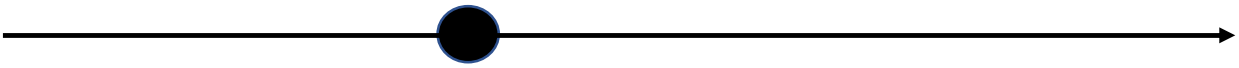
Artificial intelligence in law: Our Changing Profession
By Hunter Watkin and Hana Lee

What is AI?

AI describes the development of systems that simulate human intelligence.[1] Data is used to develop algorithms and rules that combine to create digital products. Once sufficiently sophisticated and reliable, these products are deployed to businesses, including law firms.

AI has been categorised into three types based on how closely they can mimic and improve on human capacities. These are:

Narrow	**Broad**	**General**
This is the form of AI humans are currently mastering. This is where a specific problem is identified and solved by AI. For example: translating a language. It relies on significant human intervention.	Involves taking more complex, human type problems and using these to developed nuanced solutions.	The marked difference between now and the era of General AI is that it's performance will no longer be tethered to human intervention. AI would be able to make independent iterations and seamlessly share information between machines.



We are here

Relevance to law firms

As an industry particularly sensitive to differences in efficient service delivery, firms that fail to adopt innovative tools risk losing their competitive edge. AI has two fundamentally exceptional capabilities: a foolproof memory and an ability to process and analyse data at superhuman speed. When these attributes combine, humans simply cannot compete.

What do law firms currently use?

The most prominent AI used by law firm's is to query databases and discover what might in the past have been deemed a 'needle in a haystack'. Programs are trained by human intervention to understand different elements of a document such as titles, synopses and conclusions. Once recognised, the AI remembers and automatically recalls them in the future. A key limitation is of course that relevance and accuracy must be vetted by humans, often in the form of marking whether documents are relevant or irrelevant. This reduces the trust lawyers afford the technology, as well as the time and labour-saving benefits the systems ostensibly provide. As the products become smarter, they can indeed get closer to answering questions like, of all the information available, how likely are you to find the information you are looking for? Indeed, this allows lawyers to better leverage previously underutilised and less accessible expertise, however, this is not without demanding regular human intervention.

Interactions between AI

The languages with which machine learning has developed are of course, different. Therefore, different systems cannot easily communicate with one another. Furthermore, AI products are tailored to the businesses they service. Considered together, this means that intelligence is difficult to transfer to new firms with different digital systems and real-world operating needs. Two digital products that serve very similar purposes and function in analogous ways might struggle to ingest and interpret very relevant information due to different coding languages. In this context, a human remains far more flexible. For example, we can immediately transfer our operational understandings from a job working in construction to a job working in hospitality. Currently, it is perhaps the naivety of these technologies that demonstrates the most distinguishable buffer between AI machines and their human counterparts.

Broad AI: the (not too distant) future

Firms like IBM are currently developing AI that can listen and react dynamically to the human voice. An emerging product, 'Project Debater', ingests, processes, and responds to speech with coherent arguments. Competing against a

[1] IBM, *Artificial Intelligence* (Website, 22 July 2020) https://www.ibm.com/design/ai/basics/ai/.

world class human debater, the product made impressive submissions and rebuttals on a topic involving complex economic, social, moral and political considerations.[2]

The product could particularly assist with non-adversarial practice. By listening to a discussion between practitioners, it could raise important considerations, correct errors and suggest informed solutions at speed. This tool could help facilitate more just and effective dispute resolution and to help lawyers alleviate risks of breaching their ethical obligations under the *Legal Profession Uniform Law Australian Solicitors Conduct Rules 2015* (Vic).[3]

Is AI replacing lawyers?

In the Federal Court, divorcees have in fact preferred engaging with AI in place of lawyers, finding it is less confrontational. Information provided by clients is pooled to help predict asset splits and allow clients to weigh likely outcomes against the costs of proceedings.[4]

However, AI is merely assisting with, rather than making these important legal decisions. Practitioners are hesitant to rely on this sort of predictive analytics as it raises issues of ethics and liability around who is responsible for these decisions and whether they can be appealed. Further, the information that precipitates these findings, particularly in the context of divorce, is necessarily confidential.

Bias

In the context of divorce proceedings, research shows that females are likely to settle divorce cases quicker and receive worse financial outcomes where domestic violence has occurred.[5] Questions might arise as to how AI can cater for these critical contextual considerations if it were to service such a client. A partial solution might be in emerging analytics that monitors historical outcomes to recognise the potential existence of bias or skewed results, without logical explanation. Where two identical records, in every way except gender for example, yield materially different results, AI can bring this to the attention of practitioners for review. However, the fact that it might be a catalyst for change and reform does not necessarily address the issue of servicing a client's present needs, in a way that demands a critical degree of human and emotional intelligence.

Conclusion

AI is not yet entrusted with making conscientious and unbiased decisions. For now, it serves to enhance the speed, quality and accuracy of advice lawyers are able to give. As the role of AI expands, practitioners must have a sound understanding of how machines are informed and 'think' to ensure that their integration into practice alleviates rather than invites risks.

If you are interested in emerging legal technology and want to join a network of like-minded professionals, reach out to Hana Lee, the Co-Chair of the Law Institute of Victoria's Technology and Innovation Section at hana@fortyfourdegrees.com.au.

[2] IntelligenceSquared Debates, 'IBM Project Debater' (YouTube, 26 February 2019) https://www.youtube.com/watch?v=3_yy0dnIc58&t=1362s.
[3] r 4.1.3: A solicitor must deliver services competently, diligently and as promptly as reasonably possible.
[4] Ry Crozier, 'Fed Court turns to AI to predict asset splits after relationship breakdown', *IT News* (Article, 23 May 2019) https://www.itnews.com.au/news/fed-court-turns-to-ai-to-predict-asset-split-after-relationship-breakdown-525587.
[5] Emma Smallwood, 'Stepping Stones: Legal Barriers to Economic Equality After Family Violence' (Report, Women's Legal Service Victoria, September 2015) 41.