Reimagining "Reasonableness" Under Section 330(a) in a World of Technology, Data, and Artificial Intelligence

by

Nancy B. Rapoport &² Joseph R. Tiano, Jr. *

By 2030 we will see significant legal work being done by machines. As exponential growth of technology consumes the world, the legal industry is especially appeti⟦z⟧ing. As a result, legal services will be fundamentally different than today in terms of both job function and the way legal services are provided.[1]

Vizzini: HE DIDN'T FALL? INCONCEIVABLE.

Inigo Montoya: You keep using that word. I do not think it means what you think it means.[2]

[1] Joseph Raczynski, *Legal Geek's Uncertain Decade: The future of legal technology and digital transformation,* THOMSON REUTERS (Aug. 3, 2020), https://www.thomsonreuters.com/en-us/posts/legal/uncertain-decade-pt4-digital-transformation/ (UK spelling in original).

[2] THE PRINCESS BRIDE (Twentieth Century Fox 1987), https://www.imdb.com/title/tt0093779/quotes/qt0549857.

TABLE OF CONTENTS

INTRODUCTION: SECTION 330(A) AND REASONABLENESS WHY HOW WE DO WHAT WE DO MATTERS

Transformations in the legal industry's supply chain caused by legal technology and innovative service delivery models have triggered the need for courts to reimagine how to assess the reasonableness of legal fees under 11 U.S.C. § 330. In nearly every other industry, when there are changes or fluctuations in supply chain costs, it is typical for the market price paid by end-users or consumers to fluctuate as well. Market forces organically dictate the reasonableness of the market prices in light of current production cost and demand. In contrast, the legal industry hasn't kept up with a unified, market-driven supply cost and demand approach when deciding how to use technology to serve client needs. To date, clients haven't consistently forced lawyers to evaluate the cost of new technology against the efficiency benefits that the technology may have when compared to

human labor. This article posits that it's time to factor in the choice to use, or not to use, technology when determining the reasonableness of fees and expenses under 11 U.S.C. § 330. We believe that the newest technology should be part of our toolbox—in particular, artificial intelligence (AI).

When we talk about the use of AI in the law, what do we mean? Both of us like Professor Harry Surden's definition:

> What is AI? There are many ways to answer this question, but one place to begin is to consider the types of problems that AI technology is often used to address. In that spirit, we might describe AI as using technology to automate tasks that "normally require human intelligence." This description of AI emphasizes that the technology is often focused upon automating specific types of tasks: those that are thought to involve intelligence when people perform them.[3]

The real questions in today's legal industry are when a bankruptcy professional should start a task by turning first to AI and, when a lawyer uses AI, how does that choice affect a reasonable fee under § 330 for that work?

Ever since the arrival of email,[4] technology has changed the way that lawyers communicate and deliver work product. Legal research previously entailed poring through heavy books in a law library. Now legal research relies on the likes of Lexis/Nexis, Westlaw, and Fastcase. Document

---

[3] Harry Surden, *Artificial Intelligence and Law: An Overview,* 35 GA. ST. L. REV. 1305, 1307 (2019) (footnotes omitted); *see also id.* ("What makes these AI tasks rather than automation tasks generally? It is because they all share a common feature: when people perform these activities, they use various higher-order cognitive processes associated with human intelligence."). Here's another way to think about AI:

> In the broadest sense, AI, also often referred to as cognitive computing, is an aspect of computer science that models software on human thought processes generally regarded as intelligent. This category encompasses, for example, expert systems, machine learning, natural language processing, robotics, and computer agents that perform tests to evaluate data and offer results. AI made its first major news splash in the late 1990s when IBM's "Deep Blue" computer won several chess matches against a world champion. Not to be outdone, in 2011, IBM's Watson computer (on which the ROSS legal research system is based) successfully competed in the game show *Jeopardy!* Indeed, AI's headway into daily life in 2017 is remarkable: just ask your virtual assistant Siri or the Amazon Echo on your kitchen countertop.

Dyane O'Leary, *A-I is a GO,* 26 PERSPECTIVES: TEACHING LEGAL RESEARCH AND WRITING 33, 33 (2018) (footnote omitted).

[4] Email actually started in the 1970s, but it took off in the late 1980s. *See Email timeline,* THE GUARDIAN (Mar. 13, 2002), available at https://www.theguardian.com/technology /2002/mar/13/internetnews (last visited Dec. 25, 2022).

review relies more on search terms entered in an e-discovery tool[5] than on battalions of associates in document production rooms. Mergers and acquisitions use data rooms and digital signature technology. Manilla folders and accordion racks[6] lined up on conference room tables for manual signatures are just so yesteryear. Gone, too, is the luxury of ample time to complete tasks.[7] Legal artisans now operate in a world in which the practice of law has become the business of delivering legal services.[8]

The mandate to use advanced technologies: Model Rule 1.1 comment 8. When delivering advice, services, and work product to clients nowadays, lawyers are using technology continuously and at every step of the service delivery chain.[9] If the need for lawyers to inject technology into their daily practice was ever in doubt, all doubt has been removed by the fact that almost all states now impose on lawyers a duty of technological competence.[10] No state bar has specified the types of technology that lawyers must know how to use or the exact technological acumen required, other than the famously vague comment 8 to Model Rule 1.1: "To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with

---

[5] For a nice description of how AI-assisted discovery works, see, e.g., Surden, *supra* note 3, at 1329–30. Our colleague Joe Regalia has pointed out that eDiscovery often is not a "thing" for smaller practices. *See* comments on our earlier draft from Professor Joseph Regalia (Jan. 12, 2023) (on file with authors).

[6] We recognize that we're dinosaurs who can remember what accordion racks looked like, but the rest of you can see one at https://www.amazon.com/Flexifile-Expandable-Organizer-Slot-14118/dp/B0006HWLNQ/ref=pd_lpo_1?pd_rd_i=B0006HWLNQ&psc=1. We also remember staying at the printers for nights on end—not to mention what happened on that first trip to the printers, when we realized *why* the offices had showers, beds, food, and toothbrushes.

[7] Our colleague, Professor Marketa Trimble, has cautioned us that our memory of days gone by, with its limitless deadlines, is likely inaccurate. Email from Marketa Trimble to Nancy Rapoport (Jan. 21, 2023) (on file with authors).

[8] We thank Judge Christopher Klein for this artful rephrasing of an earlier draft paragraph. *See* email from Hon. Christopher M. Klein to Nancy Rapoport (Jan. 28, 2023) (on file with authors).

[9] Try to live without your phone for an entire workday. *See, e.g.,* AMERICAN BAR ASSOCIATION COMMISSION ON THE FUTURE OF LEGAL SERVICES, REPORT ON THE FUTURE OF LEGAL SERVICES IN THE UNITED STATES 27–28 (2016) (describing innovations in document automation and the use of artificial intelligence), available at https://www.americanbar.org/content/dam/aba/images/abanews/2016FLSReport_FNL_WEB.pdf.

[10] MODEL R. PROF'L CONDUCT 1.1 cmt. 8. *Cf.* Bob Ambrogi, *Another State Adopts Duty of Technology Competence for Lawyers, Bringing the Total to 40,* LAWSITES (March 24, 2022), https://www.lawnext.com/2022/03/another-state-adopts-duty-of-technology-competence-for-lawyers-bringing-total-to-40.html. For a quick reminder of what the duty of technological competence means for lawyers, see *The Ethics of Artificial Intelligence and Law,* LEXCHECK, https://www.lexcheck.com/resources/the-ethics-of-artificial-intelligence-and-law-lc (last visited Aug. 8, 2022) ("While lawyers cannot know all the intricacies of AI systems, they are required to possess basic competencies. Attorneys using AI are responsible for monitoring the training and application of the algorithm. Just as a lawyer oversees subordinates like junior lawyers and paralegals, the same oversight is required in monitoring the performance of AI-based tools. Some tasks may not be appropriate for AI handling, so the lawyer must determine where to draw the line between automation and augmentation.").

relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject."[11] Legal industry commentators have offered guidance, stating that lawyers should be proficient in "case management software with a calendaring system; document management software; research tools; billing software; email and other communication systems; a PDF system with redacting capabilities; and the MS Office Suite, particularly MS Word."[12]

The dilemma: Will increasing the use of technology cost lawyers some income?   Today's conventional wisdom recognizes that technology facilitates better lawyering. Technology has made the practice of law today faster, advice more accurate, and deliverables more efficiently produced than ever, freeing lawyers to focus their time and energy on high-level strategic advice and high-value work rather than on recurring and mundane tasks.[13] With the increased use of technology, it stands to reason that the amount of time and resources that lawyers need to spend on certain types of tasks should shrink. But if the time and resources that a lawyer needs to get the work done are decreasing while lawyers are charging by the hour, shouldn't the cost of at least some of those more mundane legal services decrease?[14] Based on the recent 2021 profitability reports from law firms, that reasonable inference does not seem to be the case.[15] It's possible that that

---

[11] MODEL R. PROF'L CONDUCT. 1.1 cmt. 8 states: "To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject." The comment is famous, we think, because of the "I'm not a cat" video that went viral. For a description of the video, see, e.g., Daniel Victor, *'I'm Not a Cat,' Says Lawyer Having Zoom Difficulties,* N.Y. TIMES (Feb. 9, 2021, updated May 6, 2021), https://www.nytimes.com/2021/02/09/style/cat-lawyer-zoom.html (last visited Dec. 5, 2022).

[12] IVY B. GREY, ETHICAL DUTY OF TECHNOLOGICAL COMPETENCE; WHAT LAWYERS NEED TO KNOW 4, https://www.wordrake.com/tech_competence-thank-you?submissionGuid=cede7bb2-8c2b-4bbc-b97e-58e8ae60d552.

[13] Neither of us misses the long nights at the printer's as we waited to read the latest document revisions, or the long rows of accordion files for closings, or the manual redlining using rulers.

[14] After all, Model Rule 1.5(a) requires fees to be reasonable. *See* MODEL R. PROF'L CONDUCT 1.5(a) ("A lawyer shall not make an agreement for, charge, or collect an unreasonable fee or an unreasonable amount for expenses.…"). The idea that *not* using AI when the use of AI is the best way to keep fees reasonable isn't unique to us. *See, e.g., The Ethics of Artificial Intelligence and Law*, LEXCHECK, https://www.lexcheck.com/resources/the-ethics-of-artificial-intelligence-and-law-lc (last visited Aug. 8, 2022) ("ABA Model Rule 1.5 requires lawyer fees to be reasonable. Increasingly, technological implementations reduce labor hours, which saves lawyers from unnecessary work and saves clients from unnecessary fees. *As AI technology becomes more widespread in law, it may become difficult for lawyers to bill their clients a reasonable fee without leveraging artificial intelligence technologies.*") (emphasis added).

[15] *See* Press Release, *ALM's 2022 Global 200 Reveals Stellar Performance in Key Financial Metrics* (Sept. 20, 2022), https://www.alm.com/press_release/alms-2022-global-200-reveals-stellar-performance-in-key-financial-metrics/ ("Law.com International and The American Lawyer have released

law firms are making the same or more money—even in the face of adopting technology that makes them more efficient—because the increasing hourly rates[16] are outpacing the time savings in the "time x rate" economic model.[17] Make no mistake: we are not advocating for the proposition that lawyers should make less money. We see no reason why lawyers who work more efficiently by leveraging technology should be paid any less than lawyers who rack up the hours as a result of *not* leveraging technology efficiently. But this leaves us with an interesting dilemma: Why should lawyers who leverage technology to be efficient be compensated less than their

---

the 2022 Global 200 report, providing a detailed look at the top-grossing law firms from around the world. Gross revenue for The Global 200 totaled $185.6 billion for fiscal year 2021, an increase of 14.7% compared with fiscal year 2020.").

[16] *See, e.g.*, Debtors' Application for an Order Authorizing the Retention and Employment of Paul, Weiss, Rifkind, Wharton & Garrison LLP as Attorneys for the Debtors and Debtors in Possession Nunc Pro Tunc to the Petition Date, *In re* Revlon, Inc., Case No. 22-10760, (Bankr. S.D.N.Y. No. 22-10760) ECF No. 152 at page 10, paragraph 15: "15. The current standard hourly rates for Paul, Weiss's attorneys and paralegals range as follows:…Partners[,] $1,530 to $2,025[;] Counsel[,] $1,525[;] Associates[,] $550 to $1,280[; and] Paraprofessionals[,] $135 to $435."Professor Richard Susskind has this to say about the pitfalls of hourly billing:

> The shortcomings of hourly billing are well illustrated by an anecdote involving my daughter. When she was 12, she asked me for a summer job. I needed some administrative work carried out and she agreed to take on the task. She asked me how much I intended to pay her and I responded, unreflectively, that I thought I would pay her a certain amount per hour. She thought about that for a few seconds, smiled, and then said: 'Well, I'll take my time then.' If a 12-year-old can see the shortcomings of hourly billing, then it puzzles me that major international corporations cannot also see the problem here. Hourly billing is an institutionalized disincentive to efficiency. It rewards lawyers who take longer to complete tasks than their more organized colleagues, and it penalizes legal advisers who operate swiftly and efficiently. All too often, the number of hours spent by a law firm bears little relation to the value that is brought. A junior lawyer who expends 50 hours on a task can sometimes provide much less value than half-an-hour of the work of a seasoned practitioner (drawing on his or her lifetime of experience).

RICHARD SUSSKIND, TOMORROW'S LAWYERS: AN INTRODUCTION TO YOUR FUTURE 17 (2d ed. 2017).

[17] Or is it that the technologies are not being used to their fullest capacity by attorneys? As Joe Regalia has pointed out to us,

> Usually, I hear the pitch as: (1) you can get tighter realization, [and] with many practice areas dipping below 80%, this is a big difference; (2) [AI can help with] access to underserved legal markets and needs with lower costs of service; (3) [AI frees up] more time spent on high-value tasks that you can charge more for to make up the difference; (4) more internal cost savings on all the tasks that clients are already not paying for under guidelines and task billing; (5) what we've been hearing about forever but is still sporadic, which is alternative billing that allows lawyers/firms to keep more of what's left over from whatever permutation of fixed fees or budgets.

See Regalia comments on earlier draft, *supra* note 5.

counterparts who don't?[18] And how should bankruptcy professionals find the right balance between humans and computers? Section 330 focuses on the reasonableness of fees and expenses, but doesn't yet focus our attention on the human-computer split. It's time to revisit what "reasonable" means. Just as the standard of care in negligence has evolved with respect to technological advancements, so too should § 330's reasonableness assessment.[19]

To provide a more robust picture of § 330 and its roots, Part 1 discusses the legislative history of § 330. Part 2 maps the evolution of the case law since the enactment of § 330. Part 3 highlights how technological advancements and innovations in today's legal industry call for a change to a court's current § 330 assessment.[20] Part 4 discusses how various constituents in the legal industry might call for change to make it a reality. Finally, Part 5 talks about how the practice of bankruptcy law will benefit if courts' § 330 analysis starts account for advancements in legal technology.

PART 1: SECTION 330'S LEGISLATIVE HISTORY

First, let's put § 330 in perspective. In the normal attorney-client relationship, the client can evaluate the cost of legal services and set rules to make sure that law firms are using technology and other innovations[21] to ensure that the client is getting full value for every dollar paid.[22] The client can always push the bill, metaphorically speaking, back across the table to the lawyer while asking for reductions. But what happens in the context of estate-paid professionals in a bankruptcy case?[23] Those professionals submit their fee applications to the court for the court's approval under §

---

[18] After all, efficient lawyers can pass through the cost of investing in technology, either as a per-use rate or as a component of overhead, which will affect their hourly rate. We don't shrink at seeing Westlaw or Lexis charges on bills any more, and we're sure that Westlaw and Lexis are faster than the way that we did research, back in the dark ages. One of us can even remember the tiny keyboard of the first Lexis machine at school. Moreover, as our friend Scott Bovitz has pointed out, "A good lawyer's income won't drop because that lawyer will handle more client matters in the extra time that comes from quicker legal work on existing matters." Email from J. Scott Bovitz to Nancy Rapoport, Dec. 25, 2022 (on file with authors).

[19] *See* Levine v. Russell Blaine Co., 273 N.Y. 386, 389 (Ct. App. N.Y. 1937) (allowing the litigant to prove "general usage or custom" in establishing the standard of care in an industry).

[20] We're leaving for another time a deeper discussion of process improvement generally, though Professor Joe Regalia has suggested that there are ways to save clients money by improving certain internal processes. *See* Regalia comments on earlier draft, *supra* note 5.

[21] For example, using contract attorneys for certain tasks—with the appropriate conflicts-checking safeguards in place—rather than using the higher-priced in-firm attorneys for those tasks.

[22] At the same time, the client can ensure that its trusted partner, its outside counsel, is also well-compensated for the value delivered. Most clients are calibrated to pay today's handsome market rates for outside counsel when the client perceives that it has received excellent service and value.

[23] In this article, we're primarily talking about those estate-paid professionals in large chapter 11 cases, but we'll touch on estate-paid professionals in other chapters, too.

330.[24] But other than the court (and maybe the United States Trustee, *and* maybe a fee examiner[25]), there's no one source monitoring the burn rate of professional fees.[26] Unless the court pushes the bill back across the table to the professional as part of the § 330 analysis, there's no easy way for the parties in interest to put "reasonableness" in context.[27] But § 330 was enacted in 1994, nearly thirty years ago and well before the advent of today's technology.[28] Notwithstanding technological innovations, bankruptcy courts have not established new standards for what constitutes

---

[24] After a bankruptcy court approves the employment of estate-paid professionals pursuant to 11 U.S.C. § 327 (and occasionally § 328, although that's a whole other issue) or § 1103(a), the Bankruptcy Code authorizes the court to approve the payment of reasonable fees and reimbursement of actual and necessary expenses pursuant to 11 U.S.C. § 330(a). The Code also authorizes the payment of interim fees and reimbursement of interim expenses under 11 U.S.C. § 331. In large chapter 11 cases, courts often establish procedures for interim compensation. *See, e.g.*, Order Authorizing Procedures for Interim Compensation and Reimbursement of Professionals, *In re* Revlon, Inc., (Bankr. S.D.N.Y. No. 22-10760 (DSJ), ECF No. 259.

[25] Or a really angry creditor.

[26] And, as Judge Christopher Klein observed, when commenting on an earlier draft, "… nobody ever gives [judges] help. The various players entitled to be paid out of the administrative pot usually form a self-congratulatory mutual admiration society. There are, in effect, no natural enemies—unlike loser-pays regimes where every dollar hurts." Email from Hon. Christopher M. Klein to Nancy Rapoport (Jan. 28, 2023) (on file with authors). In fact, "[w]hen I say natural enemies are not around, I am saying that the adversarial process does not function when it comes to fees (unless it is a fee that directly is coming out of the hide of the adversary). In other words, it is useless to expect the adversarial system to function as designed in the arena of bankruptcy fee awards." Email from Hon. Christopher M. Klein to Nancy Rapoport (Jan. 29, 2023) (on file with authors).

[27] As one of us has explained elsewhere,

> The bankruptcy court has oversight of the payment of professional fees, but the review of those fees can be incredibly time-consuming and is highly detail-driven. Those professionals who submit their bills for court review represent real clients, but those real clients aren't writing the ultimate checks. In most non-bankruptcy settings, there's a metaphorical moment when the professional pushes a bill across the table to the client and waits for the client to react. If the client questions a bill, the professional may well end up lowering it.

> When it comes to estate-paid Chapter 11 fees, the professionals are pushing their bills across the table, but on the other side of the table, the client charged with evaluating the reasonableness of the bill may have no meaningful way to put the bill into context. Moreover, because no single client is charged with footing the professionals' entire bill, it's possible that none of the clients really cares how much these professionals are charging. In essence, the client sitting at the table is a stand-in for entities with little voice (and little individual stake) in determining how the professional makes his billable decisions. And sitting at another table, far away, is the bankruptcy court.

Nancy B. Rapoport, *Rethinking Fees in Chapter 11 Bankruptcy Cases*, 5 J. BUS. & TECH. LAW 263, 265 (2010) (footnotes omitted).

[28] Bankruptcy Reform Act of 1994, Pub. L. No. 103-394, § 224(b), 108 Stat. 4106 (1994).

"reasonable" fees in light of the technological innovations that have happened since the enactment of the Bankruptcy Reform Act.[29]

When thinking through whether Congress or the courts should revisit § 330 in light of technological advances, we started with an analysis of § 330[30] and its legislative history. Before the Bankruptcy Reform Act of

---

[29] Bankruptcy Reform Act, Pub. L. No. 103-394, 108 Stat. 4106 (1994), reprinted in 1994 U.S.C.C.A.N. 4106.

[30] 11 U.S.C § 330(a) provides:

(a)(1) After notice to the parties in interest and the United States Trustee and a hearing, and subject to sections 326, 328, and 329, the court may award to a trustee, a consumer privacy ombudsman appointed under section 332, an examiner, an ombudsman appointed under section 333, or a professional person employed under section 327 or 1103—

(A) reasonable compensation for actual, necessary services rendered by the trustee, examiner, ombudsman, professional person, or attorney and by any paraprofessional person employed by any such person; and

(B) reimbursement for actual, necessary expenses.

(2) The court may, on its own motion or on the motion of the United States Trustee, the United States Trustee for the District or Region, the trustee for the estate, or any other party in interest, award compensation that is less than the amount of compensation that is requested.

(3) In determining the amount of reasonable compensation to be awarded to an examiner, trustee under chapter 11, or professional person, the court shall consider the nature, the extent, and the value of such services, taking into account all relevant factors, including—

(A) the time spent on such services;

(B) the rates charged for such services;

(C) whether the services were necessary to the administration of, or beneficial at the time at which the service was rendered toward the completion of, a case under this title;

(D) whether the services were performed within a reasonable amount of time commensurate with the complexity, importance, and nature of the problem, issue, or task addressed;

(E) with respect to a professional person, whether the person is board certified or otherwise has demonstrated skill and experience in the bankruptcy field; and

(F) whether the compensation is reasonable based on the customary compensation charged by comparably skilled practitioners in cases other than cases under this title.

(4) (A) Except as provided in subparagraph (B), the court shall not allow compensation for—

(i) unnecessary duplication of services; or

(ii) services that were not—

(I) reasonably likely to benefit the debtor's estate; or

(II) necessary to the administration of the case.(B) In a chapter 12 or chapter 13 case in which the debtor is an individual, the court may allow reasonable compensation to the debtor's attorney for representing the interests of the

1978, bankruptcy professionals were paid on a *quantum meruit* basis. Generally speaking, the *quantum* that was *meruit*-ed led to bankruptcy practitioners being underpaid as compared to their non-bankruptcy peers who practiced in more lucrative practice areas. Compensation considerations in the prior statutory scheme revolved around "conservation of the estate" and "economy of administration,"[31] which relegated bankruptcy professionals to providing something akin to a "public service." This systemic under-compensation led to suboptimal results for those who needed bankruptcy and insolvency advice and services, because the "best and brightest" professionals naturally gravitated to practice areas that better compensated them.

The legislative history of the Code's 1978 overhaul reveals Congress's desire to change the compensation parameters under § 330:

> The compensation is to be reasonable, for actual necessary services rendered, based on the time, the nature, the extent,

---

debtor in connection with the bankruptcy case based on a consideration of the benefit and necessity of such services to the debtor and the other factors set forth in this section.

(5) The court shall reduce the amount of compensation awarded under this section by the amount of any interim compensation awarded under section 331, and, if the amount of such interim compensation exceeds the amount of compensation awarded under this section, may order the return of the excess to the estate.

(6) Any compensation awarded for the preparation of a fee application shall be based on the level and skill reasonably required to prepare the application.

(7) In determining the amount of reasonable compensation to be awarded to a trustee, the court shall treat such compensation as a commission, based on section 326.

[31] *See* NCBJ Special Committee on Venue (Hon. Terrence L. Michael, Hon. Nancy V. Alquist, Hon. Daniel P. Collins, Hon. Dennis R. Dow, Hon. Joan N. Feeney, Hon. Frank J. Santoro, Hon. Mary F. Walrath), *Report on Proposal for Revision of the Venue Statute in Commercial Bankruptcy Cases*, 93 AM. BANKR. L.J. 741, 812 n.371 (Winter 2019). That footnote reads:

In fact, the Bankruptcy Code sought to encourage the use of standard (national) rates in bankruptcy cases. See H.R. Rep. No. 95-595, at 330 (1977), reprinted in 19785963, 6286 U.S.C.C.A.N. (noting that section 330 was meant to overrule case law "which set an arbitrary limit on fees payable, based on the amount of a district court's salary, and other, similar cases that require fees to be determined based on notions of conservation of the estate and economy of administration. Bankruptcy specialists, who enable the system to operate smoothly, efficiently, and expeditiously, would be driven elsewhere, and the bankruptcy field would be occupied by those who could not find other work and those who practice bankruptcy law only occasionally almost as a public service. Bankruptcy fees that are lower than fees in other areas of the legal profession may operate properly when the attorneys appearing in bankruptcy cases do so intermittently, because a low fee in a small segment of a practice can be absorbed by other work. Bankruptcy specialists, however, if required to accept fees in all of their cases that are consistently lower than fees they could receive elsewhere, will not remain in the bankruptcy field.").

and the value of the services rendered, and on the cost of comparable services other than in a case under the bankruptcy code. The effect of the last provision is to overrule *In re Beverly Crest Convalescent Hospital, Inc.,* which set an arbitrary limit on fees payable, based on the amount of a district judge's salary, and other, similar cases that require fees to be determined based on notions of conservation of the estate and economy of administration. If that case were allowed to stand, attorneys that could earn much higher incomes in other fields would leave the bankruptcy arena. Bankruptcy specialists, who enable the system to operate smoothly, efficiently, and expeditiously, would be driven elsewhere, and the bankruptcy field would be occupied by those who could not find other work and those who practice bankruptcy law only occasionally almost as a public service. Bankruptcy fees that are lower than fees in other areas of the legal profession may operate properly when the attorneys appearing in bankruptcy cases do so intermittently, because a low fee in a small segment of a practice can be absorbed by other work. Bankruptcy specialists, however, if required to accept fees in all of their cases that are consistently lower than fees they could receive elsewhere, will not remain in the bankruptcy field.[32]

In particular, Senator DeConcini, when proposing the amendment to § 330, noted:

Attorneys' fees in bankruptcy cases can be quite large and should be closely examined by the court. However bankruptcy legal services are entitled to command the same competency of counsel as other cases. In that light, the policy of this section is to compensate attorneys and other professionals serving in a case under title 11 at the same rate as the attorney or other professional would be compensated for performing comparable services other than in a case under title 11. . .. Notions of economy of the estate in fixing fees are outdated and have no place in a bankruptcy code.[33]

In the legislative overhaul, concepts of "conservation of the estate" and "economy of administration" gave way to a new process and reasonableness

---

[32] H.R. Rep. No. 595, 95th Cong., 2d Sess. 329-30, reprinted in 1978 U.S. CODE CONG. & ADMIN. NEWS 5963, 6286.

[33] 124 Cong. Rec. 33,994 (1978), reprinted in 1978 U.S. CODE CONG. & ADMIN. NEWS 6505, 6511.

analysis under § 330. Now, under § 330, bankruptcy attorneys must prepare fee applications as a first step in getting paid from estate funds. Parties in interest (at least theoretically)[34] and United States Trustees[35] review those fee applications, and the bankruptcy court must review the fee applications to ensure compliance with § 330's standards.[36] The approved fees and expenses are paid as an administrative priority.[37]

Congress hoped that the change to the compensation structure would create an incentive for bankruptcy professionals to stay in bankruptcy practice, rather than transition to more profitable fields. Congress seems to have gotten its wish as top-flight bankruptcy practitioners at prestigious law firms are currently commanding hourly rates above $1,500 per hour, at least based on recently filed fee applications.[38] We presume that these healthy hourly rates correlate to similarly equally healthy seven-figure annual compensation packages.

The legislative history makes clear that Congress wanted bankruptcy practitioners to be fairly compensated; however, Congress also envisioned that a lawyer's (or other estate-paid professionals') entitlement to compensation for services should remain bounded by the concepts of "reasonable," "necessary," and "actually rendered." That's where the intersection of § 330 and innovative technology intrigues us. We know that Congress's intent was for bankruptcy practitioners to be fairly compensated. Now that the bankruptcy world has evolved so that practitioners *are* fairly compensated commensurate with their peers, the next question, which is not directly addressed in the legislative history, is:

---

[34] And not so theoretically for angry parties in interest.

[35] Even less theoretically.

[36] A bankruptcy court "*shall* consider the nature, the extent, and the value of such services, taking into account all relevant factors" … in determining the amount of reasonable compensation to be awarded to an examiner, trustee under chapter 11, or professional person…." 11 U.S.C. § 330(a)(3) (emphasis added).

[37] *See* 11 U.S.C. §§ 503(b), 507.

[38] *See, e.g., supra* note 16; *see also* Nancy B. Rapoport & Joseph R. Tiano, Jr., *Billing Judgment*, 96 AM. BANKR. L.J. 311, 312 n.4 (2022) [hereinafter *Billing Judgment*] ("For example, in the Pacific Gas & Electric bankruptcy case, the average hourly rate for partners at the five firms with the highest billing rates ranged from $1,027 per hour to $1,334 per hour."). As we were revising this article, Sullivan & Cromwell was asking the court in the FTX bankruptcy case to approve hourly rates of over $2,100. *See, e.g.,* Dietrich Knauth & Andrew Goudsward, *FTX Could Pay Over $2,100 Per Hour For Bankruptcy Lawyers,* REUTERS ("Bankrupt crypto exchange FTX has asked a U.S. bankruptcy judge for permission to pay its top restructuring lawyers as much as $2,165 per hour, an unusually high rate for a company that cannot afford to repay all of its debts."), https://money.usnews.com/investing/news/articles/2022-12-22/ftx-could-pay-over-2-100-per-hour-for-bankruptcy-lawyers (last visited Dec. 22, 2022). *See also* Roy Strom, *Big Law Rates Topping $2,000 Leave Value 'In Eye of Beholder,'* BLOOMBERG LAW, https://news.bloomberglaw.com/business-and-practice/big-law-rates-topping-2-000-leave-value-in-eye-of-beholder (last visited Jan. 12, 2023).

In light of technological advancements and the efficiencies created by them, what should "reasonable, necessary, and actually rendered" mean when legal professionals have an arsenal of technological weapons available to them?

For this, we must first look to recent case law on § 330.

PART 2: JUDICIAL INTERPRETATION OF REASONABLENESS

Although we know that reasonableness is in the eye of the beholder—the client or the court—we also know that lawyers' bad choices can create unreasonable fees. In particular, bad choices about what level of professional should do which tasks and how long those tasks should take can catch the eye of the person charged with evaluating those fees. Before we discuss § 330 cases in particular, we'll start with a case about reasonable fees in general.

In a fee-shifting case, *Hensley v. Eckerhart*,[39] the Supreme Court explained that bad staffing choices led to unreasonable fees:

> The most useful starting point for determining the amount of a reasonable fee is the number of hours reasonably expended on the litigation multiplied by a reasonable hourly rate. This calculation provides an objective basis on which to make an initial estimate of the value of a lawyer's services. The party seeking an award of fees should submit evidence supporting the hours work and rates claimed. Where the documentation of hours is inadequate, the district court may reduce the award accordingly.
>
> The district court also should exclude from this initial fee calculation hours that were not "reasonably expended." … Cases may be overstaffed, and the skill and experience of lawyers vary widely. *Counsel for the prevailing party should make a good faith effort to exclude from a fee request hours that are excessive, redundant, or otherwise unnecessary, just as a lawyer in private practice ethically is obligated to exclude such hours from his fee submission.* "In the private sector, 'billing judgment' is an important component in fee setting. It is no less important here…."[40]

---

[39] 461 U.S. 424 (1983).

[40] *Id.* at 434 (emphasis added and footnote omitted).

Hensley v. Eckerhart, though itself not a § 330 case, set the basic standard for what is unreasonable (and thus not compensable).[41]   A thoughtful reading of the *Hensley* court's "hours reasonably expended" analysis from 40 years ago translates to a modern day interpretation in which the use (or non-use) of technology impacts "hours expended" as logical part of a "reasonableness of fees" concept.[42]   And that concept of reasonableness necessarily extends to a § 330 review.[43]   Courts have no problem determining, for example, that time spent on certain activities was excessive.[44]   When it comes to analyzing the staffing of a matter, courts following the principle articulated in *Hensley v. Eckerhart* have the

---

[41] In determining reasonableness under § 330, courts usually start with the language of that section, as they should, and then they apply the lodestar method, after which they adjust the fees for circumstances particular to the case. *See, e.g., In re* Sarkis Investments Co., 2019 WL 9233005, *10 (Bankr. C.D. Cal. 2019) (describing the lodestar calculation as the presumptively reasonable fee and explaining that precedent allowed for downward adjustment in particular circumstances); *In re* Tribeca Market, LLC, 516 B.R. 254, 273 (S.D.N.Y. 2014) ("In tandem with a court's review of these [§ 330] factors, 'there is "[a] strong presumption that the lodestar figure—the product of reasonable hours times a reasonable rate—represents a reasonable fee."'") (citations omitted).   *Cf. In re* Schold, 554 B.R. 287, 297 (Bankr. D. Mass. 2016) (in applying its circuit's lodestar analysis—"by determining a reasonable billing rate and then multiplying it by the number of hours which appropriate tasks should have consumed"—"[t]he lodestar rate ought to take into account the type of work performed, who performed it, the expertise that it required, and when it was undertaken").

[42] We think this modern-day interpretation of *Hensley* is a natural extension of its principles. Indeed, the *Hensley* court surely would have concluded that the "hours reasonably expended" for an M&A transaction closing when *Hensley* was decided 40 years ago—before the advent of e-mail, document sharing technology, data rooms, electronic signature technology, videoconferencing, and wire transfer technology—would have been exponentially higher in 1983, as compared to 2023.

[43] *See, e.g., In re* APW Enclosure Systems, Inc., 2007 WL 3112414, *4 (Bankr. D. Del. 2007) (unreported case) ("The court should hold an attorney in a bankruptcy case to the same standards of representation as a client would hold the attorney in a non-bankruptcy case. *See Busy Beaver,* 19 F.3d at 849–50 (noting that the legislative history of section 330 indicates that Congress intended the estate to be represented by the same quality of attorneys as in non-bankruptcy cases).").

[44] *See, e.g., In re* Duarte, 2020 WL 6821723, *3–*4 (Bankr. D. Ariz. 2020) (disallowing fees for clerical work and excessive time spent on otherwise compensable work); *In re* Sarkis Investments Co., 2019 WL 9233005, *27 (Bankr. C.D. Cal. 2019) (disallowing fees for such activities as preparing exhibits, given that the law firm had plenty of clerical staff to do that type of work); *id.* (disallowing fees for tasks that took too long, such as billing 2.3 hours to prepare a status report that "consist[ed] of three and a half pages of background information about Debtor [that was] largely devoid of detailed information, such as projected income and expenses of Debtor, that would require such a substantial amount of time to prepare" and explaining that "[s]uch a status report should require no more than one hour of work by a capable attorney"); *In re* Straka, 2018 WL 3816896, *2 (Bankr. D. Maine 2018) (disallowing several .1 time entries for "tasks that take only a few seconds to complete and that do not involve any legal judgment or skill"); *In re* Digerati Tech., Inc., 537 B.R. 317, 354–55 (Bankr. S.D. Tex. 2015), *aff'd sub nom.* Herrera v. Dishon, No. 4:15-CV-227, 2016 WL 7337577 (S.D. Tex. Dec. 16, 2016), *aff'd sub nom.* Matter of Digerati Techs., Inc., 710 F. App'x 634 (5th Cir. 2018) (disallowing fees for certain activities that involved sparse pleadings taking more time to write than the court deemed appropriate); *In re* Teraforce Tech. Corp., 347 B.R. 838, 862 (Bankr. N.D. Tex. 2006) (observing that the law firm seeking fees "was 'top-heavy' in partner hours spent on the Case, as well as 'bottom-heavy' in associate hours[, and thus, that the firm's] ratio of partner-to-associate hours is not what the Court would expect to see in a reasonably staffed case of this size and complexity.").

discretion to determine how many legal professionals should work on particular tasks involved in a matter and how long various tasks should take.

Here's an example. In *In re Kern*,[45] the bankruptcy court listed several tasks for which the time billed exceeded the court's expectations as to the time required to complete the tasks:

> In this court's experience, there are many examples of excessive time being spent on certain matters. For example,
>
> • On August 7, 2020, ⟦the fee applicant⟧ billed 2.5 hours to review ⟦a party⟧'s Motion for Relief from Stay.
>
> • On August 18, 2020, ⟦the fee applicant⟧ billed 0.4 hours to prepare an amended Schedule E/F, then billed another 0.2 hours at $500 per hour the following day to review the Order respecting the amendment.
>
> • On August 20, 2020, ⟦the fee applicant⟧ billed 0.1 hours reviewing an email confirming a CourtSolutions appearance. (In this court's opinion, that should not have been charged at all.)
>
> • On August 20, 2020, ⟦the fee applicant⟧ billed 2 hours to prepare a draft contract for the sale of real estate. However, the contract for the sale of real estate attached to the Motion to Sell was a form contract with certain specific information included.
>
> • On August 25, 2020, ⟦the fee applicant⟧ billed 0.4 hours reviewing four emails confirming a hearing time change⟦.⟧
>
> • On September 2, 2020, ⟦the fee applicant⟧ billed 0.3 hours to review three letters from counsel to ⟦a party⟧ sent to Debtor's tenants, which all contained the exact same language.
>
> • For the two adversary proceedings Debtor filed in the case, ⟦the fee applicant⟧ billed 0.4 hours each to review the summons, instructions, blank form mediation order, and blank form scheduling order in an adversary proceeding.
>
> • On October 14, 2020 and October 15, 2020, ⟦the fee applicant⟧ billed 0.1 hours to review the emails regarding subpoenas, which simply referred to the attachments;

---

[45] 2021 WL 3518806, *4–*5 (Bankr. D.N.J. 2021).

then an additional 0.2 hours to review the subpoena and notice themselves, for a total of 0.9 hours.

• In the administrative/routine tasks identified on Exhibit A, there are multiple instances of time being charged for "Review Docket Entries."

The court in *Kern* reached its conclusion based on its extensive experience rather than on objective, industry benchmarks. Even though we do not question the court's conclusions on the individual time entries, we note three important things. First, the examples highlighted by the *Kern* court relate to relatively simple tasks for which the court's experience in seeing similar tasks over many years served to create a benchmark. Undoubtedly that matter also involved more complicated, nuanced tasks for which industry data could provide far more benchmarks of reasonableness. Second, the court never addressed whether the professionals could have used innovative technologies to begin (or to replace) human efforts for some of the work. Finally, even though § 330 assessments are squarely in the purview of the court, we cannot help but wonder whether the *Kern* court's manual, experience-driven analysis was the best use of judicial resources or whether the time, resources, and energy of the bankruptcy bench could have been spent on higher-value activities.[46]

In another example, *In re* Stover,[47] the bankruptcy court reduced some of the requested fees, explaining that:

> [M]any of the tasks that the Firm's shareholders performed, especially the highest-rate billers, should have fallen to associates and paralegals. The court notes that the Firm's three shareholders performed approximately 94% of the postpetition services. In contrast, the Firm's two associates performed approximately 5% of the work, and the lone paralegal, less than 1%. … Considering that approximately 1/3 of the 90.2 hours reflected in the Application involved preparing the petition, schedules, and SOFA, … the court concludes that the Firm did not appropriately staff this matter. Associates and paralegals, rather than shareholders, could and should have performed much of the schedule preparation and revision. [The senior attorney]'s extensive and unchallenged experience and expertise justify his handsome rate reflected in the Application, but that same experience and expertise ought

---

[46] In Part 5 *infra*, we suggest that courts themselves should leverage technology, either directly or indirectly via the parties, to expedite, augment, and modernize the § 330 reasonableness analysis.

[47] 439 B.R. 683 (Bankr. W.D. Mich. 2010).

to have impelled him to delegate to less-expensive personnel
many of the tasks he and other shareholders performed.
Accordingly, the court has allocated much of the
shareholder time to the associates and paralegal.[48]

The conclusion that we've drawn from these cases is that the more routine
the work, the less senior the person should be who does the work.[49] And

---

[48] *Id.* at 689 (footnote omitted).

[49] *In re* Henson, 637 B.R. 13, 18–19 (Bankr. S.D. Ohio 2022) ("The court reminds counsel that 'the
hourly fee awarded should be adjusted when a significant percentage of the total work completed is of
such a routine nature. Compensation for routine work should be discounted.' Thus, counsel need to
push work down to the lowest available rate for which such work can be competently performed or
otherwise adjust the billing accordingly so that clients are not excessively billed for the level of the work
performed.") (citation and footnote omitted); *In re* Owsley, 2021 WL 1270833, *9–*11 (Bankr. S.D.
Tex. 2021), *aff'd in part, rev'd in part*, No. 2:19-BK-20060, 2022 WL 1434673 (S.D. Tex. Mar. 31,
2022), *aff'd sub nom. Matter of* Owsley, No. 22-40283, 2023 WL 2424592 (5th Cir. Mar. 9, 2023)
(reducing excessive fees by 50%); *id.* at *12–*13 (disallowing fees that were clerical and did not require
professional expertise); *In re* Kern, 2021 WL 3518806, *3 (Bankr. D.N.J. 2021) ("The court is truly at a
loss as to why it has to again admonish ⟦the fee applicant⟧ for submitting a Fee App that once again
provides for the charging of the highest possible hourly rate—$500—for preparation of routine form
pleadings, simple letters to parties and the court, and general administrative/clerical tasks…. That ⟦the
fee applicant⟧ chooses not to utilize staff or a lesser hourly rate for these tasks is of ⟦the fee applicant⟧'s
own choice."); *In re* Mata, 2020 WL 6370347, *9 (Bankr. S.D. Tex. 2020) (reducing excessive fees by
25% for "⟦b⟧illing almost four hours preparing a simple motion, which required no legal research or
analysis…."); *In re* Hanover, 2020 WL 2554229, *4 (Bankr. E.D.N.Y. 2020) (reducing fees involving
too many professionals and too much time for given tasks); *In re* Houck, 2020 WL 5941415, *15 (Bankr.
W.D.N.C. 2020), *aff'd sub nom.* Houck v. LifeStore Bank, No. 5:13-CV-00066-DSC, 2021 WL 970495
(W.D.N.C. Mar. 8, 2021) (reducing fees for excessive work and overstaffing); *In re* Mohsen, 473 B.R.
779, 792 (Bankr. N.D. Cal. 2012), *aff'd*, 506 B.R. 96 (N.D. Cal. 2013) ("…Counsel's belief that the DQ
motion would result in a substantial recovery for the estate did not give Counsel free reign to devote
many hours to a project that should have been accomplished in much less time. Attorneys have a duty
to exercise good billing judgment when they apply for fees.") (citing Hensley v. Eckerhart, 461 U.S. 424,
437 (1983)); *In re* Henry S. Miller Commercial, LLC, 2010 WL 463882, *5 (Bankr. N.D. Tex. 2010)
("While this court has said many times in approving fee applications, that 'you get what you pay for,'
and this court has no problem awarding substantial fees to a professional who works hard to significantly
assist a client in the preservation or generation of value, or who crafts a creative solution to complex
problems, the court does have a problem with awarding generous fees where no significant activity
occurred, no value was generated, nothing was complex, no problems were meaningfully solved and, in
fact, the case was mostly about preparing routine documents, protecting insiders, and billing.") (footnote
omitted).There are also plenty of "not for publication" or otherwise unreported cases that also illustrated
the point that courts will reduce fees attributable to excessive billing. *See, e.g.*, *In re* Reynolds, 2015
WL 1054800, *4 (Bankr. C.D. Cal. 2015) (not for publication) ("The reasonableness of the time
expended is an integral part of the lodestar analysis. In that regard, the court finds that 20 hours spent
preparing and filing the dismissal motion is extravagant given the issues raised by the involuntary
petition. Nor is the court convinced that a declaration regarding service necessitates one full hour of
attorney time. Accordingly, the court will reduce by 10 hours and .5 hours, respectively, the number of
hours which reasonably should have been expended by Cohn Stewart in connection with the dismissal
motion and declaration regarding service."); *In re* Acevedo, 2014 WL 6775272, *6 (Bankr. W.D. Mich.
2014) (unreported) ("The court will not allow compensation at an attorney's rate for tasks that clerical
staff or paraprofessionals may perform."); *In re* Bowling, 2014 WL 4290336, *6 (Bankr. D. Kansas 2014)
(unreported) ("The Firm spent more time than was necessary to complete this case. Some of this is due

that conclusion lets us imagine a world in which AI takes the first cut at particular tasks, making AI, in certain circumstances, the more reasonable choice.[50] The trick, of course, will be in determining when the "lowest efficient biller"[51] is a partner, a senior associate, a junior associate, a paralegal, a well-trained non-legal professional, or technology.[52]

---

to the inefficiencies and inevitable duplication of services that occurs when four lawyers and several staff members 'touch' a file. Some of it is due to [the Debtor]'s failure or inability to respond timely to the trustee's information requests. Some of it is simply duplicative."); *In re* Green, 2013 WL 4603005, *2 (Bankr. E.D. Cal. 2013) (not for publication) ("The use of two attorneys in a Chapter 13 case is not per se impermissible. But total fees should not increase appreciably by the use of more than one lawyer, unless the size or complexity of the case is such that one lawyer could not reasonably be expected to handle it. This is not such a case. And the court finds that the use of two lawyers has, in fact, resulted in unnecessary duplication of efforts and unnecessary fees."); *In re* Kline, 2003 WL 21790190, *1 (Bankr. W.D.N.C. 2003) (unreported) ("The matter litigated by the Trustee's attorney here was the avoidance of a real estate lien where the deed of trust had been filed in the wrong county. … [T]he matter was straight-forward and uncomplicated legally and procedurally, and should have been prosecuted far more efficiently than it was. It should not have required $43,000 (or $30,000) of attorney time to avoid the lien of a creditor who had filed its deed of trust in the wrong county and to obtain priority over other creditors whose secured claims were dependent thereon."); *id.* at *2 ("Rather than obtaining efficiencies by using lower priced associates and paralegals to complete tasks, the Trustee's methods of operating seem to duplicate efforts in many instances. Instead of the associates and paralegals in the Trustee's office accomplishing a task, often their work consists of taking preliminary actions, preparation of a memorandum of what they did, review of the memo by the Trustee and finally an intra-office meeting to discuss the memo. This duplicative pattern is repeated throughout the fee application."). This list of cases is far from exhaustive, and you get our point. Even when the lowest efficient biller isn't around, that's no reason for a more senior biller to bill time at a higher rate than the task itself requires, but that is a matter for another article that we've written. *See Billing Judgment, supra* note 38, at 348–49 (quoting *In re* United Plastic Recycling, Inc., No. 15-32928, 2017 WL 4404780, at *6 (Bankr. M.D. 2017)) (unreported case). So if a senior biller shouldn't bill at over $1,000/hour to do basic legal research that a first-year associate should do, then a more junior person shouldn't be doing work that a computer should do. And from what we've heard about the entering workforce these days, the junior people would rather do higher-order work anyway, having grown up on delegating certain work to their own computers.

[50] *But see* Katherine Medianik, *Artificially Intelligent Lawyers: Updating the Rules of Professional Conduct in Accordance with a New Technological Era*, 39 CARDOZO L. REV. 1497, 1514–16 (2018) (discussing AI in relationship to the duties of competence, and observing that lawyers still have a duty to insure that the computer is doing the right research—"… if an AI tool performs legal research, was it asked the right questions? Did it grasp the legal issue? Did it research the pertinent jurisdiction?").

[51] One of us uses this term—"lowest efficient biller"—when she is acting as a fee examiner and asking professionals why they assigned particular professionals to various tasks. The lowest biller is not necessarily the best biller for a task. Neither of us wants to use a first-year associate for "bet the company" work. But we don't want a partner billing time to research the definition of the automatic stay, either. The "lowest efficient biller" has the right level of experience to do the task accurately and expeditiously.

[52] One of us just can't resist adding this quote here:

> Rear Admiral [Cain]: These planes you've been testing, Captain, one day, sooner or later, they won't need pilots at all. Pilots that need to sleep, eat…. Pilots that disobey orders. All you did was buy some time for those men out there. The future is coming, and you're not in it.

PART 3: MODERN LEGAL PRACTICE, REASONABLENESS, AND SECTION 330

A. Reasonableness and the Concept of Billing Judgment

In a recent article, we expressed our view that a component of every attorney's ethical obligations requires her to demonstrate good billing judgment. There is an adage that everyone *thinks* he or she has a sense of humor, but not everyone does.[53] Like that adage, everybody professes to understand the notion of "good" billing judgment, but not everyone does. In our *Billing Judgment* article, we defined the criteria by which courts and clients could measure good billing judgment as follows:

> Lawyers demonstrate billing judgment when the legal services for which they bill: (A) advance a meaningful client goal while alleviating the client's burden; (B) are delivered with peak staffing and workflow efficiency; and (C) describe the work done in a clear invoice delivered in a timely manner.[54]

There is an unmistakable connection between good billing judgment and the reasonableness of fees under § 330. Good billing judgment tends to be the predicate to reasonable fees.[55] More specifically, if a legal professional

---

….

Rear Admiral [Cain]: The end is inevitable, Maverick. Your kind is headed for extinction.

〚Maverick turns around〛

Maverick: Maybe so, sir. But not today.

TOP GUN: MAVERICK (Paramount Pictures 2022), https://www.imdb.com/title/tt1745960/quotes?ref_=tt_ql_sm (last visited Dec. 13, 2022). What's true of pilots and drones is also true of lawyers and robo-lawyers. The trick is to figure out when a human or a computer is the best choice for a first cut at a particular task. Indeed, if a court feels comfortable determining whether a second-year associate or a partner is the proper legal professional to handle a discrete task, it does not strain logic to conclude that a technology-savvy judge is equally capable of determining whether a task should be handled by a human being or whether the task should be partially or fully tech-enabled.

[53] For a great example of this adage, see MY BLUE HEAVEN (Warner Bros. 1998) ("Barney: Of course you have a sense of humor. Everyone thinks they do, even people who don't."), https://www.imdb.com/title/tt0100212/quotes?ref_=tt_ql_sm (last visited Dec. 22, 2022).

[54] *Billing Judgment*, *supra* note 38, at 315. After the article came out, we didn't hear any disagreement with our definition of billing judgment. That silence could mean that most people agreed with us and that the rest had no violently bad reactions to our definition—or it could simply mean that not enough people have read our article yet, and that the storm of protest is just around the corner. We prefer the first interpretation of the silence, but if anyone has a better definition of billing judgment than ours, we'd love to hear it.

[55] Of course, we acknowledge that billing by the hour could discourage good billing judgment by punishing the efficient worker. For just one example of the criticism of the billable hour, Susan Saab Fortney has pointed out that "hourly billing creates an incentive to overwork files and misrepresent time because the more hours an associate works, the more fees are generated." Susan Saab Fortney, *Soul For*

fails to exercise good billing judgment, there is a strong likelihood that the fees that the legal professional wants to collect will fall short of being reasonable under a § 330 analysis. Good billing judgment requires a lawyer to be conscientious and thoughtful about how legal services are delivered. A lawyer who demonstrates good billing judgment considers whether the use of technology or data analytics tools will be more efficient (and cost-effective) for a client, even if the number of billable hours for the matter decrease, along with a decrease in billable fees.[56] Clients may vary in how stringently they review their outside counsel's legal fees, in the same way that bankruptcy courts might vary in how frequently they do a line-item review of fee applications. But the principles of what constitutes good billing judgment should apply uniformly regardless of who is reviewing and approving the legal fees. Here's an example: In a case with mountains of first-level document review, an attorney who shows good billing judgment considers whether to engage an alternative legal service provider or an eDiscovery vendor to handle the first pass at document review, even if it means using a drastically downsized team of junior associates for document review.[57] Gone are the days when big discovery assignments used a scrum of newly minted lawyers to sift through warehouses of physical papers.[58]

Historically, a § 330 analysis has required a court to review the legal services performed, the time spent on providing those services, the professionals' hourly rates for those services, and the matter's complexity. But that analysis doesn't typically also ask if there could have been a better way to deliver legal services from a process and personnel management perspective, given technological advancements and personnel flexibility. Therein lies the crucial point of intersection between good billing judgment and a § 330 reasonableness analysis. Good billing judgment involves not just the "what" that is being done (i.e., a legal task), but also the "who" that should be doing it, and whether the "who" should be a carbon-based life form or a computer.

Sale: An Empirical Study of Associate Satisfaction, Law Firm Culture, and the Effects of Billable Hour Requirements, 69 UMKC L. REV. 239, 277 (2000) (footnote omitted).

[56] Again, though, why should the use of technology automatically result in lower fees? *See supra* note 18. Either the more efficient lawyers are more valuable, thus being able to justify increased hourly rates, or they could pass along the investment in technology to the client, either by direct charges or by a component of overhead that sneaks into the firm's hourly rates.

[57] As our friend Randy Gordon puts it, "I don't know any BigLaw firm that hasn't replaced human document reviewers with software for the initial cut of things like privilege. I think this has probably reduced the size of some incoming associate classes. Software has also mostly taken over document management from paralegals—hence there aren't many of them anymore." Email from Randy Gordon to Nancy Rapoport, Dec. 28, 2022 (on file with authors).

[58] Well, "gone" for big matters, anyway. Technology costs money, too, so big investments in tech might not yet be cost-effective for small matters.

Simply put, the nature of the legal industry has changed, and § 330 must adapt with it. We've graduated from the era in which the practice of law was solely a profession[59] into an era in which the business part of delivering legal services has come into sharper focus. We've long lost the succinct "For services rendered," one-line bill,[60] and now clients expect us to bill by the hour to demonstrate exactly what services we *are* rendering.[61]

The shift from a one-line bill with a lump-sum figure and a pithy phrase to "I spent a tenth of an hour reviewing the docket" creates a corollary: it used to be impossible to measure reasonableness with the one-line bill, other than by one's own gut hunch. Now, there are actual data points: time entries. So, the old approach of using our own experience (and a gut hunch) is missing something important: comparative data. The ability to compare, both within and across a firm, how long something should take and who should do it should form part of the reasonableness analysis under § 330.[62]

---

[59] And a "gentlemen's" profession, to boot, with all that *that* hoary old phrase entails. *See, e.g.*, Lani Guinier, *Lessons and Challenges of Becoming Gentlemen*, 24 N.Y.U. REV. L. & SOC. CHANGE 1, 2 (1998) (discussing how, when she was a student at Yale Law School, she was in a course in which a law professor who "was a creature of habit. He readily acknowledged the presence of the few 'ladies' by then in attendance, but admonished those of us born into that other gender not to feel excluded by his greeting. We too, in his mind, were 'gentlemen.'").

[60] For a brief history of the switch from "for services rendered" flat rates to hourly billing, see, e.g., Jim Calloway, *A Brief History of Hourly Billing*, https://www.okbar.org/lpt_articles/a-brief-history-of-legal-billing/ (last visited Dec. 8, 2022).

[61] The switch to hourly billing was designed to demonstrate efficiency and effectiveness. Jim Calloway describes the shift:

> [S]omewhere it began. Some business client asked a lawyer why a certain matter that had been handled before had doubled or tripled in price this time. The lawyer responded [that] this matter was more complex and therefore took more time to complete. Then came the question that would prove fateful for the legal profession: "If you are billing me for the time you expended, why aren't you showing me the time you expended on the billing?" Upon reflection, that sounded fair to the lawyer. After all, it was a repeat client who always paid [its] bills requesting this change in the firm's practices. Although changes in the legal system often take a fair amount of time to catch on, as larger law firms, banks and insurance companies learned of this method, it became the standard practice. It was objective. Hours times the lawyer's hourly rate equals the bill.

Calloway, *supra* note 53. Want to blame a single lawyer for a system that now requires us to think in six minutes increments? According to WilmerHale, it was Reginald Heber Smith. The firm's publication, *Slice of History: Reginald Heber Smith and the Birth of the Billable Hour,* is worth a read. *See Slice of History: Reginald Heber Smith and the Birth of the Billable Hour,* WilmerHale.com, https://www.wilmerhale.com/insights/publications/slice-of-history-reginald-heber-smith-and-the-birth-of-the-billable-hour-august-9-2010 (last visited Dec. 8, 2022).Professor Joe Regalia has pointed out that task-based billing and client-side e-billing software has increased the transparency of legal bills, thus enabling clients to get a clearer picture of a bill's reasonableness. *See* Regalia comments on earlier draft, *supra* note 5.

[62] *Cf. Billing Judgment, supra* note 38, at 327 ("In the long run, bad choices in a case—bad choices about what work has meaningful value, which and how many legal professionals should undertake a

A § 330 analysis ought to borrow from the practical application of good billing judgment and evolve to reflect the way that law is practiced today, which often involves technology-enabled services and lower-cost alternative legal service providers.[63] Lawyers who bill by the hour are now expected to go beyond what services are being rendered, explaining why the services are being rendered in the manner delivered and why the legal professionals rendering the legal services were chosen to do so. And now, it also has become imperative to ask, "is a computer the best 'first professional' to use for this task"?[64]

In practice, that question means that an attorney seeking fees under § 330 must be prepared to address what decisions prompted the use—or non-use—of certain technologies or alternative legal service providers. Likewise, bankruptcy judges must be willing to probe these choices when making a § 330 determination. Instead of evaluating only the *actual* time spent on providing the legal services, a reimagined analysis inquires whether the actual time and cost could have been reduced with the use of technology. Likewise, the hourly rate analysis should not just consider comparable *lawyer* rates in the relevant jurisdiction on a matter of equal complexity but should consider whether the introduction of technology or other types of professionals into the more routine aspects of the matter could have been more cost-efficient (i.e., a lower weighted average hourly rate) without any decrease in the quality of the work product.[65]

---

task, how long that work should take, and how to describe that work—will all lead to the same sad result: a likely reduction in fees.").

[63] In the 2013 U.S. trustee guidelines, the Executive Office of the United States trustee recognized that there is a way to shift work to less expensive providers: "Efficiency counsel is secondary counsel employed to handle more routine and 'commoditized' work, such as claims objections and avoidance actions, at lower cost to the estate than lead bankruptcy counsel." *Guidelines for Reviewing Applications for Compensation and Reimbursement of Expenses Filed Under United States Code by Attorneys in Larger Chapter 11 Cases*, 78 FED. REG. 36248, 36256 (June 17, 2013/2013/06/28/Fee_Guidelines.pdf (last visited Dec. 8, 2022).

[64] In an ideal world, that question comes *before* the partner in charge assigns the work. If a court or a fee examiner is asking that question, there's a risk that the professional's fees are about to be on the chopping block. *See, e.g.*, *Billing Judgment*, *supra* note 38, at 313 (footnote omitted) ("Under a perfectly equitable system, an attorney with legitimate, but unrecoverable, time could travel to the past in a WABAC machine and rebill that time to some other matter. But WABAC machines don't exist, and nobody else will be paying for that 'lost' time.").

[65] Not everything has to be perfect in order to satisfy a lawyer's fiduciary duty to her client, and sometimes, informed clients want to pay for just "good enough" services, rather than for "perfect" services. *Cf.* Robert Capps, *The Good Enough Revolution: When Cheap and Simple Is Just Fine*, WIRED (Aug. 24, 2009) ("As a result, what consumers want from the products and services they buy is fundamentally changing. We now favor flexibility over high fidelity, convenience over features, quick and dirty over slow and polished. Having it here and now is more important than having it perfect. These changes run so deep and wide, they're actually altering what we mean when we describe a product as 'high-quality.'"), https://www.wired.com/2009/08/ff-goodenough/ (last visited Dec. 22, 2022);

And to take our point one step further, we think that practicing attorneys should use legal spend data to prove what is reasonable in today's legal environment, and that judges should require attorneys to prove reasonableness in this way.[66] We've all heard (or said) the line, "I've been involved in the practice of bankruptcy law for over 30 years, and I know what things cost." Although for many professionals, that statement may be mostly accurate, it may not be accurate for much longer. We know that countless aspects of the law change every time a new decision is handed down or a new law or regulation is enacted. We also know that technological developments are happening at a dizzying pace. Experience is a good initial barometer for cost, but legal spend data is an indispensable companion to that experience.

In essence, reasonableness analysis uses a shadow system, comparing actual fees to the reviewer's own internal database of "experience." Imagine how much more robust a reasonableness analysis could be if a court had true comparative data. With the press of a few buttons to query an extensive, up-to-date legal spend database, bankruptcy practitioners and judges could uncover the range of estimated fees for preparing a stay relief motion, or a skeleton of a typical disclosure statement or chapter 11 plan, or a debtor-in-possession financing motion, or countless other tasks and workstreams that occur regularly. Those estimates could be refined by

---

Carolyn Elefant, *What Does the "Good Enough" Phenomenon Mean for Solos?*, MY SHINGLE Blog (Sept. 1, 2009) ("[M]y take away from the *Wired* article isn't that cheap and simple means compromising standards. Rather, at the core of cheap and simple is to deliver value by providing the key features of a product that matter most to consumers."), https://myshingle.com/2009/09/articles/client-relations/what-does-the-good-enough-phenomenon-mean-for-solos/ (last visited Dec. 22, 2022). Here's a take from an actual user of legal services:

> Rosemary Martin, group general counsel and company secretary of Vodafone adds:
>
> *As a buyer of legal services, I look for value: not necessarily the cheapest option but the one that I think will deliver the outcome I am looking for, be that success in a case, speed in contract execution, or precision in defining the terms of a complex legal relationship.*

NOAH WAISBERG & DR. ALEXANDER HUDEK, AI FOR LAWYERS: HOW ARTIFICIAL INTELLIGENCE IS ADDING VALUE, AMPLIFYING EXPERTISE, AND TRANSFORMING CAREERS 28 (2021) (italics in original) [hereinafter AI FOR LAWYERS]. Various firms, including Legal Decoder, have amassed verifiable data on a range of what certain tasks "should" cost. We're not saying that there should be a fixed rate for every type of legal task, but we do want you to be aware that many clients now have access to this type of information, and they're using that information in discussions with their lawyers. *Cf.* Regalia comments on earlier draft, *supra* note 5 ("You could imagine a database, accessible to courts, where there are standardized rates for tons of different legal tasks, organized by all the variables [a]nd then some push to get firms (probably pushed by clients) to use the standardized tasks. This has become so common in some practice areas where clients have already demanded it. And I think it's made a huge difference in the ability of clients to push back on fees.").

[66] We're willing to soften this thesis a bit to say that attorneys should have to prove reasonableness in this way in the larger cases. Don't stone us just yet.

ranges of assets, liabilities, creditors, and related parties to create more of an apples-to-apples review. With a good, up-to-date database, the estimates of cost ranges would adjust for innovative technologies and the use of alternative legal services providers far better than estimates using only "experience" as the barometer.

And yet, as the old advertisements said, there's more.[67] Technology, data, and alternative legal service providers (or ALSPs) are only setting the stage for the need to reimagine § 330 entirely. Just think about what happens when AI evolves to assist legal practitioners with the delivery of more types of legal services.[68]

B. The World of Artificial Intelligence in the Practice of Law

Lawyers who harness AI effectively don't use it for the parts of law practice that rely on a lawyer's judgment or specialized talent;[69] they use AI for those parts of law practice that can be routinized and done more efficiently (at least in a first cut) by machines.[70] In other words, as one of us

---

[67] *See, e.g.*, Ronco, About Company, https://www.ronco.com/pages/company (last visited Dec. 8, 2022) ("Known for the legendary tagline 'But wait . . . there's more,' Ronco has been creating innovative, cutting-edge kitchen appliances and accessories for almost sixty years.").

[68] Noah Waisberg and Alexander Hudek have observed:

> [W]e see a widening gap between the total demand for legal services and the share of that work that's going to law firms. Much of that work is being retained by in-house departments or sent to ALSPs precisely because those organizations have been willing to apply technology to accomplish more with fewer resources. Law firms willing to make similar investments in technology might be able to claw back some of that gap.

AI FOR LAWYERS, *supra* note 65, at 23..

[69] *See, e.g.*, SUSSKIND, *supra* note 16, at 65 ("It is true that much of the work of the oral advocate is highly bespoke in nature and it is not at all obvious how the efforts and expertise of the courtroom lawyer might be standardized or computerized. Indeed, oral advocacy at its finest is probably the quintessential bespoke legal service."); *see also* Hilary G. Escajeda, *The Vitruvian Lawyer: How to Thrive in an Era of AI and Quantum Technologies,* 29 KAN. J.L. & PUB. POL'Y 421, 465–69 (2020) (describing the need for emotional intelligence and empathy in the practice of law, even as AI becomes more normalized in law, resulting in a "human-machine fusion," and concluding that "the emotionally intelligent legal professionals who will thrive in a digital (eventually quantum) economy are those who will effectively use cognitive intelligence tools to serve their clients compassionately and solve their legal problems ethically and humanely."); Rebecca Crootof, *"Cyborg Justice" and the Risk of Technological–Legal Lock-In,* 119 COLUM. L. REV. FORUM 233, 237–38 (Nov. 20, 2019) (observing that computers are good at detecting patterns but are not designed for judgment calls); Surden, *supra* note 3, at 1332 ("lawyerly tasks that involve abstract thinking, problem-solving, advocacy, client counseling, human emotional intelligence, policy analysis, and big picture strategy are unlikely to be subject to automation given the limits of today's AI technology.").

[70] Noah Waisberg and Alexander Hudek have made this point:

> [T]here is more legal work than what law firms do. Technology has enabled more in-house legal departments to retain work in-house, avoiding the premiums that law firms have charged for routine or process-oriented work. An entire Alternative Legal Services (or NewLaw or Law Company) sector has been built

has heard Karim Guirguis from the American Bankruptcy Institute point out, "lawyers used to do things that robots could do, and now lawyers can concentrate on doing only those things that lawyers should do."[71] After all, not everything that a lawyer does actually involves unique, from-the-ground-up drafting:

> To be sure, and I want to stress this, difficult problems do arise that undoubtedly require bespoke attention; but, far more frequently, lawyers are asked to tackle problems which bear a strong similarity to those they have faced in the past. Indeed, one of the reasons clients select one lawyer over another, or one firm over another, is precisely that they believe that the lawyer or firm has undertaken similar work previously. Most clients would be horrified to think, especially if they are being billed on an hourly basis, that each new piece of work they pass to law firms is set about with a fresh sheet of paper and embarked upon from scratch. On the contrary, clients expect a degree of standardization.[72]

There are, in fact, many areas in which a computer is the correct choice for a first-cut analysis, with a lawyer reviewing the results of that first cut. A computer can sort through massive numbers of contracts[73] and conduct

---

up to handle some forms of outsourced legal work, much of which is process-driven and lends itself to technology-enabled services.

AI FOR LAWYERS, *supra* note 65, at 22. Or, as Daniel Susskind puts it, "[t]hink of a lawyer who is displaced from the task of looking through stacks of papers by an automated document review system, a piece of software that can scan legal material far more swiftly—and, in many cases, more precisely, too. The same lawyer can now turn her attention to other tasks involved in providing legal advice, perhaps meeting face-to-face with her clients or applying her problem-solving skills to a particularly tricky legal conundrum." DANIEL SUSSKIND, A WORLD WITHOUT WORK: TECHNOLOGY, AUTOMATION, AND HOW WE SHOULD RESPOND 23 (2020).

[71] Remarks by Karim Guirguis at the American Bankruptcy Institute's Annual Spring Meeting's session called *Let's Chat[a]Bot It: Ethical Considerations of Artificial Intelligence and ChatGPT in Law Practice* (April 22, 2023) (panel discussion with Jason Brookner, Karim Guirguis, Michael Richman, and Nancy Rapoport).

[72] SUSSKIND, *supra* note 16, at 27–28; *cf.* Surden, *supra* note 3, at 1319 ("[M]any modern AI systems are not fully machine-learning or knowledge-based systems but are instead hybrids of these two approaches.") (footnote omitted).

[73] Consider the following example:

> If, for example, a large tech company finds itself with a huge volume of procurement contracts that all have varying renewal dates and renegotiation terms, it would require hundreds of hours and a team of contract managers to review and track of all this information to ensure that no renewal or opportunity is missed.
>
> AI software, however, can easily extract data and clarify the content of contracts. (It could quickly pull and organize the renewal dates and renegotiation terms from

due diligence that canvasses all of the necessary information (such as all of the contracts that might be assumed).[74] So why can't AI also do a first draft of simple pleadings that bankruptcy lawyers routinely file?[75] We make this

---

> any number of contracts.) It can let companies review contracts more rapidly, organize and locate large amounts of contract data more easily, decrease the potential for contract disputes (and antagonistic contract negotiations), and increase the volume of contracts it is able to negotiate and execute.

Beverly Rich, *How AI Is Changing Contracts,* HARV. BUS. REV. (Feb. 12, 2018), https://hbr.org/2018/02/how-ai-is-changing-contracts; *id.* ("AI contracting software can, for example, identify contract types (even in multiple languages) based on pattern recognition in how the document is drafted. Because AI contracting software trains its algorithm on a set of data (contracts) to recognize patterns and extract key variables (clauses, dates, parties, etc.), it allows a firm to manage its contracts more effectively because it knows – and can easily access – what is in each of them."); *see also* Rachel Vanni, *How AI Accelerates the Legal Contract Drafting Process,* KIRASYSTEMS.COM (May 27, 2020), https://kirasystems.com/learn/how-ai-accelerates-the-legal-contract-drafting-process/ (describing how AI can be used to draft basic contracts and screen contract language for various terms and dates).

[74] Here's an illustration:

> We will imagine a different AI-enhanced project …. ⟦In⟧ scenario 1, a firm bills its client $200,000 for some junior lawyer work. In fact, the partner wrote off 20% of the amount their associates worked on this project before even sending the $200,000 bill, because they didn't think the juniors worked efficiently, and they worried about upsetting the client and damaging their relationship. These write-offs are common. Despite this preemptive write-off, the client only paid 65% of the diligence fee, still feeling that the work wasn't done efficiently. (The client is right!) Eventually, after lots of haggling, the firm got paid $130,000. Now, consider the AI-enhanced scenario 2. Here, the partner feels good about the efficiency of their team, so they bill all hours worked: $250,000. Throughout the matter, and in delivering the bill, the partner explains how their firm is focused on efficiency, and the client is happier about the value of the work they received. To be conservative, we assumed only a 10-point jump in realization rate, though—if the partner is good at selling value—this might be higher. Here, because the bill was higher (due to no preemptive write-off) and because of the higher realization (collection) rate, the firm makes an extra $45,500, despite us assuming that the AI cost $10,000. That's 35% more revenue! And—to keep the numbers simple—we didn't even look at matter profitability here. Suffice it to say that throwing out hours—either because you don't bill them or the client doesn't pay for them—is bad for profitability. Changes in realization rates can really make an impact. If a firm has an industry average 89% realization rate, and has over $1 billion (or $10 million, for that matter) in revenue, the money (and profit) it is leaving on the table can be pretty *immense.*

AI FOR LAWYERS, *supra* note 65, at 33–34 (italics in original); *see id.* at 30 ("Lawyers can add value by using AI to increase the number of contracts they review in transactions. Some clients might be happy to get a lower diligence bill thanks to faster AI-enhanced contract review. But many should be very interested in getting twice the diligence for the same price they paid the last time they did a deal, or three times for 30% (or 50%) more money.").

[75] For the ability of computer algorithms to take data and create bankruptcy forms, see our discussion of Upsolve, *infra* notes 108–125; *see also* https://www.legalmation.com for an AI-powered legal tech company that is already tackling this challenge in the area of general commercial litigation ("LegalMation's ground-breaking AI system dynamically produces fully formatted responsive pleadings, discovery requests and responses and other documents, all tailored to the claims, allegations, and requests in the legal document uploaded, incorporating jurisdictional requirements as well as the

argument with some trepidation, because we're sidelining first- and second-year associates in favor of computers, but we'll address that issue in Part 5 below.[76] And we're not talking about AI in the future. We're talking about AI in the present.

> In the legal sphere … JP Morgan has developed a system that reviews commercial loan agreements; it does in a few seconds what would have required, they estimate, about 360,000 hours of human lawyers' time. Likewise, the law firm Allen & Overy has built software that drafts documents for over-the-counter derivatives transactions; a lawyer would take three hours to compile the relevant document, they say, while their system does it in three minutes.[77]

In the now-classic LawGeex study, LawGeex pitted experienced lawyers against machines to spot issues in non-disclosure agreements. The machines won.[78] They might not have been perfect, but humans have never been

---

attorney's own style, and response strategy"), available at https://www.legalmation.com (last visited Dec. 23, 2022). For a discussion of how clients in large chapter 11 bankruptcies could insist that their professionals turn to AI when AI is appropriate, see Nancy B. Rapoport, *Client-Focused Management of Expectations for Legal Fees in Large Chapter 11 Cases,* 28 ABI L. REV. 39, 88–90 (2019).

[76] One way to think about this sea change is by deciding *where* AI or other legal technology belongs in the process of serving clients: in automating certain functions that humans *could* do, but that computers can do faster and more efficiently; in using computers to do certain things that humans are just not great at doing ("like spot one little word in a mountain of millions of documents"; *see* Regalia comments on earlier draft, *supra* note 5), or in assisting tasks that humans should be doing but in ways that computers can speed up.

[77] SUSSKIND, *supra* note 70, at 82–83 (footnotes omitted). As to proprietary AI like Allen & Overy's Harvey, see David Wakeling, *Allen & Overy announces exclusive launch partnership with Harvey,* ALLEN & OVERY, https://www.allenovery.com/en-gb/global/news-and-insights/news/ao-announces-exclusive-launch-partnership-with-harvey (last visited Mar. 25, 2023), our friend Jeff Garrett has pointed out that such proprietary software may end up being a plus in a law firm's pitch to clients. *See* email from Jeff Garrett to Nancy Rapoport and Joseph Tiano (Mar. 24, 2023) (on file with authors). Jeff also pointed out that it only took four months for ChatGPT to go from failing a bar exam to passing one. This technology is moving fast.

[78] *Comparing the Performance of Artificial Intelligence to Human Lawyers in the Review of Standard Business Contracts*, LAWGEEX, https://images.law.com/contrib/content/uploads/documents/397/5408/lawgeex.pdf (Feb. 2018) ("US lawyers with decades of experience in corporate law and contract review were pitted against the LawGeex AI algorithm to spot issues in five Non-Disclosure Agreements (NDAs), which are a contractual basis for most business deals…. Following extensive testing, the LawGeex Artificial Intelligence achieved an average 94% accuracy rate, ahead of the lawyers who achieved an average rate of 85%."). Our friend Lila Anderson (who has a Ph.D. in Physics) suggested that the studies would be even more powerful if they told us if the mistakes that the machines made were of the same type as the human-made mistakes. She's right. Email from Lila Anderson to Nancy Rapoport, Dec. 23, 2022 (on file with authors).

perfect, either.[79] The point is that machines, in this context, were better than humans.[80] Other studies on computer-versus-human in document reviews had similar results.[81] Different clients have different needs, and some of those needs have little to do with getting the "right" result—instead,

---

[79] And new technology may make humans less perfect as well. Professor Trimble's 2022 editorial on the effects of AI on human intelligence refers to the "Google effects on memory": that we're losing our desire to memorize certain facts because we know that we can look up those facts. (Neither of us, for example, has the other's cell phone number memorized.)

> With the internet becoming "a primary form of external or transactive memory, and with memory stored collectively outside ourselves", there is less need to remember information that is stored on the internet. Another study showed that the Google effects could be even more pronounced when internet users trust that the information they need will be reliably available on the internet in the future.

Marketa Trimble, *Artificial Intelligence and Human Intelligence*, GRUR Int'l, Vol. 72, Issue 1, at 1–2 (Jan. 2023). Technology isn't just changing what we do. It's changing how we think.

[80] *Cf.* Rhys Dipshan, *Law Firm Automation Will Survive the Pandemic*, NAT'L L.J. (Aug. 3, 2022), https://www.law.com/nationallawjournal/2022/08/03/law-firm-automation-will-survive-the-pandemic-405-08030/?kw=Law%20Firm%20Automation%20Will%20Survive%20the%20Pandemic (in comparing computer results and human results, "… Baker McKenzie's 〚Ana-Maria〛 Norbury says that those worries need to be put into proper context. 'If you've got humans reviewing documents, humans will make mistakes. It's inevitable, I think. That's interesting to think about as we look at the idea that we want things to be perfect. Yes, technology is not completely perfect and that's an issue. Well, humans aren't perfect either. So you have to factor that into the commercial angles if we are driving efficiency.'").If you're still worried that AI will ruin the practice lives of lawyers, here's an instructive example from history. Professor Arthur Daemmrich has pointed out that the invention of the automatic pin making machine, which moved society away from the bespoke and slow hand-making of pins, had significant positive effects. As pins became less expensive, clothing also became less expensive (in part thanks to the cheaper pins and in part thanks to the new textile-making machines), and the demand for new clothing increased. ("Lower-cost pins produced by "intelligent" machines invented by Howe, Bagshaw, and others made it cheaper to produce cloth, combs, and other items. In turn, these industrial and consumer goods made possible greater consumption and supported overall economic growth, even while reducing demand for child labor."). That's not the whole story, of course, and the relationship of faster pin-making to cheaper goods had its own social complications. But the market finds its way, eventually. That'll happen, too, with AI and legal services. *See* Arthur Daemmrich, *Technology and Employment: pin making and the first industrial revolution long tail*, MEDIUM (Mar. 25, 2019) (on file with authors).

[81] Consider the following example:

> 〚W〛e did our own study in which we included a group of highly qualified lawyers and had them all do the exact same document review task. We then looked at the results to see how often they agreed with one another and how often they disagreed. As it turned out, they only agreed with each other 70% of the time, which is a shockingly low number. Another interesting part about that experiment was that we also trained our system to replicate the behavior of each person. When we measured how often the resulting individual AI systems disagreed with each other, it matched roughly what we saw in the humans, which was quite an interesting observation. It basically showed that we can capture individual human differences in knowledge. This means that based on the beliefs and attitudes of whoever is training the system, the results may differ, which takes us back to carefully selecting who will be providing the expertise and making sure they are clear on what they are trying to get the AI to learn.

AI FOR LAWYERS, *supra* note 65, at 76–77 (footnote omitted).

some of those needs often include a lawyer's ability to listen actively to what the client is saying and providing the client with a way of being heard more broadly. Our point is not that AI is destined to replace lawyers. Our point is that AI should replace some tasks that lawyers are currently doing in order to free lawyers up to do things that AI can't do.[82]

Thus, the issue for bankruptcy judges is going to be when estate-paid professionals should save the estate money and increase efficiency by turning to AI for certain tasks. As a recent conference discussing Casetext's own CoCounsel AI, the general conclusion was "'AI will not replace lawyers, but lawyers who use AI will replace lawyers who don't.'"[83] It's not that AI is *coming.* AI is *here,* and it's time to figure out the relationship of AI to the reasonableness of fees.

C. When Worlds Collide: Does Artificial Intelligence Change the Meaning of "Reasonable"?

Even though our last section generally endorsed the use of AI to drive better results for clients, AI poses multiple challenges for attorneys in private practice. Before specifically delving into AI's place in a § 330 analysis, it's important to address a few views on why attorneys are disinclined to use AI. If we can identify when it is reasonable not to use AI, it logically follows that attorneys should at least consider using AI in other aspects of handling a client's matter.

First, a reality check: we've been using AI already, and for a long, long time.[84] For one thing, we use research databases. We use Westlaw or Lexis or Fastcase or other databases because finding sources is faster when done by computer than by sitting in a musty area poring over books and pocket parts.[85] Neither of us worked in a law firm when Lexis first came out, so neither of us knows if lawyers were gnashing their teeth then, worrying about losing the ability to bill time by researching the old-fashioned way. Maybe they did. But they figured out how to make up that

---

[82] Anyone who has ever been frustrated by a chatbot or having to say "representative" during a customer service phone call knows what we mean.

[83] Jean O'Grady, *CaseText CoCounsel Event–Professor Stephen Gillers['s] Keynote Declares "The end of legal services as we know it,"* DEWEY B STRATEGIC (Mar. 23, 2023), https://www.deweybstrategic.com/2023/03/casetext-cocounsel-event-professor-stephen-gillers-keynote-declares-the-end-of-legal-services-as-we-know-it.html (last visited Mar. 25, 2023).

[84] We've been using other technology for a long time, too. *See, e.g.,* J. Scott Bovitz, *The Lawyer's Toolkit: A 30-Year Retrospective*, AM. BANKR. INST. J. 84 (June 2011).

[85] In case you don't remember (or never knew about) pocket parts, see https://en.wikipedia.org/wiki/Pocket_part (last visited Dec. 25, 2022). Yes, there are some reasons to use books and go to libraries, including that happy serendipity when a nearby book gives someone a fresh idea. We're not arguing that you should get rid of books. We're just saying that there's a time and place for the use of technology, too.

lost billable time. eDiscovery isn't new, either.[86] So there's no need to treat AI as something new and scary.

Now, let's dispense with the over-blown concern that AI is going to replace lawyers.[87] Legal services are not going to be provided entirely by robots for a myriad of reasons, but mostly because there is a very personal element to legal services that requires trust, empathy, and countless other interpersonal and intellectual skills that machines cannot replicate. Thus, the "rise of the robo-lawyers" fear[88] is a bit of a red herring. A more legitimate reason not to use AI is that the current state of some AI poses realistic concerns about accuracy, security, cost, or matter-appropriateness.[89] ChatGPT isn't ready to draft good pleadings, and it likely won't be ready to draft great ones for a while.[90] In those instances, an

---

[86] *See, e.g., eDiscovery*, DRUVA, https://www.druva.com/glossary/what-is-ediscovery-definition-and-related-faqs/ (last visited Dec. 25, 2022) ("Discovery refers to the first phase of litigation during which the parties to a dispute must provide each other with all relevant case evidence, including records and information. Electronic discovery, or eDiscovery, refers to discovery in which the information sought is in electronic format. This data is typically called electronically stored information or ESI.").

[87] *Cf. supra* note 52.

[88] For a fun and relatively recent discussion of robo-lawyering, see Gary Marchant & Josh Covey, *Robo-Lawyers: Your New Best Friend or Your Worst Nightmare*, 45 No. 1 LITIGATION 27, 27–28 (Fall 2018) [hereinafter *Robo-Lawyers*] ("AI will not evolve quickly enough in the near future to replace all lawyers. Rather, AI is replacing certain *types* of legal work and already has done so. AI's speed in completing certain tasks reduces the time human lawyers need to spend on those tasks. In the aggregate, that phenomenon reduces the need for human lawyers…. So there will be, and already has been, some displacement. But human lawyers are still indispensable, and technically proficient lawyers likely will be in even higher demand.").

[89] *See, e.g.,* Zeynep Tufekci, *What Would Plato Say About ChatGPT?*, N.Y. TIMES (Dec. 15, 2022) ("[O]n trickier topics or more complicated concepts, ChatGPT sometimes gave highly plausible answers that were flat-out wrong — something its creators warn about in their disclaimers."), https://www.nytimes.com/2022/12/15/opinion/chatgpt-education-ai-technology.html (last visited Dec. 15, 2022). If you'd like to read an actual law review article co-written by ChatGPT, see Andrew Perlman and ChatGPT, Open AI's Assistant, *The Implications of OpenAI's Assistant for Legal Services and Society* (December 5, 2022), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4294197 (last visited Dec. 22, 2022). For one of the eeriest experiences of an AI interaction that we've seen, check out https://twitter.com/i/status/1602353465753309195 (@DoNotPay founder Joshua Browder's tweet, "[t]he first ever Comcast bill negotiated 100% with A.I and LLMs"), available at https://twitter.com/jbrowder1/status/1602353465753309195 (last visited Dec. 28, 2022); *see also Company Prepping 'Robot' Lawyer Uses AI to Negotiate Lower Bills,* CREDITOR COLLECTIONS TODAY, https://www.creditorcollectionstoday.com/edition/weekly-garnishment-fair-debt-collection-2022-12-17/?open-article-id=22760160&article-title=company-prepping—robot—lawyer-uses-ai-to-negotiate-lower-bills&blog-domain=accountsrecovery.net&blog-title=account-recovery- (last visited Dec. 28, 2022).

[90] *See, e.g.,* Aimee Furness & Sam Mallick, *Evaluating the Legal Ethics of a ChatGPT-Authored Motion,* LAW360, available at https://www.law360.com/articles/1567985/evaluating-the-legal-ethics-of-a-chatgpt-authored-motion (Jan. 23, 2023). Both of us are waiting to see what happens when people use ChatGPT and an earbud to feed lines to someone at the podium in court. *See, e.g.,* Stephanie Wilkins, *Is ChatGPT Ready for Its Day in Court? Experts Say No Way,* LAW.COM, available at

attorney has a reasonable basis not to use AI, and the decision not to use AI would be reasonable under § 330. But what happens when AI is, in fact, accurate, secure, cost-effective, and matter-appropriate?

AI measurably changes the analysis when it comes to automating tasks previously handled in a completely manual fashion by lawyers. The mere existence of AI in the legal sphere creates an economic tension in the minds of many legal professionals who think that using AI will undermine their personal economics. It's very easy to imagine an attorney asking the question, "Why do I have to spend money on this AI tool that will decrease the number of hours that I can bill, thus reducing my compensation?"[91] If that economic tension persists to the point where a lawyer refuses to use AI in a particular matter for fear of lower fees, it raises significant concerns that the lawyer's bill for that matter may not pass muster under a § 330 reasonableness analysis, not to mention running afoul of that lawyer's own state ethics rule on the reasonableness of fees.[92]

Although we understand, and even sympathize, with the instinct that using AI will reduce our income, maybe that assumption isn't true. The

---

https://www.law.com/legaltechnews/2023/01/19/is-chatgpt-ready-for-its-day-in-court-experts-say-no-way/ (Jan. 19, 2023) (Foster J. Sayers III, general counsel and chief evangelist at contract management company Pramata, agreed. "One of the things we benefit from relative to having people who are members of the bar [arguing in court] is that they are accountable for ethical standards, and if they do not follow them, there are penalties, right? They're no longer allowed to practice law," he said. "When you have a technology [acting in court], then what's that accountability?"). We agree: using a robo-lawyer to practice runs afoul of the unauthorized practice rules (*see* MODEL R. PROF'L CONDUCT 5.5)—or it would if the robo-lawyer were an actual, well, lawyer, as Rule 5.5(a) states that "[a] *lawyer* shall not practice law in a jurisdiction in violation of the regulation of the legal profession in that jurisdiction, or assist another in doing so.") (emphasis added). So if a lawyer programmed the robo-lawyer to appear in court, the lawyer could be charged with a Rule 5.5(a) violation. The robo-lawyer itself, being non-sentient, wouldn't be. So ChatGPT itself won't be taking lawyer jobs away and, like any other tool, should be used judiciously (and ethically). But we wouldn't mind it if ChatGPT could Bluebook this article accurately, and we're willing to bet that our editor agrees.

[91] *See Robo-Lawyers*, *supra* note 88, at 31 (discussing the likely decrease in billable hours when lawyers use AI for certain tasks). For a blunter take, here's this thought:

> There's another piece to this puzzle; we didn't cover realization rates in the example above. We suspect the lawyer might have an easier time getting paid in full in the AI-enhanced situations. Improved realization rates are a core way hourly billing lawyers can do better financially through doing more efficient work. On average, US Biglaw firms have an 89% realization rate. That means that after discounting off their standard rate and reducing the hours billed to accommodate client demands, firms are leaving on average 11% of their potential billings on the table. Beyond that, many clients will write off additional charges, resulting in an even lower collected realization rate. In fact, this overall number hides important details. Clients often view partners—even very expensive ones—as good value. (As clients ourselves sometimes, we generally think they're right.) On the other hand, some clients refuse to pay for junior lawyers.

AI FOR LAWYERS, *supra* note 65, at 32–33.

[92] *See supra* note 14 (discussing MODEL RULE 1.5).

fallacy of the billable hour is the assumption that all billable hours charged by a particular professional deliver identical value. The brainpower behind some billable hours is well worth the $1,500-or-more per hour price tag, but having a $1,500-per-hour professional fill in the blanks on a form[93] does not deliver the same hourly value.

Look at the use of AI this way: We no longer use a telephone book to look up a phone number or address. We use a search engine, and we do so to save time that we can devote to more interesting things. A minute of our time spent looking through a phone book[94] takes a millisecond or less of search engine time. We measure the value of what we're doing not by how long it takes us to look up a phone number; we measure the value of using the number that we've found.[95]

That's why every hour of billable time—even when billed by the same professional—isn't equally valuable. (It's also why we think that the billable hour bears very little relationship to the actual value that the professional is providing to the client.[96]) AI tools are not replacing high-value lawyering;

---

[93] Presumably because there are no lower-billing professionals available to do that work for her.

[94] After locating one.

[95] Nor do we shy away from using our telephones, even though law firms feared that telephones could compromise client confidentiality when telephones first became a communication tool:

> As the world moved into the late twentieth century, the landline eventually gave way to the cordless phone, the cellular phone, and the smartphone. With each iteration of the phone, not only would the instruments for client communication change but concerns about the security of the communication and client confidentiality would arise. The confidentiality concerns and general resistance to change would often cause the legal profession to pause before embracing a new technology. Often late to the party, the legal profession would arrive armed with ethics advisory opinions on the permissibility and protocols for the newest technology. In fact, lawyers often adopted new technology at the urging of clients who had already adopted the technology, discovered safeguards, and insisted on their lawyers['] participation.

Jan L. Jacobowitz, *Chaos or Continuity? The Legal Profession: From Antiquity to the Digital Age, the Pandemic, and Beyond,* 23 VAND. J. ENT. & TECH. L. 279, 289 (2021) (footnote omitted).

[96] *See, e.g., Billing Judgment, supra* note 38, at 312–13 (discussing the problems with the billable hour); Nancy B. Rapoport, *Using General Counsel to Set the Tone For Work in Large Chapter 11 Cases,* 88 FORDHAM L. REV. 1727, 1728–29 (2020) (discussing specific examples of billable hour abuse) [hereinafter *General Counsel*]; Nancy B. Rapoport, *Client-Focused Management of Expectations For Legal Fees in Large Chapter 11 Cases,* 28 AM. BANKR. INST. L. REV. 39, 61–63 (2020) (arguing that billable hours do not reflect value to the client); Nancy B. Rapoport & Joseph R. Tiano, Jr., *Leveraging Legal Analytics and Spend Data as a Law Firm Self-Governance Tool,* 13 J. BUS. ENTREPRENEURSHIP & L. 171, 179–80 (2019) (discussing various mistakes made in time entry); 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, 1293 n.68 (2019) ("As one of us has said before (and as we both have thought, repeatedly), 'attention to file' has never told a single client what the biller actually did.") (citing Nancy B. Rapoport, *"Nudging" Better Lawyer Behavior: Using Default Rules and Incentives to Change Behavior in Law Firms,* 4 ST. MARY'S J. LEGAL MAL. & ETHICS 42, 86 (2014)); Stephen L. Rispoli, *The Walking Dead: Psychological Biases That Keep the Billable Hour Alive,* 43 J.

instead, AI tools are automating tasks which, if done manually, may not justify the $1,500-per-hour rate. There is a tension between AI and reasonable billing only if one believes the billable hour fallacy.[97]

Indeed, when AI promises to be more efficient, more accurate, sufficiently secure, and cost-effective for a client, lawyers who choose not to use AI or other technology for certain tasks are on the wrong side of § 330's reasonableness standard. A lawyer should never put personal economics ahead of the client's best interest (including charging a reasonable fee under § 330). Moreover, a § 330 analysis, like virtually everything else in the law, should adapt to the current state of play, not cling to a bygone era informed only by experience and a gut hunch. Indeed, the § 330 analysis should not look at time-by-rate figures for a body of work that was considered reasonable in a pre-AI era and conclude that the same time-by-rate figures are reasonable now, when AI tools should have been used to keep costs down. Practitioners and judges should not only consider their personal experience and a gut hunch of what is reasonable under § 330, but also acknowledge the limitations of knowledge and gut hunches when comparing costs from a non-AI era to today's legal industry.

At the end of the day, the worlds may collide, but they are destined to co-exist peacefully. To comply with § 330, lawyers need to be incentivized and fairly compensated when using AI that is cost-effective and reliable. And the converse is true: professional compensation should be scrutinized carefully and considered unreasonably high when there is an unjustified failure to use safe, secure, reliable, and cost-effective AI. As AI gains more industry acceptance, practitioners and courts will wind up having to consider the possible use of AI as being a precondition for reasonableness.

D. Should "Reasonable" Mean Something Different in Consumer Cases?

A relatively recent survey of consumer lawyers[98] indicated that 79.02%

LEGAL PROF. 187, 188–89 (2019) ("The billable hour, by contrast, is inefficient and does not encourage innovation."); Susan Saab Fortney, *The Billable Hours Derby: Empirical Data on the Problems and Pressure Points*, 33 FORDHAM URB. L.J. 171 (2005) (discussing the increase in billable hour expectations); Susan Saab Fortney, *Soul for Sale: An Empirical Study of Associate Satisfaction, Law Firm Culture, and the Effects of Billable Hour Requirements,* 69 UMKC L. REV. 239 (2000) (discussing the stressors associated with billable hours).

[97] In fact, this analysis raises another question: should law firms be able to charge a higher hourly rate above the "normal" hourly rate when lawyers are handling only higher value work? Right now, a hourly rate takes into account a mix of low value tasks as well as high value work. If the low value tasks are stripped away, that invites the question whether the high value work justifiably commands a higher hourly rate. We suspect that market forces will dictate the ultimate answer here.

[98] RONALD L. BURGE, UNITED STATES CONSUMER BANKRUPTCY LAW ATTORNEY FEE SURVEY STATES REPORT 2017–2018 (Jan. 19, 2020), available at https://www.nclc.org/images/pdf/litigation/tools/report-atty-fee-survey.pdf; for an earlier, more comprehensive fee study, see

of consumer bankruptcy law firms practice in groups of four or fewer lawyers.[99] Given that, "on average, attorneys charge $1,313 to assist with chapter 7 cases and $3,792 for chapter 13 cases,"[100] we imagine that there is not a lot of available cash to invest in developing AI tailored to their work. As authors Noah Waisberg and Alexander Hudek point out, "solo and small firms are a lot like the masses, where the technology needs to be useful and cost-effective, so much so that it just becomes part of what they do."[101]

Lois R. Lupica, The Consumer Bankruptcy Fee Study Final Report (Dec. 2011), available at https://abi-org.s3.amazonaws.com/ Endowment/Research_Grants/CFSFinalReport_Final_Dec7.pdf. For an excellent compendium of research on consumer bankruptcy law issues, see http://www.consumerbankruptcyproject.org/; *see also* Pamela Foohey, Robert M. Lawless, & Deborah Thorne, *Portraits of Bankruptcy Filers*, 56 Ga. L. Rev. 573 (2022).

[99] This study observed:

> As it appears to be across all niche areas of Consumer Law, sole practitioners still dominate the niche area of Consumer Bankruptcy Law by a wide margin. 46.5% of all survey participants reported being solo practitioners, which nevertheless is a significant decrease from the last survey when it was 57.4%. When two and three and four member firms are added, small firms who primarily practice Bankruptcy Law make up 79.02% of all Consumer Bankruptcy Law firms, down significantly from the last survey when it was 87.6%. On the other hand, the percentage of large firms (5 or more attorneys) has increased to 20.98%, from 12.4% of Bankruptcy Law firms have 5 or more attorneys.

> In such a small firm circumstance, law office economics are often more important to the practitioner than they may be to large law firms who may count on a larger and more varied client base for its necessary financial support. Consumer Bankruptcy Law has always meant dealing with a different kind of clientele than typical large law firm practices, and often involves a one-time attorney-client relationship necessitated by a single legal problem.

Burge, *supra* note 98.

[100] Foohey et al., *supra* note 98, at 589.

[101] AI for Lawyers, *supra* note 65, at 45 (2021).

For these firms, AI can be part of other tools[102] that the firms already use.[103] The technology has to be simple,[104] along the lines of a Turbo Tax-type of program, and it has to be of a type that augments—rather than substitutes for—a lawyer's own judgment.[105]   And unlike our recommendations for

---

[102] There are plenty of tools out there:

> While legal research is a major area of AI innovation, machine learning and other forms of AI are emerging, including predictive coding, which "uses natural language and machine learning techniques against the gigantic data sets of e-discovery."
>
> Other companies are focused on predictive outcomes. Premonition mines data to "find out which attorneys win before which judges." Lex Machina "mines litigation data, revealing insights never before available about judges, lawyers, parties, and the subjects of the cases themselves, culled from millions of pages of litigation information."
>
> Neota Logic uses AI to power expert systems that help companies manage compliance with laws and regulations. Other companies use AI to help manage contracts – from contract review to contract drafting, from contract classification to contract interpretation.

What Solo and Small Firms Should Know About Artificial Intelligence, PREMONITION.AI (Feb. 6, 2017), available at https://premonition.ai/solo-small-firms-know-artificial-intelligence/. Randy Gordon has pointed out to us that one of the ethics risks of machine learning is "[w]hat happens when an AI program learns something from confidential information and then incorporates it into the way it 'thinks'?". Email from Randy Gordon to Nancy Rapoport (Dec. 28, 2022) (on file with authors) (citing to an observation that he heard from Milan Markovic). For a fun read about the fears of technology undermining the duty of confidentiality, see Jan L. Jacobowitz, *Chaos or Continuity? The Legal Profession: From Antiquity to the Digital Age, the Pandemic, and Beyond*, 23 VAND. J. ENT. & TECH. L. 279, 289–90 (2021) (discussing the fear that the telephone and fax would compromise client confidentiality).

[103] AI FOR LAWYERS, *supra* note 65, at 45–46 ("For example, Casetext has its Cara tool, so that if you want to quickly look at cases that you can cite in order to respond to a brief, you can just upload your opponent's brief and it will spit out a profile of the case law that you need to respond to. It's super useful, super easy to use, and powered by a machine learning algorithm on the back end. That's one effective way of using AI. It's also affordable and easy to use, making it a good value."); *see also id.* at 46 There is one company for example that has developed a program that will generate all necessary case discovery documents from a complaint. This would be a huge cost saving for small firms. Sure, using AI to help with "back-end" operations—such as automating email responses or running a targeted marketing campaign—is a huge benefit to solos, but ultimately, I'd like to get to the point where AI applications can be used to improve the quality of the substantive work that solos and smalls do because that above all would increase meaningful access to justice."). We know that this type of infrastructure investment isn't inexpensive, but then, neither is a tool like Westlaw or Lexis, and law firms have managed to find ways to deal with those costs. *See supra* note 18.

[104] AI FOR LAWYERS, *supra* note 65, at 46 ("Like many of my colleagues, I am a busy practicing lawyer so I don't have time to spend a day learning something new. Nor do I have a tech consultant on staff to help me out. So to make my technology selections, I apply a 10-minute rule. This means that if I can't figure out how to use a tech product in 10 minutes, I will probably not employ it in my practice.") (quoting Carolyn Elefant).

[105] As one of our friends, lawyer Billy Brewer, puts it, "I view technology in the same way I view paralegals. They are not only a useful tool, but also a crucial one in putting an attorney in position to provide legal services in an efficient and cost-effective way, but the attorney has to be in control." Email from William Brewer to Nancy Rapoport, June 27, 2022 (on file with authors).

BigLaw,[106] where we *are* recommending that courts presume that certain types of tasks are best started by machines, SmallLaw and SoloLaw shouldn't have to justify their use of humans to initiate work (other than with the same type of billing judgment justifications that all lawyers must use).[107]

But what of the Upsolves of the world—the algorithms that do most of the heavy lifting of preparing a consumer bankruptcy filing? The Legal Services Corporation touts Upsolve as a "TurboTax for Bankruptcy."[108] Legal aid organizations can use it to "slash[ ] the time it takes [them] to help someone file for bankruptcy from about 9 or 10 hours to 90 minutes."[109] Is it a tool that makes lawyers more efficient, or is it itself so "intelligent" that its use constitutes the practice of law?

The concept of the "practice of law" is fuzzier than you'd think.[110] One of us typically explains the practice of law as the application of legal principles to the particular facts of a client's needs.[111] But states differ on

---

[106] *See infra* notes 177–186 and accompanying text.

[107] At least not yet. At some point, though, the consumer side of practice will have much more cost-effective software, thus justifying a machines-first approach for certain tasks. But this point is relevant for BigLaw, Mid-SizeLaw, SmallLaw, and SoloLaw alike: sometimes, AI will actually find more valuable information than a human would:

> Corporates who deploy legal AI tend to realize value in two ways. Many use AI to do work more efficiently. Since—for most businesses, apart from those that bill hourly—there's a strong view that doing the same work in less time is better, this is a pretty easy way to realize a return on investment. *The more interesting way corporates find value is by being able to use AI to uncover information they wouldn't have been able to find without it.* This can enable companies to make better, more informed business decisions and nimbly respond to environment changes. Here, the benefits can be hard to measure, but enormous.

AI FOR LAWYERS, *supra* note 65, at 34–35 (emphasis added).

[108] *For Legal Aid Organizations, Upsolve Offers a Way to Do Bankruptcies 10 Times Faster and Help More People,* LEGAL SERVICES CORP.GOV, available at https://www.lsc.gov/i-am-grantee/model-practices-innovations/technology/legal-aid-organizations-upsolve-offers-way-do-bankruptcies-10-times-faster-and-help-more-people. That webpage's splash screen has the subheading to which we refer: "Dubbed as a 'TurboTax for Bankruptcy,' Upsolve is an up-and-comer in the burgeoning legal tech scene and [is] increasingly popular among LSC grantees." *Id.* Upsolve uses the same TurboTax reference: "Upsolve is a nonprofit tool that helps you file bankruptcy for free. Think TurboTax for bankruptcy." UPSOLVE.ORG, available at https://upsolve.org/learn/on-boarding-guide-for-legal-aid-staff/.

[109] *For Legal Aid Organizations, Upsolve Offers a Way to Do Bankruptcies 10 Times Faster and Help More People,* LEGAL SERVICES CORP.GOV, available at https://www.lsc.gov/i-am-grantee/model-practices-innovations/technology/legal-aid-organizations-upsolve-offers-way-do-bankruptcies-10-times-faster-and-help-more-people.

[110] And the unlicensed practice of law is an ethics violation. *See* MODEL R. PROF'L CONDUCT 5.5.

[111] That would be the one of us who gets to teach for a living. And Professor Roy Simon explains the concept beautifully: "What activities constitute the unauthorized practice of law? The phrase 'unauthorized practice' is inherently ambiguous. The classic test of unauthorized practice is the exercise of legal judgment by a nonlawyer, especially the application of law to a particular set of facts." ROY D. SIMON, JR., SIMON'S NEW YORK RULES OF PROF'L CONDUCT ANN. § 5.5:9.

what they consider to be the practice of law,[112] as the Second Circuit observed in *Lola v. Skadden, Arps, Slate, Meagher & Flom LLP*.[113] In that case, the issue was whether a contract attorney conducting document review was practicing law (and thus not entitled to argue for overtime pay), and the court came up with an *anti*-Turing Test[114] of sorts: if a machine can do what the human is doing, then the task doesn't involve the practice of law.[115] But not every court agrees, and, in particular, not every court agrees when Upsolve is involved.[116]

In a massive opinion, the bankruptcy court in *In re* Peterson[117] concluded that Upsolve's program did indeed constitute the practice of law in Maryland. Upsolve's software, which is limited to extremely simple

---

[112] *See, e.g.*, RONALD D. ROTUNDA & JOHN S. DZIENKOWSKI, LEGAL ETHICS—THE LAWYER'S DESKBOOK ON PROFESSIONAL RESPONSIBILITY § 5.5-3 (2021–2022 ed., July 2021 update) ("What constitutes the unauthorized practice of law is a matter of state law.").

[113] 620 F. App'x. 37, 42 (2d Cir. 2015) (not for publication).

[114] For the world's pithiest discussion of the Turing Test, see *infra* note 144. We're still a little freaked out by the Bing AI that fell in love with a reporter. *See, e.g.*, Aaron Mok & Sindhu Sundar, *People are sharing shocking responses from the new AI-powered Bing, from the chatbot declaring its love to picking fights*, INSIDER (Feb. 16, 2023), https://www.businessinsider.com/bing-chatgpt-ai-chatbot-argues-angry-responses-falls-in-love-2023-2 (last visited Mar. 25, 2023).

[115] The court explained:

> The gravamen of Lola's complaint is that he performed document review under such tight constraints that he exercised no legal judgment whatsoever—he alleges that he used criteria developed by others to simply sort documents into different categories. Accepting those allegations as true, as we must on a motion to dismiss, we find that Lola adequately alleged in his complaint that he failed to exercise any legal judgment in performing his duties for Defendants. *A fair reading of the complaint in the light most favorable to Lola is that he provided services that a machine could have provided.* The parties themselves agreed at oral argument that an individual who, in the course of reviewing discovery documents, undertakes tasks that could otherwise be performed entirely by a machine cannot be said to engage in the practice of law.

Lola, 620 F. App'x at 45 (emphasis added). *See also* Michael Simon, Alvin F. Lindsay, Loly Sosa, & Paige Comparato, *Lola v. Skadden and the Automation of the Legal Profession,* 20 YALE J. L. & TECH. 234, 251 (2018) ("Though it was developed more than half a century before the Second Circuit's questioning at the *Lola* oral argument, the Turing Test's line of questioning seems strikingly familiar. Indeed, both Alan Turing and the Second Circuit realized that machines would not only replicate rote tasks, but would also be increasingly able to engage in more complicated data processing."). We imagine that having to make that argument ("I exercised no judgment whatsoever") had to have been embarrassing for the plaintiff.

[116] For a discussion of Legal Zoom and the practice of law, see, e.g., Jordan Bigda, *The Legal Profession: From Humans to Robots,* 18 J. HIGH TECH. L. 396, 406–07 (2018). That article argues in part that the ethics rules for artificially intelligent lawyers should mimic the rules for paralegals: that AI-lawyers should be able to work anywhere, as long as they report to lawyers licensed in the proper jurisdiction. *See id.* at 425.

[117] *In re* Peterson, 2022 WL 1800949 (Bankr. D. Md. 2022).

chapter 7 cases[118] and which creates forms based on the user's answers to specific questions, generates the exemptions for the user—and the application of the law of exemptions to the facts of a specific user's situation was—in the court's opinion—constituted the practice of law.[119] The court observed:

> The Court acknowledges that Upsolve's mission may indeed be in line with the spirit and purpose of protecting prospective debtors from incompetent representation. However, good faith and pure intentions alone do not negate the "character of the act." By selecting exemptions for users, the manner in which Upsolve's software operates embodies the character of practicing law and application of legal knowledge when considering the intended constrictions of Maryland's practice of law regulations and the facts and circumstances presently before the Court. For these reasons, the Court finds that Upsolve engages in the unauthorized practice of law by presenting limited exemption options to users and by selecting exemptions for Upsolve users via its software.[120]

Fair enough: if the practice of law is the application of the law to specific facts, then yes, Upsolve's algorithms that select appropriate exemptions could constitute the practice of law. But, in *Upsolve, Inc. v. James*,[121] a district court decided that New York's unauthorized practice of law provisions might infringe on Upsolve's First Amendment[122] right to give basic legal advice. We can't read too much into this opinion, as the court was only ruling on Upsolve's motion for a preliminary injunction that would prevent New York's Attorney General from targeting Upsolve for violating the unauthorized practice of law rules.[123] But the *James* court did rule that

---

[118] *See id.* at *7 ("Upsolve represents that these criteria ⟦described in the opinion⟧ allow only individuals with 'straightforward, routine,' 'uncomplicated,' 'simple, no-asset Chapter 7 cases' to use the software.").

[119] *See id.* at *42, *44, *46–*48.

[120] *Id.* at 50.

[121] 604 F. Supp. 3d 97 (S.D.N.Y. 2022).

[122] Yes. We were surprised that this argument carried the day, too.

[123] 604 F. Supp. 3d at 102. As the court explained,

> At the outset, the Court underscores that an abstract "right to practice law" is not at issue in this narrow challenge. The Court does not question the facial validity of New York's UPL rules to distinguish between lawyers and non-lawyers in most settings, and to regulate all sorts of non-lawyer behavior.[6] Instead, the issue here is a narrow one: whether the First Amendment protects the precise legal advice

the type of advice that Upsolve gives at least has a chance of being considered protected speech.

> At its core, Plaintiffs' action is indisputably speech, not conduct. "If speaking to clients is not speech, the world is truly upside down." The Court shall not ignore common sense by construing Plaintiffs' legal advice as something it is not.
>
> That logic applies seamlessly to the statute at issue here. On its face, New York's UPL rules "may be described as directed at conduct" of acting as a lawyer, "but as applied to plaintiffs the conduct triggering coverage under the statute consists of communicating a message." In other words, Plaintiffs' violation of the law "depends on what they say" to their clients. If ⟦Upsolve's⟧ Justice Advocates provide non-legal advice about a client's debt problem (by, for example, advising that person to cut down on spending to pay off debts), the UPL rules do not apply. But if they provide legal advice about how to respond to the client's debt problem (by advising that person on how they should fill out the State-Provided Answer Form, based on their specific circumstances), the UPL rules forbid their speech. Their actions are therefore, by definition, content-based speech.[124]

Why does the Upsolve conundrum about the unauthorized practice of law matter? For most of what we're suggesting—that § 330 should require lawyers to use AI for some of their work, if they want to keep their fees reasonable—Upsolve's fight against UPL rules doesn't matter at all.[125] There are other creative options out there to help those without means to file for bankruptcy protection, such as the United States Bankruptcy Court for Central District of California's "Don't Have an Attorney" web page.[126] But

---

that Plaintiffs seek to provide, in the precise setting in which they intend to provide it. The Court holds that it does.

Id. at 111–12.

[124] *Id.* at 114 (citations omitted).

[125] Personally, we'd rather have a smart algorithm help someone than have a *bad* lawyer try to do it, but that's a topic for another day. In a perfect world, good lawyers would be able to solve all pro bono needs. But we're not in a perfect world. And here's a thought: What if a local rule required Upsolve and Upsolve-like services to disclose, at the bottom of all petitions and schedules, that a computer drafted the documents with minimal review by an attorney, and also required the service to provide contact information for the reviewing attorney, in case something went wrong with the petition and schedules? Would that be a good compromise?

[126] https://www.cacb.uscourts.gov/dont-have-attorney (last visited Dec. 26, 2022). Hat tip to Scott Bovitz for pointing us to this website.

as AI develops, the issue of whether it constitutes the practice of law *will* have a bearing on just what types of AI lawyers should use in particular situations.

PART 4: WHICH PLAYERS IN OUR BANKRUPTCY ARENA SHOULD CALL FOR CHANGE?

It's pretty clear that the stage is set for a change to a court's § 330 analysis, but absent a legislative mandate requiring a technology assessment, the question is "Who will catalyze the change?" Some constituency in the bankruptcy industry must be the change agent here. There are four natural candidates for being this catalyst: (1) mega-debtors;[127] (2) creditors, lenders and other stakeholders funding the operations of the debtor-in-possession; (3) the United States Trustee Program; and (4) bankruptcy courts.

One might think that a mega-debtor faced with massive legal spending would want to control professional fees. What seems beyond peradventure is that the debtor is economically motivated to control professional fees, making it the ideal constituency to catalyze change in the § 330 analysis. As one of us has written before, the general counsel or in-house legal department of the debtor could create guardrails around reasonable fees and should be inclined to so do.[128] In practice, it is rare for a mega-debtor, specifically the general counsel of a mega-debtor, to self-initiate professional fee cost-control measures.[129] We suspect that several dynamics of the

---

[127] People can quibble over how large a debtor has to be to be a "mega-debtor." One option is to use the definition in the United States Trustee Program's 2013 Guidelines. *See* Appendix B Guidelines for Reviewing Applications for Compensation and Reimbursement of Expenses Filed Under United States Code by Attorneys in Larger Chapter 11 Cases, 78 FED. REG. 36,248, 36,249 (June 17, 2013) ("chapter 11 cases where the debtor's petition lists $50 million or more in assets and $50 million or more in liabilities, aggregated for jointly administered cases and excluding single asset real estate cases as defined in 11 U.S.C. 101(51B)"). Another way to define a mega-case (and thus a mega-debtor) is to look at a court's definition. *See, e.g., Mega Cases and Designated Cases with Omnibus Hearing Dates and Times,* United States Bankruptcy Court for the District of Nevada, https://www.nvb.uscourts.gov/case-info/mega-cases/ (last visited Dec. 30, 2022) ("Mega cases are single case or set of jointly administered or consolidated cases that involve $100,000,000 or more, 1000 or more creditors or a hold a high degree of public interest."). And yet another possibility is to define a mega-case as one in which the resources of a bankruptcy court are stressed too thin. We're willing to bet that people know mega-debtors when they see them. *Cf.* Jacobellis v. State of Ohio, 378 U.S. 184, 197 (1964) (the famous Justice Stewart line in his concurrence, which is "I know it when I see it.").

[128] *General Counsel, supra* note 96, at 1732.

[129] *See, e.g., Billing Judgment, supra* note 38, at 319–22 (no single entity is pushing the too-high bill back across the table to the professional); Nancy B. Rapoport, *Telling the Story on Your Timesheets: A Fee Examiner's Tips for Creditors' Lawyers and Bankruptcy Estate Professionals,* 15 BROOK. J. OF CORP. FIN. & COM. L. 359, 365 n.27 (2021) (same); Nancy B. Rapoport, *Want to Take Control of Professional Fees in Large Chapter 11 Bankruptcy Cases? Talking With Your Client's General Counsel is a Good First Step,* Harvard Law School Bankruptcy Roundtable, July 28, 2020, available at http://blogs.harvard.edu/bankruptcyroundtable/2020/07/28/want-to-take-control-of-professional-fees-in-large-chapter-11-bankruptcy-cases-talking-with-your-clients-general-counsel-is-a-good-first-step/

bankruptcy process cause inaction by the estate in terms of professional fee cost control. Because, in particular, big bankruptcies are highly intense, one-off transactional matters, incumbent executive teams of a debtor rarely have extensive experience in bankruptcy and spend much of their time trying to rectify a distressed situation while conducting day-to-day business. This frenzy leaves little time to learn the macro-concepts in a bankruptcy process, let alone the intricacies of the professionals' bills. A lack of domain expertise and the significant time constraints for decision-making mean that the estate becomes heavily reliant upon the debtor's professional team. Therein lies the conflict. The group most suited to help the estate review professionals are the professionals whose fees will be scrutinized and questioned. Even though the debtor itself is incentivized to control professional fees, the practical reality is that the debtor rarely does it.[130] If the debtor isn't undertaking to control professional fees on its own account, we see little chance that mega-debtors will catalyze a change in the § 330 analysis.

Those with a passive, economic interest in the bankrupt estate, such as DIP financers, legacy secured creditors (especially those paying for professional fees out of a cash collateral carve-out), unsecured creditors, and stockholders are the second constituency that could operate as the change

---

(same); *General Counsel, supra* note 96, at 1732 (same); Nancy B. Rapoport, *Client-Focused Management of Expectations for Legal Fees in Large Chapter 11 Cases*, 28 AM. BANKR. INST. L. REV. 39, 43 (2020) (same); Nancy B. Rapoport & Joseph R. Tiano, Jr., *Leveraging Legal Analytics and Spend Data as a Law Firm Self-Governance Tool*, 13 J. BUS. ENTREPRENEURSHIP & L. 171, 176–77 (2019) (factors that drive legal bills skyward); 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, 1273–74 (2019) (same); Nancy B. Rapoport, *The Case for Value Billing in Chapter 11*, 7 J. BUS. & TECH. LAW 117, 139 n.116 (2012) (same); Nancy B. Rapoport, *Rethinking Fees in Chapter 11 Bankruptcy Cases,* 5 J. BUS. & TECH. LAW 263, 265 (2010) ("When it comes to estate-paid Chapter 11 fees, the professionals are pushing their bills across the table, but on the other side of the table, the client charged with evaluating the reasonableness of the bill may have no meaningful way to put the bill into context. Moreover, because no single client is charged with footing the professionals' entire bill, it's possible that none of the clients really cares how much these professionals are charging. In essence, the client sitting at the table is a stand-in for entities with little voice (and little individual stake) in determining how the professional makes his billable decisions. And sitting at another table, far away, is the bankruptcy court.") (footnotes omitted).

    [130] A good lawyer partners with the client to choose the right means for each task. *See* MODEL R. PROF'L CONDUCT 1.2 (" … a lawyer shall abide by a client's decisions concerning the objectives of representation and, as required by Rule 1.4, shall consult with the client as to the means by which they are to be pursued"). As one of our favorite lawyers puts it:

> A lawyer must be able to provide efficient and effective service to the client. It will be up to the lawyer and the client to determine when artificial intelligence is helpful and when it is a hinderance. And that lawyer must be able to explain her work and billing choices to the fee examiner and the court. Also, if I can't handle something efficiently, there is a service that will do it for my client (e.g., ACE attorney service, remote deposition services, certificateofservice.com). I tell the client why I have chosen the outside vendor. They never complain.

Email from J. Scott Bovitz to Nancy Rapoport, Dec. 25, 2022 (on file with authors).

agent for a more robust § 330 analysis. These economic stakeholders often see any money exiting the debtor to pay professionals as being "their" money, which they prefer to remain in the debtor's hands to fund operations and growth, rather than paid to third-party professionals. When there's a carve-out to pay professionals, one would think that there'd be a compelling reason to want to control fees. But the challenge is that economic stakeholders tend to have only indirect influence in the bankruptcy process. Creditors can object to fees, and some do (especially when there are other internecine battles going on behind the scene), but most don't. An unsecured creditors' committee or secured creditor with the purse strings will grumble, but not protest too loudly. (After all, the committee's professionals are filing fee applications, too.) Members of this group of funders often have disparate interests and, much like the debtor, they take strategic advice on bankruptcy matters from the very same professionals whose fees will be scrutinized.

The United States Trustee Program (USTP) is the third constituent that could catalyze a change in § 330. After all, the USTP is charged with safeguarding the integrity of the bankruptcy process and reviews fee applications as a component of that mission.[131] But the primary reason that we don't see the USTP as the change agent is that the USTP tends not to be an "activist" in the bankruptcy process. It's a watchdog, for sure, but it argues for enforcing the Bankruptcy Code and Rules, rather than reimagining them. That said, the USTP has created guidelines for large cases,[132] so nothing's stopping the program from considering guidelines about the use of technology.

This leaves bankruptcy courts themselves as the last constituent to catalyze a change in the § 330 analysis. Of our four possibilities, we think

---

[131] *See* PL 116-325, Bankruptcy Administration Improvement Act of 2020, available at https://www.congress.gov/116/plaws/publ325/PLAW-116publ325.pdf. In respect of the United States Trustees Program, Congress recited the following findings when passing legislative to raise the quarterly fees payable to the USTP in Chapter 11 cases:

> FINDINGS.—Congress finds the following:
>
> (1) Because of the importance of the goal that the bankruptcy system is self-funded, at no cost to the taxpayer, Congress has closely monitored the funding needs of the bankruptcy system, including by requiring periodic reporting by the Attorney General regarding the United States Trustee System Fund.
>
> (2) Congress has amended the various bankruptcy fees as necessary to ensure that the bankruptcy system remains self-supporting, while also fairly allocating the costs of the system among those who use the system.
>
> (3) Because the bankruptcy system is interconnected, the result has been a system of fees, including filing fees, quarterly fees in chapter 11 cases, and other fees, that together fund the courts, judges, United States trustees, and chapter 7 case trustees necessary for the bankruptcy system to function.

[132] *See supra* note 63.

that bankruptcy courts are best positioned to make the needed change in the legal standard of how professional fees are evaluated. First, they can tap into their own experience[133] to contextualize whether innovations and technological advancements are appropriate in a case. Second, bankruptcy courts are well-positioned to require evidence on the use or non-use of innovations and technology and can also require the parties to provide industry-wide evidence about the net effect of certain technology. Last, these courts are already familiar with undertaking a § 330 analysis. They are best suited to develop a thoughtful interpretation of § 330 that factors new methods of delivering services into account.

There are countervailing forces, though. Article I judges serve 14-year terms,[134] and if they'd like to seek reappointment, then they have to think carefully about how they do their jobs, because part of the reappointment process involves public comment.[135] We aren't saying that judges are making their decisions with reappointment at the top of their minds, but judges are human, and we'd bet that the concept of reappointment factors in, at least a bit, as they're figuring out *how* to phrase rulings that could be controversial. Are judges ready to push back by asking fee applicants for a technology component to fee applications? More specifically, are those lawyers who are choosing a venue going to avoid jurisdictions that request such information in fee applications?

Maybe the gut hunch that judges have that they *know* (overbilling) when they see it[136] is right in the small cases but less so in the big ones, given the immense volume of professional fees.[137] In essence, we believe that, for

---

[133] Yes, after they've been on the bench a while, their experience may be attenuated. So is ours. But fee applications have a way of updating the canon of current bankruptcy practice. We see what's happening in cases in part by reading time entries across a wide variety of cases.

[134] *See* 28 U.S.C. § 152(a)(1) (setting forth the 14-year term).

[135] *See, e.g.*, Thomas M. Horan, *The Selection and Appointment of Bankruptcy Judges*, 34 AM. BANKR. INST. J. 48 (Mar. 2015). On a similar note, a judge that wishes to return to private practice after time on the bench may be disinclined to make waves over fees amongst members of the bankruptcy bar.

[136] *Cf.* Jacobellis v. Ohio, 378 U.S. 184, 197 (1964) ("I know it when I see it ….") (Stewart, J., concurring); *see also In re* Lynch, 2017 WL 416782, *8 (Bankr. N.D. Ohio 2017) (unreported case) ("This Court has more than twenty years' experience in evaluating attorney fee applications and, thereby, assessing the competence and quality of work of attorneys who practice before it. After reviewing the evidence presented and evaluating Hyde's work in this case and the adversary case, the Court can only conclude that she took advantage of [the client], a client who had a benefactor with the resources to pay her fees.").

[137] For an example of a bankruptcy court that was able to see unreasonable billing without the need for any complicated data analysis, see, e.g., *In re* Spurlock, Case No. 21-31957, United States Bankruptcy Court for the Southern District of Ohio, Docket No. 38 *2 (Aug. 1, 2022) (disallowing a portion of a fee application in a chapter 13 case for which the professional had requested the full no-look amount, with the court explaining that "[h]ere, the court does not find that the actual and necessary work required to effectively represent the Debtor in this case supports an award of the maximum allowable flat fee as

a § 330 analysis, every bankruptcy judge should expect legal professionals and other estate-paid professionals to use industry-accepted innovations and technology or explain to the reasons for its not doing so. Courts should use legal spend analytics tools, whether *sua sponte* or via a court order to the parties, to calculate the time and cost savings resulting from the use or non-use of today's technology. Gut hunches as to reasonable time and cost from a bygone era when technology was not part of the day-to-day fabric of delivering services is not the way to fulfill the legislative mandate of § 330. Bankruptcy courts should use data to augment their own experience.

PART 5: WHY REIMAGINING REASONABLENESS IS (MOSTLY) A GOOD IDEA

> If you want to view paradise
> Simply look around and view it
> Anything you want to, do it
> Want to change the world?
> There's nothing to it….[138]

> We're "[b]uilding a plane while flying it."[139]

A. Connecting the Overriding Law and Policy of § 330 with 21st Century Technology

If, as the two of us believe, AI will become an increasingly common part of the practice of law because its proper use allows lawyers to be more efficient,[140] then the case law surrounding § 330 should evolve to recognize

---

reasonable compensation.").Judge Christopher Klein has pointed out to us that there is already a mechanism for creating efficiencies, including technological efficiencies: fixed fees put the pressure on professionals to maximize profit by minimizing waste. *See* email from Hon. Christopher Klein to Nancy Rapoport (Jan. 28, 2023) (on file with authors).

[138] Leslie Bricusse & Anthony Newley, *Pure Imagination,* WILLY WONKA AND THE CHOCOLATE FACTORY (Paramount Pictures 1971).

[139] *Cf. On Building a Plane While Flying It*, available at https://maisonbisson.com/post/on-building-the-plane-while-flying-it/ (Mar. 26, 2019); available at https://adland.tv/adnews/eds-airplane-2000-060-usa (the EDS "building an airplane while flying it" advertisement).

[140] Here, in a nutshell, is the tension between what clients say they want and what true efficiency might dictate:

> There's also a cost factor that comes into play. [Here is a] true story of a senior attorney at a major firm, Matt, who explained that he could do the contract review project in two hours and that it would take an associate two days. "But the client doesn't feel like paying me to do the project in two hours at $1,000 an hour, so junior lawyers do it instead in two days," explained Matt. Of course, this was not as cost-effective to the client. If it was going to take Matt two hours or cost $2,000

that efficiency.[141]   It will be up to bankruptcy courts to determine when lawyers should have used AI to perform certain tasks (much as it is up to the courts to monitor the current use of technology like Lexis or Westlaw), and thus it will be up to the professionals who are submitting fee applications to justify when they used humans (rather than AI) and when they used humans *after* doing a first cut at the task by using AI.[142]   Billing judgment is still billing judgment.[143]   For that matter, judgment is judgment,

> and an associate would charge $300 an hour but it would take roughly 16 hours,
> or $4,800, Matt was not saving the client money by having associates do the work.

AI FOR LAWYERS, *supra* note 65, at 134–35; *see also id.* at 135 ("The truth is, however, even if you had the top partners at Biglaw firms doing the reviews, it would still be problematic because they couldn't cover as much ground as AI. They're still human, and they would still have to read the contracts. While they would likely have a better idea of what to look for and where to find it, the stuff you're looking for is not always where it's supposed to be. For example, Noah once saw a change of control clause in a notice section, and that's not something you'd expect. It shouldn't have been there, but it was. Either way, a senior partner is still not faster than AI.").

[141] Those lawyers who love the billable hour—in other words, those who aren't paying attention to mounting fees—will likely hate any analysis that encourages such efficiency. But those lawyers who have found their way to fixed fees, at least for some matters, will want to be as efficient as possible. *See, e.g.*, AI FOR LAWYERS, *supra* note 65, at 34 ("In a fixed-fee situation, lawyers who can generate the same amount of output with less effort are going to make more profit. Fixed-fee work can even be very profitable for firms, even at lower prices, if the firms get more efficient. Happily, there tends to be lots of room for more efficient work in law practice.").

[142] Our friend Ivy Grey suggested one such application of AI:

> A lawyer can write the first draft of the complaint in MS Word, then a secretary can insert field codes for payee, amount, dates, and address and automatically generate individual preference complaints using the mail merge function. Since the list of preference targets is already in an Excel file (probably), the mail merge should take just a few minutes. If we discover an error in the template later, we can re-run the merge without re-doing all of the work. If a firm primarily handles preference actions, then document automation tools like Woodpecker or LawYaw would be better than MS Word. But if the firm is handling these types of actions quarterly, then MS Word is best because it is already available and it's free. Any paralegal or legal secretary would know how to set up this workflow. The lawyer just needs to know what to assert. Then the lawyer can spend more time drafting the underlying complaint, negotiating for payment, and writing any follow up briefing. Letters, briefs, and memos could be improved by using a tool like WordRake to edit for clarity and brevity.

Email from Ivy Grey to Joseph R. Tiano, Jr. and Nancy Rapoport (Jan. 2, 2023) (on file with authors). Ms. Grey also pointed out that repetitive work done by humans should at least trigger an inquiry by a fee examiner. *Id.* ("If I were a fee examiner, I would start every review by looking for huge batches of repetitive documents and mercilessly slash those fees. Drafting individual preference complaints for these matters should be a non-starter—unless the recovery amount exceeds a high threshold, as determined case-by-case. Any settlements could also be handled similarly…. This approach could also work for first day filings and proofs of claim forms, which all start with the same generic template.").

[143] *See, e.g.*, *Billing Judgment*, *supra* note 38 (passim); *see also* AI FOR LAWYERS, *supra* note 65, at 168 (2021) ("AI isn't just about automating junior lawyer work. More experienced lawyers need to pay close attention, too. Ultimately, the most valuable attribute of most senior lawyers is their judgment. AI can help senior lawyers make better decisions in less time (sometimes through assisting their juniors to do more, higher-quality work). Senior lawyers who don't take advantage of this change put themselves at a real competitive disadvantage.").

period.[144] We're guessing that most bankruptcy courts have no problem with lawyers who do a first cut of discovery via computer searches. As we've said, computers don't get tired, or hungry, or distracted,[145] and they can process mountains of data in a short time, leaving the subsequent analysis of that data to humans.[146] As Mark Cohen and Richard Susskind noted in an interview:

---

[144] Even though there were some scary stories about potentially sentient AI, see, e.g., Nitasha Tiku, *The Google engineer who thinks that the company's AI has come to life*, WASH. POST (June 11, 2022), available at https://www.washingtonpost.com/technology/2022/06/11/google-ai-lamda-blake-lemoine/, we still don't have computers that can reliably pass the Turing Test (roughly speaking, the test that Alan Turing proposed to see if computers were sentient), *see The Turing Test*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Oct. 4, 2021), https://plato.stanford.edu/entries/turing-test/; *see also* Cade Metz, *A.I. Is Not Sentient. Why Do People Say That It Is?*, N.Y. TIMES (Aug. 5, 2022), https://www.nytimes.com/2022/08/05/technology/ai-sentient-google.html. And, in an aside that only a Rice alumna would love, Twinkies can't pass the Turing Test, either. *See* Tanya Barrientos, *This One Takes the Cake: On-Line Twinkie Test*, WASH. POST (Dec. 7, 1995), https://www.washingtonpost.com/archive/lifestyle/1995/12/07/this-one-takes-the-cake-on-line-twinkie-test/8924747b-01e0-4628-bab3-a60f8df760b4/.

[145] We all make mistakes:

> [T]here's the random error component, which is simple; people at any size law firm are often doing this work for hours and hours. So, by the time it gets to 4:00 in the morning, for the second or third night in a row, they are no longer very sharp. There are also the distractions in life, such as having a fight with their girlfriend or boyfriend, or working with March Madness or the World Cup on TV in the background. Contract review is a high-focus task, and the glut of data to review makes it nearly impossible for even the sharpest humans to maintain a high level of concentration for long periods of time. Even after drinking several Red Bulls. The point is, people screw up.

AI FOR LAWYERS, *supra* note 65, at 135. And, yes, we're going to cite TOP GUN: MAVERICK again here. *See supra* note 52.

[146] *See, e.g.*, Beverly Rich, *How AI Is Changing Contracts,* HARV. BUS. REV. (Feb. 12, 2018) ("AI contracting software can quickly assess risk in contracts (performing the risk analysis much faster than a team of lawyers) by identifying terms and clauses that are suboptimal. And it can reduce the risk of human error in contract drafting and review."), https://hbr.org/2018/02/how-ai-is-changing-contracts. Richard and Daniel Susskind point out how we should look at the should-a-machine-be-doing-this task issue—not as "if the machine can't get it 100% correct, it's worthless to use a machine," but rather, "can a machine be significantly better at this task than a human can be?"

> [It is a mistake] to expect more of our machines than we expect of ourselves. If we hear, for example, that an online diagnostic system is capable of making a correct diagnosis 80 per cent of the time, our instinct seems to be to declare that the 20 per cent of incorrect diagnoses is intolerable, rather than to compare that error level with human beings' current capabilities. We see this spirit in many of the objections of this chapter. Those who object often demand that the people and systems that replace the professions should attain a level of moral virtuosity, for example, or a degree of empathy that palpably outstrips those who currently work in the professions. As Voltaire would caution, in reforming or transforming the professions, we should not let the best be the enemy of the good. Frequently, the question that should be asked of a proposed new system or service is not how

> The legal industry's openness to the full spectrum of people, cultures, legal professionals, professional support roles, and technologies will be paramount to its future sustainability, ⟦Cohen and Professor Richard Susskind⟧ added. And while the horizon could be fabulous for most, in practice, lawyers in the future will be working to enable legal machines, far more so than today. Fighting that concept is inevitable for some and losing that battle is almost certain. The winners in this legal evolution are those that find a way to adapt. The positive note of adapting is that with the support and efficiency of legal technology, lawyers can focus more time and energy on higher value tasks and client care.[147]

AI isn't perfect, of course. Just ask Mariya Yao, whose article on the meme "Chihuahuas or blueberry muffins" should be a classic.[148] But we can imagine a world in which AI becomes part of a law firm's standard first cut at routine tasks:

> Meet ROSS, a new junior associate. He can read over one million pages of law in a second. He knows every court in every federal circuit. He understands with ease legal

---

> it compares to traditional service, but whether it would be better than nothing at all.

RICHARD SUSSKIND & DANIEL SUSSKIND, THE FUTURE OF THE PROFESSIONS: HOW TECHNOLOGY WILL TRANSFORM THE WORK OF HUMAN EXPERTS 359–60 (2022 ed.) (footnote omitted). When we consider the "don't let the perfect be the enemy of the good," though, there is an intangible part of the equation: when we just prefer to have a human do the work.

> However, … for certain kinds of activity we may prefer to engage human beings even if they perform less impressively than machines. We may do so because we value the effort and imagination expended by fellow human beings over the outcome. Precisely because it was crafted by a human being, we may prefer to buy a sculpture by a person, even though a robot could do a better and cheaper job. In the professions, though, our general view is that this (often nostalgic) preference for the old ways of working will be too high a price to pay, especially if the quality of service is demonstrably lower than that provided by a machine.

Id.

[147] Joseph Raczynski, *Legal Geek's Uncertain Decade: The future of legal technology and digital transformation,* THOMSON REUTERS (Aug. 3, 2020), https://www.thomsonreuters.com/en-us/posts/legal/uncertain-decade-pt4-digital-transformation/.

[148] Mariya Yao, *Chihuahua or muffin? My search for the best computer vision API,* Free Code Camp (Oct. 12, 2017), https://www.freecodecamp.org/news/chihuahua-or-muffin-my-search-for-the-best-computer-vision-api-cbda4d6b425d/; *see also* Scott Stump, *Goofy New Internet Meme Asks, 'Is this a Chihuahua or muffin?,'* TODAY.COM (Mar. 11, 2016), https://www.today.com/pets/goofy-new-internet-meme-asks-chihuahua-or-muffin-t79456 (showing the meme itself in all of its glory); Ahffan Kondeth, *Solving the famous problem of Puppy vs Muffin by deep learning — Web App on Google AppEngine/Fastai,* MEDIUM.COM, https://medium.com/@ahffank/solving-the-famous-problem-of-puppy-vs-muffin-using-a-simple-web-application-on-google-app-a3264e2be49c (June 30, 2020).

research questions posed to him in plain language, and
answers within seconds. He thrives on feedback from his
supervisor to improve his accuracy and performance. He
gets smarter with each completion of a task. And, I almost
forgot: he doesn't take vacations, doesn't get tired, doesn't
get frustrated, doesn't require health insurance, doesn't
waste time reviewing irrelevant authority, doesn't care
about work/life balance, and doesn't bill at an exorbitant
hourly rate—only, ROSS isn't human.[149]

Let's posit that there will be some tasks that, in the future, bankruptcy
courts will want AI to perform, in order to fit within § 330's reasonableness
analysis. We highlight some of those tasks below as we propose an analytic
structure for a § 330 analysis. For now, it's important to point out that the
use of technology should not be forced into situations where it does not
advance a client's cause, and we need to heed technological limitations and
risks. Likewise, we're mindful that technology cannot and should not
replace legal professionals; instead, it should augment how they deliver legal
services and it should change how legal professionals are trained.[150] Most
senior lawyers cut their teeth on the old way of document review or
contract drafting: We spent weeks in warehouses sifting through files, and
we used form files to begin drafting contracts. We didn't start with having
a computer hand us legal research, document analysis or first drafts. So how
will we train our junior colleagues to tell good "discovery sifting" from bad,
or to determine which parts of a computer-generated draft are

---

[149] O'Leary, *supra* note 3, at 33 (footnote omitted).

[150] Teny Sahakian reports that AI may eventually cost paralegals and more junior lawyers some jobs.

> While implementing AI more for these [[basic, paralegal-level]] functions will
> boost efficiency and cut costs for law firms, [[Bryan]] Rotella said he's concerned
> that moving to rely on technology for these essential tasks will strip legal assistants
> and young lawyers of the training they need to gain experience.
>
> ….
>
> Rotella, who specializes in providing personal counsel to businesses, said if law
> firms have less need for paralegals to do their labor-intensive, entry-level tasks, it
> could be difficult for recent graduates to find employment even with a degree. He
> predicted that this development could have a serious impact on the number of law
> students.

Teny Sahakian, *How AI could keep law students in debt forever*, FOX NEWS (Mar. 22, 2023),
https://www.foxnews.com/tech/ai-keep-law-students-debt-forever (last visited Mar. 25, 2023). Jeff
Garrett agrees: "… I wonder if needs for newer associates will be drastically reduced. If AI gets to the
point that it is very good and very fast, it may only require a paralegal to double check things. With law
firms posting record-profits after laying off lots of people during COVID, I could see law firms leaning
more heavily on AI as an alternate source of work associates used to do." Email from Jeff Garrett to
Nancy Rapoport and Joseph Tiano (Mar. 24, 2023) (on file with authors).

worthwhile?[151] In other words, are we creating a generation of new lawyers who won't be able to do what we can do now, because they never did those tasks manually first?[152]

It's a little disingenuous of us to say that the tasks that the junior lawyers will take on will be more "bespoke" and thus more interesting than the routine tasks that taught the two of us how to be lawyers,[153] because that argument skips over the problem: *someone* has to teach new lawyers the necessary, but unglamourous, skills that undergird the AI algorithms. When people describe the world of the junior lawyer in an AI-enhanced environment, here's what they envision, in transitioning from the old way of doing things to the new way:

> A junior lawyer reads through agreements, page by page, looking for consistent data points (e.g., change of control, assignment, restrictive covenants). Or the old way of doing discovery: junior (or temporary) lawyers scan document after document, saying which are relevant, or which are

---

[151] Significant innovation seems to occur first in the legal research and writing fields. For a discussion of how a legal research course teaches students how to interpret research algorithms, see Annalee Hickman, *How to Teach Algorithms to Legal Research Students*, 28 PERSPECTIVES: TEACHING LEGAL RESEARCH AND WRITING 73 (2020).Realize, too, that our duties of supervision (MODEL R. PROF'L CONDUCT 5.1 for supervision of lawyers and MODEL R. PROF'L CONDUCT 5.3 for supervision of non-lawyers) will continue. Even if computers do a first draft of something, a lawyer is going to have to check it for accuracy. *See id.* R. 5.3. And even if a junior lawyer checks the computer's work, a more senior lawyer will have to check the junior's work. *See id.* R. 5.1.

[152] Back in the day of the first Texas Instruments scientific calculators, *cf. Texas Instruments Timeline,* https://education.ti.com/en/snapapp/timeline (indicating that the Texas Instruments Scientific Calculator first came out in 1974), one of us wasn't allowed to use the calculator at all until she first did a "real" calculation by hand.

[153] As one commentator has explained,

> There are also concerns over automation leading to less job security. To be sure, automation has also led to some firms laying off staff, especially those in administrative and support roles. But firms say it is also helping them retain staff as well, given that employees are performing fewer tedious, rote tasks and by extension, are less stressed.
>
> "Data and the 'Great Resignation' shows that employees are experiencing significant burnout. Our attorneys and resources across the firm are looking towards technology and automation now more than ever to eliminate manual tasks that are time-consuming and burdensome. Our automation efforts save our team's attorneys hundreds of hours and improve the quality of their work life[,]" ⟦Vedika⟧ Mehera ⟦Orrick's innovation adviser⟧ says.

Rhys Dipshan, *Law Firm Automation Will Survive the Pandemic*, NAT'L L.J. (Aug. 3, 2022), https://www.law.com/nationallawjournal/2022/08/03/law-firm-automation-will-survive-the-pandemic-405-08030/?kw=Law%20Firm%20Automation%20Will%20Survive%20the%20Pandemic; *see also* SUSSKIND, *supra* note 71 ("Lawyers, for instance, may argue that no machine could stand and deliver a stunning peroration to a gripped jury—and they may well be right about that. But machines today certainly can retrieve, assemble, and review a wide range of legal documents, tasks that make up a big part of most lawyers' jobs—and, in the case of junior lawyers, almost their entire jobs.").⟧

privileged. Today, thanks to AI, things are different. In contract review, AI directs lawyers to passages that might be relevant, as opposed to spending significant time finding the passages in the first place. Rather than spending lots of time trying to find on-point wording (and sometimes missing it), AI makes users consider whether "Customer will buy 100% of its requirements of paper from Dunder Mifflin" is an exclusivity obligation.[154]

But if computers make that first cut, how will junior lawyers be able to cull good clauses from bad ones? Will law firms continue to train their junior lawyers and simply write off the billable time attributable to training?[155] Do we expect law schools to somehow pick up the slack—law schools that, for the most part, have very few tenure-stream professors who still have a hand in the "real world"? Law schools *are* changing, because there are more courses that involve the "law and technology" moniker.[156] And the American Bar Association now requires law schools to provide experiential learning.[157] But even with the American Bar Association's

---

[154] AI FOR LAWYERS, *supra* note 65, at 13. There will still be room for lawyering judgment after AI does a first cut of a task—and lawyers should use their judgment, rather than blindly accept a draft that AI spits out. Junior lawyers can learn from AI as they develop that judgment, much the same way that the two of us learned from the massive editing that senior lawyers gave to our work when we first started practice. It is possible to develop a schema that distinguishes good from bad. We're just adding a step that speeds up part of the process.

[155] Richard Susskind suggests this possibility, though he points out that writing off that time "would directly reduce the profit of those firms that rely on the pyramidic structure." SUSSKIND, *supra* note 16, at 169; *see also* SUSSKIND & SUSSKIND, *supra* note 146, at 345 ("There is a related point here—that in this era of cost-consciousness, when recipients of professional work are asking for more professional work at less cost, they are not as willing as in previous years to pay for the time of budding professionals who are learning their trade by working with the recipients of their work. In short, recipients are increasingly unhappy about paying for the training of their external providers."). And Michael Richman has suggested (in a hallway conversation at the American Bankruptcy Institute's Annual Spring Meeting in April 2023) that part of the training will involve law students proofreading any AI-generated first drafts for accuracy, including cite-checking any cited cases and double-checking any asserted facts.

[156] SUSSKIND & SUSSKIND, *supra* note 146, at xxxiii ("[S]lowly but perceptibly, law schools around the world are acknowledging that a legal education would be incomplete without exposure to developments in technology. Courses, centres, and professorships are now being dedicated to legal technology and transformation.").

[157] ABA Standard 303(a)(3) requires law schools to offer

> one or more experiential course(s) totaling at least six credit hours. An experiential course must be a simulation course, a law clinic, or a field placement. To satisfy this requirement, a course must be primarily experiential in nature and must:
>
> (i) integrate doctrine, theory, skills, and legal ethics, and engage students in performance of one or more of the professional skills identified in Standard 302;
>
> (ii) develop the concepts underlying the professional skills being taught;
>
> (iii) provide multiple opportunities for performance; and

new rule about experiential learning, both of us doubt that the minimum of six credit hours that law schools must provide will replace the two or more years that the two of us spent learning the ropes.

What do we see, in terms of the practice of law? We see AI helping already skilled paralegals provide more helpful drafting to the lawyers on their teams. We predict a decrease in the need for contract attorneys to do first-cut analysis, in favor of using AI for the first cut.[158] And we're already seeing many practitioners resent the heck out of the law schools who are graduating people with an enormous gap in their knowledge—with plenty of theory but little practice experience. Sadly, we also see law graduates with hundreds of thousands of dollars of loans looking back at their law schools and toward their employers, saying, "What now?"

Something has to give.[159] Lawyers and law students have been using AI for years,[160] and several law schools are developing robust "law and technology" programs that cover everything from AI to process improvement to an understand of off-the-rack, useful technology.[161] Those

---

(iv) provide opportunities for self-evaluation.
https://www.americanbar.org/content/dam/aba/publications/misc/legal_education/Standards/2017-2018ABAStandardsforApprovalofLawSchools/2017_2018_standards_chapter3.authcheckdam.pdf.

[158] *Cf.* SUSSKIND & SUSSKIND, *supra* note 146, at 344 ("[M]uch of the routine and repetitive work of today's aspiring professionals will be undertaken in new ways, for example, by para-professionals, offshoring, or online service. Are we not therefore depriving young professionals of the work upon which they currently cut their teeth? If we source much of the basic work in alternative ways, on what ground will young professionals take their early steps towards becoming expert?").

[159] *Cf.* William Butler Yeats, *The Second Coming* ("Things fall apart; the centre cannot hold…."), https://poets.org/poem/second-coming.

[160] When was the last time you started a research project by heading to the law library and looking at cases? For that matter, when was the last time you crossed the threshold of a law library?

[161] *See, e.g.,* Katrina June Lee, *A Call For Law Schools to Link the Curricular Trends of Legal Tech and Mindfulness*, 48 U. TOL. L. REV. 55, 70–71 (2016) ("Law school curricula and programs relating to legal technology can take many different forms, from robust programs that involve extensive collaboration with legal tech industry companies to individual courses that include some aspect of legal tech.") (footnote omitted); *see also id.* at 72–73 ("Legal design is also trending as part of legal technology education. The Legal Design Lab at Stanford Law School is one prominent trailblazing example. The Legal Design Lab is an interdisciplinary team "working at the intersection of human-centered design, technology & law to build a new generation of legal products and services" and to train law students and professionals.") (footnote omitted); AMERICAN BAR ASSOCIATION COMMISSION ON THE FUTURE OF LEGAL SERVICES, REPORT ON THE FUTURE OF LEGAL SERVICES IN THE UNITED STATES 26 (2016) ("Many law schools are now educating law students about innovation in legal services delivery. For example, a number of law schools now offer courses on e-discovery, outcome prediction, legal project management, process improvement, virtual lawyering, and document automation.") (footnote omitted), https://www.americanbar.org/content/dam/aba/images/abanews/2016FLS Report _ FNL_WEB.pdf.

programs include "coding for lawyers"[162] and Law and AI seminars,[163] but these incremental innovations are lagging the need for much better prepared law graduates. Law schools are notorious for not wanting to change,[164] and yet change is crucial at this juncture.[165] Some overhaul of the curriculum is necessary,[166] and that overhaul should include courses that help students understand communication and the digital world,[167] the use of (and evaluation of the benefits of) AI in providing legal services, and project management (to determine when and how to use AI, and by whom that AI will be used).[168] Fundamentally, if a law school wants to do more than turn out law professors and appellate judges,[169] its faculty will have to refine a curriculum to include these components:

> In anticipation of the AI age, future legal training should place an educational premium on (i) methodology over specific, ever-changing substantive matters, (ii) multi-

---

[162] *See* Alfredo Contreras & Joe McGrath, *Law, Technology, and Pedagogy: Teaching Coding to Build a "Future-Proof" Lawyer*, 21 MINN. J.L. SCI. & TECH. 297, 321–330 (2020) (describing their "coding for lawyers" module at the University of Minnesota Law School); *see also* Kevin D. Ashley, *Teaching Law and Digital Age Legal Practice With an AI and Law Seminar*, 88 CHI.-KENT L. REV. 783, 790–801 (2013) (describing an AI and Law seminar).

[163] *See* Brendan Johnson & Francis Shen, *Teaching Law and Artificial Intelligence*, 22 MINN. J.L. SCI. & TECH. 23, 28 (2021) ("Based on this review of all published Law & AI course offerings in ABA approved law schools in the United States, we find that, through the 2019–20 academic year, 26% of the approximately top 200 ranked U.S. law schools offer (or recently offered) a Law & AI course. But only 13% of schools appear to offer more than one Law & AI course."); *see also* courses discussed *supra* note 162.

[164] *Cf.* Nancy B. Rapoport, *Eating Our Cake and Having It, Too: Why Real Change Is So Difficult in Law Schools*, 81 IND. L.J. 359, 370 (2006) (observing that the faculty is in charge of the curriculum, although the administration is in charge of making sure that the curriculum passes regulatory muster).

[165] Brendan Johnson & Francis Shen, *Teaching Law and Artificial Intelligence*, 22 MINN. J.L. SCI. & TECH. 23, 42 (2021) ("There is thus an urgent need for law school curricular leadership to innovate, to form stronger interdisciplinary collaborations with AI expertise, and to create new courses that address key issues at the intersection of law and AI."); *see also* Melanie Reid, *A Call to Arms: Why and How Lawyers and Law Schools Should Embrace Artificial Intelligence*, 50 U. TOL. L. REV. 477, 482–83 (2019) ("With fewer future opportunities for junior attorneys since AI will replace the mundane tasks entry level attorneys typically performed in the past, law schools need to prepare their students to become expert, senior attorneys the day they graduate. This will require a shift in curriculum and a willingness to engage with the AI technology currently available to better prepare law students for the future legal landscape.").

[166] *But see infra* note 175.

[167] *See, e.g.*, Iantha M. Haight, *Digital Natives, Techno-Transplants: Framing Minimum Technology Standards for Law School Graduates*, 44 J. LEGAL PROF. 175, 197 (2020) ("Attorneys must be competent to protect their own data and information, manage their legal practices and tasks, and also be able to advise their clients to do the same.").

[168] Project management itself will become a larger part of a good lawyer's repertoire, in part because good project managers create efficient workflow.

[169] *Cf. infra* note 175 for a link to the T-14 law schools. Stanford is doing some great things in this area. *See, e.g.*, CodeX, https://law.stanford.edu/codex-the-stanford-center-for-legal-informatics/. Note that we haven't canvassed the other highly ranked law schools to see what they're doing.

dimensionality and cross-disciplinary over linear legal analysis, (iii) originality and creativity over repetition and processing, (iv) ethical judgement and adaptability requiring complex normative assessment over technical legal provisions, (v) social context understanding and strategic thinking over detailed grasp of each individual transaction, (vii) client management and interpersonal skills over mechanical and isolated due diligence tasks, and (viii) robust mastery of legal technological innovations, such as AI. In particular, the training of future lawyers should concentrate on the ethical considerations of using AI outputs and the need to override AI for ethical reasons.[170]

More law schools will have to develop a curriculum that guides law students toward understanding a world that will change repeatedly throughout their working lives. Those graduates who want to thrive will have to ask themselves regularly, "Is the way that we're doing this now still the best way to do it?"[171] And law schools and law firms will still have to find ways—for law firms, probably non-billable ways—to give recent graduates a glimpse into how those tasks that algorithms perform actually work.[172]

The problem is that law schools and law firms will find themselves in a staring contest, and we don't know which sector will blink first. Even though recent law graduates still need to learn how to practice law in general, their ability to understand what algorithms to program for which

---

[170] Dessislav Dobrev, *The Human Lawyer in the Age of Artificial Intelligence: Doomed for Extinction or in Need of a Survival Manual*, 18 J. INT'L BUS. & L. 39, 41 (2018) (footnote omitted).

[171] AI FOR LAWYERS, *supra* note 65, at 56 (quoting Mary O'Carroll, Director of Legal Operations at Google and President of the Corporate Legal Operations Consortium, in her list of questions for change managers); *see also id.* at 134 (describing some of the skills that BigLaw and SmallLaw practitioners will have to learn).

[172] This step is an important piece of the puzzle:

> Secondly, although this may seem duplicative and inefficient, when large collections of tasks are being sourced beyond an organization, young professionals may be required, in parallel, to take on samples of these tasks themselves. Even though this work could be undertaken more quickly, to a higher quality, and at lower cost by some alternative provider (human or machine), some exposure to the manual conduct of this work can be a vital learning experience. Just as we insist that our schoolchildren learn to perform arithmetic by hand and in head, despite the existence of calculators, so too with young professionals. In part, this will help them to learn their trade. In part, this could perhaps be integrated within working practice as some form of quality-control mechanism. In any event, and in contrast with today, no longer will recipients of professional services be willing to pay for this parallel learning process.
>
> The final piece of our alternative jigsaw is e-learning.

SUSSKIND & SUSSKIND, *supra* note 146, at 347–48.

tasks will depend in part on how lawyers have done things manually in the past.[173] Many tenure-stream law professors have been out of law practice for too many years to provide useful real-world examples. There are adjunct professors, though, and the beauty of adjunct professors is that they are teaching that which they are currently doing "in real life." But the American Bar Association places limits on the proportion of adjunct professors teaching across the curriculum.[174]

The process of elimination would then have AI training fall to law firms, but the training time will be non-billable time, and the firms would have to decide how much time and effort they want to spend on that training. So we're back to that staring contest: law firms could start to put the pressure on law schools by choosing to interview only those students who have demonstrated some understanding of AI and its implications.[175] We don't have the solution yet, but clearly, as AI takes over certain tasks, and as

---

[173] *See supra* note 172, for an example.

[174] *See* Standard 403(a), AMERICAN BAR ASSOCIATION, ABA STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS, 2017-2018, https://www. americanbar.org/content/dam/aba/publications/misc/legal_education/Standards/2017-2018ABAStandardsforApprovalofLawSchools/2017_2018_aba_standards_rules_approval_law_ schools_final.pdf ("The full-time faculty shall teach substantially all of the first one-third of each student's coursework. The full-time faculty shall also teach during the academic year either (1) more than half of all of the credit hours actually offered by the law school, or (2) two-thirds of the student contact hours generated by student enrollment at the law school.").

[175] Yes, law firms could put the pressure on even at the T-14 schools. For a listing of the perennial T-14 law schools, including some schools that jump onto and off of that list, see, e.g., https://7sage.com/top-law-school-rankings/. Law firms *could* do that, but they likely won't, at least at the higher part of the rankings ladder for both schools and firms. The top firms and the top law schools share a belief that smart law graduates can learn to do anything. They can, usually, but someone still has to teach them. For an interesting take, we turn again to the comments that Professor Joe Regalia made on an earlier draft of this article:

> I have quite a lot of opinions/ideas on this point. One is that law firms are more open to flexible and innovative training than they ever have been in the past (we know that well at Write.law!). But at the same time, training funding is a weird place: Some firms are increasing it dramatically; others are cutting it to the same degree. Same goes for other sectors beyond firms. It's clear that clients are no longer the way to pay for training—that ship has generally sailed, I think.
>
> One option is private-sector solutions, of which there are a few so far, like Write.law (we do tech and tech skill training). And we have a few competitors.
>
> Another [option] could be some law schools taking the lead in creating a top-notch, standardized virtual program that other law schools can opt into. I've been a supporter of that for a long time.
>
> Another is the creation of stand-alone programs at individual law schools. [Oklahoma] has a great example of this approach. Kenton Brice has spearheaded a program that requires so many hours of tech and innovation training, and the offerings are, frankly, incredible. No one graduates without fundamentals. Same with a handful of other schools who are already paving the way. It's what I've tried to build with our own UNLV Virtual Lawyering Bootcamp, as well.

Regalia comments on earlier draft, *supra* note 5.

bankruptcy courts consider the use of AI in determining the reasonableness of fees under § 330, there will have to be a sea change in how new lawyers learn the ropes.

B. A Proposed Analytic Construct For Bankruptcy Courts Under a Reimagined § 330

It's never been our style to advocate that others adopt our innovative ideas without offering an analytic construct by which those ideas can be implemented.   Traditional notions of economic fairness dictate that attorneys and other bankruptcy industry professionals know and understand the framework by which their professional fees will be evaluated. We propose that a court's § 330 analysis should incorporate current AI innovations and technological advancements.[176] We're not asking anyone to rewrite § 330. The legislative intent, the Code itself, and policy underlying § 330 already dictate that all aspects of reasonableness, including the 21st century technological advancements, should be considered in the equation. Our proposal simply requires the court to assess the professionals' technology and data use throughout the matter, using the existing § 330 factors.   After all, § 330(a)(3) already requires a court to consider:

> … all relevant factors, including—
>
> (A) the time spent on such services;
>
> (B) the rates charged for such services;
>
> (C) whether the services were necessary to the administration of, or beneficial at the time at which the service was rendered toward the completion of, a case under this title;
>
> (D) whether the services were performed within a reasonable amount of time commensurate with the complexity, importance, and nature of the problem, issue, or task addressed;
>
> (E) with respect to a professional person, whether the person is board certified or otherwise has demonstrated skill and experience in the bankruptcy field; and

---

[176] Given that one of us runs a technology company that makes a first cut of fee review a matter of weeks instead of months (and the other one of us uses that technology in her fee reviews), we can't resist mentioning that courts should consider how fee examiners use technology in their work as well.

(F) whether the compensation is reasonable based on the customary compensation charged by comparably skilled practitioners in cases other than cases under this title.[177]

The use of AI and data can fold neatly into this framework:

The time spent on such services	Could the use of reasonably accessible technology and data have accomplished the task faster and better? Would the use of technology have reduced the number of hours billed to a client/debtor? Would the use of comparative data have helped the assigning lawyer assign the work to the "lowest efficient biller"?[178]
The rates charged for such services	Did the professional assign the work to the lowest efficient biller? When taking into account the cost of technology, was the blended cost of the reduced volume of legal professional time and technology less than the cost of legal professionals alone?
Whether the services were necessary or beneficial at the time that they were rendered	Could a computer have performed the task faster and better, in the early stages of discharging the task?
Were the services performed within a reasonable amount of time commensurate with the work?	Could a computer have performed the task faster and better, perhaps with human help as the task became more complicated? Would the use of industry benchmarks help the assigning lawyer assign the work to the "lowest efficient biller"?

A court could certainly ask these questions of those professionals filing

---

[177] 11 U.S.C. § 330 (emphasis added).

[178] We may not have coined this phrase, but we use it all the time. And one of us is pretty sure that her co-author actually did coin the phrase.

fee applications.[179]   Better yet, though, there could be a local rule that requires the parties to proffer evidence to answer these questions.[180]

In a previous article, we suggested that professionals—or courts, by local rule—could require that professionals mine the available data to choose the lowest efficient biller for a task:

> Law firms that tout their expertise in large, complicated matters have a treasure trove of data sitting around in their old bills. Partners who have just added a new chapter 11 representation could start by identifying other cases that the firm had handled in the past that are similar to the new case. Firms can mine their billing data from these similar cases and place the data into categories of common tasks (*pro hac vice* motions, first-day motions, cash collateral stipulations, 2004 examinations, preference actions, and the like, all the way to—of course—interim fee applications). During the budgeting process at the beginning of a given case, the assigning partner could anchor on this firm-specific information about specific tasks, concentrating on what level of professional did the initial drafting, who reviewed it, and how long each professional took. That would help the partner set a reasonable budget, with the appropriate language included about budgets having to be adjusted as the case develops.   Moreover, every morning, that professional could get a running total of the cost of current tasks as compared to similar tasks in prior cases. Think of

---

[179] And courts have asked more explicit questions of professionals in similar contexts. For example, in *In re Elieff,* the bankruptcy court required the fee applicants to reorganize the fee applications so that the court could see, in chart form, "each and every pleading and notice that the applicant prepared and filed, with each item referring the docket number … [[and]] organize by name and billing rate … the hours spent and billed by each attorney or paraprofessional in preparation of each pleading and notice referenced in the initial chart[[,]]" among other tasks. *In re* Elieff, Case No. 8:19-13858-SC, United States Bankruptcy Court for the Central District of California, Docket No. 1348 at 2. Thanks to Judge Clarkson for pointing out to us that courts not only have this power but use it. Email from Hon. Scott C. Clarkson to Nancy Rapoport (Dec. 26, 2022) (on file with authors).

[180] Here's one way that a professional could address these factors in a fee application: When analyzing "the time spent on such services" under subsection (A), the professional could discuss how the time spent on such services would change, if at all, by using technology. In analyzing "the rates charged for such services" under subsection (B), the professional could discuss how the weighted average of rates would have changed if the task had been assisted by technology or an alternative legal services provider.

this as not just "budget to actual" but as "prior cases to budget to actual."[181]

Therefore, in a more robust § 330 analysis, a court could ask the professionals, as a part of their fee applications, to discuss the cost-benefit choices of the use (or non-use) of technology and data in different phases of the case, with an eye toward answering whether the professional's delivery of services and advice was best done "the old-fashioned way" or whether a judicious use of technology and data could have provided services and advice that would have been more efficient, cost-effective, reliable, and valuable. And, just like a court requiring the use of data to establish the likely lowest efficient biller, a court could ask the professionals to use data to compare how much a task was likely to cost with currently available technology versus the same task's costs using only humans. For example, we can imagine that there would be no savings at all in asking a robo-lawyer to appear at a hearing, but there could be substantial savings for using a computer to search for documents, rather than by asking a bevy of first-year associates to hang out at a hearing just in case a senior lawyer needed to find something quickly.[182] In essence, by requiring professionals to provide a cost-benefit analysis along with comparative data (demonstrating the cost of the task with and without technology), the court could assure itself that "the services [really] were performed within a reasonable amount of time commensurate with the complexity, importance, and nature of the problem, issue, or task addressed."[183]

We know: when it comes to smaller cases, including most consumer cases, asking professionals to conduct this extra work in their fee applications is too burdensome to be realistic, and so we're suggesting that, for certain sizes of cases, courts should not require this additional analysis.[184] In those smaller cases, this analysis surely would be helpful, but we're mindful that the burden on the parties may outweigh the benefits. In large and mid-sized bankruptcies, though, this type of analysis should be mandatory. The types of technologies that would be important for this analysis are those that replace recurring, low-level, time-intensive tasks, such as initial legal research, docketing, initial document review, initial discovery (such as the culling of responsive documents), claims management, and fee

---

[181] *Billing Judgment, supra* note 38, at 347 (footnotes omitted). We also suggested slightly more intrusive "nudges" to get firms to use big data: by using comparative data across law firms, *id.* at 350–51, or by having courts enact a local rule requiring such analysis, *id.* at 352–53.

[182] Yes, we're on the same side of the bifocal divide as many of you, so we know that there would need to be at least one computer-savvy person at the hearing to do those searches.

[183] *See supra* note 177.

[184] At least until we can suggest a way to make the drafting of fee applications much easier than it is today. We are, of course, working on that.

application preparation.[185] For those tasks, the professionals can use already existing "legal spend analytics" tools[186] to augment the analysis. The point, of course, is to honor the concept of "reasonableness" that § 330 requires.

CONCLUSION

The wonderful thing about jurisprudence in the United States is that the law adapts to aspects of the world that were, in the words of Vizzini,[187] previously "inconceivable." Just as software can "think" and "do" many of the tasks that humans are doing, data analysis can help professionals fine-tune their own gut hunches. Adaptions happen in every aspect of law every day, but § 330 has remained largely static since its adoption, even as technology has outpaced everything else in society at lightspeed. If we are to respect the legislative intent of § 330, it's time for bankruptcy courts to adopt a natural, market-driven analysis of § 330 to factor in technology as part of a reasonableness analysis. Doing so advances the overarching principles of the Bankruptcy Code and still allows professionals to deliver excellent bankruptcy advice by professional services, while they are still receiving quite handsome "reasonable compensation." This new way to view § 330 is the right economic result for all constituents involved.

---

[185] *See supra* note 184.

[186] Companies such as Legal Decoder, Litera, BigHand, Brightflags, Laurel, and Intapp have been taking different approaches to help clients and their law firms make better sense out of legal-spend data to ensure that outside counsel are providing optimal pricing, budgeting, and efficiency.

[187] In the movie THE PRINCESS BRIDE, Inigo Montoya responds to Vizzini with the classic lines, "You keep using that word. I do not think it means what you think it does." *See supra* note 2. The classic line in the book, in response to the word "inconceivable," is "'You keep using that word!' the Spaniard snapped. 'I don't think it means what you think it does.'" WILLIAM GOLDMAN, THE PRINCESS BRIDE: S. MORGENSTERN'S CLASSIC TALE OF TRUE LOVE AND HIGH ADVENTURE 105 (2007 ed.). The Spaniard is, of course, Inigo Montoya.