[Note: this blog post on artificial intelligence is intended as a 1000-word discussion of the impact of artificial intelligence on the practice of law]

Artificial Intelligence and the Legal Profession

by Robert S. Want, Esq.
March 20, 2019

Prepared for
Information Technology & Cyber Law Committee
New York City Bar Association

We constantly hear horror stories about how the increasing use of artificial intelligence (AI) will result in massive job losses in certain industrial sectors. This may or may not be the case, but one thing is certain – AI will in many areas have a transformative impact on work and how it is performed. And while AI may bring about the loss of jobs in certain industries, it is likely to spur job creation as well.

Here we will look at the impact of AI on one industry: the legal profession.

As in other industries, AI is beginning to transform the legal profession in many ways, and it is not uncommon to read alarming headlines predicting the eventual replacement of lawyers by AI-enabled automation. But, thus far, AI has generally served to augment what lawyers do, such as in in reviewing complex contracts, while freeing lawyers to focus on higher-level tasks such as advising clients, negotiating deals and appearing in court.

Despite the dire headlines, AI will not replace most lawyers' jobs, at least in the short term. But that is not to say there will not be fairly significant changes in the way the law is practiced. One in-depth study of the legal field estimates that 23% of a lawyer's job could be automated based on current technology.

What is Artificial Intelligence (AI)?

The term artificial intelligence has been around since the 1950s, and refers to the science of training computers to perform human-like tasks. Machine learning, often used synonymously with AI, is actually a subset of AI. The term machine learning applies to computers that use algorithms (mathematical formulas) to analyze data and glean insights from that data. This trains a machine to learn and perform difficult tasks, such as recognizing speech, identifying images or making predictions.

For example, in teaching a computer to play chess, the computer is fed data and an algorithm is developed that applies that data to the task of evaluating the many possible moves and selecting the most promising among them. Feedback is used to make the algorithm better. And the algorithm-feedback cycle is repeated over and over, providing increasing accuracy and performance. (*continued on next page*)

How AI Is Currently Being Used in the Legal Profession

Whenever an industry faces new technology, questions arise regarding how that technology will disrupt daily operations and the careers of those involved. The legal profession is no exception.

Forbes magazine has identified several areas where AI is beginning to transform the legal profession:

Review documents and legal research

Document review (involving paper documents, emails, text messages, social media posts) can be a major cost factor in litigation. AI-powered software improves the efficiency of document analysis, with machines reviewing documents and flagging them as relevant to a particular case. Machines are much faster at sorting through documents than humans, and thus can help reduce the load on the human workforce by forwarding on only documents that are questionable rather than requiring humans to review each and every one of them.

In legal research, lawyers have been using automated systems – powered by AI software – for so long they take it for granted, often not realizing that this is AI in action. Most practitioners today have forgotten (or never knew) what it was like to go through the laborious process of looking up headnote numbers in paper volumes. The capabilities of AI in legal research continues to improve, and in the process has taken legal research to the next level.

Help perform due diligence

In law offices around the world, legal support professionals are kept busy conducting due diligence to uncover background information on behalf of their clients. This work involves confirming facts and figures, and thoroughly evaluating the decisions in prior cases to effectively offer advice to their clients. This can be a gigantic task, and AI tools can help legal support staff to conduct their due diligence more efficiently and with more accuracy, since this work is often tedious and time consuming for humans.

Contract review and management

A big portion of work law firms do involves reviewing contracts to identify risks and issues with how contracts are written that could have negative impacts for their clients. Lawyers redline items, edit contracts and counsel clients as to whether they should sign or not and help clients negotiate better terms. AI can help analyze contracts in bulk as well as on an individual basis, doing the job quicker and with fewer errors than humans.

Predicting Results

Lawyers are often called upon to predict how a case is likely to turn out. They must ask themselves: If I bring this case, how likely is it that I'll win -- and how much will it cost? Also, a lawyer must consider settling the case (or taking a plea), or risking full blown, and expensive, litigation. (*continued on next page*)

Experienced lawyers can sometimes make good guesses on these matters, because they have more years of data to work with. But no lawyer has complete knowledge of all the relevant data. And this is where AI comes in. Being able to evaluate mountains of data, AI can often lead to better decisions than even the most experienced attorney.

How Will AI Affect the Legal Profession?

Though it hasn't happened yet, AI will most certainly have a dramatic impact on the law and the way it is practiced. But changes are more likely to occur at an evolutionary pace rather than a revolutionary one.

AI adoption by major law firms has started to pick up pace, and midsize and small firms are well advised to get into the action as well. Incorporation of AI into a law firm's systems and operations is a gradual, learning process, so early users will have a major advantage over firms that lag in adopting the technology.

Those who do not get on the AI bandwagon risk being left behind, as firms that fail to take advantage of AI-powered efficiencies may lag in competing with those that do.