

**2015 AUSTRALIAN BAR ASSOCIATION CONFERENCE
SURVIVAL OF THE FITTEST: CHALLENGES FOR ADVOCATES IN
THE 21ST CENTURY
“iADVOCATE V RUMPOLE: WHO WILL SURVIVE? AN ANALYSIS OF
ADVOCATES’ ONGOING RELEVANCE IN THE AGE OF
TECHNOLOGY”
THE HON T F BATHURST AC
CHIEF JUSTICE OF NEW SOUTH WALES
BOSTON
9 JULY 2015***

1. Good morning everyone. I wish to start today by posing a riddle. What do the Quagga, Caribbean Monk Seal and Tecopa Pupfish all have in common? Without keeping you in suspense for too long, the answer is that they have all, within the last one hundred years or so, become extinct.¹ In short, they seem to have responded to changing times like Rumpole. He stated, “[i]f I don’t like the way the times are moving, I shall refuse to accompany them”.² As admirable as many of Rumpole’s traits are, I think this one, of stoic stubbornness to change, needs to be avoided if advocates are to survive the 21st century.
2. In the thirty minutes or so I have been allocated to fill the gap between now and the morning tea, I plan on speaking about the consequences that the age of technology is having on the profession’s existence. This is clearly topical. Entire books are being dedicated to the subject. Take for instance Richard Susskind’s “The End of Lawyers” and his sequel ironically entitled, “Tomorrow’s Lawyers”.³ There is also Mitchell Kowalski’s “Avoiding Extinction: Reimagining Legal Services for the 21st Century”.⁴
3. Like these books, today, I will first consider what is the nature of the threat which technology poses to advocates’ survival? I will then explain how, contrary to Chicken Littles round about, the sky is not falling in. I will also explain why it is impossible for human barristers, like Rumpole, to ever be completely replaced by

* I express my thanks to my researcher, Miss Madeline Hall, for her assistance in the preparation of this address.

¹ The last known Quagga is said to have died at the Amsterdam Zoo in 1883; The Caribbean Monk Seal was declared extinct in 2008 by the National Oceanic and Atmospheric Administration’s National Marine Fisheries Services; and the Tecopa Pupfish is said to have become extinct by 1970 or soon after (Gerken, ‘11 Animals That Are Now Extinct...And It’s Our Fault’ *Huffington Post* (online), 22 October 2013 http://www.huffingtonpost.com/2013/10/22/11-extinct-animals_n_4078988.html).

² Mortimer *The Anti-Social Behaviour of Horace Rumpole* (Penguin Books Ltd, 2008).

³ Susskind, *The End of Lawyers? Rethinking the Nature of Legal Services* (Oxford University Press, 2010); Susskind, *Tomorrow’s Lawyers An Introduction to Your Future* (Oxford University Press, 2013).

⁴ Kowalski, *Avoiding Extinction: Reimagining Legal Services for the 21st Century* (American Bar Association, 2012).

some sort of legal app that presumably would be called iAdvocate. I will conclude by discussing how barristers must nonetheless mutate to avoid, not extinction, but irrelevancy to the society they serve, now in the age of technology.

THE THREAT OF TECHNOLOGY –ADAPTABLE OR DAMNING?

4. To turn first to the threat posed by the age of technology. In many ways, it is hard to fear extinction when the number of barristers is increasing exponentially.⁵ I think this fact aligns us, as a sub-species of the legal profession, with the fate of the Tecopa Pupfish that I mentioned earlier. This fish became extinct, not because of predatory hunting and dwindling numbers. It was more due to habitat alterations which increased the water temperature above what the poor Pupfish were adapted to tolerate. I think that similarly, the future of barristers and the legal profession in general is not endangered from competitive poaching. It is more environmental changes, such as those caused by technological developments, that are heating things up for the profession.⁶
5. There are, it seems, two schools of thought on the nature of the changes that technology is wrecking on the legal landscape. The first is the unremarkable proposition that technology is changing the access to and delivery of legal services.⁷ The second, more controversial perspective, is the idea that technology already is, and will increasingly be able to, actually replace the role of barristers and lawyers themselves. This is the idea that iAdvocate apps will replace us Rumpoles. If true, this second perspective on the nature of the technology threat, would mean the legal profession in general, is already doomed to extinction.
6. So which perspective is correct? Is the technology threat adaptable or damning to barristers' existence? Although uncontroversial, I will briefly detail the first proposition, before turning to the reality or fiction, of the second perspective.
7. As I said, the idea that technology has changed the manner of accessing and delivering legal services is really common sense, and acknowledged throughout

⁵ Within New South Wales alone, from 2011 to 2014, the increase in the number of barristers represented a 44% increase compared to the preceding three year period (Compare the NSW Bar Association, 'New South Wales Bar Association Annual Report 2013-14', 12-13; NSW Bar Association, 'New South Wales Bar Association Annual Report 2010-11', 13; NSW Bar Association, 'New South Wales Bar Association Annual Report 2007-08', 12).

⁶ See comments that: "If one force alone were seen to be driving changes in the legal market, that force would be the rapid- and accelerating- developments in the field loosely known as information technology...already information technology, at its present stage of sophistication, is being marked as the disruptive force in the legal market" (Fodden, 'CBA Legal Futures Initiative Contributing Perspective Voices of Change Canadian Social Media and Other Writings on the Future of Legal Practice' (The Canadian Bar Association 2013) (CBA's Voices of Change), 13.

⁷ See for instance, the Forward by Tim Long in Zylpha, 'The Legal Landscape Trends for 2015' <http://www.zylpha.com/wp-content/uploads/2015/01/Zylpha-Legal-Landscape.pdf> (Zylpha study).

the legal profession.⁸ Take the respective Australian and English examples of Lawyerselect⁹ and Stobart Barristers.¹⁰ These websites, designed to facilitate direct referrals and contact with clients, show how barristers can use technology to excel in the new legal landscape, rather than flounder like a Pupfish.

8. Examples also abound more generally for lawyers both here and back home in Australia. Just Google: Plexus, Rocket Lawyers, LegalZoom, Co-operative Legal Services, EmploySure, LawPath and LegalVision, to see what I'm talking about. Or, take a look at the legal forums¹¹ and legal-focused search engines, which are popping up in response to the "growing demand for instantaneous results that web consumers have become accustomed to due to services like Google".¹² The reality is, if barristers do not keep track of these new ways of connecting with clients, they will quite simply miss out on an ever increasing amount of work that is there for the taking.
9. Before I discuss the ramifications of these structural and cultural changes on barristers' future, I will now deal with the more radical proposition, that the nature of the technology threat endangers the very existence of barristers and the broader legal profession. This is where I enter the realms of artificial intelligence and the automation of legal analysis.

⁸ The Zylpha study found 78% of legal professional respondents strongly agreed that innovation in providing legal services will be paramount in the next five years. New technology was considered a key component to the legal profession's survival (Zylpha study, 6). Similarly, the American Bar Association's 2014 Legal Technology Report found 39% of attorneys in private practice had obtained clients from blogging sites and 78% maintained one or more social networks for professional purposes (Bennett, *How are Lawyers Using Social Media?* (20 February 2015) Social Times Infographic Social Media, <http://www.adweek.com/socialtimes/lawyers-social-media/615605>).

⁹ Gorman, 'Barrister launches lawyer selection site' *Lawyers Weekly* (online) 7 August 2013 <http://www.lawyersweekly.com.au/wig-chamber/news/14518-barrister-launches-lawyer-selection-site>.

¹⁰ This UK company used a website to refer clients directly to a barrister with the relevant expertise, out of the many that were affiliated with the company. This bypassed the need for lawyers, who were essentially replaced by a sister company, comprised of a team of paralegals that could be deployed to help the barristers with the direct referrals on a needs basis. The streamlined arrangement allegedly achieved savings to the client of up to 50% in any one matter. The business has since been limited to internal Stobart group legal matters as the legal director of the enterprise has left to start up a similarly alternatively structured law firm, called OneLegal ('Stobart Group drives into legal services market' (17 May 2012) *Legal IT Insider* <http://www.legaltechnology.com/latest-news/stobart-group-drives-into-legal-services-market/>). No structure like Stobart Barristers exists in Australia yet. Although the underlying demand seems to similarly exist. For instance, a 2015 Australian Corporate Lawyers Association survey showed 43.7% of in-house respondents directly briefed a barrister in the past 12 months (Woodhill, 'Direct briefing popular with in-house teams: survey' (27 February 2015) *Australasian Lawyer* <http://www.australasianlawyer.com.au/news/direct-briefing-popular-with-inhouse-teams-survey-197471.aspx>).

¹¹ A free Australian based legal forum is LawAnswers.com.au, which comes with inbuilt search engine capabilities, legal document templates and an affiliated online lawyer referral program.

¹² Lao and Jagadeesh, 'Creating a Legal-Focused Search Engine' (3 December 2014) CodeX The Stanford Centre for Legal Informatics Student Papers <http://codex.stanford.edu/creating-a-legal-focused-search-engine-2/> (Lao and Jagadeesh). See also 'CBA Legal Futures Initiative Contributing Perspective The Client's Perspective' (The Canadian Bar Association 2013) (CBA's The Client's Perspective), 9.

10. Perhaps like me, your instinctive response is that this second perspective is off with the pixies. Regrettably, one estimate posits that we are "...at least 10 years away, probably more, from machines that can *completely* replace lawyers. But we're already in the era when machines can *displace* lawyers".¹³
11. One of the current areas of growth is in computational law. This is "the concept that by formally representing laws in logic, computers could be used to process, apply, and analyse" the law, rather than just ease the delivery and access to it.¹⁴ With computational law, computers thus become "capable of conducting legal analysis entirely on their own...without the intervention of human experts".¹⁵
12. Sounds crazy? Yet already in this country software exists which allows a builder, drafting construction plans, to receive automated feedback and corrections according to the relevant regulations.¹⁶ This bypasses the need for legal and local council review. In Australia too, legal firm Plexus has also used the concept in 2014 to create Plexus Wizard. This software has coded all the different laws and regulations between the states and territories, relating to trade promotion deals, and automatically generates tailored terms and conditions and necessary permits.¹⁷ This is said to be four hundred times faster and twenty to thirty per cent cheaper than, what was described as, the "traditional" method, of using humans.¹⁸ It does seem therefore that technology really can, "work it harder, make it better, do it faster".¹⁹
13. Undoubtedly, computational law is ideally suited to regulatory based areas. However, before you sigh with relief thinking barristers' traditional advocacy work is safe, consider the following research projects. First, a group has already converted the British Nationality Act into computer code.²⁰ This allows the application and interpretation of the act to real life situations to be determined automatically, once the software is provided with certain facts. Given that this was actually achieved in 1986, the possibilities for such coding to occur in other and far more complicated statutes is startling. So too, are the broader

¹³ Furlong's estimation extracted in CBA's Voices of Change, 14 (emphasis added).

¹⁴ Love and Genesereth, 'Computational Law' International Conference on Artificial Intelligence and Law (6-11 June 2005) <http://logic.stanford.edu/people/genesereth/papers/computationallaw.pdf>, 205.

¹⁵ Genesereth, 'Computational Law The Cop in the Backseat' (2015) CodeX The Stanford Centre for Legal Informatics Papers <http://logic.stanford.edu/complaw/complaw.html> (The Cop in the Backseat).

¹⁶ The Cop in the Backseat.

¹⁷ Merritt, 'Artificial Intelligence and the law' *The Australian* (online), 20 June 2014 <http://www.plxs.com.au/artificial-intelligence-and-the-law> (Merritt).

¹⁸ Merritt.

¹⁹ Daft Punk Lyrics to 'Harder, Better, Faster, Stronger'.

²⁰ Sergot, Sadri, Kowalski, Kriwaczek, Hammond and Cory, 'The British Nationality Act as a Logic Program' (1986) 29(5) *Communications of the ACM* 370.

ramifications such technology could have on barristers' bread and butter statutory interpretation work.²¹

14. Take another more recent project. In 2001, the Idaho courts started using a computer system called Protection Order Advisor. This "advisor" is solely for people applying for Protection Orders (or as we call them AVOs). The advisor informs prospective applicants about protection orders, assesses their input to certain fields to determine whether they have a prima facie case and uses the inputs to auto generate the necessary court documents to apply for the order.²² This sounds an awful lot like a computer drafting pleadings and determining prima facie case motions. Moreover, there appears to be no reason why this could not be expanded into a barrister's appellate work. Applications for leave to appeal or no case to answer submissions could then be determined electronically.
15. Perhaps the most incredible project is in 2013, artificial intelligence was used to model the use of argument from analogy as a rhetorical device of persuasion.²³ The US group used a closing argument in *Silkwood* and *Kerr-McGee Corporation*,²⁴ which has been described "as fine a closing argument as has ever been delivered in an American courtroom".²⁵ If the art of persuasion is capable of being modelled by technology, barristers, as a species, will clearly be no more immune from the technology threat, than anyone else of the legal profession genus.²⁶

²¹ Some would argue that due to the logical nature of computational law code, most uncertainties that give rise to the need for statutory interpretation by the courts could be prevented if parliaments wrote legislation directly in electronic form.

²² See Branting, 'Advisory Systems for Pro Se Litigants' (Paper presented at International Conference on Artificial Intelligence and Law, New York, 1 May 2001). For other examples see 'Using web based legal decision support systems to improve access to justice' (2002) 11(2) *Information & Communications Technology Law* 15.

²³ Walton, 'Argument from analogy in legal rhetoric' (2013) 21(3) *Artificial Intelligence and Law* 279 (Walton).

²⁴ *Silkwood v Kerr-McGee Corporation* (1984) 464 US 238.

²⁵ Lief, Caldwell and Bryce, *Ladies and Gentlemen of the Jury: Greatest Closing Arguments in Modern Law* (Scribner, 1998), quoted in Walton.

²⁶ Another area foreseeably in danger of being replaced by technology is criminal sentencing. Already "relevant sentencing guidelines for an offence can be automatically presented to the judge or magistrate" (Thomson Reuters Insight Team, *The Future of the Courts (Whitepaper)* (17 March 2015) Thomson Reuters Insight Technology in Law, <http://insight.thomsonreuters.com.au/resources/resource/the-future-of-the-courts-whitepaper/> (Thomson Reuters' Future of the Courts)). There seems little to stop this from being combined with a suite of other relevant factors, to allow for the automation of sentencing calculations. This in turn could be coupled with a cross-checking system which compares the suggested sentence with historical sentences, to check for anomalies or outliers; similar to the JIRS database in NSW.

SALVATION IN SEMANTICS

16. It is at this point that you may expect me to declare that the sky is falling in and you may as well pack up your bags, or sacks, and hang up the wigs, for the computers to handle it all. However, like a classic barrister, I plan on responding to this difficult problem by having resort to the safety of abstract philosophical arguments.
17. First of all, there is the policy issue of increasingly involving technology in proceedings when it has no soul to damn, although in some sense there is a body you can kick.²⁷ This problem was ironically noted in the High Court matter of *Tomlinson and Ramsey Food Processing Pty Ltd* in April just this year. As the transcript attests, the proceedings were rudely interrupted because of what the Chief Justice described as “a rogue iPad” requiring technical assistance.²⁸ Counsel opined, “[i]t is probably guilty of contempt, your Honour”.²⁹
18. There are also, of course, the general philosophical problems which can be raised with all technological and human interaction. For instance, if humans are irrational, systems which require definite inputs will inevitably fail to predict or answer human problems accurately. Closely related to this is the “frame problem”, or, how to teach a computer common sense so that, like our mind, it makes a decision only on the basis of what is relevant, without having to explicitly consider all that is not relevant.
19. However, often it is countered that these sorts of problems are only temporary setbacks that the advent of faster and better technology will surpass, perhaps even while us sceptics are saying it cannot be done.³⁰
20. There is, fortunately therefore, another philosophical argument which does present more than a temporary problem to the technology threat. The problem goes to the evolutionary origins of technology. That is, the fact that technology is digital. This means its operations are specified purely formally, with abstract symbols (zeros and ones) that themselves have no content. John Searle described this as the “syntactical structure” inherent in all technology. He pointed out that, in contrast, human mental states not only have a formal structure, but

²⁷ For a defence as to why technology should be allowed, in the interests of justice, to replace judges see Fulda, ‘Implications of a logical paradox for computer-dispensed justice reconsidered: some key differences between minds and machines’ (2012) 20(3) *Artificial Intelligence and Law* 321 (Fulda).

²⁸ iPads can also of course be incredibly useful in proceedings. For an example of the successful use of iPads in court see Newhook, ‘Electronic Information and Services in the Environment Court of New Zealand- Access Advantages and Risk Factors for self-represented litigants’ (Paper presented at AIJA Conference Justice Without Barriers: technology for greater access to justice, Brisbane, 21-22 May 2015).

²⁹ *Tomlinson v Ramsey Food Processing Pty Ltd* [2015] HCATrans 77 (10 April 2015).

³⁰ See also Fulda for other things, like the recognition of sentic modulation (e.g. a raised eyebrow from a witness), previously considered impossible and now viewed plausible if not already possible.

content and meaning as well. When you think, “Gosh this speaker has been talking for a long time” your thought has actual content. It is not just a series of dots and dashes emitted from your grey matter. Searle was of the opinion that this meant “the mind has more than a syntax, it has a semantics”.³¹

21. Searle famously illustrated the point with the parable of the Chinese room.³² The parable goes as follows. Imagine you know nothing about the Chinese language and you are locked in a room with several baskets full of Chinese symbols. Now imagine you are given a rule book in English for manipulating these Chinese symbols. The rule book specifies how to manipulate the symbols, purely formally, in terms of their syntax. For example, one rule might be, put this sign from the first basket next to that sign from the second basket. Now imagine Chinese symbols are passed into the room and you are given further rules for passing Chinese symbols back out of the room. Then the people outside the room start to call the symbols they pass into the room as “questions”, and the symbols you pass out as “answers”. You begin to get faster and faster with arranging the symbols. Your arrangements get more and more complicated. From the point of view of an outside observer, you are now behaving exactly as if you understand Chinese.³³ But the point is, you still don’t understand a word of Chinese.³⁴ Why? Because, like computers, your formal program for manipulating symbols only has syntax. The symbols themselves have no meaning to you and so the program lacks semantics. It lacks the human element of our thought processes.³⁵
22. So as much as current and future technologies may be able to *simulate* human thinking, they will forever be unable to *duplicate* thinking.³⁶ Now if that distinction is correct (and no one has yet come up with a reason why it is not), then it readily becomes apparent why computers will never be able to think as humans do and why the Rumpoles of this world will never be replaced by an iAdvocate app. Fortunately for barristers, technology’s DNA will prevent its evolution to the point of your extinction.
23. If you don’t believe me or find any of what I have described confusing, I suggest you just ask Siri. I thought out of courtesy I should check if she could truly understand what I was saying. I’m happy to report that she skilfully avoided my questioning for quite some time before eventually admitting she couldn’t answer the question but would check on it. I’m yet to hear back from her.

³¹ Searle, ‘Can Computers Think?’ in Chalmers (ed), *Philosophy of mind classical and contemporary readings* (Oxford University Press, 2002) 669 (Searle), 671.

³² Searle, 671.

³³ Searle, 671.

³⁴ Searle, 671.

³⁵ For a more recent defence of the view that the mind is not computational, see Fodor *The Mind Doesn’t Work That Way* (MIT Press, 2001).

³⁶ Searle, 673.

EMBRACING MUTATION

24. All of this leads me to the conclusion that barristers' survival is not technically endangered. However, as I said earlier, the changes to the delivery and accessibility of legal services are real and should not be under-estimated. Responding to these issues, will require some form of mutation or adaptation. As one barrister in the Canadian Bar Association's Future Initiative stated, "the only question that matters is how quickly and gracefully shall we adapt. Will we be on the wrong side of history, resisting the demands of clients and the market, insisting we know better?"³⁷
25. Of course, even if we all acknowledge change has to occur and that such change will not necessarily be easy or come naturally, the question still remains: *how* should barristers change? In what areas is adaptation needed?
26. First, in my opinion, barristers will have to adapt to the amount and type of work they do. The reality is that technology, either directly or indirectly, will cut into many areas of barristers' work. For instance, the readers and junior barristers who currently supplement their work with document reviews or compiling chronologies will find these tasks increasingly drying up as technology takes over these roles. Many of them, no doubt, will not be sorry about this.
27. Court work will be affected as well. As the projects I described earlier indicate, the future may not simply be paperless courts, but people-less courts too.³⁸ More immediately, I think there is a real chance the increased use of electronic court systems will mean directions hearings and interlocutory matters will be attempted to be handled from the safety of law firms. There, the physical absence of barristers and the presence of multiple partners and lawyers to confer with each other, may, at least for a time, embolden lawyers to handle these court (or computer) appearances, solo. There should be no misunderstanding therefore, that adaptation needs to occur sooner rather than later.

³⁷ MacEwen, 'CBA Legal Futures Initiative Contributing Perspective You Can't Argue With 100 Years of Success: Navigation Beyond the Inflection Point' (The Canadian Bar Association 2013), 13.

³⁸ Thomson Reuters' Future of the Courts, 5. Examples mentioned therein include the Money Claim Online and Possession Claim On Line systems in England and Wales. See for instance: <https://www.gov.uk/possession-claim-online-recover-property> and <https://www.gov.uk/make-money-claim-online>. That is not to downplay the benefits of paperless environments. The amount saved by courts on storage costs of paper documents alone is in excess of millions and can similarly benefit barristers' businesses (see Johnson, 'Moving to digital records-how do we future proof access to this data?' (Paper presented at AIJA Conference Justice Without Barriers: technology for greater access to justice, Brisbane, 21-22 May 2015). See also, Kutty, 'Beyond e-filing moving to an electronic court record' (2009) 47(6) *Law Society Journal* 74).

28. You will note, however, that I have expressed this possibility cautiously. This is because there have been rumours of law firms taking over advocate work before. In the 1980s, some law firms geared themselves up to have, what they described as advocate departments. These all failed because, of the people engaging in those departments, fifty per cent did not want to do advocate work and the other fifty per cent were inevitably called to the bar. Further, barristers are cheaper and by the very nature of the way they practice, have the flexibility and the absence of a bureaucratic structure, both of which are essential prerequisites in a technological age.
29. While some work will be outsourced or disappear, I think the type of work that will remain untouched by technology's clutches for the longest, will be things like the preparation and assessment of evidence, ensuring the case as pleaded can be established and, of course, its actual presentation. You might think trial work, with its superficially greater reliance on oral advocacy, would be more likely to weather the storm better than appellate work. However, I do not think that this will be the case. In the ever increasing maze of technological development the advocate who can succinctly identify and explain key material will be even more relevant. It is, in fact, a good example of Searle's distinction between syntax and semantics.
30. Of course, the reality of any reduction in the type of work that is available to the profession is a possible over supply of barristers, with all the attendant consequences on profitability.³⁹ There is a real question whether, given the probable future, there is a need for professional bodies, such as the ABA, to respond, educate and future proof its members from these problems.
31. A second way in which I think adaptation may need to occur is in regards to our ethical and professional obligations. These will need to reflect the fact that the new major source of information for evidence and litigation is technology. Already, in 2012 the American Bar Association amended their Model Rules of Professional Conduct. Now, maintaining competence includes maintaining the requisite knowledge and skill of the "benefits and risks associated with relevant technology".⁴⁰ There has been ongoing debate over whether similar rules should be added to our professional codes of conduct.⁴¹ In that context, I think it should

³⁹ This is also being foreshadowed in the market for lawyers. See, Pennington, 'Lawyers next for tech-driven outsourcing' *The Age* (online) 10 September 2013 <http://www.theage.com.au/it-pro/business-it/lawyers-next-for-techdriven-outsourcing-20130909-hv1qa.html>.

⁴⁰ American Bar Association, Model Rules of Professional Conduct, Rule 1.1, Comment [8].

⁴¹ See for instance Walker, *Should Australia introduce technology standards for law firms?* (10 April 2015) Thomson Reuters Insight Technology in Law <http://insight.thomsonreuters.com.au/should-australia-introduce-technology-standards-for-law-firms/> and Mezrani, 'Opting out of technology no longer an option' *Lawyers Weekly* (online), 10 March 2015 <http://www.lawyersweekly.com.au/news/16247-opting-out-of-technology-no-longer-an-option>.

be remembered that, as has become clear in America, simply introducing a model rule acknowledging technology is not necessarily a panacea. Many “...questions remain about how the Model Rules apply...and new ones seemingly come up with every additional advance in technology”.⁴²

32. In any event, while it is still unclear in Australia how technology may have increased ethical obligations, it certainly has expanded the possible ways of breaching them.⁴³ Whether through blundering branding online, or being ignorant of important tweeted updates, barristers will need to accustom themselves to the new dangers.⁴⁴ After all, it was not so long ago that it was held to not be part of a barrister’s duty of care to see if any relevant authorities were subject to special leave applications.⁴⁵ Yet, I am not sure if the same result would be arrived at today.
33. Related to this point is a third aspect of adaptation. The fundamental approach to proving a case will obviously have to change to reflect technological developments. This is particularly given, “[t]he importance of electronic evidence is only set to increase”.⁴⁶ Barristers will need to “keep abreast of...the way we communicate”, including tweets and texts, and “the way in which we are able to store, access and authenticate those communications”.⁴⁷ Perusing the subpoenaed emails is no longer sufficient. In other words, just because *you* go way back, doesn’t mean you *don’t* need to know about the Wayback machine.
34. The expanding digital universe also means barristers will need to become much more efficient in sorting the wheat from the chaff. In 2006, combined data from computer hard drives in the world was approximately 165 exabytes.⁴⁸ I don’t really know how much that is, but I do know it means barristers will increasingly have to be selective and efficient at processing and analysing material. Those inclined to obsess over every detail, risk being consumed by an avalanche of information. Those with Rumpole’s opinion that “...knowledge of the law is a bit of a handicap to a barrister”, will also increasingly struggle.⁴⁹ In an internet landscape, there is nowhere to hide legal ignorance.

⁴²Podgers, *Lawyers struggle to reconcile new technology with traditional ethics rules* (1 November 2014) ABA Journal Ethics http://www.abajournal.com/mobile/mag_article/the_fundamentals_lawyers_struggle_to_reconcile_new_technology_with_traditio/.

⁴³ Ethics Committee and Ethics Department of the Law Society of NSW, ‘Ethical dilemmas: Some FAQs’ (2015) 2(2) *Law Society Journal* 80.

⁴⁴ Teicher, ‘Desperately seeking information’ (2015) 2(2) *Law Society Journal* 36, 37.

⁴⁵ *Heydon v NRMA Ltd; Bateman v NRMA Ltd; Morgan v NRMA Ltd* [2000] NSWCA 374; (2000) 51 NSWLR 1, 134 and 242.

⁴⁶ Soars and Lee, ‘Tweets, texts, forged emails and changing webpages: emerging issues and practical examples’ (2015) 2(2) *Law Society Journal* 74 (Soars and Lee), 75.

⁴⁷ Soars and Lee, 75.

⁴⁸ Wikipedia, *Zettabyte* (Accessed 16 June 2015) Wikipedia <https://en.wikipedia.org/wiki/Zettabyte>.

⁴⁹ Mortimer, *Rumpole of the Bailey: Rumpole a la Carte* (Penguin Group, 1991).

35. The final point I wish to make is that, in addition to mutating to respond to these changes, I also think barristers, as a group within the legal profession, should lead the way in embracing, rather than resisting technology. The reality is that “the tools to enable counsel to prepare evidence and present it electronically have all been available for years. However, the preference for traditional, paper-based systems remains”.⁵⁰ In saying that, I am acutely aware that today I myself have eschewed any form of technology, in preference to the traditional method of a paper talk. I do hope though, that a culture of embracing the needed mutation, will become more systemic within the profession. Technology should be used at all stages of a matter, including in and with the courts. I have previously spoken about the obligations on lawyers and barristers to not inundate the courts with useless material.⁵¹ Technology can and should be used to assist barristers to ensure this does not happen.

CONCLUSION

36. I do hope these suggestions of the need for, and ways of, possible change within the profession are, if not helpful, at least thought provoking. You may, of course, reject some or all of what I have said, with the opinion that I am now an ignorant outsider looking on. I just hope no-one shares Rumpole’s harsh opinion that they only make you a judge, when you are no good at the bar.⁵² Although Rumpole now has some support for that proposition. A 2013 Oxford University research report predicted that there was around a 40% likelihood of judges being replaced by robots, whilst the likelihood of lawyers being replaced was as low as 3.5%.⁵³ Perhaps we can both avoid dwelling on any underlying truths behind Rumpole’s maxim and those statistics, now and in the future.

⁵⁰ Stanfield, ‘Online Courts: The way of the future?’ (2015) 2(2) *Law Society Journal* 50.

⁵¹ Bathurst, ‘After the Civil Procedure Act’ (Speech delivered at the 10th anniversary of the Civil Procedure Act, Banco Court, 18 February 2015) at [24].

⁵² Mortimer, *Rumpole of the Bailey: Rumpole and the Quacks* (1991).

⁵³ Frey and Osborne, ‘The Future of Employment: How susceptible are jobs to computerisation?’ (17 September 2013), University of Oxford
http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf, 59 and 62.