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## **Artificial Intelligence and the Practice of Law: What Does the Future Hold?**

### **I. What Is AI?**

Artificial intelligence (AI) also called cognitive computing, is the use of machines to think and perform tasks like humans. Smart machines can process massive amounts of data, identify patterns, which then create new patterns, allowing machines to test hypotheses and find solutions. The machines can also do all that in record time. Computers can look for patterns in data, carry out tests to evaluate the data, and find results.

There are two types of artificial intelligence—hard and soft. Hard AI is focused on having machines think like humans, while soft AI is focused on machines being able to do work that traditionally could only be completed by humans. The main difference is that soft AI does not necessarily involve machines thinking like humans. Rather, they involve computer software and systems that do not just do tasks they have been programmed for in advance—they actually learn as they go, improving their performance through feedback

Traditional AI was focused on hard AI capabilities to perform humanlike reasoning. In that regard, there is a lot more development to be had. Yet soft AI provides tools and problem-solving resources and is now *common place in all industries*. Data we often need to analyze is massive. It may take extensive amount of time to analyze. Speed and time savings are an issue. There is also the issue of accuracy. If a reviewer is looking for buzz words or number for example, a computer can more accurately identify those. As a result of relying on computers to analyze data, computers (AI) are changing the way people think and do business. They can do research (Google is AI), spellcheck, compare and analyze documents and so forth.

### **II. How We Commonly Use AI**

In terms of legal research, review of contracts, and analysis of massive amounts of information, AI is used by lawyers to complete their work. AI can also assist industries that need to analyze information in real time such as news media.

AI is also used by companies trying to determine consumer patterns by analyzing the consumer's habits, age, gender etc. as well as customer satisfaction by analyzing surveys.

AI is used to build models that analyze behavior and find signs of fraud (for example, credit card use patterns). Insurance companies use models for actuaries to price premiums.

AI can analyze stocks and markets and assist in determining probabilities of success.

AI is in our cars, smartphones, search engines, homes (such as in the form of robo-sweepers), surveillance, traffic etc. Video games are AI and can beat the player by learning how to play.

Next, hard AI can almost appear like soft AI, when computers will start predicting results of human processing. Researchers examined for example, 584 cases before the European Court of Human Rights with a machine-learning algorithm. They found that the court's judgments were highly correlated to facts rather than legal arguments. They were then able to predict the results of human rights cases with 79% similarity to the judges, by using artificial intelligence to analyze the factual sections of published human rights judgments.

AI is not one technology but a range of techniques that give the appearance of having intelligence. AI is applied math and statistics yet without a clear definition it will be difficult to regulate it. What will we allow machines to do? How far will we let them go?

AI is used to find compatibility in dating sites. A Cambridge University study shows that from 10 Facebook "likes" an AI can know you as well as a work colleague. *Computers Using Digital Footprints Are Better Judges of Personality than Friends and Family*, Univ. of Cambridge (Jan. 12, 2015).

### **III. Benefits of AI**

The biggest, most obvious benefit to AI applications is time savings. Computer systems can analyze more information, more thoroughly than humans can, in a tiny fraction of the time. For example, one of our users reported that she spent an hour proofing a document and then ran the original through AI software as a test. In less than a minute, it found and fixed all the errors she had painstakingly identified. This benefit applies to all types of AI applications. Computers can quickly: search through and identify discoverable or potentially relevant data of all forms and file types, conduct legal research that would take a skilled attorney days to complete, and analyze contracts and other documents for errors, missing information, and inconsistent language.

AI allows earlier (and more accurate) risk assessment in criminal and civil cases. AI tools, including predictive coding, can be used to review information in real time. This allows lawyers to identify potential risks earlier, advise clients wisely about their exposure, and head off legal problems before they even occur. When a lawsuit has been started, or even merely threatened, these smart solutions allow law firms to quickly identify relevant information and to define the universe of data and custodians that must be protected. With this increased information, law firms can more accurately assess outcomes, minimizing costs and limiting risks while protecting their clients'—and their own—reputations.

AI produces higher quality work product with the use of intelligent software—which doesn't get tired, bored, or distracted—can be truly error-free. Specialized document software can enhance the organization of documents and flawlessly maintain that organization, including all internal cross-references, through the life of the document. Such software can also ensure that language is applied consistently, no matter how many attorneys had a hand in the drafting. Through document comparison and automatic learning, software such as contract comparison tools can identify missing clauses or conditions, inconsistently used terminology, or undefined terms, both within a single document and across a pool of similar documents.

With automatic document comparison and organization, attorneys can more quickly identify holes or gaps in their documents and even in their legal analyses. For example, contract analysis programs that have learned through repeated analysis can identify missing terms or

definitions in known types of contracts. Similarly, document analysis can uncover a logical connection that hasn't yet been firmly established in a legal memorandum, allowing attorneys to revisit and strengthen their weak points. For both, smart software that maintains internal organization and allows attorneys to quickly and conveniently switch between different levels and views enhances the overall structure and logical flow of the document.

With the time savings of automated review, research, and document quality control, AI frees up attorneys' time and mental energy for higher-level work. This enhances creativity, allowing attorneys to add unique value and focus completely on the work that computers can't do. Increased confidence in results also gives attorneys the free hand they need to take risks and evaluate alternatives. With intelligent legal research software, attorneys can test out variations in fact patterns or legal analyses to identify the most advantageous strategy. Comparative analysis between cases in different states or between state and federal courts no longer takes days of exhaustive (and exhausting) scanning.

### **A. Rise of Predictive Coding**

Technology is going beyond merely assisting lawyers to doing some of their work. A number of law firms are now making use of predictive coding to replace some of the work done by associates. Predictive coding has begun to replace the previous method of e-discovery, which involved the use of Boolean search terms and an associate poring over the documents to determine if they were relevant to the case in question.

Predictive coding utilizes software to discover documents that are relevant to a case. Attorneys who are very familiar with the case and therefore the relevant search terms train the software what to look for by introducing a seed set of documents. After that, more documents that fit the criteria are added to teach the program. An attorney might review the findings too and then accept or reject documents depending on whether or not they match the criteria. This process is usually repeated several times until the program's coding and results are at a comparable level to the attorney's work. How the relevant search documents that the program has identified are used depends on how comfortable the lawyers and clients are with the amount of risk involved.

The use of predictive coding raises some legal issues with regard to lawyers' duty to conduct a reasonable search for documents under the federal rules for discovery as well as how to protect attorney-client privilege when a privileged is disclosed under the federal rules of evidence. Both of these rules require a reasonable standard, and this comes up in predictive coding with regard to how accurate it is at finding the relevant documents. In fact, the argument can be made that using predictive coding is more in line with the rules, especially because its accuracy can be statistically validated. Thus, parties know the likelihood of relevant documents slipping through.

### **B. Strengths of Machine Learning**

In many ways, these developments in AI are quite profound. Machine learning techniques tap into our own cognitive strengths – pattern recognition and learning – rather than attempting to define complex rules. The most sophisticated techniques in this area – based on artificial neural nets and deep learning – are enabling major breakthroughs in areas such as natural language processing, translation, machine vision and game playing.

This approach could also enable computers to move far further into decision – making processes than was previously possible when they were defeated by the complexity and ambiguity of pre-defined rules. Indeed, research in areas such as medical imaging and diagnosis increasingly shows machines producing far more accurate results than human do. While there is

nothing new about algorithms performing better and more consistently than many experts, AI systems ‘turbo charge’ this capability and potentially lead to much more powerful decision tools than have previously been possible. This reflects three features about models and the algorithms they contain.

So far, AI-powered document discovery tools have had the biggest impact on the field. By training on millions of existing documents, case files, and legal briefs, a machine-learning algorithm can learn to flag the appropriate sources a lawyer needs to craft a case, often more successfully than humans. For example, JPMorgan announced earlier this year that it is using software called Contract Intelligence, or COIN, which can in seconds perform document review tasks that took legal aides 360,000 hours.

These programs are, simply put, changing the way legal research is carried out. Workers used to have to trudge through stacks of dusty law books and case files to find relevant information. That task typically fell to paralegals, vital members of any legal practice who usually do not have a law degree. As their standard responsibilities are increasingly taken over by machines, paralegals must find ways to work alongside the technology, or they are likely become a rare breed.

Large Data Volumes	Complex and Changing Patterns	Consistency
They can process huge amounts of data (structured and unstructured) – much more than humans ever could; for example, the results of every piece of medical research carried out on a topic, or every piece of financial regulation. This provides a stronger and more powerful basis for learning.	They can pick up weaker or more complex patterns in data than we can. Therefore, machines may be better in environments that we find less predictable. Where feedback loops can be built into models, they can also be highly adaptive and learn from errors or new cases.	They can be far more consistent decision-makers. They do not suffer from tiredness or boredom. They also do not exhibit human biases and therefore provide opportunities to eliminate cognitive biases – such as availability or confirmation bias – as well as socially-based biases, such as racism.

These capabilities are particularly important for organizations aiming to exploit the increasing amount of big data that is available to them. Humans alone simply cannot analyse and extract insight from the volumes of data being created today. It is essential to work with machine learning techniques to gain meaning from, and make best use of, big data.

#### IV. Status of Law/Regulations

Currently, all the legislation around technology is concerned with data privacy and autonomous vehicles. In Europe, for example, the General Data Protection Regulation coming into effect in 2018 will give EU citizens the right to demand an account of how a decision that affected them adversely was achieved. Thus, if an algorithm was used in the denial of a loan to an EU citizen, that citizen can require the loan company to explain how it came to its decision. This however, may be a problem, since the data fed into the computer may be easy to recite, but the algorithms are not as transparent, and they involve a great deal of self-studying (and may be subject to copyright). Kay Firth Butterfield, *Artificial Intelligence and the Law More Questions Than Answers*, The SciTech Lawyer, Fall 2017, Vol. 14, No. 1.

An example in treating AI in law enforcement is in the use of Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) which assist judges in sentencing, can look at historic criminal justice data, corruption of the data and the subsequent decisions. In *State*

*v. Loomis*, the judge used the COMPAS tool to assist with sentencing. The Wisconsin Supreme Court rejected Loomis's appeal, saying he would have received the same sentence whether or not the AI was involved. However, the court seemed concerned about the use of COMPAS.

Regulation of AI is important to protect customers who will buy and use AI-enabled devices. Parents use AI to monitor their children's activities through phone tracking devices and monitoring of the children's internet activities. Laws relating to children's privacy have looked at those activities. As of now, the most anticipated AI legislation is with respect to autonomous vehicles.

The Kenan Institute of Ethics at Duke University has evaluated the idea of "adaptive regulation," to provide users and developers with some guidelines in connection with emerging technology at an early stage. IBM, AI Global, and Future of Life Institute are a few companies who created guidance for design, development, and use of AI. Yet in the most part, the law regarding AI will come from judicial decision making,

In comparison, the Web Content Accessibility Guidelines (WCAG) has developed, in cooperation with individuals and organizations around the world, a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally. While this relates more to the user and not to the developer (such as it relates to the American with Disabilities Act (ADA)), it shows that universal standards can be developed. The Dept. of Justice has not formally adopted the WCAG standard, it has directed businesses to the WCAG. Can something like this be created for AI development?

## V. AI and Morality—Should We Care?

In addressing morality there are several issues we can debate:

(a) The type of uses we can find acceptable: In Japan, there are AI-enabled child sex dolls, which are produced for pedophiles. It is the contention that it stops them from assaulting human children. However, in our country this may be illegal, and a person was convicted in the United Kingdom for trying to import such a doll.

(b) Assuming the use is acceptable (autonomous cars, evaluation of judicial proceedings) how do we morally implement the use? There is a Global Initiative for Ethical Considerations in Artificial Intelligence and Autonomous Systems which has recommended a new standard to deal with this problem of transparency. For example, autonomous cars should allow accident investigators, lawyers, and a jury to know what the car was doing at the time of an accident in order to allocate blame and damages. On the other hand, is this too much of a complicated evaluation for a jury? Does it interfere with privacy?

(c) Can we create moral regulations? Will AI regulations be industry based (banking industry, insurance industry) or can they be general? Who will police them? In comparison, various professionals (real estate brokers, attorneys) have rules of ethics. Yet, California Rule of Professional Conduct Rule 1-100 states, "These rules are not intended to create new civil causes of action. Nothing in these rules shall be deemed to create, augment, diminish or eliminate any substantive legal duty of lawyers or the non-disciplinary consequences of violating such a duty." Rules of Professional Conduct cannot be only basis for a claim against attorneys. (*Noble v. Sears Roebuck & Company* (1973) 33 Cal.App.3d 654; *Wilhelm v. Pray, Price, Williams & Russell* (1986) Cal.App.3d 1333.). Similarly, in Florida, the Rules of Professional Conduct cannot be used to set the standard of care for attorneys in negligence actions. See *Beach Higher Power Corp. v. Rekant*, 832 So. 2d 831 (Fla. 3d DCA 2002); see also *Smith v. Bateman Graham, P.A.*, 680 So. 2d 497 (Fla. 1st DCA 1996) (ethics opinion from the state bar provides no authority for a cause of action). The National Association of Realtors have a Code of Ethics to guide realtors in their relationship to

their clients and to each other. Realtors can be charged by the various Boards who adopted those rules, but rules of ethics are often not grounds for civil liability. In connections with lawyers and realtors we have the state bars, departments of real estate, and realtors and lawyers associations who can reprimand and also cite the professionals' licenses. Who will monitor, police and judge AI offenders?

Moreover, in addition to being licensed, lawyers and the brokers are in a fiduciary relationship to their clients. It is easy therefore to expect moral compliance. In connection to AI, there is no relationship between the manufacturer/developer and the end user. Therefore, a more over-reaching legislative body will have to try and create ethical guidelines as was done to the financial industry for example, with various consumer protected regulations (Dodd Frank, RESPA etc.). Yet, is that logistically possible?

(d) Can our moral regulations become universal? In a standard of care case, *FFE Transportation Services v. Fulgham*, 154 S.W.3rd 84 (Tex. 2004) the Supreme Court of Texas discussed the changing standard of care. *FFE Transportation Services* was a trucking injury case where the plaintiff argued that the company deviated from its own--potentially higher--standard, which inspected the trailer assemblies every 60 days. While plaintiff's expert testified that he was not aware of such industry wide standard, he commented that this standard was reasonable and therefore applied to the situation. The judge did not allow that testimony because it was not prevalent throughout the industry. The Supreme Court agreed and held that a self-imposed inspection, taken alone, did not establish the standard a reasonably prudent trucking company would follow. In fact, this self-imposed standard may have exceeded the industry standard and a party should not be penalized solely for setting its internal policies higher. If companies create moral standards to their AI, will they be held by them?

## VI. AI and Intellectual Property

There are concerns of intellectual property, copyright, and patent issues when developing AI and those concerns transcend to how open for review can/should an AI program be? If a video game influences a person to become a mass shooter, can a government pursue the manufacturer and determine whether certain imbedded codes were intentionally inputted to influence the users and create an addictive behavior? Isn't the developer protected by copyright? The Copyright Act - 17 U.S.C.S. ' 102(a) lists eight categories of "works of authorship" covered by the Act. We see many lawsuits in connection for example, with music or film where the claimant alleges that his/her content was improperly copied into a new song/writing/movie. To what extent can AI developers trace their fingerprint when software algorithms may be similar?

## VII. AI and Privacy

There are "four distinct kinds of activities violating the privacy protection and giving rise to tort liability: (1) intrusion into private matters; (2) public disclosure of private facts; (3) publicity placing a person in a false light; and (4) misappropriation of a person's name or likeness ...Prosser's classification was adopted by the Restatement Second of Torts in sections 652A-652E. California common law has generally followed Prosser's classification of privacy interests as embodied in the Restatement." *Hill v. National Collegiate Athletic Assn.* (1994) 7 Cal.4th 1, 24. The tort of intrusion "encompasses unconsented-to physical intrusion into the home, hospital room or other place the privacy of which is legally recognized, as well as unwarranted sensory intrusions such as eavesdropping, wiretapping, and visual or photographic spying." *Shulman v. Group W Productions, Inc.* (1998) 18 Cal.4th 200, 230. The latter, are all intrusions that can occur with AI.

AI needs massive data. This makes it necessary to collect and sell data. Yet this also means that there is no privacy. Information is constantly recorded. Some AIs like Alexa, listen for key “wake up” words before recording. In November 2015, a murder occurred at the home of James Bates. The prosecutor asked Amazon for any recordings created by Alexa at the time of the death. Amazon refused stating that First Amendment and privacy implications were at stake and refused to comply. Elliott C. McLaughlin, *Suspect Oks Amazon to Hand Over Echo Recordings in Murder Case*, CNN (Apr. 26, 2017),

The element of intrusion “is not met when the plaintiff has merely been observed, or even photographed or recorded, in a public place. Rather, ‘the plaintiff must show the defendant penetrated some zone of physical or sensory privacy surrounding, or obtained unwanted access to data about, the plaintiff.’” *Sanders v. American Broadcasting Co.* (1999) 20 Cal.4th 907, 914—915. Accordingly, if the drone invasion is over private land then an invasion of privacy may be claimed.

While people expect privacy, they easily give it away without knowing (similar to invasion of privacy that occurs in a public space, where consent for invasion is assumed). To prove the point that most people do not read the terms and conditions of their various uses, the United Kingdom Purple company recently included a requirement for users of its free Wi-Fi to clean toilets for 1,000 hours; of the thousands who logged on, only one person read the terms and conditions in which this was included. Rachel Thompson, *22,000 People Accidentally Signed Up to Clean Toilets Because People Don’t Read Wi-Fi Terms*, Mashable (July 13, 2017), It is for this reason that the German government banned “Cayla,” an AI-enabled doll. The same applies to vehicle owners and users who must decide whether their vehicle data could be used.

In connection with AI, there can also be trespass issues. The “unlawful interference with possession of property.” Includes sound. Damages can be “annoyance and distress, including mental anguish, proximately caused by a trespass.” *Armitage v. Decker* (1990) 218 Cal.App.3d 887, 905. Is collection of data in regard to more intimate issues like, interface with sex toys/robots enabled with AI trespass? These robots purportedly need to collect data and have it stored, yet is that trespassing into a person’s private space?

#### **VIII. AI and Cybersecurity**

Cyber claims can include, gaining unauthorized access to a computer system or its data, theft and fraud, disruption such as, taking down of entire web sites or access, demand for ransom, and installation of viruses or malicious code. The more we rely on AI and connect all our devices, home security, even smart refrigerators and coffee makers, the more these machines know about our habits and the more exposed we are to theft/fraud.

Developers have been using game theory to develop algorithms (AI) about strategic defense from cyber attacks. The U.S. National Institute of Standards and Technology created standards for cryptography. Yet, if companies produce AI-enabled devices after which they go out of business, the security of their products will not be protected.

Moreover, we cannot monitor and discover all typos of attacks. For example, as we become more sophisticated, AI can change video to insert words into the mouth of the speaker that are entirely different from what was actually said. This type of attack can cause other people to change their behavior (for those who watched Terminator where the machine was able to simulate ordinary people by voice and appearance).

## **IX. Claims**

There are many aspects of claims that can use AI and some already do. From reviewing past claims to determining premiums, to reporting, evaluating coverage, hiring a lawyer, determining settlement value, and ultimately judges ruling on matters.

### **A. The Value of Settlement**

Putting all this in the context of claims, we know that AI is constantly being developed to underwrite accounts. Actuaries use information from past claims in the industry nationwide, and by the same business to determine rates, trends, risks, and pricing. Certain industries thereafter become harder to place like, surveyors and geotechnical engineers. Certain areas become uninsurable as well, Florida and Texas after the storms, California after the earthquakes.

Also, apparent, is that carriers are constantly looking for ways to save money. They include, use of TPAs that are being compensated based on the length of time a file is open, set fees (if the case resolves in phase 1, phase 2 etc.), an early assessment of the settlement value based on the cost of defense etc. Underwriters already use algorithms for their analysis so what prevents claim people from doing the same? While it can be claimed that the human element (credibility of a witness, sympathy etc.) must be taken into account when evaluating the value of a claim, other considerations can be easily imputed with a number value as well such as, jurisdiction (conservative jurisdiction may get a lower number), judge, plaintiffs' attorneys (those with reputation for tenacity or for taking cases to trial will get a higher value) and so forth. Then a number can be spit out, based on the probability of a defense verdict and the cost.

### **B. AI as a Neutral**

Clearly, our technology is ready to provide an evaluation of claims. Yet, are we ready to the use of AI as our judges? Hard AI does not have the human factor locked down. A computer cannot be sympathetic, mad, or even wish to punish a party. Nor can a computer come up with a creative solution that did not exist as an option. Often, we see that a case goes to trial with each party advocating for their best theory, only to find out that the trier of fact actually looked at something completely different. Can an AI judge do that? What about our constitution right to a jury of our peers? How can an AI machine simulate our peers with its diversity and history? Will there be a simulator for a woman, a Hispanic, an African American etc.? What about the Court of Appeal? How far can we go? Yet, even if computers get it right only 90% of the time, does that matter? Isn't it more efficient?

### **C. AI as Counsel**

A carrier owes a duty to its insured to provide a defense. Counsel must be competent, but does counsel need to be the best in the practice? Will an AI attorney be the best? Who will supervise counsel? Will this prevent mistakes that are typically associated with counsel such as, blowing the statute of limitation? Can an AI write a compelling brief that is emotional or that appeals to public policy?

While the suggestion that AI will be used as counsel seems far reaching, carriers already use AI to review billing statements based on certain buzz words. As we know, the reviewing software is not aware of the case facts, complexity nor the need to review a document for 3 hours instead of 3 minutes. Neither can the software evaluate that certain discovery must be handled by an attorney and not a paralegal. Is this process ethical, or does it cause a third party to improperly dictate how an attorney should handle a case?



It is one thing for AI to be used in sending out form letters and discovery it is quite another to have AI write letters to clients or communicate with three or four attorneys in an attempt to broker a settlement. The same can be said for AI in taking depositions or appearing at a mediation. Simply put, the more complex the legal task and the more out of the box thinking that is required to assist a client the less likely one can rely upon AI to perform such tasks.

#### **D. Damages/Causation**

How can we blame machines? Will AI dispose of all causation? When we lose a trial, we can appeal. When we do not like our attorney we can replace him/her. Yet, if an insured loses a case, how can the insured prove that but for his/her robo-lawyer the client would have successfully defended the lawsuit? Hopefully, using robo lawyers is very much in the distant future however, lawyers today often use AI to assist their practice, and will do so more and more. An attorney uses AI to do research. Can a client blame counsel for research done this way? Even if it is not the standard of care, how can a client prove that the AI missed something that a lawyer would not have missed?

Traditionally, the legal system's interactions with software like robotics only finds liability where the developer was negligent or could foresee harm. For example, Jones v. W + M Automation, Inc., a case from New York state in 2007, did not find the defendant liable where a robotic gantry loading system injured a worker, because the court found that the manufacturer had complied with regulations. The underlying question really is whether the AI should be liable if something goes wrong and someone gets hurts. Isn't that the natural order of things? People don't regulate non-human behavior, like animals or plants or other parts of nature. Bees aren't liable for stinging you. After considering the ability of the court system, the most likely reality is that the world will need to adopt a standard for AI where the manufacturers and developers agree to abide by general ethical guidelines, such as through a technical standard mandated by treaty or international regulation. And this standard will be applied only when it is foreseeable that the algorithms and data can cause harm.

#### **E. Limitations of AI**

While AI may be the wave of the future, personal interaction cannot be replaced with AI. If your client has a question about a memorandum that you submitted, AI may not be able to answer the question. If you are dealing with a complex case with multiple defendants, AI may not be able to identify which defendants should potentially pay toward a settlement as opposed to others. Can AI identify when a crucial witness is lying at a deposition just by looking at his/her facial expressions? What about if someone is seeking to make a compelling summary judgment argument that requires a detailed discussion on fact and expert depositions?

#### **X. AI and Other Professionals**

Many of us at the conference represent other professionals like doctors, lawyers, accountants, real estate brokers, and design professionals. AI also plays a part in each of these professions. Any professional is held to a standard of care that, at its most fundamental level, recognizes that the professional will exercise his or her judgment in the performance of the profession. That judgment is exercised in the context of past and ongoing learning, training, experience and the utilization of existing tools that assist the professional in exercising that judgment. The professional takes the facts and circumstances and weighs various conclusions regarding a course of action. In this context, AI tools can be extremely beneficial—particularly in the health care context—as they can speed analysis, expand the knowledge base of the provider and speed the review of vast amounts of data.

For liability and licensure purposes, however, the practitioner must never lose sight of his or her own responsibility and always exercise independent judgment. The practitioner must not delegate to the AI system the essential function of being a licensed professional and making the final call. While this may be a simple concept to express, as AI system functionality continues to improve, and expand on their clinical diagnostic and even treatment plan capabilities, it may be a harder concept to implement as time goes on.

Experience indicates that technology will continue in its development as a ubiquitous tool. We accept information technology into our professional and personal lives with ease. Studies indicate that younger generations adopt technology with ease and confidence; and demand that these technologies be made available to them in a variety of contexts. It appears that, unless there is a law against it—and even if there is—someone is going to build an app, and people will use it. The health care sector is not immune to this trend, even though the significant regulatory environment makes rapid and systemically valuable adoption difficult. This pressure for adoption will only increase as AI systems continue to develop, improve and demonstrate their effectiveness in the health care delivery setting.

Clearly, there is nothing wrong with relying on proven technology; but at what point do we, as a society, accept that proven technology can replace the judgment of a licensed professional? If an AI system proves to be more effective and reliable than a human physician at a certain function, then should we not rely on the AI system's judgment?

Regulation is largely about allocating responsibility among actors, and ensuring that certain actors have the requisite skills, knowledge, assets, qualifications or other protections in place given the nature of what they are doing. We regulate health care practitioners, financial institutions, insurers, lawyers, automobile salesmen, private investigators and others because we believe, as a society, that these actors—human or corporate—in exercising their judgment should be held to heightened standards. Accordingly, not only are these actors subject to potentially more exacting standards of care, but also they frequently must be licensed, demonstrate a certain financial stability or otherwise prove a degree of trustworthiness.

## **XI. Conclusion**

As a smart society we are constantly evolving. More and more we use AI in our respective practices. Laws may be drafted, and they may even change, as our use evolves. Surely AI makes our life easier, but the cost is cyberattacks and privacy. We accept those defaults for convenience, but how far will we tolerate them? We cannot stop this development process, but we can try to better plan ahead. Perhaps industry by industry. At the very least, we can, and should, self-regulate what is acceptable in each of our industries, with respect to the development and use of AI.