

OUT IN THE DARK WITH ARTIFICIAL INTELLIGENCE

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Artificial intelligence (“AI”) will affect the legal landscape in significant ways. AI tools offer important efficiencies and are poised to alter traditional lawyering; at the same time, they require careful navigation of professional duties and ethical obligations. The article encourages law firms to adapt their training, governance, and business practices to harness AI’s potential while being guided by the profession’s fundamental values and ethical standards.

Valerie **THEAN**¹

Judge of the General Division of the High Court, Supreme Court of Singapore.

I. Artificial intelligence today

1 Artificial intelligence (“AI”) is at a tipping point. Rapid technological innovation in the last decade has brought generative AI into the fabric of our lives. With ChatGPT, large language models have become accessible through our computers and mobile devices. DeepSeek has enabled cheaper, faster, and even more accessible AI adoption. And now we have agentic AI, AI autonomous agents that are able to perceive their environment, reason about situations, act upon those insights, and learn from outcomes to continuously improve performance without human intervention.²

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- 1 This article is adapted from my keynote address delivered at the Litigation Conference Workshop 2025. I am grateful to my former clerk, Mr Chua Kang Le, for his assistance in the preparation of this article and Mr Yeong Zee Kin, Chief Executive of the Singapore Academy of Law, for review and comments.
 - 2 “Agentic AI Primer: What Is an Agent”, *Government Technology Agency Singapore* <https://playbooks.aip.gov.sg/agentic-ai-primer/02_what_is_an_agent/> (accessed 20 May 2025).

2 It is understandable that this tipping point brings trepidation. Science fiction writer Isaac Asimov coined the term “Frankenstein’s Complex” – a fear of mechanical men supplanting their creators.³ *Are we out in the dark with Frankenstein’s Monster?* Many ask whether AI will replace lawyers and judges. To the contrary, those of us who are familiar with Luke Skywalker’s *R2D2* or Iron Man’s *Jarvis* would know that AI can be a loyal friend and not a foe. I posit that lawyers will not be replaced by AI, but they will be replaced by lawyers who *use* AI.

- 3 In analysing the issues, two questions are pertinent:
- (a) First, how AI will affect the legal landscape and the wider legal fraternity, and in this light, how we should better prepare to succeed.
 - (b) Second, whether our professional values matter in finding our way in the midst of these disruptive changes.

II. Artificial intelligence and lawyering

4 On the first question, I suggest that our attitude towards AI should be one of healthy caution. Avoidance is not an option. At the Mass Admission Ceremony 2025, Chief Justice Sundaresh Menon highlighted a survey by Vals AI, a new startup that evaluates AI tools. This survey compared the performance of AI tools and lawyers in prescribed tasks.⁴ Harvey.AI, the best performing AI tool in the survey, outperformed lawyers in five areas – data extraction; document review and analysis; document summarisation; transcript analysis; and generation of chronologies. I cannot think of any lawyer who will not be relieved to receive good assistance in these five areas.

3 In his robot novels.

4 Chief Justice Sundaresh Menon, Supreme Court of Singapore, “The Centrality of Trust in the Legal Profession”, speech at the Mass Admission Ceremony 2025 (21 April 2025) at paras 7–8, <<https://www.judiciary.gov.sg/news-and-resources/news/news-details/chief-justice-sundaresh-menon--speech-at-mass-admission-ceremony-2025>> (accessed 20 May 2025). See also Vals AI, *Vals Legal AI Report* (2025) <<https://www.vals.ai/vlair>> (accessed 20 May 2025).

5 We must also bear in mind that the development of AI is now at exponential pace. In summer 2023, a study was conducted to assess the effect of AI assistance on the completion of realistic legal tasks.⁵ The study showed that while improvements to the quality of legal analysis were small and inconsistent, AI assistance greatly reduced the time taken to complete the assigned tasks by an average of about 20%. This study was premised on GPT-4, the most advanced AI model then. A year later, in October 2024, another study was conducted using the two leading generative AI models at the time.⁶ The study recorded a statistically significant improvement in *both* the quality and the speed of legal work. In the short span of time since ChatGPT first brought generative AI to public consciousness in late 2022, innovations such as the Retrieval Augmented Generation and reasoning models have significantly improved the efficacy of AI tools, and more innovations are surely to come.

A. Law firms

6 Law firms, given the need to incorporate AI in their work processes, may have to re-examine three areas: training, internal governance, and business practices.

(1) New training needs

7 First, training. What I hear most commonly, when I talk to senior lawyers, is a concern that the use of AI may lead to a diminution of hands-on training for young lawyers. For example, written advocacy skills are honed through an iterative process of drafting and refinement, guided by the wisdom of more experienced colleagues. While AI presents a prime opportunity for lawyers to go up the value chain to focus on higher-value

5 Jonathan H Choi, Amy B Monahan & Daniel Schwarcz, “Lawyering in the Age of Artificial Intelligence” (2023) 109 *Minnesota Law Review* 147.

6 Daniel Schwarcz *et al*, “AI-Powered Lawyering: AI Reasoning Models, Retrieval Augmented Generation, and the Future of Legal Practice” (2025) Minnesota Legal Studies Research Paper No. 25-16, U of Michigan Public Law Research Paper No. 24-058.

tasks,⁷ this may inadvertently truncate what would otherwise be years of rigorous training in fundamental lawyering skills.

8 Generation Z individuals are digital natives though. We will have to adapt, be intentional in training young lawyers,⁸ and keep using new and better ways. There was a time when seniors were concerned that the demise of the library would mean inferior research. Time has shown that search tools have obviated the need for physical libraries.

(2) *Need for firm-wide artificial intelligence governance policies*

9 Second, AI governance. Firms should establish clear AI use policies and a comprehensive internal governance strategy in relation to AI solutions.⁹ These policies may be considered in three buckets. The first category relates to considerations *before* using the AI tool, such as *when* AI can be used for a piece of work and *how* information should be appropriately inserted into AI tools. The second category relates to training lawyers on how to use AI tools. All lawyers should learn how to craft prompts, in the same way that we learnt to conduct keyword searches in the past. The third relates to procedures *after* using the AI tool, such as professional responsibility over vetting the output before incorporating them into work products and when the use of AI needs to be disclosed to the courts. Lawyers must also be aware of internal or client policies requiring disclosure of the use of AI. These policies should be careful to circumscribe the use of AI so as to avoid incurring legal liability. By keeping lawyers safe and

7 Edwin Tong SC, Minister for Culture, Community and Youth and Second Minister for Law, response speech at the Committee of Supply Debate 2025 (4 March 2025) at para 37, <<https://www.mlaw.gov.sg/response-speech-by-second-minister-for-law-edwin-tong-at-the-committee-of-supply-debate-2025/>> (accessed 20 May 2025).

8 See, *eg*, the Junior Lawyers Professional Certification Programme (“JLP”) which was launched on 21 May 2025. The automation of entry-level legal tasks and the diminution of learning opportunities was cited by Yeong Zee Kin, Chief Executive of the Singapore Academy of Law, as forming part of the impetus for the JLP: see Samuel Devaraj, “New Law Academy Programme Will Help Young Lawyers With Ethical GenAI Use, Difficult Clients”, *The Straits Times* (21 May 2025).

9 International Bar Association & Center for AI and Digital Policy, *The Future Is Now: Artificial Intelligence and the Legal Profession* (September 2024) at p 13.

by dispelling uncertainty, these policies would enable the use of AI within secure parameters.

10 In this area, the Model AI Governance Framework (Second Edition) provides useful guidance on how organisations may promote the responsible use of AI and serve as a good starting point.¹⁰ In addition, law firms should institute internal training programmes to cover these policies and strategies and to provide practical guidance as to effective AI use.¹¹

(3) *New business practices*

11 Third, new business practices may become relevant. For example, law firms surveyed for the International Bar Association’s September 2024 report on AI and the Legal Profession (“IBA Report”) anticipated a shift towards fixed or added value fees along with additional technology and development surcharges.¹² When many tasks can be automated, the billable hour, the dominant billing model for decades,¹³ may no longer be appropriate to assess the value of the law firm’s services.¹⁴ While this change will be a challenge, it could also be an opportunity for the profession.

10 See Infocomm Media Development Authority & AI Verify Foundation, *Model AI Governance Framework for Generative AI: Fostering a Trusted Ecosystem* (30 May 2024). The Ministry of Law is also working on general guidelines to guide legal professionals in the purchase and use of AI tools: see Murali Pillai SC, Minister of State for Law, response speech at the Committee of Supply Debate 2025 (4 March 2025) at para 24.

11 International Bar Association & Center for AI and Digital Policy, *The Future Is Now: Artificial Intelligence and the Legal Profession* (September 2024) at pp 15–16.

12 International Bar Association & Center for AI and Digital Policy, *The Future Is Now: Artificial Intelligence and the Legal Profession* (September 2024) at p 14.

13 James W Jones, “How Law Firms Ended Up With the Billable Hour Model”, *Thomson Reuters* (11 February 2025).

14 Angeline Poon, “Rethinking Law Firm Billing in the Age of AI”, *Singapore Law Gazette* (January 2025). See also International Bar Association & Center for AI and Digital Policy, *The Future Is Now: Artificial Intelligence and the Legal Profession* (September 2024) at p 14.

B. The wider legal profession

12 Coming to the broader view of the wider legal profession, the structure of the legal profession may evolve. The IBA Report observed that large firms benefit from economies of scale in the purchase and implementation of AI tools and are quicker in its adoption.¹⁵ Further, large firms have significantly greater archives of work products and therefore possess exclusive, high-quality datasets which may be used to train their firm-owned AI. In contrast, small firms may not have the resources to make bespoke agreements economically feasible and may lack the broad dataset necessary to train an AI tool. Instead, they may rely on paid or even free versions of public AI tools. Surveying the legal landscape, the IBA Report found that 100% of firms with over 500 lawyers reported implementing AI in their workflow.¹⁶ Conversely, only 32% of smaller firms with fewer than 100 lawyers have been leveraging on AI tools.¹⁷ We have not done the same survey in Singapore, but anecdotal evidence suggests a similar large and small firm divide in the use of AI. This asymmetric adoption of AI tools is concerning, and poses a question for the legal fraternity.

13 In time, the wider legal industry may also fundamentally change. Professor Richard Susskind suggested in 2008 that lawyers face the danger of disintermediation, being cut out of a supply chain by advanced systems.¹⁸ The jobs of traditional lawyers could be substantially eroded and even eliminated, but on a brighter note, new law jobs may also emerge.¹⁹

15 International Bar Association & Center for AI and Digital Policy, *The Future Is Now: Artificial Intelligence and the Legal Profession* (September 2024) at p 16.

16 International Bar Association & Center for AI and Digital Policy, *The Future Is Now: Artificial Intelligence and the Legal Profession* (September 2024) at p 12.

17 International Bar Association & Center for AI and Digital Policy, *The Future Is Now: Artificial Intelligence and the Legal Profession* (September 2024) at p 12.

18 Richard Susskind, *The End of Lawyers? Rethinking the Nature of Legal Services* (Oxford University Press, 2008) at p 6.

19 Richard Susskind, *The End of Lawyers? Rethinking the Nature of Legal Services* (Oxford University Press, 2008) at p 2.

14 The demand for traditional legal services may, for example, be reduced in two ways.²⁰

(a) First, self-represented persons may be empowered by AI tools to handle their own legal affairs without the assistance of lawyers.²¹ Many businesses have started to rely on generative AI to produce contracts at minimal cost as opposed to hiring and paying a law firm to do so.²² Litigants may also leverage on AI tools to develop legal strategies and navigate court proceedings. Professor Susskind posited that “the newest, stiffest competitor to a law firm is an AI-empowered client”.²³

(b) Second, AI dispute resolution is growing. Much scepticism has been expressed in relation to AI judging, which may lack a human touch and fail to reflect the values of the justice system.²⁴ However, for business disputes where all that matters to parties may be the numbers, AI-dispute resolution may yet prove to be a cheap and cost-effective solution. The larger e-commerce platforms have introduced rules-based online dispute resolution systems to resolve complaints over small value transactions for a number of years. These systems will be further augmented by the introduction of AI, which could play mediation²⁵ or adjudication roles. In early 2025, a legal tech startup in the US launched the Arbitrus.ai platform,

20 Chief Justice Sundaresh Menon, Supreme Court of Singapore, “The Transformation of Litigation and the Litigator of the Future”, keynote address at Litigation Conference 2024 (3 April 2024) at para 9.

21 Chief Justice Sundaresh Menon, Supreme Court of Singapore, “The Transformation of Litigation and the Litigator of the Future”, keynote address at Litigation Conference 2024 (3 April 2024) at para 10.

22 Renald Yeo, “Small-Business Owners Warm to AI-Written Contracts; Lawyers Warn of Costly Mistakes”, *The Business Times* (22 November 2023).

23 Caroline Hill, “Richard Susskind: ‘The Market Will Show No Loyalty to the Traditional Way of Working’”, *Legal IT Insider* (2 January 2024).

24 Chief Justice Sundaresh Menon, Supreme Court of Singapore, “Judicial Responsibility in the Age of Artificial Intelligence”, keynote speech at the Inaugural Singapore-India Conference on Technology (13 April 2024) at paras 7–9.

25 See, eg, Hannes Westermann, Jaromir Savelka & Karim Benyekhlef, “LLMediator: GPT-4 Assisted Online Dispute Resolution” (2023) arXiv:2307.16732.

an AI arbitration tool.²⁶ The platform is trained on case law to render a decision based on parties' evidence and briefs. Parties are charged a fee to sign up and must agree in advance to be bound by the platform's decision which is to be enforced as an arbitration award. In their paper setting out the platform's mechanics, the founders make a bold claim that automated arbitration "will gradually outcompete" and "subsume large swathes of formerly public litigation".²⁷ They boast that the platform reduces the cost of dispute resolution from \$100,000 to a flat \$10,000.²⁸ The jury is still out on whether AI arbitration would be embraced by the market, but it is incontrovertible that developments in AI can offer competitive alternatives to litigation. Litigation must adapt and improve.

III. Lawyering in the real world of the future

15 Looking to the future, we ask: Where will the new opportunities come from?

16 We do not know where the future will take us. But we should consider possible future outcomes even as we plan in the present.

(a) One possible future is the consolidation of the legal industry into mega law firms, leveraging on their competitive advantage with AI tools to outcompete small law firms. This may result in the elimination of smaller outfits.

(b) At the same time, the opposite could just as easily happen, with the increasing affordability and accessibility of AI tools. Affordable AI tools might make

26 Steven Lerner, "Founders of 'AI Judge' Arbitrus on Arbitration Tech's Promise", *Law360 Pulse* (7 February 2025).

27 Kimo Gandall, Jack Kieffaber & Kenny McLaren, "We Built Judge.AI. And You Should Buy It." SSRN (forthcoming, 2025) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5115184> at pp 1–3.

28 Kimo Gandall, Jack Kieffaber & Kenny McLaren, "We Built Judge.AI. And You Should Buy It." SSRN (forthcoming, 2025) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5115184> at p 1.

the traditional pyramid structure of law firms obsolete. The democratisation of AI could empower small firms and sole practitioners in new ways.

(c) Third, another possible future is one where general law firms may splinter into more specialised outfits, tailored to the precise nature of the legal service to be delivered.²⁹ Three broad categories of firms may emerge.

(i) First, firms may operate on the legal technology model, focusing on the development of legal technology tools and offering software-as-a-service. Many legal technology businesses have emerged in recent years, and this market is going to grow exponentially in response to demand.

(ii) Second, some firms may be structured on the legal operations model, centring around efficient legal technology tools to address process-oriented legal work, such as contract management, in a cost-effective manner. This would require a multidisciplinary team of lawyers, legal technologists and allied legal professionals to work in tandem.³⁰

(iii) Third, others may still operate on the legal advisory model, with experienced practitioners providing bespoke advice on complex transactions and high-stakes litigation.

17 These are just a few scenarios among many. With change, new possibilities emerge. Some of these possibilities could result in very positive outcomes for the legal profession. As we tell our children, the future is what we make it.

29 Richard Parnham, Mari Sako & John Armour, “AI-Assisted Lawtech: Its Impact On Law Firms”, *University of Oxford* (December 2021) at pp 19–22.

30 Chief Justice Sundaresh Menon, Supreme Court of Singapore, “The Transformation of Litigation and the Litigator of the Future”, keynote address at Litigation Conference 2024 (3 April 2024) at para 38(b).

IV. Values

18 In this journey ahead, do values matter, in the day-to-day grind of survival amidst a landscape where AI advances relentlessly? In the Final Report by the Ethics and Professional Standards Committee released in January 2025,³¹ the Committee had, after extensive consultation, framed the legal profession's core values as: integrity, professionalism, and justice. These values build on the premise that lawyers exist to serve the common good and this service is fundamental to the rule of law. This premise has a logical corollary, which is that if lawyers fail to reflect our profession's core values in their work, the common good is not served, and there will, eventually, be consequences for societal well-being and the rule of law.

19 In this context, let me come to the legal profession's duties to the court, client and fellow practitioners, as it is these duties that detail how our values are translated into daily reality.

A. *Duty to the court*

20 First, let me deal with lawyers' paramount duty to the court.³² As lawyers are officers of the court, this duty takes precedence over duties owed to clients. In the now (in)famous case of *Mata v Avianca Inc*,³³ New York lawyers relied on ChatGPT to generate legal submissions, assuming, erroneously that it functioned just like a search engine. This was in early 2023, during the early days of generative AI. As we all now know, generative AI does hallucinate, and the AI they used cited non-existent cases. The US District Court for the South District of New York ordered them to file an affidavit annexing the decisions. Once again, they relied on ChatGPT to produce what purported to be copies of decisions, and, without independent verification, annexed them to an affidavit filed in court. The court found the lawyers to have acted in bad faith and imposed a joint penalty.

31 Ethics and Professional Standards Committee, *Final Report of the Ethics and Professional Standards Committee* (8 January 2025), Annex C.

32 Legal Profession (Professional Conduct) Rules 2015 r 4(a).

33 678 F Supp 3d 443 (SDNY, 2023).

21 The Singapore courts' position on AI use in litigation is encapsulated in a Registrar's Circular published in September 2024.³⁴ The Circular emphasises that lawyers must ensure materials put before the courts are "independently verified, accurate, true and appropriate".³⁵ The lawyer must bear full responsibility for the output.³⁶ In this sense, AI is simply another form of assistance; practitioners must remain personally accountable for the quality and integrity of their work.

B. Duty to clients

22 What about the duty to clients?

(1) Duty of confidentiality

23 Client confidentiality and data protection remains a challenge. Generally, a generative AI model is trained on data inputs. Some services will make use of prompts from users as part of their continuous learning. If we are not careful, our prompts may contain confidential information from clients. For example, Amazon employees were warned not to provide ChatGPT with confidential information, after it was discovered that ChatGPT's output closely resembled existing internal proprietary material.³⁷ Practitioners must take appropriate measures to ensure that client information is not accessed or used by unauthorised persons. There are different approaches. Law firms with the technological wherewithal to customise their own open-source AI are able to draw upon their own in-house repositories, but they would need the technical ability to develop and host the system within

34 Supreme Court of Singapore, "Registrar's Circular No. 1 of 2024: Guide On the Use of Generative Artificial Intelligence Tools By Court Users" (23 September 2024).

35 Supreme Court of Singapore, "Registrar's Circular No. 1 of 2024: Guide On the Use of Generative Artificial Intelligence Tools By Court Users" (23 September 2024) at para 3(2)(a).

36 Supreme Court of Singapore, "Registrar's Circular No. 1 of 2024: Guide On the Use of Generative Artificial Intelligence Tools By Court Users" (23 September 2024) at para 3(2)(b).

37 Eugene Kim, "Amazon Warns Employees Not to Share Confidential Information With ChatGPT After Seeing Cases Where Its Answer 'Closely Matches Existing Material' From Inside the Company", *Business Insider* (25 January 2023).

their own infrastructure. Law firms that use proprietary models hosted externally would need to ensure they have negotiated the relevant contractual safeguards and selected the correct service levels, to ensure that the AI model would not store or use the firm's data inputs for further training or other purposes.

(2) *Duty of competence and diligence*

24 Secondly, as the examples above show, lawyers have a duty to use AI competently and diligently in servicing their clients.³⁸

25 At the same time, as AI evolves, so would a lawyer's duty of competence and diligence.

(a) First, would lawyers have an affirmative duty to use AI to discharge their duty to complete work conscientiously, and in a cost-effective manner?³⁹ As a practical matter, clients may expect lawyers to incorporate technology to provide legal services efficiently.⁴⁰ English Master of the Rolls Sir Geoffrey Vos asked, "rhetorically", he said, in March last year, whether lawyers would be able to show that they have used reasonable skill, care and diligence to protect their clients' interests if they fail to use available AI programs that would be better, quicker and cheaper.⁴¹

(b) Second, what is the duty to communicate and to keep the client reasonably appraised where AI is used?⁴² The IBA Report suggests that "lawyers should inform their clients when they have made use of AI, disclosing the

38 Legal Profession (Professional Conduct) Rules 2015 r 5.

39 Legal Profession (Professional Conduct) Rules 2015 r 17(2).

40 Chief Justice Sundaresh Menon, Supreme Court of Singapore, "Legal Systems in a Digital Age: Pursuing the Next Frontier", speech at 3rd Annual France-Singapore Symposium on Law and Business in Paris, France (11 May 2023) at para 29(c).

41 Sir Geoffrey Vos, Master of the Rolls and Head of Civil Justice, "AI – Transforming the Work of Lawyers and Judges", keynote speech at AI Conference 2024: Transforming the Legal Landscape (8 March 2024) at paras 7 and 36–37.

42 Legal Profession (Professional Conduct) Rules 2015 r 5(2)(e).

scope of such use and the type of AI used”.⁴³ Since the time that report was published, however, AI has become part of the daily context of any client’s existence; commonly used productivity tools incorporate AI features. Judgment is required to be applied in deciding whether and what to communicate.

C. *Duty to fellow practitioners*

26 Aside from duties to the court and client, practitioners also have duties to each other. A quick reminder. Before sending out a letter to the opposing counsel, please make sure your Copilot-assisted draft is courteous, and not, as a lawyer so aptly put it, “life-shortening”.

D. *Looking at all these duties together*

27 This context of each lawyer’s professional duties is intertwined with the law firm governance issues I discussed earlier. Law firm policies and practices will have to deal with these points of client confidentiality and professional responsibility. Within the workplaces of law firms, good training and sound policies to guide professional standards are as necessary as safety helmets and harnesses on a construction site.

V. *Conclusion*

28 Let me conclude with two more questions.

(a) First, how may we, as lawyers with better tools, become better, more effective and more efficient lawyers?

(b) Second, how can we, as a legal profession, evolve to better serve our community of lawyers and our society?

29 Our values must guide us. Our values are our torches, showing the way forward and lighting a sure path amidst uncertainty. Let us tread with confidence in the light of our trusty

43 International Bar Association & Center for AI and Digital Policy, *The Future Is Now: Artificial Intelligence and the Legal Profession* (September 2024) at p 9.

torches, but more than ever, let us tread together: as a community, with meaningful conversation, and joyful collaboration.