

**WHEN TO PRAISE THE MACHINE: THE PROMISE AND PERILS OF
AUTOMATED TRANSACTIONAL DRAFTING**

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I. INTRODUCTION

Prominent law firms’ recent adoption of artificial intelligence technology has scholars and practitioners engaged in wide-ranging speculation about a new era of automated lawyering. The latest technological innovations hold the promise of streamlining legal research, managing massive due diligence projects, efficiently constructing contractual provisions, and analyzing inconceivably large quantities of data.

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But along with the excitement over the nearly limitless potential of rapidly advancing legal technology comes uncertainty about the future role of the human lawyer and a bevy of concerns for the profession. In artificial intelligence, attorneys see both a welcome liberation from picayune tasks and frightening implications for their work stream and the relevance of their existing skill set.

But technology-assisted lawyering is by no means a new phenomenon. While recent attention has been focused on new research and litigation capabilities, transactional and estate planning lawyers have utilized document automation and assembly software for decades. These programs can perform an array of functions, from populating repetitive fields in a simple purchase agreement to producing an entire portfolio of documents for a client's estate plan. More elaborate programs use an attorney's responses to a series of prompts to generate complex and professional-looking work product like trust agreements.

Like artificial intelligence programs, the proliferation of automation and assembly software presents both opportunities to improve the quality and efficiency of legal services and also difficult questions regarding the appropriate role of an attorney providing technology-assisted counsel. And despite decades of widespread use, scant attention has been paid to the ethical implications that reliance on technology may have on transactional practice. In particular, although automation can reduce technical errors and rapidly incorporate evolving laws and techniques, reliance on software creates risks of undue deference to computer-generated outputs and of temptation to undertake representations that strain an attorney's sphere of proficiency.

This Article addresses the expectations for effective transactional representation by highlighting several common missteps in typical transactional engagements. It then describes the increasingly sophisticated tools attorneys have used to more efficiently and effectively draft legal documents. The Article then turns to the potential of automation and artificial intelligence programs to eliminate drafting mistakes and to raise the standard of transactional practice. It implores caution, however, as attorneys rely more heavily on computer assistance in delivering legal services and products. As it becomes easier to generate a professional-looking work product in a wide range of complex areas of law, the risks of professional misadventure multiply. In this sense, technology amplifies some perils as it resolves others.

II. DUTIES AND EXPOSURE IN TRANSACTIONAL PRACTICE

Attorneys face countless risks when drafting transactional documents. In the course of preparing a series of complex agreements, it is not uncommon for an attorney to employ legally insufficient or outdated language, to neglect to remove terms from a prior negotiation, or more generally, to fail to effectuate the client's intent or to incorporate the client's unique circumstances.¹ On the more benign end of the spectrum, inconsistent provisions can create ambiguities that only potentially imperil a client's objectives. More malignant errors can trigger unanticipated tax liability or exposure for securities law violations or may place the client in an entirely inappropriate transactional structure.

Very generally, transactional representation errors fall into two broad categories: flawed planning and flawed execution. Flawed planning revolves around the soundness of the substantive legal advice memorialized in the documents, and it describes circumstances where, even though the documents are prepared accurately, the transaction or structure itself was inadvisable under the circumstances. For example, flawed planning might occur in the estate context if the attorney employs a less advantageous structure or fails to anticipate common contingencies that jeopardize the client's desired tax treatment or plan of distribution.² Flawed execution, on the other hand, involves circumstances where the legal requirements of the transaction are not met, or where drafting mistakes or omissions undermine the intended effect of the transaction. For example, flawed execution might occur when a party to a transaction intended to qualify as a like-kind (Section 1031) exchange receives a prohibited cash payment.³

1. See, e.g., Martin D. Begleiter, *The Gambler Breaks Even: Legal Malpractice in Complicated Estate Planning*, 20 GA. ST. U. L. REV. 277, 287 (2003).

2. See, for example, *Sims v. Hall*, 592 S.E.2d 315 (S.C. Ct. App. 2003), where the attorney failed to inform his client that she could avoid paying significant estate taxes by disclaiming property she inherited from her daughter. The appellate court upheld judgment against the attorney in the amount of \$191,543. *Id.* at 320. “[The attorney’s] duty to inform [the client] of the right to disclaimer compelled him to ascertain if executing a disclaimer was in his client’s interest or, at a minimum, advise her of the existence or significance of a disclaimer.” *Id.*; see also *Linck v. Barokas & Martin*, 667 P.2d 171, 173–74 (Alaska 1983) (finding that clients stated a claim for professional negligence when attorneys did not advise them of right to disclaim interest in estate, causing increased estate tax liability).

3. See, for example, *Wo Yee Hing Realty, Corp. v. Stern*, 949 N.Y.S.2d 50, 63 (App. Div. 2012), where the transaction ran afoul of the requirements for non-recognition as a Section 1031 “like-kind” exchange when the attorney failed to ensure that the purchaser made the checks payable to a “qualified intermediary,” and the purchaser instead paid his seller clients directly.

This Part details the essential ethical duties of attorneys engaged in typical transactional undertakings and provides an account of the ways in which lawyers can fall short of their obligations in planning and execution. In so doing, it provides context for understanding the utility of the resources transactional lawyers rely upon to deliver consistent and effective documents.

A. *Requisite Knowledge and Skill*

The basic ethical obligations of an attorney in any matter are to provide the client with “competent representation”⁴ and to consult with and explain the matter to the client.⁵ Fundamental to competent representation is the expectation that the attorney possess or obtain the requisite substantive knowledge and skill.⁶ Requisite knowledge and skill, in turn, hinges on the difficulty of the matter,⁷ the attorney’s experience (both general and specific to the field in question), “the preparation and study” the lawyer can devote to the issue, “and whether it is feasible to refer the matter to, or associate or consult with, a lawyer of established competence in the field in question.”⁸

4. MODEL RULES OF PROF’L CONDUCT r. 1.1 (AM. BAR ASS’N 2016).

5. *Id.* r. 1.4(a)(2), (b). The New Jersey Superior Court has even set forth an extensive framework for analyzing whether transactional attorneys have met their standard of care. *See Cottone v. Fox Rothschild, LLP*, No. L-4966-0, 2014 WL 4287002, at *11–12 (N.J. Super. Ct. App. Div. Sept. 2, 2014). If included in the scope of representation, “failure to perform” one of the following “in a reasonably competent manner may indicate a breach of the standard of care.” *Id.* at *12. Lawyers should “ascertain[] the client’s business objectives through appropriate consultation” and provide the client with “reasonable advice” on “legal and strategic issues bearing on those . . . objectives.” *Id.* at *11. They should “scrutinize the proposed agreement to ensure that the writing effectuates” those goals. *Id.* at *12. They should “review the written agreement with the client, to determine that the client understood the material terms that might reasonably affect the client’s decision to execute it.” *Id.* And they should tell the client about the “various provisions to accomplish each of the client’s stated objectives.” *Id.* If not, they should “ensure that the client assents to the omission of any such objective.” *Id.*; *see also* Lisa L. Dahm, *Practical Tips for Drafting Contracts and Avoiding Ethical Issues*, 46 TEX. J. BUS. L. 89, 100 (2014) (“[T]he successful transactional attorney will draft language that is clear, precise, and tailored to meet the client’s expressed objectives.”); David Hricik, *Infinite Combinations: Whether the Duty of Competency Requires Lawyers to Include Choice of Law Clauses in Contracts They Draft for Their Clients*, 12 WILLIAMETTE J. INT’L L. & DISP. RESOL. 241, 246–47 (2004) (“A competently drafted contract clearly sets forth the obligations of the parties and avoids foreseeable litigation about its meaning.”).

6. MODEL RULES OF PROF’L CONDUCT r. 1.1 cmt. 1 (AM. BAR ASS’N 2016).

7. In most circumstances, the attorney must only be as competent as a general practitioner, but some cases may require specialized knowledge. *Id.*

8. *Id.*; *see also* RESTATEMENT (THIRD) OF THE LAW GOVERNING LAWYERS § 52 cmt. B (AM. LAW INST. 2000) (“The duty is one of reasonableness in the circumstances.”). The duty of sufficient legal knowledge is the pillar of legal representation—a client “[h]ires the lawyer

In essence, attorneys must know the basics and be able to thoroughly address the unknowns through research or association of other counsel.⁹

because the lawyer knows the law.” *Barnes v. Turner*, 606 S.E.2d 849, 851 (Ga. 2004); *see also* Roy M. Adams & Thomas W. Abendroth, *Malpractice Climate Heats Up for Estate Planners*, 126 TR. & EST. 41, 42, 49 (1987) (“[T]he practitioner who undertakes to prepare . . . estate planning documents . . . may be responsible for knowing or learning many of the finer points of estate and trust law, or tax law, regardless of his own degree of expertise. . . . Certainly the attorney should attempt to educate himself with regard to relevant statutory and case law and to keep abreast of current developments by attending seminars and lectures on the field.”). Attorneys may still be liable even when they consult specialists:

The attorney who consults a specialist without advising his client will be held liable for any negligence on the part of the specialist. . . . When an attorney associates with a specialist with consent of his client, the question may turn on *the care with which the attorney selected the specialist and how reasonable was his reliance*. While it may be possible to shift liability to a specialist, a lawyer who relies on a specialist to carry out a duty that is within the skill and knowledge of the ordinary attorney will not be relieved of responsibility for the results of the specialist’s act or omission. . . . Generally, if the general practitioner and the specialist are splitting fees, both will be liable.

24 AM. JUR. PROOF OF FACTS 2D *Legal Malpractice—Estate, Will, and Succession Matters* § 7 Westlaw (2017) (emphasis added). The attorney’s liability, of course, depends on whether the actions were taken within the scope of representation. *See* MODEL RULES OF PROF’L CONDUCT r. 1.2(c) (AM. BAR ASS’N 2016) (providing for limited representation).

9. The attorney must know basic legal principles “which are commonly known by well informed attorneys,” and uncover those more obscure legal rules which “may readily be found by standard research techniques.” *Smith v. Lewis*, 530 P.2d 589, 595 (Cal. 1975). If the law on a subject is unclear, attorneys do not breach their duty of care if they simply “fail to anticipate the manner in which the uncertainty will be resolved.” *Id.* Yet, even in those cases the attorney must still “undertake reasonable research in an effort to ascertain relevant legal principles and to make an informed decision . . .” *Id.*; *see* *Reibman v. Senie*, 756 N.Y.S.2d 164 (App. Div. 2003); *Gimbel v. Waldman*, 84 N.Y.S.2d 888, 891 (Sup. Ct. 1948) (citing *Goodman and Mitchell v. Walker*, 30 Ala. 482, 496 (Ala. 1857)) (If the law is clear, “has existed and been published long enough to justify the belief that it was known to the profession, then a disregard of such rule by an attorney at law renders him accountable for the losses caused by such negligence or want of skill; negligence, if knowing the rule, he disregarded it; want of skill if he was ignorant of the rule”); *see also* *Goebel v. Lauderdale*, 263 Cal. Rptr. 275, 276, 278 (Ct. App. 1989) (attorney breached duty of care when he advised client general contractor to take payment and stop work without ascertaining the existence of a relevant criminal statute, resulting in criminal charges against the client); *Degen v. Steinbrink*, 195 N.Y.S. 810, 814 (App. Div. 1922) (“[A]n attorney is obligated to know the law relating to the matter for which he/she is representing a client and it is the attorney’s duty, if he has not knowledge of the statutes, to inform himself, for, like any artisan, by undertaking the work, he represents that he is capable of performing it in a skillful manner.”)

No liability attaches for an error of judgment on a point of doubtful construction or a point of law not settled by a court of last resort and on which a reasonable doubt may be entertained by informed lawyers. Nevertheless, the rule of reasonable research requires that an opinion given on a doubtful point of law be based on sufficient research to enable

In the constant struggle to attract and retain clients, lawyers frequently are forced to grapple with the limits of their expertise and their capacity to provide high-quality work at an acceptable cost and on a feasible timeline. The temptation to commit to delivering complex work product on unreasonable deadlines is ever present.

Occasionally, attorneys are candid about their inexperience with a proposed transaction. Those frank lawyers are particularly vulnerable to negligence claims when they nonetheless undertake unfamiliar representations and then fail to satisfy basic legal requirements. One court admonished a lawyer for telling the clients “that he was not qualified to handle a 1031 exchange” and still undertaking “the preparation of the contract of sale.”¹⁰ Likewise, in *Horne v. Peckham*,¹¹ a general practitioner disclosed to his clients that he “had no knowledge of tax matters,” but nevertheless agreed to draft documents to establish a “Clifford” trust¹² if another professional provided tax advice.¹³

Even absent such outright acknowledgements, in relatively straightforward commercial transactions, patently defective documents themselves can illustrate the attorney’s lack of competence in the matter. In one notable case, an attorney drafted a promissory note that failed to include “a due date, a default or acceleration clause, or . . . an address for the

the attorney to give an informed and intelligent determination.

AM. JUR. PROOF OF FACTS, *supra* note 8, § 2.

10. *See* *Wo Yee Hing Realty, Corp. v. Stern*, 949 N.Y.S.2d 50, 61–63 (App. Div. 2012). In that case, the attorney failed to ensure that a transaction met the requirements for non-recognition in a Section 1031 “like-kind” exchange because, rather than making the check payable to a “qualified intermediary,” the purchaser paid the attorney’s seller clients directly. *Id.* at 63. Because the clients could not show that they were capable of acquiring a replacement property but-for the lawyer’s negligence, the lawyer escaped malpractice liability. *Id.* at 65; *see also* *Jewish Hosp. of St. Louis, Mo. v. Boatmen’s Nat’l Bank of Belleville*, 633 N.E.2d 1267, 1276 (Ill. App. Ct. 1994) (finding issue of material fact as to whether attorney was negligent in giving tax advice and drafting document that did not qualify for tax exclusions).

11. *Horne v. Peckham*, 158 Cal. Rptr. 714 (Ct. App. 1979).

12. The clients, who had formed a corporation to manufacture wood products using a patented process, proposed to execute a non-exclusive license allowing the corporation to manufacture the products and then transfer to the trust the rights to the royalties from the non-exclusive license. *Id.* at 716.

13. *Id.* Although the expert was a CPA and had worked as a tax accountant for two or three years, he “had been licensed to practice law less than a year . . .” *Id.* After the CPA approved of the plan, the attorney drafted the documents. *Id.* When the IRS later assessed the clients with a tax deficiency, the clients sued the attorney for negligent draftsmanship. *Id.* at 717. The court found for the clients, reasoning that the issue was not so unclear as to shield the attorney from liability, and that the attorney should have referred his clients to a specialist. *Id.* at 720–21. The court evidently did not view the attorney’s consultation with the expert as a sufficient referral, possibly because there were issues of fact about the extent of disclosure to the expert and the expert’s limited involvement. *See id.* at 716.

borrower,”¹⁴ and in another, an attorney filed defective chattel mortgages in two states without ascertaining the requirements of the respective jurisdictions.¹⁵

These cases highlight problems that can result when attorneys accept representations without possessing (or obtaining) a command of the most essential legal issues involved. Although it seems obvious that an attorney must have a fundamental understanding of the legal principles underlying any transactional representation, the case reporters are littered with examples of lawyers who failed to demonstrate this too often assumed competence. But effective transactional representation extends beyond a grasp of the relevant legal doctrines.

Merely knowing the law is insufficient; attorneys must actually apply that knowledge to accomplish their clients’ goals. To do so, the attorney must probe and analyze “the factual and legal elements” of the client’s issue and employ “methods and procedures” that satisfy “the standards of

14. The attorney prepared the note “in the format of a receipt.” *In re Wallace*, 518 A.2d 740, 740–42 (N.J. 1986) (suspending the attorney for six months); *see also* *Theobald v. Byers*, 13 Cal. Rptr. 864, 865 (Dist. Ct. App. 1961) (attorneys neglected to inform clients of the need to record the mortgage); *Silver v. George*, 618 P.2d 1157, 1159 (Haw. Ct. App. 1980) (holding that it is a “per se violation of an attorney’s duty for him to draw a note which is on its face usurious”); *In re Sheridan*, 813 A.2d 449, 450 (N.H. 2002) (repeated failure to draft acceptable articles of incorporation); *DeStaso v. Condon Resnick, LLP*, 936 N.Y.S.2d 51, 54 (App. Div. 2011) (stating that a legal malpractice action “may be based upon the creation of a [usurious] loan document”).

15. *Degen v. Steinbrink*, 195 N.Y.S. 810, 814 (App. Div. 1922). “If the attorney [was] not competent to skillfully and properly perform the work,” the court said, “he should not [have] undertake[n] the service.” *Id.* “The law governing the creation of liens on personal property by chattel mortgages is statute law. This every lawyer should know, and, further, that . . . [those laws differ from state to state] as to form of the instrument, . . . the form of acknowledgement, and . . . other requirements.” *Id.* at 813–14. “[T]o prepare documents that have no legal potency, by reason of their lack of compliance with simple statutory requirements, is . . . a negligent discharge of [the attorney’s] duty . . .” *Id.* at 814; *see also* *Berman v. Rubin*, 227 S.E.2d 802, 805 (Ga. Ct. App. 1976) (“[T]he attorney may breach his duty towards his client when, after undertaking to accomplish a specific result, . . . he then fails to comply with prescribed statutory formalities . . .”); *Marom v. Anselmo*, 933 N.Y.S.2d 744, 745 (App. Div. 2011) (client stated valid malpractice claim by alleging attorney “failed to structure the [client’s] \$500,000 investment” as a secured loan when the attorney had agreed to do so). *Compare* *Lucas v. Hamm*, 364 P.2d 685, 690 (Cal. 1961) (excusing from liability an attorney who drafted a trust that violated the rule against perpetuities, stating that “an attorney of ordinary skill acting under the same circumstances might well have” made the mistake), *with* *Temple Hoyne Buell Found. v. Holland & Hart*, 851 P.2d 192, 199 (Colo. App. 1992) (finding issue of fact on whether attorney breached duty by failing to ascertain that the rule against perpetuities could apply to an option contract), *and* *Millwright v. Romer*, 322 N.W.2d 30, 33 (Iowa 1982) (barring beneficiaries’ malpractice claims because they should have known a trust violated the rule against perpetuities).

competent practitioners.”¹⁶ The “required attention and preparation” varies depending on the stakes of the transaction, as “complex transactions ordinarily require more extensive treatment than matters of lesser complexity and consequence.”¹⁷ Simply put, the attorney must act diligently in effectuating the planning and execution stages of the representation, a task which requires the attorney to gather sufficient factual information, plan an appropriate transaction, and effectively execute the planned transaction.

B. Planning

The planning phase sets the stage for the entire transaction. During that time, the attorney develops an understanding of the client’s goals and the factual circumstances at hand.¹⁸ A solid grasp of the client’s objectives and individual circumstances is integral to the success of the representation, as it allows the attorney to plan the transaction in a manner that achieves that intent.¹⁹ A flawed factual investigation can undermine even the most vital goals of the representation. Take, for example, a scenario where the client wishes to structure an investment involving a real estate venture as a secured loan to an entity, and the attorney instead drafts the documents to provide the client with only a membership interest in the entity.²⁰ If a default later occurs, such a critical mistake can effectively deprive the client of a significant part of the value of the transaction, if not all.²¹

With a refined understanding of the client’s goals, the attorney can structure the transaction in the most beneficial manner.²² As part of this

16. MODEL RULES OF PROF’L CONDUCT r. 1.1 cmt. 5 (AM. BAR ASS’N 2016).

17. *Id.* Lawyers have “an obligation to exercise care in determining the effect of [any] agreement” that their clients are to sign. *Collas v. Garnick*, 624 A.2d 117, 121 (Pa. Super. Ct. 1993).

18. Dahm, *supra* note 5, at 100 (stating that a transactional attorney “must understand every transaction from the client’s perspective, at least to the extent that he/she recognizes what goals and objectives the client wants to achieve and what risks the client wants to avoid”).

19. Gerry W. Beyer, *Avoiding the Estate Planning “Blue Screen of Death”—Common Non-Tax Errors and How to Prevent Them*, 1 EST. PLAN. & CMTY. PROP. L.J. 61, 79–80 (2008) (“Failure to obtain relevant facts makes it difficult or impossible to draft an appropriate estate plan. A client may not reveal important information merely because the attorney did not ask; the client may not realize the material’s significance.”).

20. *Marom v. Anselmo*, 933 N.Y.S.2d 744, 745 (App. Div. 2011).

21. *Id.* (stating that client lost his \$500,000 investment).

22. More favorable structuring may take the form of “a more advantageous agreement” or, in some cases, no agreement at all, if the attorney discovers information that makes the transaction disadvantageous to the client’s interests. *See Viner v. Sweet*, 70 P.3d 1046, 1050 (Cal. 2003).

planning process, the attorney must evaluate alternative structures that may better achieve the client's objectives, weighing the benefits and drawbacks of the various means of accomplishing the client's intent.²³ This step is most imperative when the law actually prevents the client from effectuating his or her desired result through the proposed structure, such as where a client wishes to make a certain testamentary disposition in contravention of the state constitution.²⁴

Even when the suggested transactional structure can accomplish the client's basic objective, other devices may effectuate the client's wishes in a less onerous manner. Commonly, tax implications can and should drive the choice between alternative structures.²⁵ For example, one attorney failed to advise his client that she could avoid paying estate taxes by disclaiming an inheritance.²⁶ Another attorney committed a more blatant oversight when he recommended that a client make significant lifetime gifts in order to minimize her estate tax liability.²⁷ When the client died, the gifts were added back into her estate, triggering "an increase of \$238,000 in tax liability."²⁸

Within the chosen structure, the attorney must also think critically to anticipate and avoid contingencies that may undermine the client's intent. These contingencies can include both the possibility of unexpected factual occurrences and the application of legal principles which may sabotage the client's objectives. Factual scenarios can run the gamut, ranging from the

23. "It is not enough simply to follow a client's instructions, for a client cannot foresee or be expected to foresee the great variety of legal problems that may arise." *In re Wallace*, 518 A.2d 740, 742 (N.J. 1986) (citing *In re Lanaza*, 322 A.2d 445, 448 (N.J. 1974)); see also *Horne v. Peckham*, 158 Cal. Rptr. 714, 721 (Ct. App. 1979) ("[A]n attorney has a duty to avoid involving his client in murky areas of the law if research reveals alternative courses of conduct. At least he should inform his client of uncertainties and let the client make the decision.").

24. *Lorraine v. Grover, Ciment, Weinstein & Stauber, P.A.*, 467 So. 2d 315, 319 (Fla. Dist. Ct. App. 1985) (dismissing suit against attorney because client's intent to transfer a life estate could not have been accomplished regardless of how the lawyer drafted the will).

25. TINA L. STARK, *DRAFTING CONTRACTS: HOW AND WHY LAWYERS DO WHAT THEY DO* 410 (2d ed. 2013) ("In more sophisticated transactions, [tax] issues might require the transaction's structure to be changed or the deal to be abandoned.").

26. The attorney's "duty to inform [the client] of the right to disclaimer compelled him to ascertain if executing a disclaimer was in his client's interest or, at a minimum, advise her of the existence or significance of a disclaimer." *Sims v. Hall*, 592 S.E.2d 315, 320 (S.C. Ct. App. 2003); see also *Linck v. Barokas & Martin*, 667 P.2d 171, 173-74 (Alaska 1983) (finding a valid claim where attorneys did not advise clients of right to disclaim interest in estate, resulting in increased estate tax liability); *Kinney v. Shinholser*, 663 So. 2d 643, 646-47 (Fla. Dist. Ct. App. 1995) (finding an issue of fact as to whether attorneys breached their duty of care by failing to advise clients of consequences of failing to disclaim power of appointment).

27. *Peterson v. Wallach*, 764 N.E.2d 19, 21 (Ill. 2002).

28. *Id.*

obvious to the practically unpredictable.²⁹ In one case, an attorney faced a negligence claim after he drafted a will that failed to address the possibility that the testators might die within thirty days of each other without perishing in a common disaster.³⁰ Attorneys must likewise be attuned to the potential effects of legal maneuvers by individuals or the application by courts of legal doctrines, which differ considerably in complexity. Again, the estate planning realm is rich with examples, from needing to calculate the effect of a spousal-share election on a client's estate plan³¹ to considering the undermining impact of including a general power of appointment in favor of a spouse in a trust instrument that otherwise sought to avoid apportionment of trust property to that spouse.³²

C. Execution

In addition to thoroughly planning in accordance with the law and their clients' unique circumstances, attorneys must properly execute transactions by drafting the requisite documents and ensuring they are free of errors that might derail the intended outcome.³³ The pitfalls awaiting drafters in the execution stage vary widely, ranging from overlooking typographical errors to incorporating latent ambiguities in the key provisions of the document.

Although many typos and omissions are harmless, causing nothing more than embarrassment for the drafter, others may generate significant

29. See, e.g., Beyer, *supra* note 19, at 81 ("The prudent attorney must recognize situations that are likely to inspire a will contest and take steps to reduce the probability of a will contest and the chances of its success.").

30. Ogle v. Fuiten, 445 N.E.2d 1344, 1348 (Ill. App. Ct. 1983) (allowing plaintiffs to proceed on a negligence claim).

31. Johnson v. Sandler, Balkin, Hellman, & Weinstein, P.C., 958 S.W.2d 42, 45-46, 53-54 (Mo. Ct. App. 1997) (finding an issue of material fact as to the attorney's negligence). A California attorney overlooked another such issue when he erroneously advised his client that her husband's retirement benefits were separate property, and the court held him liable for negligence. Smith v. Lewis, 530 P.2d 589, 595 (Cal. 1975) ("The major authoritative reference works which attorneys routinely consult . . . uniformly indicated . . . that vested retirement benefits earned during marriage were generally subject to community treatment."). And another attorney breached his duty of care when he failed to address his client's impending marriage in her will after she told him she intended to marry, but still desired to leave all her property to her daughters. Heyer v. Flaig, 449 P.2d 161, 165 (Cal. 1969) ("A reasonably prudent attorney should appreciate the consequences of a post-testamentary marriage . . . and use good judgment to avoid them if the testator so desires.").

32. The attorney's error caused the spouse to incur state inheritance taxes on the entirety of the trust property plus federal gift taxes when she disclaimed the property to prevent its inclusion in her estate. Bucquet v. Livingston, 57 Cal. Rptr. 514, 516-17 (Ct. App. 1976).

33. MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 5 (AM. BAR ASS'N 2016).

disruptions and questions regarding the effect of documents.³⁴ For example, one attorney overlooked mortgage language that dramatically understated the amount of the secured interest,³⁵ while another neglected to fill in a blank entirely on a form land contract.³⁶ Others have overlooked language that is clearly inappropriate for the current transaction, like the attorney who used a form to prepare a trust but forgot to remove the phrase “per stirpes,” even though the settlor intended to distribute the trust’s assets only to her then-living siblings.³⁷

The most obvious and critical errors often occur where the drafter uses legally deficient language or excludes an essential provision.³⁸ The former category encompasses such plain errors as drafting a usurious promissory note.³⁹ The latter often ensnares knowledgeable attorneys who simply forget

34. Beyer, *supra* note 19, at 82 (“Major errors—a misplaced decimal point in a legacy or an important provision omitted—and seemingly minor errors—misspelling of a beneficiary’s name—may become the focus of later litigation.”).

35. Prudential Ins. Co. of Am. v. Dewey Ballantine, Bushby, Palmer & Wood, 573 N.Y.S.2d 981, 984, 987 (App. Div. 1991) (holding that the client stated a viable breach of contract claim against the attorney when the mortgage identified the client’s secured interest as \$92,885.00, rather than \$92,885,000).

36. Behnke v. Radtke, 222 N.W.2d 686, 687, 689 (Wis. 1974) (holding that the client could proceed on a negligence claim against an attorney who neglected to fill in the blank for the insurance amount in a form land contract, and a fire later destroyed the property); *see also* *In re Addison*, 611 S.E.2d 914, 915–17 (2005) (disciplining an attorney who drafted conveyance documents with incorrect real property descriptions).

37. *In re Lock Revocable Living Tr.*, 123 P.3d 1241, 1249–51 (Haw. 2005). Because all but two of the settlor’s siblings predeceased her, under a distribution of equal shares, the two survivors would split the res, while a per stirpes distribution would apportion one-eighth of the assets to each sibling, “with the surviving children of any predeceased sibling taking the share of the deceased parent in equal shares.” *Id.* at 1244. Fortunately for the survivors, the court interpreted the document to mandate a distribution in equal shares to the surviving siblings. *Id.* at 1251.

38. Ramp v. St. Paul Fire & Marine Ins. Co., 269 So. 2d 239, 244 (La. 1972); Fiorentino v. Rapoport, 693 A.2d 208, 213 (Pa. Super. Ct. 1997) (“In order to advise a client adequately, a lawyer is obligated to scrutinize any contract which the client is to execute and thereafter must disclose to the client the full import of the instrument and any possible consequences which might arise therefrom.”); Collas v. Garnick, 624 A.2d 117, 121 (Pa. Super. Ct. 1993) (stating that lawyers have “an obligation to exercise care in determining the effect of [any] agreement” that their clients are to sign).

39. Silver v. George, 618 P.2d 1157, 1159 (Haw. Ct. App. 1980) (“[I]t is a per se violation of an attorney’s duty for him to draw a note which is on its face usurious.”); DeStaso v. Condon Resnick, LLP, 936 N.Y.S.2d 51, 54 (App. Div. 2011) (stating that a legal malpractice action “may be based upon the creation of a [usurious] loan document”); *see also* Malik v. Beal, 864 N.Y.S.2d 153, 154–55 (App. Div. 2008) (allowing malpractice claim when attorney purportedly failed to employ language to obligate seller of real property to deliver certificates of occupancy to client-buyer).

to include client requests such as a specific gift in a will,⁴⁰ or omit common provisions like a residuary clause.⁴¹ Or, similarly, the attorney may fail to ensure that payments under a divorce decree qualify as tax alimony by neglecting to include a statement terminating the payments upon the death of the recipient.⁴²

Blatant language defects are relatively easy to avoid, as they are easily discovered. They represent the most basic failures to accomplish the planned transaction.⁴³ More subtle deficiencies occur when the drafter includes all necessary provisions that might accomplish the client's intent if considered in isolation, but the document as a whole falls short. These flaws exist because of the well-known principle of interpreting legal instruments as a whole, rather than each provision in isolation.⁴⁴ The interrelation of the provisions, rather than substantive deficiencies in any individual paragraph, spawns these defects.⁴⁵

40. *Hale v. Groce*, 744 P.2d 1289, 1292–93 (Or. 1987); *see also* *M&R Ginsburg, LLC v. Segal, Goldman, Mazzotta & Siegel, P.C.*, 934 N.Y.S.2d 269, 269–71 (App. Div. 2011) (allowing a negligence claim where the attorney purportedly failed to include in a contract for sale of real property a client-requested restriction prohibiting purchasers from operating a pharmacy).

41. *Young v. Williams*, 645 S.E.2d 624, 626 (Ga. Ct. App. 2007) (attorney admitted that failure to include a residuary clause in a will violated standard of care); *see also* *Dahlin v. Jenner & Block, L.L.C.*, No. 01 C 1725, 2002 WL 31804458, at *5 (N.D. Ill. Dec. 12, 2002) (finding an issue of fact as to whether the lawyer acted negligently in failing to include, in a lease, a provision shifting tax payments from the landlord to the tenant); *Escape Airports (USA), Inc. v. Kent, Beatty & Gordon, LLP*, 913 N.Y.S.2d 47, 48–49 (App. Div. 2010) (refusing to dismiss claim that the attorney acted negligently in failing to include a provision in a lease allowing the client to terminate the agreement if the landlord curtailed the client's right to occupy certain space); *Wittich v. Wallach*, 607 N.Y.S.2d 725, 726 (App. Div. 1994) (permitting the client to proceed on claim that the attorney acted negligently in failing to include a non-disturbance provision in a real property lease).

42. *See Wolens v. Comm'r*, 114 T.C.M. (CCH) 607, at *6 (2017). Although the courts will look to state law to ascertain whether the payments will extend beyond the recipient's death, if the divorce decree expressly provides that they will terminate at the payee's death, the IRS will generally consider them tax alimony without further inquiry (assuming the payments satisfy the other requirements). *See id.*

43. *See Badik v. Murphy*, 555 N.Y.S.2d 206, 207–08 (App. Div. 1990) (allowing the client to proceed on claim that the attorney erroneously drafted lease to include option of the tenant to purchase, rather than option of the landlord to sell).

44. *Bamdad Mech. Co. v. United Techs. Corp.*, 586 F. Supp. 551, 555 (D. Del. 1984), *vacated*, 760 F.2d 255 (3d Cir. 1985) (“In upholding the intentions of the parties, a court must construe the agreement as a whole, giving effect to all provisions therein.”); *E.I. du Pont de Nemours & Co. v. Shell Oil Co.*, 498 A.2d 1108, 1113 (Del. 1985) (citing *State v. Dabson*, 217 A.2d 497, 500 (Del. 1966)).

45. *E.I. du Pont de Nemours*, 498 A.2d at 1113 (citing *Sterman v. Ackerman*, 184 A.2d 28, 34 (Del. Ch. 1962)) (“[T]he meaning which arises from a particular portion of an

Such documentary defects can take several forms. Drafters pressed for time may prepare documents with inconsistencies between provisions, often buried in lines of lengthy text, or fall victim to incorrect cross-references altered through several rounds of back-and-forth negotiations.⁴⁶ Faults of a more nuanced nature occur when one provision has an unintended interpretive effect on another. In many cases, any resulting ambiguity remains undiscovered, part of the great heap of contracts simply tossed aside, never to be read again, or the ambiguity is so trivial as to cause no concern. But sometimes the question of interpretation strikes at the heart of the matter, such that the document no longer accomplishes the client's objective.⁴⁷ In those more extreme instances, the client stands to lose the benefit of the bargain, and the drafter faces liability for negligence.⁴⁸

Integral to the proper execution of documents is the need to supervise all non-lawyers who contribute to the transaction's effectuation.⁴⁹ In many law offices, paralegals, law clerks, and legal assistants play a significant role in the document preparation process.⁵⁰ Delegation unbridles the attorney from mundane tasks and facilitates low-cost legal services.⁵¹ At the same time, however, the attorney still bears the responsibility to ensure that the final work product reflects and properly effectuates the client's intent.⁵² In one noteworthy case, a lawyer's secretary inserted language in a deed contrary to the express instructions of a long-time client.⁵³ After the lawyer failed to notice the inclusion, the court held him liable for negligence.⁵⁴

agreement cannot control the meaning of the entire agreement where such inference runs counter to the agreement's overall scheme or plan.”)

46. Attorneys must also guard against inconsistencies between separate documents in the same transaction. *See, e.g.*, *Becker v. Port Dock Four, Inc.*, 752 P.2d 1235, 1236 (Or. Ct. App. 1988) (finding the attorney negligent after he drafted a land sale contract to include parking spaces and an easement but failed to include those in the deed).

47. *See Kushner v. McLarty*, 300 S.E.2d 531 (Ga. Ct. App. 1983).

48. *See id.*

49. *See* MODEL RULES OF PROF'L CONDUCT r. 5.3 (AM. BAR ASS'N 2016).

50. *See* Paul R. Tremblay, *Shadow Lawyering: Nonlawyer Practice Within Law Firms*, 85 IND. L.J. 653, 656–57 (2010).

51. *See In re Op. No. 24 of Comm. on Unauthorized Practice of Law*, 607 A.2d 962, 963, 967 (N.J. 1992) (stating that paralegals benefit “the public in the form of reduced legal fees”).

52. *See In re Evans*, 657 S.E.2d 752, 753 (S.C. 2008); *In re Avant*, 603 S.E.2d 295, 296 (Ga. 2004); Harold A. Segall, *Drafting: An Essential Skill*, 30 FORDHAM URB. L.J. 751, 752 (2003) (“[Lawyers] must concentrate on reading a final draft as if [they] were reading the document for the first time There is no use in blaming mistakes on the secretary or typist. It is up to the draftsman to correct mistakes.”).

53. *McWhorter, Ltd. v. Irvin*, 267 S.E.2d 630, 631 (Ga. Ct. App. 1980).

54. *Id.* at 632.

The execution phase does not end when the documents are drafted, however. Even the most impeccably crafted document will not effectively carry out the client's intent if the attorney overlooks any additional requirements. Consider the familiar examples of recording a mortgage and complying with testamentary formalities. In the mortgage context, the lender's attorney dutifully drafts the document, and the requisite parties sign at closing. But the attorney's job is not done, as he or she must still ensure the mortgage is recorded, either by doing so personally, assigning the task to a reliable third party, or at least informing the client of the need to record.⁵⁵ Formalities of testamentary conveyances function in a similar manner. In most states, a will must be written and signed by the testator and two witnesses (plus a varying number of additional formalities, depending on the state).⁵⁶ Failure to satisfy those requirements often renders the gift ineffectual, and the property passes through intestacy, the eventual result of which may or may not reflect the testator's original intent.⁵⁷

D. Consultation and Explanation

Planning and executing a transaction involves a dynamic process—it is less a sequential affair than a back-and-forth exercise, which reflects the shifting nature of the transaction and the evolving needs of the client. In both simple and complex engagements, the client may be confused by what the documents accomplish and how they protect the client's interest. Without a proper explanation of the client's legal situation and options, as well as the implications of the transaction on his or her interest, the client is hard-pressed to make fully informed decisions. To mitigate these concerns, as a corollary to the duty of competence, the attorney has a duty to consult and advise the client and to explain the transaction.⁵⁸

55. See *Theobald v. Byers*, 13 Cal. Rptr. 864, 865 (Ct. App. 1961) (the attorneys neglected to inform their clients of the need to record the mortgage); see also *Edme v. Tanenbaum*, 855 N.Y.S.2d 596, 596–97 (App. Div. 2008) (permitting action against the attorney who allegedly failed to “set up and maintain an escrow account for” certain funds of his client intended to pay the client's monthly mortgage obligation).

56. RESTATEMENT (THIRD) OF PROP.: WILLS & DONATIVE TRANSFERS § 3.1 (AM. LAW INST. 1999). For an example of a state statute that mandates a litany of additional formalities, see ARK. CODE ANN. § 28-25-103(a) (2012).

57. See, e.g., *Auric v. Cont'l Cas. Co.*, 331 N.W.2d 325, 327 (Wis. 1983) (lack of second witness signature on will rendered invalid a \$25,000 specific bequest to the testator's brother); see also John H. Langbein, *Excusing Harmless Errors in the Execution of Wills: A Report on Australia's Tranquil Revolution in Probate Law*, 87 COLUM. L. REV. 1, 3–4 (1987).

58. MODEL RULES OF PROF'L CONDUCT r. 1.4 (AM. BAR ASS'N 2016). “One of an attorney's basic functions is to advise. Liability can exist because the attorney failed to provide advice.” *Nichols v. Keller*, 19 Cal. Rptr. 2d 601, 608 (Ct. App. 1993). “There is also a very

In broad terms, the duty of consultation and explanation obligates the attorney to use care in keeping the client apprised of significant matters relating to the transaction.⁵⁹ This generalization breaks down into two interconnected components: reasonable consultation and reasonable explanation. The former requires the attorney to “reasonably consult with the client about the means by which the client’s objectives are to be accomplished,” which is to say the attorney must seek the client’s input where appropriate.⁶⁰ The latter similarly entails an explanation of the “matter to the extent reasonably necessary to permit the client to make informed decisions regarding the representation,” meaning the attorney must give the client sufficient information to determine how to proceed.⁶¹ Sometimes, the client will request an explanation of the alternative approaches, the significance of a provision, or the effect of a document.⁶² However, when the client never directly seeks such an explanation, the attorney must use his or her judgment to determine when a consultation and explanation is truly necessary. Certain decisions fundamentally affect the client’s interest and clearly require the attorney to seek the client’s input, explain the relative considerations, and let the client make the final decision.⁶³ The fundamental

practical reason for such explanations to the client: no lawyer wants to work hard taking action that a client has no use for, and no client wants to get a bill for such work.” Brook Boyd, *Smart Checklists and the Future of Real Estate Law Practice*, 28 PROB. & PROP. 34, 36 (2014).

59. MODEL RULES OF PROF’L CONDUCT r. 1.4(a)(2) (AM. BAR ASS’N 2016).

60. *Id.*; see also Hricik, *supra* note 5, at 260 (“Lawyers have a fundamental duty to communicate with clients.”). Attorneys owe their clients a “duty to review and explain . . . the legal import and consequences which would result from” signing any agreement. Lowry v. Lowry, 393 S.E.2d 141, 145 (N.C. Ct. App. 1990). “[L]awyers should make their best efforts to ensure that the client does not make a decision until the client has been informed of the relevant considerations.” Rice v. Poppe, 881 N.W.2d 162, 169 (Neb. 2016).

61. MODEL RULES OF PROF’L CONDUCT r. 1.4(b) (AM. BAR ASS’N 2016). Attorneys should “volunteer opinions when necessary to further the client’s objectives. [They] need not advise and caution of every possible alternative, but only of those that may result in adverse consequences if not considered.” *Nichols*, 19 Cal. Rptr. 2d at 608. The degree of explanation “is a function of the specific situation and the known predilections of the client.” Conklin v. Hannoeh Weisman, 678 A.2d 1060, 1069 (N.J. 1996).

62. See *Cicorelli v. Capobianco*, 453 N.Y.S.2d 21, 22 (App. Div. 1982) (finding that the attorney breached duty of care when he incorrectly advised his clients that they had no further obligations under a contract); *Gorski v. Smith*, 812 A.2d 683, 694–95 (Pa. Super. Ct. 2002) (holding that the attorney breached duty of care by failing to explain to his clients the consequences of a warranty and erroneously advising them that they could terminate the agreement).

63. MODEL RULES OF PROF’L CONDUCT r. 1.4 cmt. 5 (AM. BAR ASS’N 2016); see also *Cottone v. Fox Rothschild, LLP*, No. A-0420-12T4, 2014 WL 4287002, at *12 (N.J. Super. Ct. App. Div. Sept. 2, 2014) (transactional attorneys have a duty to “review the written agreement with the client [] to determine that the client underst[ands] the material terms that might reasonably affect [his] decision to execute it”). “An attorney . . . must advise a client of the

category might include the determination of whether a newly-formed LLC will be member- or manager-managed,⁶⁴ whereas a client might not expect or care to provide input on how “Business Day” is defined in an operating agreement.⁶⁵

Together these duties supply guiding principles for effective transactional representation: sufficient knowledge, suitable planning, sound execution, and adequate explanation where appropriate. Although at first glance they seem straightforward enough, these deceptively complex touchstones engender a corresponding set of risks in transactional representations, pitfalls which are often difficult to predict, and time-consuming to reliably avoid. Indeed, the above described cases are merely a fraction of the already diminished amount that survive the privity bar⁶⁶ or

risks of the transaction in terms sufficiently clear to enable the client to assess the client’s risks. The care must be commensurate with the risks of the undertaking and tailored to the needs and sophistication of the client.” *Conklin*, 678 A.2d at 1069; *see also* *Wong v. Wu*, 683 N.Y.S.2d 249, 249–50 (App. Div. 1999) (allowing a claim against the attorney for failing to advise the real estate purchasers of their right to terminate upon the seller’s nonperformance at closing and as to the omission of a time-is-of-the-essence clause).

64. *See* Gianfranco A. Pietrafesa, *Avoiding Legal Malpractice in LLC Formations*, N.J. LAW. 12, 14 (2016), <https://www.archerlaw.com/wp-content/uploads/2016/09/Pietrafesa%20-%20Avoiding%20Legal%20Malpractice%20in%20LLC%20Formations.pdf> (“Without knowing the economics, and without explaining the different consequences to clients, an attorney may draft an operating agreement that has unintended results.”).

65. *See* *Preferred Fragrance, Inc. v. Buchanan Ingersoll & Rooney PC*, No. 15 Civ. 1293 BMC, 2015 WL 6143612, at *8 (E.D.N.Y. Oct. 18, 2015) (expressing concerns that imposing a duty to explain simple provisions would generate endless malpractice claims, regardless of whether the provision was “substantively unreasonable”). *Cf.* *Hackers Inc. v. Palmer*, 79 Pa. D. & C.4th 485, 488–89 (Pa. Ct. Common Pleas 2006) (finding an issue of fact as to negligence of the attorney who allegedly failed to explain “clause of [an] asset purchase agreement that denoted what liabilities were assumed”).

66. Some states have retained a strict privity bar. *See, e.g.*, *Robinson v. Benton*, 842 So. 2d 631, 634 (Ala. 2002) (dismissing a negligence claim of the devisee against the attorney, stating that “an intended beneficiary has no standing to bring a legal-malpractice action against an attorney because there is no privity between the beneficiary and attorney, and in the absence of privity, the attorney owes no duty to the beneficiary”); *Barcelo v. Elliot*, 923 S.W.2d 575, 576 (Tex. 1996) (“[A]ttorney who negligently drafts a will or trust agreement owes [no] duty of care to persons intended to benefit under the will or trust.”). Others have permitted non-client beneficiaries to sue attorneys “only if the client’s intent, as expressed in the [document], is frustrated.” Bradley E.S. Fogel, *Estate Planning Malpractice: Special Issues in Need of Special Care*, GPSOLO (May 2005), https://www.americanbar.org/newsletter/publications/law_trends_news_practice_area_e_newsletter_home/0506_estate_estateplanning.html (citing *Espinosa v. Sparber, Shevin, Shapo, Rosen and Heilbronner*, 612 So. 2d 1378, 1380 (Fla. 1993)); *see also* *Glover v. Southard*, 894 P.2d 21, 24 (Colo. App. 1995). Still other courts apply broader, more flexible tests to determine whether non-clients may maintain a cause of action against the attorney. *See, e.g.*, *Blair v. Ing*, 21 P.3d 452, 464–68 (Haw. 2001); *Auric v. Cont’l Cas. Co.*, 331 N.W.2d 325, 326–27 (Wis. 1983).

the statute of limitations to reach the appellate level.⁶⁷ Few attorneys wish to navigate such perils with only their wits, a blank Word document, and a blinking cursor.⁶⁸ Instead, they have long looked to precedential drafting tools for assistance, the nature of which has evolved throughout the centuries.⁶⁹

III. THE EVOLVING INTERFACE OF LAWYERS AND TECHNOLOGY

Innovation is no stranger to the practice of law. As the techniques employed by attorneys and the law itself have become increasingly complex, so too have the resources developed to assist transactional attorneys to increase their efficiency and to navigate drafting hazards.⁷⁰ The staples in the lawyer's toolkit have advanced over centuries from rudimentary collections of standard documents intended to be hand copied to the present day vast array of electronic precedents that are easily edited, instantly shared, and quickly customized for the current transaction.

A. *The Many Forms of the Form*

In the distant past, lawyers and their clerks, like everyone else, handwrote everything.⁷¹ Beginning in the mid-1400s, formbooks heavily

67. See, e.g., *Snyder v. Heidelberger*, 953 N.E.2d 415, 421 (Ill. 2011) (dismissing as time barred, a widow's malpractice action against the attorney for allegedly negligent preparation of a quitclaim deed that failed to convey certain real estate to her and her husband as joint tenants with right of survivorship); *Dearborn Animal Clinic, P.A. v. Wilson*, 806 P.2d 997, 999–1001 (Kan. 1991) (holding statute of limitations barred the malpractice claim against the attorney who allegedly failed to draft asset purchase agreement to require buyers to purchase stock, and instead gave them an option to purchase); *Goldberg v. Bosworth*, 215 N.Y.S.2d 849, 853 (Sup. Ct. 1961) (dismissing the claim against the attorney who permitted devisee to act as a witness to a will).

68. See DAVID MELLINKOFF, *LEGAL WRITING: SENSE AND NONSENSE* 102 (1982) (“No one who makes frequent use of the law will ever live long enough to live without forms.”).

69. See Susan M. Chesler & Karen J. Sneddon, *Tales from a Form Book: Stock Stories and Transactional Documents*, 78 MONT. L. REV. 237, 243 (2017) (“The use of form documents . . . by lawyers is perhaps as old as the law itself.”).

70. See M.H. Hoeflich, *Law Blanks & Form Books: A Chapter in the Early History of Document Production*, 11 GREEN BAG 2D 189, 191 (2008) (“The repetitive nature of much of legal drafting makes the use of forms economically efficient.”).

71. PETER BUTT & RICHARD CASTLE, *MODERN LEGAL DRAFTING* 17 (2001) (“Before the invention of printing, legal documents were necessarily handwritten.”). A brief perusal of the registry of deeds in most U.S. counties yields numerous handwritten documents conveying legal title to property. Indeed, many eighteenth and nineteenth century handwritten indentures, stock certificates, and court petitions remain in circulation, if not legal effect. See, e.g., *NALC Letters and Documents*, HISTORIC INDENTURES, <http://historicindentures.com/category/robert->

influenced much of this handwritten drafting, as they eased the repetitive task of crafting reliable language in routine matters.⁷² By the 1920s, electric typewriters appeared in more and more law offices, virtually eliminating the arduous task of copying formbook language by hand.⁷³ The mid-1960s gave the legal profession word-processing systems, which allowed lawyers to store data and easily edit documents.⁷⁴ With the incremental advancement of word memory functions through the second half of the twentieth century, formbooks began gathering dust on bookshelves as lawyers increasingly

morris/nalc-letters-and-documents/ (last visited Feb. 11, 2018). This state of affairs remained until the 1900s, when the first feasible electronic typewriters emerged. MARIANNE FORRESTER MUNDAY, OPPORTUNITIES IN WORD PROCESSING 6 (1985); *see also* BUTT & CASTLE, *supra* note 71, at 18 (citing DAVID MELLINKOFF, LANGUAGE OF THE LAW 86 (1963)) (“After William Caxton set up the first printing press in England in 1476, printed works soon proliferated. Not much printing, though, found its way unto private legal documents. Until the typewriter took over in the twentieth century, legal documents were for the most part handwritten by clerks who were often poorly educated and poorly paid.”).

72. ADAM FREEDMAN, THE PARTY OF THE FIRST PART: THE CURIOUS WORLD OF LEGALESE 25 (2007) (“Almost as soon as Gutenberg’s first Bible rolled off the press (1455), English lawyers were putting together formbooks, that is, collections of sample contracts, pleadings, and other documents that had already passed muster with some court or another. Provided that one copied the form verbatim, no sporting judge could object.”); *see also* Alfred L. Brophy & Douglas Thie, *Land, Slaves, and Bonds: Trust and Probate in the Pre-Civil War Shenandoah Valley*, 119 W. VA. L. REV. 345, 380 (2016); Hoeflich, *supra* note 70, at 191; Karen J. Sneddon, *In the Name of God, Amen: Language in Last Wills and Testaments*, 29 QUINNIPAC L. REV. 665, 698–99 (2011). The comments of a fifteenth-century English judge illustrated the credibility the judiciary attributed to even the earliest formbooks: “Sir, the law is as I say it is, and so it has been laid down ever since the law began; and we have several set forms which are held as law, and so held and used for good reason, though we cannot at present remember that reason.” WILLIAM SEARLE HOLDSWORTH, A HISTORY OF ENGLISH LAW (3d ed. 1923) (citing YB 36 Hen. VI, 25–26 (1458) (Fortescue, C.J.)); *see also* Graybill v. Graybill, 14 Pa. D. & C. 382, 384 (Pa. Com. Pl. 1930) (“An examination of the form books, while not being recognized as stating the law, gives some indication of what the general practice is . . .”).

73. The first successful manual typewriter was invented in 1867, but innovators did not create a “feasible” electric typewriter until the 1920s. MUNDAY, *supra* note 71, at 6–7. Typing alleviated some of the potential errors in transcribing form language. GEO. CARL MARES, THE HISTORY OF THE TYPEWRITER: BEING AN ILLUSTRATED ACCOUNT OF THE ORIGIN, RISE, AND DEVELOPMENT OF THE WRITING MACHINE 12 (1909) (“Writers on office management, and bookkeepers all declare that the transcription of figures from one record to another is the most prolific source of errors . . .”).

74. Word processors did not truly catch on until the 1970s, when businesses came to realize the full range of possibilities. MUNDAY, *supra* note 71, at vi–vii (“Many experts predict that during the next decade, word processing systems will replace the typewriter for most office uses. Given that scenario, a working knowledge of word processing will be essential for anyone who wishes to successfully compete in the business world.”).

relied on forms and previous agreements saved on their computers.⁷⁵ At the same time, specialized document assembly systems for transactional attorneys began appearing, first as locally installed systems and later as internet-based resources.⁷⁶ Now the profession is in the midst of a potentially promising, but as of yet unrealized, restructuring through the advent of artificial intelligence.⁷⁷

Simply starting from a form document benefits transactional attorneys in numerous ways. Forms serve as checklists of important provisions, reminding attorneys to include common clauses even if they simply glance over the headings.⁷⁸ This, in turn, reduces the occurrence of forgetful oversights in the drafting process and lessens the need for attorneys to mentally catalogue important inclusions in document preparation.⁷⁹ The pre-drafted language also allows attorneys to save time otherwise spent generating repetitive language and, depending on the form's reliability, can provide a measure of assurance of the final document's legal sufficiency.⁸⁰

In addition, the widespread use of form language among practitioners facilitates consistent interpretation of similar documents and allows attorneys and clients to navigate the document more efficiently.⁸¹ In the business context, standardized language promotes productivity in the negotiation process by allowing each side to more easily understand the document's effect and streamlining bargaining points.⁸² Companies can

75. See Hoeflich, *supra* note 70, at 200 (“As word-processing technology moved into the digital era, . . . the traditional form book . . . at last became obsolete. . . . Today, a lawyer will rarely purchase a form book, but both compilations of forms and individual forms . . . downloadable from the Web remain much in use.”).

76. See Darryl R. Mountain, *Disrupting Conventional Law Firm Business Models Using Document Assembly*, 15 INT’L J.L. & INFO. TECH. 170, 172–73 (2007).

77. See Julie Sobowale, *How Artificial Intelligence is Transforming the Legal Profession*, AM. BAR ASS’N J. (Apr. 2016), http://www.abajournal.com/magazine/article/how_artificial_intelligence_is_transforming_the_legal_profession.

78. See Dahm, *supra* note 5, at 96–97.

79. See Claire A. Hill, *Why Contracts Are Written in “Legalese”*, 77 CHI. KENT L. REV. 59, 63 (2001) (“Given the complex nature of the task, and the quick turnaround time typically required, even the most experienced lawyer would have difficulty remembering every step and detail; the form is a useful reminder.”).

80. See STARK, *supra* note 25, at 411 (“[I]f the precedent is a good one, using it will reduce errors and improve a contract’s quality.”); Hill, *supra* note 79, at 63 (“A new product, custom-crafted for the client from a form, can be produced quickly, and at far lower cost than a product crafted from scratch.”).

81. See William E. Foster, *Enduring Design for Business Entities*, UTAH L. REV. 955, 1000 (2015).

82. See *id.* at 1001.

manage their contractual commitments in a more orderly, cost-effective manner, enabling them to retain value from obligations others owe to them.⁸³

When coupled with word-processing systems, the practical usefulness of forms multiplies. Attorneys can easily customize and save form documents, which are retrievable with only a few clicks.⁸⁴ Using the editing capabilities of Word, they can insert placeholders throughout the document and use the find-and-replace function to insert names and other individualized information in mere minutes.⁸⁵ For unique agreements, they can draw on multiple documents using the copy-and-paste function—one useful provision from one agreement, a second from another document, and so on.

Before law offices were connected to the internet, attorneys' drafting tools were often limited to standardized forms in published formbooks and whatever precedents were available from transactions involving lawyers in the same office.⁸⁶ The internet unleashed a universe of readily available forms by allowing attorneys to instantly share documents through email and to access a wide variety of templates electronically stored throughout the world.⁸⁷ In some important ways, this shift fundamentally altered the practice of many transactional attorneys, who previously had to cobble together language from limited and familiar databases and who now could instantly locate precedents for nearly any conceivable transaction.⁸⁸

83. See Mark R. Patterson, *Standardization of Standard-Form Contracts: Competition and Contract Implications*, 52 WM. & MARY L. REV. 327, 342–43 (2010) (describing the benefits of contract standardization in lessening transaction costs and providing a contract “whose meaning and interpretation is more certain”).

84. Word processors contributed many editing and formatting tools attorneys now take for granted: font, font size, and “paragraph attributes such as justification, spacing before and after, [and] automatic numbering.” David Kiefer & Marc Lauritsen, *Recent Developments in Automating Legal Documents*, 52 SYRACUSE L. REV. 1091, 1092–93 (2002). Such developments also included scrolling, word wrap, insertion, deletion, search and replace, margins and tabs, and spell-check. MUNDAY, *supra* note 71, at 27–29.

85. See Marc Lauritsen, *Current Frontiers in Legal Drafting Systems 2* (June 2007) (Working Paper), <https://static1.squarespace.com/static/571acb59e707ebff3074f461/t/5946f1e39de4bb69d253380c/1497821669156/CurrentFrontiers.pdf> (“A boilerplate document with placeholders like [plaintiff], [defendant], [court], and [attorney for plaintiff] can thus be tailored for a given case by replacing those phrases with specific information.”).

86. See Austin Coleman Gay, Book Review, 6 TEX. L. REV. 122 (1927) (reviewing ROBERT W. STAYTON, *TEXAS FORM BOOK ANNOTATED* (2d ed. 1927)) (stating that the author “deserves the thanks of the members of the Texas Bar for furnishing them with a comprehensive, grammatical, and correct set of legal forms”).

87. Dahm, *supra* note 5, at 96 (“Attorneys commonly use standard contracts that were previously drafted for other clients, they research form books for standard contracts, and they search the Internet for contracts that have been drafted by other attorneys for clients with similar transactions.”).

88. See Paul E. Washington & Michael Stefanoudakis, *The Internet: A Great Resource for Corporate Lawyers*, 28 COLO. LAW. 65, 65 (1999) (“The Internet and other online sources

Yet, that expanded availability has carried with it a potentially deleterious effect on the quality of transactional representation. The internet's expansive reach means attorneys and others have access to unfamiliar documents from obscure sources. With minimal information on the drafter and often virtually no context for the original transaction, attorneys risk relying on precedents that are ill-suited for their client's needs.⁸⁹ To be sure, the internet has brought innumerable high-quality forms within everyone's grasp.⁹⁰ But in the great heap of accessible documents, attorneys also face a new challenge in distinguishing between suitable precedents and malpractice fodder.

B. Automation

Since the 1970s, computer-based advancements have driven the evolution of the law practice. The advent of computerized legal research occurred with the introduction of LEXIS in early 1973 and then Westlaw in 1975.⁹¹ For transactional attorneys, specialized document assembly systems appeared shortly thereafter, beginning in 1978 with the American Bar Foundation's "ABF Processor."⁹² Early document assembly systems required local software, which forced attorneys to install the program (as well as any updates) on the firm's system.⁹³ By 1990, these locally based systems had spread throughout the United States.⁹⁴ As that decade progressed, the internet further augmented the systems' popularity by

are excellent resources for obtaining well-drafted agreements that corporate lawyers may use to draft similar agreements for their clients.").

89. STARK, *supra* note 25, at 412–13.

90. See Washington & Stefanoudakis, *supra* note 88, at 65 ("The primary advantage of using the Internet is that it is an efficient way to obtain well-drafted precedent.").

91. The Ohio State Bar Association launched the first foray into electronic legal research in the mid-1960s, when it enlisted the forerunner of LEXIS to explore the issue. See F. Allan Hanson, *From Key Numbers to Keywords: How Automation Has Transformed the Law*, 94 LAW LIBR. J. 563, 573 (2002). While at first LEXIS offered a clearly superior product to Westlaw, by the mid-1980s, "Westlaw had become an automated research service equal in power to LEXIS." *Id.* (citing William G. Harrington, *A Brief History of Computer-Assisted Legal Research*, 77 LAW LIBR. J. 543, 553–54 (1984)).

92. See James A. Sprowl, *Automating the Legal Reasoning Process: A Computer That Uses Regulations and Statutes to Draft Legal Documents*, 4 AM. BAR FOUND. RES. J. 1, 16 (1979).

93. See Steven Keeva, *Document Assembly*, 76 AM. BAR ASS'N J. SD11, SD14 (1990); Kiefer & Lauritsen, *supra* note 84, at 1098–99.

94. See Keeva, *supra* note 93, at SD14. In 1990, one Memphis practitioner predicted that the "document assembly boom" would "be complete in 10 years." *Id.* at SD11.

allowing attorneys access to the programs through online servers.⁹⁵ Importantly, this new online location permitted producers to instantly update the systems to keep pace with legal developments.⁹⁶

Broadly defined, document assembly is an automation technique that involves the construction of templates into which the program inputs client-specific information.⁹⁷ Most systems use a questionnaire format, in which the user responds to the program's inquiries, and the program incorporates the user's responses to generate a final document.⁹⁸ With the correct formatting, the systems can produce a range of documents of varying complexity.⁹⁹ Even the ABF Processor could assemble simple wills, divorce complaints, and intestate probate forms.¹⁰⁰ And those outputs have only expanded over time; current document assembly systems can generate documents ranging from revocable living trusts and pour-over wills to buy-sell agreements and entity formation documents such as operating agreements.¹⁰¹

Current document assembly programs take one of two basic forms. Law firms can program a system to utilize the firm's own forms and to use questions and answers the firm's attorneys formulate.¹⁰² Or the firm can purchase a pre-built program (whether online or locally installed), which

95. See Mountain, *supra* note 76, at 173 (citing Richard Granat et al., 'Will Document Automation Disrupt the Legal Profession? A Roundtable Discussion Sponsored by the ABA's eLawyering Task Force', Loew's Hotel Philadelphia, Oct. 22, 2005) ("[T]he increasing reach of the Web makes it more economical to automate a given document.").

96. See Kathryn D. Betts & Kyle R. Jaep, *The Dawn of Fully Automated Contract Drafting: Machine Learning Breathes New Life Into a Decades-Old Promise*, 15 DUKE L. & TECH. REV. 216, 222 (2016); see, e.g., Brett Pinegar, *Before You Purchase Estate Planning Software, Read This Article*, WEALTHCOUNSEL (Aug. 1, 2017), <http://info.wealthcounsel.com/blog/before-you-purchase-estate-planning-software-read-this-article> ("Wealth Counsel's software allows [attorneys] to streamline [their] processes by creating accurate, up-to-date, professional documents. The software is regularly updated to reflect legal and legislative changes . . .").

97. See Irene Ng (Huang Ying), *The Art of Contract Drafting in the Age of Artificial Intelligence: A Comparative Study Based on US, UK and Austrian Law* 18 (Transatlantic Tech. L. Forum, Working Paper No. 26, 2017).

98. Kenneth A. Adams & Tim Allen, *The Illusion of Quality in Contract Drafting*, 248 N.Y.L.J. 11 (July 17, 2012) ("When the user has completed the questionnaire, the system pulls together and adjusts the preloaded contract language in accordance with instructions included in the contract language, and the user is presented with the resulting contract as a Word document or a PDF . . .").

99. See Mark J. Morrise, *How Document Assembly Will Benefit Your Law Practice*, 8 UTAH B.J. (2d ser.) 14, 15 (1995).

100. See Sprowl, *supra* note 92.

101. See Pinegar, *supra* note 96.

102. *Introduction*, PATHAGORAS, <https://www.pathagoras.com/help/introduction.htm?toc=0&printWindow&> (last updated Nov. 1, 2017).

uses contract material that a commercial producer's attorneys created.¹⁰³ A prominent example of the latter is Wealth Docx, which offers suites of documents from estate planning to entity formation.¹⁰⁴

Regardless of whether the contract material originates from a law firm or a commercial entity, the systems' basic question-and-answer format is the same and encompasses a number of functions. At their most basic level, the systems operate similar to the find-and-replace function of word-processing systems by allowing attorneys to enter client information (such as names, addresses, and birth dates) into new forms in a matter of seconds.¹⁰⁵ A last will and testament form on a document assembly system, for example, would contain bracketed placeholders throughout the document, including [the name of the testator], [the testator's spouse], and so on.¹⁰⁶ The program would generate a question based on the contents of each set of brackets, e.g., "What is the name of the testator?" and then substitute the user's response for each corresponding bracket.¹⁰⁷

In addition to eliminating the redundant task of inserting names and dates, these programs facilitate customization by providing optional or alternative clauses. Each document may contain a number of these clauses, which can vary in depth and intricacy.¹⁰⁸ In designing the programs to include alternative and optional clauses, programmers formulate a catalogue of "blocks or clauses to cover a wide variety of factual scenarios"¹⁰⁹ that are likely to be included in the types of documents the attorney typically drafts.

103. Betts & Jaep, *supra* note 96, at 219 ("Web-based programs now prevail over those requiring users to load software on individual devices.").

104. *Estate Planning and Business Planning Tools*, WEALTHCOUNSEL, <https://www.wealthcounsel.com/software-for-attorneys> (last visited Jan. 14, 2018) [hereinafter WEALTHCOUNSEL].

105. Mountain, *supra* note 76, at 172 (stating that the "basic functions" of assembly software "are to replace the cumbersome manual filling in of repetitive documents with template-based systems where the user answers software-driven interview questions").

106. Sprowl, *supra* note 92, at 19.

107. See, e.g., Jim Calloway & Diane Ebersole, *Magic in Minutes—Effective Use of Document Assembly*, LAW PRACTICE TODAY (Sept. 2012), http://www.americanbar.org/publications/law_practice_today_home/law_practice_today_archive/september12/magic-in-minutes.html ("In Pathagoras a lawyer can just pull up the lawyer's own form in Microsoft Word and replace all of the various variables (names, dates, prescriptions) with the name of the variable surrounded by brackets. (e.g. replace Betty White with [Client Name].)").

108. Betts & Jaep, *supra* note 96, at 219.

109. Henry J. Lischer, Jr. et al., *What is Document Assembly?—Document Assembly Compared With Traditional Forms of Document Preparation*, 16 West's Legal Forms, Estate Planning § 3.4 ("First, the system designer prepares a catalogue of alternative paragraphs or clauses ('blocks of text') to cover a wide variety of fact situations that may be necessary for a document. The author usually will start with his or her own existing forms and, as the need arises, expand the 'inventory' of clauses to cover a wider variety of fact patterns.").

The source material can be either a commercial producer's own forms or, if an attorney is building a document assembly program in-house, the attorney's own forms and documents.¹¹⁰ Next, by using the automation software, the programmer creates a "decision tree . . . that links the various blocks of text together as the circumstances of each situation dictate."¹¹¹

To formulate an optional clause, the programmer instructs the system to include or exclude a single clause depending on the user's response. For instance, one such decision in a will would be whether to include a provision instructing the executor of the estate to pay estate taxes out of the estate.¹¹² The program might ask, "Are the [estate] taxes to be paid out of the res of the estate?"¹¹³ If the user typed "yes," the system would insert a preprogrammed clause instructing the executor to do so.¹¹⁴ If, however, the user typed "no," the system would simply omit that provision.¹¹⁵

Alternative clauses operate in a similar fashion, except that a user's answers are attached to two or more different clauses. Consider, for example, the typical testator's decision of whether to appoint one or multiple executors.¹¹⁶ The system would ask, "Do you wish to name only one executor, rather than an executor and an alternate executor?"¹¹⁷ Based on the user's responses, the system automatically inserts alternative and optional clauses, fills in blanks, ensures grammatical consistency, and generates a first draft of the document.¹¹⁸ For example, if the user responded "yes" to the single executor question, the system would insert the clause appointing only one executor.¹¹⁹ If, on the other hand, the user said "no," it would insert the clause naming multiple executors.¹²⁰

Document assembly systems can use these optional and alternative clauses to lead the user through multiple layers of variables, which allows the systems to generate documents of impressive complexity.¹²¹ And the programs have only become more user-friendly and streamlined since their

110. Mountain, *supra* note 76, at 172.

111. Lischer et al., *supra* note 109.

112. Sprowl, *supra* note 92, at 24; *see also* Morrise, *supra* note 99, at 14.

113. Sprowl, *supra* note 92, at 23-24.

114. *Id.* at 24.

115. *Id.*; *see also* Morrise, *supra* note 99, at 14.

116. Sprowl, *supra* note 92, at 24-25.

117. *Id.*

118. Morrise, *supra* note 99, at 14.

119. Sprowl, *supra* note 92, at 25.

120. *Id.*

121. Betts & Jaep, *supra* note 96, at 219 ("Each successive answer in the questionnaire prompts a different series of follow-up questions to tailor the final document to the user's specific needs, providing for a larger, more customizable logic tree than one only focused on only a single practice area.").

inception.¹²² With only a basic understanding of how the program works, attorneys can use document assembly to generate sophisticated, customized work product in smaller and smaller increments of time.¹²³

Although document assembly systems remain the primary tool for transactional attorneys seeking automated assistance, recent developments in artificial intelligence portend accelerated advancements toward automation in the coming years.¹²⁴ Promising programs include systems for document drafting,¹²⁵ automated legal research,¹²⁶ automated due diligence and contract review,¹²⁷ and advanced contract management programs.¹²⁸ Many of these new systems utilize “machine learning.” Unlike traditional document assembly systems, which are completely dependent on hard-coded instructions that their programmers provide,¹²⁹ machine learning systems

122. See generally Richard S. Granat, *Elawyering: Providing More Efficient Legal Services with Today's Technology*, 80 N.Y. STATE BAR J. 20, 26 (2009) (“Traditionally, document automation has been used by lawyers within the office environment to speed up the production of documents of all kinds. This is important, but it does not have as dramatic an effect on the law firm work process as client-centered and Web-enabled document automation. By moving the document automation process onto the Web and enabling the client to provide data online—without initial lawyer intervention—a major increase in lawyer and client productivity occurs.”).

123. See, e.g., *Drafting Assistant—Transactional*, THOMSON REUTERS, <http://legalsolutions.thomsonreuters.com/law-products/solutions/drafting-assistant/transactional> (last visited Feb. 26, 2018) (advertising the system’s ability to “[a]void contract drafting errors, [c]ut proofreading time in half,” and “[p]roduce documents that reflect the latest market practice”).

124. 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, 3051 (2014) (“We predict that within ten to fifteen years, computer-based services will routinely generate the first draft of most transactional documents.”).

125. See, e.g., *Kira for Due Diligence*, KIRA, <https://kirasystems.com/how-it-works/due-diligence> (last visited Feb. 26, 2018) [hereinafter KIRA] (stating that Kira “[a]utomatically finds the provisions that matter in M&A—especially in unfamiliar contracts”).

126. Most prominent is the ROSS Intelligence system, which “uses the Watson cognitive computing system to enhance legal research. Users ask legal questions in plain English and ROSS searches legislation, case law and secondary sources.” Julie Sobowale, *How Artificial Intelligence is Transforming the Legal Profession*, AM. BAR ASS’N J. (Apr. 2016), http://www.abajournal.com/magazine/article/how_artificial_intelligence_is_transforming_the_legal_profession.

127. See, e.g., KIRA, *supra* note 125 (stating that Kira “[a]utomatically finds the provisions that matter in M&A—especially in unfamiliar contracts”).

128. See, e.g., *Contract Analyzer*, EBREVIA, <https://ebrevia.com/ebrevia-contract-manager> (last visited Feb. 26, 2018) (“The Contract Analyzer extracts information from current and legacy contracts to ensure that key contractual data and commitments are not missed.”).

129. Morrise, *supra* note 99, at 15 (“[T]he lawyer or someone working under the lawyer’s direction must input the forms, identify the blanks, decide what optional or alternative clauses to add, insert the instructions to the computer, etc.”).

employ algorithms that allow them to independently learn drafting options.¹³⁰ As programmers feed them data (i.e., a series of contracts), the processors review, interact, and learn from those examples.¹³¹ Eventually, the systems can teach themselves “to identify new examples to better fit the user’s liking,” such as identifying standard clauses in each contract and using those provisions to create a model template with “the least amount of deal-specific, non-standard language available.”¹³²

One system that uses aspects of machine learning is Bloomberg Law’s “Draft Analyzer” tool.¹³³ The system interfaces with EDGAR—the SEC’s publicly available database of contracts—which allows it to identify “the prevailing market terms . . . for certain contract provisions . . .”¹³⁴ This feature provides attorneys access to language that approximates current market norms, which the program updates as market trends shift.¹³⁵ To use the program, the user must merely upload a document.¹³⁶ The system then analyzes the document, drawing on hundreds of precedent documents, and provides alternative language for provisions throughout the agreement.¹³⁷ These suggestions can be highly useful to drafters who take the time to carefully evaluate each potential alteration. But the user must act cautiously in determining whether to change his or her language based on the system’s proposed wording, especially when the user inputs a highly unique

130. Irene Ng (Huang Ying), *supra* note 97, at 21 (“The AI system assesses information that is fed into it, and subsequently makes inferences based on the data it has received by attempting to make connections and relationships amongst the different data that it receives. Upon making the relevant inferences, the AI system will then attempt to predict outcomes.”).

131. Betts & Jaep, *supra* note 96, at 224; *see also* McGinnis & Pearce, *supra* note 124, at 3041 (“Intelligent machines will become better and better, both in terms of performance and cost. And unlike humans, they can work ceaselessly around the clock, without sleep or caffeine.”).

132. Betts & Jaep, *supra* note 96, at 224, 227; *see also* McGinnis & Pearce, *supra* note 124, at 3050 (“[M]achine intelligence will revolutionize the use of legal forms. Most obviously, machine intelligence will help tailor these forms to meet individual situations.”).

133. *See Product Help & Walkthrough: Draft Analyzer*, BLOOMBERG LAW, <https://www.bna.com/draft-analyzer/> (last visited Feb. 26, 2018) [hereinafter *Draft Analyzer*].

134. David Lat, *The Future of Law and Technology: An Interview with Bloomberg BNA’s David Perla*, ABOVE THE LAW (Aug. 27, 2015, 1:11 PM), <https://abovethelaw.com/2015/08/the-future-of-law-and-technology-an-interview-with-bloomberg-bnas-david-perla/>.

135. *See Draft Analyzer*, *supra* note 133 (“Draft Analyzer can reveal just how ‘standard’ some language is.”). Some argue that these types of systems are fundamentally flawed because they are unable to discriminate between quality and sub-optimal language. Ken Adams, *Some Thoughts on “Bloomberg Law: Corporate Transactions”*, THOMSON REUTERS (May 26, 2015), <http://www.contractexpress.com/2015/05/some-thoughts-on-bloomberg-law-corporate-transactions/>.

136. *See Draft Analyzer*, *supra* note 133.

137. *Id.*

document such as a promissory note, as some recommendations are clearly inappropriate for the particular transaction.¹³⁸

IV. THE ETHICAL IMPLICATIONS OF AUTOMATION FOR TRANSACTIONAL PRACTICE

Automation in the drafting process offers a respite from many of the drafting risks that have plagued transactional attorneys over the years. Assistive programs have furthered the progress of non-automated forms in the execution phase and have made encouraging inroads in assisting lawyers in effectively planning transactions. But even with those diminished risks, transactional attorneys still have an integral role to play through the planning and execution phase, and pitfalls still lurk for those attorneys who do not exercise appropriate diligence in each phase.

In the pursuit of efficiency and cost reduction, automated technology has undeniably benefitted legal practice. Document assembly systems have increased the efficiency of drafters, allowing them to reduce time allocated to document drafting.¹³⁹ Fewer hours spent muddling through drafting tasks will hopefully decrease the cost of representation and provide greater opportunities for low- and middle-income clients to obtain legal counsel.¹⁴⁰ The standardized nature of the programs also promotes uniformity among similar types of contracts, especially for those familiar with the specific program's format.¹⁴¹

138. To test the system, the authors uploaded two documents: a promissory note and a confidentiality agreement. For the note, some of the proposals included altering the defined term "Guarantor" to "Pricing Date" and changing the legal description of the "Land" to description of the "Business." Suggestions for the confidentiality agreement were more relevant and generally included only linguistic variations, rather than substantive alterations.

139. Keeva, *supra* note 93, at SD11 ("It can literally do in minutes what used to take days or even weeks."). The programs may also facilitate responsible delegation to non-lawyer assistants such as paralegals. *See id.* ("Once sophisticated legal knowledge is embedded in a system, it can be leveraged down, so that paralegals, for example, are able to construct first drafts of complex documents that they could never have done before.").

140. *See* MARK A. ROBERTSON & JAMES A. CALLOWAY, WINNING ALTERNATIVES TO THE BILLABLE HOUR: STRATEGIES THAT WORK 66 (3d ed. 2008) ("[L]awyers can cut the time it takes to develop initial drafts of documents and thus build a platform for charging clients for the documents provided rather than for the time it takes to prepare them."). Lawyers could lessen these cost savings, however, by billing on a per-transaction basis. *See id.* at 65–66; Morrise, *supra* note 99, at 17 ("The key to profiting from document assembly is to charge a fixed or flat fee that is based on the value of the service provided, not the time spent. Lawyers who have taken this step have doubled or tripled their effective hourly billing rate.").

141. *See* Kenneth A. Adams et al., *Transactional Skills Training: Contract Drafting—Beyond the Basics*, 10 TENN. J. BUS. L. 253, 276–78 (2009).

Beyond the obvious efficiency-related benefits, however, the consequences of document assembly and artificial intelligence technology are more complex. With respect to the proficiency of transactional practice, new technology systems can have duplicitous effects. They can assist attorneys in providing quality representation and avoiding some of the common missteps in typical transactional engagements. But those uses are not unlimited, and they cannot resolve all of the common pitfalls in transactional practice. Even with automated drafting resources, attorneys may still risk professional mishaps.

Recall that contract drafters encounter risks of two primary types: oversights in planning and execution errors. The former refers to whether the drafter possesses the requisite legal knowledge to effectively represent clients in particular transactional engagements, and involves situations where, for example, attorneys miss an applicable legal rule or mistakenly believe that a legal rule applies when it does not.¹⁴² The latter category concerns the drafter's duty to carry out the representation in a diligent and skillful manner, and encompasses missteps from typos to structural defects in the document such as mistakenly omitted clauses and accidentally included information.¹⁴³

A. *Improved Execution*

While advancing technology can address errors in both the planning and execution of transactions, to date automation has been employed primarily to reduce execution errors. Automation technology can help reduce execution errors by eliminating inconsistent provisions, avoiding retention of language from a prior negotiated transaction, and ensuring legal updates are incorporated into necessary provisions.

Used with appropriate care, document assembly systems can considerably reduce the occurrence of typographical errors in the memorialization of the transaction. Automatic insertions based on user responses alleviate the need for drafters or their assistants to search page after page of dense text in search of every place for client-specific information such as a name, date, or address.¹⁴⁴ Aside from the time-consuming and monotonous nature of the search process, attorneys can miss

142. MODEL RULES OF PROF'L CONDUCT r. 1.1 (AM. BAR ASS'N 2016).

143. *Id.*

144. Nerino J. Petro, Jr., *Document Automation: Using Technology to Improve Your Practice*, 32 GPSOLO 56, 57 (2015) ("Reusing a previously created document for a different client requires [the drafter] to find each piece of information for that prior client and replace it with the information for the new client.").

important spaces for information, even when they use forms with designated blank spaces.¹⁴⁵ With document assembly software, if the attorney originally inputs the correct information, it will be accurate throughout the entire document.¹⁴⁶

Equally significant is the program's ability to remove language that is inconsistent with the user's response, namely through the use of optional and alternative clauses.¹⁴⁷ Remember, for example, the case where the attorney forgot to remove the term "per stirpes" from a trust template.¹⁴⁸ A properly programmed document assembly system would have automatically excised that language from the finished product, preserving the consistency of the document with the client's wishes.¹⁴⁹

These same functions also reduce the likelihood that one provision will wreak an unintended interpretive effect on another. Obviously, the removal of plainly inconsistent provisions facilitates a more consistent interpretation of the document.¹⁵⁰ But assembly systems can also assist drafters in addressing more latent ambiguities, ones that attorneys can otherwise detect only with a thorough knowledge of the document's underlying context and the interrelation of the provisions.¹⁵¹ These hidden flaws generally lurk most often in highly customized precedents, in which the drafter has incorporated the unique considerations of previous parties.¹⁵² In those instances, attorneys

145. *Behnke v. Radtke*, 222 N.W.2d 686, 687 (Wis. 1974) (the attorney neglected to fill in a blank on the insurance amount in a form land contract).

146. *Morrise*, *supra* note 99, at 15 ("[E]ach piece of information (such as the client's name) is only entered once. The system automatically inserts the information throughout the document . . ."). Document assembly systems cannot solve problems where attorneys incorrectly enter the information in the first place; indeed, if that happens, the systems will enhance the error by repeating it throughout the entire document. *See, e.g.*, *Prudential Ins. Co. of Am. v. Dewey Ballantine, Bushby, Palmer & Wood*, 573 N.Y.S.2d 981, 984, 987 (App. Div. 1991) (holding that the client stated a viable breach of contract claim when the attorney failed to notice a typo in the mortgage agreement which indicated that the client's interest was \$92,885.00, rather than \$92,885,000.00).

147. *See Petro*, *supra* note 144, at 58.

148. *In re Lock Revocable Living Tr.*, 123 P.3d 1241, 1250–51 (Haw. 2005); *see also Pawtucket Inst. for Savings v. Gagnon*, 475 A.2d 1028, 1031 n.1 (R.I. 1984) (noting the attorney's failure to remove language from the standard-form mortgage deed indicating the existence of a promissory note, when the transaction did not involve a note).

149. *Morrise*, *supra* note 99, at 16 ("[T]he system can automatically select and insert appropriate provisions based on the legal decisions and other relevant information the lawyer provides."); *see also McIntyre v. Zac-Lac Paint & Lacquer Corp.*, 131 S.E.2d 640, 642 (Ga. Ct. App. 1963) (stating that "[i]t is the lawyer's responsibility to his client to select and employ words in the construction of [contracts] that will accurately convey" the client's intended meaning).

150. *See Morrise*, *supra* note 99, at 15–16.

151. *Petro*, *supra* note 144, at 57.

152. *See Kushner v. McLarty*, 300 S.E.2d 531, 532 (Ga. Ct. App. 1983).

may quite easily overlook the interpretive consequences of the previously employed language.¹⁵³ Assembly software soothes these problems because it provides a relatively neutral starting point from which attorneys may work in crafting the final document, without concealed traces from prior transactions.¹⁵⁴

Document assembly software can also assist the drafter in customizing the document and successfully capturing the client's expectations.¹⁵⁵ Decision tree logic generally prevents the most egregious failures to customize, such as where an attorney simply uses generic forms to draft a trust without altering the language to suit the client's needs.¹⁵⁶ The abilities of properly programmed assembly software to tailor documents based on user specifications can also aid attorneys in fulfilling specific client expectations, such as where a client asks the attorney to exclude specific provisions from all agreements.¹⁵⁷ Subject to cost restraints, the attorney could program his or her assembly system to avoid any such language through the use of a simple decision tree.¹⁵⁸ In this way, the attorney could rely less on their legal assistants who, like all humans, make mistakes, and more on a computer he or she hardwired to eschew that provision. Now this is not to say that document assembly systems require no supervision, or that the attorney should wholly rely on them, as the attorney clearly must ensure the program is functioning properly and review any agreements it produces.¹⁵⁹ They simply provide a measure of comfort to an otherwise diligent attorney.

The ability of internet-integrated automation systems to immediately update also holds promise for alleviating, while not completely resolving, the age-old problem of relying on a template with legally deficient language. Formbooks and locally saved documents can easily grow stale with incremental changes in the law, and even if the attorney knows the document's date of creation, he or she must still conduct diligent research to

153. *See id.* (finding an issue of fact as to negligence of the attorney who used his radiologist-client's previous employment agreement as a model to draft his new agreement, but failed to effectuate the client's intended termination process).

154. Petro, *supra* note 144, at 57–68.

155. Morrise, *supra* note 99, at 16.

156. Toledo Bar Ass'n v. Sawers, 903 N.E.2d 309, 310 (Ohio 2009). Clearly, this benefit depends on the attorney's actual use of the system. Indeed, an attorney who makes no effort to appropriately customize a document may not take the time to use (or pay for) assembly software.

157. *See, e.g.,* McWhorter, Ltd. v. Irvin, 267 S.E.2d 630 (Ga. Ct. App. 1980).

158. *See* Lischer et al., *supra* note 109.

159. *See* MODEL RULES OF PROF'L CONDUCT r. 5.3 cmt. 3 (AM. BAR ASS'N 2016).

ascertain any potential changes.¹⁶⁰ Online assembly programs, which licensed attorneys generally administer,¹⁶¹ regularly incorporate any relevant legal developments into the documents.¹⁶² This could conceivably include variables such as state restrictions on usurious interest rates.¹⁶³ Appropriately programmed, the system could incorporate template restrictions that prohibit interest above the legally prescribed rate.¹⁶⁴

Even commercially produced documents are not infallible, however. Although most of the cases concerning reliance on defective documents derive from sources other than assembly programs,¹⁶⁵ the drafter can never be absolutely certain of the documents' sound nature without possessing adequate knowledge of the legal principles and scrutinizing the provisions.¹⁶⁶ And drafters who simply rely on the assembly system documents face serious questions of whether they have satisfied their duty of competence. True, commercial document assembly providers have lawyers

160. *See id.*

161. WEALTHCOUNSEL, *supra* note 104.

162. *See* Pinegar, *supra* note 96. Attorneys can likely have some measure of confidence in the quality of the programs that commercial entities provide, as those programs have customer-driven incentives to provide a quality product.

163. Silver v. George, 618 P.2d 1157, 1159 (Haw. Ct. App. 1980) (stating that it is a "per se violation of an attorney's duty for him to draw a note which is on its face usurious").

164. Adams & Allen, *supra* note 98.

165. One lawyer discovered that unfortunate reality when he advised a client to use a form that violated federal securities law. Lawyers Coop. Publ'g Co. v. Muething, 603 N.E.2d 969, 972 (Ohio 1992); *see also* Pofel v. Nat'l Title Co., No. C2-00-1512, 2001 WL 267464, at *1 (Minn. Ct. App. Mar. 20, 2001) (describing title company's preparation of promissory note using lender-provided form which contained usurious interest rate); Burrell v. Cornelius, 570 S.W.2d 382, 383-84 (Tex. 1978) (stating that some form books contained faulty information on how to properly prepare proposed orders). In another case, a lender hired an attorney to conduct real estate closings and told him that the loan documents were "tried and true." *In re* Goldstein, 990 A.2d 404, 406 (Del. 2010). Relying on the client's assurances, the attorney did not review the documents. To his surprise, the documents included terms that violated federal law, and the attorney faced disciplinary action. *Id.* In a similar case, the attorney agreed to prepare a franchise agreement and disclosure statement even though he had limited experience in that legal area. State v. Orr, 759 N.W.2d 702, 705 (Neb. 2009). He drafted the documents using a restaurant franchise agreement and disclosure statement he had recently reviewed. After his client experienced issues with franchisees in several states, a specializing attorney reviewed the documents and found major deficiencies. The Nebraska Supreme Court later found that the drafter had violated his duty of competence. *Id.* at 706.

166. *See* Complaint at 2-3, Webster v. LegalZoom.com, Inc., No. BC438637 (L.A. Super. Ct. Apr. 18, 2012) (asserting that the plaintiff had to hire a lawyer to remedy the problems with a living will she purchased through LegalZoom); *see also* Betts & Jaep, *supra* note 96, at 221 ("[T]he more restrictive the [assembly] program, the more the lawyer is forced to rely on the program's ability to self-update, without much control over whether the underlying questionnaires or form documents comply with changing legal rules.").

review and approve the language in their agreements,¹⁶⁷ which seemingly falls within attorneys' ability to provide competent representation "through the association of a lawyer of established competence in the field in question."¹⁶⁸ The commentary to the Model Rules makes it clear, however, that an attorney's obligation to supervise nonlawyer work extends to software programs, and thus attorneys must make "reasonable efforts" to ensure that legal services rendered through such systems are done so in "a manner that is compatible with the lawyer's professional obligations."¹⁶⁹ In other words, drafters rely at their own peril.¹⁷⁰

Notably, however, no current automated software effectuates any required formalities in executing the document outside of the drafting process. It may remind the drafter to comply with such requirements as having two persons witness a will or to record a mortgage, but the attorney still bears the burden to actually perform those tasks. While these formalities often seem trivial and obvious, failure to follow the letter of the law can wreak havoc on the client's intended objective.¹⁷¹

B. Improved Planning

In some ways, automation's potential to dramatically streamline the execution phase of the transaction is simply a continuation of the evolution of templates throughout the history of the legal practice. Each technological advancement from typewriting to document assembly has brought significant improvements in the execution process and has facilitated the elimination of errors.¹⁷² But, until this point, the assistive aspects of templates have been primarily limited to the execution phase, rather than the

167. WEALTHCOUNSEL, *supra* note 104 ("WealthCounsel drafting solutions were designed by estate planning attorneys . . .").

168. MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 2 (AM. BAR ASS'N 2016).

169. *Id.* r. 5.3 cmt. 3 (AM. BAR ASS'N 2016) (stating that such obligations apply to the "hiring of a document management company"); Mass. Bar Ass'n Comm. on Prof'l Ethics, Ethics Op. 05-04 (2005) (stating that law firms must exercise "reasonable efforts to ensure" that "integrated document management application[s] . . . created specifically for the legal profession by a third-party software vendor" comply with the profession's ethical obligations); *see also In re Thrasher*, 661 N.E.2d 546, 548 (Ind. 1996) (finding that the attorney who relied on a financial company to prepare a bankruptcy petition without meeting or consulting with the client violated his duty of competency "[b]y completely relying on the factual and legal analysis of a nonlawyer").

170. The lawyer's ability to recover costs expended in defending such actions are dubious at best, as most document providers disclaim all responsibility for errors.

171. *See, e.g., Auric v. Cont'l Cas. Co.*, 331 N.W.2d 325, 326–27 (Wis. 1983).

172. *See MUNDAY, supra* note 71, at 2–3, 33 (describing the benefits of word processing in editing documents).

planning phase. While templates have nearly always aided drafters in anticipating and avoiding contingencies, the form's capacity for doing so has always depended on the quality and diligence of its creator and, of course, the drafter's willingness to spend the time required to evaluate the document.¹⁷³ Existing automated technologies and the developments on the near horizon each hold the possibility of extending drafting assistance beyond execution assistance and further into the realm of transactional planning. As of yet, however, this promise remains largely potential.

Some of these potential benefits are within the grasp of the legal profession simply through the proper use of existing technology. Programmed to ask the appropriate questions for inputs into the decision tree, document assembly systems can alert the drafter to potential areas for further research and facilitate a more uniform and thorough fact-gathering process.¹⁷⁴ Available templates from transactional law services, both assembly programs and otherwise, can serve as checklists and assist attorneys in predicting potentially harmful contingencies.¹⁷⁵ With neutral templates, such as those that assembly software often uses, drafters can identify provisions typically included in a specific type of agreement.¹⁷⁶ Templates that favor one side of the transaction provide valuable insight into potential bargaining points for the drafter's client, as well as any troublesome issues to avoid, assuming the document in fact identifies itself as, for example, a buyer- or seller-friendly form.¹⁷⁷

Similarly, current software holds promise for assisting the attorney in selecting a suitable structure for the transaction. These helpful insights stem both from the multi-faceted offerings of many assembly programs, some of which have extensive suites of documents for various transactional structures,¹⁷⁸ and from the many resources available through databases

173. See Mountain, *supra* note 76, at 172 (explaining that the use of templates allows lawyers to form a "good first draft").

174. See Morrise, *supra* note 99, at 15–16.

175. *Id.* ("A document assembly system acts like an automated checklist, prompting the lawyer to think of relevant issues or document provisions that otherwise might be missed in the first draft.")

176. See Keeva, *supra* note 93, at SD11 (explaining the need to use a "sufficiently broad-based form").

177. See, e.g., *Stock Purchase Agreement (Pro-Buyer Long Form)*, THOMSON REUTERS: PRACTICAL LAW, [https://ca.practicallaw.thomsonreuters.com/4-382-9882?originationContext=document&transitionType=DocumentItem&contextData=\(sc.Default\)&firstPage=true&bhcp=1](https://ca.practicallaw.thomsonreuters.com/4-382-9882?originationContext=document&transitionType=DocumentItem&contextData=(sc.Default)&firstPage=true&bhcp=1) (last visited Feb. 26, 2018).

178. See WEALTHCOUNSEL, *supra* note 104.

maintained by companies like Practical Law¹⁷⁹ and Bloomberg Law.¹⁸⁰ By simply looking through the catalogues of the various transaction types, the attorney can obtain a rough idea of a range of possible structures. Of greater assistance, many templates contain extensive drafting notes that describe various considerations involved in the transaction, which can affect the attorney's decision on whether to utilize the particular structure.

Like past templates, however, the actual realization of these benefits remains tied to the attorney's level of diligence in using the technology. If, for example, the attorney never relays the document assembly program's questions to the client, it can accomplish little in streamlining the fact-gathering process.¹⁸¹ Vast libraries of drafting commentary cannot improve an attorney's prediction of contingencies or skillfulness in structuring the transaction if he or she does not read them. And even if the drafter peruses the notes, he or she must actually consider them in the context of the client's unique circumstances in order to provide effective counsel.¹⁸² The machines of the present day cannot yet perform that required scrutiny and application,¹⁸³ and even highly advanced software such as Bloomberg's Draft Analyzer requires the drafter to use care in selecting the language he or she utilizes.¹⁸⁴

Recent developments in automation have indicated a possibility for artificial intelligence to eventually bridge this gap in planning transactions. Machine learning technology, with its ability to process massive amounts of data and draw newer, better conclusions based on those precedents, offers encouraging (and, perhaps, for many transactional attorneys, frightful) signs for an increasingly fruitful association between transactional practice and

179. See *Model Contracts, Legal Agreements, and Clauses*, THOMSON REUTERS: PRACTICAL LAW, <http://legalsolutions.thomsonreuters.com/law-products/solutions/practical-law/legal-contracts-agreements-clauses> (last visited Feb. 26, 2018).

180. See *Bloomberg Law: Corporate Transactions*, BNA, https://www.bna.com/uploadedFiles/BNA_V2/Legal/Products/Subscriptions/Corporate_Transactional_and_Antitrust/Bloomberg_Law_Corporate_Transactions_Brochure.pdf (last visited Feb. 26, 2018).

181. Some firms allow clients to provide information directly through the use of a "secure extranet client space." RICHARD S. GRANAT, DIRECTLAW, ONLINE LEGAL SERVICES: THE FUTURE OF THE LEGAL PROFESSION 7 (2010), <https://www.directlaw.com/futureoflegalprofessiwoappend.pdf> ("Enabling the client to provide the data directly into an on-line interview reduces the time that the attorney has to spend on the interview process and results in an instantaneous generation of a draft ready for a lawyer's more detailed review. Web-enabled document assembly enlists the client's effort in providing the data that is used to create a customized document without initial lawyer intervention.")

182. See MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 5 (AM. BAR ASS'N 2016).

183. See Betts & Jaep, *supra* note 96, at 221 ("[E]ven the best programmers cannot foresee all possible scenarios at the time they craft the original algorithms.")

184. See *Draft Analyzer*, *supra* note 133, at 1.

automation.¹⁸⁵ Yet it is overwhelmingly difficult, if not impossible, to predict whether that momentous transition into automated planning may come to pass in the near or distant future.¹⁸⁶ Perhaps in only a few years machine learning software for transactions will be able to fully assess and advise attorneys on relative merits of an individual client's disclaiming an inheritance, or the advantages of an asset purchase versus a stock acquisition.¹⁸⁷ But such software is not currently available to the vast majority of lawyers who perform transactional work throughout the country, even if rudimentary prototypes exist in the research and development departments of Silicon Valley.¹⁸⁸ For now, the diligence of the operator continues to limit the reach of technological innovation.

C. *Praise the Machine—With Caution*

To the modern-day drafter, increasingly sophisticated automated technology offers a host of resources stretching from the commencement of the engagement to closing. Transactional attorneys can access a seemingly endless trove of electronic forms by simply searching keywords,¹⁸⁹ and they may employ advanced document assembly programs to generate

185. See Daniel Ben-Ari et al., “*Danger, Will Robinson?*” *Artificial Intelligence in the Practice of Law: An Analysis and Proof of Concept Experiment*, 23 RICH. J.L. & TECH. 3, 69 (2017) (citing McGinnis & Pearce, *supra* note 124, at 3050) (“Machine intelligence will evolve to generate documents that answer the specific needs of an individual. When these files are reviewed in court, AI will be able to improve the documents by tracking their effectiveness, using his learning abilities.”); McGinnis & Pearce, *supra* note 124, at 3041 (“[W]hen machine intelligence becomes as good as lawyers in developing some service . . . it does not stop improving. . . . Such continuous technological acceleration in computational power is the difference between previous technological improvements in legal services and those driven by machine intelligence.”).

186. See McGinnis & Pearce, *supra* note 124, at 3045 (“[B]efore the combination of hardware, software, and connectivity progresses to a certain point, machine intelligence represents no substitute for human activity.”).

187. See *id.* at 3051 (“In the future, machine processing will be able to automate a form, tailor it according to the specific facts and legal arguments, and track its effect in future litigation.”); Daniel Ben-Ari et al., *supra* note 185, at 60 (“Lawyers may also become a dying breed, as algorithms learn how to structure claims, check contracts for problematic caveats, negotiate deals, predict legal strategies, and more.”); David Barnhizer, *Artificial Intelligence and Its Implications for Lawyers and Law Schools* 9 (2017) (unpublished paper), https://works.bepress.com/david_barnhizer/ (predicting a shift in the nature, and perhaps the amount, of legal jobs in the coming decades).

188. See Matthew Field, *Facebook Shuts Down Robots After They Invent Their Own Language*, TELEGRAPH (Aug. 1, 2017, 10:21 AM), <http://www.telegraph.co.uk/technology/2017/08/01/facebook-shuts-robots-invent-language/>.

189. See THOMSON REUTERS: PRACTICAL LAW, <http://legalsolutions.thomsonreuters.com/law-products/solutions/practical-law/> (last visited Feb. 26, 2018).

professional-looking work product (assuming they are willing to pay the provider an appropriate fee).¹⁹⁰ These tools offer a number of advantages, both in expediting the drafting process and in facilitating its completion in an effective manner. But while these technological developments deserve a warm welcome, the legal profession should tread cautiously in traversing the ethical implications of such automated programs. As the automated nature of legal practice accelerates, so too does the risk of undue deference to computer-generated outputs.

In some respects, the need for a healthy dose of hesitation in wholeheartedly embracing automated programs parallels concerns drafters faced when the internet emerged as a resource. By dramatically expanding drafters' access to templates of varying origins, the worldwide web exacerbated the need for attorneys to carefully scrutinize every form they use.¹⁹¹ The immense range of possible sources often diminished users' ability to obtain adequate contextual knowledge of the form's creation. This, in turn, restricted drafters' means of verifying the quality of a given template and, more generally, its suitability for each specific client.¹⁹²

These limitations mean not that attorneys should avoid utilizing the latest resources, but only that they should exercise heightened care in selecting and using each form.¹⁹³ Templates which contain drafting commentary and originate from a known credible source generally offer the most reliable pathways for discerning context and conducting other appropriate diligence.¹⁹⁴ Precedents from obscure sources, sans details of the underlying transaction, present drafters with a more daunting task in ascertaining the suitability of a template.¹⁹⁵ Yet, the drafter must utilize

190. *See* Morrise, *supra* note 99, at 15.

191. Washington & Stefanoudakis, *supra* note 88, at 67 (“The user must always canvass the legal subject area for which he or she is drafting a document to see if any recent changes in the law have occurred.”).

192. STARK, *supra* note 25, at 412 (“[Attorneys] can obtain forms from industry associations, treatises, continuing legal education materials, and online. Be wary of all these precedents; quality varies.”).

193. Even in the pre-internet era, attorneys who used templates faced the risk that the form would be defective, whether it was out of date or otherwise. *See, e.g.,* Lawyers Coop. Publ'g Co. v. Muething, 603 N.E.2d 969, 970 (Ohio 1992) (where a state indicted an attorney who used a formbook to prepare promissory notes that violated state securities laws).

194. STARK, *supra* note 25, at 412 (stating that precedents from familiar sources provide “ready access to the precedent’s drafter, who can explain the purpose behind provisions that [the attorney] do[es] not understand”).

195. Foster, *supra* note 81, at 962 (“Even assuming that the document an attorney finds was appropriate for the specific transaction it was negotiated for, it may not be appropriate for present drafting needs. Even more so, that precedent document itself may have been the product of heavy reliance on previously drafted agreements.”).

available resources in understanding the transaction and any alternatives in customizing and scrutinizing the documents. Drafting a document in blind reliance on an unfamiliar form puts the attorney at risk for failing to meet the minimum standards for adequate representation.¹⁹⁶

The increasing ease with which automated programs can generate apparently comprehensive transactional documents has only magnified these concerns. In the past, there were fewer opportunities and incentives to blindly rely on a form document without tailoring it to the specific client, primarily because of the patently defective results of such reliance.¹⁹⁷ Now, advanced software can assemble a customized document in a matter of minutes, tailor-made to effectuate the user's responses to the program's inquiries.¹⁹⁸ Instead of a plainly generic document, the program produces a streamlined, superficially impressive work product.¹⁹⁹

Assembly software's capability to produce seemingly flawless customized legal instruments in a matter of minutes can lull users into a deceptive confidence in the machine's outputs. Coupled with the steep cost of many commercial document assembly services, the programs can tempt attorneys to take on unfamiliar matters they would not otherwise accept. In that sense, financial concerns joined with the expansive wherewithal of automated technology can create a false safety net for users, potentially leading them to unduly strain their sphere of proficiency in complex areas of law.

Those drafters who step beyond their comfort levels can find themselves in tenuous situations even with automated assistance. If the attorney fails to properly account for the limitations of current software in terms of planning and executing the transaction, those shortcomings may trigger unfortunate results for the client. On a more fundamental level, attorneys who range beyond their expertise (and beyond their willingness or capacity to thoroughly review the unfamiliar transaction on the client's timeline) may be unable to satisfy their basic duties of requisite knowledge and skill and of

196. *See Ramp v. St. Paul Fire & Marine Ins. Co.*, 269 So. 2d 239, 244 (La. 1972) (“[L]awyers are obligated to scrutinize any contract which they advise their clients to execute, and are required to disclose the full import of the instrument and the possible consequences that may arise upon execution of it.”); MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 5 (AM. BAR ASS'N 2016).

197. *See, e.g., Toledo Bar Ass'n v. Sawers*, 903 N.E.2d 309, 310–11 (Ohio 2009) (disciplining an attorney who drafted a trust using a generic form without tailoring the language to the client's needs).

198. *See Mountain, supra* note 76, at 172.

199. *See Morrise, supra* note 99, at 15–16.

consultation and explanation.²⁰⁰ Like the inexperienced attorney who agreed to draft a Clifford trust,²⁰¹ drafters who accept representations in new legal areas may breach their duty of competence if they simply rely on automated technology to achieve the client's objectives, rather than undertaking research necessary to become knowledgeable on the relevant legal issues.²⁰² And if the attorney does not fully understand the matter, obviously he or she will generally lack the ability to explain it to the extent reasonably necessary to allow the client to make an informed decision.²⁰³

This is not to say that attorneys should decline to venture into novel legal areas if they are willing (and have the time) to conduct necessary research and attain sufficient familiarity with the matter. Indeed, the Model Rules expressly contemplate such representations.²⁰⁴ But in considering an expansion into unfamiliar grounds, attorneys must ensure they actually perform that diligent study, rather than abdicating that responsibility to any resource, including automated technology.²⁰⁵

V. CONCLUSION

The drafting toolkit of the modern transactional lawyer abounds with valuable resources. From print-based relics of times past to emerging automated technologies, drafters may draw on a litany of assistive devices in crafting agreements to accomplish their clients' goals. Properly utilized, increasingly advanced software has the potential to drastically reduce

200. MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2016) ("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.").

201. *Horne v. Peckham*, 158 Cal. Rptr. 714, 720–21 (Ct. App. 1979).

202. MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 2 (AM. BAR ASS'N 2016).

203. *Matter of Thrasher*, 661 N.E.2d 546, 549 (Ind. 1996) ("It is essential to the integrity of any legal practice that lawyers maintain independent professional judgment and not fully abdicate the responsibility of providing legal advice, guidance and expertise to nonlawyers."); MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 8 (AM. BAR ASS'N 2016).

204. MODEL RULES OF PROF'L CONDUCT r. 1.1 cmt. 2 (AM. BAR ASS'N 2016) ("A lawyer can provide adequate representation in a wholly novel field through necessary study.")

205. In this way, attorneys' duties approximate those of a corporate board of directors, whose members may rely in good faith on information that reasonably selected outside experts provide, but cannot merely abdicate their responsibilities to govern the organization. *See* DEL. CODE ANN. tit. 8, § 141(e) (West 2018); *see also* *Aronson v. Lewis*, 473 A.2d 805, 812 (Del. 1984), *overruled by* *Brehm v. Eisner*, 746 A.2d 244 (Del. 2009); *Ash v. McCall*, No. Civ.A.17132, 2000 WL 1370341, at *9 (Del. Ch. Sept. 15, 2000) (stating that delegation to "qualified experts" of "due diligence review of a target company's books and records . . . is not an 'abdication' of duty").

execution errors ranging from typos to linguistic inconsistencies and to substantially increase the consistency and uniformity of documents.

Equally encouraging is the potential for automation to resolve many planning errors, which traditional precedential tools have historically not reached. When appropriately used, current resources such as document assembly systems and annotated forms can greatly benefit transactional planners. Artificial intelligence holds the promise of propelling this planning assistance to new levels through cutting-edge machine learning software. But this promise remains largely inchoate, as present-day artificial intelligence systems are still in the early stages of development and face significant restraints on their utility.²⁰⁶

The nascent status of automation and artificial intelligence places the legal profession in a unique position. Despite existing programs' potential to alleviate many conventional burdens tied to transactional practice, effective representation still depends ultimately on the degree of skill and diligence the attorney exercises. But automated systems may sometimes obscure this reality with their ability to easily generate streamlined, customized legal documents. Some attorneys, especially those who have invested heavily in sophisticated systems, may feel pressure to expand their practice and services into complex and wide-ranging matters. While automation and AI, like many previous technological innovations, can facilitate responsible expansion, they can also obscure the risks involved in venturing into uncharted professional waters.

206. A notable hindrance is the inability to procure adequate precedential material for the machine learning systems outside of public databases such as EDGAR. *See* Betts & Jaep, *supra* note 96, at 230. For optimal function, the systems need access to a range of documents for a particular transaction type. *See id.* As many law firms are notoriously guarded with their transactional documents, this type of stockpile remains elusive. *See id.*