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ABSTRACT—The transformative potential of technology in legal practice is well recognized. But wholly apart from how law firms actually use technology is the question of what law firms say about how they use and relate to technology—in particular, how law firms communicate whether technology matters and has value in what they do. In the past, firms in the BigLaw category, especially at the top echelon, have grounded their reputations on the credentials and achievements of their lawyers. In this paper, we explore whether elite law firms use technology similarly by describing it as an additional tool of inter-firm competition—a sort of "technocapital" that wields power in the war for clients, talent, and reputation generally. Based on an in-depth review of the websites of fiftyone nationally recognized and highly ranked law firms, the article analyzes differences in how firms use tech as a means of promoting themselves.

We found that elite law firms adopt one of three distinct approaches. The most prestigious firms generally refrain from making claims about technology that might undercut the preeminence of their lawyers. Rather, tech is simply one among many organizing themes for describing what their lawyers do, whether on behalf of an industry or with regard to particular legal issues arising in the course of legal representations. A second group of firms couples their description of work for tech clients and on tech matters with claims of expertise in harnessing technology to provide conventional legal services better and faster. Finally, a small subset of firms describe tech as transformative of their practices and identities, and integral to their claims of being innovators. These firms' descriptions of tech reveal its role as a kind

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of capital being used to distinguish themselves both from traditional law firms and from new entrants to the legal market. These variations in law firms' descriptions of the importance and role of technology in their organizations offer insight into the ways in which tech serves as a new form of capital in the ongoing competition for status in the legal services market.

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INTRODUCTION

The emerging and transformative potential of technology in legal practice has been a popular topic for more than ten years. Technology has been the focus of attention for its potential to revolutionize everything from solo and small firms to the largest corporate law firm practices, the work of corporate counsel, and the needs of individuals who often go without legal services.¹ Often, the focus has been on technology as a tool used in back-office operations and to streamline routine work for clients. But wholly apart from how law firms actually *use* technology is the question of what law firms *say* about how they use and relate to technology—in particular, how law firms communicate that their experience and expertise with regard to technology matters and has value. Technology, in this way, is a tool of inter-

¹ For purposes of this article, rather than defining "technology" directly, we defer to the meanings ascribed by law firm websites reviewed for our research. That is, even what is meant by "technology" is negotiated. *See infra* Section II.A and accompanying notes. *But see How Technology Levels the Playing Field for Midsize Law Firms*, THOMPSON REUTERS 4, https://legal.thomsonreuters.com/en/forms /how-tech-levels-the-playing-field-for-midsize-law-firms [https://perma.cc/8YD3-43KK] (defining technology in the context of mid-size law firms as "any digital solution specifically designed to streamline common law firm activities, including, but not limited to, legal research, matter management, time and billing, client intake and law firm marketing"). On the meaning of technology generally, see ERIC SCHATZBERG, TECHNOLOGY: CRITICAL HISTORY OF A CONCEPT (2018); Jon Agar, *What is Technology?*, 77 ANNALS OF SCI. 377 (Oct. 11, 2019), https://doi.org/10.1080/00033790.2019.1672788 [https://perma.cc/6PZT-QB6W] (reviewing SCHATZBERG, *supra*); Eric Schatzberg, *Why Is There No Discipline of Technology in the Social Sciences?*, 8 ARTEFACT 193 (2018), https://journals.openedition.org/artefact /2150 [https://perma.cc/7YPX-57SY].

firm competition—a sort of "technocapital"² that is recognized as wielding power in the war for clients, talent, and reputation generally. How do law firms refer to technology in their self-promotional writings and descriptions of their practices, and what do these references reveal about the extent to which they consider tech a valuable asset in promoting their reputation? If they claim technological expertise in their competitive rhetoric, what are the implications for lawyers and their firms? We use law firm websites to explore these previously unexamined issues. Websites are an entry point for their uninformed readers, but even sophisticated consumers now rely on websites for information. Particularly today, as the pandemic hinders insight from more casual interaction, websites are crucial sources of information about what and who law firms consider important in building and maintaining their images and reputations.

Traditionally, the legal profession has been highly stratified.³ Years ago, in their famous study of Chicago lawyers, Heinz and Laumann described the profession as comprised of two hemispheres, with the lawyers in the more prestigious hemisphere serving in large firms and representing corporate clients, and those in the lower hemisphere serving in small firms or solo practices and representing individuals.⁴ While the lines have blurred over time,⁵ there remains a cadre of large corporate law firms which generally represent businesses, charge high fees, generate high income, and maintain high status in the profession. These "BigLaw" firms are our focus here,⁶ and, specifically, we draw on a study of a subset of firms recognized as the elite of BigLaw—itself an elite group—based on their generating the highest revenues. Our targeting of these elite firms reflects their focus on talent, encapsulated in elite law school credentials.⁷

² See Jaewon Royce Choi et al., *Techno-capital: Theorizing Media and Information Literacy Through Information Technology Capabilities*, NEW MEDIA & SOCY 1, 16 (May 27, 2020), https://journals.sagepub.com/doi/pdf/10.1177/1461444820925800 [https://perma.cc/7DWU-4ZE8] (describing "technological capital" of individuals as "relevant and pivotal").

³ See generally Carroll Seron, *The Status of Legal Professionalism at the Close of the Twentieth Century: Chicago Lawyers and Urban Lawyers*, 32 L. & SOC. INQUIRY 581 (2007) (reviewing JOHN P. HEINZ & EDWARD O. LAUMANN, CHICAGO LAWYERS: THE SOCIAL STRUCTURE OF THE BAR (1982) and JOHN P. HEINZ ET AL., URBAN LAWYERS: THE NEW SOCIAL STRUCTURE OF THE BAR (2005)).

⁴ HEINZ & LAUMANN, *supra* note 3, at 101.

⁵ Seron, *supra* note 3, at 582 (reviewing analysis of the second *Chicago Lawyers* survey conducted twenty-five years after the first).

⁶ "BigLaw" has no fixed definition but generally connotes the largest, most profitable law firms. *See,* e.g., Nancy B. Rapoport & Joseph R. Tiano, Jr., *Legal Analytics, Social Science, and Legal Fees: Reimagining "Legal Spend" Decisions in an Evolving Industry*, 35 GA. ST. U. L. REV. 1269, 1269 n.3 (2019).

⁷ HEINZ & LAUMANN, *supra* note 3, at 192–93 (recognizing this factor in their original study). The relationship of law school to law firm status also has been explored in more recent work. *See* Ronit Dinovitzer & Bryant Garth, *The New Place of Corporate Law Firms in the Structuring of Elite Legal*

In competing for clients, firms in the BigLaw category, especially at the top echelon, conventionally have sought to distinguish themselves from one another based primarily on their professional capital.⁸ To enhance their reputations, firms promote their lawyers' educational background, relationships, expertise, judgment, and creativity; their lawyers' individual and collective experience working on complex, high-stakes matters for prestigious clientele; and the results their lawyers have achieved.⁹ Relatedly, firms emphasize their aggregate expertise in particular practice specialties. Often, corporate firms also draw on other factors to compete for work, including pricing—in response to pressure from corporate general counsel, who themselves often have prior experience in BigLaw¹⁰—and location, among other things.

Emerging technology has the potential to throw a new variable into the mix and to potentially disrupt assumptions about the status and superiority of BigLaw firms, their lawyers, and their practices. Elite law firm partners may not have been trained for—or have developed experience in—evolving technology, even though it has become central to economic activity.

Indeed, lawyers' technological proficiency may be inversely proportionate to their seniority.¹¹ Out of concern that experienced lawyers in all strata of the profession are generally unversed in the technology that is increasingly essential to their practices, the organized bar has called on lawyers to keep up with technological changes and to achieve minimal technological competence.¹² Recognizing that technology is not law firms'

Careers, 45 L. & SOC. INQUIRY 339 (2020); Bryant G. Garth & Joyce S. Sterling, *Diversity, Hierarchy, and Fit in Legal Careers: Insights from Fifteen Years of Qualitative Interviews*, 31 GEO. J. LEGAL ETHICS 123 (2018); Bryant Garth & Joyce Sterling, Rethinking the Solo Practitioner (Jan. 5, 2021) (unpublished manuscript) (on file with authors).

⁸ Nancy J. Reichman & Joyce S. Sterling, *Recasting the Brass Ring: Deconstructing and Reconstructing Workplace Opportunities for Women Lawyers*, 29 CAP. U.L. REV. 923, 941 n.59 (2002) ("Professional assets accrue from a combination of human capital, social capital, and cultural capital and are the 'stuff' from which advancement occurs."); Carole Silver, *The Variable Value of U.S. Legal Education in the Global Legal Services Market*, 24 GEO. J. LEGAL ETHICS 1, 3 n.7 (2011) (using the term "professional capital" as "an umbrella term, [including] the notions of human, social, cultural and international capital").

⁹ Bruce E. Aronson, *Elite Law Firm Mergers and Reputational Competition: Is Bigger Really Better? An International Comparison*, 40 VAND. J. TRANSNAT'L L. 763, 783–85 (2007) (discussing reputational signaling by law firms).

¹⁰ See, e.g., Rapoport & Tiano, Jr., *supra* note 6 (discussing law firms' use of technology and data analytics to compete on pricing).

¹¹ It may be too much to assume, however, that youth equates with technological adeptness, at least as it relates to using technology in legal services.

¹² See infra text accompanying note 35.

traditional emphasis, a new industry is growing to help law firms and legal departments adapt technology to their practices.¹³

One might wonder whether this development will lead to a reconfiguration of the hierarchy within BigLaw. BigLaw firms emphasize the unique attributes of their lawyers, and their websites are filled with selfpromotional language to reflect these qualities. They pride themselves on doing what has not been done before. Perhaps expertise regarding technology will develop into an additional reputational asset. But on the other hand, technology often builds on repetition and routine, needing multiple similar cases to develop knowledge, unlike the bespoke, cuttingedge work that is the pride of elite law firms (although many question whether it is their mainstay).¹⁴ Moreover, at an individual level, technologists work in code and numbers, while lawyers are experts in words-and in fact often admit to being numbers-impaired.¹⁵ The crux of this tension between the traditional attributes promoted as indicia of quality for firms and their lawyers, and the organizational and individual characteristics inherent in developing expertise regarding technology, suggests that signaling the possession of expertise regarding technology may present a quandary for elite law firms. Technological mastery might give law firms a competitive advantage, or it might mark them as performing routine, and perhaps less interesting and less valued, work. This paradox may be evident in how firms that traditionally have been recognized as the most successful decide to refer to technology in their descriptions of their approaches to practice, their clients, lawyers, and other employees, and whether they have, at least implicitly, added technological expertise to the attributes that they present to potential clients and the public as contributing to their competitiveness.

To learn more, we investigated the websites of a set of fifty-one elite law firms to learn about the ways in which they refer to technology. To be clear, we are *not* analyzing whether law firms in fact possess technological expertise, or even how they are using technology in practice. Nor does our work try to analyze the types of technology being used by these firms. Although commercial enterprises and professional publications have singled

¹³ Sam Skolnik, *Legal Tech Broke Investment Record in 2019 as Sector Matures*, BLOOMBERG LAW (Dec. 30, 2019, 3:50 AM), https://news.bloomberglaw.com/us-law-week/biggest-legal-tech-deals-and-developments-of-2019 [https://perma.cc/E6VH-LUCA].

¹⁴ See ROBERT L. NELSON, PARTNERS WITH POWER: THE SOCIAL TRANSFORMATION OF THE LARGE LAW FIRM 26 (1988) (discussing the notion that identifying work as "routine"... depends more on the significance that various parties attach to the transaction than on the intrinsic nature of the matter"). See generally RICHARD E. SUSSKIND, THE END OF LAWYERS?: RETHINKING THE NATURE OF LEGAL SERVICES (2008) (predicting that technology will spark a movement from bespoke legal services to commodified legal services).

¹⁵ Carole Silver & Louis Rocconi, *Learning From and About the Numbers*, 4 J. LEGAL METRICS 53, 55–56 (2015).

out some law firms as technological innovators,¹⁶ we are skeptical that firms' websites reveal enough to fully and accurately ascertain what law firms actually do in this realm; as described below, some firms may prefer not to describe how they use technology, and others' descriptions are often vague at best. In any event, our interest here is not in what law firms *do*, but in what they *say* they do. In this way, our focus reflects what BigLaw firms value— or, more accurately, what they perceive that readers of their websites will value in assessing a firm's reputation.

We begin in Part I, by way of background, with the ethical context for technology's role in lawyers' services. This includes a discussion of the distinction between technological competence, which all lawyers are expected to develop, and technological expertise, toward which lawyers might choose to strive, coupled with a discussion of law firms' ethical latitude to promote their self-perceived technological expertise.

In Part II, we describe our empirical study of the fifty-one law firm websites. We organize our analysis within a typology of firms' claims about their expertise and interactions with technology. Firms use tech-expertise in several ways to convey its value. On one hand, all of the websites we reviewed present their lawyers—and, in turn, their services—as their most important assets, but at the same time, certain law firms also describe venturing into different directions by supporting their lawyers' work with technology applications and tools. And more interesting, a smaller subset of law firms connects descriptions of technology to innovation and use this to convey a message about who they are as organizations, offering a vision of what is valuable that differs from the traditional model. We view this as an attempt to compete with both traditional law firms and with new entrants to the market for legal services (that is, new entrants that are not organized as law firms) that harness technology in ways quite foreign to traditional law firms.

Finally, Part III synthesizes our findings and identifies possible implications that might be explored through future research. Among our conclusions are that while the most elite firms continue to view traditional forms of professional capital, including their lawyers' credentials and expertise derived from representing notable clients on important matters, as defining, a small segment of firms—occupying lower-places in the BigLaw rankings—also use technology as a form of capital in their competition for status and recognition. While this analysis reveals the development of a new

¹⁶ See, e.g., Vivian Hood, Marketing Innovative Law Firms, LAW.COM (Oct. 31, 2019), https://www.law.com/2019/10/31/marketing-innovative-law-firms/ [https://perma.cc/D65B-YBVD] (identifying two law firms as "examples of how firm leaders are spurring innovative legal practices and law firms while using creative marketing that is changing the future of these progressive firms").

element of professional capital related to claims around technology, this sits alongside the continuing lawyer-centric approach evident in the ways that law firms describe themselves. That is, even where technocapital is promoted, it is within a context framed by the hegemony of lawyers.

I. BACKGROUND: LEGAL ETHICS AND TECHNOLOGICAL EXPERTISE

Technological advances are significant, if not transformative, in law practice as in so many other areas of life and commerce.¹⁷ There is a burgeoning literature on lawyers and new technology,¹⁸ addressing, among other things, lawyers' use of technology in law offices and case management,¹⁹ legal research,²⁰ legal drafting,²¹ and litigation and negotiations.²² The writings explore not only the significance of existing technology but the potential significance of future technology such as advances in artificial intelligence (AI).²³ One theme is how technology might expand access to justice for low- and middle-income clients, many of whom cannot currently afford lawyers, whether by reducing the cost of lawyers' services or by providing an alternative to retaining counsel.²⁴ But at least as much attention is given to how technology might benefit corporate clients

¹⁷ Benjamin H. Barton & Deborah L. Rhode, *Access to Justice and Routine Legal Services: New Technologies Meet Bar Regulators*, 70 HASTINGS L.J. 955, 957 (2019) ("We are in the early stages of a technological revolution in legal services. Technology is displacing lawyers in a wide array of tasks such as document drafting, review, and assembly, and is also reshaping the way that lawyers find clients and deliver assistance.").

¹⁸ See Forty-Ninth Selected Bibliography on Computers, Technology, and the Law, 44 RUTGERS COMPUT. & TECH. L.J. 334 (2018).

¹⁹ See, e.g., Annie Simkus, Preventing Data Breaches at Law Firms: Adapting Proactive, Management-Based Regulation to Law-Firm Technology, 59 ARIZ. L. REV. 1111 (2017); The 2018 Aderant Business of Law and Legal Technology Survey, ADERANT https://www.aderant.com/research /2018-business-of-law-survey/ [https://perma.cc/LCH8-RCCV].

²⁰ See, e.g., Dana Remus & Frank Levy, Can Robots Be Lawyers? Computers, Lawyers and the Practice of Law, 30 GEO. J. LEGAL ETHICS 501, 520–24 (2017).

²¹ See, e.g., id. at 518–19.

²² See, for example, Daniel N. Kluttz & Deirdre K. Mulligan, *Automated Decision Support Technologies and the Legal Profession*, 34 BERKELEY TECH. L.J. 853 (2019), for a critique of the use of analytic coding in litigation discovery.

²³ See generally, for example, Jordan Bigda, *The Legal Profession: From Humans to Robots*, 18 J. HIGH TECH. L. 396 (2018), advocating for legal restrictions on the use of AI to assist with legal problems. *See also* Michael Hatfield, *Professionally Responsible Artificial Intelligence*, 51 ARIZ. ST. L.J. 1057 (2019); Kluttz & Mulligan, *supra* note 22; Mark McKamey, *Legal Technology: Artificial Intelligence and the Future of Law Practice*, 22 APPEAL: REV. CURRENT L. & L. REFORM 45 (2017); Sean Semmler & Zeeve Rose, *Artificial Intelligence: Application Today and Implications Tomorrow*, 16 DUKE L. & TECH. REV. 85 (2017); 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 (2018).

²⁴ See, e.g., Elinor R. Jordan, *Point, Click, Green Card: Can Technology Close the Gap in Immigrant Access to Justice*?, 31 GEO. IMMIGR. L.J. 287 (2017); Elliott Vinson & Samantha A. Moppett, *Digital Pro Bono: Leveraging Technology to Provide Access to Justice*, 92 ST. JOHN'S L. REV. 551 (2018).

and the law firms that serve them, by enabling elite firm lawyers to work more efficiently, effectively, or profitably;²⁵ and, conversely, how law-related service providers²⁶ might compete with lawyers to provide legal and law-related services.²⁷

Commentators have not overlooked the ethical implications of technological advances for lawyers' practice. They have identified a range of ethical concerns, including how technology puts client confidences at risk,²⁸ provides new outlets for lawyer incivility,²⁹ and implicates restrictions on lawyers' collaborations with non-lawyers.³⁰ These concerns are not merely theoretical. Lawyers may be disciplined or sued for alleged misconduct relating to evolving technology.³¹

As background to our study of the emergence of technology as a new element of professional capital, this Part explores two other aspects of the relevant ethical landscape. Section A discusses the minimal extent to which lawyers are professionally *obligated* to learn how to use technology in their law practices, in order to depict the gap between what lawyers *must* do and what they *may* do with respect to technology. If mastery of technology were required, tech would have less value as a competitive weapon; that is, if everyone has it, it is not particularly valuable as a distinction. However, as

²⁵ See, for example, Kluttz & Mulligan, *supra* note 22, for a study on the use of predictive coding in e-discovery, principally by large corporate defense firms.

²⁶ We use the term "law-related service providers" as a reference to organizations providing legal and law-related services that are not organized as law firms. This includes the legal arms of the Big Four, as well as organizations like Novus Law that work directly with corporate law departments to provide legal support services.

²⁷ See, e.g., Michael Guihot, New Technology, the Death of the BigLaw Monopoly and the Evolution of the Computer Professional, 20 N.C. J.L. & TECH. 405, 445 (2019) (arguing that non-lawyer legal services providers are using technology to compete with law firms, which overcharge for the same services and perform them inefficiently).

²⁸ See, e.g., Cassandra Burke Robertson, Online Reputation Management in Attorney Regulation, 29 GEO. J. LEGAL ETHICS 97, 132 (2016) (discussing lawyers' motivation to breach client confidences in order to respond to negative online reviews); Robert W. Derner, Comment, Ethical Limitations on Lawyer-to-Lawyer Online Consultations Regarding Pending Cases, 10 ST. MARY'S J. LEGAL MALPRACTICE & ETHICS 102, 104 (2019) (discussing confidentiality concerns when lawyers seek online advice from other lawyers outside their firms); Cheryl B. Preston, Lawyers' Abuse of Technology, 103 CORNELL L. REV. 879, 909–30 (2018) (discussing how blogs, chat sites, and other internet-based platforms provide new opportunities for abuse).

 $^{^{29}}$ See Preston, supra note 28, at 966–71 (discussing how the internet affords new outlets for incivility).

³⁰ See, e.g., Barton & Rhode, *supra* note 17, at 957–58 (criticizing regulators' invocation of restrictions on unauthorized practice of law against internet providers that connect clients with lawyers).

³¹ See, e.g., Complaint at 5–9, Hiscox Ins. Co. v. Warden Grier, LLP, No. 4:20-cv-00237-NKL (W.D. Mo. Mar. 27, 2020) (alleging that law firm failed in its ethical, contractual and fiduciary duty to protect client confidences from hackers); Robbins v. Delafield (*In re* Williams), 2018 Bankr. LEXIS 382 (Bankr. W.D. Va. Feb. 12, 2018) (sanctioning bankruptcy lawyers for participating in deceitful internet marketing practices).

Section A shows, lawyers' professional obligation to keep pace with technological advances that could benefit their work is minimal.

Section B then turns to the question of whether there are ethical limits on the ways in which firms can tout their technological expertise. As this Section shows, law firms are not seriously restricted from exploiting technological expertise and innovation as a selling point. Professional norms may discourage law firms from making excessive or unverifiable claims about their technological expertise, but nothing restrains firms from accurately describing their use of technology when they portray the firm to the public, including to prospective clients.

A. The Duty of Technological Competence

The literature on technology and legal ethics emphasizes lawyers' ethical obligation to maintain technological competence.³² The stage for this duty was set in 2012, when the American Bar Association (ABA) amended its Model Rules of Professional Conduct,³³ on which most state ethics codes are based,³⁴ in light of the rapidity of technological change. The ABA cautioned lawyers that maintaining competence, as required by Rule 1.1, now calls for "keep[ing] abreast of . . . the benefits and risks associated with relevant technology[.]"³⁵ That lawyers should remain conversant with relevant technology may seem obvious—for example, when courts require documents to be filed electronically, litigators have little choice but to learn how to make such filings. But, importantly, technological competence is conceptually different from professional competence as it is traditionally understood.

³² See, e.g., Jamie J. Baker, *Beyond the Information Age: The Duty of Technology Competence in the Algorithmic Society*, 69 S.C. L. REV. 557, 558 (2018) (arguing that the duty of technological competence should extend to the use of algorithms in the law); Katherine Medianik, Note, *Artificially Intelligent Lawyers: Updating the Model Rules of Professional Conduct in Accordance with the New Technological Era*, 39 CARDOZO L. REV. 1497, 1516 (2018) ("[I]t is the lawyer's duty to remain competent in using these sophisticated [AI technology] tools correctly and interpreting their results correctly when providing legal advice to clients."); Preston, *supra* note 28, at 906 ("As technology becomes more and more pervasive, ignorance of beneficial uses of technology is increasingly unacceptable[.]").

³³ MODEL RULES OF PROF'L CONDUCT (AM. BAR. ASS'N 2018) [hereinafter MODEL RULES].

³⁴ See Fred C. Zacharias & Bruce A. Green, *Rationalizing Judicial Regulation of Lawyers*, 70 OHIO ST. L.J. 73, 94 (2009) (noting that state courts "tend to rubberstamp" professional conduct rules proposed by state bar associations based on ABA models).

³⁵ MODEL RULES, *supra* note 33, at r. 1.1 cmt. 8.; Robert Ambrogi, *Tech Competence*, LAWSITES, https://www.lawsitesblog.com/tech-competence [https://perma.cc/9X7D-4YKS] (stating that "[t]hirty-eight states have adopted this provision"). Early after the ABA adopted this provision, Judith Maute astutely noted that "no disciplinary counsel is going to waste precious enforcement resources in isolated instances where a senior lawyer is behind on technology but where such lapses cause no client harm. These lawyers will lose in the marketplace but typically will not face discipline." Judith L. Maute, *Facing 21st Century Realities*, 32 MISS. COLL. L. REV. 345, 369 (2013).

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Conventionally, competence under the Model Rules refers either to the quality of work performed in a given legal matter,³⁶ or to a lawyer's anticipated ability, or qualifications, to undertake a particular matter.³⁷ In contrast, technological competence, in the context of ethical regulation, ordinarily refers to a lawyer's possession of technological knowledge and skill necessary to perform adequately as a lawyer in general.³⁸ The premise that lawyers must work to become technologically competent is unusual, in that lawyers are generally assumed to have the requisite skill and knowledge to practice law by virtue of having attended law school and passed a bar

³⁶ When used in this sense, competence is an *ex post* standard describing the minimally acceptable quality of work. The standard originated in common law. See Susan Saab Fortney, A Tort in Search of a Remedy: Prying Open the Courthouse Doors for Legal Malpractice Victims, 85 FORDHAM L. REV. 2033, 2041–42 (2017) (explaining that legal malpractice derives from both negligence (tort law) and breach of fiduciary duty (agency law)); John Leubsdorf, Legal Malpractice and Professional Responsibility, 48 RUTGERS L. REV. 101, 108-12 (1995) (same). It was then codified in professional conduct rules corresponding to ABA Model Rule 1.1. See MODEL RULES, supra note 33, r. 1.1 ("A lawyer shall provide competent representation to a client."). As a matter of both law and professional ethics, lawyers must perform their legal work competently, and they may be found civilly liable or be disciplined for falling short. See Leubsdorf, supra, at 118. Ordinarily, incompetent representation denotes work in a particular representation that falls below the standard of care of a reasonable lawyer under the circumstances. One would hope that lawyers aspire to a higher quality of work-ideally, a standard of proficiency or even excellence, not minimal competence, and clients presumably seek lawyers who will perform at a high level, not a minimally acceptable one. But law and ethics set a floor, not a ceiling, for a given representation. Technological competence is different from conventional competence in this sense; it does not refer to the minimally acceptable quality of a lawyer's work in a particular matter but is an ex ante standard

³⁷ When used in this sense, competence is an *ex ante* standard. *See, e.g.*, MODEL RULES, *supra* note 33, r. 1.1 cmt. 2 (contrasting lawyers for whom a field of law is new from those "of established competence in the field in question"). Having been admitted to practice law, lawyers are presumed by law to be generally capable of performing legal work-for example, to give competent legal advice or to produce competent legal documents. See Bruce A. Green, Lethal Fiction: The Meaning of "Counsel" in the Sixth Amendment, 78 IOWA L. REV. 433, 486 (1993) (noting "our historic insistence that we treat every person admitted to the bar as qualified to give effective assistance on every kind of legal problem that arises in life") (quoting Warren E. Burger, The Special Skills of Advocacy, 42 FORDHAM L. REV. 227, 230-31 (1973)). But a lawyer might be considered incompetent—or unqualified—if, in fact, the lawyer lacks the skill or legal knowledge necessary to competently perform particular anticipated legal work. See id. at 484 ("[T]he mere possession of a license does not mean an attorney is qualified to practice in all areas of law[.]"). Professional conduct rules have long called upon lawyers in such situations either to decline the particular representation or to find a way to become competent before rendering the given legal services-for example, by co-counseling with a competent lawyer, by obtaining a mentor, or through self-study. See MODEL RULES, supra note 33, r. 1.1 cmt. 2 ("A lawyer can provide adequate representation in a wholly novel field through necessary study. Competent representation can also be provided through the association of a lawyer of established competence in the field in question."). But technological competence is different from competence in this ex ante sense, too, in that technological competence ordinarily does not refer to a lawyer's anticipated ability to produce adequate work in a particular matter.

³⁸ In amending Rule 1.1 to call for lawyers to develop knowledge and skill regarding "relevant technology," the ABA's drafting commission deliberately refrained from defining technologically competence. *See* Andrew M. Perlman, *Towards the Law of Legal Services*, 37 CARDOZO L. REV. 49, 61 (2015).

examination.³⁹ But technology upsets that assumption. Because technology advances at a rapid pace and has shaped various aspects of practice, including the storage and conveyance of information, practicing lawyers may not have the necessary background knowledge that would enable them to implement new tools without additional training. Therefore, the recent amendments to professional conduct rules call on lawyers to keep pace technologically—that is to maintain the minimal necessary technological expertise⁴⁰—just as such rules have long reminded lawyers to keep pace with changes in the law and legal processes.⁴¹

The recent recognition of a professional duty to maintain technological competence, an innovation in ethics codes, does not grow out of a sense of opportunity but out of the bar's anxiety about some lawyers' ability to keep pace with technological change that also could affect existing ethical obligations. In earlier days when technology developed more slowly, lawyers could readily adapt along with everyone else in the commercial world—for example, moving from the use of quill pens to fountain pens to manual typewriters and ballpoint pens to electric typewriters to computer keyboards. The profession lacks confidence, however, that, in the ordinary course of practice, lawyers will learn what they need to know about the available technology and how to use it to clients' benefit, not detriment. For example, while lawyers may understand how to store clients' information on a computer or how to communicate via email, they may not know to take reasonable measures to protect the confidentiality of clients' information.⁴²

The flipside of technological competence is technological expertise the ability to exploit current technology as an expert, for clients' benefit or to the advantage of the firm organizationally, or both, in ways that average lawyers cannot. That is more like a professional ceiling than a floor. No law or rule requires lawyers to aim high, much less to hit a high mark. Indeed, the professional conduct rules do not identify technological mastery as a quality that might distinguish lawyers and make some better than others. But the rules leave a significant gap between what lawyers might have to know

³⁹ See supra note 37. Further, it might be assumed that lawyers become more capable over time as they become more experienced. That explains why the hourly billing rate of lawyers in corporate law firms tends to go up, not down, as they become more senior.

⁴⁰ MODEL RULES, *supra* note 33, r. 1.1 cmt. 8.

⁴¹ *Id.* This is one of the premises of Continuing Legal Education requirements for experienced lawyers. *See id.* ("To maintain the requisite knowledge and skill, a lawyer should . . . engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.").

⁴² See generally Eli Wald, Legal Ethics' Next Frontier: Lawyers and Cybersecurity, 19 CHAP. L. REV. 501, 502 (2016) (arguing that lawyers' cybersecurity practices are underregulated and should be addressed through improvement to rules of professional conduct).

as a matter of minimal technological competence—e.g., how to electronically file documents, conduct computer research, or protect electronically stored information—and what they may claim to know as a matter of technological expertise or innovation. Because lawyers are obligated to possess only minimal technological competence, it may be attractive for lawyers and law firms to aim to set themselves apart from competitors through claims of use and mastery of technology.

B. Claims of Technological Expertise and Innovation—and Ethical Limits

Lawyers have always competed for business, although sometimes more subtly than at present. The earliest professional conduct codes prohibited lawyers from advertising their services, viewing ostentatious self-promotion as unethical.⁴³ Lawyers at the time were expected to obtain clients through word of mouth.⁴⁴ However, the early twentieth-century restrictions were significantly loosened beginning in the 1970's, when the Supreme Court concluded that lawyers' First Amendment right to engage in truthful commercial speech barred state courts from categorically forbidding lawyer advertising.⁴⁵ Nora Freeman Engstrom has observed that the decisions opening the door to lawyer advertising, which is "now a roughly two-billiondollar-a-year business, . . . have had a bigger practical impact on contemporary legal practice—and thus on the transmission of legal services—than any other line of cases in American history."⁴⁶

Old-line law firms (including those now known as BigLaw) were initially tentative about exploiting this newfound freedom, because

⁴³ See CANONS OF PROF'L ETHICS Canon 27 (AM. BAR ASS'N 1908) ("The most worthy and effective advertisement possible, even for a young lawyer, and especially with his brother lawyers, is the establishment of a well-merited reputation for professional capacity and fidelity to trust. . . . [S]olicitation of business by circulars or advertisements . . . is unprofessional."). For insight into how professional constraints on self-promotion shaped early twentieth-century law practice, see generally JEROLD S. AUERBACH, UNEQUAL JUSTICE: LAWYERS AND SOCIAL CHANGE IN MODERN AMERICA (1976).

⁴⁴ Bruce A. Green, *The Disciplinary Restrictions on Multidisciplinary Practice: Their Derivation, Their Development, and Some Implications for the Core Values Debate*, 84 MINN. L. REV. 1115, 1121 (2000).

⁴⁵ See Bates v. State Bar of Ariz., 433 U.S. 350, 381 (1977) (finding that lawyers' truthful advertising of their legal services at "very reasonable" rates was constitutionally protected); see also Zauderer v. Off. of Disciplinary Counsel of Sup. Ct. of Ohio, 471 U.S. 626, 651 (1985) (finding that truthful advertising for personal-injury representations was constitutionally protected); *In re* R.M.J., 455 U.S. 191, 205 (1982) (finding that advertising restrictions were unconstitutional and that the lawyer's advertisements were not misleading, although the truthful reference to his membership in the U.S. Supreme Court bar was in "bad taste"). See generally Kathleen M. Sullivan, *The Intersection of Free Speech and the Legal Profession: Constraints on Lawyers' First Amendment Rights* 67 FORDHAM L. REV. 569, 574–80 (1998) (reviewing Supreme Court opinions on lawyers' First Amendment rights to advertise).

⁴⁶ Nora Freeman Engstrom, *Attorney Advertising and the Contingency Fee Cost Paradox*, 65 STAN. L. REV. 633, 640–41 (2013).

advertising, if no longer unethical, nevertheless might be regarded as unprofessional or ineffective.⁴⁷ And to this day, these firms have selfimposed limits—for example, unlike lawyers seeking to attract individual clients with personal-injury, divorce, and criminal matters, BigLaw firms generally have not taken to the airwaves and billboards to lure corporate clients.⁴⁸ But by the twenty-first century, corporate law firms were budgeting substantial amounts of money for marketing, much of which went to brochures tastefully describing their lawyers and legal work.⁴⁹ And with the advent of the internet, BigLaw turned to their websites to promote their services and shape their images.⁵⁰

Until recently, among the dominant themes in many elite corporate law firms' efforts at self-promotion was globalization.⁵¹ U.S. law firms with global practices sought to attract elite corporate clients, which transact business worldwide, by emphasizing their ability to work effectively in multiple foreign jurisdictions. Although small local law firms might achieve the necessary capability through alliances with foreign firms or through law firm networks, large corporate law firms with foreign law offices promoted themselves as having a competitive edge and insight unavailable elsewhere.

Today, however, the battleground may be shifting. Technology has assumed a central role in society, including in business, that could hardly have been imagined a decade ago. This is exacerbated by the pandemic—the

⁴⁷ See, e.g., Geoffrey C. Hazard, Jr. et al., *Why Lawyers Should Be Allowed to Advertise: A Market Analysis of Legal Services*, 58 N.Y.U. L. REV. 1084, 1104 (1983) (maintaining that in seeking individualized legal services regarding high-risk matters, rather than standardized legal services where risk is low, clients will seek lawyers through personal knowledge and reputation, not advertising).

⁴⁸ Although law firms occasionally are mentioned on radio or television as sponsors of particular programs or channels.

⁴⁹ See, e.g., Carole Silver, *Globalization and the U.S. Market in Legal Services – Shifting Identities*, 31 L. & POL'Y INT'L BUS. 1093, 1138, 1146 n.198 (2000) (describing how global law firms' brochures address internationalism); David B. Wilkins & G. Mitu Gulati, *Reconceiving the Tournament of Lawyers: Tracking, Seeding, and Information Control in the Internal Labor Markets of Elite Law Firms*, 84 Va. L. Rev. 1581, 1655 n.229 (1998) ("Needless to say, today's large law firms are much more likely to engage in a broad array of marketing measures—ranging from glossy brochures and 'seminars' on legal developments for existing and potential clients to outright solicitation of corporate general counsel— than their expressed condemnation of advertising would lead one to suspect.").

⁵⁰ Deborah McMurray, *Big Law Websites Need Harder-Working Biographies*, L. PRAC. TODAY (Aug. 14, 2017), https://www.lawpracticetoday.org/article/big-law-websites-biographies/ [https://perma .cc/4VYA-7PDJ] ("Over the course of the last decade, the Global 50 law firms have spent a collective tens of millions of dollars designing new websites."). Indeed, the shift from listing directories like Martindale-Hubbell to reliance on organizational websites has altered the ability to analyze the legal profession, including contributing to the lapse in publication of the Lawyer Statistical Report.

⁵¹ See, e.g., Silver, *supra* note 49, at 1132–35 (showing that law firms followed a herd mentality regarding opening overseas offices and promoting a global message regarding their identity); David B. Wilkins, *Team of Rivals? Toward a New Model of the Corporate Attorney-Client Relationship*, 78 FORDHAM L. REV. 2067, 2090 (2010) ("[L]arge global companies increasingly interact with law firms that are themselves large and globalized.").

time in which we are writing-when reliance on the internet as the source of information is even more pervasive. In this competition, BigLaw does not necessarily have the edge. The main selling point of the top establishment law firms has traditionally been their partners' individual and collective experience and judgment.52 But, as noted, new technology seems not only to be a young person's game—it is commonly accepted that younger lawyers, having grown up with computer and internet technology, are more likely to master it⁵³—but it also is a game where the qualities needed to thrive differ from those recognized as leading to success in law. Rather than emphasizing language and relationship skills, technology also rewards quantitative skills. The old joke about lawyers going to law school because they were not good at numbers is not particularly funny in this context. Meanwhile, growth in firm size-once considered crucial for conducting document review in litigation discovery or as part of a corporate "due diligence"—has perhaps shifted from an asset to a liability in light of computers' ability to quickly perform work that used to eat up lawyers' billable hours.54

Some small new firms attempt to exploit their superior—or presumptively superior—technological acumen. A prominent example is DLx Law, a firm featured in an *ABA Journal* article about "embrac[ing] blockchain technology ethos."⁵⁵ The firm's very name connotes hipness. Its website reinforces the impression, describing the firm as follows:

Lawyers, technologists and explorers. As blockchain and other disruptive technologies and markets evolve at ever-intensifying velocities, law, business and technology collide at the outer edge of the expanding wave of human possibility. We surf these tides alongside our clients, guiding them and being guided back, adapting constantly to the morphing flow of futurity while

⁵² See generally NELSON, supra note 14, at 65 (describing a system of deference to law firm partners' seniority and experience as part of the organizational framework of large law firms); Eli Wald, *The Rise and Fall of the WASP and Jewish Law Firms*, 60 STAN. L. REV. 1803, 1807–08 (2008) ("[T]he 'Cravath system' ... sought to develop and implement a professional ideology of meritocracy based on quality standards of professional performance. [This] meritocracy ... *purported* to deem considerations such as religious affiliation, cultural and socioeconomic background, ethnic identity, and social status irrelevant in assessing professional qualifications.") (emphasis added).

⁵³ See Kevin M. Smith, *Rising Tide Lifts Boats: How Technology Floats Good Lawyers and Sinks the Bad*, 30 REGENT U.L. REV. 391, 397 (2018) ("Old-school lawyers must now compete against fresh graduates who know how to utilize new technologies in the practice of law.").

⁵⁴ See, e.g., Brook E. Gotberg, *Technically Bankrupt*, 48 SETON HALL L. REV. 111, 115 (2017) ("[D]evelopments in artificial intelligence make it possible for a single attorney, using the appropriate software, to conduct legal research and review factual records faster and more accurately than a dozen BigLaw partners and associates. This reality severely undermines the BigLaw model....").

⁵⁵ Jason Tashea, *New Firm Looks to Embrace Blockchain Technology Ethos*, ABA J. (May 15, 2018, 8:00 AM), https://www.abajournal.com/news/article/new_firm_looks_to_embrace_blockchain_techno logy ethos [https://perma.cc/6QX7-ES84].

maintaining strong lifelines to the bedrock principles of sound lawyering and jurisprudence so that the future has channels into the past.⁵⁶

Though vague, the description gets the point across that the firm's lawyers share their prospective clients' technological innovativeness and expertise, while still employing customary legal skills and knowledge.

BigLaw firms may perceive a need to compete with each other, if not to respond to the boasts of small upstarts, by assuring potential clients not only that they possess the necessary technological expertise, but that they are technological innovators.⁵⁷ Firms' technological expertise may matter not only to prospective clients, but to prospective lawyers, whether because they perceive innovativeness as an indicia of a firm's quality or as a framework important for building their practices, they seek to develop their technological skills, or they already possess technological skills for which they seek an outlet.⁵⁸ And technological expertise likely is not uniformly important to all lawyers or practices in a firm; what gets promoted may reflect these factors and other internal dynamics.⁵⁹

Conventional corporate firms might hesitate to make bold, if vague, assertions like those of DLx Law. It might seem implausible, for example, that BigLaw partners would be self-styled technologists and explorers. Even if large corporate law firms regarded themselves as technologically competitive, their reference to "the morphing flow of futurity" might seem odd to themselves, bewilder their more conventional corporate clients, and seem to lack the precision and clarity expected of skilled legal technicians.

⁵⁶ Who We Are, DLX LAW, https://dlxlaw.com/who-we-are [https://perma.cc/26KN-PGN2]. The description continues: "We engage closely with other practitioners, academics and policymakers to inform and be informed by the very best through leadership available and we pride ourselves as being recognized as one of the three leading blockchain legal practices in the United States by independent ranking firm Chambers and Partners." *Id.* (citation omitted).

⁵⁷ One reflection of the perceived significance of technological expertise is that Dan Linna, then a Michigan State law professor and now on the Northwestern Law faculty, has developed, as pilot projects, both a Catalog of Law Firm Innovations and a Law Firm Innovation Index. *See* LEGAL SERVICES INNOVATION INDEX, www.legaltechinnovation.com [https://perma.cc/2A4Z-98FW]. For a critique of this work, see Brent Miller, *The Legal Services Innovation Index – The Flaw in the Ointment*, BIGLAW KM (Sept. 17, 2017), http://biglawkm.com/2017/09/17/the-legal-services-innovation-index-the-flaw-in-the-ointment/ [https://perma.cc/V8QY-4CHD].

⁵⁸ See Better, Stronger, Faster: The Best Law Firms for Technology & Innovation, VAULT (Oct. 16, 2019), https://www.vault.com/blogs/vaults-law-blog-legal-careers-and-industry-news/better-stronger-faster-the-best-law-firms-for-technology-innovation [https://perma.cc/UBX9-N4QT] (describing a survey in which "associates were asked to rate their satisfaction with their firms' technology in terms of work efficiency, remote working, and innovation").

⁵⁹ See Patrick Smith, *Why Law Firm Websites Break Bad*, LAW.COM (Oct. 27, 2020), https://www.law.com/americanlawyer/2020/10/27/why-law-firm-websites-break-bad/ [https://perma.cc /K3P5-GDVL] (referring to internal perceptions of law firm websites as being important, particularly during the pandemic).

In theory, established corporate firms might also worry about whether professional conduct rules restrain how lawyers market their purported ability to understand or harness new technology. As a general matter, the rules subject lawyers to discipline for overstating their credentials, ability, or experience. This is a problem for which First Amendment cases show no sympathy: While state courts must resist the temptation to forbid advertising that is merely in bad taste, they are free to sanction lawyers for making false or misleading claims.⁶⁰ To protect the ability of prospective clients to make well-informed choices among lawyers, state courts have adopted ethics rules based on Model Rule 7.1, which forbid lawyers from "mak[ing] a false or misleading communication about the lawyer or the lawyer's services," and provides that "[a] communication is false or misleading if it contains a material misrepresentation of fact or law, or omits a fact necessary to make the statement considered as a whole not materially misleading."⁶¹

Regulators sometimes apply this rule strictly, sanctioning lawyers not only for telling outright lies but for making inflated and unverifiable claims.⁶² Bar-association ethics committees similarly discourage overclaiming.⁶³ They are more sensitive to the possibility that statements may be misleading in the context of lawyer advertising than in other contexts, such as when a lawyer makes factual assertions on behalf of a client. In the context of legal representations, authorities often interpret lawyers' arguably misleading statements sympathetically, recognizing that lawyers are navigating between

⁶⁰ See, e.g., Bates v. State Bar of Ariz., 433 U.S. 350, 383 (1977) ("Advertising that is false, deceptive, or misleading of course is subject to restraint.").

⁶¹ MODEL RULES, *supra* note 33, r. 7.1. The accompanying Comment expresses the further view that non-verifiable claims are misleading. *Id.* r. 7.1 cmt. 2 ("A truthful statement is misleading if a substantial likelihood exists that it will lead a reasonable person to formulate a specific conclusion about the lawyer or the lawyer's services for which there is no reasonable factual foundation.").

⁶² See, e.g., Iowa Supreme Court Attorney Disciplinary Bd. v. Bjorklund, 725 N.W.2d 1, 6 (Iowa 2006) (punishing lawyer for making the "[u]nverifiable and [s]elf-laudatory" claims that he was "the foremost authority on drunk driving defense," that his "[f]irm's scholarly achievements are unmatched by any other law firm," and that its lawyers' "vast knowledge, experience, and expertise as well as their zealous and aggressive legal representation has resulted in overwhelmingly favorable results for clients"); N.C. State Bar v. Culbertson, 627 S.E.2d 644, 646 (N.C. Ct. App. 2006) (sanctioning lawyer who was "described on the firm's website as 'also one of the elite percentage of attorneys to be published in Federal Law Reports – the large law books that contain the controlling caselaw [sic] of the United States"); *In re* Dickey, 722 S.E.2d 522, 523 (S.C. 2012) (finding that lawyer's website made impermissible claims, including "statements comparing respondent's services with other lawyers' services in ways which could not be factually substantiated"). *See generally* Nat Stern, *Commercial Speech, "Irrational" Clients, and the Persistence of Bans on Subjective Lawyer Advertising*, 2009 BYU L. REV. 1221, 1221 ("[M]any states have clung [to] the prohibition on 'self-laudatory' claims or other subjective representations by attorneys.").

⁶³ See, e.g., Supreme Court of Ohio Bd. of Prof'l Conduct, Opinion 2016-8, at 2 (Oct. 7, 2016) ("[T]estimonials containing statements that characterize the lawyer's skills, reputation, or record are nonverifiable and are not permitted by the rule.").

the conflicting obligations to represent clients effectively and preserve clients' confidences, on one hand, and to refrain from dishonesty and deceit, on the other.⁶⁴ But authorities see no reason to give lawyers license when marketing their services. In the context of advertising, there is no strong countervailing interest that might lead lawyers to tread close to the line. Particularly given that lawyer advertising has traditionally been disfavored altogether, authorities feel justified in interpreting Rule 7.1 demandingly.

Law firms' websites and other promotional material that run afoul of ethics rules would be an easy target, even for regulators with limited resources, in that allegedly false or misleading advertisements are highly visible and easily proven, and regulators may seem to be derelict in their responsibilities if they ignore such public transgressions. When regulators target lawyers' websites, they apply Rule 7.1 demandingly, as in other advertising contexts.⁶⁵ In practice, however, the advertising restrictions are probably under-enforced.⁶⁶

Moreover, regulators have not focused in particular on claims of technological expertise whether by law firms generally or BigLaw firms specifically. They may assume that sophisticated corporate clients will not be misled by corporate law firms' overstatements, that corporate law firms' public claims are trustworthy, or that corporate firms, representing the professional elite, set the standard for what is acceptable marketing.⁶⁷

The result is that corporate law firms have significant latitude to promote their technological expertise and accomplishments. As developed more fully below, for a certain segment of elite firms, this is not a particularly

⁶⁴ A notable, and well-recognized, example is lawyers' license to engage in puffery in negotiations. See MODEL RULES, supra note 33, r. 4.1 cmt. 2; Van M. Pounds, Promoting Truthfulness in Negotiation: A Mindful Approach, 40 WILLAMETTE L. REV. 181, 186 (2004) (recounting a survey showing that most lawyers engaged in "puffery" in negotiations).

⁶⁵ See supra notes 61–62 and accompanying text. See generally James L. Buchwalter, Annotation, Propriety of Website Attorney Advertisements, 26 A.L.R. 7 art. 2 (2017). Recently, lawyer internet advertising has also become the subject of empirical and theoretical scholarship focusing on the potentially deceptive websites of lawyers seeking individual clients. See Jim Hawkins & Renee Knake, The Behavioral Economics of Lawyer Advertising: An Empirical Assessment, 2019 U. ILL. L. REV. 1005, 1037 (concluding, based on an empirical study of lawyer advertising seeking clients in DUI and personalinjury cases, that lawyer advertising "exploits systematic poor decision-making" by individual consumers of legal services).

⁶⁶ See generally Fred C. Zacharias, What Lawyers Do When Nobody's Watching: Legal Advertising as a Case Study of the Impact of Underenforced Professional Rules, 87 IOWA L. REV. 971 (2002).

⁶⁷ Lawyers and legal scholars have been less concerned with the possibility that BigLaw firms might overstate their technological expertise than with the possibility that ethics rules may place unnecessary restraint on the BigLaw firms with regard to new technology—in particular, that the rules may stifle firms' technological innovation. *See, e.g.*, Todd Richheimer & Peter Joy, *Changing Ethics Rules is Key to Law Firm Innovation*, LAW360 (Aug. 7, 2019), https://www.law360.com/articles/1182253/changing -ethics-rules-is-key-to-law-firm-innovation [https://perma.cc/HHV5-LQGU] (arguing that rules against nonlawyer ownership of law firms deprives firms of capital needed to sustain technological innovations).

valuable opportunity, because their reputations lie in the traditional terms of competition that have shaped law firm prestige for years. But for another set of firms—also among those most highly regarded—the leeway afforded by professional regulation offers them a chance to identify tech expertise as a new form of capital in the ongoing BigLaw competition and to signal their preeminence in this category. Professional norms discourage making claims that cannot be proven, but there is a minimal enforcement risk for overclaiming. With these understandings, we turn in Part II to an analysis of law firm websites as places where the recognition of technology as capital is visible.

II. WEBSITE INSIGHT INTO TECH'S ROLE IN BIGLAW FIRMS' COMPETITION

Given the importance of technology both in society generally and in business in particular, we expected BigLaw firms' websites to include descriptions of the different ways in which firms declare their expertise in understanding and using technology. We were not disappointed: The websites describe firms' investments in learning about technology for traditional purposes of representing clients whose work, disputes, or deals involve technology, as well as for the less traditional purpose of integrating technology into their legal practices. In describing the traditional purpose of how technology relates to practice substantively, descriptions are clear and often include naming notable and cutting-edge clients, disputes, and deals that implicate technology matters.⁶⁸ But firms' descriptions of their own technological innovations are more often vague, promising greater quality, effectiveness, and efficiency apparently not obtainable without using technology, but lacking clarity in exactly how the technology will accomplish this. Thus, the vast majority of law firm websites provide little insight into the prospects for *using* technology in law: this is consistent with the argument that law firms are too invested in their existing reputations and

⁶⁸ See, e.g., *Technology*, SIMPSON THACHER & BARTLETT LLP, https://www.stblaw.com/client -services/industries/technology [https://perma.cc/TJ7K-KUNJ].

Simpson Thacher has led some of the *most significant and high profile tech matters in recent history*, including acquisitions, financings, IPOs, shareholder disputes, cybersecurity issues, government investigations and other litigation matters. Our clients include both well-known players and emerging companies in technology, media and telecommunications, as well as investors, lenders and underwriters. We understand the industry dynamics and challenges faced by companies in this highly competitive space, and render advice tailored to each client's circumstances and reflective of their key priorities, business model and operations, proprietary IP and the competitive landscape.

Id. (emphasis added). This language is followed by a list of matters and clients that the firm represented in various practice areas, including LinkedIn, ZoomInfo Technologies, Dropbox, and Apple.

success to invest in technology and other innovative approaches to practice.⁶⁹ What the websites *do* provide, however, is insight into firms' anticipation of reputational benefits arising from expertise with regard to technology; these benefits reflect the perception of potential users of their websites, including potential or actual clients, law students, lawyers considering joining their firms, journalists, or legal industry analysts. In other words, the websites serve as a lens for exploring what firms perceive as important about technology in terms of their reputations and competitiveness.

This Part begins in Section A with a description of our methodology for reviewing corporate law firms' websites to learn how they address technology. Section B offers a contextual description of BigLaw websites as a prelude to Section C, where we set out our findings and describe a typology of firms based on their websites' emphasis on how technology matters, from (1) advising on tech-related matters and clients, to (2) using technology in practice, and (3) describing the identity of the firm in terms of technology and innovation.

A. Methodology

To learn how BigLaw firms describe themselves with regard to technology, Silver and her research assistant, a student at Northwestern Pritzker School of Law, conducted a review during the summer of 2020 of the websites of fifty-one of the U.S.-based law firms ranked among the *American Lawyer's* highest-grossing law firms.⁷⁰ These firms were chosen

⁶⁹ See Clayton M. Christensen et al., *What Is Disruptive Innovation*? HARV. BUS. REV. (Dec. 2015), https://hbr.org/2015/12/what-is-disruptive-innovation [https://perma.cc/KSL5-2FBM]. There is an argument that law firm websites are not an ideal setting for exploring claims about technology. According to Professors John Armour and Mari Sako, law firms are not necessarily the place where innovation and development will occur; their incentives to invest in change associated with and stemming from technology is lower because of their existing success and standing in the legal industry. *See* John Armour & Mari Sako, *AI-Enabled Business Models in Legal Services: From Traditional Law Firms to Next-Generation Law Companies*? (Dec. 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3418810 [https://perma.cc/4ZA7-FZZ7]; *see also* Jae Um, *The Current State of Play in Legal Innovation: A New Era of Evolution in the Making (109)*, LEGAL EVOLUTION (Aug. 11, 2019), https://www.legalevolution.org/2019/08/the-current-state-of-play-in-legal-innovation-a-new-era-of-evolution-in-the-making-109/ [https://perma.cc/V6K7-EUN4] (noting the long timeline for developing technology).

⁷⁰ We selected the firms from those ranked in the *AmLaw 100* for 2019. Firms were selected to reflect both those at the top of the rankings (including the top twenty-five-ranked firms by gross revenue) and those in the middle and bottom of the rankings. Descriptions of a firm's profits per equity partner and position on the *AmLaw 100* in this article reflect 2020 rankings, and, as a result, one firm that had been included in the 2019 *AmLaw 100* dropped into the top of the *AmLaw 200* in the 2020 ranking. That firm's PEP places it between number ninety-nine and 100, according to the 2020 PEP rankings, and it is considered to have a PEP of 99.5 in this article, as a result.

The firms whose websites were reviewed include all of the top twenty-five-ranked firms, seven from firms ranked twenty-six to fifty, six from a group ranked fifty-one to seventy-five, and thirteen from those ranked seventy-six to 110. See The 2020 Am Law 100: Ranked by Gross Revenue, AM. LAW. (Apr. 21,

for several reasons. First, discussions of technology in the legal market often identify resources as an important criterion for developing, acquiring, and adopting technology, and firms at the top of this ranking can be assumed to have sufficient resources to invest in technology. This suggests that these firms will discuss technology if they consider it important to do so, and a failure to include such discussions does not mean the firm is not in fact making an investment in technology.⁷¹ Second, BigLaw has been subject to increasing competition from the Big Four,⁷² among others, which utilize technology in more comprehensive ways. Relatedly, clients of this BigLaw sector have been pressing their law firms on the issue of high fees, which in turn is often tied to technology as a potential mechanism for reducing the cost of legal services.

The fifty-one firms in our study have head offices in sixteen U.S. cities and in London (the latter the result of mergers with British-based law firms).⁷³ Given the dynamism of websites, particularly during the summer of 2020 when the COVID-19 pandemic had essentially shut law firm offices and in the aftermath of George Floyd's killing, this work cannot be

^{2020),} https://www.law.com/americanlawyer/2020/04/21/the-2020-am-law-100-ranked-by-gross -revenue/ [https://perma.cc/U99D-CUMJ]; *The 2020 Am Law 200: Ranked by Gross Revenue*, AM. LAW. (May 18, 2020), https://www.law.com/americanlawyer/2020/05/18/the-2020-am-law-200-ranked-by -gross-revenue/ [https://perma.cc/D7HL-G3L3]. Neither the review of law firm websites nor the review of press and scholarly materials comprises a representative or comprehensive review. Given the breadth and emerging meaning of this topic in the context of lawyers and legal services, it would be nearly impossible to claim representativeness.

⁷¹ See, e.g., Armour and Sako, *supra* note 69 (discussing significant cost of AI technology influencing investment decisions); *3 Reasons Why Law Firms are Resistant to Technology*, THOMSON REUTERS LEGAL BLOG (Sept. 5, 2019), https://legal.thomsonreuters.com/blog/3-reasons-why-law-firms -are-resistant-to-technology/ [https://perma.cc/V84M-LETM] (identifying cost as one fact contributing to resistance to adopt new technology).

⁷² The Big Four are comprised of KPMG International (KPMG), PricewaterhouseCoopers (PwC), Ernst & Young (EY), and Deloitte. Together, these firms had more than 75% of the global market in 2019 and audited all but five of the S&P 500 companies. Tom Chitty, *The Accounting Oligopoly: What's Next for the Big Four*?, CNBC (Oct. 1, 2020), https://www.cnbc.com/video/2020/10/01/the-accounting -oligopoly-whats-next-for-the-big-four.html_https://perma.cc/JH6X-TB93].

⁷³ We identified "head offices" by consulting *Chambers and Partners*'s Global and U.S. listings. *See* CHAMBERS & PARTNERS, https://chambers.com/ [https://perma.cc/2NVF-J9TZ] (access by clicking on respective tab under "Guides"). In addition, we identified the largest office for each of the firms by consulting law firm websites, CHAMBERS ASSOC., http://www.chambers-associate.com/home, [https://perma.cc/44VX-ZMQQ], and *NALP Directory of Legal Employers*, NALP, https://www.nalp directory.com/ [https://perma.cc/XA99-5R8K]. In most instances, the largest and head offices were the same location. Where that was not the case, we looked to the history of the firm as presented on the firm's website and supplemented in news articles to identify where the firm was founded, which we identified as the home office.

considered representative of a more diverse set of firms or of a more stable period of time.⁷⁴

Each website was explored in the following manner. The overall structure and organization of the site was reviewed to learn about the primary organizing topics, including whether principal categories were titled "technology" and/or "innovation"-the latter being a term commonly used to describe the approach of law firms that embrace using technology in practice, among others. We looked for descriptions of technology-related tools used by the firm either internally or in representing clients.75 Titles of practice groups and client industries were reviewed for references to technology; where we found these references, we reviewed the content of the practice group or industry pages to learn more. We also reviewed lawyer profiles of these two groups at a subset of law firms to get a sense of how firms describe the lawyers who advise on technology matters or clients as compared to those credited with using technology in practice. We referred to an "Innovation Index" developed by Professor Dan Linna, which catalogues "legal-service delivery innovation"⁷⁶ for the purpose of identifying descriptions of tools, partnerships, and other tech-related matters attributed to a firm in that Index, and then searched each firm's website for a description of the items identified by Linna. Finally, we supplemented our review of each firm's website with a Google search intended to confirm that we identified the technology-relevant content.77

In addition to reviewing the websites, we also gathered information about tech's role in the practices of these and other elite firms from sources

⁷⁴ Indeed, the same analysis applied to firms ranked differently or selected on the basis of criteria apart from rankings might yield different results.

⁷⁵ See, e.g., Firm Subsidiary SixFifty Launces New COVID-19 Tools, WILSON SONSINI GOODRICH & ROSATI (Apr. 14, 2020), https://www.wsgr.com/en/insights/firm-subsidiary-sixfifty-launches-new -covid-19-tools.html [https://perma.cc/A7X5-3JLE] (announcing a "free COVID-19 employment toolkit . . . includ[ing] automated policies developed by Wilson Sonsini's leading employment attorneys and a questionnaire system that can gather information from employees impacted by COVID-19, manage tasks, and automate important communications"); BigLaw Firm's Legal Tech Subsidiary Has Launched a Steady Stream of COVID-19 Tools, LEGAL TALK NETWORK (June 17, 2020), https://legaltalknetwork .com/podcasts/aba-journal-legal-rebels/2020/06/biglaw-firms-legal-tech-subsidiary-has-launched-a

⁻steady-stream-of-covid-19-tools/ [https://perma.cc/V43L-XNGS] (describing the work of Wilson Sonsini's SixFifty); Anna Persky, *Law Firms Are Developing Their Own Tools and Software to Better Serve Clients*, A.B.A. J. (June 1, 2019), https://www.abajournal.com/magazine/article/law-firms-software-clients [https://perma.cc/88R9-CZB7] (describing tech tools and law firm development subsidiaries); Gabriel Teninbaum, *Law Firms Either Keep Up With Tech or Get Left Behind*, A.B.A. J. (Feb. 14, 2019), https://www.abajournal.com/voice/article/time-for-a-hard-reset-to-the-legal-industrys -approach-to-innovation-technology [https://perma.cc/HP5K-AW85].

⁷⁶ Overview, LEGAL SERVS. INNOVATION INDEX, https://www.legaltechinnovation.com/overview/ [https://perma.cc/D9DM-RWLU].

⁷⁷ The search used the following phrases with each firm's name: "+ technology + tool," "+ analytics + tool," "+ AI + tool," "+ innovation + technology" and "+ innovation + tool."

in the legal and popular press, including the *American Lawyer*, *Law360*, the *ABA Journal*, the *Financial Times*, U.S. national news publications such as the *Wall Street Journal* and the *New York Times*, and other publications linked through *Law.com*, as well as undertaking a review of academic literature focused on technology in the legal market.

B. The Role of Websites in Shaping and Conveying Law Firms' Professional Identity

Law firm websites have been described as "the shingles, business cards and phone-book ads of modern lawyering."⁷⁸ Websites are used for branding purposes,⁷⁹ including presenting information about a firm's lawyers, specializations, work undertaken for clients, pro bono matters, and statements about current events such as the COVID-19 pandemic and societal movements such as race and inequality.⁸⁰ They also may reflect the internal organizational dynamics among various factions within a firm that see the website as a mechanism for gaining status with external and internal audiences.⁸¹ In each instance, the website functions as a space for

⁷⁸ Sophia Rios, Lead Generation for BigLaw? The Business and Ethics of Providing Free Legal Tools and Information Online, STAN. L. SCH. BLOGS (Apr. 1, 2015), https://law.stanford.edu/2015/04/01/lead-generation-biglaw-business-ethics-providing-free-legal-tools-information-online/ [https://perma.cc/ZJ2K-GBJP] (quoting Rex Gradeless, Law Firm Websites that Work, 95 A.B.A. J. 33, 33 (2009)).

⁷⁹ As stated by Rios,

A good firm website creates a "brand"—a "distinct identity based on a promise of value that is different from any other." A brand is conveyed by the website design, the content, organization, and format of information, and any other features of the site.

The content allows firms and attorneys to showcase their expertise as well as increase visibility by generating terms that can be found through search engines such as Google.

Id. (citation omitted); *Best Law Firm Websites*, LAWYERIST (Feb. 1, 2021), www.lawyerist.com /marketing/websites/#why-a-website-matters [https://perma.cc/QTY6-MJWY] ("Law firm websites serve many purposes. They share information about who you are, showcase your service areas, and offer potential clients a way to reach out for those services. Beyond that, your website should communicate what makes you unique—your value proposition—to your target client."). On branding for law firms generally, see Shanon Lazarus, *A Law Firm Rebrand: Understanding Where You Are – and Where You Need to Go*, LAW.COM: DAILY BUS. REV. (June 10, 2020), https://www.law.com/dailybusiness review/2020/06/10/a-law-firm-rebrand-understanding-where-you-are-and-where-you-need-to-go/

[[]https://perma.cc/FX2X-CZ2K]; see also Joseph Anderson, Performance of Brand Personality Within Law Firm Websites: A Computer-Assisted Content Analysis (2016) (Master's Capstone Paper, University of Minnesota) (on file with author) (stating "five dimensions make up brand personality: sincerity, excitement, competence, sophistication, and ruggedness . . . and research has demonstrated that brands can use these dimensions to effectively communicate brand personality via websites." (citation omitted)).

⁸⁰ As of June 20, 2020, all but three of the fifty-one sites we initially examined had messages on their homepages highlighting reactions to the killing of George Floyd and subsequent movements for racial justice and/or responses to COVID-19.

⁸¹ See Smith, supra note 59.

communicating organizational image—or how the firm wishes to be viewed by outsiders—and identity—or how the firm views itself in comparison to other firms.⁸²

Notwithstanding the objective of differentiation that is inherent in branding and in these notions of organizational identity and image, observers have described law firm websites as characterized by "sameness rules."⁸³ Sameness may reflect the aesthetics of website design apart from anything specific to law,⁸⁴ as much as a herd-mentality, but it limits the use of websites to convey marks of distinction. Sophia Rios's Stanford blog post about firms in the BigLaw category captures the frustration with sameness: "Since the first step of a successful online marketing campaign is conveying a unique brand with quality context, the AmLaw 200 is failing through conformity."⁸⁵ And the criticism is not new; more than a decade ago the same assessment was made by Burkey Belser, who observed:

It's almost impossible to find law firm websites that effectively succeed in the all-important job of branding the firm—creating a distinct identity based on a promise of value that is different from any other . . . In fact, when we looked at every one of the Am Law 250 websites for another study, we discovered we could re-create the prototypical site just like linguists can create the Proto-Indo-European language from word fragments.⁸⁶

In contrast to these analyses, our review of the BigLaw firms' websites belies the assumption that all law firm websites are essentially the same. We identified differences in how firms claim expertise in advising on technology as a subject matter and in incorporating technology into their organizations and identities.

⁸² Kevin G. Corley et al., *Guiding Organizational Identity Through Aged Adolescence*, 15 J. MGMT. INQUIRY 85, 87 (2006) ("At the organizational level, identity is about capturing that which provides meaning to a level above and beyond its individual members...."); Dennis A. Gioia et al., *Organizational Identity, Image, and Adaptive Instability*, 25 ACAD. OF MGMT. REV. 63, 65–66 (2000) ("[Some] argued that organizational image is the way organization members believe others view the organization....[Others] argued instead for defining image as the way 'organizational elites' would like outsiders to see the organization.").

⁸³ Rios, *supra* note 78; Burkey Belser, *Branding: Baker & Hostetler*, *in Law Firm Websites That Work*, 95 A.B.A. J. 32, 34 (2009). An even more current example is that a majority of the websites we reviewed displayed statements responding to both the COVID-19 pandemic and George Floyd's murder.

⁸⁴ On the aesthetics of website design, see Ahamed Altaboli & Yingzi Lin, *Investigating Effects of Screen Layout Elements on Interface and Screen Design Aesthetics*, 2011 ADVANCES IN HUM.-COMPUT. INTERACTION 1, 1; Shun Cai et al., *Understanding Aesthetics Design for E-Commerce Web Sites: A Cognitive-Affective Framework*, 60 PACIS 2008 PROC. (2008), https://aisel.aisnet.org/pacis2008/60 [https://perma.cc/28UU-EZAB].

⁸⁵ Rios, *supra* note 78, at II.A (footnote omitted).

⁸⁶ Belser, *supra* note 83, at 34.

At the same time and despite substantial differences, there also are ways in which the websites conform to a sameness consistent with the judgment of Rios and Belser. Substantively, all promote lawyers as the central value offered. This message is conveyed through images⁸⁷ and profiles that emphasize credentials and legal practice expertise, as well as providing contact information. Professional profiles are important: "According to website analytics tracked by Content Pilot, 40-70% of visitors to law firm sites view lawyer biographies."88 The emphasis on lawyers as the law firms' core asset is also evident in the way firms describe technology, as explained below. But sameness goes well beyond lawyer profiles and photos. Websites also are similar in more obvious ways: Their structure,89 descriptions of services, approaches to labeling practice groups and industries, and imagery all bear a striking resemblance. This is not new; by the mid-2000s, for example, the websites of elite firms had adopted images of globes and flags to signal their global-facing attitudes and growth.⁹⁰ For many firms, these images remain, now joined by pervasive references to technology.

C. Firms' Claims About Technology

Our review revealed that firms fall into three general groups regarding their website claims about technology. From most to least common, these

⁸⁷ While all firms provide photos of partners, a few do not post photos for lawyers in other ranks. Moreover, photos can signal tradition (e.g., with men in ties and mostly white shirts). *See, e.g., People*, SIDLEY, https://www.sidley.com/en/us/people/?letter=M [https://perma.cc/X2HL-2JP3]. Or, they can signal a less traditional approach (e.g., men with or without ties, sweaters, or jackets). *See, e.g., People*, COOLEY, https://www.cooley.com/people [https://perma.cc/HL6G-CG2F].

⁸⁸ Deborah McMurray, *Big Law Websites Need Harder-Working Biographies*, L. PRAC. TODAY (Aug. 14, 2017), https://www.lawpracticetoday.org/article/big-law-websites-biographies/ [https://perma.cc/4VYA-7PDJ]; *see also* Gabrielle Orum Hernandez, *Four Tips For a Strong Law Firm Website*, LAW.COM: LEGALTECH NEWS (Aug. 26, 2016, 3:25 PM) https://www.law.com/legaltechnews/almID /1202766071973/4-tips-for-a-strong-law-firm-website/ [https://perma.cc/YT8G-EYHN] ("The most important part of a law firm website is the quality of the biographies and contact information, because that's going to be the most accessed component of the site on a daily basis.") (quoting law firm marketing consultant Micah Buchdahl).

⁸⁹ A typical website structure sets out five main components: (1) practices and client industries, (2) lawyer profiles (typically including photos, titles, location(s), and credentials, among other items), (3) a description of the firm (generally titled "About" or "About the firm"), (4) insights and news, and (5) careers (recruiting, hiring). Sites will often break up the basic template of [insights+news] and/or [about the firm] categories to create more main headings. These might include, for example, [locations], [diversity and inclusion], or [corporate responsibility]/[pro bono]. It also is common for sites to break "insights and news" into strict [news] (press releases and news articles mentioning the firm) and [insights] (client memos, blogs, special projects, industry initiatives, etc.).

⁹⁰ See generally Silver, supra note 49, at 1103 (describing the herd mentality of law firms revealed in overseas office locations and timing); Swethaa S. Ballakrishnen, 'She Gets the Job Done': Entrenched Gender Meanings and New Returns to Essentialism in India's Elite Professional Firms, 4 J. PROFS. & ORG. 324, 324 (2017) (noting that law firms with a global-facing approach offer new opportunities for female lawyers).

claims begin with assertions of tech expertise as a subject matter in the practice of law, which is a claim made by all firms in our study. This involves a firm conveying its understanding of technology as a by-product of its representation of tech companies, businesses with technology assets, disputes involving tech, and analogous matters where tech is relevant to the subject matter of the representation. Nearly one-third of the firms in our study make *only* this sort of generic claim about tech expertise, comparable to claims of expertise about other topics relevant to client industries and assets, whether involving technology, health care and pharmaceuticals, or energy. In contrast, a subset of firms in the study add to this generic claim by asserting that their firms benefit from embedding technology organizationally-that is, they claim to be *using* technology themselves, whether in discrete aspects of their practice or generally in the firm, to gain efficiency and effectiveness for clients' benefit. Over and above these two sorts of claims is a third claim, which is made by approximately one-third of all of the firms (and about 40% of the firms that make both the first and second claims). This third group goes further and also makes tech-identity claims: Their references to technology promote an organizational identity that conveys a mission of innovation in providing legal services. Table 1 captures the three types of claims and how they are employed: All firms make generic tech subject matter expertise claims; two-thirds also make claims of embedding tech in their practices; and 40% of the second group make all three types of claims, including tech-identity claims.

	Claims of tech subject matter expertise	Claims of embedding tech in practice	Claims of tech-identity
Group 1: 15 firm websites make only tech subject matter expertise claims	Х		
Group 2: 21 firm websites make both tech subject matter expertise claims and embedding tech in practice claims	Х	Х	
Group 3: 15 firm websites make tech subject matter expertise, embedding tech in practice and tech-identity claims	Х	Х	Х

TABLE 1: TYPOLOGY OF CLAIMS OF EXPERTISE RELATING TO TECHNOLOGY

Firms' varying claims regarding tech expertise reflect their different perceptions of the reputational value of these claims, operating as a form of capital in the firms' competition for talent, clients, and notice from both.⁹¹ Descriptions of understanding and using technology act as signals for the ways in which firms conceive of what they do; more importantly, these descriptions convey how firms want to be perceived (including, potentially, by outsiders, insiders, those with existing relationships, and those looking ahead to possibly establishing relationships) in terms of their expertise and the value they offer, or in more lawyerly terms, their jurisdiction and authority. The variation in how technological expertise is described on firm websites serves as a mechanism for attempts to set the terms of competition, including possibly the identity of competitors. Downplaying the use of technology implies that tech use is not a distinguishing feature, not necessarily because technology is unimportant but perhaps because all firms are sufficiently proficient in its use, so that they must compete based on other criteria. Positioning oneself as a tech innovator, in contrast, conveys that

⁹¹ The idea of capital reflects the context in which the organizations are and hope to be situated. *See generally* SWETHAA S. BALLAKRISHNEN, ACCIDENTAL FEMINISM: GENDER PARITY AND SELECTIVE MOBILITY AMONG INDIA'S PROFESSIONAL ELITE (2021); YVES DEZALAY & BRYANT G. GARTH, DEALING IN VIRTUE: INTERNATIONAL COMMERCIAL ARBITRATION AND THE CONSTRUCTION OF A TRANSNATIONAL LEGAL ORDER (1996); Silver, *supra* note 8.

firms vary in their ability to employ technology and that the variation matters to the quality of legal representations; that is, transforming tech into technocapital.

1. Claims of Expertise Relating to Tech as a Subject Matter of Legal Representation

All of the firms whose websites were reviewed claim expertise in representing technology companies and businesses with technology assets.⁹² These claims of tech subject-matter expertise convey lawyers' understanding of tech as an industry or commodity, but they do not address how firms exploit tech organizationally for their clients' benefit. We refer to this sort of claim as a generic approach to tech expertise. It is comparable to claims that might have been made by nineteenth century lawyers for emerging railroad companies who might have claimed a detailed understanding of the railroad industry and its operations but not necessarily know how to build or drive a train. Of course, building or driving a train was not helpful to organizations practicing law at that time. In contrast, technology has an important potential role in law practice, and this is particularly obvious in the context of the COVID-19 pandemic.

An example of this type of generic claim can be found in this description of one law firm's technology transactions practice:

Innovators across an array of industries rely on our Technology Transactions team to help get their ideas realized. Our team leverages broad expertise in science, engineering, business, and law to gain an in-depth understanding of our clients' groundbreaking technologies and relevant markets, provide targeted advice and insights, and craft and negotiate IP- and technology-driven commercial arrangements for procuring, protecting and commercializing our clients' key assets.⁹³

Other firm websites make claims of expertise that are more industryfocused, such as this description of an artificial intelligence practice: "More than 140 of our lawyers have degrees in either hard sciences or engineering. Thus, we can quickly learn even the most complex technologies. And, because we try so many cases, we have mastered the art of explaining these

⁹² Although these claims may afford a reputational advantage, there is a corresponding legal disadvantage: In negligence cases, the standard of care is higher for lawyers who claim to have specialized knowledge or ability in a field of practice, rather than being generalists. *See, e.g.*, Duffey L. Off., S.C. v. Tank Transp., Inc., 535 N.W.2d 91, 96 (Wis. Ct. App. 1995) (holding that a lawyer who "presented himself as an expert in the areas of labor law, collective bargaining agreements, and pension-fund contribution law... should be held to a standard of care that is consistent with that representation").

⁹³ Services: Technology Transactions, ARNOLD & PORTER, https://www.arnoldporter.com/en/services/capabilities/practices/technology-transactions [https://perma.cc/7N3Z-EUGC].

often complex technologies to judges and juries that do not have technical backgrounds."94

Firms routinely claim that their clients are the most cutting-edge, successful, and innovative businesses within technology-related sectors. One website states:

[Firm] represents some of the most highly regarded companies in the technology industry, including IBM, Qualcomm and Xerox, in a variety of corporate, litigation and advisory matters. We have extensive experience in diverse sectors of technology, including computer systems and software, cellular devices and standards, electronics and electrical equipment, information technology and e-commerce.⁹⁵

It also is common for firms to highlight their tech clients in more practicespecific contexts, such as in this description of a litigation practice:

Our lawyers have prevailed in some of the most significant high-stakes technology litigation cases in recent times. The deep industry experience of our Technology group includes successes like the largest copyright infringement verdict in history in *Oracle v. SAP* and the successful defense of a leading consumer electronics company in a billion-dollar antitrust class action claiming monopolization of digital rights management technology.⁹⁶

A related claim of expertise arises from statements alluding to a techfocused identity shared by a firm and its clients (current and prospective), including clients in tech fields and those that have valuable tech assets. That is, law firms present themselves as knowing about technology in order to attract clients that value technology. This sort of client-identity-derivative claim is part of a broad pattern of homophily, in which lawyers and law firms reflect and mimic clients. It also reflects the organizational strategy of using rhetoric to get "closer to [one's] audience by means of identification." ⁹⁷ An explicit example of this compares the entrepreneurial spirit of the law firm to that of its tech clients: "For technology companies of all sizes, the pace and pressure can be relentless: create, innovate, revise, compete, survive,

⁹⁴ Practice Areas: Artificial Intelligence, QUINN EMANUEL URQUHART & SULLIVAN, LLP, https://www.quinnemanuel.com/practice-areas/artificial-intelligence/[https://perma.cc/DF88-3VLF].

⁹⁵ *Technology*, CRAVATH, SWAINE & MOORE LLP, https://www.cravath.com/practices/Detail Extended.aspx?FirmService=60 (last visited June 11, 2020). Between completing our research and publishing this article, changes on the website resulted in the quoted material no longer appearing on this webpage. A screenshot of the webpage at the time of our research is on file with the authors and was shared with the Journal.

⁹⁶ Practices, Technology, BOIES SCHILLER FLEXNER LLP, https://www.bsfllp.com/practices /litigation/technology.html [https://perma.cc/9U87-5GQ7].

⁹⁷ John A. A. Sillince, *Resources and Organizational Identities: The Role of Rhetoric in the Creation of Competitive Advantage*, 20 MGMT. COMM. Q. 186, 191 (2006) (citation omitted).

grow, thrive. As a leading technology company law firm, [Firm] shares your entrepreneurial spirit."98

BigLaw firms also universally signal their expertise by listing the practice areas and the major industries that frame the work of their lawyers. Technology now appears frequently in titles of practice groups and industries, and this is especially true of firms that identify themselves as tech innovators, as discussed below.⁹⁹ But even among the firms whose websites make only generic claims about tech subject matter expertise, there were an average of approximately three groups (practice and client industry combined) that use the word "technology" or "tech" in their titles, which in turn relate to fifteen distinct practice areas (again combining practice and client industries).¹⁰⁰

Finally, each of the websites promotes firms' tech subject matter expertise through lawyer profiles. It is standard (without regard to particular practice areas) for lawyer profiles to emphasize a lawyer's participation in legions of deals or disputes involving that individual's substantive field within the firm.¹⁰¹ Firms that limit their website technology claims to subject-matter expertise follow this same approach; for example, this description of a lawyer specializing in artificial intelligence is typical:

[Lawyer] has extensive experience representing and advising clients on the legal, ethical, regulatory, and policy issues arising from emerging technologies like artificial intelligence. He regularly acts as a strategic advisor to clients in their development of AI-related products and services, their acquisition and sale of technology-related businesses, and in their development of appropriate legal and ethical policies and procedures pertaining to AI-focused business operations. In the rapidly advancing area of automated and autonomous vehicles, [Lawyer] has guided clients through the numerous hurdles of federal and state regulations and requirements for vehicle testing and deployment, as

⁹⁸ This is found in Goodwin's description of its services for the technology industry, which is posted on a page with the heading "Technology Lawyers for Technology Companies." *Technology*, GOODWIN PROCTER LLP, https://www.goodwinlaw.com/services/industries/technology-companies [https://perma .cc/83WA-8SDV].

⁹⁹ See infra text accompanying notes 117–18.

¹⁰⁰ These fifteen practice areas/client industries are: artificial intelligence; blockchain; communications; cryptocurrency; cybersecurity; emerging technology; healthcare information technology; life sciences; media, technology and telecommunications; social media; tech transactions; technology; fintech; privacy; and intellectual property.

¹⁰¹ This is not to suggest that traditional claims also were not present. *See, e.g., Consumer Technologies and Retail: Overview*, FENWICK & WEST LLP, https://www.fenwick.com/services/industries/consumer-technologies-and-retail#overview [https://perma.cc/BJQ8-EPP9] (click on "Read More") ("Fenwick's lawyers have collectively brokered hundreds of transactions that help clients develop, distribute and promote innovative products and services.").

well as advising and assisting clients in exercising their voice before key agencies and legislative bodies. 102

The profile continues to describe the lawyer's trial experience, and it sets out a standard approach to profiling the expertise and experience of any elite firm senior lawyer. As described below, this differs from the approach taken by at least some of the firms that make tech-identity claims, which emphasize their experience gained *outside* of the firm in promoting their capabilities.¹⁰³

The fifteen firms that describe technology solely in terms of a generic subject-matter expertise are the most elite of the three groups we identified in our study according to their *AmLaw* rankings. One-third are ranked in the top-10 by profits per equity partner (PEP), 60% are top-20 ranked by PEP, and the average PEP ranking for the group is twenty-eight. They also are the most closely tied to New York, where finance traditionally has been a focus for many of the elite firms: Either the head office or the largest office of 60% of these firms is located in New York. These firms approach tech on their websites like any other subject matter to conquer. What is missing from their websites is any reference to an investment in tech as an organizational tool. Instead, for these firms, their focus is aimed at their lawyers' identities and legal expertise; firm operations are only a backdrop.

2. Claims of Expertise Reflecting Use of Tech in Practice

All law firms use technology in their practices in various ways, but not all call attention on their websites to their use of technology. Nevertheless, a subset of firms describes expertise arising from embedding technology into particular practices and discrete organizational applications. These include practices involving e-discovery, contract management, and due diligence, and practices that utilize tech tools to help clients identify compliance risks or lapses. These firms also describe tech subject matter expertise—the generic claim discussed above—but they distinguish themselves by featuring their *uses* of technology in their work with or on behalf of clients. This emphasis on using tech reflects one facet of tech as capital.

As a group, the firms claiming to embed tech in their practices are less elite, based on PEP, than those describing tech only in terms of a generic subject matter expertise. The average PEP ranking for this second group of firms is thirty-seven (see Table 2, *infra* at 296, for comparisons), 19% of firms are ranked among the top-10 by PEP, and nearly 29% in all are ranked in the top-20. New York is the site of the head or largest office of just under 40% of these firms. Thus, compared to the first group of firms described

¹⁰² H. Mark Lyon, GIBSON DUNN, https://www.gibsondunn.com/lawyer/lyon-h-mark/ [https://perma .cc/Y6YN-BXYT].

¹⁰³ See infra note 123 and accompanying text.

above, the firms claiming expertise based on their organizational use of technology are somewhat less elite and also more diverse geographically.

The firms in this group array across a continuum with respect to the extent to which tech is claimed to be embedded in their practices and the emphasis placed on these claims. Approximately two-thirds of these firms limit the description of using tech to e-discovery, not a surprising topic to link to tech usage. These firms tend to be the more prestigious firms (by PEP ranking) within this second group, and also are more likely to be New Yorkbased. But in addition, firms in this second group describe tech as valuable when it is used in compliance,104 in advising on organizational matters,105 and in due diligence contexts. Generally, the descriptions of using tech in particular practices are tied to claims that tech leads to greater effectiveness and efficiency compared to approaches of other firms (implicitly claiming these "others" do not use tech in the same ways). For example, one firm claims that "continuing to innovate with AI, including by adapting predictive processes, concept clustering, sentiment analysis and other advanced technologies" in the context of e-discovery enables it to provide "higherquality" services.¹⁰⁶ Another firm makes an efficiency claim about its information-processing work, offered under the trademarked name. "LegalMine," as being "state-of-the-art ... [and] specially designed to effectively manage costs by culling and limiting the number of documents that need to be substantively reviewed, keeping the due diligence and discovery processes efficient and predictable."107 Both sorts of statements

¹⁰⁴ Innovation, HOGAN LOVELLS, https://www.hoganlovells.com/en/knowledge/topic-centers /innovation [https://perma.cc/7KWP-EKAG] (describing a LIBOR (London Interbank Offered Rate) app).

¹⁰⁵ FOUNDERS WORKBENCH, https://www.foundersworkbench.com/ [https://perma.cc/CZT2 -W2A2].

¹⁰⁶ e-Discovery, CLEARY GOTTLIEB STEEN & HAMILTON LLP, https://www.clearygottlieb.com /practice-landing/ediscovery [https://perma.cc/8DSY-4295].

¹⁰⁷ Efficiency Ahead: LegalMine Document Review Solutions, DORSEY & WHITNEY LLP, https://www.dorsey.com/services/legal mine [https://perma.cc/D862-PDM7]; see also E-Discovery & Information Management, CROWELL & MORING LLP, https://www.crowell.com/Practices/E-Discovery -Information-Management [https://perma.cc/8BP8-9JBU] ("We regularly deploy artificial intelligence and other advanced analytic tools to rapidly assess data, find hidden patterns and escalate important information to drive case understanding and management. In this way, we can interrogate great volumes of data in a fraction of the time, and at a fraction of the costs, seen in traditional e-discovery."); Seeing the Wood for the Trees, HOGAN LOVELLS, https://engagepremium.hoganlovells.com/ uploads /downloads/Hogan Lovells Engage LIBOR Solution I 2020.pdf [https://perma.cc/6NRF-X5N2] (referring to the firm's "highly scalable and efficient delivery model leveraging AI, alternative delivery models and cutting edge legal expertise" for supporting clients in challenges arising from the transition from LIBOR at the end of 2021); Technology Transactions and Strategic Sourcing: Overview, DLA https://www.dlapiper.com/en/us/services/intellectual-property-and-technology/technology PIPER. -transactions-and-strategic-sourcing/ [https://perma.cc/4GUR-3TAU] ("Our proprietary ASCENDANT

implicitly claim expertise and comparative advantage over other law firms through technology. These sorts of claims also may be aimed at competitor law-related service organizations that exist apart from the law firm model. For example, a service provider that engages in document review, in competition with law firms, describes its "structured process control, quantitative analytics, advanced technologies and professional management[,]" which purportedly increases accuracy as well as "the probability of a better resolution."¹⁰⁸ Law firms that describe their use of technology to support particular aspects of their practices are signaling that they do not concede authority over these services to other providers.

In sum, firms making claims about how they embed technology within their provision of legal services to clients are interjecting a new measure into a competition for clients among BigLaw firms based on the quality of their work. These firms convey that at least in certain areas of practice, although perhaps not in law practice generally, success reflects the ability to harness technology to make gains in efficiency or effectiveness. In turn, this conveys that the way the firm uses technology makes its lawyers more valuable in the relevant practice areas.

Claims (# of firms)	Avg. PEP for firms making the described claims	% of firms making the described claims ranked top- 10 PEP/top-20 PEP	% of firms making the described claims with a NY headquarters or largest office
Generic subject matter expertise (15)	28	33/60	60
Generic subject matter expertise + embedding tech organizationally (21)	37	19/28.5	33
Generic subject matter expertise + embedding tech organizationally + tech-identity (15)	68	0/7	13

TABLE 2: COMPARISON OF FIRMS BASED ON WEBSITE CLAIMS ASSERTED OF TECH EXPERTISE

3. Claims of Expertise Reflecting Tech-Identity

In addition to generic claims of expertise over tech as a subject matter of legal practice, as well as claims regarding its use in particular practices, about 30% of the firms also describe embracing technology as part of a

methodology and its associated unique software tools continue to differentiate us in the market and allow us to deliver services cost efficiently to clients around the globe.").

¹⁰⁸ NOVUS L., https://novuslaw.com [https://perma.cc/Q6HW-9UGV].

metamorphosis of sorts, reconstructing their reputations around innovation, of which tech is a key ingredient. Innovation is a common refrain for law firms, as it is for others providing goods and services,¹⁰⁹ and it is used both alone and in combination with references to technology.¹¹⁰ But this third category of claims coalesces around technology being a central aspect of innovation claims.

Apart from the substance of their references to tech as central to innovation, the websites of these firms also locate their claims about technology differently than the other websites we reviewed. They position their tech-related claims in a central location on the website where the firm conveys who it is in broad terms. These central locations convey that tech is significant to the firms' identities, too. One firm, for example, declares on its "home" page: "Our strength is our ability to adopt a new type of thinking and use cutting-edge legal technologies to help clients overcome the challenges of competing in today's new world economic order."111 Another firm uses its "about the firm" page to convey a similar message: The firm, it says, "moves boldly into the future, investing in talent, technology and innovation to continually provide clients with exceptional service, collaborative experiences, innovative approaches and value."112 Both statements link innovation to technology, framing these as a core message about the firm: technology matters and connects the firm's identity to its future

Using a website's central pages to draw attention to a firm's embrace of technology suggests recognition of technology as capital. The "home" and "about" pages are places where a firm can address its organizational identity and mission, history, and strategic plans; they also may hold information that is too important to omit but has no other logical home on the site. These spaces contrast with the practice- and industry-specific pages that are the focus for claims about using tech in particular practices (described above). Firms claiming on their home pages to be tech innovators utilize their relationship with tech as a selling point in competing with other law firms

¹⁰⁹ See Callen Anthony & Mary Tripsas, Organizational Identity and Innovation, in THE OXFORD HANDBOOK OF ORGANIZATIONAL IDENTITY 417, 417 (Michael G. Pratt et al. eds., 2016) (defining innovation as "about exploring new terrain . . . at its core, innovation is about new things").

¹¹⁰ For an example of a firm claiming to be innovative outside the context of using technology, see *About the Firm*, WACHTELL, LIPTON, ROSEN & KATZ, https://www.wlrk.com/firm/ [https://perma.cc /4ZCF-AGYE] ("We have a track record of original and groundbreaking solutions and innovations that have had a dramatic impact on business and law. We are thought leaders.").

¹¹¹ About Us, BAKER MCKENZIE, https://www.bakermckenzie.com/en/aboutus [https://perma.cc /EK9P-7HMP].

¹¹² About Us: Overview, FAEGRE DRINKER BIDDLE & REATH LLP, https://www.faegredrinker.com/en/about#!#tab-Overview [https://perma.cc/Y6B8-HUT6].

and service providers. In effect, these firms are asserting that technology is a salient measure and a form of capital; of course, implicit—or explicit also is a claim that they excel by this measure. Making such a claim may reveal as much about a firm's assessment of its competition as about the actual way in which technology is seen to promote a firm's practice.

These tech-identity claims are made in different ways. Forty percent of the firms making these claims position their message about technology and innovation directly on the "home" or "about" page of their site. Other firms place an introductory general statement about innovation on one of these pages, with a link to another page that provides in-depth information about the firm's embrace of technology and its relationship to innovation. An example of this latter approach is found on a website that, on the "home" page, declares "advancing legal services through collaboration, connectivity and innovation."113 This statement then is linked to language explicit in its reference to using technology in practice: "Our innovations have helped shape the legal industry. We were early adopters of artificial intelligence and were the first to win a case in the UK High Court using predictive coding technology."114 Other firms' websites link to additional information about technology either directly or through multiple sub-links from the "home" or "about" page. We consider the message of tech-identity to be most strongly asserted when placed directly on the "home" or "about" page of the website, and we identified six firms taking this approach out of the fifteen making these sorts of tech-identity claims.

The firms making tech-identity claims skew towards lower PEP rankings within the *AmLaw 100* context, as reflected in Table 2, *supra* at 296. None are ranked in the top-10 by PEP, 7% are ranked in the top-20, and the average rank of the group is sixty-eight, compared to twenty-eight and thirty-seven for the two groups described earlier. New York also exerts less influence: 20% of these firms are either headquartered there or their largest office is there. Overall, then, these firms are less likely to be among the Wall Street elite, and more likely to understand themselves as competing from the middle in an increasingly stratified field against more notable and, by some measures, successful law firms.

These differences highlight the contest over the terms of competition. The most prestigious and successful firms (using *AmLaw* rankings as a proxy for this) do not promote technology as a force that shapes either their mission or identity. We infer from this their judgment that their reputations will not

¹¹³ BRYAN CAVE LEIGHTON PAISNER, https://www.bclplaw.com/en-US/index.html [https://perma.cc /53RZ-7456]. On the website, this declaration was displayed in all capital letters.

¹¹⁴ Purposefully Structured for Innovation, BRYAN CAVE LEIGHTON PAISNER, https://www.bclplaw.com/en-US/innovation/overview.html [https://perma.cc/J8PM-F3X6].

be strengthened by such claims, and perhaps would be diminished. But firms in more vulnerable positions—in terms of reputation and ranking—harness technology as a distinguishing signal; these firms may have fewer longstanding client relationships compared to the first group, and thus may be more open to using various means of competition, including technology, as mechanisms for distinction. Firms claiming tech-identity also tend to list more practice areas and industry groups linked to technology: The fifteen firms making this claim averaged nine groups (practices and client-industry combined) related to technology, and we identified a total of thirty-two distinct subjects that are the focus of these groups.¹¹⁵

Firms' tech-identity claims address not only their typical law firm competitors, but also technology-focused service providers, including the Big Four, which are aggressively vying for a larger share of the law-related work of corporate clients.¹¹⁶ Nevertheless, even for these law firms, the importance of providing legal services dominates: The firms promote themselves as a group of lawyers practicing law, not as a combination of lawyers and other experts providing services through technology. While the law firms convey that technology shapes their work and identity, they simultaneously recognize the professional capital of their lawyers as their central asset. This distinguishes them from non-law firm competitors, which are less likely to promote the individuals in their organizations over the organizational identity itself, and it reflects the dynamism in technology's role as an element of professional capital.¹¹⁷

Firms making tech-identity claims also are likely to describe their investments in developing relevant technology. Although firms may be

¹¹⁵ The finding that it is lower ranked firms making the strongest tech-as-capital claims is consistent with the work of Clayton Christensen. *See Disruptive Innovation in Legal Services*, THE PRAC., Jan./Feb. 2015, https://thepractice.law.harvard.edu/article/disruptive-innovation/ [https://perma.cc/8YWR-WP7R].

¹¹⁶ David B. Wilkins & Maria J. Esteban Ferrer, *The Integration of Law into Global Business Solutions: The Rise, Transformation, and Potential Future of the Big Four Accountancy Networks in the Global Legal Services Market, 43 L. & SOC. INQUIRY 981, 981 (2018); GEO. L. CTR. ON ETHICS & LEGAL PRO., 2020 REPORT ON THE STATE OF THE LEGAL MARKET 16–17 (2020), https://legalprof.thomson reuters.com/LEI_2020_State_of_Legal_Market_LP_010620 [https://perma.cc/AR2C-EVYU]; Cat Rutter Pooley, <i>Big Four Set Sights on Legal Services*, FIN. TIMES (Oct. 22, 2019), https://www.ft.com /content/01b7c17a-e6b1-11e9-b8e0-026e07cbe5b4 [https://perma.cc/Z6TZ-NW7E] ("Through a number of high-profile moves over the past two years, the Big Four have ramped up the assault on the legal services industry with technology at the forefront of their approach.").

¹¹⁷ See, e.g., Our Firm, NOVUS L., https://novuslaw.com/firm/ [https://perma.cc/PK6H-NKEJ] (profiling only leadership); *Transaction Law*, ERNST & YOUNG, https://www.ey.com/en_us/law /transaction [https://perma.cc/KQ67-3YH8] (profiling only leadership). *But see Legal: Our Lawyers*, PWC, https://www.pwc.com/ca/en/legal/local-contacts.html [https://perma.cc/F4UK-UAY2] (profiling all lawyers). *See generally* TANINA ROSTAIN & MILTON C. REGAN JR., CONFIDENCE GAMES: LAWYERS, ACCOUNTANTS, AND THE TAX SHELTER INDUSTRY (2016) (describing differences between Big Four firms and law firms with regard to their approaches to clients, lawyers, and policies).

secretive about what their technology *does*, they can be quite explicit in drawing attention to their investment in developing tech applications for use in practice. Firm-owned tech development groups, whether separate entities or developed as a part of a firm's existing structure,¹¹⁸ often are given unique names that trigger an association with technology generally. Firms use words like "labs"¹¹⁹ and "transform,"¹²⁰ thereby connecting their work in this field to that of innovators in the technology sector.¹²¹

Descriptions of firm talent also reflect the tech-identity message. This goes both to the ways these firms describe the lawyers who provide a foundation for the firm to claim generic subject-matter expertise regarding technology matters, and also to their presentation of tech-talent that may or may not involve individuals practicing law. For example, it was more common for firms that make tech-identity claims to tout the experience that their lawyers gained *outside* the firm as the basis for their expertise in advising technology clients.¹²² One firm stated: "[A]ll of our new media and technology practitioners have served as in-house counsel to a variety of multinational conglomerates, enabling us to offer a unique perspective on the key strategic and operational business issues our clients face in this

¹¹⁸ Separate entities might be identified as alternative legal service providers, which have been described as being more likely to emphasize technology.

Technology adoption marks another important attribute of ALSPs, and it is often emphasized more strongly in ALSPs than at traditional law firms. Technology-enabled services allow ALSPs to provide higher value and take on different and more complex tasks. Some ALSPs may rely on third-party technology, but others are developing proprietary systems in search of sustainable competitive advantage.

THOMSON REUTERS LEGAL EXEC. INST. ET AL., ALTERNATIVE LEGAL SERVICE PROVIDERS 1 (2019), https://legal.thomsonreuters.com/content/dam/ewp-m/documents/legal/en/pdf/reports/alsp-report -final.pdf [https://perma.cc/B6ML-CKBJ]; *see also* Dan Packel, *Big Law Doing More Than Dabbling in New Law, Report Finds*, AM. LAW. (Oct. 6, 2020 3:58 PM), https://www.law.com/americanlawyer/2020 /10/06/big-law-doing-more-than-dabbling-in-new-law-report-finds/ [https://perma.cc/59YE-N2NS] (reporting that thirty-five of *AmLaw 100* firms have "launched captive alternative legal service providers" with the most common service offering being e-discovery).

¹¹⁹ See, e.g., Fenwick Recognized for Industry Leading Innovation by Financial Times, FENWICK & WEST LLP (Jan. 3, 2019), https://www.fenwick.com/Media/Pages/Fenwick-Recognized-for-Industry -Leading-Innovation-by-Financial-Times.aspx [https://perma.cc/3MR7-SNDP]; Orrick Labs, ORRICK HERRINGTON & SUTCLIFFE LLP, https://www.orrick.com/en/Innovation/Orrick-Labs [https://perma.cc/TL28-7W9Z].

¹²⁰ See NRF Transform, NORTON ROSE FULBRIGHT, https://www.nortonrosefulbright.com/en/about /our-firm/nrf-transform [https://perma.cc/3S3A-SJZ6] (describing NRF Transform as "[d]riving change in the delivery of legal services").

¹²¹ See also IncuBaker – Emerging Technologies, BAKER & HOSTETLER LLP, https://www.bakerlaw.com/IncuBakerEmergingTechnologies [https://perma.cc/G776-SVBT].

¹²² An analogy might be to how law firms with lobbying practices emphasize lawyers' prior experience in government. This is not to suggest, however, that traditional claims also were not present. *See, e.g., supra* note 101 and accompanying text.

space."¹²³ Of course not every firm can make such a claim, but focusing on experience gained outside the firm, and even experience and credentials outside the practice of law, was common and distinguishes these firms from those taking the more traditional approach described above.¹²⁴

Moreover, firms making tech-identity claims also were likely to describe their tech specialists and to signal their recognition that expertise not possessed by the traditional law firm lawyer is necessary. Scholars who study organizational innovation recognize "that organizations must reach beyond their existing knowledge base. By integrating knowledge that is distant organizationally, geographically, or technologically, firms are more likely to have innovation success."¹²⁵ This may be achieved by hiring tech experts who are not necessarily trained in the law, or by partnering with non-lawyer firms that are focused on developing technology. A study of UK law firms leading in utilizing AI in their practices found that "[e]arly adopters and innovators [of tech] have ... proactively recruited and created new

Technology Transactions: Overview, MAYER BROWN, https://www.mayerbrown.com/en/capabilities /practices/technology-transactions?tab=overview [https://perma.cc/3JDH-SDA2]. So does Baker Botts:

With nearly 250 dedicated global technology lawyers in 14 offices throughout the world, many who hold advanced scientific degrees as well, equipping them with the intellectual acumen to incisively analyze technical challenges and craft solutions. Many of our clients are exclusively technology businesses and the attorneys possess a keen understanding of their underlying, complex technologies. We have deep experience in the technology sector providing interdisciplinary teams that are designed to maximize collaboration and innovation resulting in best practices and efficiencies for our clients.

Technology: Overview, BAKER BOTTS, https://www.bakerbotts.com/services/industries/technology [https://perma.cc/28AC-LYXL].

¹²⁴ For example, Blank Rome conveys that the firm understands how to provide traditional legal services via their tech practice through language such as the following:

To excel in this climate, you need business advisers with deep understanding of the legal and regulatory framework you work within. You also need legal advisers who know your industry, know the risks, and know what it takes to find a competitive advantage. Blank Rome provides both, and our technology attorneys are experienced with the wide range of business and legal needs specific to technology companies, as well as private equity, joint venture, and individual investors focused on the technology industry.

Technology: Overview, BLANK ROME, https://www.blankrome.com/industries/technology [https://perma.cc/F4E8-XSUV].

¹²³ Media, Technology & Commercial Transactions: Overview, HUGHES HUBBARD & REED LLP, https://www.hugheshubbard.com/practices/new-media-entertainment-and-technology [https://perma.cc /7WPR-J29T]. Mayer Brown takes a similar approach:

Mayer Brown's Technology Transactions lawyers have advised clients on thousands of technology transactions, which allows us to offer extensive experience and deep market knowledge. Many of our lawyers have worked as in-house legal counsel for outsourcing providers and in business or technical roles for leading outsourcing, technology and supply chain companies. We use this experience to drive value for clients and to advise them on market-competitive terms.

¹²⁵ Anthony & Tripsas, *supra* note 109, at 419 (citations omitted).

specialized and 'hybrid' roles. As one explained: 'We've created a whole batch of new roles that didn't exist, like legal project manager, legal analyst, legal knowledge engineer, [and] legal technologist.''¹²⁶ One firm making a tech-identity claim recognized this explicitly, asserting that it was "expanding the range of expertise we hold within the firm.''¹²⁷ Similarly, another of these firms refers to its "lawyers, technologists, and related professionals who are responsible for identifying and implementing new practice innovations.''¹²⁸ Occasionally, a lawyer doubles as a tech expert, including the same firm's Global Chief Innovation Officer, who previously was a litigation partner but now engages in "oversight of new product development.'' This work includes "lead[ing] the innovation team's new product designs for clients who are challenged to manage areas of high volume legal work," a task "combin[ing] the firm's legal service delivery centers with its complex advice and its experience in process engineering, technology and data analytics.''¹²⁹

In myriad ways, then, claims of tech-identity correspond with messages conveying a different, more expansive approach to conceiving of how to provide legal services. These in turn reflect the recognition of technocapital as a valuable asset.

III. TECH AS A TERM OF COMPETITION

Historically, BigLaw firms have competed based on the attributes, skills, and expertise of their lawyers, individually and in the aggregate.¹³⁰ To varying degrees, firms promote star lawyers and the ability to harness the collective talents of their legal work force. Older firms may benefit from reputations developed over time based on the work of lawyers who are long gone and the aura of having represented notable clients on notable matters. In contrast, firms rarely compete based on the quality of their buildings or

¹²⁶ Chay Brooks et al., Artificial Intelligence in the Legal Sector: Pressures and Challenges of Transformation, 13 CAMBRIDGE J. REGIONS, ECON. & SOC'Y 135, 148 (2020) (studying UK-based law firms).

¹²⁷ Driving Change in the Delivery of Legal Services, NRF TRANSFORM, https://nrftransform.law/about-nrf-transform/#how-does-it-work [https://perma.cc/BX76-4YJR].

¹²⁸ Kathryn DeBord, BRYAN CAVE LEIGHTON PAISNER LLP, https://www.bclplaw.com/en-US /people/kathryn-debord.html (last visited March 7, 2021) [https://perma.cc/QC92-HLRL].

¹²⁹ Id. The firm describes the group that innovates under DeBord elsewhere:

Our track record of leading the legal industry stretches back decades and it is part of our core business strategy to deliver services in a way that meets our clients' operational and business objectives. As part of our expertise in innovative legal service delivery, we have a dedicated consultancy division that assists law departments with their legal operations.

Purposefully Structured for Innovation, BRYAN CAVE LEIGHTON PAISNER LLP, https://www.bclplaw.com/en-US/innovation/overview.html [https://perma.cc/7T4G-K4FR].

¹³⁰ Attributes included WASP identities, among other things. See generally Wald, supra note 52.

other physical infrastructure, or based on the quality of their writing equipment or law libraries.¹³¹ That is in part because lawyers' tools generally are subsumed in services identified with the ability and work of the lawyers using them. And what BigLaw claims as distinctive reflects this—the firms describe the pivotal work that their *lawyers* have done for the most notable clients, causes, and deals, drawing on their lawyers' particular judgment, experience, acumen, skill, relations with clients and others, and, in general, expertise regarding the law, business, and human relations. In other words, it is about the lawyers. Within BigLaw, the hierarchy, and shifts in the hierarchy, generally turn on perceptions about the lawyers.

Today, certain firms use technological expertise as a new weapon in their efforts to rise in the hierarchy, or at least to maintain their position. These firms must make an investment, including possibly in personnel with tech expertise, or gain new experience themselves in order to make a plausible claim to tech expertise. At the same time, the value of tech claims in the competition among firms is dynamic and likely to fade as particular applications of technology are tested and adapted throughout the market.¹³²

The divergent approaches to invoking technology in competing for clients reflect a segmentation and stratification of the legal market that others have also noted. According to Jim Jones, writing in 2019:

[T]here is no longer a single legal market (if indeed there ever was one). There are instead several legal markets – or, perhaps more accurately, a continuum of quite different legal services being offered by different groups of providers, some of whom are traditional law firms and some of whom are not. The services offered at various points along this continuum are subject to very different "rules" related to pricing, staffing, infrastructure and process support, use of technology, drive for efficiency, and the like. Service providers along the spectrum also experience different forms of competition and different competitive threats to their market positions.¹³³

Our study reinforces this observation about different forces. Our analysis reveals that law firms in the lower echelon of BigLaw—although we recognize that all of the firms in our study are successful and recognized as elite within the profession—are most likely to make claims about using technology and embracing technology as central to their identity. But the fact

¹³¹ But see Victor Li, Architecture Firm Unveils Display of the 'Law Firm of the Future', ABA J. (May 19, 2014, 5:20 PM), https://www.abajournal.com/news/article/architecture_firm_unveils_display _of_the_law_firm_of_the_future [https://perma.cc/X7A2-S442].

¹³² Widespread adaptation may be pressed more by third-party developers than those within a firm. *See* Armour & Sako, *supra* note 69.

 $^{^{133}\,}$ Geo. L. CTR. on Ethics & the Legal Pro., 2019 Report on the State of the Legal Market 16 (2019).

that it is the lower-tiered firms that message the importance of technology suggests that they conceive of their competitive strengths differently from those at the top of the rankings. Put another way, the pressures on firms lower in the rankings may reflect competition not only with other elite law firms but also with law-related service providers that promote their utilization of technology as more directly related to the value that they contribute to clients.

Evidence suggests that even firms that are silent on their websites regarding using technology organizationally, much less about tech-identity, nevertheless are investing in tech in various ways. Although these firms may be doing the same or similar things as their lower-ranked competitors, they have determined that it would not be advantageous to promote their use of technology, whether because referring to technology would detract from stronger selling points or for other reasons.

This distinction between what firms say about tech and what they do was brought home to us in the descriptions of investments in technology included in news reports. In some cases, we found firms' omissions to be in tension with how they are described by third parties. For example, the website of a Wall Street elite firm that was named "Technology Group of the Year" by Law360¹³⁴ showcased a long list of technology clients and highprofile tech-related matters, consistent with the press recognition and with a general claim of expertise.¹³⁵ That is, its recognition was about tech as a subject matter expertise of its lawyering work. But this same firm also was the focus of a report reflecting using tech in practice—or at least its promise: The subject was the firm's hiring of a Chief Knowledge and Innovation Officer, and according to the report, this hire showed the firm's "eagernessor at least openness-to embrace alternative models for both innovation and operations."136 Nevertheless, the firm's website, while adding its new employee's profile, made no mention of the significance of his having joined the firm or his potential influence on its future.137

¹³⁴ Alyssa Aquino, *Technology Group of the Year: Simpson Thacher*, LAW360 (Feb. 6, 2020), https://www.law360.com/articles/1232130/technology-group-of-the-year-simpson-thacher [https://perma.cc/FA6B-B887].

¹³⁵ See, e.g., Client Services, Industries, Technology, SIMPSON THACHER & BARTLETT LLP, https://www.stblaw.com/client-services/industries/technology [https://perma.cc/8NV3-GRAC].

¹³⁶ David Thomas, Simpson Thacher Invests in Innovation, Hiring Prominent CKO Oz Benamram, LAW360 (Feb. 6, 2020, 3:00 PM), https://www.law.com/americanlawyer/2020/02/06/oz-benamram-to -leave-white-case-for-simpson-thacher/ [https://perma.cc/H2PW-VB8Y].

¹³⁷ Oz Benamram, SIMPSON THACHER & BARTLETT LLP, https://www.stblaw.com/our-team /search/oz--benamram [https://perma.cc/488M-N9RW] (describing Benamram as "provid[ing] strategic direction on knowledge management, innovation and practice technology").

18:265 (2021)

Similarly, we noted a group of elite firms that together "support[] the development and launch of" Reynen Court, a "single secure platform for AI and other legal technology."¹³⁸ Reynen Court's website identifies a "consortium" of eighteen of the most elite U.S.- and UK-based law firms, some of which invested in Reynen Court and all of which advise and do testruns on the tech applications that are developed. But only two of the consortium members mention Reynen Court on their websites.¹³⁹ The omissions are consistent with an assumption that the development of technology through their relationship with Reynen Court will not enhance the reputation of these elite firms; this is not a form of capital these firms currently advance. Rather, the firms in this top echelon present themselves in ways that reinforce the existing hierarchy, gaining from the same structural favoritism that promotes tradition and seniority while denying the relevance of new players that use technology to gain reputationally.

Some similarities also emerged through our review of these websites. One point of sameness, for example, was the ambiguity of statements firms made about their uses of technology in practice. We would have no basis to judge whether firms make exaggerated or unfounded claims of technological expertise, but many of the descriptions of how firms use technology in practice and of their work to develop new tech tools made claims of superiority that probably cannot be proven or were so ambiguous as to verge on not being meaningful. In at least one example, the firm purportedly was motivated to be unrevealing by competitive concerns, but it is not possible to know whether this generally is the explanation.¹⁴⁰ Perhaps there are

¹³⁸ Your Single Secure Platform for AI and Other Legal Technology, REYNEN CT., https://reynencourt.com/home [https://perma.cc/3P5E-RWX9].

¹³⁹ We reviewed websites of all of the U.S.-based consortium members for this purpose. Only the websites of Latham and Orrick refer to Reynen Court. *Latham Co-Chairs Consortium of Law Firms to Advise on the Development of Legaltech Startup*, LATHAM & WATKINS LLP (Oct. 4, 2018), https://www.lw.com/news/latham-co-chairs-consortium-law-firms-legaltech-startup [https://perma.cc /5MFC-E9H9]; *Orrick Joins Consortium to Advise on Launch of Innovative Legal Tech Startup*, ORRICK HERRINGTON & SUTCLIFFE LLP (Oct. 4, 2018), https://www.orrick.com/en/News/2018/10/Orrick-Joins-Consortium-to-Advise-on-Launch-of-Innovative-Legal-Tech-Startup [https://perma.cc/PJY8-6FW4]. The news articles included in the Latham and Orrick websites are archived, and their relationship to Reynen Court is not otherwise highlighted on the websites.

¹⁴⁰ A description of a firm's use of ROSS AI technology was the subject of a *Crain's Cleveland* news article, but the firm's website not only did not provide similar information about the relevant practice, but the description that was posted about its collaboration with ROSS was obscure. According to the *Crain's* article, the firm "prefers to keep most of those efforts [referring to its partnering with third-party tech developers] close to its vest... the ROSS news only made headlines because IBM promoted the partnership." Jeremy Nobile, *Blind Justice No More: Law Firms Embrace AI, Other Emerging Tech*, CRAIN'S CLEVELAND BUS. (Jan. 19, 2019) https://www.crainscleveland.com/legal/blind-justice-no-more-law-firms-embrace-ai-other-emerging-tech [https://perma.cc/B4BA-U4CT] (referring to Baker Hostetler); *cf. IncuBaker – Emerging Technologies*, BAKER & HOSTETLER LLP, https://www.bakerlaw .com/IncuBakerEmergingTechnologies [https://perma.cc/TS2A-K2CD].

differences in who controls the crafting of particular website language, with descriptions of technology not receiving the same attention as descriptions of practice areas, clients, and lawyer profiles.

The vagueness and evasiveness of firms' claims about their use of technology and their technological innovativeness is potentially meaningful, given the earlier-described advertising rules and norms. Wholesale restrictions on lawyer advertising were eventually struck down when the Supreme Court recognized that lawyer advertising can serve the legitimate purposes of educating people about the need for lawyers and assisting them in making informed choices among lawyers. But this presupposes a certain degree of clarity in lawyers' promotional materials. Unverifiable claims may be regarded as impermissibly misleading, and vague and unhelpful claims, even if not misleading, fall short of professional expectations. On the other hand, if these claims are viewed as revealing what firms consider valuable, the focus shifts from precision in disclosure to seeing tech as capital and a mechanism for competition. If there were nothing to be gained, firms presumably would play it more conservatively, sticking to just the facts, as they conventionally do in their lawyer profiles and in otherwise promoting their professional capital.

This is not to overstate the significance of technocapital. Regardless of the nature of firms' claims about technology expertise, the firms maintain a lawyer-centric approach to their mission and services. Even firms that tout their use of tech in practice affirm their commitment to the central importance of lawyers and lawyering—that is, to lawyers acting as advocates, counselors, and advisors on matters related to law. This orientation shapes the websites overall, including descriptions of technology. For example, one firm stated: "*Our eData lawyers are, first and foremost, litigators* who advise clients at every stage of the discovery lifecycle and through every type of controversy, litigation, or investigation."¹⁴¹ Technology has not taken center stage or shifted the focus away from lawyers and lawyering. In this way, our analysis suggests that, for the firms in our study, the traditional law firm model in which lawyers are seen as the most valued asset is not in particular danger.

Even so, it is significant that technocapital—that is, the embrace of technology as an identity as much as a competitive weapon—has emerged as a feature of messaging at least among lower-tiered BigLaw firms. These firms worry about competition not only from traditional law firm stalwarts but also from new entrants to the legal market, such as the Big Four, where

¹⁴¹ *Our Practice, Discovery*, MORGAN, LEWIS & BOCKIUS LLP, https://www.morganlewis.com/services/discovery [https://perma.cc/W76N-CF22] (emphasis added).

"Legal Tech" is promoted as a central offering.¹⁴² The lower-tiered firms and the legal services providers appear to be competing for the same clientele, and the non-lawyer providers are unrestrained in their claims. For example, the Legal Tech page of the legal services arm one of the Big Four claims:

Fueled by advancing technology, new business models and altered client expectations, the legal industry faces unprecedented change across its entire value chain. We at [Firm] Legal Services see the opportunity this presents for our own and our clients' benefit. We fully embrace Legal Technology (LegalTech) and are committed to use it to its fullest to deliver better, more efficient and more comprehensive services to our clients and to provide for the most enriching working environment for our talent.¹⁴³

This is followed by a quote seemingly aimed directly at law firms: "The appropriate response to new technology is not to angrily retreat into the corner hissing and gnashing your teeth. It's to ask: Okay, how should we use this?"¹⁴⁴ With this sort of challenge, it is no wonder that law firms competing with the Big Four would promote their investment of resources and attention to using technology in their practices.

Law firms' reluctance to place technological expertise at center stage can be attributed to the nature of their competition. Insofar as they are competing with tech service providers, it is unlikely that they can plausibly claim superior mastery of technology. Law firms do not have resources comparable to those of the Big Four legal services arms, and their time and attention may center on legal representations in which innovative technology is less central. Consequently, the law firms would see their lawyers as their principal competitive advantage in relation to non-lawyer providers. Although many sorts of professional service firms employ lawyers, the law firms can plausibly convey that for work requiring legal judgment and acumen, it is better to have a law firm with mastery of tech (and who can harness tech resources or partner with tech firms) than to have a tech firm with lawyer employees.

To a far greater extent than ethics rules, features of law firm competition restrain the nature and extent of firms' claims about technological expertise.

¹⁴² See, e.g., Legal, PWC, https://www.pwc.com/gx/en/services/legal.html (last visited March 5, 2021) [https://perma.cc/76E8-3WZS] (showing "Legal Tech @ PwC" on the home page for legal services and stating "[i]n today's fast-moving world, it's more important than ever to have a legal partner who understands all aspects of your business and embraces technology to help you move ahead effectively and decisively"); see also David B. Wilkins & Maria Jose Esteban Ferrer, *Taking the "Alternative" Out of Alternative Legal Service Providers, in*, NEW SUITS 29 (Michele DeStefano & Guenther Dobrauz-Saldapenna eds., 2019) [https://perma.cc/QZ4M-DZJV].

¹⁴³ *Redefining Legal Services*, PWC, https://www.pwc.com/gx/en/services/legal/tech.html [https://perma.cc/AY6W-YGR8].

¹⁴⁴ Id.

One feature, just noted, is the need to avoid detracting from law firms' traditional professional capital: Their reputations remain tied to the skill, credentials, relationships, and judgment of their lawyers.¹⁴⁵ Another feature, noted earlier, is the need to avoid appearing to engage in the rote work associated with technology. BigLaw firms seek work that has been described as "bespoke" legal services¹⁴⁶—customized services that draw on lawyers' skill and judgment. Overemphasizing the use of technology may risk detracting from their claims of the distinctiveness of their legal teams and its skills.

CONCLUSION

This empirical study and analysis of the recognition of tech as a form of capital provides new insight into the ways that BigLaw firms vary in their responses to the increasing influence of technology. One group of traditionalists portrays technology as simply one among many organizing themes for describing what it is their lawyers do, whether on behalf of an industry or with regard to particular legal issues arising in the course of legal representations. These firms-the top slice of this altogether elite group of firms-refrain from making claims about their use of technology that might undercut the preeminence of their lawyers. A second group of firms, while also describing work for tech clients and on tech matters, presents technology as an institutionalized force for advancing their work in particular areas of practice. These claims of expertise in tech-embedded practices describe harnessing technology to do what the firms have always done, but better and faster. Finally, a small subset of firms signaled their internalization of technology as a general orientation that enables them to transform into innovators. For these firms, technology is part of a new, creative, and perhaps revolutionary approach to offering legal services, and it serves as a means of meeting the competition by aggressively advocating the use of technology as a way to disrupt and capture the legal services industry.

Despite these differences but perhaps unsurprisingly, the firms remain united in fostering the understanding that the work conducted by BigLaw firms is exclusively the province of lawyers. Whether or not a firm promotes itself as using technology distinctively, as embracing technology generally, or as recognizing tech as a form of capital, the websites universally convey adulation for the attorneys. It is lawyers and legal services that propel these websites. All of the firms position lawyers at the center of their organizational reputations and identities, and in this approach their message

¹⁴⁵ See Aronson, supra note 9.

¹⁴⁶ See generally SUSSKIND, supra note 14.

minimizes, if not rejects, the promise offered by new players in the field of law or law-related services whose business strategies build from technology. We see this as a struggle for the terms of competition, with the most elite firms resisting most strenuously, while there is softening among firms in slightly more tenuous positions of the *AmLaw* rankings, who may perceive their vulnerability to law-related service providers.

Our study did not look beyond firms' websites and other marketing materials and publications to attempt to discern whether firms' differing approaches to competing around technology is becoming a disruptive force affecting firms' reputations or their success in attracting clients. We assume that it would be too soon to tell in any event, because firms' rank in the BigLaw hierarchy changes slowly over time. Likewise, it remains to be seen whether, as the generation of lawyers who are comfortable with technology rises in the ranks of its law firms, the technological expertise of individual law graduates will be recognized and rewarded by certain of the BigLaw firms. For now, many of the highest ranked firms continue staking their reputations almost exclusively on their professional capital, which is what brought them to their leadership positions. Nor have we explored the ways in which technology is being recognized as a form of capital by private law firms outside of the elite, BigLaw category. What we found, though, is that certain firms ranked below the top of the BigLaw hierarchy, although certainly not gambling their entire reputations on technocapital, have placed a significant side bet that claims of technological expertise will give them a competitive advantage. If these firms prove right, disruption may follow in the hierarchies both among elite law firms and among individual lawyers within the professional elite.

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