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 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 of this, law firms are not hiring as many recent graduates.[4] Eventually, technical jobs will replace the classical notion of old-school attorneys.[5] However, the growing concern that technology is taking over jobs in the legal field is not the only problem by artificial intelligence.[6] Issues arise with how much integration technology has in estate planning and the future role that artificial intelligence will play.[7] An even greater issue arises about who is liable for artificial intelligence's mistakes and the fact that there is little-to-no regulation.[8]

Tech industry experts are in stark disagreement as to the means of regulating artificial intelligence.[9] Stephen Hawking and Elon Musk warned the world of the dangers of advancing artificial intelligence and that governments need to start creating laws and regulations.[10] Experts such as Bill Gates and Mark Zuckerberg, believe that creating new regulation is not realistic because the technology has not fully developed.[11] Some critics argue that researchers are already regulated enough, and adding more regulation will stifle innovation.[12] This Comment focuses on regulation 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 practice are held liable for the system.[13] Additionally, this Comment will expand the meaning unauthorized practice of law relating to artificial intelligence.[14]

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[1] *See generally* Asma Khalid, *From Post-It Notes to Algorithms: How Automation is Changing Legal Work*, https://www.npr.org/sections/alltechconsidered/2017/11/07/561631927/from-post-it-notes-to-algorithms-how-automation-is-changing-legal-work (Nov. 7, 2017 at 11:38AM) (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*, MARKET WATCH (Jan. 7, 2018, 9:32 AM), https://www.marketwatch.com/story/elon-musk-is-wrong-about-regulating-artificial-intelligence-2017-10-24.
[10] *Id.*
[11] *Id.*
[12] *Id.*
[13] *See infra* Part V.
[14] *See infra* Part V.

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 plays on estate planning law.[18] Part IV discusses the parties liable for artificial intelligence in the event of litigation.[19] Part V argues the need for regulation, the importance of estate planning lawyers to educate themselves to stay competent, and introduces amendments to current rules on unauthorized practice of law and imposing a duty on law firms who use them.[20]

A. The Basics

To understand the effect that machines utilizing artificial intelligence have on the legal field, particularly fields like estate planning, the following section is a brief discussion of the technology.[21] Two of the biggest programs focused 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, reason by using the rules to come to conclusions and correct its mistakes.[26] It is difficult for people to understand what artificial intelligence is because of its intangible technology and learning systems.[27] Artificial intelligence utilizes "machine learning" where the computer continually

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[15] *See infra* Parts I-V.

[16] *See infra* Part I.

[17] *See infra* Part II.

[18] *See infra* Part III.

[19] *See infra* Part IV.

[20] *See infra* Part V.

[21] *See infra* Part II.A.i.

[22] *See infra* Parts II.A.i-II.A.ii.

[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/.

[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.

[25] *Id.*

[26] Margaret Rouse, *AI (Artificial Intelligence)*, TECH TARGET, http://searchcio.techtarget.com/definition/AI (last visited Nov. 1, 2017).

[27] Erik Brynjolfsson & Andrew Mcafee, *The Business of Artificial Intelligence*, HARVARD BUSINESS REVIEW (July 2017), https://hbr.org/cover-story/2017/07/the-business-of-artificial-intelligence.

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 how to perform entirely new tasks.[29]

Traditionally, to make a machine do something there needs to be a computer program.[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 on how to complete the task are called the computer algorithm.[32] The machine will start the program, follow the steps mechanically, and complete the work.[33] Now, some of the advanced devices can skip the step-by-step instructions and learn on their own.[34] Machines can do this by utilizing data mining and pattern recognition methods.[35] Data mining is an analytic process where a machine will sift through large amounts of data to find consistent patterns or relationships between variables.[36] One favorite way that people interact with algorithms every day is through the famous application Netflix.[37] Netflix's program will suggest new shows for the viewer based on their 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, some machines 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 big 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

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[28] *Id.*

[29] *Id.*

[30] How Stuff Works, https://computer.howstuffworks.com/question717.htm (last visited Jan. 3, 2018).

[31] *Id.*

[32] *Id.*

[33] *Id.*

[34] Stephen F. Deangelis, *Artificial Intelligence: How Algorithms Make Systems Smart*, Wired (Sept. 2014), https://www.wired.com/insights/2014/09/artificial-intelligence-algorithms-2/.

[35] *Id.*

[36] Statsoft, http://www.statsoft.com/Textbook/Data-Mining-Techniques (last visited Jan. 3, 2018).

[37] Stephen F. Deangelis, *Artificial Intelligence: How Algorithms Make Systems Smart*, Wired (Sept. 2014), https://www.wired.com/insights/2014/09/artificial-intelligence-algorithms-2/.

[38] *Id.*

[39] *Id.*

[40] Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/reasoning-automated/ (last visited Jan. 4, 2018).

[41] *Id.*

[42] *Id.*

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) 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 impute facts into the expert system's knowledge base and inference engine and the system will extrapolate its expertise into information readable to the user.[48] Some characteristics of expert systems are that they perform 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 "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."[51] Neota is just one of the systems that are taking the legal field by storm by focusing on efficiency, profitability, and improving law firms.[52] One of the leaders of Neota predicts that artificial intelligence answers 80% of questions and 20% may require traditional legal services.[53]

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

[44] *Id.*

[45] *Expert System*, BUSINESS DICTIONARY, http://www.businessdictionary.com/definition/expert-system.html (last visited Nov. 1, 2017).

[46] *See generally*, Bruce G. Buchanan & Edward A. Fiegenbaum, *The Stanford Heuristic Programming Project: Goals and Activities*, 1 AI MAGAZINE 1 (1980), file:///C:/Users/Alexandra/Downloads/89-90-1-PB.pdf.

[47] *See supra* note 45.

[48] *What is an Expert System?*, WORLD OF COMPUTING (Oct. 17, 2010), http://intelligence.worldofcomputing.net/ai-branches/expert-systems.html#.

[49] *Id.*

[50] *Id.*

[51] Ron Friedmann, *Automating Legal Advice: AI and Expert Systems*, BIG LAW BUSINESS (Jan. 22, 2016), https://biglawbusiness.com/automating-legal-advice-ai-and-expert-systems/.

[52] NEOTA LOGIC, https://www.neotalogic.com/industry/legal-services/ (last visited Sept. 24, 2017).

[53] Ron Friedmann, *supra* note 51.

B. Statutory Definitions – Or Lack There Of

Many movies, books, and media creatively attempt to capture the essence of artificial intelligence, but courts and legislatures provide little information on how to define or regulate it.[54] In recent years, courts began to categorize artificial intelligence under the term "electronic agents".[55] The Texas definition of electronic agent is a computerized program or automated means that work independently to initiate an action, without review by someone.[56] 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 with regards to regulation.[57] 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.[58]

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.[59] Corporations are considered legal persons, although they have different legal rights than humans.[60] 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.[61] It is arguable that artificial intelligence possesses those qualities.[62] The European Union created a new label to protect the rights and responsibilities of artificial intelligence and distinguish them from other entities.[63] The European Union recognized the need for regulation in the technology sector and drafted a new label for artificial intelligence called "electronic personhood", which analogizes corporations' responsibilities and allows them to be parties in a legal case.[64]

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[54] Matthew U. Scherer, *Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies*, 29 HARV. J.L. & TECH. 353, 359.

[55] TEX. BUS. & COM. CODE ANN. §322.002 (WEST 2009).

[56] *Id.*

[57] Matthew U. Scherer, *Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies*, 29 HARV. J.L. & TECH. 353, 359.

[58] *Id.* at 356.

[59] Lawrence B. Solum, Article, *Legal Personhood for Artificial Intelligences*, 70 N.C. L. REV. 1231, 1239 (1992).

[60] *Id.*

[61] *Id.*

[62] *Id.*

[63] Alex Hern, *Give Robots 'Personhood' Status, EU Committee Argues*, THE GUARDIAN (Jan. 12, 2017), https://www.theguardian.com/technology/2017/jan/12/give-robots-personhood-status-eu-committee-argues.

[64] *Id.*

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

People believed that artificial intelligence could only take over jobs that did not require extensive training or were human in nature.[65] However, many jobs are disappearing, and not just blue-collar ones.[66]

A. Economic Impact

Artificial intelligence is beginning to dominate employment that traditionally required human function.[67] Even the most complicated fields are being taken over by artificial intelligence, like lawyers, accountants, and artisans.[68] The jobs that appear safe from being replaced 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."[69] Indeed, human-dominated fields like medicine quickly see the impact of programs like IBM Watson.[70] 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.[71] Some experts warn that supercomputers like IBM Watson are capable of reading massive amounts of reports in a manner so efficient that it is replacing researchers.[72] Analogous to IBM Watson, in the legal field law clerks who prepare discovery are losing their jobs because artificial intelligence programs are performing a wide array of tasks that are done in a quicker, more efficient manner than law clerks.[73] The result of this technology shift is that fewer employers are hiring lawyers, there is a forty percent decrease in law school applications, and the legal market is shifting from the private to public service legal market.[74]

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[65] David Rotman, *How Technology is Destroying Jobs*, MIT TECHNOLOGY REVIEW MAGAZINE, (June 12, 2013), http://www.shellpoint.info/InquiringMinds/uploads/Archive/uploads/20130802_How_Technology_is_Destroying_Jobs.pdf.

[66] *Id.*

[67] *Id.*

[68] *Id.*

[69] Aaron Smith & Janna Anderson, *AI, Robotics, and the Future of Jobs*, PEW RESEARCH CENTER (Aug. 6, 2014), http://www.pewinternet.org/2014/08/06/future-of-jobs/.

[70] Benjamin Wallace-Wells, *As Jeopardy! Robot Watson Grows Up, How Afraid of It Should We Be?*, NY MAGAZINE (May 20, 2015), http://nymag.com/daily/intelligencer/2015/05/jeopardy-robot-watson.html.

[71] Margaret Rouse, *IMB Watson Supercomputer*, WHAT IS (last visited Oct. 13, 2017), http://whatis.techtarget.com/definition/IBM-Watson-supercomputer.

[72] Aaron Smith & Janna Anderson, *AI, Robotics, and the Future of Jobs*, PEW RESEARCH CENTER (Aug. 6, 2014), http://www.pewinternet.org/2014/08/06/future-of-jobs/.

[73] *Id.*

[74] Asma Khalid, *supra* note 2.

To be sure, not everyone believes that a technology takeover would be catastrophic.[75] Some experts believe that even though many jobs will disappear, this will create new jobs and industries.[76] There are arguments firmly rooted in the fact that this is a new Industrial Revolution and the job market will form into purely technology-based employment.[77] However, these experts concede that current jobs held by humans will likely disappear.[78]

B. Technology is Already Taking Over

There are many different ways technology is impacting the legal field.[79] For example, robo-forms market to consumers who are typically not going to hire an attorney to aid in matters of civil practice.[80] For example, one company helped over three-hundred and fifty thousand people avoid nearly ten million in fines.[81] 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 not useful when applied to complicated matters.[82] 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.[83]

1. Robo-Forms

Another form of technology that threatens the legal profession are programs like LegalZoom.[84] There is stark opposition to these programs.[85] Elder law and estate planning

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[75] Aaron Smith & Janna Anderson, *AI, Robotics, and the Future of Jobs*, PEW RESEARCH CENTER (Aug. 6, 2014), http://www.pewinternet.org/2014/08/06/future-of-jobs/.

[76] *Id*.

[77] *Id*.

[78] *Id*.

[79] *See* Julie Sobowale, *How Artificial Intelligence is Transforming the Legal Profession*, ABA JOURNAL (Apr. 2016), http://www.abajournal.com/magazine/article/how_artificial_intelligence_is_transforming_the_legal_profession,.

[80] Cort Jensen, *Rise of the Robo-Form*, MONTANA LAWYER, 37-MAY Mont. Law. 9, 9 (May 2012).

[81] Thomas Hedger, *Should We Turn the Law Over to Robots?*, THE ATLANTIC, http://www.theatlantic.com/sponsored/vmware-2017/robolawyer/1539/ (last visited Jan. 17, 2018).

[82] Cort Jensen, *Rise of the Robo-Form*, MONTANA LAWYER, 37-MAY Mont. Law. 9, 10 (May 2012).

[83] *Id.* at 9.

[84] *See generally* Ondi Timoner, *Demystifying Law: How LegalZoom Uses Technology to Make Law Affordable*, HUFFPOST (Nov. 11, 2014 at 9:54am), https://www.huffingtonpost.com/ondi-timoner/demystifying-law-how-lega_b_6160814.html. (discussing the rise of online affordable legal help programs).

[85] *Online Legal Documents Company Sued Over Flawed Estate Plan*, ELDER LAW ANSWERS (June 18, 2010), https://www.elderlawanswers.com/online-legal-documents-company-sued-over-flawed-estate-plan-8355.

professionals believe that "do-it-yourself" programs prey on older generations and those who cannot afford a lawyer to take advantage of them.[86]

Courts are now addressing the issue of whether using expert systems is a form of unauthorized practice of law.[87] For example, the court in *LegalZoom.com, Inc. v. McIllwain* compelled arbitration on the issue of whether LegalZoom was engaged in the unauthorized practice of law.[88] In that case, a person from Arkansas visited LegalZoom with the purpose of creating a will for only $100.00.[89] McIllwain filed a class-action lawsuit on the basis that LegalZoom engaged in the unauthorized practice of law by violating the Arkansas Deceptive Trade Practices Act.[90] However, the court held that the arbitration clause in LegalZoom's terms of service that parties must solve the matter through arbitration, not the court.[91]

Further, in *Janson v. LegalZoom, Inc.*, the parties settled after an interlocutory ruling determined that LegalZoom participated in the unauthorized practice of law where the buyer supplied information and the seller prepared the documents.[92] The court held that filling out blank forms is not in and of itself the unauthorized practice of law.[93] The reliance of the human employee in preparing the forms was the issue.[94] The *Janson* court relied in part on the reasoning in *Florida Bar v. Brumbaugh*.[95] *Brumbaugh* held that selling legal forms or materials explaining legal practice and procedure through a secretarial service was not itself improper.[96] However, advising clients of legal remedies and assisting clients to prepare forms constituted the unauthorized practice of law.[97] The action of typing up the instruments was not the unauthorized practice of law.[98] The *Brumbaugh* court made it clear that her 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 strictly limited to her secretarial and notary services.[99] 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.[100] Under Missouri law and following *Brumbaugh*'s reasoning, the *Janson* court said the unauthorized practice of law occurred when the employee

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[86] *Id.*

[87] *Id.*

[88] *LegalZoom.com, Inc. v. McIllwain*, 429 S.W.3d 261, 261 (2013).

[89] *Id.* at 262.

[90] *Id.*

[91] *Id.* at 266.

[92] 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/; *see Janson v. LegalZoom, Inc.*, 802 F. Supp. 2d 1053, 1053 (W.D. Mo. 2011).

[93] *Janson v. Legalzoom, Inc.*, 802 F. Supp. 2d 1053, 1064.

[94] *Id.*

[95] *Id.*

[96] *Florida Bar v. Brumbaugh*, 355 So.2d 1186, 1193-94.

[97] *Id.*

[98] *Id.* at 1194.

[99] *Id.*

[100] *Id.*

reviewed the customer's questionnaire, looked for factual mistakes, corrected errors, and shipped the final product to the customer.[101]

Texas defines the practice of law as

> 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.[102]

However, the *Texas Government Code* mainly addresses attorneys from another jurisdiction, law school, or unlicensed people who engage in the above-described conduct.[103] Additionally, the *Texas Penal Code* prescribes that people who hold themselves out as lawyers that are unlicensed commit a punishable offense.[104] With the advancement of artificial intelligence and technology like LegalZoom taking over the legal field, the legislature should incorporate electronic agents to start regulating artificial intelligence and expert systems.[105]

C. Practical Implications for Law Firms

Lawyers utilize artificial intelligence to conduct research, provide administrative legal support, create documents, and other related tasks.[106] In fact, lawyers have been using artificial intelligence for over ten years because Westlaw and LexisNexis uses it in their searches.[107] Westlaw recently incorporated machine learning to aid researchers with analysis and recommendations.[108] One of the world's largest law firms came out with NextLaw Labs to begin the transformation of the legal field across the globe.[109]

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,

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[101] *Janson v. Legalzoom, Inc.*, 802 F. Supp. 2d 1053, 1064.

[102] TEX. GOV'T. CODE ANN. §81.101.

[103] TEX. GOV'T. CODE ANN. §81.102.

[104] TEX. PENAL CODE ANN. §38.122. (check cite)

[105] Matthew U. Scherer, *supra* note 54.

[106] Dennis Garcia, *Preparing for Artificial Intelligence in the Legal Profession,* LEXIS PRACTICE ADVISOR JOURNAL (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.

[107] Daniel E. Harmon, *Artificial Intelligence in Law*, LAWYER'S PC, 34 No. 8 Law. PC 1 (2017).

[108] *Id.*

[109] *Id.*

membership dues, and other costs.[110] However, with the rise of artificial intelligence law firms may see the cost of running their business decrease.[111] Many of the tasks that these programs perform required teams of lawyers.[112] A recent advancement is called quantitative legal prediction (QLP).[113] QLP is a system where artificial intelligence will answer questions like "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 sotrustphisticated algorithms that answer what many lawyers are paid to solve.[114]

2. Risks

Some of the risks associated with implementing expert systems and artificial intelligence are that they will potentially replace lower-level associate jobs, so it is more cost efficient for firms.[115] Indeed, lower level positions are not the only jobs threatened.[116] For example, one of the world's biggest hedge funds is creating technology that acts as managers that fire and hire employees and partake in decision making, which was thought of as human-dominated positions.[117] However, some skeptics argue that professionals will still need to supervise the machines and ensure quality control.[118]

Additionally, experts believe that relying on artificial intelligence poses a risk because judgment involved in legal analysis is difficult for computers to adopt.[119] For example, one task that a lawyer must deal with is case evaluation.[120] When a lawyer receives a case, the lawyer must decide whether or not to accept representation based on their personal experience, knowledge of outcomes of other cases, case reports, and verdict surveys.[121] Consequently, the

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[110] *How Much Does it Cost to Start Your Own Law Firm?*, FINDLAW (last visited Oct. 5, 2017), http://practice.findlaw.com/how-to-start-a-law-firm/how-much-does-it-cost-to-start-your-own-law-firm.html.

[111] 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).

[112] *Id.*

[113] *Id.*

[114] *Id.* at 912.

[115] *See supra* note 107.

[116] 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.

[117] *Id.*

[118] Daniel Harmon, *supra* note 107.

[119] Particia Hassett, *Technology Time Capsule: What Does the Future Hold?*, 50 SYRACUSE L. REV. 1223, 1230 (2000).

[120] *Id.* at 1231.

[121] *Id.* at 1231-32.

initial evaluation of the case may be incomplete based on their understanding of the law or prior case outcomes.[122]

One system that contradicts that argument is the Computer-Assisted Case Evaluation or "CACE", an artificial intelligence system used by the Brooklyn District Attorney's office to tackle these beginning evaluations.[123] CACE quickly sifts through rules and statutes to determine whether or not the district attorney's office should prosecute the case.[124] Also, CACE includes practical and policy rules that evaluate jury responses, involve mitigating circumstances, and compare previous case experiences.[125] While this system promises a bright future, they are expensive to build and maintain.[126]

Lastly, another risk that law firms will encounter with artificial intelligence is data privacy.[127] Law firms should be steadfast in protecting their database with the on-set of artificial intelligence because as more users enter the digital world, so does the number of cybercriminals.[128] Proponents believe that embracing the technology and employing members who are trained and well-versed in artificial intelligence and mega-data will help protect a law firm.[129] For example, the European Union is making new regulation through the General Data Protection Regulation that will take place next year so consumers will understand the steps necessary to protect their data.[130]

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

Estate planning is one of the areas of law impacted the most by the growth of technology.[131] As previously mentioned, areas dealing with forms and transactions where litigation is unlikely already see the impact of technology.[132] Criminal litigation is seeing less of an effect at this stage than civil areas of law.[133]

A. Fiduciary Duties

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[122] *Id.* 1232.

[123] *Id.*

[124] Particia Hassett, *Technology Time Capsule: What Does the Future Hold?*, 50 SYRACUSE L. REV. 1223, 1232 (2000).

[125] *Id.*

[126] *Id.* at 1233.

[127] Dennis Garcia, *Preparing for Artificial Intelligence in the Legal Profession*, LEXIS PRACTICE ADVISOR JOURNAL (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.

[128] *Id*.

[129] *Id*.

[130] *Id*.

[131] Cort Jensen, *Rise of the Robo-Form*, MONTANA LAWYER, 37-MAY Mont. Law. 9, 9 (May 2012).

[132] *Id*.

[133] *Id*.

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.'"[134] Fiduciary law has two principles: the duty of care and the duty of loyalty.[135] A person who owes a fiduciary duty owes the highest degree of care to that relationship.[136] One example of a fiduciary relationship is the duty that a lawyer owes to their client.[137] People hire lawyers for advice, to advocate for them, and aid them in determining what is in their best interest.[138] Another type of fiduciary duty is a doctor to a patient.[139] Doctors must maintain confidentiality about patient's medical conditions and other sorts of information as established through the patient-physician relationship.[140]

An example of a fiduciary role that is analogous to artificial intelligence in estate planning is robo-advisors in investment advising.[141] Like the legal field, the financial sector is gravely lacking regulation of artificial intelligence.[142] The financial market uses artificial intelligence called robo-advisors.[143] Robo-advisors are computerized services that give investment advice through the internet that rely primarily on algorithms to make recommendations.[144] As with the robo-forms seen in estate planning, clients answer questions regarding the basic information, income, and financial goals to create an investment portfolio.[145] Using this technology minimizes transaction costs and steadily follows clients goals.[146] The so-called "robo-advice market" has seen tremendous growth in the past decade with largely $45

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[134] *Dunnagan v. Watson*, 204 S.W.3d 30, 46 (Tex. App.—Fort Worth, Aug. 24, 2016) (quoting *Daniel v. Falcon Interest Realty Corp.*, 190 S.W.3d 177, 185 (Tex. App.—Houston [1st Dist.] 2005, no pet.).

[135] JESSE DUKEMINIER & ROBERT H. SITKOFF, WILLS, TRUSTS, AND ESTATES 582 (9th ed. 2013).

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

[137] *Id.*

[138] *Id.*

[139] *Id.*

[140] EC Hui, *Doctors as Fiduciaries: A Legal Construct of the Patient-Physician Relationship*, 11 HONG KONG MED J 527, 527 (2005).

[141] *See supra* Part II.

[142] Megan Ji, *Are Robots Good Fiduciaries? Regulating Robo-Advisors Under the Investment Advisers Act of 1940*, 117 COLUMBIA LAW REVIEW 1543, 1543 (2017) (quoting Alessandro Malito & Elli Zhu, Top 5 Robo-Advisers by AUM, InvestmentNews (Feb. 25, 2016), http://www.investmentnews.com/ article/20160225/FREE/160229960/top-5-robo-advisers-by-aum).

[143] *Id.* at 1557.

[144] *Id.*

[145] *Id.*

[146] *Id.* at 1559.

billion in assets under management.[147] The market is predicted to continue to grow to $2.2 trillion in assets under management in 5 years.[148]

Industry professionals criticize the quality of recommendations provided by robots and doubt that they could successfully meet the fiduciary standards set by the Securities and Exchange Commission (SEC) through the Advisers Act.[149] Some of the arguments against robo-advisors are that the questionnaire 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 client's experience and needs.[150] Additionally, scholars argue that robo-advisors lack the human element of investment planning.[151] Arthur Laby, a professor at Rutgers Law, explained that the two essential elements of an investment adviser's fiduciary duty are human connection and judgment.[152] Machines miss problems that arise in conversation and other information obtained only between human contact..[153] To regulate the robo-advisor market, one author suggests that the SEC should focus on conflicts of interests and the duty of loyalty by requiring disclosure of conflicts and how biased algorithms cost clients.[154] This Comment will take into these considerations in Part V to address regulating artificial intelligence in estate planning.[155]

B. Trustee 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*."[156] The trustee takes legal title of the property and holds it for the settlor's beneficiaries.[157] It is undisputed that in addition to natural

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[147] Megan Ji, *Are Robots Good Fiduciaries? Regulating Robo-Advisors Under the Investment Advisers Act of 1940*, 117 COLUMBIA LAW REVIEW 1543, 1544 (2017) (quoting Alessandro Malito & Elli Zhu, Top 5 Robo-Advisers by AUM, InvestmentNews (Feb. 25, 2016), http://www.investmentnews.com/ article/20160225/FREE/160229960/top-5-robo-advisers-by-aum).

[148] *Id*. at 1545.

[149] *Id.*

[150] Megan Ji, *Are Robots Good Fiduciaries? Regulating Robo-Advisors Under the Investment Advisers Act of 1940*, 117 COLUMBIA LAW REVIEW 1543, 1565 (2017), *see* SEC, IM Guidance Update on Robo-Advisers 6–7 (2017), http://www.sec.gov/investment/im-guidance-2017-02.pdf.

[151] *Id.* at 1566.

[152] *Id.*

[153] Megan Ji, *Are Robots Good Fiduciaries? Regulating Robo-Advisors Under the Investment Advisers Act of 1940*, 117 COLUMBIA LAW REVIEW 1543, 1566 (2017) (citing Tara Siegel Bernard, The Pros and Cons of Using a Robot as an Investment Adviser, N.Y. TIMES (Apr. 29. 2016), http://www.nytimes.com/2016/04/30/yourmoney/the-pros-and-cons-of-using-a-robot-as-an-investment-adviser.html (on file with the Columbia Law Review).

[154] Megan Ji, *Are Robots Good Fiduciaries? Regulating Robo-Advisors Under the Investment Advisers Act of 1940*, 117 COLUMBIA LAW REVIEW 1543, 1583 (2017).

[155] *See infra* Part V.

[156] JESSE DUKEMINIER & ROBERT H. SITKOFF, WILLS, TRUSTS, AND ESTATES 385 (9th ed. 2013).

[157] *Id.*

persons, corporations can hold property in trust and act as a trustee.[158] Part of the reason why is because corporations are classified as "legal personhood" and maintain the capacity to be sued.[159] As artificial intelligence continues to take over more responsibility and liability, it should have regulations as a natural person or corporation would as a trustee.[160]

There are three different stages in which artificial intelligence could act as trustees.[161] First, as is commonly used today, humans make ultimate decisions based on advice from expert systems.[162] When a beneficiary dies, the program could follow its algorithm to change the trust instrument and is mainly involved with low-level daily tasks.[163] Second, as technology grows and artificial intelligence advances, humans would no longer need to check the program and only signs documents while spending little time on administering trusts.[164] 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.[165] Third, there is no human trustee, and settlors go straight to artificial intelligence for services.[166] This may be because some people have a distrust of lawyers or people may embezzle or misappropriate trust funds.[167]

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."[168] Would artificial intelligence be able to analyze the needs of the trust and adhere to the will of the settlor?[169] Artificial intelligence could eliminate humans from acting as trustee altogether, but a significant issue left unanswered is who would be responsible for the artificial intelligence administration of a trust.[170] This Comment examines liability of artificial intelligence and who is responsible for them in Part IV.[171]

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[158] RESTATEMENT (THIRD) OF TRUSTS: CORPORATIONS AND OTHER ENTITIES AS TRUSTEES §33 (AM. LAW INST. 2003)
[159] Lawrence B. Solum, *Legal Personhood for Artificial Intelligences*, 70 N.C. L. REV. 1231, 1238 (1992).
[160] *Id.*
[161] *Id.* at 1240.
[162] *Id.* at 1240-41.
[163] *Id.* at 1242.
[164] *Id.*
[165] *Id.*
[166] *Id.*
[167] *Id.*
[168] Lawrence B. Solum, *Legal Personhood for Artificial Intelligences*, 70 N.C. L. REV. 1231, 1242 (1992) (citing RESTATEMENT (SECOND) OF TRUSTS §167(1) (1959)).
[169] *Id.*
[170] *Id.*
[171] *See infra* Part IV.

C. Will Drafting

As previously noted, artificial intelligence like robo-forms helps clients provide for their estate planning needs without breaking the bank by hiring an attorney.[172] Constructing an estate plan can be costly, and many people disregard it because they are not wealthy, despite the inevitable certainty of death.[173] However, there are warnings that this software may harm consumers who are looking for a cheaper estate planning route.[174] The American Bar Association firmly warns consumers about using this technology.[175] The ABA believes that to understand the complexities of property, tax, wills, and trusts clients should rely on a qualified trusts and estates lawyer. 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, that state law is taken into account.[176]

Additionally, the ABA continues by stating that attorneys are oftentimes well-versed in specialty areas of practice.[177] 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.[178] Receiving advice and direction from a professional attorney is less risky than an individual planning their estate because it will reduce the chance it will end up in litigation.[179] Litigation will inevitably take more time and drive up costs higher than the initial legal fees.[180]

D. Guardianshipand Mental Incapacity

Take a moment to reminisce about the classic American animated sitcom *The Jetsons*.[181] *The Jetsons* was a show based on a space-age family with aliens and flying cars.[182] The Jetsons employed a loveable robot named Rosie who performed all of the housework and assisted in parenting.[183] While the probability of consumer-accessible flying cars is remote, perhaps robots

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[172] *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 (discussing the benefits of paying for their services at an affordable rate because most people cannot hire an attorney).
[173] *Id.*
[174] Cort Jensen, *supra* note 80.
[175] *The Lawyer's Role*, AMERICAN BAR ASSOCIATION, https://www.americanbar.org/groups/real_property_trust_estate/resources/estate_planning/the_lawyer_s_role.html (last visited Nov. 1, 2017).
[176] *Id.*
[177] *Id.*
[178] *Id.*
[179] *Id.*
[180] *The Lawyer's Role*, AMERICAN BAR ASSOCIATION, https://www.americanbar.org/groups/real_property_trust_estate/resources/estate_planning/the_lawyer_s_role.html (last visited Nov. 1, 2017).
[181] THE JETSONS (Hanna-Barbera 1962).
[182] *Id.*
[183] *Id.*

performing guardianship roles is in the not-too-distant future.[184] Artificial intelligence could soon take the role of caregivers and even assume legal responsibilities for children or incompetent adults.[185]

Often, a person who develops a severe and irreversible neurological disease like Alzheimer's will need to be appointed a power of attorney or guardian.[186] Recent statistics show that "more than 5 million Americans are living with Alzheimer's…by 2050, this number could rise as high as 16 million."[187] In people over the age of sixty-five, one in ten has dementia.[188] The onset of mental incapacity poses a myriad of issues in estate planning.[189] In *Dubree v. Blackwell*, the appellate court protected seniors living with mental incapacity by voiding contracts in which the client was mentally incompetent.[190] Under the *Restatement (Second) of Contracts*, a contract is voidable "if he 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."[191]

To confront this problem, a guardianship proceeding can appoint a guardian to handle the incapacited person's financial and other needs.[192] However, there are problems associated with guardianships.[193] Guardianship proceedings can be expensive, and the social cost of publicly appointing a guardian can be humiliating.[194] Additionally, although there are dangers regarding misappropriation of the decisions or finances of the ward, there are criminal penalties for harming an elderly or disabled person.[195]

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

[185] *Id*.

[186] *Id.*

[187] *2017 Alzheimer's Disease Facts and Figures*, ALZHEIMER'S ASSOCIATION, https://www.alz.org/facts/ (last visited November 1, 2017).

[188] *Id.*

[189] *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 LAW REVIEW ON MINORITY ISSUES, 13 SCHOLAR 483, 483 (2010) (discussing the various issues surrounding incapacited seniors).

[190] *See id.*; *see also* Dubree v. Blackwell, 67 S.W.3d 286, 289 (Tex. App.—Amarillo 2001, no pet.).

[191] RESTATEMENT (SECOND) OF CONTRACTS § 15 (1981).

[192] Hayden Colby, *How Texas Can Better Protect Seniors from Financial Abuse and Mismanagement Associated with Alzheimer's Disease*, THE SCHOLAR: ST. MARY'S LAW REVIEW ON MINORITY ISSUES, 13 SCHOLAR 483, 519 (2010).

[193] *Id.*

[194] *Id.*

[195] *See* TEX. PENAL CODE ANN. § 22.04 (West 2017).

As technology and the legal field advances, the question of liability of the guardian arises.[196] Researchers are spending a lot of time developing artificial intelligence into caregivers.[197] 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.[198] Likewise, Pearl the Nursebot is designed to aid seniors with daily tasks, provide companionship and even help them communicate with physicians and caregivers remotely.[199] If the guardian leaves the ward in care of artificial intelligence and the autonomous system malfunctions or otherwise harms the ward, the guardian will be liable under a negligence theory for the consequences.[200] Experts believe there will be an expansive integration of robots in elderly homes and that attorneys should begin discussing in a durable power of attorney of whether the client would allow artificial intelligence as caregivers.[201]

Another impact that artificial intelligence will have on the legal field is in assessing mental incapacity.[202] Deep Patient, an artificial intelligence program created by a research group in New York created a system that discovers a disease that people will develop, like liver cancer.[203] Not only can Deep Patient discover cancers, but it determines with high accuracy the onset of psychiatric disorders.[204] The system operates by compiling patient's test results, doctor visits, and many other variables to discover hidden patterns in the hospital database.[205] As this technology progresses, this will be a valuable tool in estate planning for determining capacity.[206] 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.[207]

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[196] JOHN FRANK WEAVER, ROBOTS ARE PEOPLE TOO: HOW SIRI, GOOGLE CAR, AND ARTIFICIAL INTELLIGENCE WILL FORCE US TO CHANGE OUR LAWS: HOW SIRI, GOOGLE CAR, AND ARTIFICIAL INTELLIGENCE WILL FORCE US TO CHANGE OUR LAWS, 88 (Praeger, 2014).

[197] *Id.*

[198] 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/.

[199] *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/.

[200] JOHN FRANK WEAVER, ROBOTS ARE PEOPLE TOO: HOW SIRI, GOOGLE CAR, AND ARTIFICIAL INTELLIGENCE WILL FORCE US TO CHANGE OUR LAWS: HOW SIRI, GOOGLE CAR, AND ARTIFICIAL INTELLIGENCE WILL FORCE US TO CHANGE OUR LAWS, 93-94 (Praeger, 2014).

[201] *Id.*

[202] Will Knight, *The Dark Secret at the Heart of AI*, TECHNOLOGY REVIEW (Apr. 11, 2017), https://www.technologyreview.com/s/604087/the-dark-secret-at-the-heart-of-ai/.

[203] *Id.*

[204] *Id.*

[205] *Id.*

[206] *Id.*

[207] *See supra* Part V.

IV.   WHAT HAPPENS WHEN THINGS GO WRONG?

The probative value that artificial intelligence has in almost all markets across the globe is undeniable.[208] However, there is a great threat as well.[209] At the National Governors Association meeting, Nevada's Governor Brian Sandoval asked Elon Musk, Tesla CEO and technology innovator, about his stance towards artificial intelligence.[210] Elon Musk intensely warned the public that "AI is a fundamental existential risk for human civilization, and I don't think people fully appreciate that," he continued to caution that "AI is 'the scariest problem.'"[211] He is not just worried about artificial intelligence taking people's jobs but is worried essentially no regulation at this time, and governments need to be proactive in halting a tech-pocolypse.[212]

In response to Elon Musk's warning, the 2017 Asilomar Conference came together to create a core set of twenty-three principles to approach artificial intelligence on a global scale in an attempt to promote discussion of the emerging technology.[213] 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.[214] In addition to the designers being held responsible, 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.[215]

A. Professional Responsibility

As every practicing lawyer is aware, being a member of the legal profession requires lawyers to adhere to ethical rules and procedures.[216] Failure to follow these rules will result in disciplinary proceedings, civil liability, and potentially criminal consequences.[217] One of the most important duties that a lawyer must provide to a client is the duty of competency, which provides: "A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the

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[208] *See infra* Part II.

[209] 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.

[210] *Id.*

[211] *Id*.

[212] *Id.*

[213] *Asilomar AI Principles*, FUTURE OF LIFE (2017), https://futureoflife.org/ai-principles/ (last visited November 2, 2017).

[214] *See supra* Appendix A.

[215] Melissa Maleske, *Artificial Intelligence Raises Ethical Concerns for Attys*, LAW 360, https://www.law360.com/articles/897965/artificial-intelligence-raises-ethical-concerns-for-attys.

[216] *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).

[217] LISA G. LERMAN & PHILIP G. SCHRAG, ETHICAL PROBLEMS IN THE PRACTICE OF LAW 65 (4th ed. 2016).

representation".[218] Additionally, the *Model Rules of Professional Conduct* Rule 1.1 Comment 5 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.[219] Tools using artificial intelligence like brief-writing software or online forms for lawyers in estate planning are becoming increasingly popular.[220] With this shift in the legal sphere, lawyers possess a duty to stay up-to-date on the latest technology.[221] That is not to say that every lawyer must be an expert in artificial intelligence.[222] However, lawyers should be aware of the advantages and disadvantages of using expert systems for their clients and to stay competitive with other lawyers.[223]

In addition to the duty of competence, managing lawyers must ensure that nonlawyer assistance outside of the law firm complies with the professional rules of conduct.[224] Comment 3 in the rule describes the duties of lawyers to nonlawyers that they hire to help them perform legal services for their client.[225] It provides examples that using a company for maintaining a database or using Internet services to store information impose a duty on the lawyer to make sure that those services perform in congruence with professional obligations.[226] 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 lawyer's law firm would subject them to liability if it does not meet professional obligations.[227]

V.   PROPOSALS

Artificial intelligence will soon play many roles in a lawyer's life.[228] The most significant problem in this changing economy is the fact that there is little-to-no regulation on these systems.[229] While this Comment does not attempt to solve the problem in its entirety, these regulations help make it clear where to point the finger when things go wrong.[230]

A. Unauthorized Practice of Law

First, the *Texas Government Code* should be amended to include electronic agents and include artificial intelligence systems.[231] The purpose of this is to hold individuals and entities

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[218] MODEL RULES OF PROF'L CONDUCT r. 1.1 (AM. BAR ASS'N 1980).

[219] MODEL RULES OF PROF'L CONDUCT r. 1.1, cmt. 5 (AM. BAR ASS'N 1980).

[220] Melissa Maleske, *Artificial Intelligence Raises Ethical Concerns for Attys*, LAW 360, https://www.law360.com/articles/897965/artificial-intelligence-raises-ethical-concerns-for-attys.

[221] *Id.*

[222] *Id.*

[223] *Id.*

[224] MODEL RULES OF PROF'L CONDUCT r. 5.3 (AM. BAR ASS'N 1980).

[225] MODEL RULES OF PROF'L CONDUCT r. 5.3, cmt. 3 (AM. BAR ASS'N 1980).

[226] *Id.*

[227] *See supra* note 215.

[228] *See supra* Part II.

[229] *See supra* Part I.

[230] *See supra* Part IV.

[231] *See supra* Part II.b.i.

accountable who employ artificial systems in their practice.[232] Although this does not provide a bright-line rule for regulating artificial intelligence, it will be the beginning of holding those uses the systems liable.[233] Given the nature of the systems, individuals and entities such as law firms, corporations, etc. that use expert systems should employ someone who is authorized to practice the law to manage these systems.[234] Artificial intelligence systems should not be employed in fiduciary roles such as trustees without at least authorization and oversight of those prescribed in the *Texas Government Code*.[235] By amending this provision, it would give the courts the opportunity to address and hold accountable those who rely on artificial intelligence as well as limit the systems from solely taking over important positions such as trustees without oversight.[236] Although this amendment will eliminate the system's role for taking on major fiduciary tasks on its own, it does not stifle the amount of work it does, as long as someone signs off on it.[237]

Second, courts should treat any company, firm, or entity that uses expert systems that does more than handle blank forms as unauthorized practice of law.[238] Estate planning will see the growth of technology through will drafting, trustee administration, fiduciary duties and other positions and when courts face issues involving this kind of technology they should follow the reasoning of the *Janson* court.[239] For example, if a lawyer uses an expert system that helps write a will that lawyer will not be engaging in the unauthorized practice of law.[240] If a person who is not authorized to practice the law uses a tool that exceeds the boundaries of just using blank forms, they should be held liable for unauthorized practice of the law.[241] Additionally, if employees are not authorized to practice law help assist a customer in preparing documents for using systems, courts should determine that they are violating the unauthorized practice of law provision.[242] Services that are just selling forms or legal manuals should not fall under this category because artificial intelligence systems are much more than that.[243] Because artificial intelligence systems are capable of machine learning, automated reasoning, and quantitative legal prediction, people who are not authorized to practice the law but use them for themselves or someone else for legal matters will subject themselves to some form of punishment.[244]

Third, 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.[245] Law firms should take careful measures to ensure that businesses are

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[232] *See supra* Part II.b.i.
[233] *See supra* Part II.b.i.
[234] *See supra* Part II.b.i.
[235] TEX. GOV'T. CODE ANN. §81.102 (West 2017), *see supra* Part III.
[236] *See supra* Part III.
[237] *See supra* Part III.
[238] *See supra* Part II.
[239] *See supra* Part II.
[240] *See supra* Part II.
[241] *See supra* Part II.
[242] *See Supra* Part II.
[243] *See supra* Part II.
[244] *See supra* Part II.
[245] *See supra* Part IV; *see infra* Appendix C.

complying with the ethical rules.[246] Otherwise, they should be subject to disciplinary action.[247] Whether they are using an assistant, separate entity, or another third person to conduct business using the technology, the rules should make it more clear on the law firm's liability in their managerial capacity.[248]

VI. CONCLUSION

While some people are scared of a technology takeover, estate planning lawyers should learn to embrace the changing tide of the legal system.[249] In fact, lawyers have a professional obligation to do so.[250] The advancements that artificial intelligence and expert systems provide should be an exciting new area that continues to develop, and lawyers should make it a part of their practice to remain competent.[251] Although artificial intelligence has the potential to take over jobs like that of the first-year associate who does e-discovery or document preparation, the shifting economy will more than likely take the shape of a new Industrial Revolution and create new jobs.[252] With this growth of technology, a line should draw more clearly who is liable.[253]

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[246] *See supra* Part IV.
[247] *See supra* Part IV.
[248] *See supra* Part IV.
[249] *See supra* Part II.
[250] *See supra* Part IV.
[251] *See supra* Part V.
[252] *See supra* Part II.
[253] *See supra* Part I.

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.

(a) Except as provided by Subsection (b), a person may not practice law in this state unless the person is a member of the state bar.

(b) The supreme court may promulgate rules prescribing the procedure for limited practice of law by:

      (1) attorneys licensed in another jurisdiction;

      (2) bona fide law students; and

      (3) unlicensed graduate students who are attending or have attended a law school approved by the supreme court.

(c) Individuals or entities that employ the use of electronic agents will be violating this provision if the individual or entity does not maintain a person authorized to practice law set forth in subsection (a) and (b) to monitor and manage the electronic agents.

      (1) Electronic agents include artificial intelligence systems and branches of artificial intelligence such as expert systems.

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.

3. Managerial lawyers who employ companies that use companies or assistants in their practice that utilize artificial intelligence or branches of said system should provide reasonable measures to ensure that they are complying with their ethical and professional obligations. Lawyers will be held liable for the use, misuse and actions of companies employing these technology systems.