



From evolutionary to revolutionary

Lessons learned from the previous technology transformation

The year 2024 is not the first time that authors have grappled with technology and the law for this journal. In 2002, before the name *Precedent* was coined,² an edition of this journal was published with a technology theme. To put that date into context, the first Apple iPhone was still five years into the future. It was the era of Nokia, Motorola and BlackBerry; not really smartphones as we know them today.

In that 2002 edition, Rob Davis wrote about a revolution over the previous 10 years in the delivery of legal services over a distance using technology. At the time, many of those developments were back-office services: communications, financial record keeping, diary systems, document production and so on.³

Well before our recent experience with the work from home constraints of COVID-19, Davis accurately observed that new technologies permitted the supply of services over a network such that staff need not

be in the same building or even the same city. With necessity being the mother of invention,⁴ it was not until the COVID-19 era that the video conferencing application Zoom, launched in 2013, suddenly became the fifth most downloaded app in the world in 2020.⁵ Microsoft, in March 2020, announced that Teams had hit 44 million daily users.⁶ And so it was not until almost 20 years after Rob Davis's article that we saw something close to exponential growth in the adoption of Zoom, Teams and similar software by law firms and courts, though so far as I am aware Victoria was the only Australian jurisdiction to rather quaintly request lawyers use an image of a courtroom as a background during court appearances. This may have overestimated the familiarity of some lawyers with the backgrounds feature of the software.

I was asked to write in the same edition and by selective quotation feel reasonably happy with having

By **Bill Madden**

Special Counsel, Carroll & O’Dea Lawyers

‘The past is a foreign country; they do things differently there.’¹ Can the challenges of previous developments (whether evolutionary or revolutionary) be usefully applied to the current hot topic in technology, generative AI? What is it, and what opportunities does it hold?



said ‘we have to assume that in the very near future the internet will become the first port of call for guidance on almost any issue, and the first port of call for transaction of personal and business commerce.’⁷ In the legal sphere, that was not too brave a prediction given that it was well before 2002 that we saw the beginnings of online access, and indeed free online access, to the law in Australia:⁸ AustLII, which was formed in 1995.⁹ Now hosted at the University of Technology Sydney, it recently announced its 1000th database and has more than 1.5 million cases and decisions.¹⁰

Today’s hot topic – generative AI

It is arguable that the key growth of legal sphere technology in the past has been in the areas of communication, document generation and access to information (in particular, caselaw, statutes, journals and the like).

But generative AI is a technology that learns patterns from data and then generates original content. The technology is partly based on what are known as large language models (LLMs), designed to understand and generate text and other forms of content, based on the vast amount of data used to train them. LLMs have the ability to infer from context, generate coherent and contextually relevant responses, translate to other languages, summarise text, answer questions, and even assist in creative writing or code generation tasks.¹¹

Perhaps the best-known example is ChatGPT, but there are similar services available through Microsoft (Copilot), Gemini (Google) and Llama (Meta).¹² “ChatGPT is the most remarkable system I’ve seen in over 40 years of working on AI,” Dr Richard Susskind said¹³ on the day of his book launch for the third edition of *Tomorrow’s Lawyers*.¹⁴ So what challenges are raised by generative AI?

Law schools and words like endless rain

Unsurprisingly, educational institutions including law schools have some concerns about generative AI, as is suggested by the wonderfully emotive title of a paper by Stuart Hargreaves “‘Words are flowing out like endless rain into a paper cup’”: ChatGPT & law school assessments.¹⁵ Hargreaves noted the remarkable ease with which ChatGPT can generate natural sounding text across a range of domains in response to natural language prompts, which made it an instant online sensation, with over 100 million unique users and 590 million visits within less than two months of launch. He said, however:

‘While the technology is incredibly impressive, this research shows that ChatGPT often gives entirely *incorrect* answers in the legal context. It invents cases. It fails to spot obvious issues. It ignores applicable law. The idea that a judge could rely on ChatGPT to summarize an area of law for use in the court remains, for the time being, a poor idea.’¹⁶

This is true, subject to the qualifier 'for the time being'. A couple of weeks ago I asked ChatGPT3 to 'Tell me about the Australian legal case *Rogers v Whitaker*'. Without providing the citation,¹⁷ it gave this reply (slightly shortened):

'The case involved a patient named Marilyn Joy Rogers who underwent a procedure called a keratotomy, performed by ophthalmologist Dr. Leslie Whitaker, to correct her short-sightedness. Following the surgery, Rogers suffered complications, including permanent damage to her vision. She alleged that Dr. Whitaker had failed to adequately warn her of the risks associated with the procedure, including the risk of developing a particular complication known as "central corneal steepening".'

There are of course a number of problems with that, starting with the name of the claimant who was Maree Lynette Whitaker, not Marilyn Joy Rogers. Nor is central corneal steepening mentioned in the decision. This is the generative AI limitation known as hallucinations.

But the systems are developing over time. A few weeks later (in late April 2024) ChatGPT3.5 produced a much better answer:

'*Rogers v Whitaker* is a landmark case in Australian medical law that significantly influenced the duty of care owed by medical practitioners to their patients. The case was decided by the High Court of Australia in 1992.

The case involved a woman named Mrs. Whitaker who was blind in one eye due to a pre-existing condition. She sought treatment from Dr. Rogers for a cataract in her other eye. Dr. Rogers assured her that the surgery had a 1 in 14,000 chance of causing further blindness. Unfortunately, during the surgery, Mrs. Whitaker's eye suffered complications, resulting in complete blindness.

The central issue in the case was whether Dr. Rogers had adequately informed Mrs. Whitaker of the risks associated with the surgery. The High Court ruled that doctors have a duty to disclose all material risks to their patients, not just those that other medical practitioners in the same field would consider significant. This ruling significantly expanded the scope of what constitutes informed consent in Australia.'

And the Microsoft product Copilot on the same day asserted:

'The judgment in *Rogers v Whitaker* [1992] was a defining moment in Australian medical law. It introduced and affirmed the 'failure to warn' principle, emphasising the obligation of medical practitioners to adequately inform patients of

significant risks associated with proposed medical procedures.

This case established a precedent that considerably impacts the duty of care owed by medical professionals to their patients, requiring them to provide comprehensive information regarding substantial risks. Patients must be well-informed to make decisions concerning their medical care.'

Not perfect, but not too bad. The challenges for secondary and tertiary institutions are obvious.

The University of Melbourne has published 10 principles to articulate its position regarding generative AI challenges, and to help guide actions around the adoption and use of AI tools and systems. High on the list is the aim to build awareness among students and staff of their responsibilities around the use of AI tools in the preparation of work and to manage integrity-related risks posed by AI tools.¹⁸ For students, the University states:

'If a student uses artificial intelligence software such as ChatGPT or QuillBot to generate material for assessment that they represent as their own ideas, research and/or analysis, they are **NOT** submitting their own work. Knowingly having a third party, including artificial intelligence technologies, write or produce any work (paid or unpaid) that a student submits as their own work for assessment is deliberate cheating and is academic misconduct.

If a student uses AI generated material in the preparation of their assessment submission, this must be appropriately acknowledged and cited in accordance with the *Assessment and Results Policy*.¹⁹

There are of course quite well regarded commercial writing assistance tools such as Grammarly, which now have 'responsible' generative AI features.²⁰

The courts and questionable references

The use of generative AI has started being mentioned in recent Australian caselaw, in both positive and negative ways. *Youssef v Eckersley*²¹ was a damages assessment in a motor accident compensation claim where liability had been admitted. Justice Wilson noted that the self-represented plaintiff's submissions had been prepared with the assistance of the artificial intelligence platform ChatGPT.²² The plaintiff stated that the platform assisted in the organisational structure and added a flourish to his submissions. Interestingly the plaintiff was a highly qualified university graduate with his education culminating in a Doctor of Philosophy from the Queensland University of Technology.²³ No adverse comment was made in relation to that aspect of the submissions.

Less fortunate was the situation which arose in *DPP v Khan*,²⁴ a sentencing hearing following a guilty plea to a charge of obtaining property by deception. The offender was represented, but tendered a number of personal references. Justice Mossop dealt with the authorship of one such reference cautiously in the following terms:

'The terms of the reference from his brother strongly suggest that it was written with the assistance of a large language model program, such as ChatGPT. As no evidence was given by the author of the reference, I enquired of counsel for the offender as to whether or not it had been prepared with such assistance and she said that her instructions were that it may have been prepared with the assistance of computer translation but not with a large language model. In the absence of evidence, I must make of the document what I can having regard to its terms. Read as a whole, the use of language within the document is consistent with an artificial intelligence generated document. Two particular aspects of the document stood out. The first is the manner in which the author's relationship with the offender is introduced:

I have known Majad both personally and professionally for an extended period, and I am well-acquainted with his unwavering commitment to his faith and community.

One would expect in a reference written by his brother that the reference would say that the author was his brother and would explain his association with the offender by reference to that fact, rather than by having known him "personally and professionally for an extended period".

The second is a paragraph towards the end of the reference which appears after paragraphs describing his "exceptional qualities", "academic excellence", his "positive contributions and willingness to assist

others" and that he is a "family man". It provides:

Majad's commitment to cleanliness and order is another facet of his character that stands out. He maintains a meticulous approach to his surroundings, expressing a strong aversion to disorder. His proactive attitude towards cleaning, both inside the house and in the community, reflects a sense of responsibility and respect for the environment. His efforts extend to keeping the streets and driveways clean, a testament to his commitment to a well-maintained and orderly community.

It is certainly possible that something has been lost in translation. He may well be committed to cleanliness. However, the non-specific repetitive praise within the paragraph which places such an emphasis on his proactive attitude towards cleaning and strong aversion to disorder is strongly suggestive of the involvement of a large language model.²⁵

Justice Mossop also said that it is 'clearly inappropriate that personal references used in sentencing proceedings are generated by, or with the assistance of, large language models' as 'it becomes difficult for the court to work out what, if any, weight can be placed upon the facts and opinions set out in them. It is also undesirable that they be written in another language and then translated using a computer-based translation, as the subtleties of the use of language, which will be significant in assessing the content of the reference, will not necessarily be accurately reflected in the automated translation.'²⁶

However, despite those concerns, the suspected generative AI reference did not make much difference. There were a number of other references which did not have similar features and which were tendered without objection. It was possible to reach favourable conclusions about the offender's character without placing reliance upon the reference purportedly given by his brother.

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Of course, judges have had to deal with questionable references well before the arrival of programs such as ChatGPT. *DPP v Hingert*²⁷ is an example, where as a result of the provision of fraudulent references the defendant's bail was revoked and he was remanded in custody until later sentencing.²⁸

Lawyers and hallucinations

The unfortunate circumstance of a US lawyer, Steven Schwartz, has been the subject of much media comment.²⁹ Schwartz was part of a legal team acting for a man suing the airline Avianca. The client, Roberto Mata, had claimed that he was injured after a metal serving cart hit his knee during a flight. Schwartz did his legal research for the case using ChatGPT without fact checking if the cases he cited in his brief, involving other airlines and personal injuries, were real or not.³⁰ Some were generative AI hallucinations.³¹

No similarly extreme examples appear to have arisen in Australia, however, returning to *DPP v Khan*, Mossop J said that counsel 'should make appropriate enquiries and be in a position to inform the court as to whether or not any reference that is being tendered has been written or rewritten with the assistance of a large language model or any automated translation program'.³²

Lawyers need not walk the generative AI path alone; it is already being explored by those providing services to lawyers such as the large commercial publishers and practice management system providers. Thomson Reuters Australia has released an AI product 'CoCounsel' which is said to be able to assist in reviewing and summarising documents and generating event timelines. LexisNexis has 'Lexis+AI' which is said to be 'the fastest legal generative AI with conversational search, drafting, summarization, document analysis, and hallucination-free linked legal citations'.³³

Courts and digital strategies

The Chief Justice of New Zealand, Helen Winkelmann, last year launched a *Digital strategy for courts and tribunals* of New Zealand.³⁴ The publication asserts that 'appropriate digital technology is now essential to enable the courts to perform their function of upholding the rule of law, and to enable the judiciary to administer justice for the benefit of all people.' Some of the initiatives are unsurprising, such as a fully digital document and case management system for all courts and tribunals at the earliest practicable date. In Australia, the present situation is mixed. Some courts such as the Supreme Court of New South Wales offer an Online Registry.³⁵ Others, such as the Supreme Court of Queensland are not so well

equipped, though interestingly there is an online service to assist in the preparation of a statement of claim which can be downloaded – but must then be printed, signed and lodged with the court in person or by post.³⁶

A digital document and case management system in the courts is a relatively modest aspiration and does not give rise to some of the challenges presented by generative AI. Longer term aspirations noted in the New Zealand strategy include three AI related items:

- Use of AI tools (as appropriate, and with necessary safeguards) to provide guidance to parties on potential outcomes;
- Use of AI tools (as appropriate, and with necessary safeguards) to assist parties and decision-makers to identify relevant materials, and organise and analyse those materials (eg by identifying references in large document sets to particular individuals, events or topics, or to identify and arrange materials thematically);
- Use of algorithms/AI tools (as appropriate, and with necessary safeguards) to support determination of simple procedural applications eg applications for extension of time to file submissions/memoranda, applications for routine pre-hearing case management orders.³⁷

Legal decision making

The role of algorithms in legal decision making is addressed in the book *Artificial Justice* by Tatiana Dancy.³⁸ She expresses concern that the effect of using algorithms can be to exacerbate unjustified differences between people, on the basis of considerations such as race, sex or socio-economic circumstance.

Unfortunately the potential for algorithmic decision making to 'go wrong' reminds us of the Royal Commission into the Robodebt Scheme.³⁹ Chapter 17 focused on automated decision making but did not simply suggest that it be prohibited. Rather, the Commission recommended that the Commonwealth 'consider legislative reform to introduce a consistent legal framework in which automation in government services can operate.' Secondly the Commission recommended that the Commonwealth 'consider establishing a body, or expanding an existing body, with the power to monitor and audit automate [sic] decision-making processes with regard to their technical aspects and their impact in respect of fairness, the avoiding of bias, and client usability'.⁴⁰

In Chapter 19, the Commission focused on lawyers or, at least, on in-house lawyers working for Services Australia. Recommendation 19.2 said that 'Services Australia should provide regular training to its in-house

lawyers on the core duties and responsibilities set out in the Legal Practice Standards, including:

- An emphasis on the duty to avoid any compromise to their integrity and professional independence and the challenges that may be presented to a government lawyer in fulfilling that obligation.
- Appropriate statutory and case authority references in advice writing.⁴¹

The UK Post Office prosecutions provide another example of problematic algorithmic decision making.⁴² A civil action by the *Justice for Subpostmasters Alliance* followed.⁴³

Concluding remarks

The previous technology revolution did not give rise to ethical considerations, except perhaps how to adapt time-recording practices for automated document preparation. Generative AI is arguably different, so what are the ethical issues for generative AI and the law?

Lawyers must understand the limitations of these tools such as hallucinatory output and be cautious, at least for now, about relying solely on generative AI output without verification. Privacy and confidentiality issues may arise if client information is used in public (open) systems and even when using non-public (closed) products, lawyers should be satisfied of their security and data protection features. Generative AI output may inadvertently breach intellectual property rights or privacy laws. And if legal material is produced (either in whole or part) by generative AI, a lawyer must always validate and confirm the accuracy of the material before submitting it to a court.

Or at least that is what Microsoft Copilot tells me. I did check the sources.⁴⁴

Notes: **1** L P Hartley, *The Go-Between*, Hamish Hamilton, 1953. **2** The previous name was *Plaintiff*: the Journal of the Australian Plaintiff Lawyers Association (1997–2004). **3** R Davis, 'Planning for the leap into new technology', *Plaintiff* 49, February 2002, 23–26. **4** The proverb 'necessity is the mother of invention' appears, perhaps for the first time in English, translated as *Mater artium necessitas* in *Vulgaria*, a book of Latin aphorisms, by W Horman, in 1519. **5** Behind TikTok, WhatsApp, Facebook and Instagram. **6** 'Microsoft Teams Hits 44 Million Daily Active Users', *UC Today* (19 March 2020) <<https://www.uctoday.com/collaboration/microsoft-teams-hits-44-million-daily-active-users/>>. **7** B Madden, 'The future of law', *Plaintiff* 49, February 2002, 6–11. **8** For an entertaining early history of online legal information retrieval services in Australia see G Greenleaf, A Mowbray and D Lewis, *Australasian Computerised Legal Information Handbook*, pt A, 'Introduction to Legal Information Retrieval', Butterworths (Australia), 1988 <<https://www2.austlii.edu.au/cal/guides/retrieval/handbook/index-4.html#Heading84>>. **9** AustLII was formed as a joint facility operated by the Faculties of Law at the University of Technology, Sydney and the University of New South Wales, in order to carry out an Australian Research Council Infrastructure Grant. **10** The most recent annual report of AustLII, *2022 Year in Review*, is available online <<https://www.austlii.edu.au/austlii/reports/2022/>

AustLII_YiR_2022.pdf>. **11** 'What are large language models (LLMs)?' *IBM* (2024) <<https://www.ibm.com/topics/large-language-models>>. **12** ChatGPT: <<https://chat.openai.com/>>; Copilot: <<https://copilot.microsoft.com/>>; Gemini: <<https://gemini.google.com/app/>>; Meta Llama: <<https://www.meta.ai/>>. **13** L Beveridge 'ChatGPT Already Outperforms a lot of Junior Lawyers': An Interview With Richard Susskind', *Law.com* (2 March 2023) <<https://www.law.com/international-edition/2023/03/02/chatgpt-already-outperforms-a-lot-of-junior-lawyers-an-interview-with-richard-susskind/>>. **14** R Susskind, *Tomorrow's Lawyers: An Introduction to Your Future*, 3rd edition, Oxford University Press UK, 2023. **15** S Hargreaves, "'Words are flowing out like endless rain into a paper cup": ChatGPT & law school assessments', *Legal Education Review*, 33(1), July 2023, 69–105. **16** *Ibid.*, 72. **17** [1992] HCA 58; (1992) 175 CLR 479. **18** Generative AI Taskforce, *University of Melbourne AI principles* <<https://www.unimelb.edu.au/generative-ai-taskforce/university-of-melbourne-ai-principles>>. See also the University's submission to the House Standing Committee on Employment, Education and Training, *Inquiry into the use of generative AI in the education system* (14 July 2023) <https://about.unimelb.edu.au/_data/assets/pdf_file/0032/396446/UoM-Submission-Inquiry-into-Generative-AI-in-Education-FINAL.pdf>. **19** *Artificial intelligence tools and technologies* (21 Apr 2023) <<https://academicintegrity.unimelb.edu.au/plagiarism-and-collusion/artificial-intelligence-tools-and-technologies>>. **20** Grammarly Inc (2024) <<https://www.grammarly.com/ai>>. **21** [2024] QSC 35. **22** *Ibid.*, [17]. **23** *Ibid.*, [42]. **24** [2024] ACTSC 19 (*DPP v Khan*). **25** *Ibid.*, [39]–[44]. **26** *Ibid.*, [43]. **27** [2016] VCC 1888. **28** *Ibid.*, [33]. **29** See eg UNSW Canberra, *This US lawyer used ChatGPT to research a legal brief with embarrassing results. We could all learn from his error* (24 June 2023) <<https://www.unsw.edu.au/news/2023/06/this-us-lawyer-used-chatgpt-to-research-a-legal-brief-with-embar>>. **30** *Mata v Avianca Inc* 22-cv-1461 (PKC) (2023) see <<https://cases.justia.com/federal/district-courts/new-york/nysdce/1:2022cv01461/575368/54/0.pdf?ts=1687525481>>. **31** See also the examples in R Douglas, '10 Minutes with ChatGPT' *Hearsay* 95 (2024) <<https://www.hearsay.org.au/10-minutes-with-chatgpt/>>. **32** *DPP v Khan*, above note 24, [43]. **33** Lexis+AI <<https://www.lexisnexis.com/en-us/products/lexis-plus-ai.page>>. **34** H Winkelmann, Te Tari Toko i te Tumu Whakawā, The Office of the Chief Justice (Report, March 2023) <<https://www.courtsofnz.govt.nz/assets/7-Publications/2-Reports/20230329-Digital-Strategy-Report.pdf>>. **35** NSW Online Registry (2024) <<https://onlineregistry.lawlink.nsw.gov.au/content/>>. **36** Queensland Government, *Lodge a civil claim at court* (2017) <<https://www.qld.gov.au/law/court/court-services/enforce-a-court-order-and-disputes-about-money/claims>>. **37** Winkelmann, above note 34, 27. **38** T Dancy, *Artificial Justice*, Oxford Technology Law and Policy, Oxford University Press, 2024. **39** Commonwealth of Australia, *The Royal Commission into the Robodebt Scheme* (Report, 2023) <<https://robodebt.royalcommission.gov.au/>>. **40** *Ibid.*, xvi. **41** *Ibid.*, xvii. **42** See K Peachey, 'Post office scandal: Postmasters celebrate huge victory against convictions', *BBC News* (2 October 2020) <<https://www.bbc.com/news/business-54384427>>. **43** Discussed in J Christie, 'The Post Office Horizon IT scandal and the presumption of the dependability of computer evidence', *Digital Evidence and Electronic Signature Law Review* 17, 2020, 49. **44** Navigating the legal ethics of generative AI, King & Wood Mallesons (24 April 2024) <<https://www.kwm.com/au/en/insights/latest-thinking/navigating-the-legal-ethics-of-generative-ai.html>>; Thompson Reuters, *The key legal issues relating to the use, acquisition, and development of AI* (1 March 2024) <<https://legal.thomsonreuters.com/blog/the-key-legal-issues-with-gen-ai/>>.

Bill Madden is Special Counsel, Carroll & O'Dea Lawyers.
Email bmadden@codea.com.au.