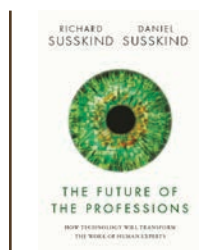# The Future of the Professions:

How technology will transform the work of human experts

By Richard Susskind and Daniel Susskind
Oxford University Press, 2015

For more than 30 years Richard Susskind has been a thought leader on the future of the legal profession.

This is despite the Law Society of England and Wales saying he did not understand confidentiality and was bringing the legal profession into disrepute by suggesting that email would become the predominant way lawyers and their clients would communicate in his 1996 book, *The Future of Law*.

Susskind's most recent book, *The Future of the Professions: How technology will transform the work of human experts,* is a must read for anyone who wants to gain insights into where the legal profession is going. The book was co-written with his son, Daniel Susskind, an economics professor at Oxford. Nothing else I have read more clearly and convincingly elucidates the future of legal services and how technology will transform the traditional practice of law.

The idea for the book came from the Susskinds' observations that most professions are experiencing significant changes and challenges very similar to those the legal profession is facing. To investigate this notion they looked at eight professions in detail, conducted over 100 interviews and reviewed more than 800 sources. This lead them to a very basic question: Why do we have the professions?

The answer is simple. As individuals in a print-based industrial society we have limited expertise on many topics. Professionals step in when required to provide, what the Susskinds call, "practical expertise" – the knowledge, experience, and know-how the majority of humankind doesn't have. This

is part of a "grand bargain" wherein each profession exclusively provides a specific expertise to members of the public. In return for that exclusivity, society expects that the professions will make their practical expertise available in a manner that is affordable, accessible and reliable.

But times are changing. We are moving from a print-based industrial society to an internet and technology-based society. Specialized information has become much more widely available. And many professions, including the legal profession, aren't holding up their part of the grand bargain. Many people can't access the professional services they need because they are unaffordable, inaccessible, or just not available. These problems beg the next question the Susskinds ask: Are there new ways to organize the professions to better share the expertise we all need access to? Their answer is a resounding, "yes."

The Susskinds explain how a fundamental transformation in patterns and trends (in particular, decomposition and routinization) are occurring in most professions. Complex work is being broken down into its composite parts. Even the most complex activities are usually comprised of many simpler steps. The parts that don't need to be hand-crafted can be rountinized and done by non-professionals or even machines.

They then describe how technology is enabling these changes. There has been an exponential growth in processing power, storage and bandwidth. We have increasingly capable machines that are becoming more pervasive, smartphones and tablets are everywhere, and the "Internet of Things" will bring even more connections between devices and humans. Technology is enabling a shift from one-to-one service to one-to-many service in many professions.

The Susskinds highlight examples of where these changes can already be seen. Millions of people get educational content from Khan Academy and medical information

from WebMD®. The Huffington Post® has more readers than the New York Times. Sixty million disputes are resolved annually through Ebay®'s eMediation. Legalzoom® is probably the best known legal brand in the U.S. LexMachina™ uses a statistical analysis of more than one hundred thousand court cases to give more accurate predictions of success in patent litigation than any experienced lawyer can. IBM's Watson® has mastered Jeopardy!® and chess, and is working on its legal expertise. Self-driving cars will be very common within a decade or so. Computers can now detect human emotions.

Two futures and seven models ahead

The Susskinds see radical change coming and they outline two distinct futures for the professions. One future will see some continue to work in traditional ways. The other future – the one that will bring fundamental changes – will see increasingly capable machines transform the way practical expertise is shared amongst members of society. This will displace the work that is currently done in traditional ways by many professions. For now, these two futures will operate in parallel, but in the longer run – perhaps in two to three decades – the Susskinds see the second one as dominating and leading to a gradual dismantling of the traditional professions as we know them today.

The authors propose seven different models for the production and distribution of practical expertise. While their models map more neatly onto some professions than others, it doesn't take much imagination to see that these models will be taken up across many professions, including the legal profession. The models they propose are as follows:

1. The traditional model: This model will be very familiar to most lawyers as it is the way we currently do business. That is, human professional providers

undertaking their work, usually by way of real time, face-to-face interaction that is rewarded according to the amount of time spent. They will use technology for greater efficiencies to streamline and optimize traditional tasks and work.

2. The networked experts model: This model also involves professional human providers, but they will cluster, more or less informally, via online virtual teams rather than physical organizations. They will offer multi-disciplinary services (e.g. two or more of legal, accounting, regulatory, environmental, etc.).

3. The para-professional model: This model is similar to the traditional model in that services are provided by way of consultation, one human being with another. However, the provider here is not a specialist, but rather a person with more rudimentary training in a discipline. These para-professionals will be supported by procedures and systems that allow them to do some parts of the work that historically was done by a human expert.

4. The knowledge engineering model: In this model, knowledge in a given area of expertise is incorporated into systems that are made available to less expert or lay people as an online self-help service. Basic legal services and advice are already being offered this way in many jurisdictions.

5. The communities of experience model: In this model, evolving bodies of practical expertise are crowd-sourced, that is, built-up through the contributions of past recipients of professional service or of non-experts who have managed to sort out problems for themselves. Wikipedia operates in this manner.

6. The embedded knowledge model: The sixth model involves the distillation of practical expertise into some form that can be built into machines, systems, processes, work practices or physical objects. An example of this would be an HVAC system that monitors and controls air quality to meet regulatory requirements.

7. The machine-generated model: In this model, practical expertise is originated by machines, not humans. While the machine-generated model will involve big data, artificial intelligence and technologies yet to be invented, it remains to be seen how this content will be used or distributed.

Can a machine really do my job?

No doubt some lawyers will find doom and gloom in the Susskinds' predictions. Indeed they devote an entire chapter to discussing the objections and anxieties that they have often heard from members of the professions. They argue the status quo can't continue because many professions are not upholding the grand bargain. And while the Susskinds see a steady decline in the demand for human professionals in the longer term, they think a great deal of work has to be done by humans in the near term. They see the 2020's as a decade of redeployment, not unemployment. While machines will take over some tasks, there will be new tasks to be done and the Susskinds specifically identify 12 new roles that humans will need to fulfil. The Susskinds feel there are many exciting opportunities to make legal services more accessible and affordable for people who need help. They remind lawyers to think about the future of the professions from the point of view of the recipients of professional work.

The Susskinds also directly address the skeptics who say there are some tasks that only humans can do. They say that routine tasks, even extremely complex ones, can be done by rules-based machines.

And while lawyers like to think otherwise, much of what lawyers do is actually fairly routine. On the human side, it is creativity, judgment and empathy that are involved in non-routine tasks. They suggest that it is a mistake to think non-routine tasks can't also be done by machines. We should not assume that people will always be the best options for completing the tasks that professionals currently perform. Indeed, Lex Machina is an example where machines can give answers to legal questions more quickly and accurately than humans can, and their logic or reasoning process may look completely different from how a human would tackle a problem. The Susskinds caution us not to let our imaginations limit our thoughts as to what might come to be.

Moral questions

The Susskinds also discuss some of the moral questions arising from the fact that machines will be making decisions that once were the sole domain of humans. They ask if there are tasks that shouldn't be handled by a machine. Passing a life sentence? Turning off life support? They discuss some interesting and challenging ethics questions.

And in the really big picture, the Susskinds also raise the question of who should ultimately own and control tomorrow's practical expertise. Technology companies? They will want to be paid for it. Governments or charitable organizations? They will want it made available for free. They suggest that the practice expertise of the professions is so vital that is should really be part of an information commons held by and for the benefit of all humankind.

A must-read book

The Susskinds started out to write a book on the future of the professions. They ended up writing about the future of practice expertise and how to share it in society. Their ideas will challenge those who want to continue to do business the old way, and they make it clear we all must find ways to rise to the challenges and opportunities of providing legal services in new and innovative ways. *The Future of the Professions* is a must read for anyone seeking a clearer picture of the future of legal services. And if you are not inclined to read this book, I strongly suggest you visit YouTube and invest an hour of your time to watch the presentation the authors gave at Oxford on November 4, 2015. I think it will serve to pique your interest in the future of the legal profession, and will convince you, you really do need to read the Susskinds' book. ■

Dan Pinnington is Vice-President, Claims Prevention and Stakeholder Relations at LawPRO.