THE LAWS OF (LEGAL) ROBOTICS:
Automatons, APIs, and the ABA

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INTRODUCTION

While scholars of cyberlaw have long focused on the ways in which lawyers and the law shape technological development, perhaps less frequently discussed are the ways in which technology is in turn shaping the practice of law. To what extent -- if at all -- should our regulation of the legal profession shift as the provision of services move online and become increasingly automated?

A public discussion is already underway on this question. A representative article published by *The Atlantic* in June 2012 characterized one popular view on the issue. In it, the author confidently predicts that a new generation of technologies will come to upend the foundations of the legal industry. Lawyers, he writes, will not be immune to the shifts being wrought by technology elsewhere in the economy. "In the end, after you've stripped away their six-figure degrees, their state bar memberships, and their proclivity for capitalizing Odd Words, lawyers are just another breed of knowledge worker."[1] Quite simply, the author concluded, "when software comes along that's smarter or more efficient at those tasks that a human with a JD, it spells trouble."[2] Similar articles speculating on the effect of technology on legal services have appeared in the *New York Times*, the *Wall Street Journal*, and others.[3]

Claims made about the impact of automation on the law are not entirely speculative, nor are they new. E-discovery, which applies modern search technologies to help manage the massive amounts of data in litigation, has already seen significant coverage both within and beyond the legal industry in the past decade. The headline of a *New York Times* article summed up the demonstrated impact of these technologies simply: "Armies of Expensive Lawyers, Replaced By Software."[4]

However, what may be more novel is that automation is moving increasingly beyond incremental improvements to tools used by lawyers in the "back office." Automation more and more touches the actual work product received by clients, as well as "front office" interfaces that the public uses to access legal services and the legal system at large. This includes companies like LegalZoom, which provides a system which assembles legal documents, largely without human guidance, through an automated questionnaire based on responses from their customers.

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[1] Jordan Weissmann, *iLawyer: What Happens When Computers Replace Attorneys?,* THE ATLANTIC (Jun. 11, 2012), http://www.theatlantic.com/business/archive/2012/06/ilawyer-what-happens-when-computers-replace-attorneys/258688/.

[2] *Id.*

[3] *See generally* Jacob Aron, *Lawyerbot Takes the Drudgery Out of Law,* NEW SCIENTIST (Jun. 28, 2012), http://www.newscientist.com/article/mg21428704.100-lawyerbot-takes-the-drudgery-out-of-law.html; John Markoff, *Armies of Expensive Lawyers, Replaced by Cheaper Software,* N.Y. TIMES, Mar. 5, 2011, at A1, *available at* http://www.nytimes.com/2011/03/05/science/05legal.html?pagewanted=all; Joe Palazzolo, *Why Hire a Lawyer? Computers are Cheaper,* WALL ST. J., Jun. 18, 2012, at B1, *available at* http://online.wsj.com/article/SB10001424052702303379204577472633591769336.html.

[4] Markoff, *supra* note 3.

Lawyers have responded to these developments in mixed ways. Advocates like Richard Susskind have touted the benefits of this technology to increase competition, lower prices for legal services, and broaden access to the legal system more generally.[5] Meanwhile, detractors have pointed out the risks attendant in using these technologies and the persistent need for human judgment, even in the context of now-established technologies like e-discovery.[6] Insofar as these technologies replace jobs taken on traditionally by young attorneys, they raise issues that have particular salience as post-graduation unemployment continues to be high even among the leading law schools.[7]

How should the law approach this new generation of client-facing automated legal services? Although the context is unique, the basic policy dilemma at the heart of this question is a familiar theme at the intersection of the law and technology. Simply stated, how do we balance the need to support innovation against the desire to minimize harm to the public, settled expectations, and established practices? This is a question that appears frequently in debates about the proper role of the law in managing "classic" cyberlaw arenas like intellectual property, privacy, and intermediary liability. It is the same here in the context of legal services: how do we unlock the benefits that technology might bring in lowering costs and increasing efficiency within the legal industry, while minimizing risks and providing adequate compensation those harmed?

Addressing the question of whether or not an artificial intelligence could serve in the legal role of a trustee over twenty years ago, Lawrence Solum distilled this multifaceted inquiry into two key questions: one of practical competence ("[W]ill the AI be able to get the job done[?]") and one of legal capacity ("[W]ill the law allow AIs to serve[?]").[8]

This paper addresses these two questions, and proposes a framework. Part I will review the current and developing state of legal technology, and the evidence supporting the view that automation will continue to become more advanced and ubiquitous going forwards. Part II will argue that existing legal frameworks for dealing with these developments either have been largely ineffectual in protecting the public or go to the other extreme of stifling productive

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[5] *See* Neil Rose, *How Far Can Legal Work Be Automated?,* THE GUARDIAN (Nov. 2, 2011), http://www.guardian.co.uk/law/2011/nov/02/legal-work-automated-neil-rose; RICHARD SUSSKIND, THE END OF LAWYERS? (2008).

[6] *See, e.g.,* Jason Krause, *Robots Are Not Replacing eDiscovery Lawyers,* NEXTPOINT CO. BLOG (Jul. 12, 2012), http://www.nextpoint.com/ediscovery/3022/robots-are-not-replacing-ediscovery-lawyers/ ("The image of a lawyerbot is fun, but what it means is that a smaller number of lawyers will work more closely in training their computers. But it certainly does not mean computers will replace humans").

[7] *See* Jordan Weissmann, *The Jobs Crisis at Our Best Law Schools is Much, Much Worse Than You Think,* The Atlantic (Apr. 9, 2013), http://www.theatlantic.com/business/archive/2013/04/the-jobs-crisis-at-our-best-law-schools-is-much-much-worse-than-you-think/274795/ (showing average unemployment hovering around 20 percent beyond the top 15 law schools).

[8] Lawrence Solum, *Legal Personhood for Artificial Intelligences*, 70 N.C. L. REV. 1231, 1252 (1992).

innovation in legal services. Part III will conclude by proposing a new framework that draws inspiration from the management practices around application programming interfaces ("APIs") in the technology context to better balance the policy interests at work.

I. PRACTICAL COMPETENCE

Skeptical readers may rightly question claims made about the extent to which automation presently can and might eventually be able to replace functions currently performed by lawyers for their clients. As one commentator has written, lawyering has "plenty of room for creativity, deep knowledge, leadership skills and the other qualities that people are willing to pay for"[9] and that resist easy attempts to automate.

This is all true. Insofar as the technology to fully replace lawyers and human legal judgment remains science fiction for the foreseeable future, the question becomes critically one of just *how much* can be streamlined and replaced with automation.[10] This section will provide a brief account of the current and likely future state of the technology landscape, and make the case for why significantly more legal functions will see replacement by machines going forwards.

A. *Present Technologies*

Automation is appearing across a broad range of legal tasks and services. As alluded to above, perhaps most often discussed in this context is e-discovery, which uses modern search technology to process through the massive amounts of information that need to be managed in litigation. The potential savings from this sort of technology is enormous, with one company estimating that "the shift from manual document discovery to e-discovery would lead to a manpower reduction in which one lawyer would suffice for work that once required 500".[11]

However, the landscape of legal automation is far broader than this. E-discovery streamlines and broadens the set of tools available to the attorney, but the provision of services and work product to the client is still in the hands of an attorney. In short, the lawyer must still write the brief, no matter how sophisticated the search technology being used in her research is.

This is changing. Automation holds the prospect of replacing or otherwise streamlining drafting and the creation of *outputs* that lawyers traditionally produced by hand. The thicket of technologies in this vein includes promising tools like automated document assembly, software

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[9] Tom Smith, *Computers Are Not Going To Replace Lawyers,* THE RIGHT COAST (Mar. 8, 2011), http://rightcoast.typepad.com/rightcoast/2011/03/computers-are-not-going-to-replace-lawyers-tom-smith.html.

[10] *See* Kevin Kelly, *The Robotic Courtroom of Tomorrow,* io9 (Jan. 4, 2008), http://io9.com/340426/the-robotic-courtroom-of-tomorrow (humorous 1996 Los Angeles Times representation of the future courtroom depicting robo-bailiffs, holographic judge).

[11] Markoff, *supra* note 3.

which "replace[s] the cumbersome manual filling in of repetitive documents with template-based systems where the user answers software-driven interview questions."[12] While based on a simple idea, the technology is rapidly advancing to take on ever more complex templates for legal documents. Companies like KIIAC demonstrate some of the practical applications of this type of technology in contract drafting. With access to a sufficiently large corpus of legal documents, the KIIAC software can use statistical inference to determine the extent to which certain contract clauses are or are not atypical, and allows attorneys to quickly browse between various options in drafting a certain provision.**[13]**

Automated document assembly is increasingly becoming big business. Started in 1999, Exari is a company which develops enterprise solutions that translate legal workflow into templates that allow for the scaled production of legal documents without the constant supervision of professionals.[14] The company has seen adoption from clients as diverse as financial information provider Dow Jones and the United States Department of Agriculture, and maintains offices around the world.[15]

In some cases, automation is supplanting not just aspects of crafting the work product, but the lawyer altogether. Companies like LegalZoom and LegalForce provide customized legal documents that are generated through automated systems that do much of the simple work of collecting information about the client and translating the basic elements of those responses into a draft document.**[16]** LegalZoom claims that the site licenses over 12,000 documents per month.**[17]** Rocket Lawyer -- a company which offers similar services -- combines form templates with extremely short, inexpensive consultations with lawyers.**[18]**

However, it is important to observe that the picture is not entirely positive. Insofar as these technologies lower the costs to taking or threatening legal action, they open the potential for being used abusively to pursue meritless claims at scale.

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[12] Richard Granat, *Automated Document Assembly as a Disruptive Legal Technology,* eLAWYERING BLOG (Dec. 30, 2008), http://www.elawyeringredux.com/2008/12/articles/change/automated-document-assembly-as-a-disruptive-legal-technology/ (for a general description of automated document assembly technology).

[13] *See* KIIAC - PRECISION DRAFTING FOR THE 21ST CENTURY, http://www.kiiac.com/index.htm (last visited May 7, 2013).

[14] *See* EXARI, http://www.exari.com/ (last visited May 7, 2013).

[15] *See* EXARI - OUR CUSTOMERS, http://www.exari.com/our-customers.html (last visited May 7, 2013).

[16] *See* LEGALZOOM - ABOUT US, http://www.legalzoom.com/about-us; LEGALFORCE - ABOUT LEGALFORCE, http://www.legalforce.com/about-trademarkia/about-us.aspx.

[17] Darryl R. Mountain, *Disrupting Conventional Law Firm Business Models Using Document Assembly,* 15(2) INT'L J. LAW INFO TECH. 170, 182.

[18] Daniel Fisher, *Google Jumps Into Online-Law Business With Rocket Lawyer,* FORBES BLOG (Aug. 11, 2011), http://www.forbes.com/sites/danielfisher/2011/08/11/google-jumps-into-online-law-business-with-rocket-lawyer/.

Some firms have leveraged litigation automation to bring massive waves of suits on sometimes dubious grounds. Cohen & Slamowitz -- a firm of only 14 attorneys -- has been able to file more than 80,000 debt collection lawsuits a year with the help of a software platform called Collection-Master. Creditors provide the firm with a large database of lapsed debtors, which is then run through software which can "take a file and run it through the entire legal system automatically", taking care of such actions as "sending out collection letters, summonses and lawsuits."[19] Obviously, the concerns about mechanically processing such an enormous caseload are that defendants often face legal action based on "little more than a defendant's name, address, and alleged balance."[20] Indeed, these activities appear to have generated a small cottage industry of defense firms specializing specifically in challenging groundless robo-suits initiated by Cohen & Slamowitz.[21]

Copyright provides another arena in which large scale automation of enforcement may lead to undesirable outcomes. The Digital Millennium Copyright Act of 1998 provides a system by which aggrieved copyright holders may file a notice with an online platform alleging infringement and have that platform remove or disable access until a counter-notice is received by the poster of that content.[22] Accordingly, the past decade has seen the development of third-party services that algorithmically search for infringing content and automatically file waves of takedown requests en masse.[23] Some platforms have also chosen on their own initiative to use third-party software to algorithmically detect infringement and remove content from websites.[24] Like in the debt collection case, automated systems might result in the groundless takedown of content legitimately making fair use of copyright, and chill expression online. This seems particularly likely in the case of algorithms, which may systematically have difficulty engaging in the complex weighing required to make a fair use determination. They might also be used illegitimately by companies attempting to sabotage content posted by competitors online.[25]

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[19] Andrew Martin, *Automated Debt-Collection Lawsuits Engulf Courts,* N.Y. TIMES, Jul. 13, 2010 at B1, *available at* http://www.nytimes.com/2010/07/13/business/13collection.html?pagewanted=all&_r=0

[20] *Id.*

[21] *See* THE LANGEL FIRM - WE DEFEND YOU AGAINST COHEN & SLAMOWITZ, http://www.thelangelfirm.com/Debt-Collector-List/Cohen-Slamowitz-LLP.aspx (last visited May 7, 2013); GRAHAM & BORGESE - COHEN & SLAMOWITZ, http://www.grahamborgese.com/cohen--slamowitz-llp.html (last visited May 7, 2013); STOP COHEN & SLAMOWITZ, http://stopcollector.com/agency/Cohen-Slamowitz.php (last visited May 7, 2013).

[22] 17 U.S.C. §512.

[23] *See* Mike Masnick, *EFF Argues That Automated Bogus DMCA Takedowns Violate The Law,* TECHDIRT (Mar. 8, 2012), http://www.techdirt.com/articles/20120308/03505018034/eff-argues-that-automated-bogus-dmca-takedowns-violate-law-are-subject-to-sanctions.shtml.

[24] *See* Geeta Dayal, *The Algorithmic Copyright Cops,* WIRED THREAT LEVEL (Sept. 9, 2012), http://www.wired.com/threatlevel/2012/09/streaming-videos-robotic-overlords-algorithmic-copyright-cops/all/.

[25] *See* Ted Gibbons, *Google Submission Hammers Section 92A,* N.Z. PC WORLD (Mar. 16, 2009), http://pcworld.co.nz/pcworld/pcw.nsf/feature/93FEDCEF6636CF90CC25757A0072B4B7 ("[M]ore than half (57%) of the takedown notices [Google] has received under the [DMCA] were sent by business [sic] targeting competitors and over one third (37%) of notices were not valid copyright claims").

B. ***The Future of Legal Automation***

Despite these many innovations, it is important to recognize that the concept of automation in legal services is nothing new. Expert systems -- software which can provide basic legal advice based on the inputs given to it by a user -- have been an available technology since the 1980s.[26] To that end, a salient question is why these technologies are seeing increased adoption at the present time, and why they are likely to see further development into the future.

Structural changes are driving increased competition, which in turn is producing increased pressure to introduce efficiencies through technology. This competition is emerging on a number of fronts. One prominent source of competition is increased global competition from the rise of legal and financial centers outside the United States which provide pressure on the so-called "BigLaw" firms that traditionally have dominated the legal landscape.[27] Another source of disruption comes from the emergence of legal outsourcing, which transfers relatively simple legal tasks to areas with significantly lower labor costs.[28]

Lurking behind these direct competitors to large legal institutions is also the fact that the presence of free legal information made easily accessible online itself creates competition.[29] As simply put by one commentator, the presence of legal information online "has the potential for educating consumers enough to reduce their dependence on professional advice."[30] While unable to replace complex legal work, the abundance of legal resources for laypeople may have a powerful impact on smaller practitioners and other legal businesses dependent on more easily commodified legal work.

This increased competition makes automation more attractive to both entrants and incumbents. New entrants have incentives to automate because it helps them compete more

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[26] *See* Toby Brown, *The First Time I Saw a Computer Practice Law,* 3 GEEKS AND A L. BLOG (May 10, 2012), http://www.geeklawblog.com/2012/05/first-time-i-saw-computer-practice-law.html (describing one expert system running on an IBM XT PC in the 1980s).

[27] *See* Larry Ribstein, *The Death of Big Law,* 2010 WIS. L. REV. 749, 765.

[28] *See id.* at 767.

[29] *See* Larry Ribstein, *Lawyers' Property Rights in State Law* 9 (Geo. Mason U. School of Law, Law and Economics Working Papers Series, Working Paper No. 00-43, 2000), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=251750.

[30] *Id.*

effectively with relatively smaller financial resources. Incumbents may also have incentives to automate since it allows them to scale their operations and keep pace with their competitors.[31]

Competition is a "push" mechanism: it creates pressures for increased adoption of automation. Perhaps just as important is the "pull" mechanism of the technology itself. As the technology for automation advances, adopting and integrating these innovations into the legal business model may become increasingly attractive.

One promising frontier of research and development is around *computable contracts*, the representation of legal obligations in a computer-processable format.[32] Such technology addresses an existing limit to automation: at the moment, computers have no method to "understand" the semantic content of the legal language and data that they process. Rendering rules and obligations in a machine-readable format unlocks the ability for automation to take on the more sophisticated legal tasks that previously were the exclusive province of professional expertise.

This is not a purely academic exercise: computable contracts open up a number of interesting practical applications. Simple versions of this technology are already being used to facilitate streamlined licensing markets for copyrighted works without lawyers as negotiating intermediaries.[33] Government actors are considering mandating the implementation of machine-readable standards in legal contracts, as well. Computable contracts may find a future use in capital markets to improve systemwide transparency about risk exposure in the marketplace and to more effectively monitor compliance with contracts. A 2011 study conducted by the Securities and Exchange Commission (SEC) and the Commodities Futures Trading Commission (CFTC) concluded that "current technology is capable of representing derivatives using a common set of computer-readable descriptions."[34] Further development is ongoing, with the CFTC convening a group to develop a workable standardized model for representing financial contracts in data.[35]

Computable contracts are only one specific application of a broader set of technologies that aim to give computers the ability to process and understand legal text beyond the more

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[31] *See* Wendy S. Goffe & Rochelle L. Haller, *From Zoom to Doom?,* 38 Estate Planning 27, 32 (2011) (advocating that estate planning lawyers "embrace new technology" to compete with LegalZoom and others); Bruce H. Kobayashi & Larry Ribstein, *Law's Information Revolution*, 53 Ariz. L. Rev. 1169, 1192 (2011) (speculating on different models of firm adoption of automation).

[32] *See* Harry Surden, *Computable Contracts*, 46 U.C. DAVIS L. REV. 629 (for a fuller account of the implementation of legal obligations in data).

[33] *See id.* at 662 (describing the use of computable contracts at the Stanford Intellectual Property Exchange project).

[34] *See Machine Readable OTC Derivatives Contracts Move a Step Closer,* FINEXTRA (Apr. 11, 2011), http://www.finextra.com/news/fullstory.aspx?newsitemid=22457.

[35] *See Regulators and Industry Tackle Data Standards,* MARKETSMEDIA (Aug. 17, 2011), http://marketsmedia.com/regulators-and-industry-tackle-data-standards/; CFTC TECHNOLOGY ADVISORY COMMITTEE, DATA REPRESENTATION FOR COMPLEX AND BESPOKE OTC DERIVATIVES (2011), *available at* http://www.cftc.gov/ucm/groups/public/@aboutcftc/documents/file/tac_121311_workingpaper.pdf.

structured realm of the financial contract. Sophisticated machine-processing of precedent and judicial decision-making might provide a range of tools that bring automation from the world of transactional work to the world of litigation.[36] One commentator has proposed the design of a system called HARLAN, a "personal litigation assistant," which would use statistical inference to advise *pro se* litigants (or even lawyers) by "explain[ing] how best to structure the litigation, what types of motions would be most successful, and how to structure arguments."[37] Whether technology progresses to the point where this type of application becomes feasible is still left to be seen, but economic pressures continue to push development forwards.

C. Policy Considerations

How do we manage this next generation of technology in the legal industry? As automation increasingly interacts with clients directly without the presence of a lawyer as an intermediary, the overriding question is how to develop a rule which appropriately balances societal interests in the provision of legal services.

There are many positives to these developments in automation. Higher efficiency and streamlining of legal work lowers the costs to provide legal services, producing savings which can then be passed on to the general public. Public-facing automation of legal tasks will also be able to provision services at a rate much faster than that a lawyer attempting to complete the same tasks by hand. Both of these raise the potential for broadening access to the legal system and empowering people to exercise their full range of rights underneath the law.

Moreover, the behavior of software is predefined and uniquely trackable in a way in which human work may not be. Insofar as more legal work is taken on by automated services, increasing automation might also promote transparency and provide clearer measures of value than the traditional system of legal billing.[38]

Tempering enthusiasm for these technology is the fact that legal automation undeniably raises a number of important concerns. Complete deregulation opens the door to unscrupulous vendors to offer services that are poor substitutes for retaining an experienced, engaged attorney. Even if not actively malicious, the proliferations of negligently designed systems might harm the public. Indeed, the entire purpose of licensing lawyers for the practice of law is to "protect[] the

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[36] *See generally* JUDICATA, https://www.judicata.com/ (last viewed May 7, 2013); RAVEL LAW, http://www.ravellaw.com/ (last viewed May 7, 2013); LEX MACHINA, https://lexmachina.com/ (last viewed May 7, 2013) (using direct semantic processing of legal text to parse outcomes, procedural posture, and rules of law algorithmically).

[37] Josh Blackman, *Robot, Esq.* (Jan. 9, 2013), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2198672 (describing the operation and legal questions raised by HARLAN).

[38] *See* Steven J. Harper, *The Tyranny of the Billable Hour,* N.Y. TIMES, Mar. 28, 2013, at A25, *available at* http://www.nytimes.com/2013/03/29/opinion/the-case-against-the-law-firm-billable-hour.html?_r=0 (relating the incentives of the billable hour to opaqueness in legal industry).

public against rendition of legal services by unqualified persons."[39] The provision of services through an automated system seems to raise precisely the same concerns.

As in the case of Cohen and Slamowitz discussed above, these systems also raise concerns that they will be used to needlessly increase the expense of litigation and be used to bring a torrent of meritless cases to an already overwhelmed court system.[40] Automation lowers the costs of taking legal action, which also means that it is relatively easier to use the legal system inappropriately to harass innocent parties. It may also enable parties to design ever more complex systems for hiding money and evading taxation through offshore incorporation.[41]

The profession may also resist these technologies to the extent that they replace legal jobs. This concern is often characterized as purely a matter of self-interest by the popular press, but there may be a deeper long-term concern at work here.[42] Namely, the replacement of entry-level jobs disrupts a traditional mechanism for fostering experience and expertise in young attorneys. Insofar as those opportunities become more scarce as automation comes to replace simple tasks, it might also be a factor in eroding the human capital in the legal community for solving complex problems that will remain beyond the reach of automated systems for the foreseeable future.

How should we balance these competing opportunities and risks? Part II will examine two approaches that have been taken by state legislatures and courts in response to these questions: a formalist notice approach, and a more fact-specific analysis driven by the functionality of the product being offered. This paper will argue that both of these existing approaches fail to strike the proper balance, and proposes a potential new framework to regulate legal automation.

II. LEGAL CAPACITY

The most basic question around legal automation is one of practical competence. If the technology is not sufficiently capable to replace at least some of the tasks done by lawyers, there will be no adoption. However, as discussed above, technological and economic trends in the legal industry point to more -- rather than less -- development and adoption of these technologies into the legal workflow over time.

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[39] Model Rules of Prof'l Conduct R. 5.5 cmt. 2 (2012).

[40] *See, e.g. supra* note 19.

[41] *Shells and Shelves,* ECONOMIST, Apr. 7, 2012, *available at* http://www.economist.com/node/21552196 (reporting on the global shell corporation industry and offering of incorporation services online); INTERNATIONAL CONSORTIUM OF INVESTIGATIVE JOURNALISTS, SECRECY FOR SALE, http://www.icij.org/offshore (last visited May 7, 2013) (reporting on a recent leak of records revealing that the size of the offshore incorporation industry).

[42] Daniel Fisher, *Missouri Lawyers Sue to Block Online Competition,* FORBES BLOG (May 13, 2011), http://www.forbes.com/sites/danielfisher/2011/05/13/missouri-lawyers-sue-to-block-online-competition/ (suggesting that a suit against LegalZoom was driven by a motivation to "protect themselves from competition").

But this is not the end of the story. Whatever the technological capabilities, adoption will turn on *legal capacity*, as well. What will the law permit these automated systems to do? This goes to questions around the unauthorized practice of law (UPL) and whether these automatons impermissibly offer legal services to the public.

Part II reviews the current state of the law on this question. It is broken into three sections. In the first, we will discuss the rule that emerged around legal conflicts over an earlier generation of legal form software and printed resources for laypeople. Second, we will address the rule articulated in cases addressing the current generation of automation in the legal space. Finally, we will evaluate both rules from a policy standpoint, noting their advantages and disadvantages. Largely, this review will conclude that existing alternatives are overinclusive and underinclusive, and that a more nuanced framework is required.

A. *Historical Precedent: Texas*

Software which engages in sophisticated automation of legal tasks for the general public did not emerge fully formed and without precedent. It is instead the latest iteration in an ongoing evolution of resources designed to provide information to navigate the legal system without the active assistance of a professional. Examining how the law has dealt with these earlier types of products and services provides a potential rule that could be applied in the present generation of client-facing automated platforms.

As a preliminary matter, it is useful to note that there exists no uniform definition for the unauthorized practice of law. The 1983 ABA Model Rules of Professional Conduct merely notes that "[t]he definition of the practice of law is established by law and varies from one jurisdiction to another."[43] The predecessor 1969 Model Code provided only broadly that "the practice of law relates to the rendition of services for others that call for the professional judgment of a lawyer. The essence of the professional judgment of the lawyer is his educated ability to relate the general body and philosophy of law to a specific legal problem of a client."[44] However, both the Rules and the Code remain obscure about what specific tasks this definition brings within its scope. Individual states have been left to craft and apply this rule in their implementations of the Model Rules.

Texas provides a useful case study of one approach that might be taken by a jurisdiction in response to increasing automation in legal services. In Texas, UPL is defined extremely broadly, including such activities as "the giving of advice or the rendering of any service requiring the use of legal skill or knowledge, such as preparing a will, contract, or other instrument, the legal effect of which under the facts and conclusions involved must be carefully

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[43] Model Rules of Prof'l Conduct R. 5.5 cmt. 2 (2012).

[44] Model Code of Prof'l Responsibility Canon 3-5 (1980).

determined."[45] The statute also provides the state judiciary with a free hand in expanding this definition, nothing that the definition is not "exclusive" and allows for other acts "not enumerated" to constitute the practice of law.[46]

It was with this definition that the Supreme Court of Texas' Unauthorized Practice of Law Committee ("UPL Committee") took action against two companies in the late-1990s, claiming that they engaged in the UPL. The two services in question were both early iterations of legal automation technology. Rather than having a computer execute the assembly or filing of forms, these companies took a "recipe book" approach which provided customers with collections of templates for legal documents, and accompanying instructions on how to fill out those forms.

The first company challenged was Parsons Technology, a company which developed and sold a software program entitled *Quicken Family Lawyer*. The software contained "over 100 different legal forms (such as employment agreements, real estate leases, premarital agreements, and seven different will forms) along with instructions on how to fill out these forms."[47] Despite no evidence that the product had ever resulted in harm to Parsons' customers, the court in that case held that selling the product constituted UPL.[48] This violation was considered sufficiently clear under Texas law that the court granted summary judgment to the UPL Committee, issuing an injunction barring Parsons from selling the product in Texas.

The second company, Nolo Press, was at the time largely a publisher of *printed* do-it-yourself legal guides.[49] In that sense, the company provided the same templates and instructional guides as Parsons Technology, but eliminated the software component entirely. These "recipe book"-style guides were challenged by the UPL Committee on the grounds they posed a threat to the public given the complexity of legal services. As one UPL Committee member analogized it at the time, "If a person gave you power of attorney to do brain surgery...do you think the Texas [medical] board would let you do it?"[50] These proceedings were soon tied up in procedural maneuvers by Nolo which attempted to require the UPL Committee to adopt more open

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[45] TEX. GOV'T CODE §81.101(a) (2007).

[46] TEX. GOV'T CODE §81.101(b) (2007).

[47] Unauthorized Practice of Law Comm. v. Parsons Tech., 1999 WL 47235 *1 (N.D. Tex. Jan. 22, 1999), *vacated,* 179 F.3d 956 (5th Cir. 1999).

[48] *See* J.D. Biersdorfer, *Quicken Legal-Help Software is Banned in Texas by a Judge,* N.Y. TIMES, Apr. 15, 1999, *available at* http://www.nytimes.com/1999/04/15/technology/news-watch-quicken-legal-help-software-is-banned-in-texas-by-a-judge.html (quoting Parsons' CEO Eric Stone, that "there has been no evidence that indicates -- or even suggests -- that our product has done any harm to anyone").

[49] Nolo Press, like many other companies, has since moved legal self-help resources online. *See* NOLO PRODUCTS, http://www.nolo.com/products/ (last visited May 7, 2013).

[50] Doreen Carvajal, *Lawyers Are Not Amused by Feisty Legal Publisher,* N.Y. TIMES, Aug. 24, 1998, *available at* http://www.nytimes.com/1998/08/24/business/lawyers-are-not-amused-by-feisty-legal-publisher.html?pagewanted=3&src=pm.

procedures.[51] As an article covering the proceedings noted in late 1998, "the dispute ha[d] devolved into a debate about the guidelines and rules of the Texas subcommittees."[52]

It was the intervention of the Texas legislature that ultimately resolved these disputes and allowed the two services to continue selling their products within the state. In 1999, the Texas legislature passed an amendment to the definition of the practice of law, creating a safe harbor for the "design, creation, publication, distribution, display, or sale, including publication, distribution, display, or sale by means of an Internet web site, of written materials, books, forms, computer software, or similar products."[53] The amendment instituted a notice regime: in order to not be included under the "practice of law" these services simply had to "clearly and conspicuously state that the products are not a substitute for the advice of an attorney."[54] As NOLO already provided these disclaimers, they were no longer deemed to be practice of law and the proceedings against them were dropped.[55] Following the amendment, the 5th Circuit vacated the injunction against Parsons Technology.[56]

A prescient BusinessWeek article predicted that the would not be the last word on the clash between the regulatory regime for attorneys and technological advances in legal services. They wrote, "[I]n years to come...increasingly sophisticated computer software -- which might use artificial intelligence to help draw up legal documents or dispense advice -- could increase the number of unauthorized practice claims."[57] We turn now to how jurisdictions have begun to deal with precisely these innovations, more than a decade later.

B. *The Modern Approach: Legalzoom and Reynoso*

The technology for legal services has, unsurprisingly, advanced significantly since the late 1990s. The "recipe book" approach -- which characterized the Nolo Press and Parsons Technology products that were at issue in Texas -- has given way to software that takes the additional step of integrating templates and instructions into a single, automated interface. As this new generation of technologies has become more prominent, courts have articulated a new approach to dealing with UPL claims in the automation context. This approach focuses on the functionality of the software in question, finding that even the coding of an automated system by

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[51] *The Brief Story of Texas vs. Nolo*, NOLO BLOG (Apr. 11, 2011), http://blog.nolo.com/blog/2011/04/11/the-brief-story-of-texas-vs-nolo/.

[52] *See supra* note 50.

[53] TEX. GOV'T CODE §81.101(c) (2007).

[54] *Id.*

[55] *See supra* note 51.

[56] Unauthorized Practice of Law Comm. v. Parsons Tech., 179 F.3d 956 (5th Cir. 1999) (vacating the injunction).

[57] Dennis Berman, *A Matter of Law: Texas vs. Nolo Press,* BUS. WEEK ONLINE, Mar. 26, 1998, *available at* http://www.businessweek.com/bwdaily/dnflash/mar1998/nf80326b.htm.

a non-lawyer can constitute UPL. We illustrate this rule in the context of two cases: *Janson v. Legalzoom* and *In re Jayson Reynoso*.

At issue in *In re Reynoso* was the "Ziinet Bankruptcy Engine" -- a website operated by the defendant which would take information from customers to generate a complete set of bankruptcy petitions and schedules. Notably, the software also automated the process of selecting where "to place information provided by the debtor, selected exemptions for the debtor and supplied relevant legal citations."[58]

In California -- as in Texas -- the definition of the practice of law is very broad, including "legal advice and counsel and the preparation of legal instruments and contracts."[59] Also similar is that California courts reserve the right to go beyond the statutory definition to find that a given activity is the UPL depending "upon the context and situation involved."[60]

The 9th Circuit held that the Ziinet program had engaged in UPL. In making its finding, the court relied on a two major factors that "taken together, lead us to conclude that it engaged in the unauthorized practice of law." First, they focused on the expectations set by Ziinet advertising, and how the product was represented to the marketplace. The product promised that it provided services "comparable to those of a 'top-notch bankruptcy lawyer'...[and that it] would do more than function as a 'customized word processor[ ]."[61] The resulting effect of "offering of legal advice and project[ing] an aura of expertise concerning bankruptcy petitions" was impermissible.[62]

However, the court in *Reynoso* went beyond simply looking at the manner in which the Ziinet product was sold. The 9th Circuit also held that the functionality of the product was itself a ground for finding that the Bankruptcy Engine engaged in UPL. The court found that the software went beyond simply providing "clerical services" and instead provided "personalized -- albeit automated -- counsel" in selecting and optimizing exemptions for the customer.[63] The court specifically withheld judgment on whether or not other types of programs would constitute UPL, at least holding open the possibility that automated systems might be permissible under certain circumstances.[64]

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[58] In re Reynoso*,* 477 F.3d 1117, 1125 (9th Cir. 2007).

[59] Baron v. City of L.A., 469 P.2d 353, 357 (Cal. 1970).

[60] People v. Landlords Prof'l Sevs., 215 Cal.App.3d 1599, 1605 (Cal. Ct. App. 1989).

[61] Reynoso, *supra* note 58, at 1125.

[62] *Id.* at 1126.

[63] *Id.*

[64] *Id.* n. 9.

The 2011 Missouri *LegalZoom* case follows an approach similar to the one applied in the *Reynoso* case. At issue in the case was LegalZoom's website, which provided a "branching intake mechanism", essentially an online questionnaire which would take inputs from the customer to automatically generate a variety of legal forms including affidavits, bills of sale, promissory notes, and different types of agreements.[65] The form was reviewed by a LegalZoom employee for errors before being delivered to the consumer.[66]

Missouri's UPL statute defines the practice of law broadly, and as in the Texas and California cases, the state judiciary has reserved the power to expand the definition on its own authority.[67] The major distinction between permissible and impermissible products drawn by the court in *LegalZoom* was the extent to which personalized legal advice or documents were provided. On one hand, "do-it-yourself" kits, which contain only "blank legal forms and general instructions" and refrain from giving customer-specific legal advice, are not considered practice of law.[68] On the other, products that go beyond simply providing the customer to "do it for you" would be considered to be engaging in the practice of law.[69]

As in *Reyonoso*, the court focused first on the expectations set by the representations made about the system, and then on the functionality of the system itself. On the representations, the court pointed to the fact that LegalZoom advertised that it would "prepare your legal documents" and that they would "take over" once the customer provided them with some basic information.[70]

However, the functionality of the system was the major focus of the analysis in the case because LegalZoom clearly signaled that it was not providing any legal advice. LegalZoom had a policy "against providing legal advice and [its employees] are regularly instructed not to recommend forms or documents or give any legal advice...even approaching giving legal advice to a customer will result in discipline up to and including dismissal."[71] Unlike the Bankruptcy Engine in *Reynoso*, LegalZoom's advertising also contained a specific disclaimer that "LegalZoom isn't a law firm. They provide self-help services at your specific direction."[72]

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[65] Order, Janson v. LegalZoom.com Inc., 2:10-CV-04018-NKL at 3-6 (W.D. Mo. Aug. 2, 2011) (order denying summary judgment), *available at* http://www.scribd.com/doc/61564347/Janson-v-LegalZoom.

[66] *Id.*

[67] *Id.* at 10.

[68] *Id.* at 13.

[69] *Id.* at 13-16.

[70] *Id.* at 18.

[71] *Id.* at 6.

[72] *Id.* at 3.

Notwithstanding the fact that "the named Plaintiffs never believed they were receiving legal advice while using the LegalZoom website", the site was nonetheless engaged in the practice of law based on the fact that the system "takes legal problems out of its customers' hands."[73] The court analogized the case to earlier litigation involving document preparation services that render the customers "passive bystanders after providing the information necessary to complete the form."[74] In automating the assembly of the form and selecting the legal language to be used based on the answers from the customer, the LegalZoom system engaged in UPL.

One unique element of the analysis in the *LegalZoom* case is that the court held that one of the reasons the company engaged in UPL was that a non-lawyer employee had programmed the computer to engage in the practice of law:

> LegalZoom's branching computer program is created by a LegalZoom employee using Missouri law...A computer sitting at a desk in California cannot prepare a legal document without a human programming it to fill in the document using legal principles derived from Missouri law....There is little or no difference between this and a lawyer in Missouri asking a client a series of questions and then preparing a legal document based on the answers and applicable Missouri law.[75]

In short, the very act of coding a system that is capable of applying legal principles and engaging in the practice of law can itself be considered UPL. The court here appears to make the act of creating the system itself synonymous with the active asking of questions by a lawyer in Missouri. The outcome is that the mere creation of code which is capable of executing legal tasks might be considered UPL, even if the software never actually engages with any customer.

After the plaintiffs prevailed on summary judgment, the case was ultimately settled and allowed LegalZoom to continue operating in Missouri with a number of changes to the service.[76] While the case settled in Missouri, as of 2011 LegalZoom continued to face UPL challenges in a number of states including Alabama, North Carolina, and Washington.[77]

C. *Evaluating The Approaches*

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[73] *Id.* at 18.

[74] *Id.* at 22.

[75] *Id.* at 21.

[76] Debra Cassens Weiss, *LegalZoom Can Continue to Offer Documents in Missouri Under Proposed Settlement,* ABAJOURNAL (Aug. 23, 2011), http://www.abajournal.com/news/article/legalzoom_can_continue_to_offer_documents_in_missouri_under_proposed_settle/.

[77] Bill Draper, *Missouri Lawyers Challenge LegalZoom's Service,* NEWSTRIBUNE.COM (Jul. 31, 2011), http://www.newstribune.com/news/2011/jul/31/missouri-lawyers-challenge-legalzooms-service/.

These two case studies present two possible approaches that a jurisdiction might use in responding to the increasing automation of legal services to the public. However, both are problematic and fail to adequately balance the policy interests of protecting the public with enabling innovation in the legal marketplace.

The first approach -- represented by the framework adopted by Texas in 1999 -- is based on notice and disclaimer. So long as the product contains a statement "that the products are not a substitute for the advice of an attorney", the product will not be deemed UPL.[78] By providing clear notice about the inadequacies of the system being provided, the rule ostensibly prevents customers from being misled and allows them to make their own judgment of the risks of using the service.

Unfortunately, this notice approach is underinclusive: it fails to capture services that we may not want to have offered in the first place. While this rule has the benefit of allowing for both entrants and incumbents to freely experiment with new approaches and automation of legal services with little friction, it opens up the door to a host of possible negative outcomes. First, allowing all services to operate so long as they provide a disclaimer shifts the costs of a negligently or recklessly designed system to be dealt with after damage has been done. This may leave harmed customers inadequately compensated. In the very least, it may require them to expend time and resources to pursue litigation where *ex ante* preventative measures would have been on net less costly.

Second, it is unclear that disclaimers provide much notice to the public in practice. One survey suggests that only about 7% of consumers actually read the terms and conditions for online services before using them.[79] Insofar as Texas-style regime depends on the ability of consumers to make informed decisions about the legal products being offered to them, a disclaimer may not be the most effective way of ensuring that the public is in fact informed prior to leaving their legal needs up to an automated system.

Third, disclaimers might also be used to immunize services from liability in ways that may lead to incoherent results. As an example, the extensively detailed, ten-paragraph disclaimer for LegalZoom asserts not only that the service does not engage in practice of law, but also that the site is used at the consumer's risk with the company disclaiming all "responsib[ility] for any loss, injury, claim, liability, or damage related to [the] use of [the] site."[80] The disclaimer would

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[78] TEX. GOV'T CODE §81.101(c) (2007).

[79] Rebecca Smithers, *Terms and Conditions: Not Reading the Small Print Can Mean Big Problems,* THE GUARDIAN (May 11, 2011), http://www.guardian.co.uk/money/2011/may/11/terms-conditions-small-print-big-problems; *see also* Mike Masnick, *Proof That (Almost) No One Reads End User License Agreements,* TECHDIRT (Feb. 23, 2005), http://www.techdirt.com/articles/20050223/1745244.shtml (noting a case in which a company hid a notice for a free $1,000 award within their EULA and it was not claimed for four months and after more than 3,000 downloads).

[80] LEGALZOOM - DISCLAIMER, http://www.legalzoom.com/disclaimer.html (last visited May 7, 2013).

presumably apply even as automation continues to advance and takes on functionality that would in some respects provide services commensurate to that of a real lawyer. In such a case, it seems inconsistent to allow services to disclaim that they are practicing law in a way that would be unethical for a lawyer to do so, simply because the service is automated.[81]

The second approach -- represented by the approach taken by the court in the *LegalZoom* and *Reynoso* cases -- adds a consideration of the functionality of the software to this analysis. The cases focused on how the challenged products were marketed, as well as the precise operation of the tools provided by the companies. This is the approach seen in *Reynoso*: the software was found to engage in UPL in part because the defendants made claims that that it was comparable to a human attorney, and in part because the program went beyond performing merely "clerical services."

A stronger version of this rule would find that either prong of the analysis would be sufficient to find that an automated system engaged in UPL. This is the tack taken by the court in the *LegalZoom* case. The system was found to be engaging in UPL despite the fact that disclaimers were conspicuously placed on the website and even the plaintiffs agreed that they never believed they were receiving legal advice.

This functionality-centered approach is overinclusive: it captures too large a scope of activity and in doing so stifles productive innovation in legal services. This owes itself largely to the fact that the scope of "practice of law" itself remains extremely vague. As noted above, the ABA Model Rules fail to provide a crisp definition of the practice of law, and the state statutes venturing an attempt at a definition leave much room for interpretation. This amorphous definition might increase the risk for innovators to enter the marketplace, and chills investment in developing even technologies that pose minimal risk to the public.

This is particularly worrisome in cases like *LegalZoom*, in which the approach appears to conflate the design of a system is capable of practicing law with the actual provision of legal services by a lawyer.[82] On purely conceptual grounds, there is good reason to draw a distinction between the two. The implementation of a legal task in code is simply a passive representation of the set of steps a computer will take when a program is activated, while the lawyer asking questions of a client actually engages in provision of services to a customer. To that end, a non-lawyer coding the law is more akin to a layperson teaching themselves the practice of law without actually rendering legal services to the public. In both cases, there is simply the unrealized *potential* that UPL may take place.

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[81] *See* Lindzey Schindler, *Skirting the Ethical Line: The Quandary of Online Legal Forms,* 16 CHAP. L. REV. 185 (2012) (making the argument that by "disclaiming all liability to users of legal services, whether online or not...skirts a line of ethical responsibility that should not be allowed").

[82] *See* Eric Goldman, *Missouri Federal Court Says LegalZoom Could Be Engaged in the Unauthorized Practice of Law,* TECH. & MARKETING L. BLOG (Aug. 15, 2011), http://blog.ericgoldman.org/archives/2011/08/missouri_federa_1.htm (discussing this argument in more depth).

There are also good practical grounds to resist such an expansive reading of the practice of law. For one, it significantly raises the costs of third-party innovation. Under the rule suggested in *LegalZoom*, layperson technologists would be forced to choose between two options. First, they could go through the time consuming and expensive process of passing the bar to become licensed to practice law. Second, they would have to design the system under the professional supervision of an attorney.[83] Indeed, our prospective innovator would be barred from even prototyping new solutions in the legal space without this supervision. In both cases, the costs of experimentation in legal automation are significantly increased.

Moreover, pursuing such a broad definition of practice of law may have significant legal ramifications, as well. Precedent supports the rule that non-lawyers have First Amendment rights in sharing resources about the law, so long as it does not rise to the level of providing personalized legal service.[84] It also supports the principle that blank legal forms are a form of protected speech under the Constitution.[85] To that end, some scholars have suggested that the "entry of consumer information into those forms" could also be protected against the vagueness and ambiguity of the UPL definition.[86]

Ultimately, the two rules seem inadequate for striking the proper balance of policy interests discussed in Part I.C. The rule that Texas developed in the 1990s maximizes the opportunity for innovation, but may inadequately protect the public as automation becomes ever more sophisticated over time. At the same time, the approach taken in *LegalZoom* and *Reynoso* optimizes for protecting the public, but may place excessively heavy burdens on non-lawyer innovators because of the fuzzy limits of the definition of the practice of law. Insofar as these two approaches do not appear to draw an appropriate balance, what might be a more effective framework?

III. TOWARDS A MORE EFFECTIVE FRAMEWORK

Part of the problem of the approaches described above is that they go to extremes, often protecting one value at the unacceptable expense of the other. This Part proposes a more moderate framework that favors a "controlled openness" approach. Such an approach would provide safe harbors which create sufficient space for innovation while limiting the potential harm to the public. In doing so, we take inspiration from the models that have been proven successful in the technical space around the use of application programming interfaces ("APIs"). First, we will examine the analogous problem faced by platform owners in opening their products to third-party innovation. Second, we will map out an alternative model of regulating

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[83] Model Rules of Prof'l Conduct R. 5.3 (2012).

[84] Catherine J. Lanctot, *Does LegalZoom Have First Amendment Rights?*, 2011 TEMP. POL. & CIV. RTS. L. REV. 101, 140 (forthcoming).

[85] *Id.* at 128 (arguing that blank forms are protected commercial speech under *Central Hudson* doctrine).

[86] *Id.* at 140.

services that automate the provision of legal services to the public through simultaneous interventions at the levels of law and code.

A. An Analogous Problem: The API

Balancing the interest in innovation with the need to protect the integrity of the legal system and the public at large is the core question at the center of the debates around automation. However, the legal system is not alone in needing to balance these types of competing objectives.

Web services -- like Google, Twitter, and Facebook -- have long faced similar questions in the private space. These platforms increase in value if third-party developers are able to freely build novel applications that use the services and data provided by the platform. This is in part because these third-party services indirectly increase the user base of the platform, and also because third-party innovators may be able to develop novel and valuable uses unanticipated by the platform. This is also the promise of new applications that interface with the legal system: as discussed above, automation opens the possibility of broadening access to the law, and allowing the development of entirely novel applications that improve the quality of the legal system.[87]

However, web platforms cannot afford to allow third-party actors to have entirely free access to the system. For one, completely free access might threaten to overload the limited capacity of the service.[88] There are also concerns that entirely open access may be used in ways that harm users.[89] These too, are some of the potential harms confronted by allowing software to freely act in lieu of lawyers within the legal system.[90]

To balance these interests, web services have turned to the application programming interface, or API. APIs are essentially sets of structured rules for third-party applications to access and make requests to a service.[91] They are accompanied by documentation about how those requests must be structured, and the constraints applications must operate under to continue having access to the service.

The ultimate outcome of this arrangement is that web services provide *permission within limits*. The specific bounds of these limits vary depending on the needs and resources of the

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[87] *See supra* Part I.C.

[88] *See, e.g.,* Mike Melanson, *Twitter Kills the API Whitelist*, READ WRITE WEB (Feb. 11, 2011) (noting Twitter's reason for cutting back on API access to defend platform stability and avoid overload).

[89] *See, e.g.,* TWITTER - API DEVELOPERS: ABUSE PREVENTION AND SECURITY, https://support.twitter.com/articles/79901-api-developers-abuse-prevention-and-security (last visited May 7, 2013) (policies on avoiding spam and abuse in the Twitter API).

[90] *See supra* p. 8-9.

[91] *See* QUORA - IN BABY LANGUAGE OR LAYMAN'S TERMS, WHAT IS AN API?, http://www.quora.com/APIs/In-baby-language-or-laymans-terms-what-is-an-API (describing the concept in more depth).

service. As a general matter, many services "rate limit" the number of requests that a third-party application can make to their platform.[92] Some services also require "developer keys," codes that allow only an approved set of third-party applications to access a service.[93]

APIs have been an enormously successful means of approaching this problem in the private sector. The travel website Expedia estimates that 90% of its business comes to the site through its API.[94] Similarly, 60% of listings for the online auction website eBay are posted via their API.[95] Insofar as the problems are analogous on some level, they may be able to inform the design of a framework that might better manage the tensions of the current legal automation ecosystem.

B. The Lawyer as API

So how might this model be implemented in the legal context? This section provides a proposed framework to regulate the activity of legal automatons, inspired by how web services have structured APIs. It combines interventions at both the level of "West Coast Code" (computer code) and at the level of "East Coast Code" (the law).[96]

First, by requiring applications to "talk" to a service in a predefined way, APIs allow a platform to have easy visibility into usage and activity from third-parties. In contrast, transparency remains an unresolved problem in the context of legal automation: it is often unclear which companies and lawyers are offering automated legal services. This hinders the ability for the state judiciary to protect the public. Without any clear way of tracking the behavior of legal automatons and distinguishing between them, risk averse regulators are forced to either bar legal automation completely in an effort to prevent harm, or ineffectively deal with problems only as they become aware of them through dissatisfied customers or the popular press.[97]

This could be implemented technically in the legal automation context. Automated services could be required to continuously send structured transactional data about their activity to the state judiciary. Those that did not would be classified definitively as engaging in UPL.

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[92] *See, e.g.,* TWITTER - REST API RATE LIMITING IN V. 1.1, https://dev.twitter.com/docs/rate-limiting/1.1 (last visited May 7, 2013) (giving an example of rate limiting in APIs).

[93] *See, e.g.,* GOOGLE DEVELOPERS - GOOGLE APIS CONSOLE HELP, https://developers.google.com/console/help/#WhatIsKey (giving an example of developer key "closed" form APIs).

[94] John Sheehan, *APIs are Dead, Long Live APIs,* THE NEXT WEB (Mar. 12, 2013), http://thenextweb.com/dd/2013/03/12/apis-are-dead-long-live-apis/.

[95] John Musser, *eBay Opens Platform to 3rd Party Developers,* PROGRAMMABLE WEB (Jun. 16, 2008), http://blog.programmableweb.com/2008/06/16/ebay-opens-platform-to-3rd-party-developers/.

[96] *See* Lawrence Lessig, *The Law of the Horse,* 113 HARV. L. REV. 501, 532 (1999), *available at* http://cyber.law.harvard.edu/wg_home/uploads/199/1999-05.pdf (introducing the East Coast / West Coast distinction).

[97] Indeed, this was how the state judiciary became aware of the automated products that were at issue in the *Parsons Technology* and *Reynoso* cases. *See supra* note 47, 58.

This transactional data could be a package of information that would anonymize client information, but identify the application being used, the type of transaction being conducted, and the person or entity operating the system.

Second, APIs communicate expectations upfront. Policies and documentation are used to provide third-party applications with guidance on what is and is not permissible. The current definition of UPL in the legal context fails to provide this, hindering innovators from acting effectively.

There are two possible approaches here. One might be to simply improve the definition of practice of law to provide clarity into which set of tasks will be definitively be excluded from the concept. This would permit the open automation of those tasks, while leaving other tasks up to the more nuanced inquiry into functionality used in the *LegalZoom* and *Reynoso* cases.

Some may argue rightly that it may be too difficult to cleanly delineate a set of tasks which are permissible for automation in all contexts.[98] From a practical standpoint, it also may be politically difficult to reach consensus within the legal community on what tasks should be open to full automation. To that end, an alternative approach may be to implement a "whitelisting" model for legal automation, borrowing from similar approaches in the API context.[99]

Under such a model, the legal "API" would be made "open" below certain predefined transaction limits. Third-parties or lawyers would be broadly permitted to provide automated legal services to the public so long as the total number of transactions processed by the system stayed within certain preset rate limits. Automated contract generation companies, for instance, might be permitted to produce only a specified number of contracts or service a set number of customers each month. These services would be subject to a notice regime similar to the one applied in Texas, providing at least some forewarning to customers.

However, if the application needed to process a number of transactions beyond these limits, it would be required to either seek approval from the state judiciary or act under the supervision of an attorney. Under such a system, all licensed lawyers would have access to a unique "API key" code that could be included as part of the information transferred to the state judiciary signaling that the legal automaton was permitted to go beyond the usual limits.

Under such a system, third-party application developers also could petition the state judiciary directly to have their application approved to operate without the supervision of an attorney. This inquiry could follow the full substantive inquiry into functionality used in the

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[98] *See* Daniel Fisher, *Non-Lawyers Find It Hard To Avoid Breaking Bar's Vague Rules,* FORBES BLOG (Jul. 25, 2011), http://www.forbes.com/sites/danielfisher/2011/07/25/non-lawyers-find-it-hard-avoid-breaking-bars-vague-rules/ (noting the difficulties that even lawyers have in developing a succinct definition).

[99] *See, e.g.,* note 88 (describing Twitter's original use of this approach for its API).

LegalZoom case, and might be required to meet certain criteria. For example, high volume programs might be required to allow for human quality checks at appropriate points in the workflow.

The outcome of this system would to import the approach of permission within limits used in the application context. This framework has a number of advantages over the existing rules discussed above for managing legal automation. First, such a framework would provide more clarity by providing a more nuanced description of the types of automation that are considered permissible, and the types of automation that must face higher levels of scrutiny. Even if specific legal tasks open to automation are left undefined, the whitelist approach could focus on the level of activity deemed to be an acceptable risk to the public. This improves over the existing approaches that groups all automation into a single category, regardless of likelihood of harm.

Second, the system reduces risk by allowing open testing in limited, low-stakes settings before scaling in size. Under a whitelist approach third-party innovators could test new approaches with little friction and no UPL risks within the bounds of a bright-line limit on the number of customers or the number of transactions. Once the reliability of the system and the demand in the market is demonstrated, they would be permitted to grow on only a closer assessment of the benefits and risks of the system.

Third, this approach may also reduce the adversarial quality that has characterized the battles to date between automators of legal tasks and the legal profession in the past. Novel applications are able to build a track record without much friction, and have incentives to clearly demonstrate their value and reliability to attorneys to obtain their keys to the legal system without having the engaging in whitelisting proceedings with the judiciary. Lawyers, in turn, effectively gain a property right that allows them to monetize access of these automated services to the legal system.

IV. CONCLUSION

However it is structured, such a legal "API" would permit automated systems to provide legal services to the public in some unregulated form. To that end, one potential criticism of a "permission within limits" approach is that it minimizes, but does not eliminate, the risk of harm.

It is important to recognize that background mechanisms provide compensation in these cases. Most obviously, the tort of malpractice still remains available for lawyers negligently operating automated systems to provide legal services to their clients. To the extent that automated services take on ever more complex legal tasks, non-lawyers and businesses that operate automatons might be held to a similar professional standard of care, even if they do not engage in *unauthorized* practice of law.

There is another layer of protection in the bar associations. Under a "whitelisting" approach, lawyers are constrained from recklessly licensing systems to practice law under their name. Even if they do not end up committing malpractice, the disciplinary function of these organizations may act as a useful "stick" to ensure that lawyers do their due diligence before licensing their "API keys" to an automated system.

Whatever the ultimate approach taken, the technology of automation continues to advance. Existing legal frameworks are inadequate partially because they wrestle with developing a crisp definition of practice of law, with permissible activity by automated systems lying outside this conceptual boundary, and impermissible activity lying within it. Ongoing ambiguity hinders innovation, and drawing this boundary may ultimately be an impossible task given all the innumerable facets of legal practice.

Litigating whether or not a given function is the practice of law may miss the broader point. The reality is that automation *does* engage in the practice of law, in the sense that it takes on functions previously deemed to require the professional judgment of a lawyer. By permitting these systems to operate in some form, the biggest gain may be a change in emphasis towards weighing the relative costs and risks of these technologies to the public. In the end, this inquiry may be more consistent with the policies of protecting the public that underlie the entire purpose of legal licensing in the first place.