The Bots Are Coming! And They Are Here to Help

In science fiction movies and television, artificial intelligence (AI) is personified. There is Data, the benevolent android in Star Trek: The Next Generation. There is WALL-E, an adorable robot of the future in the Pixar movie of the same name. These human-like machines, though ever helpful, are a source of comic relief in their inability to fully comprehend what it means to be human.

On the other side of the coin, AI has been presented as cold, calculating, and self-aware. Think of HAL 9000, from 2001: A Space Odyssey, or Skynet, from the Terminator franchise.

As AI technology leaves the realm of science fiction, we have come to realize that AI is neither wholly benign nor wholly malevolent. The character William in the new Netflix series Another Life strikes a balance. William, a holographic projection of the spaceship's central computer, runs the spaceship. He is benevolent, providing for all the life support requirements of the crew, along with a little comic relief. Yet, when the spaceship is damaged, William malfunctions. Sensing the failure of the mission, William executes a "return home" command that severs the ship, leaving half of the crew to die. Although AI can be helpful, it can also be dangerous.

AI Is No Longer Science Fiction
Computers are essentially fast calculators that run based on pre-programmed rules, or software, and give predictable responses. Run the same program with the same inputs, and you will get the same responses. The difference with AI is that the programmer stands on the sidelines as coach and trainer. The AI system can learn. With a sufficiently large dataset, an AI system can classify masses of unstructured data and understand how to respond to inputs that were never programmed into that software. Instead of filling out fields on a computer screen, you can chat with the AI system, and it will figure out what you want to do.

A hallmark of AI systems is the use of natural language as a means of communication. An AI system, typically a chatbot (or bot), receives questions in plain written or spoken English and converts them into instructions, to which it responds. The responses, likewise, are in plain English with proper grammar. When the bot asks a question, it should also be able to understand the answer, validate the data, and, if uncertain, ask the user for clarification.

AI has become a "platform offering" that can be licensed and leased. The platform can be made available to anyone with a computer, a smartphone, or even plain old telephone service. There are currently affordable AI offerings from Google, Amazon, Microsoft, and IBM, with dozens of startups vying for attention with more industry-specific offerings. Google has an open-source machine learning platform called TensorFlow (ai.google). With Microsoft, you can spin up your own AI private engine on Azure (microsoft.com/ai). With Amazon Web Services, you can build an AI-driven application by choosing pre-trained AI or building your own with SageMaker (aws.amazon.com/machine-learning/ai-services/). IBM has made available the Watson engine, famous for beating Jeopardy! champion Ken Jennings (ibm.com/watson).

Applications of AI for Real Estate Attorneys: Contract Review
It was only a matter of time before AI became a useful tool for real estate lawyers. At present, AI has found a niche: contract review and document drafting. For a real estate attorney, the application of AI to contract review provides a cost-effective way to analyze thousands of contracts. AI tools are very good at text classification. The lawyer creates (or licenses) a data model that contains classifications. Using this model, the AI system extracts relevant content from thousands of documents and provides the results in a report or database.

Document management systems like NetDocuments (netdocuments.com) have incorporated AI tools into their platform to automatically extract "entity information," such as names of persons and companies, key dates, and financial terms, which can then be incorporated into global full-text and profile-based searches. With Kira Systems's automated contract analysis engine (kirasystems.com), you can obtain a more structured review of documents stored in your NetDocuments DMS. After its acquisition of RAVN Systems in 2017, iManage entered the AI marketplace (imanage.com/product/ravn/). Both Kira and RAVN are helpful to real estate attorneys who need to abstract and understand thousands of lease agreements as part of due diligence review or corporate acquisitions.
In theory, you could feed thousands of leases into an AI engine and then use the system to draft a new lease. In the area of contract drafting, however, AI is currently lagging. AI systems do a poor job of creating content. Instead, what passes for AI in contract drafting are products like LawGeex (lawgeex.com) and Contract Analytics by Legal Robot (legalrobot.com), which review documents and score them for conformity to an approved legal model.

**Enhanced Drafting with Wizebot and Nymbot**

Online document assembly engines have been available for many years. They follow the traditional software model: using pre-programmed document templates, with a decision tree of questions and answers, they produce highly customized documents in seconds. In the past few years, these systems have become affordable for lawyers who wish to use their own legal content and make it available to their clients through a public website. XpressDox (xpressdox.com/server) offers a hosted server starting at $50/month per user for as few as two users. There are similar offerings from AbacusNext (hotdocs.com/products/hotdocs-advance) and Thomson Reuters (legal.thomsonreuters.com/en/products/contract-express), respectively HotDocs Advance and Contract Express.

I recently saw a demonstration by Braam Kruger, a director of Nymbiz (nymbiz.co.za), of two chatbots, one named Wizebot (wizebot.ai) and the other named Nymbot (nymbot.ai). Wizebot is a virtual advisor that is powered by AI. It presents a more intelligent way of running an intake interview, by allowing the user to “chat” with a specialist while the user is answering the questions in the document assembly interview. Wizebot started as a chat box on a web page. As it answered my questions, Wizebot determined that I need to create a promissory note. Wizebot gave me a link, which then launched an XpressDox interview on the left side of my screen. Wizebot remained active on the right side of the screen, ready to answer any questions I might have.

As I proceeded through the interview, I asked for help from Wizebot, my virtual advisor. Wizebot knew what question I was on and ranked the answers related to that question. But I could also ask more general questions about the purpose and use of the template or the area of law. Afterwards, Kruger showed me how a template developer could review user questions that “stump” the bot and train it to answer them.

Wizebot is passive, waiting for a user to ask for help or an explanation. By contrast, Nymbot is scripted for a particular purpose. Nymbot is a generation ahead of Wizebot. My Nymbot demo was designed to create a non-disclosure agreement (NDA). Underneath the system is an XpressDox template. However, instead of an XpressDox online interview, all we had was the bot on a website. The bot could have been running in a browser on a phone. It could have been initiated in Facebook Messenger and run as a Facebook app.

This bot was designed to determine what type of NDA a user wished to draft, to require the user to enter data on authenticate all the parties to the agreement, and then to present the user with a finished agreement. Nymbot guided the users with questions in a natural flow, even allowing the user to go back and correct his answers. The answers were validated against a public database, including corrections of spelling and address, which could then be approved or rejected by the user. Chatbots are already in use on several law firm websites as a marketing tool. Nymbiz leverages that technology to go beyond new client acquisition into the delivery of legal document production services.

**Where AI Can Go Next**

At some point in the future, AI will be used to develop document assembly templates. You will be able to take a model loan agreement, point the AI system to a collection of executed loan agreements, and ask the system to define all the merge fields that are transaction-specific. The AI system will then give you a list of alternative paragraphs or phrases for each section with their usage criteria. From this report, a developer will be able to refine the document assembly rules and create a workable template faster.

Other uses could include use by building inspectors. As the inspector identifies issues in different parts of a building, he could describe them on his cellphone to a bot, and the bot could prompt follow-up questions and even ask the inspector to take a picture. From the descriptions, the system can compile a comprehensive report. Rental leasing could also be powered by AI. Student off-campus housing could be transformed by an AI engine that determines what type of apartment the student is seeking and recommends matches, based on different criteria. If there is a match, the AI system could qualify the lessee, draft the lease agreement, and arrange for contract execution, all within Facebook messenger.

**On the Horizon**

In the arena of law, bots present the potential for a more natural interaction with clients and potential customers. Bots have personalities; they can engage customers in a way that doesn’t require a 24/7 customer service operating team. If you are a receptionist or a customer service representative, much of your job will soon be outsourced to the bots. The result of the AI will be that you need fewer lawyers and paralegals to do due diligence and contract analysis. If you own a law firm or a company, this is good news. If you work for a law firm or company, you may need to find a different area of specialization or become a bot trainer who embraces the technology.

There will be a drive to make contracts clearer and more consistent. Creativity (and deviousness) in contract drafting will be replaced by consistency and transparency. The real-time contract review engines will flag problematic contracts before they go out the door. Website bots will encourage visitors to linger on a website and fill out a contact request form, or maybe shepherd prospective clients through a pay wall and into an online document assembly system.

The bots are coming, AI engines will not destroy mankind, but they will certainly force lawyers to make some adjustments.