OLD DAYS ARE DEAD AND GONE: ESTATE PLANNING MUST KEEP ITS HEAD ABOVE WATER WITH THE CHANGING TIDE OF TECHNOLOGY

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I. INTRODUCTION

Fresh out of law school, many young lawyers are eager to start their legal careers and jump right into the courtroom.¹ While they still need some practical training first, many young lawyers accept jobs that deal solely with discovery or intake until they can slowly make their way up the legal food chain.² With the advancement of technology, programs like expert systems and artificial technology are taking over some of these first-year associate jobs because they are less expensive and are more efficient.³ As a result, law firms are not hiring as many recent graduates.⁴ Eventually, technical jobs could replace the classical notion of attorneys.⁵ However, the growing concern that technology is taking over jobs in the legal field is not the only problem caused by artificial intelligence.⁶ Issues arise with how much impact technology has in transactional fields, such as estate planning, and the future role that artificial intelligence will play.⁷ An even greater issue arises with who is liable for artificial intelligence mistakes when there is very little in terms of legislation.⁸

Tech industry experts are in stark disagreement about the means of regulating artificial intelligence. Stephen Hawking and Elon Musk have warned the world of the dangers of advancing artificial intelligence and that governments need to start creating laws and regulations. Experts such as Bill Gates and Mark Zuckerberg believe that creating new regulation is not realistic because the technology has not fully developed. Some critics argue that researchers are already regulated enough, and adding more regulation will stifle innovation. This comment focuses the issue on a much smaller scale by suggesting that lawyers, law firms, and other entities that utilize artificial intelligence, or its branch of expert systems, in their estate planning practice are consistent with ethical rules of conduct for the system.

^{1.} See generally Asma Khalid, From Post-It Notes to Algorithms: How Automation Is Changing Legal Work, NPR (Nov. 7, 2017, 11:38 AM), https://www.npr.org/sections/alltechconsidered/2017/11/07/561631927/from-post-it-notes-to-algorithms-how-automation-is-changing-legal-work [perma.cc/5X2M-G7GB] (discussing how the legal market is shifting and that automation is taking legal jobs).

^{2.} *Id*.

^{3.} *Id*.

^{4.} *Id*.

^{5.} Id.

^{6.} See infra Part III.

^{7.} See infra Part III.

^{8.} See infra Parts IV-V.

^{9.} Jeremy Straub, *Opinion: Elon Musk is Wrong About Regulating Artificial Intelligence*, MKT. WATCH (Jan. 7, 2018, 9:32 AM), https://www.marketwatch.com/story/elon-musk-is-wrong-about-regulating-artificial-intelligence-2017-10-24 [perma.cc/26G3-U43K].

^{10.} *Id*.

^{11.} *Id*.

^{12.} Id.

^{13.} See infra Part V.

Additionally, this comment will expand upon the meaning of the unauthorized practice of law as it relates to artificial intelligence.¹⁴

This comment proceeds in five parts.¹⁵ Part I introduces the concept of artificial intelligence through practical and theoretical examples and definitions.¹⁶ Part II discusses the impact that artificial intelligence has on the legal field and some of the benefits and risks associated with its expansion.¹⁷ Part III considers the effects artificial intelligence have on estate planning law.¹⁸ Part IV discusses the parties liable for artificial intelligence.¹⁹ Part V suggests methods of ensuring compliance with ethical standards to estate planning practitioners as technology becomes more absorbed in transactional fields.²⁰

A. The Basics

To understand the effect that machines utilizing artificial intelligence have on the legal field, particularly in fields like estate planning, the following section is a brief discussion of the technology.²¹ Two of the largest programs focused on in this comment are artificial intelligence and expert systems.²²

1. Artificial Intelligence

Artificial intelligence is hard to define, which is why courts and legislatures experience great difficulty creating a commonly-used definition.²³ Artificial intelligence is not simply one thing.²⁴ For the context of this comment, artificial intelligence is a supercomputer that simulates human intelligence.²⁵ Supercomputers use algorithms to gather information and rules, and reason by using the rules to come to conclusions and correct its mistakes.²⁶ It is often difficult for people to grasp the concept of artificial

- 14. See infra Part V.
- 15. See infra Parts I-V.
- 16. See infra Sections I.A–B.
- 17. See infra Part II.
- 18. See infra Part III.
- 19. See infra Part IV.
- 20. See infra Part V.
- 21. See infra Sections II.A.1-2.
- 22. See infra Sections II.A.1-2.
- 23. Dave Gershgorn, *US Congress is Trying to Define What Artificial Intelligence Actually Means*, QUARTZ (Dec. 12, 2017), https://qz.com/1154491/us-congress-is-trying-to-define-what-artificial-intelligence-actually-means/ [perma.cc/FBE7-EA9K].
- 24. An Introduction to Artificial Intelligence: AI, UX & The Human Expert, WOLTERS KLUWER (Sept. 26, 2017), http://wolterskluwer.com/company/newsroom/news/2017/09/an-introduction-to-artificial-intelligence-ai-ux--the-human-expert.html [perma.cc/2CDN-95CF].
 - 25. Id
- 26. Margaret Rouse, AI (Artificial Intelligence), TECH TARGET, https://searchenterpriseai.tech target.com/definition/AI-Artificial-Intelligence [perma.cc/7RBD-WXGT] (last visited Nov. 1, 2017).

intelligence because of its intangible technology and learning systems.²⁷ Artificial intelligence utilizes "machine learning" in which the computer continually improves its performance and depends less on humans to direct its tasks.²⁸ These machines are advancing so quickly that now some machines can teach themselves to perform entirely new tasks.²⁹

Traditionally, a computer program is required to make a machine perform a task.³⁰ The creator of the program has a specific goal and gives step-by-step instructions on what to do and how it is going to do it.³¹ The directions about how to complete the task are called computer algorithms.³² The machine will start the program, follow the steps mechanically, and complete the work.³³ Some of the advanced devices can skip the step-by-step instructions and learn on their own.³⁴ To accomplish this, machines utilize data mining and pattern recognition methods.³⁵ Data mining is an analytic process in which a machine will sift through large amounts of data to find consistent patterns or relationships between variables.³⁶ One popular way that people interact with algorithms every day is through the famous application Netflix.³⁷ Netflix's program suggests new shows for the viewer based on its program's mathematical algorithm to determine the viewer's preferences.³⁸

While some machines are programed solely to calculate and recite correlations to collect data, others are advancing through automated reasoning.³⁹ Simply put, "reasoning is the ability to make inferences" and deductions.⁴⁰ Automated reasoning uses computer systems to automate inferences and deductions through equations.⁴¹ Programs that utilize automated reasoning can use these algorithms to answer complicated

^{27.} Erik Brynjolfsson & Andrew Mcafee, *The Business of Artificial Intelligence*, HARV. BUS. REV. (July 2017), https://hbr.org/cover-story/2017/07/the-business-of-artificial-intelligence [perma.cc/46PY-2NPS].

^{28.} Id.

^{29.} *Id*.

^{30.} What Is a Computer Algorithm?, HOW STUFF WORKS, https://computer.howstuffworks.com/what-is-a-computer-algorithm.htm [perma.cc/2J9P-L98L] (last visited Jan. 3, 2018); see also Yalin Bastanlar & Mustafa Özuysal, Introduction to Machine Learning, MIRNOMICS: MICRORNA BIOLOGY AND COMPUTATIONAL ANALYSIS. METHODS IN MOLECULAR BIOLOGY (METHODS AND PROTOCOLS), vol. 1107 (M. Youself, J. Allmer eds., 2014) (detailing the mechanics of machine learning).

^{31.} *Id*.

^{32.} *Id*.

^{33.} Id.

^{34.} Bastanlar, supra note 30.

^{35.} *Id*

^{36.} What Is Data Mining (Predictive Analysis, Big Data)?, STATSOFT, http://www.statsoft.com/Textbook/Data-Mining-Techniques [perma.cc/K2GK-PGB6] (last visited Jan. 3, 2018).

^{37.} Id

^{38.} Id.

^{39.} Id.

^{40.} Automated Reasoning, STAN. ENCYCLOPEDIA OF PHILOSOPHY, https://plato.stanford.edu/entries/reasoning-automated/[perma.cc/N7TT-ZMEZ] (last visited Jan. 4, 2018).

^{41.} *Id*.

questions in logic, engineering, and mathematics.⁴² Additionally, some artificial intelligence programs use rule-based reasoning in which the program examines its library of rules, evaluates a factual scenario, and interprets the rules with the consequences and result.⁴³ Incidentally, rule-based reasoning follows the "if-then" conditional pattern to solve programs quickly.⁴⁴

2. Expert Systems

Particular applications of artificial intelligence, commonly used in the legal field, are called expert systems.⁴⁵ Expert systems were created by a group of faculty, staff, and graduate students from the Stanford University Computer Science Department through the Stanford Heuristic Programming Project.⁴⁶ Traditionally, there are three parts of expert systems: "(1) a knowledge base that uses logic rules to solve problems, (2) an inference engine that translates the issue against the rules, and (3) interface that allows the program to speak in any language."⁴⁷ The primary function of an expert system is that the user will input facts into the expert system's knowledge base and inference engine, which then will extrapolate the information to the user.⁴⁸ Expert systems perform much like a human expert, respond in a reasonable time, are reliable, and can explain the reasoning process.⁴⁹ Typically, these systems are less expensive than hiring experts and can be designed to have more than one expertise.⁵⁰

One company that made the technology headlines is Neota, whose program not only allows fast recitation of state and federal law, regulations and insights, but also "will deliver tailored research, multi-jurisdictional surveys and regulatory gap analyses in a wide array of data and privacy risk areas empowering clients to quickly and cost-effectively understand and handle routine compliance matters." Neota is just one of the systems that are taking the legal field by storm by focusing on efficiency, profitability,

^{42.} *Id*.

^{43.} AI TOPICS, https://aitopics.org/class/Technology/IT/AI/Representation%20&%20Reasoning/Rule-Based%20Reasoning [perma.cc/X4N5-BLHA] (last visited Jan. 5, 2018).

^{44.} *Id*.

^{45.} Expert System, BUS. DICTIONARY, http://www.businessdictionary.com/definition/expert-system.html [perma.cc/6RBF-RLU9] (last visited Nov. 1, 2017).

^{46.} See Bruce G. Buchanan & Edward A. Feigenbaum, The Stanford Heuristic Programming Project: Goals and Activities, 1 AI MAG. 1, 25 (1980), https://www.aaai.org/ojs/index.php/aimagazine/article/view/89/88 [perma.cc/979J-D9C9].

^{47.} See BUS. DICTIONARY, supra note 45.

^{48.} What Is an Expert System?, ARTIFICIAL INTELLIGENCE (Oct. 17, 2010), http://intelligence.world ofcomputing.net/ai-branches/expert-systems.html#.W8duSxNKiu [perma.cc/APM3-YN8T].

^{49.} *Id*.

^{50.} Id.

^{51.} Ron Friedmann, *Automating Legal Advice: AI and Expert Systems*, BLOOMBERG L. BIG L. BUS. (Jan. 22, 2016), https://biglawbusiness.com/automating-legal-advice-ai-and-expert-systems/ [perma.cc/67Y8-4LD].

and improving law firms.⁵² One of the leaders of Neota predicts that artificial intelligence will answer eighty percent of questions and the other twenty may require traditional legal services.⁵³

B. Defining AI

Democrat John K. Delaney (D-MD) introduced the Fundamentally Understanding The Usability and Realistic Evolution (FUTURE) of Artificial Intelligence Act of 2017 which defines artificial intelligence as

(A) Any artificial systems that perform tasks under varying and unpredictable circumstances, without significant human oversight, or that can learn from their experience and improve their performance. Such systems may be developed in computer software, physical hardware, or other contexts not yet contemplated. They may solve tasks requiring human-like perception, cognition, planning, learning, communication, or physical action. In general, the more human-like the system within the context of its tasks, the more it can be said to use artificial intelligence.

. . .

(D) A set of techniques, including machine learning, that seek to approximate some cognitive task.⁵⁴

Upon realizing how prominent artificial intelligence technology will be in the future, the proposed bipartisan bill was introduced in the House of Representatives on December 12, 2017. One of the major purposes of the bill is to create the Federal Advisory Committee on the Development and Implementation of Artificial Intelligence. That advisory committee will give advice to the Secretary of Commerce regarding issues like retraining workers due to possible technology replacements and legal issues relating to violation of laws by artificial intelligence. The bill also addresses the economic and social benefits for the country, like promoting investment and innovation.

Recently, state legislatures began to categorize artificial intelligence under the term "electronic agents." The Texas definition of electronic agent is "a computer program or an electronic or other automated means used

^{52.} NEOTA LOGIC, https://www.neotalogic.com/industry/legal-services/ [perma.cc/G4UL-FPQC] (last visited Sept. 24, 2017).

^{53.} Friedmann, supra note 51.

^{54.} H.R. 4625, 115th Cong. § 3(1)(A) (2017).

^{55.} H.R. 4625, 115th Cong. (2017).

^{56.} *Id*.

^{57.} *Id.* § 4(b)(1)(G) (2017).

^{58.} Id. § 2.

^{59.} Tex. Bus. & Com. Code Ann. § 322.002(6) (Supp.).

independently to initiate an action or respond to electronic records or performances in whole or in part, without review or action by an individual."⁶⁰ This vague description touches the autonomous nature of artificial intelligence, but it leaves much to be desired because experts in the field cannot agree on a working definition regarding regulation.⁶¹ The lack of uniformity in defining artificial intelligence and trying to determine who should be responsible in the event of failure or harm poses unique challenges like who or what entity to sue.⁶²

1. Other Definitions—Artificial Intelligence as a "Legal Person"

It is widely accepted that a legal person is not just a human or a natural person. Corporations are considered legal persons, although they have different legal rights than humans. Additionally, the capacity to sue and be sued is a major component of legal personhood (as well as attributes like intelligence and will), which some scholars argue are necessary to be considered a legal person. It is arguable that artificial intelligence possesses those qualities. The European Union introduced legislation to protect the rights and responsibilities of artificial intelligence and distinguish it from other entities. The European Union recognized the need for regulation in the technology sector and drafted a new label for artificial intelligence called "electronic personhood," which mirrors corporations' responsibilities and allows them to be parties in a legal case.

^{60.} Id.

^{61.} Matthew U. Scherer, Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies, 29 HARV. J.L. & TECH. 353, 359 (2015).

^{62.} Id. at 356.

^{63.} Lawrence B. Solum, Legal Personhood for Artificial Intelligences, 70 N.C. L. REV. 1231, 1239 (1992).

^{64.} Id.

^{65.} Id.

^{66.} Id

^{67.} Eur. Parliament Rep., Comm'n on Civ. Law R. on Robotics (2015/2103 (INL)) http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML%2BCOMPARL%2BPE-582.443%2B0 1%2BDOC%2BPDF%2BV0//EN [perma.cc/]M7EF-RWT6] (last visited Aug. 8, 2018).

^{68.} Id.

II. WHY SHOULD A LAWYER CARE ABOUT ARTIFICIAL INTELLIGENCE IN THE FIRST PLACE?

Many people believe that artificial intelligence can only take over jobs that do not require extensive training or are human in nature.⁶⁹ However, many jobs are disappearing, and it is shaping the entire workforce.⁷⁰

A. Economic Impact

Artificial intelligence is beginning to dominate employment that traditionally required human function.⁷¹ Even the most complicated professions are being replaced by artificial intelligence, like lawyers, accountants, and artisans. ⁷² The jobs that appear safe from replacement by artificial intelligence are those "that require local human effort (gardening, painting, babysitting), distant human effort (editing, coaching, coordinating), and high-level thinking/relationship building."73 Indeed, human-dominated fields like medicine quickly see the impact of programs like IBM Watson.⁷⁴ IBM Watson is a supercomputer that uses artificial intelligence and other software to surpass human performance with lightning fast data processing and the capacity to store incredible amounts of data. ⁷⁵ Some experts warn that supercomputers like IBM Watson are capable of reading massive amounts of reports so efficiently that they will replace researchers.⁷⁶ Analogous to IBM Watson, law clerks who prepare discovery are losing their jobs because artificial intelligence programs perform a wide array of tasks in a quicker and more efficient manner. 77 The results of this technology shift are that fewer employers are hiring lawyers, there is a decrease in law school applications, and the legal market is shifting from the private to public service legal market.⁷⁸

^{69.} See generally David Rotman, How Technology is Destroying Jobs, MIT TECH. REV. MAG. (June 12, 2013), http://www.shellpoint.info/InquiringMinds/uploads/Archive/uploads/20130802_How_Technology_is_Destroying_Jobs.pdf [perma.cc/D5YW-B8S9] (arguing that automation may account for a stagnant economy and slow job growth).

^{70.} Id.

^{71.} Id.

^{72.} Id

^{73.} Aaron Smith & Janna Anderson, *AI, Robotics, and the Future of Jobs*, PEW RES. CTR. (Aug. 6, 2014), http://www.pewinternet.org/2014/08/06/future-of-jobs/ [perma.cc/J4CG-58SM].

^{74.} Benjamin Wallace-Wells, *As* Jeopardy! *Robot Watson Grows Up, How Afraid of it Should We Be?*, N.Y. MAG. (May 20, 2015), http://nymag.com/daily/intelligencer/2015/05/jeopardy-robot-watson.html. [perma.cc/JY9R-ZJTA].

^{75.} Margaret Rouse, *IBM Watson Supercomputer*, TECH TARGET, https://searchenterpriseai.tech target.com/definition/IBM-Watson-supercomputer [perma.cc/8T84-CPGX] (last visited Oct. 18, 2018).

^{76.} Smith, supra note 73.

^{77.} Id.

^{78.} Khalid, supra note 1.

To be sure, not everyone believes that a technology takeover would be catastrophic. Some experts believe that even though many jobs will disappear, new jobs and industries will appear. Some experts argue this is a new industrial revolution and the job market will transform into purely technology-based employment. However, these experts concede that current jobs held by humans will likely disappear.

B. Technology Is Already Taking Over

There are many different ways technology already impacts the legal field. The field field. For example, robo-forms market to consumers who typically do not hire an attorney for matters of civil practice. The company helped over 350,000 people avoid nearly \$10,000,000 in fines. These types of forms are great for simple and straightforward legal tasks, such as creating a will for a small estate, but prove to be useless when applied to complicated matters. It is not surprising that civil practices like estate planning, family law, real estate law, and intellectual property will be the first areas of law impacted by advancement in technology.

1. Robo-Forms

One type of technology company that is present in the legal profession is a program called LegalZoom.⁸⁸ Some elder law and estate planning professionals caution that do-it-yourself programs prey on older generations and those who cannot afford a lawyer.⁸⁹

Some courts are reluctant to rule on whether using robo-form systems is a form of unauthorized practice of law. 90 For example, the court in LegalZoom.com, Inc. v. McIllwain compelled arbitration on the issue of

^{79.} Smith, supra note 73.

^{80.} *Id*.

^{81.} Id.

^{82.} Id

^{83.} See Julie Sobowale, How Artificial Intelligence is Transforming the Legal Profession, ABA J. (Apr. 2016), http://www.abajournal.com/magazine/article/how_artificial_intelligence_is_transforming_the_legal_profession[perma.cc/7X4F-5DXX].

^{84.} Cort Jensen, Rise of the Robo-Form, 37-MAY MONT. LAW. 9, 9 (May 2012).

^{85.} Thomas Hedger, *Should We Turn the Law Over to Robots?*, THE ATLANTIC, http://www.the atlantic.com/sponsored/vmware-2017/robolawyer/1539/ [perma.cc/96Q9-DN8U] (last visited Jan. 17, 2018).

^{86.} Jensen, supra note 84, at 10.

^{87.} Id. at 9.

^{88.} See generally Ondi Timoner, Demystifying Law: How LegalZoom Uses Technology to Make Law Affordable, HUFFPOST (Nov. 11, 2014, 9:54 AM), https://www.huffingtonpost.com/ondi-timoner/demystifying-law-how-lega_b_6160814.html [perma.cc/LY7K-7LC2] (discussing the rise of online affordable legal help programs).

^{89.} Id.

^{90.} Id.

whether LegalZoom.com, Inc. (LegalZoom) engaged in the unauthorized practice of law. ⁹¹ In that case, a person from Arkansas visited LegalZoom to create a will for only \$100.00. ⁹² McIllwain filed a class-action lawsuit on the basis that LegalZoom engaged in the unauthorized practice of law in violation of the Arkansas Deceptive Trade Practices Act. ⁹³ However, the court held that the arbitration clause in LegalZoom's terms of service dictated that parties must solve the matter through arbitration, not the court. ⁹⁴

Further, in Janson v. LegalZoom.com, Inc., the parties settled after an interlocutory ruling determined that LegalZoom participated in the unauthorized practice of law in which the buyer supplied information and the seller prepared the documents.⁹⁵ The court held that filling out blank forms is not in and of itself the unauthorized practice of law. 96 The issue in the case was the reliance on the human employee in preparing the forms.⁹⁷ The Janson court relied in part on the reasoning in Florida Bar v. Brumbaugh. 98 Brumbaugh held that selling legal forms or materials explaining legal practice and procedure through a secretarial service was not itself improper.⁹⁹ However, advising clients of legal remedies and assisting clients to prepare forms constituted the unauthorized practice of law. 100 The action of typing up the instruments was not the unauthorized practice of law. 101 The Brumbaugh court made it clear that the attorney's services were not to answer questions about necessary forms, how to fill them out, where to file them, or how to present evidence to the court, but rather strictly limited to her secretarial and notary services. 102 Additionally, the court stated that the limited holding that related to divorce applied to other areas of law such as preparing wills or real estate transactions. 103 Under Missouri law, and following Brumbaugh's reasoning, the Janson court stated the unauthorized practice of law occurred when the employee reviewed the customer's questionnaire, looked for factual mistakes, corrected errors, and shipped the final product to the customer. 104

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91. LegalZoom.com, Inc. v. McIllwain, 429 S.W.3d 261, 261 (Ark. 2013).
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^{92.} Id. at 262.

^{93.} Id.

^{94.} Id. at 266.

^{95.} Dane S. Ciolino, *Is LegalZoom Engaged in the Unauthorized Practice of Law in Louisiana?*, LOUISIANA LEGAL ETHICS (Nov. 8, 2013), https://lalegalethics.org/web-based-legal-service-providers-engaged-unauthorized-practice-law/ [perma.cc/H5ZN-STMJ]; *see* Janson v. LegalZoom.com, Inc., 802 F. Supp. 2d 1053, 1053 (W.D. Mo. 2011).

^{96.} Janson v. Legalzoom.com, Inc., 802 F. Supp. 2d 1053, 1064 (W.D. Mo. 2011).

^{97.} Id.

^{98.} Id.

^{99.} Fla. B. v. Brumbaugh, 355 So.2d 1186, 1193-94 (Fla. 1978).

^{100.} Id.

^{101.} Id. at 1194.

^{102.} Id.

^{103.} Id

^{104.} Janson v. Legalzoom.com, Inc., 802 F. Supp. 2d 1053, 1064 (W.D. Mo. 2011).

Moreover, state bar associations recognize the threat that companies who use these technology services pose as unauthorized practice of law. ¹⁰⁵ For example, LegalZoom filed a complaint against the North Carolina State Bar and asserted the right to provide its technology services to the state. ¹⁰⁶ The bar association counterclaimed that LegalZoom was engaged in the unauthorized practice of law. ¹⁰⁷ The parties settled the dispute and entered into a Consent Judgment, in which they agreed that LegalZoom's actions did not constitute the practice of law under N.C.G.S. § 84-2.1. ¹⁰⁸ However, LegalZoom's services are subject to the following limitations:

- (a) LegalZoom shall provide to any consumer purchasing a North Carolina product (a North Carolina Consumer) a means to see the blank template or the final, completed document before finalizing a purchase of that document;
- (b) An attorney licensed to practice law in the State of North Carolina has reviewed each blank template offered to North Carolina Consumers, including each and every potential part thereof that may appear in the completed document. The name and address of each reviewing attorney must be kept on file by LegalZoom and provided to the North Carolina Consumer upon written request;
- (c) LegalZoom must communicate to the North Carolina Consumer that the forms or templates are not a substitute for the advice or services of an attorney; 109

. . .

Texas defines the practice of law as:

The preparation of a pleading or other document incident to an action or special proceeding or the management of the action or proceeding on behalf of a client before a judge in court as well as a service rendered out of court, including 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 determined. 110

However, the Texas Government Code mainly addresses attorneys from another jurisdiction, law school, or unlicensed people who engage in the

^{105.} Legalzoom.com, Inc. v. N.C. State B., No. 11CVS15111, 2011 WL 8424700 (N.C. Super. 2011).

^{106.} Id.

^{107.} Id.

^{108.} Id.

^{109.} LegalZoom.com, Inc. v. N.C. State B., 2015 NCBC 96, Consent J.

^{110.} Tex. Gov't Code Ann. § 81.101(a) (Supp.).

conduct described above.¹¹¹ Additionally, the Texas Penal Code prescribes that the following acts are unauthorized practice of law:

- (1) contracts with any person to represent that person with regard to personal causes of action for property damages or personal injury;
- (2) advises any person as to the person's rights and the advisability of making claims for personal injuries or property damages;
- (3) advises any person as to whether or not to accept an offered sum of money in settlement of claims for personal injuries or property damages;
- (4) enters into any contract with another person to represent that person in personal injury or property damage matters on a contingent fee basis with an attempted assignment of a portion of the person's cause of action; or
- (5) enters into any contract with a third person which purports to grant the exclusive right to select and retain legal counsel to represent the individual in any legal proceeding.¹¹²

If lawyers are not prudent, this sophisticated technology has the potential to commit the above acts. Additionally, with the advancement of artificial intelligence and technology like LegalZoom taking over the legal field, the legislature should continue to incorporate artificial intelligence and expert systems in upcoming legislation. 114

C. Practical Implications for Law Firms

Lawyers utilize artificial intelligence to conduct research, provide administrative legal support, create documents, and other related tasks. In fact, lawyers have been using artificial intelligence for over ten years because Westlaw and LexisNexis use it in their searches. Westlaw recently incorporated machine learning to aid researchers with analysis and recommendations. One of the world's largest law firms came out with

^{111.} TEX. GOV'T CODE ANN. § 81.102 (Supp.).

^{112.} TEX. PENAL CODE ANN. § 38.123(a)(1)-(5) (Supp.).

^{113.} See supra Part V

^{114.} Scherer, supra note 61.

^{115.} Dennis Garcia, *Preparing for Artificial Intelligence in the Legal Profession*, LEXIS PRAC. ADVISOR J. (June 7, 2017), https://www.lexisnexis.com/lexis-practice-advisor/the-journal/b/lpa/archive/2017/06/07/preparing-for-artificial-intelligence-in-the-legal-profession.aspx [perma.cc/3WDP-Y6HA].

^{116.} Daniel E. Harmon, Artificial Intelligence in Law, LAWYER'S PC, 34 No. 8 Law. PC 1 (2017).

^{117.} *Id*.

NextLaw Labs to begin the transformation of the legal field across the globe. 118

1. Benefits

The cost of running a law firm can be daunting when considering factors such as office space, technology, employees, liability insurance, business collateral, office supplies, membership dues, and other costs. However, law firms may see the cost of running their businesses decrease with the rise of artificial intelligence. Many of the tasks that these programs perform required teams of lawyers. A recent advancement is called quantitative legal prediction (QLP). QLP is a system in which artificial intelligence will answer questions such as "Do I have a case? What is our likely exposure? How much is this going to cost? What will happen if we leave this particular provision out of this contract? How can we best staff this particular matter?" by using sophisticated algorithms that answer what many lawyers are paid to solve. 123

2. Risks

Some of the risks associated with implementing expert systems and artificial intelligence are that they may replace lower-level associate jobs, so it is more cost-efficient for firms.¹²⁴ Indeed, lower-level positions are not the only jobs threatened.¹²⁵ For example, one of the world's largest hedge funds is creating technology that acts as managers that fire and hire employees and partake in decision making, which were considered human-dominated positions.¹²⁶ However, some skeptics argue that professionals will still need to supervise the machines and ensure quality control.¹²⁷

Additionally, experts believe that relying on artificial intelligence poses a risk because judgment involved in legal analysis is difficult for computers

^{118.} Id.

^{119.} How Much Does it Cost to Start Your Own Law Firm?, FINDLAW, http://practice.findlaw.com/how-to-start-a-law-firm/how-much-does-it-cost-to-start-your-own-law-firm.html [perma.cc/QL6Z-58D4] (last visited Oct. 5, 2017).

^{120.} Daniel Martin Katz, Quantitative Legal Prediction – Or – How I Learned to Stop Worrying and Start Preparing for the Data-Driven Future of the Legal Services Industry, 62 EMORY L.J. 909, 910 (2013).

^{121.} Id.

^{122.} *Id.* at 912.

^{123.} Id.

^{124.} Id. at 915.

^{125.} Olivia Solon, World's Largest Hedge Fund to Replace Managers with Artificial Intelligence, THE GUARDIAN (Dec. 22, 2016), https://www.theguardian.com/technology/2016/dec/22/bridgewater-associates-ai-artificial-intelligence-management [perma.cc/9WBU-GDNM].

^{126.} Id.

^{127.} Harmon, supra note 116.

to adopt.¹²⁸ For example, case evaluation is one task that a lawyer must encounter.¹²⁹ When a lawyer receives a case, he or she must decide whether or not to accept representation based on their personal experience, knowledge of outcomes of other cases, case reports, and verdict surveys.¹³⁰ Consequently, the initial evaluation of the case may be incomplete based on their understanding of the law or prior case outcomes.¹³¹

One system that contradicts that argument is the Computer-Assisted Case Evaluation (CACE), an artificial intelligence system used by the Brooklyn District Attorney's office to tackle these initial evaluations. CACE quickly sifts through rules and statutes to determine whether or not the district attorney's office should prosecute the case. Also, CACE includes practical and policy rules that evaluate jury responses, input mitigating circumstances, and compare previous case experiences. While this system promises a bright future, it is expensive to build and maintain.

Lastly, another risk that law firms will encounter with artificial intelligence is data privacy. Law firms should be steadfast in protecting their databases with the onset of artificial intelligence because as more users enter the digital world, so do the number of cybercriminals. Proponents believe that embracing the technology and employing members who are trained and well-versed in artificial intelligence and mega-data will help protect law firms. For example, the European Union has implemented the General Data Protection Regulation that took effect May 2018 so consumers will understand the steps necessary to protect their data. 139

III. COULD ARTIFICIAL INTELLIGENCE BECOME THE FOCAL POINT OF ESTATE PLANNING?

Estate planning is one of the areas of law that will see a large impact from this technology. ¹⁴⁰ As previously mentioned, areas dealing with forms and transactions in which litigation is unlikely already see the impact of

^{128.} Patricia Hassett, *Technology Time Capsule: What Does the Future Hold?*, 50 SYRACUSE L. REV. 1223, 1230 (2000).

^{129.} Id. at 1231.

^{130.} Id. at 1231-32.

^{131.} Id. at 1232.

^{132.} *Id*.

^{133.} *Id*

^{134.} *Id*.

^{135.} Id. at 1233.

^{136.} Garcia, supra note 115.

^{137.} *Id*.

^{138.} Id.

^{139.} Id.

^{140.} Jensen, supra note 84.

technology. 141 Criminal litigation is seeing less impact at this stage than areas of civil law. 142

A. Fiduciary Duties

Fiduciary relationships "generally [apply] 'to any person who occupies a position of peculiar confidence towards another,' refers to 'integrity and fidelity,' and contemplates 'fair dealing and good faith." Fiduciary law has two principles: the duty of care and the duty of loyalty. A person with a fiduciary duty owes the highest degree of care to that relationship. One example of a fiduciary relationship is the duty that a lawyer owes to his or her client. People hire lawyers to obtain advice, to advocate for them, and to determine what is in their best interests. Another type of fiduciary duty is between a doctor and a patient. Doctors must maintain confidentiality about a patient's medical conditions and other information as established through the patient-physician relationship.

An example of a fiduciary role that is analogous to artificial intelligence in estate planning is robo-advisors in investment advising. Like the legal field, the financial sector is gravely lacking restrictions for artificial intelligence. Robo-advisors are computerized services that give investment advice through the internet. This technology relies primarily on algorithms to make recommendations. As with the robo-forms seen in estate planning, clients answer questions regarding basic information, including income and financial goals, to create an investment portfolio. This technology minimizes transaction costs and steadily follows clients goals. The so-called "robo-advice market" has seen

^{141.} *Id*.

^{142.} *Id*.

^{143.} Dunnagan v. Watson, 204 S.W.3d 30, 46 (Tex. App.—Fort Worth 2016, pet. denied) (quoting Daniel v. Falcon Int. Realty Corp., 190 S.W.3d 177, 185 (Tex. App.—Houston [1st Dist.] 2005, no pet.).

^{144.} JESSE DUKEMINIER & ROBERT H. SITKOFF, WILLS, TRUSTS, AND ESTATES 582 (9th ed. 2013).

^{145.} The Fiduciary Duty: What Is It and What Does It Impose Upon You?, STIMMEL LAW, www.stimmel-law.com/en/articles/fiduciary-duty-what-it-and-what-does-it-impose-upon-you [perma.cc/F53R-YL3T] (last visited Oct. 18, 2017).

^{146.} Id.

^{147.} *Id*.

^{148.} Id.

^{149.} EC Hui, Doctors as Fiduciaries: A Legal Construct of the Patient-Physician Relationship, 11 H. K. Med. J. 527, 527 (2005).

^{150.} See supra Section II.B.1.

^{151.} Megan Ji, Are Robots Good Fiduciaries? Regulating Robo-Advisors Under the Investment Advisers Act of 1940, 117 COLUM. L. REV. 1543, 1544 (2017) (quoting Alessandro Malito & Elli Zhu, Top 5 Robo-Advisers by AUM, INV. NEWS (Feb. 25, 2016), http://www.investmentnews.com/article/20160225/FREE/160229960/top-5-robo-advisers-by-aum [perma.cc/V26X-XTC7]).

^{152.} Ji, supra note 151, at 1557.

^{153.} Id.

^{154.} *Id*.

^{155.} Id. at 1559.

tremendous growth in the past decade with largely \$45 billion in assets under management.¹⁵⁶ The market is predicted to continue to grow to \$2.2 trillion in assets under management in five years.¹⁵⁷

Industry professionals criticize the quality of recommendations provided by artificial intelligence and doubt that it can successfully meet the fiduciary standards set by the Securities and Exchange Commission (SEC) through the Advisers Act. 158 Some of the arguments against robo-advisors are that the questionnaires that clients must fill out do not satisfy the fiduciary duty of care because they are over-generalized and fail to take into account the clients' experience and needs. 159 Additionally, scholars argue that robo-advisors lack the human element of investment planning. 160 Professor Arthur Laby at Rutgers Law School explained that the two essential elements of an investment adviser's fiduciary duty are human connection and judgment. 161 Machines miss problems that arise in conversation and other information obtained only through human contact. 162 To regulate the robo-advisor market, one author suggests the SEC should focus on conflicts of interest and the duty of loyalty by requiring disclosure of conflicts and how biased algorithms cost clients. 163 This comment will take into account these considerations in Part V when suggesting how estate planners can ethically utilize artificial intelligence in their practice. 164

B. Trust Administration

In estate planning, a trust is a "legal arrangement created by a *settlor* in which a *trustee* holds property as a *fiduciary* for one or more *beneficiaries*." The trustee takes legal title of the property and holds it for the settlor's beneficiaries. ¹⁶⁶ It is undisputed that in addition to natural persons, corporations can hold property in trust and act as trustees. ¹⁶⁷ Part of the reason is because corporations are classified as a "legal personhood" and maintain the capacity to be sued. ¹⁶⁸ As artificial intelligence continues to

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156. Id. at 1544.
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^{157.} Id. at 1545.

^{158.} Id.

^{159.} Id. at 1565.

^{160.} Id. at 1566.

^{161.} *Id*.

^{162.} *Id*

^{163.} Id. at 1583.

^{164.} See infra Part V.

^{165.} JESSE DUKEMINIER & ROBERT H. SITKOFF, WILLS, TRUSTS, AND ESTATES 385 (9th ed. 2013).

^{166.} *Id*.

^{167.} RESTATEMENT (THIRD) OF TRUSTS: CORPORATIONS AND OTHER ENTITIES AS TRUSTEES \S 33 (Am. Law Inst. 2003).

^{168.} Solum, *supra* note 63, at 1238.

take over more responsibility and liability, it should be subject to rules as a natural person or corporation would as a trustee. 169

There are three different stages in which artificial intelligence could act as a trustee. First, as is used today, humans make decisions based on advice from expert systems. When a beneficiary dies, the program could follow its algorithm to change the trust instrument and is mainly involved with low-level, daily tasks. Second, as technology grows and artificial intelligence advances, humans would no longer need to check the program and only sign documents while spending little time on administering trusts. In this stage, there would still need to be some human intervention when the trust is sued, for example, if a beneficiary believes they did not receive their fair share. Third, there is no human trustee, and settlors go straight to artificial intelligence for services. This may enticing for those who wish to have no human involvement with their funds.

One problem raised is that the law prescribes that "a trustee may be required or permitted to deviate from a term of the trust if following the terms would defeat the purpose of the trust due to an unanticipated change in circumstances." Would artificial intelligence be able to analyze the needs of the trust and adhere to the will of the settlor? Artificial intelligence could eliminate humans from acting as trustee altogether, but who would be responsible for the artificial intelligence administration of a trust remains a significant issue. This comment suggests limitations on artificial intelligence when acting as a trustee in Part V. 180

C. Will Drafting

As previously noted, artificial intelligence—like robo-forms—helps clients with their estate planning needs without breaking the bank by hiring an attorney.¹⁸¹ Constructing an estate plan can be costly, and many people disregard it because they are not wealthy, despite the inevitability of death.¹⁸²

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169. Id.
170. Id. at 1240.
171. Id. at 1240–41.
172. Id. at 1242.
173. Id.
174. Id.
175. Id.
176. Id.
177. Id. (citing RESTATEMENT (SECOND) OF TRUSTS § 167(1) (AM. LAW INST. 1959)).
178. Id.
179. Id.
180. See infra Part V.
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^{181.} See generally Beginner's Guide to Estate Planning, LEGAL NATURE (Aug. 25, 2015), https://www.legalnature.com/article-center/estate-planning/beginners-guide-to-estate-planning [perma.cc/HMG4-2K97] (discussing the benefits of paying for their services at an affordable rate because most people cannot hire an attorney).

^{182.} *Id*.

However, some warn that this software may harm consumers who are looking for a cheaper estate planning route. The American Bar Association (ABA) firmly warns consumers about using this technology. The ABA believes that to understand the complexities of property, tax, wills, and trusts clients should rely on a qualified trusts and estates expert. The ABA believes programs and forms fail to provide a range of legal advice to assure the accuracy of the form, the assets passing outside a will or trust are properly handled, and that state law is taken into account. The account the state of the state o

Additionally, the ABA states that attorneys are often well-versed in specialty areas of practice. By using attorneys that are board certified and qualified in estate planning, it indicates that they dedicated their practice to estate planning and are committed to staying current with the law. Receiving advice and direction from a professional attorney is less risky than an individual planning his or her own estate because it will reduce the chance it will end up in litigation. Litigation inevitably takes more time and drives up costs higher than the initial legal fees. 190

D. Guardianship and Mental Incapacity

Take a moment to reminisce about the classic American animated sitcom *The Jetsons*. ¹⁹¹ *The Jetsons* was a show based on a space-age family with aliens and flying cars. ¹⁹² The Jetsons employed a loveable robot named Rosie who performed all of the housework and assisted in parenting. ¹⁹³ While the probability of consumer-accessible flying cars is remote, perhaps robots performing guardianship roles will exist in the not-too-distant future. ¹⁹⁴ Artificial intelligence could soon take the role of caregivers and even assume legal responsibilities for children or incompetent adults. ¹⁹⁵

Often, a person who develops a severe and irreversible neurological disease like Alzheimer's disease will require a statutory power of attorney or guardian. Recent statistics show that "more than 5 million Americans are

^{183.} Jensen, supra note 84.

^{184.} *The Lawyer's Role*, AM. BAR ASS'N, https://www.americanbar.org/groups/real_property_trust_estate/resources/estate_planning/the_lawyer_s_role.html [perma.cc/J96Q-F6Z9] (last visited Nov. 1, 2017).

^{185.} Id.

^{186.} Id.

^{187.} Id.

^{188.} Id.

^{189.} *Id*.

^{190.} The Lawyer's Role, supra note 184.

^{191.} THE JETSONS (Hanna-Barbera 1962).

^{192.} Id.

^{193.} Id.

^{194.} JOHN FRANK WEAVER, ROBOTS ARE PEOPLE TOO: HOW SIRI, GOOGLE CAR, AND ARTIFICIAL INTELLIGENCE WILL FORCE US TO CHANGE OUR LAWS 81 (Praeger, 2014).

^{195.} Id

^{196.} Id.

living with Alzheimer's . . . by 2050, this number could rise as high as 14 million."¹⁹⁷ In people over the age of sixty-five, one in ten has dementia. ¹⁹⁸ The onset of mental incapacity poses a myriad of issues in estate planning. ¹⁹⁹ For example, in *Dubree v. Blackwell*, the appellate court protected seniors living with mental incapacity by voiding contracts in which the client was mentally incompetent. ²⁰⁰ Under the *Restatement (Second) of Contracts*, a contract is voidable if the person who created the contract "is unable to understand in a reasonable manner the nature and consequences of the transaction," or "he is unable to act in a reasonable manner in relation to the transaction and the other party has reason to know of his condition."²⁰¹

To confront this problem, a judge in a guardianship proceeding may appoint a guardian to handle the incapacitated person's financial and other needs. However, there are problems associated with guardianships. Guardianship proceedings can be expensive, and the social cost of publicly appointing a guardian can be humiliating. Although dangers exist regarding misappropriation of the decisions or finances of the ward, there are criminal penalties for harming an elderly or disabled person. Proceedings may appoint a guardian to handle the incapacitated person's financial and other needs. Although guardianship proceedings are problems associated with guardianships.

As technology and the legal field advances, the question of guardian liability arises. Researchers are spending ample time developing artificial intelligence into caregivers. For example, Family Nanny, created by Siasun Robot & Automation Co. in Japan, interacts with humans and can even check for vital signs with health monitoring systems. Likewise, Pearl the Nursebot aids seniors with daily tasks, provides companionship, and even helps them communicate with physicians and caregivers remotely. If the guardian leaves the ward in care of artificial intelligence and the autonomous system malfunctions or otherwise harms the ward, the guardian could be held

^{197. 2017} Alzheimer's Disease Facts and Figures, ALZHEIMER'S ASS'N, https://www.alz.org/facts/[perma.cc/T26V-ZAY7] (last visited Nov. 1, 2017).

^{198.} Id.

^{199.} See generally Hayden Colby, How Texas Can Better Protect Seniors from Financial Abuse and Mismanagement Associated with Alzheimer's Disease, THE SCHOLAR: ST. MARY'S L. REV. ON MINORITY ISSUES, 13 SCHOLAR 483, 483 (2010) (discussing the various issues surrounding incapacitated seniors).

^{200.} See id.; see also Dubree v. Blackwell, 67 S.W.3d 286, 289 (Tex. App.—Amarillo 2001, no pet.) (holding that contracts are void for seniors with mental incapacity).

^{201.} RESTATEMENT (SECOND) OF CONTRACTS § 15 (AM. LAW INST. 1981).

^{202.} Colby, *supra* note 199, at 519.

^{203.} Id.

^{204.} Id.

^{205.} See TEX. PENAL CODE ANN. § 22.04 (Supp.).

^{206.} Weaver, supra note 194.

^{207.} Id.

^{208.} Richard Lai, Family Nanny Robot is Just Five Years and \$1,500 Away from Being Your New Best Friend, ENGADGET (Apr. 30, 2010), https://www.engadget.com/2010/04/30/family-nanny-robot-is-just-five-years-and-1-500-away-from-being/[perma.cc/A7RX-E85Z].

^{209.} *Nursebot: Personal Mobile Robotic Assistants for the Elderly*, DESIGN TO IMPROVE LIFE (Nov. 9, 2011), https://designtoimprovelife.dk/nursebot-personal-mobile-robotic-assistants-for-the-elderly/[perma.cc/VK53-2AZ4].

liable.²¹⁰ Experts believe there will be an expansive integration of robots in elderly homes and attorneys should begin discussing whether the client would allow artificial intelligence care.²¹¹

Another impact that artificial intelligence will have on the legal field is in assessing mental incapacity. Deep Patient, an artificial intelligence program created by a research group in New York, created a system that discovers diseases that people may develop, like liver cancer. Not only can Deep Patient discover cancers, but it determines with high accuracy the onset of psychiatric disorders. The system operates by compiling a patient's test results, doctor visits, and many other variables to discover hidden patterns in the hospital database. As this technology progresses, this will be a valuable tool in estate planning for determining capacity. It could potentially warn those who are becoming incapacitated that they should protect their assets by creating an estate plan before they are unable to do so.

IV. WHAT HAPPENS WHEN THINGS GO WRONG?

The probative value that artificial intelligence has in almost all markets across the globe is undeniable. However, there is a great threat as well. However, as well. However, as well. However, there is a great threat as well. However, as well. However, there is a great threat as w

In response to Elon Musk's warning, the 2017 Asilomar Conference created a core set of twenty-three principles to approach artificial intelligence

^{210.} Weaver, supra note 194.

^{211.} Id

^{212.} Will Knight, *The Dark Secret at the Heart of AI*, MIT TECH. REV. (Apr. 11, 2017), https://www.technologyreview.com/s/604087/the-dark-secret-at-the-heart-of-ai/[perma.cc/BBZ8-6886].

^{213.} Id.

^{214.} Id.

^{215.} Id.

^{216.} Id.

^{217.} See infra Part V.

^{218.} See supra Part II.

^{219.} Camila Domonoske, *Elon Musk Warns Governors: Artificial Intelligence Poses 'Existential Risk'*, NPR (July 17, 2017, 10:39 AM), http://www.npr.org/sections/thetwo-way/2017/07/17/537686649/elon-musk-warns-governors-artificial-intelligence-poses-existential-risk [perma.cc/MN95-BSKA].

^{220.} Id.

^{221.} Id.

^{222.} Id.

on a global scale in an attempt to promote discussion of the emerging technology.²²³ The most relevant principle for the context of this comment is that designers and builders of artificial intelligence are held responsible for the use, misuse, and actions of their systems.²²⁴ In addition to the designer responsibility, lawyers who employ these systems could also be held accountable for failure to remain competent in their practice area or through the management of nonlawyer services.²²⁵

A. Professional Responsibility

As every practicing lawyer is aware, the legal profession requires lawyers to adhere to ethical rules and procedures. ²²⁶ Failure to follow these rules will result in disciplinary proceedings, civil liability, and potential criminal consequences.²²⁷ One of the most important duties that a lawyer must provide to a client is the duty of competency, which the ethical rules define as: "[the] possession of the legal knowledge, skill, and training reasonably necessary for the representation."²²⁸ Additionally, the *Texas* Disciplinary Rules of Professional Conduct Rule 1.01 Comment 4 explains that the practicing lawyer must be competent in the methods used in that area of law and is responsible for keeping up with the standard procedures of the matter.²²⁹ Tools using artificial intelligence like brief-writing software or online forms for lawyers in estate planning are becoming increasingly popular.²³⁰ With this shift in the legal sphere, lawyers must stay up-to-date on the latest technology.²³¹ That is not to say that every lawyer must be an expert in artificial intelligence.²³² However, lawyers should be aware of the advantages and disadvantages of using expert systems for their clients and to stay competitive with other lawyers.²³³

In addition to the duty of competence, managing lawyers must ensure that nonlawyer assistance within and outside of the law firm does not result

^{223.} Asilomar AI Principles, FUTURE OF LIFE, https://futureoflife.org/ai-principles/[perma.cc/Z5VR-MBCV] (last visited Nov. 2, 2017).

^{224.} See infra Appendix A.

^{225.} Melissa Maleske, *Artificial Intelligence Raises Ethical Concerns for Attorneys*, LAW 360 (Mar. 3, 2017, 8:39 PM), https://www.law360.com/articles/897965/artificial-intelligence-raises-ethical-concerns-for-attys [perma.cc/D4QE-YEWY].

^{226.} See generally MODEL RULES OF PROF'L CONDUCT Preface (Am. BAR ASS'N 1980) (discussing the history of the model rules and the responsibility that lawyers have to follow them).

^{227.} LISA G. LERMAN & PHILIP G. SCHRAG, ETHICAL PROBLEMS IN THE PRACTICE OF LAW 65 (4th ed. 2016).

^{228.} See TEX. DISCIPLINARY RULES OF PROF'L CONDUCT r. 1.01 cmt. 1 (1980) reprinted in TEX. GOV'T CODE ANN., tit. 2, subtit. G, app.

^{229.} See TEX. DISCIPLINARY RULES OF PROF'L CONDUCT r. 1.01, cmt. 4 (1980) reprinted in TEX. GOV'T CODE ANN., tit. 2, subtit. G, app.

^{230.} Maleske, *supra* note 225.

^{231.} Id.

^{232.} Id.

^{233.} Id.

in the unauthorized practice of law.²³⁴ The *Model Rules of Professional Conduct* Rule 5.3 Comment 3 describes the duties of lawyers to nonlawyers that they hire to help them perform legal services for their clients.²³⁵ Comment 3 further provides that using a company or nonlawyer for maintaining a database or using Internet services to store information impose a duty on the lawyer to make sure that those services are performed in congruence with professional obligations.²³⁶ With the growing use of artificial intelligence in law firms, it is not a stretch that disciplinary authorities could interpret the use of expert systems in a manner inconsistent with the ethical rules would subject them to liability.²³⁷

V. PROPOSALS

Artificial intelligence could soon play major roles in an estate planner's life.²³⁸ The most significant problem in this changing economy is that there is very little guidance like statutes or rules on artificial intelligence systems.²³⁹ While this comment does not attempt to solve the problem in its entirety, these changes can help guide an estate planner to ethically practice with the new changes in technology.²⁴⁰

A. Working with AI Companies

First, estate planners who incorporate artificial intelligence or machine learning when creating wills, trusts, or other instruments should take extra precautions to ensure that there is no unauthorized practice of law.²⁴¹ The preparation of the documents on behalf of a client should only be allowed by those prescribed by law (i.e., a licensed member of a state bar).²⁴² Practitioners and citizens should be cautious and take preventative steps that the companies they employ do not contract with any person to represent them, advise them of personal rights, advise about settlement of claims, or any other act in violation of the Texas Penal Code.²⁴³

Practitioners should consider a few factors when working with technology companies to shield them from liability.²⁴⁴ In the case of contracting artificial intelligence business outside of the firm in which

^{234.} MODEL RULES OF PROF'L CONDUCT r. 5.3 (a)-(b) (1980).

^{235.} MODEL RULES OF PROF'L CONDUCT r. 5.3, cmt. 3 (1980).

^{236.} Id.

^{237.} Maleske, supra note 225.

^{238.} See supra Part II.

^{239.} See supra Part I.

^{240.} See supra Part IV.

^{241.} See supra Section IV.A.

^{242.} See supra Section II.B.

^{243.} See supra Section II.B.

^{244.} See supra Section II.B.1.

another person may be using the technology, a consideration, mirroring the Consent Judgment by the North Carolina State Bar in section II.B.1., should be that the estate planner—who is licensed to practice law in the state—has reviewed the document upon completion.²⁴⁵ The names and addresses of each reviewing attorney should be kept on file.²⁴⁶ Further, metadata (data that tracks information like who and when changes are made in documents) should be readily available to the estate planner. 247 This is important to include because in the event that there is a claim of unauthorized practice of law, an estate planner can show which changes she made and which changes were made by someone from the outside artificial intelligence company.²⁴⁸ The metadata will show if those changes made by someone from the outside artificial intelligence company was engaged in the unauthorized practice of law. 249 Lastly, the practitioner should consider that the artificial intelligence products used by the company are not a substitute for the advice or services of an attorney.²⁵⁰ In the event of a breach, the artificial intelligence company could be liable for damages.²⁵¹

In the case of utilizing an artificial intelligence company, such as Neota, within the firm, the issue does not turn on the company for unauthorized practice of law, but who within the firm is operating the program.²⁵² As is the case in many law firms, estate planners employ legal assistants, paralegals, and law clerks.²⁵³ While they are engaged with the production of thousands of documents, the use of artificial intelligence programs using machine learning should be limited to licensed attorneys.²⁵⁴ Quantitative legal prediction has the ability to quickly analyze and recite the applicable estate statutes, tax regulations, and relevant case law to a particular set of facts to advise an attorney on how to produce the most advantageous estate plan.²⁵⁵ Because this is such a powerful tool, someone who is not authorized to practice the law could accidentally do so.²⁵⁶ The cautious estate planner should advise legal assistants, paralegals, and law clerks about the differences and limits in the technologies.²⁵⁷ For example, an estate planner could advise that it is perfectly acceptable for a legal assistant to use programs like

^{245.} See supra Section II.B.1.

^{246.} See supra Section II.B.1.

^{247.} See supra Section II.B.1; see also What is Metadata?, HARV. LAW SCH., https://hls.harvard.edu/dept/its/what-is-metadata/[perma.cc/RYY8-YK5F] (last visited Oct. 1, 2018).

^{248.} See supra Section II.B.1.

^{249.} See supra Section II.B.1.

^{250.} See supra Section II.B.1.

^{251.} See supra Section II.B.1.

^{252.} See supra Sections I.A.II., IV.A.

^{253.} See supra Section III.

^{254.} See supra Section II.B.1.

^{255.} See supra Section II.C.

^{256.} See supra Part II.

^{257.} See supra Part II.

WestLaw or LexisNexis when preparing a legal document.²⁵⁸ However, it might be unacceptable for a legal assistant to use an artificial intelligence system that analyzes the fact pattern of the client's issue and produces the most favorable results for an estate plan.²⁵⁹ To avoid problems like these, the estate planner should limit access to the program to herself and other attorneys in the firm.²⁶⁰ Additionally, estate planners should periodically educate their legal assistants, paralegals, and law clerks about what constitutes the unauthorized practice of law and how to avoid it.²⁶¹

B. Trust Administration, Fiduciary Duties, and Guardianships

For trust administration, artificial intelligence could serve many useful purposes. The artificial intelligence program could systematically distribute income in accordance with the settlor's intent, manage and maintain the assets of the trust, and quickly alert the trustee of issues regarding the trust. However, the artificial intelligence program should be limited in its duties. The program should not act as a trustee alone. An estate planner should draft the trust with the help of automated reasoning or quantitative legal prediction to analyze the different trust options. Then, the artificial intelligence program should follow the algorithm that produces the best results. Additionally, the program should maintain low-level tasks. The estate planner should include that the trustee must schedule periodic checks on the program and trust to ensure it is fulfilling the settlor's intent.

For fiduciary duties as in advising, estate planners should still maintain the dominate role.²⁷⁰ As previously suggested, robo-advisors are analogous to the future of estate planning.²⁷¹ If any individual begins to use artificial intelligence in any type of fiduciary capacity, it should be limited.²⁷² For example, estate planners should use artificial intelligence programs to test different scenarios for a client's case to help determine an outcome.²⁷³ But,

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258. See supra Section II.C.
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^{259.} See supra Section II.B.

^{260.} See supra Part II.

^{261.} See supra Part II.

^{262.} See supra Part III.

^{263.} See supra Section III.B.

^{264.} See supra Section III.B.

^{265.} See supra Section III.B.

^{266.} See supra Section III.B.

^{267.} See supra Section III.B.

^{268.} See supra Section III.B.

^{269.} See supra Section III.B.

^{270.} See supra Section III.A.

^{271.} See supra Section III.A.272. See supra Section III.A.

^{273.} See supra Section III.A.

the artificial intelligence program should not replace an estate planning attorney.²⁷⁴ This comment suggests that a non-state bar licensed individual is engaged in the unauthorized practice of law when employing these programs.²⁷⁵ If an individual did use these systems, it would not satisfy the fiduciary duty of care.²⁷⁶ While artificial intelligence systems could greatly assist a practitioner, there is no substitution for the human connection and understanding of a multitude of jurisprudence that surrounds estate planning.²⁷⁷

For guardianships, a prudent estate planner would begin to advise their client of the role artificial intelligence may play in their life.²⁷⁸ As stated above, there is a possibility that, in the future, artificial intelligence could be in charge of his or her care in a nursing facility or even appointed as a guardian.²⁷⁹ While the technology may not be widely used yet, a cautious estate planner would inquire about the client's wishes regarding artificial intelligence care and draft the estate planning according.²⁸⁰ For example, if a client is vehemently opposed to any kind of artificial intelligence contact, it may be prudent to tailor the estate plan according.²⁸¹

C. Nonlawyer Assistance Under the Disciplinary Rules

The *Texas Disciplinary Rules of Professional Conduct* Rule 5.03 should include a comment explaining the lawyer's professional obligation when employing companies that use expert systems. Law firms should carefully ensure that businesses are complying with the ethical rules. As previously suggested, estate planners should educate their staff or enter into contracts with outside artificial intelligence businesses to ensure reasonable measures are taken to comply with disciplinary rules. Other suggestions an estate planner could take is to limit the access non-licensed individuals have to the program. Otherwise, he or she could be subject to disciplinary action. Whether they are using an assistant, separate entity, or a third party to conduct business using the technology, the rules should clarify the law firm's liability in its managerial capacity. Separate entity are using an assistant.

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274. See supra Section III.A.
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^{275.} See supra Section III.A.

^{276.} See supra Section III.A.

^{277.} See supra Section III.A.

^{278.} See supra Section III.D.

^{279.} See supra Section III.D.

^{280.} See supra Section III.D.

^{281.} See supra Section III.D.

^{282.} See supra Part IV; see infra Appendix B.

^{283.} See supra Part IV.

^{284.} See supra Section V.A.

^{285.} See supra Section V.B.

^{286.} See supra Part V.

^{287.} See infra Appendix B.

VI. CONCLUSION

While some people dread a technology takeover, estate planners should learn to embrace the changing tide of the legal system. In fact, lawyers have a professional obligation to do so. Although artificial intelligence has the potential to take over jobs, like that of the first-year associate who does discovery or document preparation, the shifting economy will likely take the shape of a new Industrial Revolution. The advancements that artificial intelligence and expert systems provide should be an exciting new area that continues to develop, and estate planners should make it a part of their practice to learn how to ethically ride the technology wave.

^{288.} See supra Part II.

^{289.} See supra Part IV.

^{290.} See supra Part II.

^{291.} See supra Part V.

APPENDIX A

Research Issues

- 1) Research Goal: The goal of AI research should be to create not undirected intelligence, but beneficial intelligence.
- 2) Research Funding: Investments in AI should be accompanied by funding for research on ensuring its beneficial use, including thorny questions in computer science, economics, law, ethics, and social studies, such as:
 - How can we make future AI systems highly robust, so that they do what we want without malfunctioning or getting hacked?
 - How can we grow our prosperity through automation while maintaining people's resources and purpose?
 - How can we update our legal systems to be more fair and efficient, to keep pace with AI, and to manage the risks associated with AI?
 - What set of values should AI be aligned with, and what legal and ethical status should it have?
- 3) Science-Policy Link: There should be constructive and healthy exchange between AI researchers and policy-makers.
- 4) Research Culture: A culture of cooperation, trust, and transparency should be fostered among researchers and developers of AI.
- 5) Race Avoidance: Teams developing AI systems should actively cooperate to avoid corner-cutting on safety standards.

Ethics and Values

- 6) Safety: AI systems should be safe and secure throughout their operational lifetime, and verifiably so where applicable and feasible.
- 7) Failure Transparency: If an AI system causes harm, it should be possible to ascertain why.
- 8) Judicial Transparency: Any involvement by an autonomous system in judicial decision-making should provide a satisfactory explanation auditable by a competent human authority.
- 9) Responsibility: Designers and builders of advanced AI systems are stakeholders in the moral implications of their use, misuse, and actions, with a responsibility and opportunity to shape those implications.
- 10) Value Alignment: Highly autonomous AI systems should be designed so that their goals and behaviors can be assured to align with human values throughout their operation.
- 11) Human Values: AI systems should be designed and operated so as to be compatible with ideals of human dignity, rights, freedoms, and cultural diversity.
- 12) Personal Privacy: People should have the right to access, manage and control the data they generate, given AI systems' power to analyze and utilize that data.
- 13) Liberty and Privacy: The application of AI to personal data must not unreasonably curtail people's real or perceived liberty.

- 14) Shared Benefit: AI technologies should benefit and empower as many people as possible.
- 15) Shared Prosperity: The economic prosperity created by AI should be shared broadly to benefit all of humanity.
- 16) Human Control: Humans should choose how and whether to delegate decisions to AI systems to accomplish human-chosen objectives.
- 17) Non-subversion: The power conferred by control of highly advanced AI systems should respect and improve, rather than subvert, the social and civic processes on which the health of society depends.
- 18) AI Arms Race: An arms race in lethal autonomous weapons should be avoided.

Longer-term Issues

- 19) Capability Caution: There being no consensus, we should avoid strong assumptions regarding upper limits on future AI capabilities.
- 20) Importance: Advanced AI could represent a profound change in the history of life on Earth, and should be planned for and managed with commensurate care and resources.
- 21) Risks: Risks posed by AI systems, especially catastrophic or existential risks, must be subject to planning and mitigation efforts commensurate with their expected impact.
- 22) Recursive Self-Improvement: AI systems designed to recursively self-improve or self-replicate in a manner that could lead to rapidly increasing quality or quantity must be subject to strict safety and control measures.
- 23) Common Good: Superintelligence should only be developed in the service of widely shared ethical ideals, and for the benefit of all humanity, rather than one state or organization.²⁹²

APPENDIX B

Rule 5.03. Responsibilities Regarding Nonlawyer Assistants

With respect to a nonlawyer employed or retained by or associated with a lawyer:

- (a) a lawyer having direct supervisory authority over the nonlawyer shall make reasonable efforts to ensure that the person's conduct is compatible with the professional obligations of the lawyer; and
- (b) a lawyer shall be subject to discipline for the conduct of such a person that would be a violation of these rules if engaged in by a lawyer if:
 - (1) the lawyer orders, encourages, or permits the conduct involved; or
 - (2) the lawyer:
 - (i) is a partner in the law firm in which the person is employed, retained by, or associated with; or is the general counsel of a government agency's legal department in which the person is employed, retained by or associated with; or has direct supervisory authority over such person; and
 - (ii) with knowledge of such misconduct by the nonlawyer knowingly fails to take reasonable remedial action to avoid or mitigate the consequences of that person's misconduct.

Comment:

- 1. Lawyers generally employ assistants in their practice, including secretaries, investigators, law student interns, and paraprofessionals. Such assistants act for the lawyer in rendition of the lawyer's professional services. A lawyer should give such assistants appropriate instruction and supervision concerning the ethical aspects of their employment, particularly regarding the obligation not to disclose information relating to representation of the client, and should be responsible for their work product. The measures employed in supervising non-lawyers should take account of the fact that they do not have legal training and are not subject to professional discipline.
- 2. Each lawyer in a position of authority in a law firm or in a government agency should make reasonable efforts to ensure that the organization has in effect measures giving reasonable assurance that the conduct of nonlawyers employed or retained by or associated with the firm or legal department is compatible with the professional obligations of the lawyer. This ethical obligation includes lawyers having supervisory authority or intermediate managerial responsibilities in the law department of any enterprise or government agency.²⁹³

^{293.} See Tex. Disciplinary Rules of Prof'l Conduct r. 5.03, (1989) reprinted in Tex. Gov't Code Ann., tit. 2, subtit. G, app.

3. Lawyers who employ companies that utilize artificial intelligence or branches of said systems should provide reasonable measures to ensure that they are complying with their ethical and professional obligations. Lawyers shall also take precautions with nonlawyers within the firm on avoiding the unauthorized practice of law when using these systems. Lawyers will be held liable for the use, misuse, and actions of companies or assistants using these technology systems.