How Will Watson's Children Impact the Future of Law Practice?

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One night in 2011, a lot of TV viewers (including the authors) were glued to the screen watching *Jeopardy*. Three episodes made television and science history as IBM's Watson, a computer with artificial intelligence, took on two of the best players *Jeopardy* had ever seen.

Ken Jennings had the longest unbeaten run at 74 appearances and Brad Rutter had won the largest prize - $3.25 million.

Man vs. Machine

It was a fascinating night. Watson was in a back room with his answers piped into the studio. He couldn't be in the room because he consisted of ten racks of ten Power 750 servers and his cooling system . . . well . . . roared a bit. He was represented at the podium by an avatar of IBM's Smarter Planet logo, whose moving lines would turn green when he was right and orange when he was wrong.

Watson wasn't perfect – he was a little shaky on his Harry Potter knowledge but the upstart player rattled his human counterparts almost from the beginning. In the end, Watson decisively won the game with $77,146, leaving Rutter and Jennings eating his dust with $21,600 and $24,000 respectively. As the grand winner, Watson received the first place prize of $1 million.

Jennings, knowing defeat was certain, appended his final answer with the words "I for one welcome our new computer overlords."

Author Nelson was transfixed and remarked to author Simek "They're going to bring Watson to the legal sector one day – and it's going to play hell with the practice of law." Author Simek agreed – and this story and our thoughts about it have been simmering ever since.

IBM's Investment in Business Sectors

Watson has many children now, in many sectors. Some bear his name and some do not. If you scan IBM's Watson website, you'll see that Watson has moved into

social services, the health industry, data analytics, wearable technology, the banking sector – and even fantasy football.

IBM certainly knows that Watson's progeny will make Big Blue a fortune and has sunk a lot of money into expanding Watson's capabilities. It took five years to build Watson before he wowed audiences around the globe on *Jeopardy*. Four years later, we began to see Watson's children in many arenas. In 2011, the Watson business unit was created, joined by 107 Watson staffers.

Watson's entourage knew from the beginning that they would tackle the healthcare industry first, but they correctly judged that any information-intensive industry (and yes, that means the legal industry) was ripe for Watson's talents. And the team moved fast – in the first year, Watson became 240% faster. Once the size of a master bedroom, Watson was now 18 inches wide, 36 inches deep and weighed 100 pounds.

The healthcare industry began to use Watson as a tool to diagnose and treat patients. There were glitches, some of them comical. After Watson was "fed" the Urban Dictionary, he answered one researcher's query with the word "Bulls***." The dictionary was quickly removed so that Watson would display the right business behavior.

Where Watson was wrong, medical specialists corrected him. He learned – again and again. For those familiar with technology-assisted review in e-discovery, you will recognize the "wash, rinse, repeat" nature of teaching machines.

Citi Bank began to use Watson to improve customer experiences and to let Watson decide whether potential customers were likely to repay loans and to ferret out probable cases of fraud or identify theft. And those were the early days.

Watson's Son Ross

At its core, Watson is a question answering system. He (how easy it is to personify a machine!) takes a question expressed in everyday language, seeks to understand the question in detail, and then returns a precise answer to the question.

The first time we learned Watson had a lawyer son was when we read news reports that IBM was moving into the legal vertical. The stories reported on the Watson University Competition, at which a group of University of Toronto

students built a legal application on top of the Watson platform. The "son of Watson" was called "Ross, the super intelligent attorney". The students placed second in the IBM contest.

IBM supplied the Ross team with continued access to Watson's cloud platform. The students created Ross by loading a huge volume of public legal documents and used the subject matter experts on their team to calibrate Watson to provide useful answers on the documents. What makes Watson so powerful is its ability to learn - so the more lawyers use it, the better it gets.

Ross, by taking advantage of the natural language and cognitive computing platform that Watson offers, can predict the outcome of court cases with a confidence rating, assess legal precedents, and suggest readings to prepare for cases. Ross, who his creators say has "gone to law school" is now being funded by Dentons, a global law conglomerate with over 6,000 lawyers. As they put it, Ross has landed a job – and they expect he "will become a senior partner in every single practice area."

You have to start somewhere. As of August 2015, Ross was learning everything there is to know about U.S. bankruptcy law. The former students are now the entrepreneurs behind Ross Intelligence. And Ross is being piloted in a number of elite law firms.

As for Dentons, it has an undisclosed investment in Ross Intelligence Inc. The company will make use of the law firm's NextLaw Labs, a project aimed at developing new technology for the legal industry. Dentons also announced a partnership with IBM to provide legal startups (like Ross Intelligence) working within NextLaw Labs access to a technology platform using IBM's cloud computing resources. Y Combinator also has an undisclosed investment in Ross Intelligence.

Pity the Paralegals and the Lawyers?

Recently, lawyer/blogger Lee Rosen wrote "Paralegals have largely been replaced by technology. If you're still using them, then you should be carefully examining their function and looking at tech options for solving the problems the paralegals are solving now. Bring in the technology and dispatch the paralegals."

Lee is talking about case management, document management and other currently available tech tools. But if you take Lee's position to the future, Watson would largely eliminate the need for paralegals.

Without question, Watson can replace some lawyers. Who needs an army of associates to do legal research when you can just ask Watson? On the other side of the equation, there are lawyers who are irreplaceable because of who and what they know and their expertise in "custom" law – negotiating, strategic planning, litigation skills, etc.

Scary Stuff from the Altman Weil 2015 "Law Firms in Transition" Survey

Hold on to your hats because the stats from this survey may blow you away. Responses were received from 320 law firms including 47% of the 250 largest U.S. law firms. The survey indicates clearly that legal leaders increasingly anticipate that work handled by human beings in 2015 will inevitably be handed over to intelligent systems.

When respondents were asked whether they could envision a law-centric artificial intelligence system replacing workers in their offices within five to ten years, 47 percent said paralegals could be replaced by AI in that time, 35 percent said first year associate work could be replaced, and 19.5 percent indicated that intelligent systems would be able to handle work done by third year associates within that time frame.

Leaders still believe senior associates, those with four to six years of experience, will remain mostly irreplaceable. Only 6.84 percent agreed that their work could be replaced within five to ten years.

Perhaps the most telling stat is that the percentage of leaders who believed "computers will never replace human practitioners" has dropped dramatically from 46 percent in 2011, to only 20.3 percent in 2015.

Final Thoughts

So yes, Ross (and perhaps his own progeny) is a threat to lawyers. We see Ross as a replacement for a lot of paralegals and junior associates over time, particularly if he masters form-based lawyering and document review, which he certainly will. And if Ross should go outside of law firms, a lot of people with garden variety legal problems are going to question whether they need human lawyers at all.

And here we all were, worrying about LegalZoom . . . we may have been focused on the wrong horizon entirely.