers because, as McPeak has explained,

> technology has been integrated into the very act of practicing law. The core activity of lawyering—that of thinking like a lawyer—is expressed through the technology lawyers use. At its core, technology is not merely a tool of the trade, but it is wrapped up intrinsically in the very thought processes lawyers employ.[143]

Moreover, for licensed lawyers, using certain AI might eventually become mandatory. Ed Walters predicts that, "as the quality of work product created by lawyers augmented with AI surpasses the work created without AI, it is clear that lawyers will soon have a professional responsibility to employ new techniques."[144] This obligation could stem from, among other duties, a lawyer's duty of competence.[145] Walters also notes that "[t]he price for many AI services is already low and

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[140] *See* Knake, *supra* note 46, at 42 ("The fact is that law practice is a business-one increasingly pressured in the twenty-first century by competition and technological innovation.").

[141] *See* Brescia et al., *supra* note 1, at 555 ("[C]lients [are] demanding more efficient, less expensive services."); Guttenberg, *supra* note 45, at 417 ("Clients will gravitate to the most efficient, innovative, competitive, and skilled practitioners . . . .").

[142] *See, e.g.*, Robert Ambrogi, *Seven Ways the Pandemic Will Forever Change Law Practice*, S.C. LAW., July 2020, at 28 (describing how the pandemic led to many lawyers being encouraged to use more technology).

[143] McPeak, *supra* note 5, at 471; *see also id*. at 472 ("Modern technology is now entrenched in the core tasks of being a lawyer, and its function, purpose, and future potential cannot be ignored.").

[144] Walters, *supra* note 8, at 1076.

[145] *See id.* at 1079 ("Rule 1.1, read in conjunction with Comments 5 and 8, requires law firms to employ measures, including AI and data analytics, to ensure that they meet standards of reasonable competence in representation."); *see also id.* at 1078 ("[I]n the near future, competent legal practice may be impossible without the assistance of machine augmentation . . . .").

might be expected to decrease over time, which means that law firms may face a professional responsibility to employ state-of-the-art legal-research and drafting tools, at least where they show efficacy and become broadly used in the profession."[146]

Most importantly, though, the access to justice movement has been forced to settle for a "something is better than nothing" approach with regard to technology for too long. By focusing on calibration, stakeholders can aim higher and ensure that technology is meaningfully impacting consumers. Through this process, stakeholders can maximize the benefits of legal AI while minimizing its risks, ultimately ensuring that legal AI fulfills its promise as a tool to improve access to justice. As discussed below, this calibration will require accounting for considerations concerning the consumers, legal issues, and underlying processes in each case.

A. Calibrating for Consumer Considerations

To be effective, AI must be calibrated to account for the differences between consumers that might warrant either AI reliance or restraint when assisting with their legal problems. This is true whether the consumer is a self-represented litigant, engaging a legal services organization, or hiring a law firm. Failing to account for these consumer differences can result in poorly designed legal technology that prevents meaningful access to legal services.[147] Just because AI might open some "virtual doors" for some consumers does not mean that all consumers will be willing or able to walk through them.[148] At the same time, just because a technology-driven solution is not

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[146] *Id.* at 1076.

[147] *See* Alteneder et al., *supra* note 25, at 13 ("Without a keen understanding of self-represented litigants' behavior and needs, we risk designing systems that will miss the mark and be unused by the consumer."); Cruz, *supra* note 3, at 366-67 ("Without intentional consideration of end users and their needs, limits, and preferences, technology can lead to . . . barriers that will prevent access to legal services.").

[148] *See* Schmitz, *supra* note 30, at 2386 (suggesting, in the context of online dispute resolution, that "virtual door[s] to justice… should not close all [face-to-face] doors" in light of important differences among consumers).

right for one consumer, does not mean that others cannot benefit from it.[149]

In balancing legal AI reliance and restraint, calibration must account for consumers' varying levels of comfort with not only technology, but also the very act of engaging legal assistance in the first place. While some consumers, like corporations, frequently engage with legal services, many individuals and small businesses are more likely to be intimidated by the legal system and the lawyers in it,[150] or otherwise refrain from seeking services "because they lack the knowledge, experience, or resources to artfully and actively pursue their interests,"[151] or because of higher cost sensitivity.[152] Given that most consumers have never engaged with legal services,[153] it is wrong to assume that many have ever thought about the technology associated with those services.[154] Therefore, some consumers initially encounter legal technology from an already uncomfortable posture, and even those who are otherwise comfortable with technology might abandon their pursuit of legal information if the added complexity of new technology is involved.[155]

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[149] *Id.* at 2392 (recognizing in the context of online dispute resolution that, "[w]hile ODR may not be right for every individual or dispute, it has promise for opening new avenues for justice").

[150] *See* Guttenberg, *supra* note 45, at 438 (explaining that individual and small business clients "may be intimidated by lawyers and the legal system").

[151] Schmitz, *supra* note 30, at 2382.

[152] *See* Johnson, *supra* note 16, at 163 ("[N]on-profits, small businesses, and entrepreneurs . . . tend to exhibit higher cost sensitivity and are therefore less likely to engage counsel as vigorously as more developed businesses.").

[153] *See* Schmitz, *supra* note 30, at 2382 (discussing why, despite needing legal services, "the majority of consumers remain silent").

[154] *See* Tromans, *supra* note 50 ("[I]t's not surprising that most people never meet a lawyer in their lives, and probably don't spend too much time considering how tech and law are combining to change the means of production.")

[155] *See* Alteneder et al., *supra* note 25, at 28 (summarizing research that shows "so-called savvy" technology users can be disinclined to seek legal information, or other types of research, contrary to historical assumptions).

Solutions for consumers who are not comfortable with technology might be more appropriately calibrated toward traditional face-to-face services. The range of consumer comfort with different technologies varies greatly and is influenced by both the consumers' willingness and ability to engage.[156] That willingness and ability is often especially low when technologies are first introduced.[157]

But even consumers who are not tech-averse, fearful, or otherwise hesitant to engage tech-aided legal service providers might nevertheless be unaware that they have a legal issue in the first place,[158] and therefore not seek legal services as a result.[159] Therefore, assumptions that technology will reach those in need risk continuing to exclude some from the market. Moreover, even those consumers who do recognize they have legal issues might not be able to navigate that legal territory in the way that certain legal technologies require.[160] Self-help services, and increasingly many law firms and legal aid services, are automating certain document creation based on guided interviews and answers consumers provide on questionnaires, but it is risky to assume that consumers can accurately identify

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[156] Poppe, *supra* note 34, at 201 (quoting Catrina Denvir, Civil Justice Council, ASSISTED DIGITAL SUPPORT FOR CIVIL JUSTICE SYSTEM USERS: DEMAND, DESIGN, & IMPLEMENTATION 4 (2018)).

[157] *See* Cabral et al., *supra* note 14, at 266 ("[N]ot everyone will be able or willing to use the technology when it is first deployed.").

[158] *See* Brescia et al., *supra* note 1, at 588 ("[M]any individuals are unaware that they even have a legal problem.") (citing DEBORAH L. RHODE, ACCESS TO JUSTICE 79-80 (2004)); Alteneder et al., *supra* note 25, at 9-10 (discussing a study where "consumers generally did not identify their problems as legal needs").

[159] *See* Poppe, *supra* note 34, at 203 ("For many civil legal problems, people do not seek legal assistance because they do not perceive the problem they are experiencing as a *legal* problem."); Knake, *supra* note 46, at 2 ("[M]any do not even realize when a lawyer might be necessary or helpful.").

[160] *See* Cruz, *supra* note 3, at 389 (explaining in the context of legal technology that "navigating the law is complicated—the road to justice is filled with legal jargon, complicated rules, and unusual procedures that often overwhelm and frustrate individuals who are not trained or familiar with the law").

and describe their legal issues and goals within these tools.[161] Because consumers often do not know the legal terms corresponding to their issues, it is essential that the "classifiers" coded into the AI match the consumers' understanding of their issues.[162] Though resource-intensive, there are creative ways for technologists and legal service providers to fulfill this important step in calibrating for consumer considerations. For example, laypersons' questions can be "crowdsourced" to lawyers and even supervised law students who can identify and label the underlying legal issue, thereby training machine-learning classifiers to recognize similar issues in future questions, even if they are worded with slightly different language.[163]

In addition, designers of AI must account for the complexity often inherent in the legal issues faced by those affected by the justice gap,[164] which often include overlapping economic and medical issues, and sometimes intertwined civil and criminal issues.[165] If properly calibrated, AI can actually help service providers identify, connect, and navigate these overlapping issues, thereby providing more effective and individualized service.[166]

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[161] *See, e.g.*, Poppe, *supra* note 34, at 205 (cautioning the "empirical assumption underlying predictions of the rise of disruptive estate-planning technology . . . that clients can accurately identify and describe their testamentary desires, either on their own or with technological assistance").

[162] *See* Sonday, *supra* note 2 ("AI classifiers have to match clients' understanding of their own problems in order to be effective, and oftentimes, a client doesn't know the associated legal term.").

[163] *Id.* (describing this process with the example of the online crowdsourcing "game" Learned Hands).

[164] *See* Staudt, *supra* note 58, at 1129-30 (explaining one study that found that "complexity was a major barrier for self-represented litigants in their pursuit of justice").

[165] *Id.* at 1142.

[166] *See* McPeak, *supra* note 5, at 472 ("[Legal technology] innovations capture the thought processes and connections lawyers make between legal concepts. They expand the universe of materials that can be located and thus expand lawyers' knowledge. They catalogue and characterize legal concepts in ways that enhance legal analysis.").

Calibrating for consumer considerations must also recognize that "[a]ccess to justice starts with literal access: figuring out how clients best receive, digest, and act on legal information."[167] But consumer access to legal information varies greatly and depends in large part on one's access to information technology. Moreover, one's access to the algorithms that make sense of growing information troves often depends on one's "age, gender, ethnicity, income, education, geography, and many other variables."[168] While it is generally assumed that more consumers have access to communications technologies now than ever,[169] there is still a digital divide and an "algorithmic divide."[170] Many consumers still lack basic access to, or the necessary skills and resources to make meaningful use of, those technologies.[171] For example, some prepaid internet service plans do not provide the broadband coverage needed to support emerging legal technology applications,[172] and the bandwidth demands of increasingly complex AI could continue to grow over time. The inability to access legal services via the internet could disproportionally harm some of society's most vulnerable communities, such as those experiencing housing insecurity.[173]

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[167] Sonday, *supra* note 2.

[168] Yu, *supra* note 12, at 387 (describing what affects one's "algorithmic inclusion").

[169] Alteneder et al., *supra* note 25, at 27 ("[I]t is important that there is an understanding that more persons, including low-income persons, have access to high speed Internet, smartphones, and social media now more than ever before, and this trend is even deeper with younger persons.").

[170] *See generally* Yu, *supra* note 12.

[171] *See generally* Avital Mentovich et al., *Are Litigation Outcome Disparities Inevitable? Courts, Technology, and the Future of Impartiality*, 71 ALA. L. REV. 893 (2020); *see also* Schmitz, *supra* note 30, at 2386 (arguing in the context of online dispute resolution that "virtual door[s] to justice" might not always be appropriate, "especially in light of consumers' differing levels of . . . access to . . . technology"); Kunkel, *supra* note 29, at 384 ("While virtually everyone may have some sort of physical access to a computer, the quality of this access varies greatly with advantages and disadvantages conferred according to one's level of wealth.").

[172] *See* Cruz, *supra* note 3, at 388.

[173] *See Support for Legislation Providing Internet Access to Individuals Living in Temporary Housing Throughout New York State*, N.Y.C. BAR

The impact of the digital divide on these groups has only grown since the COVID-19 pandemic.[174] Some jurisdictions are engaged in efforts to expand internet access to these communities.[175] In addition, some legal service providers have adjusted their services to account for barriers to broadband access, for example, by programming chatbots to communicate with consumers via simple text message, which is often more accessible than other technology mediums.[176] Still, many affected by the justice gap cannot afford mobile technologies,[177] and even those who can might not have the necessary sophistication to engage with online legal services or to communicate with their legal service provider by mobile and web-based technology.[178]

Effectively calibrated legal AI also requires culturally competent design, which is an inextricable prerequisite for access to justice efforts.[179] While many legal service providers

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(Dec. 20, 2021), https://www.nycbar.org/member-and-career-services/committees/reports-listing/reports/detail/digital-divide-free-wifi-for-homeless-shelter-residents (explaining that "New York's shelters are overwhelmingly lacking internet access" and supporting legislation aimed at increasing access).

[174] *See id.* (explaining within the context of lack of internet access in shelters that the "digital divide is not a new problem, but it has only grown more dire since the outbreak of the COVID-19 pandemic").

[175] *See, e.g.*, *id.* (explaining the New York City Bar's support for legislation aimed at increasing internet within shelters across New York state).

[176] *See* Sonday, *supra* note 2.

[177] See Cruz, *supra* note 3, at 388 ("The cost of accessing and using technology, particularly mobile technology, is a real consideration for low-income families and individuals.").

[178] *See* Alteneder et al., *supra* note 25, at 28 ("[A]lthough access to broadband or the use of mobile may be on the rise, the general user is not necessarily more sophisticated."); Poppe, *supra* note 34, at 201 ("[I]ndividuals' digital and general literacy may inhibit their use of web-based legal technologies.").

[179] *See* Cruz, *supra* note 3, at 351 (explaining that the "intersectionality of cross-cultural competence theory and access to justice theory . . . demonstrate that successful use of legal technology inextricably requires legal professionals to incorporate culturally competent designs"); *see also id*. at 352 ("[C]ulturally competent design is not only possible, but necessary to ensure social justice and help close the access to justice gap.").

are increasingly appreciative of the importance of cultural competence during in-person communication with clients, these efforts are just as important when designing legal technologies and communicating through them.[180]

For example, in her work on coding legal technology for cultural competence, Sherley Cruz explains the importance of accounting for different cultures' communication styles and trust of legal professionals:

> Persons from cultures that do not typically recount free flowing narratives may have difficulty with open-ended ('who, what, when, where') questions due to the lack of structure. This is particularly true of persons from groups that may distrust legal professionals. To assist these end users, information-gathering technology needs to gather stories in multiple formats to accommodate for differing story-telling preferences. A culturally conscious intake app or guided interview will capture a story told in and out of sequence of time, or in a circular format based on events.[181]

Legal service providers must account for these factors both when adopting third-party technologies[182] and when developing their own technologies, both of which may require working with engineering, technology design, and cultural competence experts.[183] Ensuring that design teams, whether

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[180] *Id.* at 372 ("Technology does not eliminate the cultural barriers that exist with person-to-person communications."); *see also* Yu, *supra* note 12, at 352 ("When introduced without much consideration of local contexts, [algorithm-enhanced] products and services could . . . generate unintended consequences.").

[181] Cruz, *supra* note 3, at 374-75.

[182] *Id.* at 375 ("Attorneys who are conscious about cross-cultural barriers will seek technology that is designed to work with different communication styles and account for diverse understandings and preferences.").

[183] *Id.* at 383 ("[I]f legal professionals work with technology designers and engineers to understand their end users, they can identify and address common factors and nuances in order to provide the end user with a better

internal or external, are diverse and made up of those affected by the justice gap, can also help ensure that these issues are accounted for.[184] Moreover, cultural competence must be emphasized through trainings of all who engage with legal technologies, especially if the service provider does not have an in-house expert.[185]

B. Calibrating for Issue Considerations

Stakeholders must also consider what degree of AI reliance or restraint is appropriate given the nature of the legal issues at play. Some legal issues require a high level of expert assistance,[186] particularly those involving life and liberty, such that AI's role should be merely supplementary. But "[n]ot all legal work requires the personal engagement of a highly experienced specialist,"[187] in which case greater AI reliance might be warranted.

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experience."); *id.* at 401 ("Legal professionals who use technology to provide access to justice programs and funders who support those programs, need to invest in long-term design experts who can develop and maintain culturally competent design features.").

[184] *Id.* at 372 ("A more diverse design team could anticipate some of these issues and account for them in the program design."); Yu, *supra* note 12, at 341 (arguing that legal technologies might not be effective if the "product or service . . . feature[s] algorithms designed by those who do not fully grasp the user's specific needs, interests, conditions, and priorities"); Kristen Sonday, *The Face of Legal Technology in 2018 (and What it Means for the Future of Access to Justice),* MEDIUM (May 22, 2018), https://medium.com/@kristensonday/the-face-of-legal-technology-in-2018-213e9479e0b2; Jason Tashea, *Legal tech has a diversity problem, new report says,* ABA J. (May 9, 2018), https://www.abajournal.com/news/article/legal_tech_has_a_diversity_problem_says_new_report___("Because the justice gap disproportionately affects women, immigrants, minorities, . . . those groups should have influence into the tech solutions that we are building and have their voices heard because they are so close to these issues.").

[185] *See* Cruz, *supra* note 3, at 401.

[186] *See* Cabral et al., *supra* note 14, at 307 ("Fully resolving some legal problems requires the help of a lawyer.").

[187] *Supra* note 73.

Within those cases where traditional, full-service, bespoke legal services might not be necessary, there is a wide range of possible ways that AI could assist consumers with their legal issues. For example, some legal problems that tend to have simple facts and a limited number of possible outcomes might be suitable for AI-driven self-help.[188] These might include cases involving straightforward mediation or some family law issues,[189] such as uncontested divorces, as well as resolving problems where lawyers are rarely, if ever, involved, like challenging parking fines.[190] Moreover, even though "technology is better than nothing" is not a sufficient or sustainable mindset for closing the justice gap, there may be some cases where, although technology is not the ideal form of assistance, it provides some help to self-represented litigants who otherwise are not able to secure assistance from a licensed legal professional or from legal aid.[191]

However, just because self-help services often allow consumers to make choices, does not mean that they produce legal outcomes entirely unique to each consumer,[192] and

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[188] *See* Brescia et al., *supra* note 1, at 609-10 ("With any type of case, there will be those cases that bear characteristics that make them good candidates for a one-size-fits-many approach, even if it does not fit them all."); Guttenberg, *supra* note 45, at 437 ("Commentators and practitioners have made a fairly convincing argument that not all legal practice requires unique solutions on each occasion."); Cabral et al., *supra* note 14, at 307 (noting that, although full resolution of some legal problems might require a lawyer, "easier problems may be handled by [self-represented litigants] if there are tools to assist them").

[189] *See* Brescia et al., *supra* note 1, at 593 (explaining in the context of legal technology that "increased participation of nonlawyers may be useful in mediation and family law cases").

[190] *See* Delacroix, *supra* note 10 (describing customer-facing solutions, such as parking fines, "where there is little downside to the vital increase in affordability and accessibility that automation brings, provided transparency, accountability and privacy are safeguarded").

[191] Cabral et al., *supra* note 14, at 307 (explaining the value of technological tools when "some persons may ultimately have to represent themselves if they cannot afford to hire a lawyer when legal aid simply does not have the resources to assist").

[192] *See* Jewel, *supra* note 14, at 330 ("Software such as LegalZoom generates a variety of different choices for the user, but in the end, does not allow

licensed legal professionals might be needed when pre-established outcomes are not appropriate. For example, some issues, such as certain business dealings, simply might be too high-stakes for automated self-help services when there is even a small risk of the service selecting an incorrect form or producing an unenforceable contract.[193] Moreover, self-help services should be calibrated to determine if a consumer is particularly vulnerable and proactively refer such individuals to licensed legal professionals.[194]

For those cases where a licensed legal professional is needed, AI might be suitable to assist those professionals with some large aspects of the case, thereby reducing the amount of time an attorney needs to spend on it, ultimately lowering the cost of the service. Examples of such cases where attorneys are involved but typically spend minimal effort might include breaches of contracts that explicitly set damages, small automobile collisions with limited damage, and other cases with easily-calculated damages, dispositive precedent, and no policy or legal questions.[195]

However, service providers must constantly consider which cases are not suitable for a commodified or "one-size-fits-all" approach.[196] Indeed, there are some issues that simply

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people to construct completely unique legal outcomes; it produces only one of several pre-established outcomes.").

[193] *See* Pasquale & Cashwell, *supra* note 9, at 40 (cautioning that, with LegalZoom, "entirely incorrect forms for a client's particular situation could be used or a resulting contract could be unenforceable. Although some LLCs are relying on LegalZoom to draft their legal documents, it can be excessively risky to use LegalZoom for high-stakes business deals. Risk aversion may trump technology diffusion.").

[194] *See* Delacroix, *supra* note 10.

[195] Pasquale & Cashwell, *supra* note 9, at 41-42.

[196] *See* Brescia et al., *supra* note 1, at 607 ("Service providers can identify complicating factual scenarios that take an individual out of the 'commodified' scenario; that is, where the one-size-fits-all approach does not quite match that individual's situation."); *see also* Pasquale & Cashwell, *supra* note 9, at 40 (arguing that Legal Zoom's "cookie-cutter, one-size-fits-all approach is dangerous").

need more human input.[197] There are some legal problems that should be recognized as needing to be tailored to an individual's specific needs and therefore not good candidates for full automation or app-based assistance.[198]

Similarly, all service providers—including those practicing in large firms—must be cautious when using "one-size-fits-all" tools if the tool was created for a different industry or interest group that might conflict with the clients' interests.[199] For instance, algorithms designed for the privileged will not always account for the unprivileged if those on "the unfortunate side of the algorithmic divide" are excluded from the data used to train the algorithm.[200] Therefore, users of legal AI must be mindful of how, for whom, and by whom their tools have been designed.

Moreover, certain AI-driven tools that necessarily rely on digitized records could exclude areas of the law or certain communities where digitization of records is uncommon. For example, heirs' property deeds involving land passed down through generations—often in poor, marginalized, or rural

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[197] *See* Delacroix, *supra* note 10 ("[C]lear-cut cases of unproblematic automation are not that common. Laudable as it may be, the drive to democratise legal expertise by distilling it into mass-market, problem solver apps can conceal issues that demand human input.").

[198] *See* Brescia et al., *supra* note 1, at 605 ("Services such as the foreclosure application are no substitute for an individual receiving full representation by an attorney that is tailored to his or her needs and through which that individual receives the benefit of the lawyer's training and experience.").

[199] *See* Johnson, *supra* note 16, at 183 (describing an interview with a BigLaw partner who practices transactional law and worries that "certain types of document creation software available to transactional lawyers have been created by specific interest and industry groups," which "has made lawyers wary about whether using such technology would benefit their clients, depending on their role in the transaction, and the industry their client is engaged in").

[200] *See* Yu, *supra* note 12, at 359-60 (explaining in the economics context that machine-learning algorithms designed for the national or global level are unlikely to accurately account for "those on the unfortunate side of the algorithmic divide" if those populations are excluded from the "training data," resulting in amplified bias and inaccuracies when those machine-generated analyses are used in future analyses).

communities—frequently involve undigitized records of ownership or no physical records at all.[201] Without marketable title to the land in the form of records, members of these communities struggle to use their land as collateral for securing loans and accessing credit, and even sometimes struggle to prevent their land from being taken by the government.[202] AI-driven tools that rely on digitized records would either be ineffective for such practice areas and communities or fail to account for important non-digitized information that is central to their legal issues.[203] Indeed, lack of data on heirs' property has inhibited academic research on black rural property ownership,[204] suggesting that data-driven AI tools would face similar challenges and limits. This marginalization would be

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[201] *See* Anna Deen, *What is heirs' property? A huge contributor to Black land loss you might not have heard of*, GRIST (Mar. 17, 2021), https://grist.org/fix/what-is-heirs-property-a-huge-contributor-to-black-land-loss-you-might-not-have-heard-of/ (describing "land that's been passed from one generation to the next without a will or other legal document proving ownership," which "is especially prevalent among Hispanic populations in the Southwest, Indigenous communities out West . . . and throughout Appalachia," and which "disproportionately affects African American families throughout the South").

[202] *See* Ava Cilia, *As Federal Government Fails To Move On Heirs' Property, States And Local Advocates Step In,* FARM BILL L. ENTER. (Oct. 17, 2020), http://www.farmbilllaw.org/2020/10/17/as-federal-government-fails-to-move-on-heirs-property-states-and-local-advocates-step-in/ (describing heirs' property owners' "struggle[s] to access loans and credit due to their inability to use their land as collateral," and that "in South Carolina, heirs' property owners are currently fighting to save their land from being taken by the state to build a natural gas pipeline").

[203] While text-recognition AI may eventually aid efforts to digitize old physical records, barriers such as the digital and algorithmic divides will still present challenges to communities that lack the resources and technological sophistication to use such tools. *See supra* notes 168-173 and accompanying text (explaining the effects of the digital and algorithmic divides on marginalized communities).

[204] *See* Thomas W. Mitchell, *Destabilizing the Normalization of Rural Black Land Loss: A Critical Role for Legal Empiricism,* 2005 WIS. L. REV. 557, 570 ("One of the major impediments to . . . empirical studies on . . . specific aspects of black property ownership is that conducting such studies can be extremely time-intensive, laborious, and expensive, because there is not a central database that researchers can access.").

especially harmful because heirs' property has historically been utilized by those who are excluded from accessing legal services in the first place,[205] fueling a continued cycle of barriers to meaningful access to justice.

Finally, cases with especially strong emotional and social consequences are also more appropriately calibrated toward human interaction due to, among other reasons, the "deep-seated human need to have one's story heard"[206] in a way that cannot be replicated by machines. In these cases, the nature of the legal issues might be such that the professional should be more prominently involved, exercising AI restraint by only relying on AI for limited tasks, or not at all.

C. Calibrating for Process Considerations

In addition to the consumer and issue considerations described above, effective calibration of legal AI requires accounting for whether the underlying processes warrant AI reliance or restraint. Legal service providers are eager to incorporate AI-driven technologies into their processes to maximize efficiencies, reduce costs, and reach a greater number and diversity of consumers. But not all tasks are equally suited for the same level of AI reliance. Because AI is expected to continue to augment, but not replace, human processes,[207] the balance between reliance and restraint must be carefully calibrated for each task for which it is involved.

On one end of the spectrum, certain tasks might be appropriate for more reliance on AI, including those where

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[205] *See* Cilia, *supra* note 202 (stating that heirs' property "can be traced back to Reconstruction, when many Black families were barred from accessing legal services, and continued through the Jim Crow era to today" (citing Lizzie Presser, *Their Family Bought Land One Generation After Slavery. The Reels Brothers Spent Eight Years in Jail for Refusing to Leave It,* PROPUBLICA (July 15, 2019), https://features.propublica.org/black-land-loss/heirs-property-rights-why-black-families-lose-land-south/)).

[206] *See* Jewel, *supra* note 14, at 330-31.

[207] *See* Furlong, *supra* note 106, at 55, 56 (noting that legal AI in the near term "will augment human reasoning and ingenuity, not replace it," and that "[t]he machines still need us more than we need the machines").

machines have proven to be more accurate than even the most skilled humans. Machines can access and process data in ways that humans simply cannot.[208] For example, lawyers are increasingly reliant on eDiscovery as a process because it is usually not only faster, but also more accurate than discovery performed by humans.[209] Similarly, when natural language processing is employed, machines can arrive at better search results and complete certain legal forms more accurately than humans,[210] who are prone to human error.

But the processes behind larger decision making in a case are more nuanced. For decisions such as where to file a lawsuit, what claims to bring, and what strategy to employ, AI in the near term is likely to only be effective to inform, not to automate, the decision.[211] Such decisions have a serious impact on a client's case and should require human judgment, or at least human confirmation, that the decision is the prudent one.

Still other tasks require expertise and reliance on experiences, observations, or human emotions that are not easily reduced to the types of data that fuel AI.[212] AI cannot, for example, effectively replicate investigative processes into the underlying facts of a consumer's case, nor can it complete the processes required to apply those facts to the law.[213] As a

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[208] *See* McPeak, *supra* note 5, at 466 ("Lawtech tools can be beneficial because they use access to data and processing power to streamline legal-related tasks. The result is that lawtech can produce more accurate results, for less cost, and in a much quicker timeframe.").

[209] *See* Walters, *supra* note 8, at 1076 (explaining that "eDiscovery . . . has been shown to surpass human review in both accuracy and recall").

[210] *See* McPeak, *supra* note 5, at 461 ("[N]atural language processing enables more accurate research results, analysis of documents, and completion of legal forms.").

[211] *See* Walters, *supra* note 8, at 1078.

[212] *See* 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, 187-89 (2018) (describing the limits of "observational data" in legal AI).

[213] *See* Pasquale & Cashwell, *supra* note 9, at 45 (listing the human processes of "investigating facts" and "applying facts to law" among the activities for

result, "artisan" tasks, such as legal writing itself, are more properly calibrated to be informed, but not autonomously conducted, by AI.[214] AI's ability to recognize patterns in what has happened in the past[215] does not mean it can replicate the human expertise and judgment needed to evaluate what will or should happen in the future.[216] As Eugene Volokh has explained, lawyers specialize in persuasion, not correctness, whereas robots specialize in correctness, not persuasion.[217] Persuasive capabilities would require a type of "artificial general intelligence" that is very much still a thing of the future.[218] For these reasons, it is important for legal AI design to keep a "human in the loop"[219] for these tasks. Close human involvement in specialized tasks is also likely required by most jurisdictions' professional responsibility rule concerning supervision of "nonlawyer assistants."[220] In fact, in 2012, the

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which there may be "no clear computational replacement . . . on the horizon").

[214] *See generally* Melissa Love Koenig et al., *Ok, Google, Will Artificial Intelligence Replace Human Lawyering?*, 102 MARQ. L. REV. 1269 (2019) (arguing that AI cannot replicate the human lawyers' role as an "artisan").

[215] *See* Walters, *supra* note 8, at 1084 (describing today's AI tools as "mostly descriptive; that is, they explain what has happened in similar cases in the past").

[216] *See* Walters, *supra* note 8, at 1084 (comparing contemporary AI to "[f]uture tools" that "will be more predictive, describing what is likely to happen in a particular case in the future").

[217] *See* Eugene Volokh, *Chief Justice Robots*, 68 DUKE L.J. 1135, 1152-54 (2019).

[218] *See* Furlong, *supra* note 106, at 55, 56 ("The development of artificial general intelligence is a very long distance away . . . .").

[219] *See* Ge Wang, *Humans in the Loop: The Design of Interactive AI Systems*, STAN. UNIV. HUM.-CENTERED A.I. (Oct. 20, 2019), https://hai.stanford.edu/news/humans-loop-design-interactive-ai-systems (describing the phrase "human in the loop" as "the selective inclusion of human participation" that results in "a process that harnesses the efficiency of intelligent automation while remaining amenable to human feedback, all while retaining a greater sense of meaning").

[220] *See* MODEL RULES OF PRO. CONDUCT r. 5.3 (that the conduct of non-lawyers employed by, retained by, or associated with the lawyer, "is compatible with the professional obligations of the lawyer"); *see also*

American Bar Association changed the title of its Model Rule 5.3 from "Responsibilities Regarding Nonlawyer *Assistants*," referring to people, to "Responsibilities Regarding Nonlawyer *Assistance*,"[221] more broadly encompassing third party, cloud-based technology services such as AI-driven tools.[222]

But decisions concerning AI's role in any given process are not always binary—reliance should have varying degrees. Calibration must account for a number of inherent tensions between AI's emerging capabilities and several problematic aspects of today's legal problem-solving landscape.

For example, while AI can help innovate, streamline, and ultimately improve many legal processes,[223] calibration must account for the ways in which the landscape is not always conducive to such process changes. Despite recent calls for change, the U.S. legal system is notoriously conservative and resistant to process-oriented innovation.[224] Therefore, if a certain process innovation requires data that the system does not track or even generate, or requires interoperability with a different part of the legal system, that process might ultimately be slowed.

There is also tension between using AI to reduce demands on human service providers and the fact that the underlying processes are inherently structured around human

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Simshaw, supra note 212, at 201-202 (arguing that AI constitutes "nonlawyer assistance" under Rule 5.3).

[221] *Compare* MODEL RULES OF PRO. CONDUCT r. 5.3 (AM. BAR ASS'N 2002) (emphasis added), *with* MODEL RULES OF PRO. CONDUCT r. 5.3 (AM. BAR ASS'N 2020) (emphasis added); *see also* Simshaw, supra note 212, at 201 (describing the evolution of Rule 5.3).

[222] *See* Roy D. Simon, *Artificial Intelligence, Real Ethics,* N.Y. ST. B. ASS'N J., http://www.nysba.org/Journal/2018/Apr/Artificial_Intelligence,_Real_Ethics/ (last visited Nov. 21, 2018) (arguing that, within the context of Rule 5.3, "[a]rtificial intelligence products are effectively non-human nonlawyers").

[223] *See supra* Section I.

[224] *See* Jewel, *supra* note 14, at 370 (predicting that certain "radical innovations may not immediately get adopted" because "[t]hey conflict with entrenched ways of practicing law").

communication. For example, many processes, such as client intake, goal setting, and decision making, require that clear and accurate information be communicated to the consumer. If AI is used in a way that supplants a human service provider's role in these processes—as some predict may occur[225]—the technology must somehow determine whether the consumer understands the information, and if the consumer does not, the AI must be able to respond accordingly by educating the consumer.[226] Until AI can reliably identify and respond to such situations, processes such as client intake using tools like chatbots could result in myriad ethical issues. For example, although some consumers might not share enough relevant information due to reluctance or for cultural or other reasons,[227] others might actually share too much information in an unstructured interaction with a chatbot. For example, clients in criminal cases might admit guilt more freely to a chatbot than to a human, without understanding the consequences of such an admission. Similarly, a lawyer might be more likely to quickly identify a conflict of interest during intake and be able to end the communication promptly, whereas a chatbot might continue to amass information that the firm would rather not possess. Further, chatbots have been found in some instances to produce biased or even overtly racist outputs due to being "trained" by datasets containing "scraped" language from popular internet websites such as

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[225] *See* Poppe, *supra* note 34, at 202 ("[I]t is . . . possible that the availability of in-person assistance will decline as technological innovations become established.").

[226] *Id.* at 205 (explaining in the context of probate that any "technology must elicit an accurate and comprehensive set of client preferences, which likely requires some amount of education and explanation for the testator"); Brescia et al., *supra* note 1, at 606 (arguing that the "key issue" in the debate over the sufficiency of "technologically innovative legal assistance" is "the quality of the information and guidance imparted through technologically innovative delivery systems").

[227] *See supra* notes 179-180 (describing cultural competence during client communications and how individuals from cultures that do not typically recount free flowing narratives may have difficulty with open-ended questions, especially if they distrust legal professionals).

Reddit.[228] In response to this risk, Amy Cyphert has argued that a writing algorithm that has been trained in this way, such as the recently released GPT-3,[229] "should not be used in its current state to power real-time legal 'chatbots' on client-facing websites."[230]

Effective process calibration must also minimize harmful effects that can result from bias more subtly, but still harmfully, ingrained in data or algorithms used in AI-driven legal processes. Bias can manifest in virtually any AI-driven legal process. For example, predictive analytics risk embedding the designers' own judgments into the system, which can be reflected in the AI's output.[231] Because algorithm designers tend to come from similar backgrounds,[232] those judgments might not be best for the end users. This is true even despite the best intentions of algorithm designers.[233] In addition, the underlying data itself can reflect bias,[234] including racial inequality. If AI-driven processes are calibrated without careful consideration of these biases, the resulting decisions risk producing racially biased results.[235] Moreover, bias can also

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[228] *See generally* Amy B. Cyphert, *A Human Being Wrote This Law Review Article: GPT-3 and the Practice of Law*, 55 U.C. DAVIS L. REV. 101 (2021).

[229] "GPT-3 is an algorithm that has been trained to 'write' by taking a few lines of input and predicting the words that will follow it." *Id.* at 103.

[230] *Id.* at 105.

[231] *See* Kluttz & Mulligan, *supra* note 112, at 862 ("[P]redictive algorithmic systems embed many subjective judgments on the part of system designers—for example, judgments about training data, how to clean the data, how to weight different features, which algorithms to use, what information to emphasize or deemphasize, etc.").

[232] *See* Cruz, *supra* note 3, at 371 (explaining how bias issues are complicated by the fact that "the individuals who are designing AI programs come from very similar backgrounds").

[233] *See* Yu, *supra* note 12, at 357 ("[B]iases can originate from algorithm designers who are neutral or well-intentioned, or who genuinely care about those on the unfortunate side of the algorithmic divide.").

[234] *See* Simshaw, supra note 112, at 186.

[235] *See* Cruz, *supra* note 3, at 399 ("[W]ithout careful coding considerations, legal technologies that integrate artificial intelligence, or AI, into their decision-making programs run the risk of producing racially biased results.").

result from a lack of machine-readable data about certain groups or concerning certain legal issues, ultimately marginalizing individuals from communities that rely less on technology and digitization due to custom or because of the constraints of the digital divide.[236]

AI-driven processes that are not calibrated to account for bias also risk broader harms that would undermine the potential access-to-justice and other benefits of legal AI.[237] As Yu notes, "many commentators fear that algorithmic bias will have a disproportionate impact on the poor, the disadvantaged, and the vulnerable."[238] By automating and therefore reproducing and amplifying bias, improper process calibration also risks reinforcing broader inequality in society.[239] These impacts not only inhibit efforts to close the justice gap, but actually perpetuate the gap by harming those most affected by it.[240]

Effectively-calibrated AI, on the other hand, can actually help combat bias. For example, as McPeak explains, AI could help weed out bias in the legal system by "eliminating some extraneous factors from decision-making" and "unearth[ing]

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[236] *See supra* notes 201-205 and accompanying text (describing areas of the law and certain communities where digitization of records is uncommon, such as the use of heirs' property deeds in Hispanic, Indigenous, rural, and African-American communities in the United States).

[237] *See* Yu, *supra* note 12, at 342 ("[A]lgorithmic bias and discrimination threaten to take away the benefits that machine learning and artificial intelligence provide to a large segment of the population.").

[238] *Id.* at 355.

[239] *See* Poppe, *supra* note 34, at 186 (discussing in the context of disruption in probate that "the potential of legal technology to reproduce, rather than ameliorate, existing social inequalities").

[240] *See* Cruz, *supra* note 3, at 399 ("Technology is not helpful if the end result harms the communities it is employed to assist."); *id.* at 370-71 ("Unless the designers deliberately consider the issue of biased schemas within their design, AI may promote implicit biases that negatively impact the communities that are in most need of the help.") (citing Hannah Devlin, *AI Programs Exhibit Racial and Gender Biases, Research Reveals*, GUARDIAN (Apr. 13, 2017), https://www.theguardian.com/technology/2017/apr/13/ai-programs-exhibit-racist-and-sexist-biases-research-reveals).

the extra-legal (and perhaps improper) factors that judges might be using in making decisions."[241] Whether AI combats or amplifies bias depends on how effectively the underlying processes have been calibrated.

Finally, process calibration must ensure sufficient transparency into how AI is performing or assisting with each process. This includes breaking through the AI "black box," a term that describes the way AI produces outputs, including legal conclusion, without explanation.[242] Black boxes also make bias harder to detect. Katherine Altender et al. have advocated for increased transparency into "coding decisions," including in "document assembly tools, e-filing, and other automated decision processes," in order to advance access-to-justice efforts and ensure that the legal system does not "slide back into the realm of experts only."[243] Altender et al. believe such transparency can be accomplished if "programmers provide adequate comments on the code as written so that their decisions are transparent and subject to review."[244]

Calibrating legal AI to account for the specific consumers, issues, and underlying processes involved in different types of consumer problems is essential to ensuring that the technology is developed and deployed effectively and equitably across the legal problem-solving landscape, ultimately benefitting those affected by the justice gap. The next section will discuss barriers to widespread calibration.

IV. Barriers to Proper Calibration

As the previous section demonstrates, effective calibration of legal AI requires significant resources, a high level of resilience in the face of inevitable challenges, and relationships between stakeholders across the legal problem-solving

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[241] McPeak, *supra* note 5, at 467.

[242] *See* Walters, *supra* note 8, at 1091 (describing potential harms when lawyers' and judges' AI "is little more than a 'black box' producing legal conclusions").

[243] Alteneder et al., *supra* note 25, at 29.

[244] *Id*.

landscape, including between licensed legal professionals and technologists. Without these critical resources, resilience, and relationships, stakeholders will struggle to account for nuanced consumer needs, risks of automating bias, and understanding the effect of AI outputs in different legal contexts. Scholars have analyzed technologies as tools for combating barriers to access to justice,[245] but have not gone the extra step to comprehensively address the barriers to making meaningful and effective use of technologies like AI in the first place. This section will address the resource, resilience, and relationship barriers that prevent stakeholders from effectively calibrating legal AI, ultimately inhibiting AI's ability to help stakeholders close the justice gap.

A. Resource Barriers

Designing and deploying legal technology has always been resource-intensive.[246] This is even more so the case as these technologies are increasingly driven by AI. Without these resources, licensed legal professionals, consumers, and innovators across the landscape cannot effectively design, adopt, maintain, and use legal AI, ultimately missing out on its potential benefits.

Although AI is often touted for its ability to lower costs for legal service providers and consumers, the technology itself is often not cheap.[247] As a result, financial resources often present a major barrier to not only committing to adopt AI in the first place, but also to engaging in its calibration and ultimately realizing the benefits of the broader "AI revolution."[248]

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[245] *See, e.g.*, Staudt, *supra* note 58.

[246] *See* Guttenberg, *supra* note 45, at 480 ("Exploiting communication and information technology requires an ever increasing need for resources.").

[247] *Id.* at 480-81 (noting that only "those firms with access to greater capital may have the funds necessary to pursue these technologies"); Furlong, *supra* note 106, at 55, 56 ("All the new legal systems and soft-ware coming our way sound wonderful—but not everyone will be able to afford them and access them.").

[248] *See* Yu, *supra* note 12, at 341 ("To a large extent, affordability determines not only individual access to machine learning and artificial intelligence but also one's ability to fully participate in the artificial intelligence revolution.

Although the price of legal AI might drop over time,[249] the effectiveness of that AI might be diminished if large segments of the legal problem-solving landscape have been shut out of the development process.

Many of these costs are tied to the initial design and development of legal AI.[250] Prototypes are often more expensive to successfully develop than anticipated due to the needed expertise of "designers, programmers, testers, and managers."[251] These high development costs discourage some lawyers from designing their own AI-driven technologies,[252] with smaller firms at a particular disadvantage due to their smaller budgets, lack of in-house IT-support, and inability to hire outside consultants.[253]

Even if an entity can afford the base costs associated with AI, there are often prohibitive ancillary costs in the form of necessary structural resources to support and maintain the AI, which are often underappreciated.[254] One well-known

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The less access one can afford, the more limited benefits one will secure from algorithm-enhanced technological products and services . . . ."); Kunkel, *supra* note 29, at 386 (questioning the "rather bold assumption that technology will necessarily deliver on this promise of efficiency," and identifying cost as a major impediment).

[249] *See* Walters, *supra* note 8, at 1076 (noting that "[t]he price for many AI services . . . might be expected to decrease over time").

[250] *See* Kunkel, *supra* note 29, at 386-87 ("In candid moments, even the most enthusiastic proponents of technological solutions have admitted that there can be significant expense involved with developing these solutions.").

[251] *See* Staudt, *supra* note 58, at 1132 (describing the original design of A2J Author in the early 2000s).

[252] *See* Brescia et al., *supra* note 1, at 572-73 ("Lawyers . . . have been reluctant to adopt this technology, partly because of the cost of developing such systems on their own . . . .").

[253] *See* Finnemore, *supra* note 6, at 26 (noting that, unlike smaller firms, "[l]arge firms generally have a bigger budget for it and can hire an in-house IT person or an outside consultant").

[254] Yu, *supra* note 12, at 341 ("There is a general assumption that individuals will have the needed technological products or services if machine-learning capabilities become accessible and affordable. Yet, that assumption cannot

structural barrier, discussed earlier in the context of consumers, is the digital divide, where lack of reliable internet access inhibits the use of AI. But AI systems require more than just internet access; they also require investment in "core technologies"[255] and possession of "complementary assets," including "troves of data and access to computational power."[256] These assets are largely controlled by large incumbent AI firms that monopolize the market, making it hard for more affordable, innovative AI companies to compete.[257] While some powerful players, such as large in-house law departments, may thrive in this landscape, others may become increasingly antiquated.[258] Without assistance from AI experts, some legal service providers may need to build their AI infrastructure from scratch if they want to compete. For example, if important information does not already exist in electronic form, as is needed for even basic forms of legal AI like eDiscovery, legal service providers must invest in converting that information into electronic data that machines can read, which can often be costly.[259]

Large and established law firms will face resource challenges too. Established firms might have some advantages

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always be supported given the differing individual needs for products and services.").

[255] *See* Staudt, *supra* note 58, at 1145 (noting that the "emerging and fully transformative model for delivering legal information and legal services to low-income people requires a significant investment in core technologies").

[256] *See* Asay, *supra* note 26, at 1196; *see also* Cabral et al., *supra* note 14, at 316 (listing "[c]apacity to absorb . . . new technology into the business of the organization and operate it sustainably" as one "factor[] [that is] critical to making well-informed technology investments," and listing "hardware" and "other technical capabilities" among the necessary capacities).

[257] *See* Asay, *supra* note 26, at 1196.

[258] *See* Furlong, *supra* note 106, at 55, 56 ("While rich people and large in-house law departments will experience a golden age of law, the vast majority of individuals and businesses will be left to struggle through increasingly underfunded government programs and antiquated courts.").

[259] *See* Pasquale & Cashwell, *supra* note 9, at 41 ("eDiscovery almost always requires documents already be stored electronically; otherwise, additional costs are associated with converting them into electronically stored information.").

with regard to technology infrastructure, but longevity of practice can sometimes be a barrier because larger firms are often already invested in complex infrastructures that are more expensive to replace.[260] Given the significant amount of capital needed to acquire, support, and sustain data-driven technologies, even large law firms may need outside investment.[261]

B. Resilience Barriers

While resources are necessary for legal AI calibration, they are not sufficient. Designers and users of legal AI must also be resilient in order to adapt and respond to inevitable calibration challenges. But resilience is a luxury that many stakeholders lack.

One barrier to resilience among licensed legal professionals is a pervasive culture of conservatism that resists change, particularly change concerning technology. The legal profession has earned a reputation for being uncomfortable with the change and ambiguity that often accompanies operating new technologies.[262] Even with the necessary funds and resources to use AI, these lawyers must overcome what McPeak describes as a "fundamental disconnect between the slow-moving, conservative tradition of the legal industry and the newly emerging, fast-paced sector of tech disruption."[263] Similarly, Jewel has explained that certain technological

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[260] *See* Finnemore, *supra* note 6, at 26 ("For companies that are bigger and already invested in their systems, they're often afraid to bite the bullet and make the change [to a new technology system] because it can be expensive." (quoting Jeremy Vermilyea)); *id.* at 25 ("[F]irms that implemented their systems before the development of cloud-based technology often find it difficult to make improvements without doing a full-blown replacement of their systems.").

[261] *See* Guttenberg, *supra* note 45, at 481 (explaining the capital and outside investment needed, even for large firms, to perform data mining).

[262] Finnemore, *supra* note 6, at 27 (New technology "systems are best operated by someone who is reasonably technical and has a certain level of comfort with change and ambiguity—'neither of which are hallmarks of the legal profession.'" (quoting John E. Grant)).

[263] McPeak, *supra* note 5, at 469.

innovations "conflict with entrenched ways of practicing law—the cognitive structures, routines, contract boilerplate, and consumer expectations upon which our legal infrastructure is based."[264] For some individuals, as McPeak explains, "rejection of new technology is a point of pride—a firm allegiance to a perceived tradition of legal thought—and a rejection of blind adherence to some new technology trend."[265] This conservatism is a formidable foe to the innovation and resilience needed to not only adopt, but effectively calibrate legal AI.

In addition, calibration requires active leadership within an organization that is committed to effectively integrating technology-driven systems into its problem-solving structure.[266] In addition to overcoming conservative tendencies at the individual and organizational level, leadership must account for varying levels of employee comfort with using technology systems.[267] Comfort and willingness to respond to inevitable challenges during calibration might depend in part on one's generation.[268] In some law firms, there are generational divisions between experienced and newer attorneys concerning basic technology preferences like phone and email versus instant messaging and secured mobile device communications,[269] as well as whether cloud-based services and online payment programs should be adopted.[270] It is reasonable to anticipate that individuals who resist such basic

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[264] Jewel, *supra* note 14, at 370.

[265] McPeak, *supra* note 5, at 471.

[266] *See* Cabral et al., *supra* note 14, at 316 (describing "leadership ability" among the "people factors" within an organization that are necessary for the "[c]apacity to absorb the new technology into the business of the organization and operate it sustainably").

[267] *See* Finnemore, *supra* note 6, at 26 (listing "employee comfort with using . . . system[s]" among the factors that must be considered when adopting new technology).

[268] *Id.* (explaining in the context of law firm technology management that "different generations of attorneys adopt different technologies depending on comfort levels").

[269] *Id.* (quoting Leigh Gill).

[270] *Id.* ("Generations also differ in their opinions about cloud-based services such as Clio and online payment programs such as LawPay.").

communications would also be hesitant to embrace AI-driven tools and services, making resilience during calibration all the more challenging.

Resilience in legal-AI calibration requires a universal will to learn. Although many stakeholders are becoming familiar with increases in automation and data-driven law, as Yu notes, "[i]n this age of artificial intelligence, algorithmic literacy is just as important as algorithmic awareness."[271] Unfortunately, those organizations that are especially focused on closing the justice gap often lack collective knowledge about technology.[272] Even with general technology proficiency, however, lawyers often struggle to understand the business nuances of incorporating unbundled legal services into the operation of the organization.[273] Moreover, even with a will to learn, legal service providers can be overwhelmed by the rate and degree of technological change,[274] the sheer amount of information involved,[275] and the number of tech options available, leading to a phenomenon known as "cyber paralysis."[276] These natural "human frailties" can overcome one's willingness to engage in calibration.[277]

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[271] Yu, *supra* note 12, at 342.

[272] *See* Cabral et al., *supra* note 14, at 313 ("[L]ack of knowledge about technology exists throughout organizations involved in advancing access to justice.").

[273] *See* Alteneder et al., *supra* note 25, at 21 ("Unbundled stumbles because [among other reasons] lawyers do not understand how to incorporate unbundled legal services into their business process . . . .").

[274] *See* McPeak, *supra* note 5, at 471 (explaining that some tech-averse lawyers "are not actively rejecting technology but may feel overwhelmed by the sheer speed and scope of technological change in the last decade or so").

[275] *See* Finnemore, *supra* note 6, at 27 (noting that, despite benefits, services like e-discovery "can . . . overwhelm attorneys with information at times").

[276] *Id.* at 25 (explaining that industry watchers have noted that, with "so many options available . . . [f]ear of making the wrong choice . . . can often lead to 'cyber paralysis'").

[277] *See* Poppe, *supra* note 34, at 212 ("Human frailties hinder the willingness and ability of many individuals to engage successfully with new technologies . . . .").

In addition to being overwhelmed, legal service providers' fears and anxiety about ethics violations and malpractice relating to their use of emerging technology can hinder their resilience during calibration. This can be attributed to uncertainty or intimidation concerning evolving professional ethics standards, such as the emerging duty of technological competence.[278] Computer illiteracy has been rejected as an excuse for discovery misconduct,[279] which might cause some lawyers to question whether they have the technological proficiency to use even more advanced forms of AI without risk to their practice and livelihood. Solo and small-firm lawyers, already at a resource disadvantage, might be particularly wary since they "are perceived as occupying the lowest rung on the legal profession's ladder and statistically have received the most professional discipline for ethics violations."[280] Lawyers who do embrace AI might have to wrestle with tension between relying on decisions dictated by data-driven AI in order to satisfy malpractice insurers, and the risk of negligence if the AI steers the lawyer and client wrong.[281]

Resilience during calibration also requires ample amounts of one of AI's most important ingredients: time. But time is a luxury that many licensed legal professionals simply do not have. Effective AI takes many rounds of "trial and error," with successful projects often succeeding because of lessons learned

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[278] *See* Cabral et al., *supra* note 14, at 317 ("The deployment of technology to help deliver legal services more efficiently may be hindered by providers' uncertainty over ethical and professional responsibility obligations."); McPeak, *supra* note 5, at 473 ("For some lawyers, openly embracing technology seems impossible, and the prospect of even gaining basic technological competence is daunting.").

[279] *See* McPeak, *supra* note 5, at 473 (describing James v. Nat'l Fin. LLC, No. CV 8931-VCL, 2014 WL 6845560, at *12 (Del. Ch. Dec. 5, 2014)).

[280] Jewel, *supra* note 14, at 327; *see also* Guttenberg, *supra* note 45, at 451 (explaining that solo and small-firm lawyers, "[r]ightly or wrongly . . . have been the target of most of the disciplinary enforcement against lawyers").

[281] *See* Walters, *supra* note 8, at 1085 ("Malpractice insurers (and perhaps the Model Rules) may create incentives for lawyers to advise in accord with expert AI systems, but that may create negligence liability for law firms.").

from past failures.[282] While larger law firms are favorably positioned financially and temporally to engage in long-term arrangements with AI vendors,[283] other legal service providers are not so fortunate. Long term "trial and error" presents unique challenges for those legal service providers who lack "safety nets," such as solo and small-firm lawyers.[284] Experimentation with likely or inevitable failure can be challenging from such a vulnerable posture, and the disappointment from short-term failure can often be difficult to overcome.[285] The inevitability of time and failure also make it challenging to secure funding for developing technology projects like AI, both from within and outside of an organization, notwithstanding the potential of long-term benefits.[286]

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[282] *See* Roberta L. Tepper, *The Flexible Lawyer: Promoting Agility and Innovation*, VALLEY LAW., Dec. 2020, at 37, https://sfvba.org/wp-content/uploads/2020/12/VL-December2020-FINAL.pdf; Asay, *supra* note 26, at 1253 (describing "innovations that only promise returns, if at all, after a long period of risky trial and error"); Jewel, *supra* note 14, at 347 ("[S]ociety has seen the rise of collaborative, open production models, such as open-source computer coding. Although most open-source projects fail, technology facilitates the failure that allows other projects to succeed.").

[283] *See* Kluttz & Mulligan, *supra* note 112, at 874 ("[L]arger firms are using vendor platforms to further reduce costs and uncertainties of litigation through longer-term arrangements, standardization across litigation matters, and use of broader information-governance services that integrate litigation support.").

[284] *See* Jewel, *supra* note 14, at 344-45 (discussing how, "historically, solo practitioners and small-firm lawyers have not had access to a peer safety net from which large-firm lawyers benefit").

[285] *See* Staudt, *supra* note 58, at 1122 ("Overheated expectations and early unbridled enthusiasm for breaking technologies have contributed to disappointment when projects in law and information technology produced only modest improvement or even resulted in failure.").

[286] *See* Cabral et al., *supra* note 14, at 312 (discussing in the context of legal AI how "managers may be reluctant to commit limited resources to new technology projects even though they might pay off in greater efficiency and furtherance of the organization's mission over time"); Asay, *supra* note 26, at 1253 (noting that it is "difficult for innovative start-up companies to obtain financing for the type of long-term innovation capable of yielding radical discoveries").

C. Relationship Barriers

As previous sections have demonstrated, calibrating AI involves navigating a cross-section of disciplines outside of the law, including social sciences, technology, and data science. It also often requires external funding and expertise. But simply using legal AI does not automatically make an individual or entity part of the AI industry,[287] much less equip them to address the many considerations necessary for effective calibration. This section will address the relationship divide between the legal and AI industries, the challenges this presents for effective calibration of legal AI, and the financial, social, and regulatory factors that perpetuate these barriers.

Collaboration on calibration between legal service providers and technologists can range from informal two-way advising on legal and technical aspects of AI-driven legal tools and services, to ongoing financial partnerships that might include long-term technical support or referral arrangements.[288]

Whether legal service providers are designing their own AI-driven tools or subscribing to a legal AI service, technical expertise is needed in order to navigate the consumer, issue, and process considerations that are essential to effective calibration. Because AI is often proprietary and (in the case of law firms) seen as a tool for gaining a competitive advantage in the market and courtroom, there are few mechanisms for new innovators to learn the innerworkings of how AI is currently being used across the landscape.[289] As a result, stakeholders

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[287] *See* Asay, *supra* note 26, at 1238 ("'AI as a Service' allows companies with little AI expertise to utilize AI technologies in their everyday operations. But consuming AI does not make a company part of the AI industry.").

[288] *See* Kluttz & Mulligan, *supra* note 112, at 854 (describing interviews with legal professionals who "report relying on the evaluation and judgment of a range of new technical experts within law firms and, increasingly, third-party vendors and their technical experts").

[289] *See id.* at 861 ("[L]ittle is known about how legal professionals, their organizations, and their professional environments are shaping the adoption, implementation, and governance of machine-learning systems

must develop their own relationships across industries in order to gain this knowledge. Over time, more and better relationships across industries could lead to greater transparency into the coding decisions made during the development of legal AI, such as the ways in which statutes and court procedures are translated into code for the automated decision processes behind document assembly and e-filing tools.[290] This transparency is critical from an access-to-justice perspective because it ensures that a small handful of technical experts are not the only ones who understand these important systems, their designs, and their outputs.[291]

A lack of transparency and inclusiveness during calibration can also increase the likelihood of bias making its way into the AI. Rooting out bias requires a diverse team to monitor signs of discrimination in algorithms and the data that are fed into them.[292] It also requires training, especially if those who manage platforms are not AI experts but rather general technical support staff or the legal service providers themselves.[293] Both will need frequent training on the technical,

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that support professional decision-making. This gap reflects the more general dearth of empirical data on professionals, their organizational environments, and their interactions with today's automated, machine-learning-based decision-making systems more generally.").

[290] *See* Alteneder et al., *supra* note 25, at 29 (explaining the need for "programmers [to] provide adequate comments on the code as written so that their decisions are transparent and subject to review," such as when "a programmer translates statutes or court procedure into code").

[291] *Id.* at 29 ("Access to justice demands transparency in coding . . . . Transparency is the key to a consumer-centric approach, because without transparency, the system can easily slide back into the realm of experts only.").

[292] *See* Yu, *supra* note 12, at 367-68 ("[A]ddressing algorithmic distortion . . . requires [diversity] not only in terms of those designing algorithms . . . but also in terms of the training and feedback data that are being fed into the algorithms. The lack of diversity . . . will likely perpetuate the many historical biases that originate in the offline world.").

[293] *See* Cruz, *supra* note 3, at 401 ("Staff who update and maintain legal technology platforms need to receive regular cross-cultural competency trainings to identify and implement culturally conscious technology protocols. This is particularly important if the office or agency providing the

legal, or social aspects of the technology on which they are not experts. Therefore, ongoing relationships between technologists and legal service providers, whether of the partnership, in-house, or consultant variety, are essential.

But establishing and maintaining these relationships is especially challenging for solo-and small-firm lawyers who have fewer financial resources to invest than large firms.[294] In addition, these settings lack the "peer safety net" from which large firms benefit,[295] limiting the universe of potential assistance that could be gained from similarly-situated entities also engaging in AI experimentation, which might otherwise be able to offset a lack of relationships with technologists.

But advising does not happen exclusively from technologists to lawyers; legal experts are also needed to advise the technologists who design and maintain AI used throughout the legal services landscape. Market forces alone have shown to be insufficient in steering legal AI development toward products that meet the needs of all stakeholders.[296] For example, Lori Johnson has noted that transactional lawyers, in particular, "remain frustrated with both the availability of technology applicable to their practice, and the functionality of tools their firms have adopted to date. These frustrations center primarily around the inability of available legal technology to adapt to the nuances of transactional practice, and the demands of transactional clients."[297] Calibration requires relationships where expertise is shared in both directions.

Other relationships go beyond mere short-term advising and include ongoing partnerships, which are often needed if AI is calibrated over an extended period or because the nature of

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legal technology program does not . . . know[] how to incorporate culturally conscious design.").

[294] *See supra* Section IV.A.

[295] S*upra* note 284.

[296] *See* Poppe, *supra* note 34, at 212 ("[M]arket forces shape the design and availability of technology in ways that may not address the needs of all.").

[297] Johnson, *supra* note 16, at 182.

the tool requires ongoing testing, observation, or collaboration across industries. For example, as described earlier, when a self-help service determines that a licensed legal professional is needed to further assist a consumer, it could help initiate that connection. But these relationships and arrangements have been under-developed,[298] in part because of the challenges described above, but also because of regulatory uncertainty and regulatory barriers. The tension between innovation trends and regulations that predate those trends is not new.[299] When those tensions discourage innovators from entering the legal services market in the first place, access to justice can ultimately suffer.[300]

One major regulatory barrier to many of these critical relationships is the prohibition in most jurisdictions, modeled off the American Bar Association's Model Rules of Professional Conduct, on any ownership of or investment in law firms by individuals who are not licensed attorneys.[301] This prevents legal service providers from accessing sources of capital for investment in AI development and services, and from being able to enter into financial partnerships with technologists eager to collaborate on transformative AI-driven legal services.

Even if a cross-industry relationship does not rise to the level of ownership or investment in a law practice, challenges

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[298] *See* Alteneder et al., *supra* note 25, at 19 ("[V]ery little progress has been made in building connections between self-help services and other legal and non-legal resources that are critical for consumer success."); *see also id.* at 21 ("Unbundled stumbles because clients cannot connect with lawyers . . . and [among other reasons,] triage-based referral mechanisms are not in place.").

[299] *See* McPeak, *supra* note 5, at 459 (noting in the context of legal technology that "often times technological innovation clashes with existing regulatory structures").

[300] *Id.* at 475 (explaining how "regulations serve as a barrier to entry into the legal services market"); Cabral et al., *supra* note 14, at 317 ("The deployment of technology to help deliver legal services more efficiently may be hindered by providers' uncertainty over ethical and professional responsibility obligations.").

[301] *See* MODEL RULES OF PRO. CONDUCT r. 5.4(b) (AM. BAR ASS'N 2020).

remain. The more technologists are involved in shaping legal services, the greater the concern about running afoul of a jurisdiction's definition of the unauthorized practice of law (UPL), either by the technologists directly or by lawyers for providing assistance to those technologists.[302] Applying UPL definitions to AI is especially challenging because the definitions across jurisdictions vary and often require navigating state statutes, regulations, and opinions from the state's high court, bar authority, and attorney general.[303] Short of actual violations, confusion over the application of UPL definitions to software and online services could be enough to scare off potential investors and collaborators, stunting innovative access to justice efforts.[304]

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[302] *See* Poppe, *supra* note 34, at 200 ("While greater interaction may increase the quality of the final product, it may also increase the likelihood that courts will find these programs to be instances of UPL." (citing Moxley, *supra* note 93, at 558; Maria A. Vida, *Legality of Will-Creating Software: Is the Sale of Computer Software to Assist in Drafting Will Documents Considered the Unauthorized Practice of Law?*, 41 SANTA CLARA L. REV. 231, 232-33 (2000))).

[303] *See* Brescia et al., *supra* note 1, at 580 ("State ethical and criminal codes sometimes leave much to be desired in terms of defining the practice of law and UPL."); Walters, *supra* note 8, at 1088 ("Although software might violate UPL rules, it is not at all clear which software and which services would do so, and in which states. There is no universal standard for what constitutes 'the practice of law' in the United States. Instead, UPL rules are set by a patchwork quilt of regulations, state statutes, case law, bar ethics committee opinions, and attorney general opinions.").

[304] *See* Cabral et al., *supra* note 14, at 322 ("[T]he uncertain application of unauthorized practice rules to software in nonprofit legal aid settings nevertheless poses a non-trivial risk of chilling the development and broader use of innovative technologies that could significantly improve access to justice for underserved populations."); Brescia et al., *supra* note 1, at 580 ("Claims of UPL constantly hover over these websites and other services, and the threat of civil and criminal charges might chill what could be a viable solution for the 'justice gap.'"); Deborah L. Rhode & Lucy Buford Ricca, *Protecting the Profession or the Public? Rethinking Unauthorized-Practice Enforcement*, 82 FORDHAM L. REV. 2587, 2597-98 (2014); Walters, *supra* note 8, at 1090 ("The lack of clear guidelines and uniformity [of UPL] has the potential to create a chilling effect on innovation and access-to-justice efforts. . . . [T]he risk of criminal penalties,

Without the resources, resilience, and relationships described in this section, stakeholders will struggle to engage in the calibration necessary for legal AI to fulfill its potential as a tool to help close the justice gap. The next section will analyze reforms and policies for overcoming these barriers and maximizing calibration across the landscape.

V. Reforms and Policies for Overcoming Barriers and Maximizing Widespread Legal AI Calibration

The legal services landscape is at an inflection point. With certain priorities and policies, stakeholders from across the landscape could collaborate and share expertise in the development and delivery of innovative, carefully calibrated legal and self-help services that can expand access to justice. But without these focused efforts, a perpetuation of the barriers to effective calibration outlined in this Article will continue to increase the likelihood of an inequitable two-tiered system that risks widening the justice gap. This section explores several promising emerging regulatory reforms and policies through the lens of the calibration taxonomy outlined in this Article. It argues that the taxonomy illuminates how widespread adoption of these reforms and policies (or mechanisms to explore them) will reduce current barriers to calibration, help ensure a more equitable legal-AI landscape that reduces the risk of a two-tiered system, and ultimately bolster efforts to increase access to justice.

First, to achieve widespread calibration and overcome barriers, historically marginalized legal and technology stakeholders must be able to compete despite a growing trend of consolidation of AI companies, resources, and talent, both in the legal services landscape and more broadly. To be sure, the legal services market will benefit from some consolidation and an increased role for large corporations. Some consolidation can benefit a segment of the market "in the form of relatively cheap, full-stack AI solutions."[305] Consolidation

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combined with uncertainty about what is permitted, may well deter many otherwise-enthusiastic developers from even trying to enter the market.").

[305] Asay, *supra* note 26, at 1251.

can also lead to greater resources, security, and capital for the entities involved, which can enable more robust research and development.[306] Moreover, large corporations are positioned to efficiently deliver their services to the mass public, and they can be patient on returns on investment in a way that smaller entities cannot.[307]

But AI consolidation without accompanying wider-spread AI development can result in harms to overall innovation,[308] including in the legal AI landscape. Not only do larger incumbent AI firms control much of the data and computational power necessary for AI development, they often win out in competitive battles over limited human "AI talent."[309] When large corporations acquire access-to-justice-

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[306] *Id.*

[307] *See* Knake, *supra* note 46, at 6 ("Corporations like Google and Wal-Mart know a great deal about the delivery of services, goods, and information to the mass public. These corporations and many others have the capacity to make significant financial outlays into innovative mechanisms for providing legal services and await a delayed return on that investment."); *see also id.* at 44-45 ("Corporations have strong incentives to offer simple, standard, routine legal services in bulk to currently unserved individuals where profits may be realized through economies of scale and only after a hefty initial investment. Corporations have broad reach to widely disseminate information while simultaneously preserving brand reputation and trustworthiness.").

[308] *See* Asay, *supra* note 26, at 1188 ("[H]eavy consolidation in an industry is typically associated with lower than ideal levels of innovation."); *see also id.* at 1197 ("AI industry consolidation is likely to result in greater AI innovation inefficiencies and, thus, ongoing artificial stupidity, because a good amount of evidence shows that smaller, more nimble firms are typically more innovative than larger ones."); Peter Lee, *Innovation and the Firm: A New Synthesis*, 70 STAN. L. REV. 1431, 1490-91 (2018).

[309] *See* Asay, *supra* note 26, at 1196 ("[L]arge, incumbent AI firms control important 'complementary assets' necessary for running AI systems, such as large troves of data and access to computational power. This all means that instead of numerous small, nimble AI companies forging ahead in developing innovative, new AI products and services, large incumbent firms are likely to increasingly monopolize the AI space."); *id.* at 1238 ("AI-related merger and acquisition activity, and fierce competitions over available AI talent, have . . . heated up."); *The Race for AI: Here Are the Tech Giants Rushing to Snap Up Artificial Intelligence Startups,*

minded technology startups, goals surrounding access to justice can be subsumed by other priorities.[310] By some accounts, increased AI consolidation can be expected in the coming years, and U.S. anti-trust enforcement might not prevent it.[311] It is therefore important for legal AI regulation and policies to facilitate widespread AI access and ability to calibrate in the face of this consolidation. Competition in legal AI development will help ensure that the market is providing effectively-tailored services for currently underserved legal service providers and consumers.[312] Competition will also incentivize legal AI developers and users to continually improve their algorithms and confront ongoing challenges like rooting out bias.[313]

To promote both competition and calibration, technological innovation should be accompanied by regulatory innovation. While the American Bar Association, U.S. Department of Justice, and Federal Trade Commission have all voiced general support for innovation in the delivery of legal

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CBINSIGHTS (Sept. 17, 2019), https://www.cbinsights.com/research/top-acquirers-ai-startups-ma-timeline/ [https://perma.cc/PP44-EMBY].

[310] *See* Tromans, *supra* note 50 ("[Giant companies] have developed new products—often that do what the startups do and sometimes by acquiring them—because the market is shifting, but they don't always do it because they really want to change anything fundamental about the legal market, which has served them well and made their shareholders rich.")

[311] *See* Asay, *supra* note 26, at 1196 ("[T]he AI industry is likely to become increasingly consolidated as a limited number of large, incumbent firms dominate it."); *id.* at 1252 ("[T]he basic U.S. approach to antitrust enforcement seems unlikely to change anytime soon in a way that would effectively limit AI industry consolidation.").

[312] *See* Yu, *supra* note 12, at 383 ("[B]ecause a wide variety of algorithms exist to achieve the same goal, competition will be greatly needed to accommodate the different trade-offs preferred by either algorithm designers or consumers.").

[313] *Id.* ("[W]ithout competition, it would be hard to identify problems within an algorithm or to determine whether that algorithm has provided the best solution in light of the existing technological conditions and constraints."); *id.* at 382 ("Competition is imperative if society is to develop more efficient, more effective, and less biased algorithms.").

services,[314] most state bar authorities have yet to respond with change.

One way to foster more widespread calibration would be to reduce the regulatory uncertainty that currently keeps some stakeholders from exploring potentially transformative AI innovation. Concerns about engaging in UPL could be alleviated by clearer definitions of the "practice of law" across jurisdictions, which would provide technologists, legal service providers, and other stakeholders with the comfort and stability necessary to innovate[315] and engage in calibration. By emphasizing the importance of calibration, advocates for UPL reform can link access to justice goals to the barriers many stakeholders face due to regulatory constraints and uncertainty.

One potential clarification could be to make clearer what technology-driven tasks constitute scrivener and informational services, which have historically been recognized as outside the definition of the practice of law. For example, certain technology-driven services offered at low or no cost by nonprofit or pro bono providers, such as simple automated form completion, merely provide information to consumers, which is not practicing law.[316] Even so, many regulators and attorneys maintain that online document services should constitute UPL.[317] Currently, these debates are not data-driven. As discussed further below, regulatory "sandboxes" or "laboratories" could generate data about these emerging

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[314] *See* Susan Saab Fortney, *Online Legal Document Providers and the Public Interest: Using a Certification Approach to Balance Access to Justice and Public Protection*, 72 OKLA. L. REV. 91, 94-95 (2019).

[315] *See* Walters, *supra* note 8, at 1091 ("It will be important as well to define more clearly what constitutes the 'practice of law' so that innovators and law firms alike will have safe harbors for innovation.").

[316] *See, e.g.,* Cabral et al., *supra* note 14, at 321 ("Creating and deploying pro bono automated forms can be seen as comparable to certain informational activities by personnel of nonprofit or court self-help services, which are exempted from the definition of the practice of law in some states.").

[317] *See* Fortney, *supra* note 314, at 93-94.

services that could help regulators reverse engineer a more modern and effective definition of the "practice of law."

For services that would fall outside of "practice-of-law" regulation as a result of such clarifications or changes, there are several transparency efforts that, if adopted together, would supplement general consumer protection enforcement. For example, "accuracy rates" for legal AI could be made public to help monitor the quality of services and assist consumers with choosing from available providers.[318] Similarly, evaluations could track results and consumer experiences, providing helpful data to consumers and innovators alike.[319] Certifications could also emerge, which Susan Saab Fortney explains would "raise consumer awareness as to the significance of particular features of goods and services marketed by providers," which would allow consumers to "obtain valuable and accurate information that they could not easily gather on their own."[320] Ultimately, as others have acknowledged, "the reputation of those offering [technology-enabled access to justice] services will likely be put to the test and, hopefully, such reputation will stand or fall on the quality of the product and the effectiveness and salience of the information provided to the consumer."[321]

Many resource, resilience, and relationship barriers to legal-AI calibration would also be alleviated through increased flexibility in ownership and investment structures of law firms. Under the rules of most U.S. jurisdictions, lawyers can invest in technology for their practice, but technology companies (or, indeed, any company or individual who is not a licensed

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[318] *See* Poppe, *supra* note 34, at 207 ("If made public, . . . accuracy rates could at least provide consumers with additional information on which to select among competing providers.").

[319] *See* Alteneder, *et al.*, *supra* note 25, at 29 ("Evaluation provides not only helpful data about the experience of self-represented litigants, but also helps programs improve and be sure that their innovations are producing the intended results.").

[320] Fortney, *supra* note 314, at 116.

[321] Brescia et al., *supra* note 1, at 608-609.

lawyer) cannot invest in law practices.[322] While large, resource-rich law firms generally have the capital to invest in technology, small firms generally do not.[323] These regulatory restrictions significantly limit financing options for law practices that would like to partner with technologists on transformative AI by offering even a small ownership interest in the firm. Andrew M. Perlman, Dean of Suffolk Law School and former Chief Reporter of the ABA Commission on Ethics 20/20, believes that states should experiment with reforms related to alternative business structures for law firms, which could produce helpful data that could ultimately lead to change to Model Rule 5.4.[324] Data concerning the alleviation of the calibration barriers identified in this Article would help inform these efforts.

While Arizona has gone as far as eliminating its restriction on ownership and investment without experimentation,[325] jurisdictions should implement more cautious—but still impactful—reforms that will account for the complexity of the calibration considerations outlined in this Article. One way that jurisdictions can experiment with reform of ownership (and other) rules while still protecting consumers is by implementing what is known as a regulatory "sandbox" or "laboratory." This mechanism allows stakeholders to propose to an oversight body an innovation that might ordinarily run afoul of certain regulations.[326] If approved, the service would

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[322] *See supra* Section IV.C. (describing state restrictions mirroring ABA Model Rule of Professional Conduct 5.4(b)). For a history of resistance to amending Model Rule 5.4 within the ABA, *see* Andrew M. Perlman, *Towards the Law of Legal Services*, 37 CARDOZO L. REV. 49, 75-83 (2015).

[323] *See supra* Section IV.A.

[324] Perlman, *supr*a note 322, at 82-83 (2015).

[325] *See* Order Amending the Arizona Rules of the Supreme Court and the Arizona Rules of Evidence, *In re* Restyle and Amend Rule 31; Adopt New Rule 33.1; Amend Rules 32, 41, 42 (Various Ers from 1.0 to 5.7), 46-51, 54-58, 60, and 75-76, No. R-20-0034 (Ariz. 2020) (eliminating Rule 5.4), https://www.azcourts.gov/Portals/215/Documents/082720FOrderR-20-0034LPABS.pdf.

[326] *See generally* IVO JENIK, UNITED NATIONS SEC'Y-GEN.'S SPECIAL ADVOC. FOR INCLUSIVE FIN. FOR DEV., BRIEFING ON REGULATORY

be granted a temporary safe harbor from certain rules and be permitted to operate under the close watch of the oversight body, with strict reporting requirements that address any identified risks to consumers.

After successful operation in the sandbox and the production of relevant data, regulators can decide whether to approve the service for longer-term operation or amend certain rules to allow it and similar services to enter the market. Regulatory sandboxes have been implemented in areas such as financial services,[327] but their potential in the legal services space is still drastically underappreciated in an overwhelming majority of U.S. jurisdictions. The emergence of the potential access-to-justice benefits of legal AI—as well as the accompanying challenges—underscore the need for increased implementation of this versatile regulatory mechanism.

Utah launched the U.S.'s first regulatory sandbox for legal services in 2020, and in May 2021 extended its duration from two to seven years.[328] Utah's sandbox is part of a broader effort within the state to, in the words of former Utah Supreme Court Justice Deno Himonas and Tyler Hubbard, "democratize the rule of law by making an understanding of the law and access to [Utah's] civil legal system more widely affordable and available."[329]

SANDBOXES (2020), https://www.unsgsa.org/sites/default/files/resources-files/2020-09/Fintech_Briefing_Paper_Regulatory_Sandboxes.pdf.

[327] *See, e.g.*, *CFPB Office of Innovation proposes 'disclosure sandbox' for companies to test new ways to inform consumers,* CONSUMER FIN. PROT. BUREAU (Sep. 13, 2018), https://www.consumerfinance.gov/about-us/blog/cfpb-office-innovation-proposes-disclosure-sandbox-companies-test-new-ways-inform-consumers/ (describing the CFPB's "action to further the Bureau's statutory mandate to ensure that markets for consumer financial products and services operate transparently and efficiently to facilitate access and innovation").

[328] *See Utah Supreme Court to Extend Regulatory Sandbox to Seven Years,* UTAH COURTS (May 3, 2021) https://www.utcourts.gov/utc/news/2021/05/03/utah-supreme-court-to-extend-regulatory-sandbox-to-seven-years/.

[329] Himonas & Hubbard, *supra* note 45, at 263.

AI-driven legal services can be tested in a regulatory sandbox in a number of ways. For example, a small law firm could propose to offer a small percentage of ownership in the firm to an AI expert who the firm might not otherwise have been able to afford to hire. The expert could help the firm calibrate its AI to account for the specific consumers, issues, and processes associated with that firm's work, adding invaluable perspective and expertise. This would help overcome the financial resource barrier that many small law firms face and free up more resources to invest in the technology itself; would make the firm more resilient due to the full-time, long-term nature of the arrangement; and would secure a cross-industry relationship that previously might have been elusive. In 2019, LexisNexis demonstrated the positive impact that entities with legal and technical expertise can make through partnerships with bar associations when it "partnered with the International Bar Association in developing the eyeWitness to Atrocities app, which allows witnesses to verify atrocities and report them to the appropriate agencies."[330] Large-scale impact is also possible through direct legal services, as large brand names that specialize in the business of wide distribution of services could partner with legal experts, through shared ownership, to make legal services more accessible online or even through kiosks in supermarkets.[331]

Regulatory sandboxes would also generate data about emerging delivery models that would add helpful substance to debates over outside ownership and investment, which have

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[330] *See LexisNexis Receives UN Foundation Global Leadership Award*, LEXISNEXIS (Jan. 14, 2020) https://www.lexisnexis.com/authorcenter/the-journal/b/pa/posts/lexisnexis-receives-un-foundation-global-leadership-award.

[331] *See* Knake, *supra* note 46, at 7 ("It is not difficult to imagine . . . alternative law delivery models that might be developed if a company like Google could take the next step to directly own or invest in a law practice, or if Wal-Mart could add a legal assistance window next to the banking center or health care provider located in its stores."). For additional examples of potential innovations that could be tested in a regulatory sandbox, *see* Himonas & Hubbard, *supra* note 45, at 275-76.

historically been contentious.[332] Opponents to outside ownership and investment argue that such structures compromise the independence of lawyers and pose conflicts of interest due to increased profit motive.[333] But as some of the most prominent legal ethics scholars have noted, lawyers already routinely deal with competing financial interests and pressures stemming from billable hours requirements, law practice expenses, loans, and competition with other firms.[334] Existing professional obligations concerning professional independence already provide lawyers with the ethical framework for navigating these pressures,[335] which lawyers do on a daily basis. Even Justice Gorsuch has weighed in in favor of lifting ownership and investment restrictions.[336]

To the extent that concerns still remain, the regulatory sandbox mechanism would allow jurisdictions to oversee early design and deployment of such services and ensure that any consumer protection issues are addressed before wider adoption. With such careful implementation, legal service providers might actually face less competing financial influence

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[332] Guttenberg, *supra* note 45, at 479; *see also* Knake, *supra* note 46, at 14 ("[T]he debate on nonlawyer investment is not for the faint of heart.").

[333] *See* Knake, *supra* note 46, at 14 (explaining opposition to outside ownership).

[334] *See* JASON SOLOMON ET AL., HOW REFORMING RULE 5.4 WOULD BENEFIT LAWYERS AND CONSUMERS, PROMOTE INNOVATION, AND INCREASE ACCESS TO JUSTICE 12-13 (STAN. CTR. ON LEGAL PRO. 2020), https://law.stanford.edu/publications/how-reforming-rule-5-4-would-benefit-lawyers-and-consumers-promote-innovation-and-increase-access-to-justice/; Knake, *supra* note 46, at 42 ("The professionalism/independence paradigm ignores the economic realities of law practice. The fact is that law practice is a business—one increasingly pressured in the twenty-first century by competition and technological innovation.").

[335] *See* MODEL RULES OF PRO. CONDUCT r. 2.1 (requiring lawyers to "exercise independent professional judgment and render candid advice"); r. 1.7 (prohibiting representations where there would be a significant risk that the lawyer would be materially limited by a third party); r. 1.8 (prohibiting interference from third-party payors on a lawyer's independent professional judgment).

[336] *See* Kourlis & Gorsuch, *supra* note 74.

due to the increased stability found through a financially sound, cross-disciplinary, well-calibrated law practice.

The potential benefits of regulatory sandboxes with regard to legal AI go far beyond the issue of firm ownership. Depending on the way in which a jurisdiction defines and enforces prohibitions on the unauthorized practice of law, limited exceptions for certain AI-driven services could be tested in a sandbox. Innovators could also propose any number of services that might currently be constrained by an existing rule. If jurisdictions across the country implemented regulatory sandboxes that could entertain proposed AI innovations, or if a national regulatory sandbox was established, with which individual jurisdictions could partner, best practices and reciprocity mechanisms could emerge that would encourage more innovators to participate, and troves of data concerning emerging services could inform larger discussions concerning legal AI and the justice gap.

Conclusion

AI continues to increasingly drive legal technology and plays a fundamental role in all stages and settings of legal problem solving. But if AI is not widely accessible to legal and technology stakeholders, an inequitable two-tiered system of legal services could result. Fulfilling legal AI's promise and avoiding its peril depends in part on the ability of stakeholders across the landscape to "calibrate" their AI in a way that accounts for the specific consumers, legal issues, and underlying processes involved. This Article has provided a taxonomy of these calibration considerations and the barriers that inhibit certain stakeholders from engaging in calibration. As jurisdictions confront imminent challenges concerning regulating legal AI and closing the justice gap, this calibration framework should inform academics, practitioners, regulators, and law and policy makers in the important dialogue ahead. The framework also provides a helpful lens through which to appreciate the benefits of emerging reforms to regulating, among other issues, the "unauthorized practice of law" and ownership of and investment in law firms. In particular, regulatory "sandboxes" or "laboratories" are an especially

attractive mechanism for facilitating innovation of AI-driven legal-services in a way that promotes widespread calibration, breaks down existing barriers, and protects consumers. Legal AI does not have to be a "necessary evil" for licensed legal professionals or "better than nothing" for consumers. The legal and technology industries can aim higher, and this Article serves as a foundation for advancing collaborative efforts to help legal AI fulfill its potential as a tool to improve access to justice.