

# Leadership buoy

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# iCyborg lawyers

With artificial intelligence already underway, the iCyborg lawyer is near, suggests Chrissie Lightfoot

Our future and the role of lawyers within it is going to change over the next 35 years. As we witness new players entering the market and existing firms capitalising on the best of what technology has to offer, we are transitioning toward 'two faces of the law'.

Two dominant umbrella business models have come to the fore in relation to what, where, why, when and how we serve our clients: face-to-face and interface. In future, who will be doing the serving may be rather different as well.

We're already experiencing the disaggregation of legal services in relation to LPO and commoditisation. Going forward, it is clear that anything that can be commoditised and outsourced will be commoditised and outsourced.

Robert Millard, senior strategy manager at Linklaters, recently noted that legal provision, productivity and primary skills now fall into four areas:

1. IT-based – commoditised;
2. artificial intelligence (AI);
3. advocacy; and
4. judgement.

AI can be defined as the intelligence of machines, where an intelligent agent is a system that perceives its environment and takes actions that maximise its chances of success.

Arguably, the first two areas above have superseded the 'grunt work' traditionally carried out by trainees and junior lawyers. It is now the realm of paralegals and/or junior lawyers overseeing and utilising the 'machine system' in order to maximise productivity. The last two areas

are associated more with the associate level and upwards.

Accordingly, we are transiting toward three kinds of lawyer:

1. unemployed lawyer;
2. support worker to the first two areas – there is no need to be a qualified lawyer; and
3. super lawyer with a high-end intelligence quotient (IQ) and emotional quotient or intelligence (EQ/EI) to provide work in the second two areas.

## My dear Watson

Earlier this year, IBM revealed that it had developed a new technology which could be a real boon to support legal research and advocacy. The machine, Watson, is aptly named after the company's first chief executive, Tom Watson, Jr.

The machine possesses two kinds of AI. Watson understands questions that are asked of it and also learns and improves with practice. Accordingly, Watson is capable of understanding and responding to esoteric queries posed in everyday language with unprecedented speed, accuracy and confidence.

Watson represents a major leap ahead in the ability of computers to rapidly analyse information, identify patterns, gain critical insights and enhance decision making.

Deep QA (the technology underlying Watson) will be useful in two ways: for gathering facts and identifying ideas when building legal arguments. Watson may even be able to provide near real-time assistance in the courtroom. If a witness

says something that doesn't seem credible, an associate could check it for accuracy there and then.

What does this mean for the legal profession? Watson is evolving IT and AI and (arguably) nudging into advocacy. Whether preparing for litigation, protecting intellectual property, writing contracts or negotiating an acquisition, if a question is posed to Watson, Deep QA can analyse hundreds of millions of pages of content and mine them for facts and conclusions in milliseconds.

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**“Whether as a buyer or seller of legal services, virtual reality will pervade our legal world”**

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Furthermore, IBM is building the world's biggest data drive, which promises to power complex simulation models. The system could enable detailed simulations of real-world phenomena or comfortably backup 60 copies of the web.

IBM notes that Deep QA won't ever replace lawyers – after all, the essence of good lawyering is mature and sound reasoning (advocacy and judgement). It's doubtful that a machine can match the knowledge and ability to reason of a smart, well-educated, deeply experienced human being possessing high EQ (wisdom). But the technology can, at present, extend lawyers' capabilities and help them to perform better.

**“iCyborg lawyers will tap into evolved Watson-type AI technology, utilising either non-invasive or invasive brain-computer interfaces”**



### **Humanisation of lawyers**

AI is here, now. But, it could evolve in an extraordinary way in the next two decades to the extent that advocacy and judgement will also become the realm of the machine in relation to IQ.

Accordingly, a key differentiator in the successful evolution of lawyers and in the alignment of machines with man will be the ‘humanisation’ of lawyers.

As we transit even more in the years to come and as AI evolves further within legal

provision and service, our ability to simply be human (a social creature) and naked (our authentic self with lawyerly intellectual capital, empathy, passion and high EQ/EI), will become even more important and valuable.

We develop our EQ through increased reflection, leading to improved self awareness. In essence, it’s wisdom. It’s the opposite of IQ, which is all about academic ability and knowledge. Apparently, we reach our IQ peak at the

age of 19 to 20 and reach our EQ peak at the age of 40 to 50.

In a deeply fragmented legal world, it will be our EQ which differentiates us where top-level results are concerned. EQ is externalised in soft skills – communication, empathy, body language – which are frequently used in business development and client relationships.

Berwin Leighton Paisner’s remuneration committee was recently told to put more focus on soft factors

– intangible qualities like business development and client courting – when deciding an equity partner's pay. Several other firms, including Nabarro, have taken a similar approach. In time, most law firms will undoubtedly follow suit.

marginalise us and render law firms mostly irrelevant”.

Furlong also noted that “lawyers are smart, knowledgeable, creative and trustworthy professionals... The market won't abandon them... but it

However, non-invasive BCIs, where electrodes sit on the scalp instead of burrowing through it, are now finally becoming a realistic alternative to the complicated surgical procedure that implants necessitate. Controlling things via thought alone is rapidly becoming reality.

Whether as a buyer or seller of legal services, virtual reality will pervade our legal world. It will be used for simulating negotiation scenarios and testing arguments and reasoning in preparation for court proceedings, among other applications no doubt.

As technology evolves, the iCyborg lawyer will make his debut. A cyborg is simply a being with both biological and artificial parts – electronic, mechanical or robotic. The term cyborg is often applied to those organisms which use technology to repair or overcome their physical and mental constraints: including artificial limbs and hands as well as a device for helping colour-blind people to ‘hear’ in colour. Cyborgs exist now: simply look at paralympians.

Fictional cyborgs are often portrayed with physical or mental abilities far exceeding a human counterpart. It is likely that real iCyborg lawyers will evolve who will tap into evolved Watson-type AI technology, utilising either non-invasive or invasive BCIs. This quasi AI & EQ super-lawyer being will become known as iLawyer.

### Transcending biology

The singularity representing a profound and disruptive transformation in human capability will occur in 2045, says Kurzweil. He suggests that the non-biological intelligence created in that year will be one billion times more powerful than human intelligence today.

Post-singularity, there will be no distinction between human and machine or between physical and virtual reality, he says. So, what will remain unequivocally human in such a world will be our inherent nature to seek to extend our physical and mental reach beyond current limitations.

Due to the ingenuity of man, the iCyborg lawyer is near. <sup>mp</sup>

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### Endnote

<sup>1</sup> See *The Singularity Is Near*, Ray Kurzweil, Viking Press, 2005

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## “In a deeply fragmented legal world, it will be our EQ which differentiates us where top-level results are concerned”

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### The singularity is near

In 2005, renowned futurist Ray Kurzweil predicted that we will move toward singularity – where humans transcend biology as a result of the combined effect of the revolution in genetics, nanotechnology and robotics.<sup>1</sup>

He predicted that, by 2010, computers “will become essentially invisible: woven into our clothing, embedded in our furniture and environment”. He said they will tap into the “worldwide mesh” and that we'd have wireless internet communication at all times. He was right, as the widespread adoption of smartphones and tablets for personal and work usage demonstrate.

Kurzweil's main concept is that our technological knowledge has been snowballing and that, once strong AI is achieved, it will be a runaway phenomenon of rapidly escalating super-intelligence. When we reach this point in time, we will no longer recognise the world or our place (and space) in it.

### Coming of age

In the next ten years and with the continuing economic growth of Asia, law firms will experience a fundamental shift in their client bases. Global lawyering will become the norm. Accordingly, new ways of communicating, relating with clients and being productive globally, whether face to face, at the interface or virtually, can only be welcomed.

The transformation and arguably reinvention of legal service provision is well and truly underway. Canadian legal commentator Jordan Furlong has noted that “the new technologies are not going to replace lawyers... but they are going to

will find the best use for them: expert specialists with limited influence over the larger process.”

As lawyers become marginalised, our role and value will be in extolling expert niche specialism (unique space), delivering extraordinary customer service with exceptional EQ, and humanisation. This is something AI and machines can never provide – or will they?

### Nanobot technology

There are already holograms in airports – something which we've seen in a science fiction movies have now become reality. So, why not have holographic lawyers and ‘welcome’ agents? It would certainly help with improving customer service standards and ending the problem of needing to be in two places at once, particularly as a global lawyer serving global clients.

Kurzweil predicts that, in 2030, nanobot technology will provide fully immersive, totally convincing virtual reality. If we want to enter virtual reality, the nanobots will suppress all of the inputs coming from our actual senses and replace them with the signals that would be appropriate for the virtual environment. Our brains would experience these signals as if they came from our physical bodies. If we wanted to experience real reality, the nanobots would just stay in position and do nothing.

The evolution of brain-computer interfaces (BCIs) is already underway. Presently they are invasive and use electrodes implanted in the skull. Over the past two decades, BCIs have enabled paralysed patients to control computer cursors, robotic arms and wheelchairs.