

Oklahoma Law Review

Volume 72 | Number 1

Symposium: Lawyering in the Age of Artificial Intelligence

2019

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Recommended Citation

Emily S. Taylor Poppe, *The Future Is Bright Complicated: AI, Apps & Access to Justice*, 72 OKLA. L. REV. 185 (2019).

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THE FUTURE IS BRIGHT COMPLICATED: AI, APPS & ACCESS TO JUSTICE

EMILY S. TAYLOR POPPE*

Introduction

Women's garments typically have buttons on the left side with openings on the right, opposite the orientation of men's garments. The practice is clearly a historical relic, with the best explanation being the following: when clothing designs became standardized, the wealthy women who could afford buttons did not dress themselves.¹ The servants who dressed them were more likely to be right-handed, so the buttons were positioned on the woman's left to make it easier for servants to manipulate the fasteners.² This "button differential" reflects the fact that at one point in time, for the wealthy female portion of the population, dressing was not a task one did for oneself.³

Today, the placement of buttons is all that remains of this history. Clothing styles are simpler and few of us require—or have access to—assistance in dressing. Men's valets and lady's maids are occupations of the past. Could lawyers someday similarly be made obsolete? Will emerging legal technology enable lay individuals to resolve legal issues on their own, without the intervention of an attorney? Is the legal profession doomed?

There is no question that technological advances are changing the practice of law. Artificial intelligence undertakes legal analysis, apps generate legal documents, digital search programs uncover relevant evidence, and dispute systems are migrating online.⁴ These advances are reshaping the boundaries between clients and lawyers, with some futurists predicting a world in which lawyers become increasingly obsolete. While even the most alarmist commentators agree that the annihilation of the legal

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1. Megan Garber, *The Curious Case of Men and Women's Buttons*, ATLANTIC (Mar. 27, 2015), <https://www.theatlantic.com/technology/archive/2015/03/the-curious-case-of-men-and-womens-buttons/388844/> ("The most reasonable theory [for the difference] has to do with the fact that, when clothing conventions were becoming standardized, *many women did not dress themselves.*").

2. *Id.*

3. *Id.*

4. *See infra* Part I.

profession has not yet arrived, some see the “great disruption” as having begun.⁵

In particular, commentators argue that legal technology is already chipping away at the role for lawyers in consumer-focused areas of law, where legal issues are less complex and less customized legal services suffice. One such area is estate planning, which scholars frequently characterize as ripe for disruption by legal technology.⁶ In support, several scholars point to the use of technological interventions that enable lay individuals to self-draft estate-planning instruments such as wills.⁷ Citing high rates of intestacy⁸ as evidence of unmet legal need, this popular narrative suggests that legal technology will decrease the number of probate lawyers while also increasing access to justice.

In this Article, I take seriously this claim, which is offered as evidence of the disruptive and democratizing capacity of legal technology. Drawing on empirical research on civil legal needs and estate-planning behavior, I interrogate the validity of several assumptions that underlie this claim. Specifically, I evaluate adoption of estate-planning technologies, client capacity to identify and describe testamentary desires, issues in defining the scope of technological interventions, potential challenges in the enforceability of computer-generated wills, and the ongoing potential need for legal assistance in estate administration. While some assumptions find support in existing empirical work, others do not; several others merit additional investigation.

Drawing on this illustrative example, I identify several themes that complicate predictions for legal technology’s potential to increase access to justice while diminishing the legal profession. First, I highlight the potential of legal technology to reproduce, rather than ameliorate, existing social inequalities. Second, I note the challenges raised by complete automation. Finally, I discuss the role of regulatory and doctrinal reforms in determining the trajectory of legal technology. Drawing on these themes, the Article advocates for more nuance and empirical grounding in debates about the future of lawyers and access to justice in the age of disruptive legal technology.

5. See generally John O. McGinnis & Russell G. Pearce, *The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services*, 82 *FORDHAM L. REV.* 3041 (2014).

6. See sources cited *infra* note 41.

7. *Id.*

8. Individuals who die without a will are intestate. *Intestate*, BLACK’S LAW DICTIONARY (Westlaw, current through 10th ed., 2014).

The Article proceeds as follows. In Part I, I provide a brief overview of disruptive legal technologies and the predicted implications for the legal profession and access to legal services. In Part II, I turn my attention to the probate context, and consider the potential for disruptive innovation in estate planning. I first contextualize technological innovations by summarizing relevant law and current practices. I then describe technologies that seek to eliminate the need for legal representation in the preparation of estate-planning instruments. In Part III, I consider the empirical assumptions that underlie predictions of technological disruption in probate practice. Drawing on this analysis, I identify several themes in Part IV that apply to predictions regarding technological disruption more broadly. These themes suggest that the future of lawyers in the age of disruptive legal technology is more complicated than some have suggested. I conclude by urging scholars and policymakers to consider persistent social and economic realities as they make predictions about the future of access to justice.

I. Disruptive Legal Technology

Economic instability, competition from alternative sources of expertise, and globalization all threaten the existing structure of the legal profession. However, legal futurists suggest that technology has the potential to disrupt the practice of law even more fundamentally, bringing massive change to the legal profession and the form and content of law itself.⁹ This possibility has attracted the attention of practitioners,¹⁰ scholars,¹¹ and leaders of the bar,¹² who seek to understand the implications.

9. RICHARD SUSSKIND, *TOMORROW'S LAWYERS: AN INTRODUCTION TO YOUR FUTURE* 15 (2d ed. 2017).

10. See, for example, the rise of business consultants focused on legal technology (e.g., Stuart A. Forsyth, *Perspectives from a Legal Futurist: Challenges to the Courts and the Legal Community*, 51 S. TEX. L. REV. 913 (2010) (report from the “owner and principal of *The Legal Futurist*, an independent consulting practice, providing long-range strategic planning and visioning services to all components of the justice system”).

11. See, for example, law review symposia dedicated to artificial intelligence and law: Symposium, *Rise of the Machines: Artificial Intelligence, Robotics, and the Reprogramming of Law*, 88 FORDHAM L. REV. (forthcoming 2019); Symposium, *Artificial Intelligence, Technology, and the Law*, 69 U. TORONTO L.J. (SUPPLEMENTAL ISSUE) 1 (2018); Symposium, *Artificial Intelligence and the Law*, 89 WASH. L. REV. 1 (2014); Symposium, *Legal Reasoning and Artificial Intelligence: How Computers “Think” Like Lawyers*, 8 U. CHI. L. SCH. ROUNDTABLE 1 (2001).

12. See, e.g., AM. BAR ASS'N, *THE RELEVANT LAWYER: REIMAGINING THE FUTURE OF THE LEGAL PROFESSION* (2015).

Making prophecies is a tricky business,¹³ and predictions for the future of the legal profession range from alarmist¹⁴ to optimistic.¹⁵ However, predictions for the overall trajectory of technological disruption in law are relatively consistent. Underlying—and exacerbating—the disruptive potential of legal technology is the increasing disaggregation of legal work.¹⁶ This disaggregation creates the possibility for multiple sources of legal information and services,¹⁷ leading to commodification and increasing competition. Following Clayton Christensen’s theory of disruptive technologies,¹⁸ disruption is predicted to begin at the bottom of the legal market.¹⁹ As technologies improve and are able to meet the demands of other segments of the market, the disruptive technology will spread until it ultimately becomes dominant.²⁰

The diffusion of disruption across market segments depends on the capacity of technologies to meet the needs of clients.²¹ Because the higher echelons of the legal market concern matters of greater complexity and novelty—where “bespoke” legal services have been the norm—disruption

13. DOUGLAS ADAMS, *THE SALMON OF DOUBT* 102 (2002) (“Trying to predict the future is a mug’s game.”).

14. RICHARD SUSSKIND, *THE END OF LAWYERS? RETHINKING THE NATURE OF LEGAL SERVICES* 273 (2008) (“I expect that there will be significantly fewer lawyers providing traditional consultative advisory service; and I predict the emergence of new legal professionals with quite different roles in society. We will witness the end of many lawyer as we know and recognize them today . . .”).

15. Albert H. Yoon, *The Post-Modern Lawyer: Technology and the Democratization of Legal Representation*, 66 U. TORONTO L.J. 456, 457 (2016) (offering a more “optimistic” take on the future direction of the legal profession); see also Dana Remus & Frank Levy, *Can Robots Be Lawyers? Computers, Lawyers, and the Practice of Law*, 30 GEO. J. LEGAL ETHICS 501, 530 (2017) (finding that areas where legal technology is likely to have only a light effect on tasks that account for more than half of lawyers’ time).

16. SUSSKIND, *supra* note 9, at 33.

17. *Id.* at 36-42.

18. CLAYTON M. CHRISTENSEN, *THE INNOVATOR’S DILEMMA: WHEN NEW TECHNOLOGIES CAUSE GREAT FIRMS TO FAIL* ix-xxiv (1997).

19. Raymond H. Brescia et al., *Embracing Disruption: How Technological Change in the Delivery of Legal Services Can Improve Access to Justice*, 78 ALB. L. REV. 553, 565 (2014) (“[W]e should look for the ways that disruption is coming, or could come, to the lower segments of the market because that is where true disruptive innovation begins and takes hold.”); SUSSKIND, *supra* note 9, at 45.

20. Brescia et al., *supra* note 19, at 558; Benjamin H. Barton, *Technology Can Solve Much of America’s Access to Justice Problem, If We Let It*, in *BEYOND ELITE LAW: ACCESS TO CIVIL JUSTICE IN AMERICA* 459 (Samuel Estreicher & Joy Radice eds., 2016).

21. See SUSSKIND, *supra* note 9, at 44.

in this area is anticipated to require more sophisticated technology. Thus, the potential for disruption varies by area and type of practice.²²

The range of legal technologies with disruptive potential can be arranged on a continuum, with differing implications for the practice of law.²³ At one end are new modes of delivering legal information. A basic example is a static website that publishes legal information.²⁴ Lexis and Westlaw are examples of more advanced web-based delivery of legal information, where the combination of large amounts of data and increasingly refined search features add value.²⁵ Legal platforms that connect potential clients to legal service providers might also be placed in this category, although serving a different function than legal encyclopedias or online resource information.

Search technologies are also used in e-discovery.²⁶ These technologies are more disruptive because they automate tasks previously undertaken by lawyers.²⁷ However, the scope of the resulting disruption is limited because these are tasks generally undertaken by junior lawyers²⁸ who were already subject to outsourcing.²⁹

Document preparation applications are another form of automation. The most basic automate the creation of documents at the direction of a human scrivener. More sophisticated technologies generate documents that are drafted by a computer algorithm in response to input provided by a human.

22. See Brian Sheppard, *Incomplete Innovation and the Premature Disruption of Legal Services*, 2015 MICH. ST. L. REV. 1797, 1846; Yoon, *supra* note 15, at 468 (“[T]he contribution of . . . intelligence augmentation technologies varies by practice of law.”).

23. See Daniel Martin Katz, *Quantitative Legal Prediction—Or—How I Learned to Stop Worrying and Start Preparing for the Data-Driven Future of the Legal Services Industry*, 62 EMORY L.J. 909, 910-12 (2013) (discussing the automation of basic tasks associated with the practice of law that has already occurred and the disruption yet to come from emerging technologies); McGinnis & Pearce, *supra* note 5, at 3046 (tracing the anticipated effect of technology on several types of legal tasks).

24. Brescia et al., *supra* note 19, at 569-70 (describing web-based lawyer directories and legal encyclopedias).

25. *Id.* at 568 (describing the evolution of the websites’ search capabilities).

26. McGinnis & Pearce, *supra* note 5, at 3047-48.

27. *Id.*

28. Remus & Levy, *supra* note 15, at 530.

29. Tanina Rostain, *Robots Versus Lawyers: A User-Centered Approach*, 30 GEO. J. LEGAL ETHICS 559, 565 (2017) (noting that, in the corporate sphere at least, the functions that legal technologies are automating are those “that corporations had already moved outside of law firms and routinized”).

For example, there are programs that ask clients questions and then formulate a legal document that accomplishes their stated objectives.³⁰

Finally, the technologies viewed as having the greatest disruptive potential perform legal prediction.³¹ As these technologies develop, some scholars argue that they will disrupt not only legal practice, but also the creation of law. Because the technologies leverage big data and machine learning, these scholars predict that we will be able to generate law that is increasingly complex and minutely detailed.³² Professor Benjamin Alarie even foresees the creation of a “seamless legal order, which is universally accessible in real time” and dictates *ex ante* the application of law to all possible situations, a phenomenon he terms the “legal singularity.”³³

The role of lawyers in these visionary future worlds varies. Some commentators emphasize the potential of technologies that remove the need for attorney intervention, termed “substitutive legal automation.”³⁴ Taken to the extreme, this suggests a bleak future for the legal profession. Others find this vision unlikely, focusing instead on the potential for technology to enhance lawyers’ capacity through “intelligence augmentation.”³⁵

Both scenarios, however, predict an increase in access to justice, although the mechanism through which this is achieved differs.³⁶ Those who favor the potential of substitutive legal technology foresee increases in clients’ capacity for self-help.³⁷ In contrast, others see technology reducing the costs of legal practice, allowing lawyers to expand their practices into latent legal markets.³⁸

30. *See infra* Part II.

31. Katz, *supra* note 23, at 912 (commenting on the rise of “the most disruptive of all possible displacing technologies—quantitative legal prediction”).

32. *See, e.g.*, Benjamin Alarie, *The Path of the Law: Towards Legal Singularity*, 66 U. TORONTO L.J. 443, 445 (2016) (predicting the possibility of complete law); Anthony J. Casey & Anthony Niblett, *The Death of Rules and Standards*, 92 IND. L.J. 1401, 1410 (2017) (predicting the rise of “microdirectives” in place of rules and standards in law).

33. Alarie, *supra* note 32, at 446.

34. *See, e.g.*, Frank Pasquale, *A Rule of Persons, Not Machines: The Limits of Legal Automation*, 87 GEO. WASH. L. REV. 1 (2019) (defining “substitutive legal automation”).

35. Yoon, *supra* note 15, at 469 (arguing that it is unlikely that technology will enable litigants to bypass lawyers altogether).

36. *See* Raymond H. Brescia, *What We Know and Need to Know About Disruptive Innovation*, 67 S.C. L. REV. 203, 210 (2016) (describing ways that disruptive technology could be used).

37. *See, e.g.*, Barton, *supra* note 20.

38. Yoon, *supra* note 15, at 469-71.

Ultimately, however, the disruptive power of legal technology—and its ability to increase access to justice—will not depend solely on questions of technological capacity. The regulatory and political environment will influence the role of technology in legal practice.³⁹ Regulations on the unauthorized practice of law (UPL), in particular, have the potential to curtail the development and adoption of technology in law.⁴⁰

Thus, there is significant variation in predictions for the ultimate fate of the legal profession, but broad agreement that technological disruption is likely to begin in certain practice areas. Those areas viewed as being most susceptible to disruption involve document preparation for similar, repeated transactions, and are underserved by the current market. The most consistently cited example is estate planning.⁴¹ Because probate practice is characterized as being so well suited to disruption by existing legal technology, it presents a valuable test case that I take up in the next Section.⁴²

39. Frank Pasquale & Glyn Cashwell, *Four Futures of Legal Automation*, 63 UCLA L. REV. DISCOURSE 26, 29 (2015).

40. See Deborah L. Rhode & Lucy Buford Ricca, *Protecting the Profession or the Public? Rethinking Unauthorized-Practice Enforcement*, 82 FORDHAM L. REV. 2587, 2607-08 (2014). But see Barton, *supra* note 20, at 457-60 (arguing that some types of disruptive legal technology have become sufficiently entrenched that they will likely succeed in spite of UPL regulations).

41. McGinnis & Pearce, *supra* note 5, at 3050 (“Trust and estate planning is already ripe for . . . mechanization because this area of law has relatively few kinds of forms and unique factual situations that arise for the large majority of people.”); see also Benjamin H. Barton, *The Lawyer’s Monopoly – What Goes and What Stays*, 82 FORDHAM L. REV. 3067, 3072 (2014) (“The most obvious examples of computerization in legal services are online forms providers like LegalZoom and Rocket Lawyer. These companies provide . . . forms to online consumers for . . . [inter alia] wills and trusts”); Brescia, *supra* note 36, at 213 (“Simple documents like Living wills and Powers of Attorney can be prepared through the inputting of data gathered from responses to simple questionnaires.”); Larry E. Ribstein, *The Death of Big Law*, 2010 WIS. L. REV. 749, 799 (suggesting the possibility of retailing law, including the possibility that “[c]hains like Wal-Mart and Tesco can sell wills”). An early summary of artificial intelligence advances in law addresses estate planning directly. L. Thorne McCarty, *Artificial Intelligence and Law: How to Get There from Here*, 3 RATIO JURIS 189, 192-93 (1990).

42. It is for this reason—estate planning’s reputation as an area appropriate for automation—that I focus on this topic. It is not because I wish to suggest that estate planning is the area of most significant unmet legal need.

II. Legal Technology & Estate Planning

Probate has a reputation as something of a legal backwater.⁴³ The practice leans local; state law governs, state courts have exclusive jurisdiction,⁴⁴ and practitioners and local court actors interact repeatedly.⁴⁵ Probate practice becomes more cosmopolitan only when large—indeed, after recent tax reform, *very* large—amounts of wealth are involved, triggering federal transfer taxes⁴⁶ and the multi-jurisdictional administration of complex holdings. Although it is an area of practice requiring specialization,⁴⁷ judges' impressions of the quality of legal representation in this area are middling,⁴⁸ and popular perception of estate planning lawyers is not much better.⁴⁹

Despite these opinions of probate practice—or more accurately, because of them—estate planning is a practice area seen as ripe for disruption by

43. Jack Leonard, Robin Fields & Evelyn Larrubia, *Justice Sleeps While Seniors Suffer*, ORLANDO SENTINEL (Nov. 14, 2005, 3:00 AM), <https://www.orlandosentinel.com/la-me-conserve14nov14-story.html> (“Probate Court is a legal backwater, the least glamorous branch of any courthouse.”); *see also* John H. Langbein, *Substantial Compliance with the Wills Act*, 88 HARV. L. REV. 489, 503 (1975) (referencing “[t]he low estate of the probate courts”).

44. *Marshall v. Marshall*, 547 U.S. 293, 299 (2006) (“Among longstanding limitations on federal jurisdiction otherwise properly exercised are the so-called ‘domestic relations’ and ‘probate exceptions.’”).

45. Leonard, Fields & Larrubia, *supra* note 43 (“[Probate law] is an arcane world of trusts, wills and conservatorships that breeds familiarity among judges, attorneys and conservators.”).

46. *See* 26 U.S.C. § 2010(c)(3)(C) (2018) (increasing the basic estate tax exclusion amount to \$10 million and incorporating cost-of-living adjustments equal to \$1.4 million to exempt estates of up to \$11.4 million from estate tax for decedents dying in 2019).

47. Charles I. Stone, *The Function of the Lawyer in Estate Planning*, 24 WASH. L. REV. & ST. B.J. 197, 198 (1949) (noting even seventy years ago that practitioners believed “[e]state planning richly deserves, and increasingly requires, at least a measure of specialization”); *see also* Am. Bar Ass’n Standing Comm. on Specialization, *Sources of Certification*, AM. B. ASS’N, https://www.americanbar.org/groups/professional_responsibility/committees_commissions/standing-committee-on-specialization/resources/resources_for_lawyers/sources_of_certification/ (last visited May 15, 2019) (providing a directory of contemporary specialization certification programs, many of which include estate planning).

48. Richard A. Posner & Albert H. Yoon, *What Judges Think of the Quality of Legal Representation*, 63 STAN. L. REV. 317, 331 tbl.6 (2011). Because trusts and estates was combined with tax, even the middling assessments provided are likely positively biased, since tax implications would suggest larger matters which are typically handled by larger firms and more specialized lawyers.

49. Leonard, Fields & Larrubia, *supra* note 43 (“[I]t’s only fuddy-duddy lawyers without color to their skin who do it. That’s the public perception of probate law.”). *But cf.* THE DESCENDANTS (Fox Searchlight Pictures 2011) (featuring George Clooney as Hawaiian estate-planning lawyer Matt King).

technology.⁵⁰ While bad news for lawyers who practice in this area, many view the disruption as forecasting improved access to justice.⁵¹ To contextualize these claims, I first describe the structure of succession law and current patterns of use. I then describe technology applicable to the estate-planning context.

A. *The Laws of Succession and Probate Practice*

Only the living may own property; at death, ownership lapses and property must be transmitted.⁵² The laws of succession govern these transfers. In the United States, succession laws are dedicated to the freedom of disposition, and grant decedents broad authority to direct the distribution of their property after death.⁵³ This includes the freedom to allocate relative shares of one's property and to distribute specific items of property to the individuals, charities, or entities of one's choosing. This freedom also encompasses the inverse: the ability to restrict individuals from inheriting⁵⁴ or to condition the receipt of property.⁵⁵ Together, these freedoms allow decedents to support dependents, transmit wealth to future generations, comply with religious mandates, or effectuate more idiosyncratic desires.⁵⁶

To exercise these freedoms, however, individuals must designate their distributive wishes in a will or arrange for the transfer of their property through nonprobate mechanisms. The administration of a decedent's estate pursuant to a will takes place in probate court.⁵⁷ Nonprobate transfers take place outside of the supervision of the probate court through revocable trusts, pay-on-death accounts, other will substitutes that rely on beneficiary

50. See sources cited *supra* note 41.

51. Barton, *supra* note 20, at 449.

52. LAWRENCE M. FRIEDMAN, *DEAD HANDS: A SOCIAL HISTORY OF WILLS, TRUSTS, AND INHERITANCE LAW* 15 (2009).

53. ROBERT H. SITKOFF & JESSE DUKEMINIER, *WILLS, TRUSTS, AND ESTATES* 1 (10th ed. 2017); see also *Hodel v. Irving*, 481 U.S. 704, 715 (1987) (noting that "the right to pass on valuable property to one's heirs is itself a valuable right" and is subject to legal protection).

54. UNIF. PROBATE CODE § 2-101(b) (UNIF. LAW COMM'N, amended 2010) ("A decedent by will may expressly exclude or limit the right of an individual or class to succeed to property of the decedent passing by intestate succession.").

55. See *infra* Section IV.D.

56. See, e.g., Niraj Chokshi, *Choupette, Karl Lagerfeld's Cat, Has a Million Reasons to Purr*, N.Y. TIMES (Feb. 20, 2019), <https://www.nytimes.com/2019/02/20/style/karl-lagerfeld-choupette-cat.html> (describing Lagerfeld's plan to leave millions of dollars to his cat).

57. John H. Langbein, *The Nonprobate Revolution and the Future of the Law of Succession*, 97 HARV. L. REV. 1108, 1109 (1984).

designation forms (i.e., retirement accounts, life insurance policies), and joint-ownership arrangements.⁵⁸

In many cases, estate planning reflects a desire to control not only distribution but also the process of administration. For example, the desire to avoid probate—and its attendant fees, costs, delay, and publicity—has long been a motivator for estate planning,⁵⁹ even if probate's supposed ills are not fully supported by empirical investigation.⁶⁰ In addition, wills and trusts allow individuals to nominate or appoint individuals to positions of trust. Individuals can appoint executors and trustees under wills and trusts, respectively, to administer and distribute assets.⁶¹ Estate-planning instruments also designate the terms under which these individuals serve. These terms can have implications that are far-reaching, such as when business control is at stake. Last, but potentially of great significance, many individuals use wills to nominate guardians for minor children or other dependents.

In addition to these functions, estate planning can be expressive. This can be accomplished indirectly, such as through distributive provisions or fiduciary appointments. Specific bequest of a financially or emotionally valuable asset, for example, can express feelings of warmth or appreciation; disinheritance of a close family member can express the opposite. In addition, because testators know that individuals will form opinions about them based on their estate plans,⁶² they may seek to establish a favorable legacy through generosity at death. As the author of an early collection of notable wills writes, “Our earthly possessions are, after all, but life-holdings, and the grace with which we part with them at the end of life’s journey shows the heart in

58. *Id.*

59. NORMAN F. DACEY, *HOW TO AVOID PROBATE* (1965).

60. David Horton, *In Partial Defense of Probate: Evidence from Alameda County, California*, 103 *GEO. L.J.* 605, 609-13 (2015) [hereinafter Horton, *Partial Defense*].

61. Sophisticated trusts may also appoint individuals and entities to advisory positions that may not be subject to fiduciary duties. *See, e.g.*, Philip J. Ruce, *The Trustee and the Trust Protector: A Question of Fiduciary Power – Should a Trust Protector Be Held to a Fiduciary Standard*, 59 *DRAKE L. REV.* 67, 71 (2010) (describing the use of trust protectors).

62. This is well illustrated by a cartoon depicting a man at a funeral who says, “My eulogy is, of course, contingent on the will.” Kate Beaton, “*My Eulogy Is, of Course, Contingent on the Will*” – *New Yorker Cartoon*, ALLPOSTERS, https://www.allposters.com/-sp/My-eulogy-is-of-course-contingent-on-the-will-New-Yorker-Cartoon-Posters_i9180089_.htm?UPI=PGS7A30&PODConfigID=8419449 (last visited May 25, 2019) (originally published in the *New Yorker* on Feb 28, 2011).

its least disguised form.”⁶³ Estate-planning instruments can also make explicit statements, although this is less common in the modern era than might be expected.⁶⁴

Individuals who fail to undertake any estate planning forego the right to all of these benefits.⁶⁵ Any property not disposed of by will or through nonprobate transfers is distributed to the decedent’s heirs by operation of the laws of intestacy. Designed as majoritarian default rules that produce the wishes of the average decedent, these laws of descent and distribution reflect a dedication to the freedom of disposition tempered by concerns of administrative ease and public policy.⁶⁶

Whether they actually accomplish the desires of a given decedent, however, will vary. Nonmarital couples and blended families, in particular, are less likely to be well served by intestacy. Moreover, the probate court will appoint individuals to administer the estate, which may result in appointments that are inconsistent with the decedent’s wishes. Finally, distributions to minors can also be problematic without estate planning, necessitating ongoing court oversight in some cases.

Thus, estate planning enables individuals to avoid intestacy and direct the distribution of their property at death, to identify those individuals whom they want to carry out those plans, and through these terms to offer a final

63. VIRGIL M. HARRIS, *ANCIENT, CURIOUS AND FAMOUS WILLS* viii (1911); *see also* Daphna Hacker, *Soulless Wills*, 35 *LAW & SOC. INQUIRY* 957, 962-979 (2010) (“[A] bequeathal encompasses the giver’s preferences, decisions, and personality, as well as possibly reflecting the recipients’ gratitude, disappointment, remembrance, and, hopefully, respect for the giver’s choice and wishes.”).

64. *See* Hacker, *supra* note 63, at 962 (describing historical antecedents of the modern will that more frequently “included personal and emotional expressions or [were] accompanied by separate spiritual and ethical instruments and guidance”).

65. The decedent’s failure to engage in estate planning may also be felt by the decedent’s heirs. *See* Naomi Cahn & Amy Zietlow, “*Making Things Fair*”: *An Empirical Study of How People Approach the Wealth Transmission System*, 22 *ELDER L.J.* 325, 339 (2015) (noting, from qualitative study of estate planning, that “when there had been advance planning—of any type—[the families of the decedent] reacted with appreciation”).

66. Robert H. Sitkoff, *Trusts and Estates: Implementing Freedom of Disposition*, 58 *ST. LOUIS U. L.J.* 643, 645 (2014) (“In accordance with the principle of freedom of disposition, the primary objective in designing an intestacy statute is to carry out the probable intent of the typical intestate decedent—that is, to provide majoritarian default rules for property succession at death.”); *cf.* Adam J. Hirsch, *Default Rules in Inheritance Law: A Problem in Search of its Context*, 73 *FORDHAM L. REV.* 1031, 1036 (2004) (arguing that intestacy laws have “become a theoretical grab-bag [with] [s]cholars and lawmakers . . . prepared to acknowledge the relevance of virtually every conceivable preference—that of the decedent, that of survivors, that of society—all mixed together in no particular order”).

testament. However, to do so, these instruments must be valid and enforceable. Wills have traditionally been governed by a rigid legal regime that required compliance with several formalities.⁶⁷ Although holographic (handwritten) wills have a long history, they are not accepted in all jurisdictions.⁶⁸ The typical will is a written instrument that must be signed and witnessed by at least two competent witnesses.⁶⁹ These requirements are designed to serve several functions: evidentiary, channeling, cautionary, and protective.⁷⁰ In addition, the testator must have testamentary capacity and not be acting under the influence of delusion, fraud, mistake, or undue influence.

There is a move in many states to liberalize these requirements, and an ongoing dispute among scholars as to the favorability of these reforms.⁷¹ The aspect of this topic that merits special attention for purposes of this Article is the fact that the liberalization of wills formalities lays the foundation for many technological innovations. The use of many fill-in forms, for example, would be impossible absent this doctrinal evolution.

Moreover, it is also important to appreciate that nonprobate instruments, such as revocable trusts and will substitutes, are not subject to the same formalities requirements. Given the wealth holdings of most Americans and the widespread use of will substitutes, much more property is now distributed through nonprobate transfers than through the probate process.⁷² This shift can be viewed as increasing access to estate planning by making it easier for lay individuals to direct the distribution of their property at death without triggering the legal complexities of wills. However, it also generates potential pitfalls for decedents who do not appropriately account for probate and nonprobate property.

B. The Use of Estate Planning

All of us will die and nearly all of us possess something that we believe to be of value that we would like to pass on when we do, even if our assets are

67. Langbein, *supra* note 43, at 489 (“The law of wills is notorious for its harsh and relentless formalism.”).

68. JEFFREY A. SCHOENBLUM, MULTISTATE GUIDE TO ESTATE PLANNING 1001-78 tbl.1 (2018) (describing the formal will requirements of each state including acceptance of holographic wills).

69. Langbein, *supra* note 43, at 490.

70. *Id.* at 492-98.

71. *See, e.g., id.* at 530 (advocating for the adoption of the substantial compliance doctrine); David Horton, *Wills Law on the Ground*, 62 UCLA L. REV. 1094, 1145 (2015) [hereinafter Horton, *Wills Law*] (supporting adoption of harmless error to signature defects).

72. Langbein, *supra* note 57.

meager by financial metrics. Despite this, there is surprising variation in the rate at which individuals engage in estate planning.

Our empirical understanding of estate-planning behavior is incomplete, hindered by data limitations.⁷³ However, several important themes emerge from existing studies. First among these is the prevalence of intestacy. While estate plans offer a number of benefits, many individuals nevertheless fail to create them.⁷⁴ The most recent will study found that 40% of the probate estates opened in Alameda County, California, for decedents who died in 2007 were intestacies.⁷⁵ Because California is a community property state that provides nonprobate alternatives for surviving spouses, this number likely underestimates rates of intestacy in California and nationally.⁷⁶ Earlier will studies also document high levels of intestate estates.⁷⁷

However, will studies are imperfect sources of information because they underrepresent low-value estates (which avoid probate and are more likely to be intestate) and overrepresent older individuals (who are more likely to die and more likely to have wills), both of which likely lead to negatively biased estimates of intestacy.⁷⁸ Indeed, a nationally representative survey found that 68% of respondents reported being intestate, while 20% had a will drafted by an attorney and another 11% reported having a self-drafted will.⁷⁹ This is a valuable insight, but it relies on a small sample (n=324).⁸⁰ The Health and Retirement Survey (HRS), a longitudinal study of a nationally representative sample of approximately 20,000 older adults sponsored by the

73. See Horton, *Partial Defense*, *supra* note 60, at 610 (“[W]e know almost nothing about what happens in modern probate court.”).

74. HARRIS, *supra* note 63, at vii (“It must not be forgotten that while all men may make wills, and should do so, yet all men have *not* done so.”).

75. Horton, *Partial Defense*, *supra* note 60, at 627 (reporting that 269 of the 668 estates studied were intestacies).

76. *Id.* at 626 (noting that the use of the spousal petition was evident from the demographic distribution of the probate estates observed).

77. See, e.g., Lawrence M. Friedman, Christopher J. Walker & Ben Hernandez-Stern, *The Inheritance Process in San Bernadino County, California, 1964: A Research Note*, 43 HOUS. L. REV. 1445, 1453 (2007) (reporting that 171 of 513 probate records from decedents who died in 1964 in San Bernardino County, California, were intestacies); Robert A. Stein & Ian G. Fierstein, *The Demography of Probate Administration*, 15 U. BALT. L. REV. 54, 79 (1985) (reporting that the proportion of decedents who died in 1972 who had estates that underwent probate in select jurisdictions in California, Florida, Maryland, Massachusetts, and Texas who were testate ranged from 50% to 86% across states).

78. Alyssa A. DiRusso, *Testacy and Intestacy: The Dynamics of Wills and Demographic Status*, 23 QUINNIPIAC PROB. L.J. 36, 39 (2009).

79. *Id.* at 41.

80. *Id.*

National Institute on Aging and the Social Security Administration,⁸¹ offers a much larger sample, but one that is focused exclusively on Americans age fifty and over.⁸² The most recent wave of that survey found that in 2014, just over 51% of respondents in the top wealth quintile reported having a will, while the same was true of 50%, 47%, 36%, and 20% of respondents in the second, third, fourth, and bottom wealth quintiles, respectively.⁸³ All of which is to say that while we may not know exactly how many Americans are intestate, it is clearly a substantial portion of the population.

However, it is not a representative portion of the population. For example, the HRS data indicate a positive correlation between wealth and estate planning, which is consistent with anecdotal accounts. Other socio-demographic factors associated with estate planning include education, race, marital status, age, and family structure.⁸⁴ Descriptive⁸⁵ and multiple regression results⁸⁶ find that whites are more likely than individuals of other races or ethnicities to have estate plans, as are individuals with college or greater educational attainment. Experience of major life events, including a change in health or financial status, is also associated with an increase in the probability of adopting an estate plan, even after adjusting for other socio-demographic characteristics.⁸⁷

Thus, while we lack comprehensive data on the prevalence of intestacy, it is clear that unequal take-up of estate planning both reflects and replicates existing social inequality. Many scholars see technology as offering a solution.

C. Technological Innovations in Estate Planning

It is against the backdrop of widespread need and limited—and unequal—use of legal services that predictions of technological disruption in estate

81. *About*, HRS: HEALTH AND RETIREMENT STUDY, <https://hrs.isr.umich.edu/about> (last visited June 20, 2019).

82. *Welcome to the Study!*, HRS: HEALTH AND RETIREMENT STUDY, <http://hrsparticipants.isr.umich.edu/> (last visited June 20, 2019).

83. Russell N. James III, *The New Statistics of Estate Planning: Lifetime and Post-Mortem Wills, Trusts, and Charitable Planning*, 8 *EST. PLAN. & COMMUNITY PROP. L.J.* 1, 25 tbl.11 (2015) (describing the use of wills and trusts across various socio-demographic characteristics, but unfortunately not providing an overall rate).

84. *Id.* at 18, 37-38.

85. *Id.*; DiRusso, *supra* note 78, at 43, 49.

86. Lance Palmer, Vibha Bhargava & Gong-Soog Hong, *Will Adoption and Life Events Among Older Adults*, 15 *FIN. SERV. REV.* 281, 291 tbl.3 (2006).

87. *Id.* at 282.

planning are offered.⁸⁸ In this Section, I describe the interventions most frequently referenced in these predictions, which are aimed at lay individuals. There are several technological innovations designed for use by estate-planning attorneys,⁸⁹ such as those that run calculations to optimize transactions from a tax perspective, generate accounts for estates and trusts,⁹⁰ and partially automate drafting. The use of artificial intelligence will also likely expand in the future to assist lawyers in making legal determinations. However, it is substitutive technology that is frequently presented as having the potential to put probate lawyers out of business while simultaneously increasing access to law.

In general, these legal technologies fall on a continuum from static information to predictive analysis.⁹¹ Online information about estate planning is widely available. Static fill-in forms have existed for years, and in some states are even provided for free by statute.⁹² Apps that assist or automate drafting and administration represent current emerging technology.⁹³ More complex automation or analytics have not yet been realized in this context.

The technologies that are the focus of current commentary are interactive drafting aids. These programs, which are most commonly offered online, ask

88. It is important to note that lack of legal action is not necessarily indicative of unmet legal needs. Rebecca L. Sandefur, *What We Know and Need to Know About the Legal Needs of the Public*, 67 S.C. L. REV. 443, 451 (2016) (distinguishing between justiciable situations that do not require legal intervention and unmet legal needs). While formal estate planning offers the testator greater certainty that his or her wishes will be carried out, this may not be necessary for all individuals, particularly if their estates may be handled informally. Cahn & Zietlow, *supra* note 65, at 329 (reporting finding from qualitative study of estate administration that in the informal administration of intestate estates families may be guided by the testator's oral wishes).

89. Jamie J. Baker, *2018: A Legal Research Odyssey: Artificial Intelligence as Disruptor*, 110 LAW LIBR. J. 5, 13 (2018) ("To date, expert systems have been developed for use by attorneys working in bankruptcy, immigration, estate planning, food and drug safety, and securities matters.").

90. *Quicken Fiduciary Accounting Templates*, ACTEC FOUND., (Oct. 26, 2018), <https://actecfoundation.org/quicken-templates/>.

91. *See infra* Part I.

92. Gerry W. Beyer, *Statutory Will Methodologies—Incorporated Forms vs. Fill-In Forms: Rivalry or Peaceful Coexistence?*, 94 DICK. L. REV. 232, 243-44 (1990). Another proposal is to incorporate estate planning into the tax-return filing process. Reid Kress Weisbord, *Facilitating Homemade Wills*, in BEYOND ELITE LAW: ACCESS TO CIVIL JUSTICE IN AMERICA 395 (Samuel Estreicher & Joy Radice eds., 2016).

93. *See* REBECCA L. SANDEFUR, LEGAL TECH FOR NON-LAWYERS: REPORT OF THE SURVEY OF US LEGAL TECHNOLOGIES (2019), http://www.americanbarfoundation.org/uploads/cms/documents/report_us_digital_legal_tech_for_nonlawyers.pdf.

testators several questions and then provide a fill-in form to draft a will or trust. RocketLawyer and LegalZoom are the leading players in this area.⁹⁴ Programs vary in the level of assistance and customization provided.⁹⁵ While greater interaction may increase the quality of the final product, it may also increase the likelihood that courts will find these programs to be instances of UPL.⁹⁶

III. Empirical Assumptions

The suggestion that estate planning is ripe for disruption by this technology relies on several empirical assumptions. These include assumptions about mobilization, capacity, and ability to resolve boundary, enforcement, and administration issues. In this Section, I describe these assumptions and evaluate them in light of existing empirical evidence. I conclude that even if we assume that UPL enforcement does not prevent the adoption of these technologies, it is not clear that they will expand access to estate planning to the extent predicted by many accounts. Similarly, it is not clear that more advanced technologies based on artificial intelligence will overcome human limitations and behaviors that curtail potential increases in access to justice.

A. Mobilization: Assumptions About Barriers to Estate Planning

Visions of expanded access to estate planning through legal technology rely on several assumptions about why so many individuals are currently intestate. These assumptions are not well supported by existing evidence on civil legal needs. In particular, these visions ignore inequalities in access to online resources, overestimate the role of financial cost, discount the significance of psychic costs, and ignore popular understanding of estate planning as the domain of lawyers.

94. Kristen E. Killian, *The Long Tail and Demand Creation in the Legal Market*, 11 HASTINGS BUS. L.J. 157, 173 (2015).

95. LegalZoom, for example, offers customers a choice between drafting without assistance and upgrading to a bundled plan that includes a subscription to a legal-services plan that covers a thirty-minute consultation. *Pricing Options*, LEGALZOOM, <https://www.legalzoom.com/personal/estate-planning/last-will-and-testament-pricing.html> (last visited May 16, 2019).

96. Lauren Moxley, *Zooming Past the Monopoly: A Consumer Rights Approach to Reforming the Lawyer's Monopoly and Improving Access to Justice*, 9 HARV. L. & POL'Y REV. 553, 558 (2015); Maria A. Vida, *Legality of Will-Creating Software: Is the Sale of Computer Software to Assist in Drafting Will Documents Considered the Unauthorized Practice of Law?*, 41 SANTA CLARA L. REV. 231, 232-33 (2000).

1. Internet Access, Web Use, and Digital Literacy

Initial challenges to predictions of expansive web-based legal assistance are accessibility and usability limitations. Although the majority of Americans have internet access, not all do.⁹⁷ Moreover, many Americans rely on smartphones for internet access,⁹⁸ and may incur data costs that make them infeasible for accessing legal services.⁹⁹ In addition, individuals' digital and general literacy may inhibit their use of web-based legal technologies.¹⁰⁰ As Rebecca Sandefur notes, a further limitation of web-based estate-planning resources is that individuals have to seek them out and be "able to distinguish good sources from bad."¹⁰¹

In sum, as research from the United Kingdom on the expansion of electronic delivery of government services highlights, potential users may range from those who have "no willingness to engage with online services . . . to those who exhibit willingness but lack ability . . . to those who might be considered 'expert' users."¹⁰² This highlights the need for realistic assessments of the proportion of individuals who are likely to adopt and benefit from self-help technology.

Scholars such as Benjamin Barton acknowledge these concerns, but argue that self-help technology remains the best way to expand access to justice.¹⁰³ Certainly, if we lack the will and resources to expand access to justice in other ways, *anything* may be better than *nothing*.¹⁰⁴ Yet we should be realistic

97. Lee Rainie, *Internet, Broadband, and Cell Phone Statistics*, PEW INTERNET & AM. LIFE PROJECT (Jan. 5, 2010), <http://www.pewinternet.org/Reports/2010/Internet-broadband-and-cell-phone-statistics.aspx>.

98. *Id.*

99. See CATRINA DENVER, CIVIL JUSTICE COUNCIL, UNIV. COLL. LONDON, ASSISTED DIGITAL SUPPORT FOR CIVIL JUSTICE SYSTEM USERS: DEMAND, DESIGN, & IMPLEMENTATION 25 (Apr. 2018), <https://www.judiciary.uk/wp-content/uploads/2018/06/cjc-report-on-assisted-digital-support.pdf> (reporting on UK studies finding that data costs inhibited use of smartphones to access government services delivered digitally).

100. Rebecca Sandefur, *Bridging the Gap: Rethinking Outreach for Greater Access to Justice*, 37 U. ARK. LITTLE ROCK L. REV. 721, 736 (2015) [hereinafter Sandefur, *Bridging the Gap*]; REBECCA L. SANDEFUR ET AL., LEGAL TECH FOR NON-LAWYERS: REPORT OF THE SURVEY OF US LEGAL TECHNOLOGIES 11-14 (2019), http://www.americanbarfoundation.org/uploads/cms/documents/report_us_digital_legal_tech_for_nonlawyers.pdf.

101. Sandefur, *Bridging the Gap*, *supra* note 100, at 737.

102. CATRINA DENVER, CIVIL JUSTICE COUNCIL, ASSISTED DIGITAL SUPPORT FOR CIVIL JUSTICE SYSTEM USERS: DEMAND, DESIGN, & IMPLEMENTATION 4 (2018).

103. Barton, *supra* note 20, at 444-45 (acknowledging the limitations of technological assistance but heralding it as the "best bet" for addressing inequalities in access to justice).

104. *But see infra* Section IV.C (questioning the relative benefits of self-drafted will and intestacy).

about the extent to which technology will actually address unmet legal needs, particularly among those who are unlikely to benefit from technological interventions. Barton points out that increased use of self-help technology may free up resources that can be devoted to those most in need of traditional forms of legal assistance.¹⁰⁵ However, it is also possible that the availability of in-person assistance will decline as technological innovations become established.

2. *Financial Cost*

Much of the perceived potential of legal technology to increase access to justice is based on its ability to reduce costs.¹⁰⁶ Those who believe in the potential of substitutive legal technology for estate planning argue that costs can be reduced or even eliminated by removing the involvement of an attorney. In this case, the link to increased access to justice depends on an assumption that cost is a significant—or even the most significant—barrier to accessing legal representation. The validity of this assumption is questionable.

We have limited evidence of the role of cost in dissuading individuals from undertaking estate planning, but the best existing study found that only 1% of respondents listed cost as the reason for lacking a will.¹⁰⁷ This is consistent with empirical evidence on civil legal needs more generally, which finds that cost is not the barrier to legal representation that it is assumed to be.¹⁰⁸

3. *Psychic Costs and Avoidance*

The following suggests two points: (1) reducing cost will not necessarily increase use of estate planning as dramatically as anticipated, and (2) something *other* than cost must explain the high rate of intestate decedents. A popular suggestion is that individuals refrain from engaging in estate

105. Barton, *supra* note 20, at 444-45.

106. This assumption is found in many, if not most, writings on the potential benefits for access to justice. See, e.g., Pasquale, *supra* note 34, at 7 (“The most promising versions of legal automation are targeted at people who need and deserve—but cannot afford—an attorney.”).

107. Contemporary Studies Project, *A Comparison of Iowans’ Dispositive Preferences with Selected Provisions of the Iowa and Uniform Probate Codes*, 63 IOWA L. REV. 1041, 1077 tbl.10 (1978).

108. Sandefur, *Bridging the Gap*, *supra* note 100, at 722; see also Herbert M. Kritzer, *To Lawyer or Not to Lawyer: Is That the Question*, 5 J. EMPIRICAL LEGAL STUD. 875, 900 (2008) (showing that survey results from several countries suggest that “income has relatively little impact on decisions to seek the assistance or advice of a lawyer”).

planning because of the psychic cost of pondering one's demise.¹⁰⁹ This is consistent with empirical work finding the prevalence of procrastination as a reason for respondents' lack of wills.¹¹⁰

An article recounting the legendary design firm Ideo's attempt to develop an app called After I Go, reports that the app's original designer realized that "he couldn't just build the right tool; he also had to build the motivation to do the job in the first place. . . . [T]he work After I Go needed to do was no longer rational but emotional."¹¹¹ Initially intended to facilitate estate planning and administration, plans for the app became more ambitious before it ultimately failed.¹¹² The story highlights that technological innovations face the same psychological barriers as traditional forms of estate planning.

4. *Desire for Legal Expertise*

Finally, substitutive legal technology may also face a cultural barrier stemming from the broad understanding of wills as legal documents. For many civil legal problems, people do not seek legal assistance because they do not perceive the problem they are experiencing as a *legal* problem.¹¹³ Paradoxically, estate planning may have the opposite problem: lay individuals are *too* aware that estate planning requires legal documents, and may believe that estate planning is a legal matter best undertaken by lawyers.

Reid Kress Weisbord points out that individuals frequently engage in estate planning, but in the form of nonprobate beneficiary designations.¹¹⁴ He argues that it is because people view the "will-making process as unfamiliar, highly technical, burdensome, and expensive" that they don't undertake it.¹¹⁵ This suggests that to be successful, legal technology must overcome

109. SITKOFF & DUKEMINIER, *supra* note 53, at 64 ("Some people put off making a will to avoid the unpleasantness of confronting mortality.").

110. Contemporary Studies Project, *supra* note 107, at 1071. *But cf.* Reid Kress Weisbord, *Wills for Everyone: Helping Individuals Opt Out of Intestacy*, 53 B.C. L. REV. 877, 899 (2013) (pointing out that similar concerns do not appear to apply to nonprobate transfers).

111. Jon Mooallem, *Death, Redesigned: A Legendary Design Firm, a Corporate Executive, and a Buddhist-Hospice Director Take on the End of Life*, CAL. SUNDAY MAG. (Apr. 5, 2015), <https://stories.californiasunday.com/2015-04-05/death-redesigned>.

112. *Id.*

113. Pascoe Pleasance, Nigel J. Balmer & Stian Reimers, *What Really Drives Advice Seeking Behaviour? Looking Beyond the Subject of Legal Disputes*, 1 OñATI SOCIO-LEGAL SERIES, no. 6, 2011, at 1, 11, <http://opo.iisj.net/index.php/osls/article/viewFile/56/227> (documenting increase in planned advice-seeking when problems are identified as legal); Sandefur, *Bridging the Gap*, *supra* note 100, at 725 (attributing difference in observed rates of legal-advice-seeking, in part, to perceived a legality of problem faced).

114. Weisbord, *supra* note 110, at 899.

115. *Id.*

individuals' hesitation of wading into what is broadly understood as technical legal territory.

B. Boundary Problems

A second set of empirical assumptions deals with technology's ability to address boundary problems. When discussing disruptive technology and the great potential it offers for increasing access to estate planning, commentators frequently limit their claim to the preparation of "basic wills." That is, an application that generates wills can substitute for legal representation so long as what the individual needs is a basic will.¹¹⁶ But what defines a basic will? Further, is a lay person—or an algorithm—able to determine whether or not a basic will is what is needed?

A slightly different type of boundary problem arises from the divide between probate and nonprobate assets. As noted above, most wealth is now transferred via nonprobate mechanisms, leaving little to be transferred by will. Comprehensive estate plans account for this complexity in allocating expenses and distributions. Relatedly, effective estate plans consider not only the allocation of expenses and distributions across assets, but total assets relative to total bequests. Testators often intend for residuary legatees (those who take any assets remaining after payment of costs and specific bequests) to be the largest beneficiaries; this intent is frustrated if the estate is insufficient. These issues are becoming increasingly important given rising levels of personal debt. If self-help technology is going to replace lawyers, it must be able to address them.

Ray Brescia has discussed boundary problems with regard to disruptive technology and access to justice more generally. As he points out, "an approach that provides one-size-fits-all services without an appropriate screening process to identify potential complicating factors runs the risk of surrendering important rights."¹¹⁷ Thus, for substitutive legal technologies to succeed in the estate-planning context, they must be able to address the needs of all potential customers, or accurately distinguish those who can be served from those who cannot.

C. Client Capacity: Identifying and Expressing Desires

The primary objection to current technological interventions in estate planning is the concern that the instruments delivered will be of insufficient quality to meet the needs of clients. Is legal technology capable of enabling

116. Yoon, *supra* note 15, at 465 (discussing the potential for emerging technology to automate tasks such as "the preparation of a basic will").

117. Brescia, *supra* note 36, at 216.

a lay person to draft a will that effectuates the individual's testamentary desires? Will the individual know whether the legal tech has succeeded?

One empirical assumption underlying predictions of the rise of disruptive estate-planning technology is that clients can accurately identify and describe their testamentary desires, either on their own or with technological assistance. Because there may be a significant lapse of time between drafting and death, circumstances are likely to change.¹¹⁸ Thus, testators need to formulate not only their immediate, but also their contingent, desires. The resulting estate plan also must function effectively even as the value and identity of assets owned by the testator change. Relatedly, testators must decide how much flexibility they will incorporate into their estate plan versus how much dead-hand control they hope to exert. The extralegal significance of each of these decisions is easy to appreciate (imagine the potential family disruption resulting from one sibling being disfavored relative to another or the forced sale of a family heirloom to pay expenses that were poorly allocated). Not surprisingly, many testators strive to optimize soft goals like family harmony and fairness.¹¹⁹

This reality presents several challenges for technological interventions. First, it means that the technology must elicit an accurate and comprehensive set of client preferences, which likely requires some amount of education and explanation for the testator. Because of the personal nature of these preferences, probate practice requires open communication.¹²⁰ Indeed, to comply with their professional responsibilities, estate-planning lawyers are directed to meet personally with clients at the start of the representation.¹²¹ In addition, the soft goals that many clients seek to optimize are harder to logically code than hard goals like tax minimization. Engaging in this form of optimization requires an understanding of family dynamics. This type of emotional intelligence is not a strength of even the most sophisticated

118. SITKOFF & DUKEMINIER, *supra* note 53, at 325.

119. Cahn & Zietlow, *supra* note 65, at 331, 337 (describing “mak[ing] things fair” as an overarching goal of probate in most families).

120. Stone, *supra* note 47, at 198 (“I know of no comparable opportunity for combining on the broadest sort of base the personal, the practical, and the purely legal phases of the relationship between lawyer and client”); *Do It Yourself Estate Planning*, AM. B. ASS'N (Jan. 5, 2015), https://www.americanbar.org/groups/real_property_trust_estate/resources/estate_planning/diy_estate_planning/.

121. AM. COLL. OF TR. & ESTATE COUNSEL, THE ACTEC COMMENTARIES ON THE MODEL RULES OF PROFESSIONAL CONDUCT 61 (5th ed. 2016) [hereinafter ACTEC COMMENTARIES ON THE MODEL RULES] (“In order to obtain sufficient information and direction from a client, and to explain a matter to a client sufficiently for the client to make informed decisions, a lawyer should meet personally with the client at the outset of the representation.”).

emerging technologies.¹²² Moreover, wills' status as a boundary object that must serve multiple purposes across several audiences—the testator, legal actors, family members and friends, and society more broadly—makes it all the more challenging to construct.¹²³

Thus, there is reason to suspect that technological interventions may not yield estate plans that meet testators' needs, but empirical evidence on this point is limited. Critics reference scathing reviews of existing programs, and caution against the “false sense of security” they provide.¹²⁴ In contrast, proponents argue that there are many satisfied customers of online will-preparation programs. However, legal services are credence goods, meaning that non-experts are incapable of assessing the quality of the services they receive.¹²⁵ Many users of self-drafting programs likely lack sufficient legal knowledge to assess whether the will they have created achieves their testamentary desires.

Moreover, any flaws in the will are most likely to become apparent after the testator's death. Some scholars have highlighted the paucity of legal claims filed against the providers of self-drafting will programs for UPL that allege actual harm.¹²⁶ Yet we would not expect to see lawsuits alleging harm

122. Cassie Werber, *The Five Most Important New Jobs in AI, According to KPMG*, QUARTZ (Jan. 8, 2019), <https://qz.com/work/1517594/the-five-most-important-new-ai-jobs-according-to-kmpg/> (predicting that with the increase in artificial intelligence, new roles are likely to focus on humans' ability to be “compassionate, empathetic, to have emotional intelligence”).

123. See Susan Leigh Star, *The Structure of Ill-Structured Solutions: Boundary Objects and Heterogeneous Distributed Problem Solving*, in 2 DISTRIBUTED ARTIFICIAL INTELLIGENCE 37 (Les Gasser & Michael N. Huhns eds., 1989) (introducing the concept of “boundary objects”).

124. Rania Combs, *LegalZoom vs. Lawyer: What You Don't Know Can Hurt You*, RANIA COMBS ATT'Y AT LAW (May 24, 2010), <https://texaswillsandtrustslaw.com/2010/05/24/legalzoom-vs-lawyer-what-you-dont-know-can-hurt-you/> (reporting on the experience of a licensed attorney who generated a flawed will using Legal Zoom and noting that experience “provides a glimpse at how even an educated consumer may be lulled into ‘peace of mind’ by a document with significant flaws”); see also Rob Graham, *Empty Cache: When Legal Forms Frustrate Testamentary Intent*, NEV. LAW., Jan. 2015, at 26; *Legal DIY Websites are No Match for a Pro*, CONSUMER REP. (Sept. 2012), <https://www.consumerreports.org/cro/magazine/2012/09/legal-diy-websites-are-no-match-for-a-pro/index.htm> [hereinafter *Legal DIY Websites*].

125. See Gillian K. Hadfield, *The Price of Law: How the Market for Lawyers Distorts the Justice System*, 98 MICH. L. REV. 953, 968 (2000) (describing legal services as credence goods).

126. See, e.g., Benjamin H. Barton, *Some Early Thoughts on Liability Standards for Online Providers of Legal Services*, 44 HOFSTRA L. REV. 541, 544 (2015); Rhode & Ricca, *supra* note 40, at 2592.

from faulty wills until the testator has died. Moreover, for an action to arise at that point would require that the beneficiaries who were harmed (1) realized the problem, (2) had standing to sue, and (3) were motivated to sue, perhaps after having to challenge or construe the will. Thus, these are likely not the best measure of success for these legal technologies.

Instead, we need better assessments of how these technological interventions fare in practice, undertaken while testators are alive and able to describe their testamentary desires.¹²⁷ Professional regulation affords consumer protection through quality control and the imposition of liability.¹²⁸ If technological interventions are not going to be subject to this form of control, then perhaps self-testing of the kind described might form part of the novel regulatory regimes offered by some scholars as an alternative to UPL restrictions.¹²⁹ If made public, such accuracy rates could at least provide consumers with additional information on which to select among competing providers.

However, these analyses—even if undertaken rigorously and objectively—must contend with a further empirical issue: defining the appropriate comparison. Critics of self-drafting will programs point out ways in which the work product of an estate-planning lawyer would be superior to that of a lay individual using legal technology.¹³⁰ However, proponents argue that the appropriate comparison is not a will drafted by an estate-planning specialist, but one drafted by an individual without any assistance.¹³¹ A further possibility is to compare the result of a self-drafted will against the distribution mandated by the laws of intestacy; because these default rules come into play when an individual dies intestate and are designed to

127. For an example of a preliminary study focused on statutory wills, see Beyer, *supra* note 92. For a discussion of how empirical evidence is necessary to resolve debates about estate-planning reforms, see Horton, *Wills Law*, *supra* note 71, at 1101 (discussing the “impasse” between formalists and reformers that arose in the absence of empirical evidence “about the law’s real-world impact”).

128. See Remus & Levy, *supra* note 15, at 545. The issue of liability for the actions of legal technology is another important consideration. See, e.g., Jack M. Balkin, *The Path of Robotics Law*, 6 CAL. L. REV. CIR. 45, 52 (2015).

129. Susan Saab Fortney, *Online Legal Documents and the Public Interest: Using a Public Access Approach to Balance Access to Justice and Public Protection*, 72 OKLA. L. REV. 91 (2019).

130. See sources cited *supra* note 22.

131. *Legal DIY Websites*, *supra* note 124 (reporting that specialists retained to review wills prepared using software found that while the wills prepared using the software were not as good as those that would be prepared by a specialist, they were better than those generated without any assistance).

implement the preferences of the average testator, it seems reasonable to expect legal technology to improve on this outcome.¹³² Yet, the identity of the appropriate control group remains unsettled, as is our understanding of the effectiveness of existing interventions.

D. Validity and Enforceability

An additional concern raised by technological interventions into estate planning is the legal validity and enforceability of the resulting instruments. To be valid, testators must execute estate-planning instruments in accordance with required formalities; for wills, this generally includes signing in the presence of two witnesses.¹³³ Doctrinal reform in some states may offer relief for errors in execution,¹³⁴ but execution remains so important—and potentially problematic—that lawyers who prepare documents should oversee their execution to ensure compliance with professional responsibilities.¹³⁵ “[I]n some jurisdictions supervision of the execution of estate-planning documents constitutes the practice of law”¹³⁶

Wills and other estate-planning instruments are also invalid if the testator lacks the requisite capacity.¹³⁷ Estate-planning lawyers have a responsibility not to draft instruments for individuals who lack capacity, and can also assist clients who do have capacity to protect against later challenges. In contrast, technological interventions that do not incorporate assessments of testamentary capacity may generate invalid instruments and offer no protection against later challenges.

Finally, estate-planning instruments are unenforceable to the extent that their provisions violate public policy.¹³⁸ For example, courts will not enforce conditions that restrict a transferee’s opportunities for marriage or encourage

132. Put another way, this would require that the technology at least do no harm!

133. See *infra* Section II.A.

134. UNIF. PROBATE CODE § 2-503 (UNIF. LAW COMM’N, amended 2010) (adopting the harmless error rule).

135. ACTEC COMMENTARIES ON THE MODEL RULES, *supra* note 121, at 15.

136. *Id.* at 16.

137. UNIF. PROBATE CODE § 2-501 (requiring that testators be of “sound mind”); RESTATEMENT (THIRD) OF PROPERTY: WILLS AND OTHER DONATIVE TRANSFERS § 8.1 (AM. LAW INST. 2003) (describing the requirements of mental capacity to make a donative transfer).

138. RESTATEMENT (SECOND) OF PROPERTY: DONATIVE TRANSFERS § 5.1 (AM. LAW INST. 1983) (noting that donative transfers are conditioned with a restraint on personal conduct void if contrary to public policy or illegal).

divorce.¹³⁹ Estate-planning attorneys should advise clients on these matters; existing technological interventions may not.

It is true that these issues represent a challenge to *any* self-drafted will. If unassisted self-drafted wills are the appropriate comparison, technological interventions may not fare any worse. However, if the claim is that legal technology will disrupt this area of practice by substituting for the services of lawyers, then each of these issues represents a legitimate concern.

E. Estate Administration

Finally, it is important to note that wills are given effect only at death when presented to the probate court. Court appearances are one of the areas viewed as least susceptible to technological disruption.¹⁴⁰ Thus, before we write off probate lawyers entirely, we might also consider their role in estate administration. Nonprobate transfers and informal estate administration have removed many cases from the probate court docket,¹⁴¹ decreasing this need. Yet, as a result, probate courts are increasingly devoted to contested matters,¹⁴² in which legal representation is likely even more important.¹⁴³ If estate-planning instruments that testators self-draft with technological assistance are more likely to be contested or to require construction than other instruments, legal technology may have the unintended consequence of increasing legal needs in estate administration. Whether this is the case is an empirical question on which we lack systematic data.

IV. Implications

This Article has focused on will-preparation programs because they are frequently cited as an example of disruptive legal technology successfully increasing access to justice. However, the analysis suggests several themes that are relevant to predictions of the future of the legal profession and access

139. *Id.* § 6.2 (providing that restriction on first marriage in a donative transfer is void if it “unreasonably limit[s] the transferee’s opportunity to marry”); *id.* § 7.1 (stating that donative transfers encouraging separation or divorce are invalid).

140. McGinnis & Pearce, *supra* note 5, at 3042 (“[B]ecause machines will not speak in court for the foreseeable future, oral advocates will continue to enjoy a lucrative niche . . .”).

141. *See, e.g.*, Horton, *Wills Law*, *supra* note 71, at 1121-23 (noting how informal probate practices reduced the probate court docket in Alameda County, California).

142. Horton, *Partial Defense*, *supra* note 60, at 611 (describing the prevalence of contested matters, “quasi-adversarial” matters, and creditors’ claims in a sample of probate estates).

143. Rebecca L. Sandefur, *Elements of Professional Expertise: Understanding Relational and Substantive Expertise Through Lawyers’ Impact*, 80 AM. SOC. REV. 909, 924 (2015) (finding that lawyers’ ability to navigate complex procedures—as in litigation—does much to explain the association between legal representation and improved case outcomes).

to justice in the age of artificial intelligence more broadly. Together, these themes complicate many existing predictions, which largely “exist at the extremes.”¹⁴⁴

To develop predictions that are more realistic, scholars must account for the interplay between technology and structural social inequality. As Frank Pasquale writes, “Our legal system exacerbates inequality because of uneven access to resources for advocacy, not lack of automation.”¹⁴⁵ While automation may have the potential to expand legal services to markets that are currently underserved,¹⁴⁶ development of these technologies is driven by the market.¹⁴⁷ To the extent that servicing consumer-law needs remains insufficiently profitable, technologies that might address these needs are unlikely to be generated. Even if they are, adoption represents a further challenge that must be overcome for legal technology to succeed.¹⁴⁸

This relates to a second theme, which is the tension between complete substitution and technological augmentation. As other scholars have pointed out, even document review—another area frequently hailed as perfect for automation—requires training and human intervention in close cases.¹⁴⁹ Is substitutive technology truly likely to become more feasible, profitable, and better for clients than augmentative technology? What are the potential additional unintended effects of substitutive technology?¹⁵⁰ Perhaps a more realistic prediction is the expanded use of non-lawyers interacting with legal technology to expand access to legal services. This would build upon the increasing recognition of the potential for non-lawyer providers to meet client needs¹⁵¹ and for technology to enhance human productivity.

144. Remus & Levy, *supra* note 15, at 556.

145. Frank Pasquale, *Automating the Professions: Utopian Pipe Dream or Dystopian Nightmare?*, L.A. REV. BOOKS (Mar. 15, 2016), <https://lareviewofbooks.org/article/automating-the-professions-utopian-pipe-dream-or-dystopian-nightmare/> (reviewing RICHARD SUSSKIND & DANIEL SUSSKIND, *THE FUTURE OF THE PROFESSIONS* (2016)).

146. Yoon, *supra* note 15.

147. Remus & Levy, *supra* note 15, at 551 (“[W]e should remain cognizant that without regulation, the development and adoption of legal technologies will be driven by the market—a decidedly ineffective means of ensuring access.”).

148. *Id.* at 541 (noting that the pace of technological disruption depends on “advances in natural language processing while the pace of adoption would depend on client pressures”).

149. *Id.* at 517.

150. Balkin, *supra* note 128, at 57 (describing what he terms the “substitution effect”).

151. See, e.g., REBECCA L. SANDEFUR & THOMAS M. CLARKE, *ROLES BEYOND LAWYERS: SUMMARY, RECOMMENDATIONS, AND RESEARCH REPORT 3* (2016), http://www.americanbarfoundation.org/uploads/cms/documents/new_york_city_court_navigators_report_final_with_final_links_december_2016.pdf; Deborah Rhode, *The Delivery of Legal Services by Non-Lawyers*, 4 GEO. J. LEGAL ETHICS 209, 214-15 (1990).

Finally, the case of consumer-focused technological interventions in estate planning highlights the significance of not only professional regulation but also doctrinal law for the future of legal technology. Professional regulation is recognized as a threat to the emergence of new technologies.¹⁵² However, these are not the only relevant gatekeeping provisions.¹⁵³ Self-drafting will programs could never have taken hold without earlier doctrinal reforms, and their ongoing success is similarly dependent on the development of doctrinal law governing execution, construction, and administration of estate-planning instruments.

Although these themes are drawn from the example of relatively low-tech self-drafting programs for wills, they are likely relevant for emerging technologies as well, although they manifest differently. For example, massive computing power and big data might facilitate personalized default rules for intestacy.¹⁵⁴ Artificial intelligence would identify patterns of testamentary intentions and then generate individualized default rules that would be more likely to represent the testamentary desires of a given decedent. This could expand access to justice in the sense of improving outcomes for decedents who forego or are unable to undertake estate planning during life.

However, even this technologically sophisticated approach is not free from the empirical complexities identified in this Article. First, the stubbornness of social inequality would likely be evident in ongoing patterns of intestacy (which decedents' estates were subject to the personalized default rules) as well as the content of the individualized intestacy laws themselves. Probabilistic preferences would be developed from a corpus of data that is itself a function of existing social structures. Family structure, wealth, gender, race and ethnicity, education, and religion all likely contribute to testamentary preferences; it is unclear whether personalized defaults would accurately account for variation on these dimensions.¹⁵⁵

152. See sources cited *supra* note 40.

153. Sheppard, *supra* note 22, at 1846.

154. Ariel Porat & Lior Jacob Strahilevitz, *Personalizing Default Rules and Disclosure with Big Data*, 112 MICH. L. REV. 1417, 1419 (2014) (proposing personalized intestacy provisions).

155. Our current empirical understanding of variation in preferences across these dimensions is quite limited. ROBERT H. SITKOFF & JESSE DUKEMINIER, *TEACHER'S MANUAL: WILLS, TRUSTS, AND ESTATES 2-15* (10th ed. 2017) ("To our knowledge, there has never been a good study of the fit between intestacy rules and the family structures of varied racial and ethnic communities. This is a regrettable lacuna in the literature."). The suggestion that only a "bit more research" is needed to understand the role of observable characteristics in

Second, issues surrounding substitution and the lingering role for humans also apply. First, it is not clear that the development of personalized defaults should proceed without human intervention. This is especially true given the evolution of social norms and testamentary preferences. If donative transfers comprise the data corpus, the predictive results would reflect the preferences of individuals currently making donative transfers, who are likely to be older. Individuals who died relatively young could thus be subject to defaults that reflect norms and preferences that are in the process of falling out of fashion. While the relative timing of social change and legal change is always a potential issue, the bottom-up approach of personalized defaults may exacerbate it. In addition, it is possible that the elegance of the technological intervention would give way to messy realities as humans attempted to administer estates with awkward divisions.¹⁵⁶ Finally, adoption of these default rules would require massive doctrinal changes, even if they overcome challenges regarding UPL. Thus, even predictions for future legal technologies require empirical grounding.

Conclusion

Technological advances are modifying the practice of law and reshaping the boundaries between lawyers and clients. Some legal futurists foresee a bleak future for the legal profession, as the work of lawyers is increasingly automated. Others are more sanguine, emphasizing the potential for technology to enhance lawyers' ability to serve clients. Across this spectrum, however, scholars espouse the potential of legal technology to increase access to justice, with DIY estate planning frequently offered as an illustration. Yet, there are several empirical realities that challenge this prediction. Human frailties hinder the willingness and ability of many individuals to engage successfully with new technologies, while market forces shape the design and availability of technology in ways that may not address the needs of all. These realities limit the potential for disruptive technology to diminish the legal profession while expanding access to justice and illustrates the need to ground our expectations for legal technology in empirical realities. The future for lawyers and access to justice in the age of artificial intelligence is bright complicated.

predicting testamentary preferences is quite optimistic. See Porat & Strahilevitz, *supra* note 154, at 1477.

156. That is, unless the personalized defaults are carried out via automated wire transfer and physical distribution by court-appointed robots.