

Word Count: 1482

Harb, Alexander - MLS Essay Competition

Introduction

This discussion examines the transformative impact of AI on the legal profession, contending that AI will enhance rather than substitute human lawyers. By tracing the evolution of AI from its early applications to modern advancements, this essay will detail the current and potential uses of AI in legal practice while accentuating the advantages, such as augmented efficiency and improved access to justice. Additionally, the significant challenges, limitations, and applications of such technology will be assessed. The essay emphasises the need for law schools and the legal profession to prepare for AI through education and ethical training. Ultimately, this essay argues that while AI will not replace lawyers, those who utilise AI will likely surpass those who do not deliver legal services. The first section of this response will summarise AI's evolution in law, while the second section will discuss the current uses of AI in Legal Practice. The penultimate section of this response examines the growing prevalence and implications of AI, while the final section will argue the challenges of utilising the technology.

The Evolution of AI in Law

Early AI Applications:

The earliest relevant AI program related to legal analysis was the program TAXMAN,¹ first created to reconstruct a summary of the opinions from the *Eisner v Macomber* tax case.² The objective of converging artificial intelligence and legal research has been to create a model of the reasoning for cases and a tool to explain the outcome and offer potential alternative outcomes rather than simply predict the outcome of any given case.³ Building on these early advancements, modern AI applications in law have evolved significantly, leveraging deep learning techniques to address more complex tasks within the legal domain.

1L T McCarty, 'Reflections on TAXMAN: An Experiment in Artificial Intelligence and Legal Reasoning' (1976) 90 Harvard Law Review 837, quoted in Katie Atkinson, Trevor Bench-Capon and Danushka Bollegala, 'Explanation in AI and Law: Past, Present and Future' (2020) 289 Artificial Intelligence 103387 ('Atkinson et al').

2*Eisner v Macomber* (1920) 252 US 189, quoted in Atkinson et al.

3 Katie Atkinson, Trevor Bench-Capon and Danushka Bollegala, 'Explanation in AI and Law: Past, Present and Future' (2020) 289 *Artificial Intelligence* 103387.

Transition to Modern AI

AI is an umbrella term for machine functions that can emulate human processes. In the legal context, computers and software frequently employ AI in the form of machine learning (ML), which facilitates the automation of legal work and improves the performance of specific tasks over time.⁴ Use cases within the legal domain include predicting the length of prison sentences,⁵ detecting medical negligence,⁶ and extracting information from handwritten documents.⁷ State-of-the-art performance has been achieved in a broad range of classification and recognition tasks using deep learning methods, including image classification,⁸ machine translation,⁹ textual entailment,¹⁰ and relation extraction.¹¹ This demonstrates that identification and document analysis have undergone comprehensive and thorough development, presenting various avenues for further exploration.

Current Uses of AI in Legal Practice

Legal Research and Document Review:

In today's legal environment, legal research and document review tools are in high demand due to the overwhelming volume of documents and exhibits. The efficient management of these records can account for up to 73% of the total cost of producing documents.¹²

4 'AI Tools for Lawyers: A Practical Guide', *Bloomberg Law* (1 August 2023) <<https://pro.bloomberglaw.com/insights/technology/ai-in-legal-practice-explained/>>.

5 H Chen, D Cai, W Dai, Z Dai and Y Ding, 'Charge-Based Prison Term Prediction with Deep Gating Network' (arXiv preprint, arXiv:1908.11521, 2019) <https://arxiv.org/abs/1908.11521>, quoted in Atkinson et al.

6 R Bevan, A Torrissi, D Bollegala, F Coenen and K Atkinson, 'Extracting Supporting Evidence from Medical Negligence Claim Texts' in *Proceedings of the International Joint Conference on Artificial Intelligence* (KDH@IJCAI, 2019) <https://www.csc.liv.ac.uk>, quoted in Atkinson et al.

7 A Torrissi, R Bevan, K Atkinson, D Bollegala and F Coenen, 'Combining Textual and Visual Information for Typed and Handwritten Text Separation in Legal Documents' in *Legal Knowledge and Information Systems* (2019), quoted in Atkinson et al.

8 Q Xie, M-T Luong, E Hovy and QV Le, 'Self-Training with Noisy Student Improves ImageNet Classification' in *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition* (2020) 10687, quoted in Atkinson et al.

9 S Edunov, M Ott, M Auli and D Grangier, 'Understanding Back-Translation at Scale' in *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing* (Association for Computational Linguistics, 2018) 489, quoted in Atkinson et al.

10 X Liu, P He, W Chen and J Gao, 'Multi-Task Deep Neural Networks for Natural Language Understanding' in *Proceedings of the Association for Computational Linguistics* (2019) 4487, quoted in Atkinson et al.

11 L Baldini Soares, N FitzGerald, J Ling and T Kwiatkowski, 'Matching the Blanks: Distributional Similarity for Relation Learning' in *Proceedings of the Association for Computational Linguistics* (2019), quoted in Atkinson et al.

12 Nicholas M Pace and Laura Zakaras, *The Cost of Producing Electronic Documents in Civil Lawsuits: Can They Be Sharply Reduced Without Sacrificing Quality?* (RAND Corporation, 2012).

Artificial Intelligence

Despite scepticism from many legal professionals who are either technologically averse or fear being replaced by AI, LawGeex, a company specializing in software for reviewing legal contracts, addressed these concerns by inviting 20 lawyers to test their AI product. Upon working simultaneously, the lawyers and the AI reviewed five agreements and identified 30 legal questions. The average human lawyer required 92 minutes to complete the task and achieved an accuracy rate of 85%, while the AI achieved 95% accuracy and finished the task in 26 seconds.¹³

Bloomberg AI uses

Additionally, Bloomberg has indicated the following uses for AI in our current post-ChatGPT technosphere, including 'Pinpoint[ing] the best case law in seconds, write[ing] a better legal brief in less time, and be[ing] better prepared for litigation,' while highlighting the drafting/templating of communications (e.g., memos, emails, correspondence to opposing counsel), conducting legal research, and summarizing legal narratives, as well as the entire e-Discovery process.¹⁴ During e-discovery, lawyers identify and organize electronically stored information (ESI) in response to a request for production in a lawsuit or investigation, which has become a staple of modern litigation.¹⁵

What's Next?

What provokes further consideration is how these technologies interact with s 37 of the *Legal Profession Uniform Law Australian Solicitors' Conduct Rules 2015* ('ASCR 2015'),¹⁶ upholding a lawyer's responsibility to ensure any nonlawyer's conduct aligns with those of the supervising lawyer to be discussed further in later sections. With this framework in mind, it is essential to explore the potential uses of AI in legal practice, considering how these advancements can further advance in the near future, given the rate of advancing innovation in this postmodern-industrial renaissance while adhering to professional, ethical standards.

¹³ LawGeex, 'LawGeex AI Lawyer vs. Top Lawyers' (2018) <https://www.lawgeex.com/2018/02/ai-lawyer-vs-top-lawyers/>, quoted in Xu et al.

¹⁴ 'AI Tools for Lawyers: A Practical Guide', *Bloomberg Law* (1 August 2023) <<https://pro.bloomberglaw.com/insights/technology/ai-in-legal-practice-explained/>>.

¹⁵ Ibid.

¹⁶ *Legal Profession Uniform Law Australian Solicitors' Conduct Rules 2015* (NSW) s 37.

What might this look like, and how can the community support it despite this barrier to usage?

Growing Prevalence and Implications of AI

Ruling on generative tools

Director of Public Prosecutions v Majad Khan recently commented on the use of such tools, noting the emerging role of AI tools in assisting with legal documentation, highlighting their potential to streamline processes and reduce human error." During the sentencing, a character reference submitted by Khan's brother raised issues because it appeared to be generated or rewritten using a large language model, potentially ChatGPT. The court expressed concern over the appropriateness of using AI-generated references in legal proceedings. Mossop J highlighted the difficulties in assessing the weight of such references due to their potentially artificial nature and lack of genuine human input while stating that counsel ought to inquire and inform the court about employing AI or automated translation software in preparing references.

Implications in Utilising AI

With the ability to automate repetitive tasks and redirect efforts to complex issues, generative AI will effectively aid in improving access to justice alongside improving enhanced efficiency in the industry. While generative AI can assist in the profession, the original benefits of neural networks remain, such as budgeting, recruitment, employee training, and even marketing initiatives.¹⁷ As LexisNexis posits, lawyers still need to uphold the profession's standards pursuant to section 4 of the ASCR¹⁸ and accept AI as a tool to be wielded - not a solution in and of itself.¹⁹ Drawing parallels to the advent of the computer in the workplace, AI is not a replacement but a revelation.

¹⁷ LexisNexis, 'How Is Generative AI Disrupting Legal Workflows?' (23 April 2024) <<https://www.lexisnexis.com.au/en/insights-and-analysis/practice-intelligence/2024/how-is-generative-ai-disrupting-legal-workflows>>.

¹⁸ *Legal Profession Uniform Law Australian Solicitors' Conduct Rules 2015* (NSW) s 4.

¹⁹ LexisNexis, 'How Is Generative AI Disrupting Legal Workflows?' (23 April 2024) <<https://www.lexisnexis.com.au/en/insights-and-analysis/practice-intelligence/2024/how-is-generative-ai-disrupting-legal-workflows>>.

However, further exploration is necessary before AI can become the industry standard. Do the duties of Loyalty and Good Faith require lawyers to use all the tools at their disposal? Should lawyers leverage AI to handle routine and mundane tasks, maximising efficiency and reducing client billable hours? While cyber jurists may not replace traditional practitioners, they may significantly evolve the industry. Addressing these questions will be crucial in determining the future role of AI in law. As answers emerge, a legal revolution may be on the horizon, redefining the practice of law, enhancing access to justice, and reshaping the lawyer-client relationship, resulting in happier and more well-adjusted lawyers.

Challenges in Generative AI

Ethical Challenges

Most of the challenges faced when employing generative AI are ethical rather than financial burden or availability and despite accuracy issues. While Innovation is inherently tied to the legal field, due to the judge-made case law found in our common law system, a similar boom occurred during the development of the stock markets in the USA, accompanied by the emergence of new lawmaking and law enforcement institutions in the form of regulators (SEC, FSA, amongst others).²⁰ Innovative capacity refers to a given system's ability to respond to its challenges, which may differ from those a neighbouring system faces,²¹ adjusting to maintain order in the entropic society we have devised. With this innovation comes early adoption, which can lead to data privacy concerns and security issues within the territory of any new technology. Great care must assuredly be attributed when interacting with AI in order to maintain confidentiality, particularly with privileged information. AI tools, particularly those designed for document review, data analysis, and legal research, require access to large datasets to function effectively, which may prove challenging to segment data and maintain Chinese walls, in addition to biased decision-making based upon input from the user.

Case Law and Legislation

²⁰ Pistor, Katharina et al, 'Innovation in Corporate Law' (2003) 31(4) *Journal of Comparative Economics* 676.

²¹ Ibid.

Cases such as *Re Thaler*²² indicate that an artificial intelligence machine is inherently incapable of being treated as an inventor, lending credence to s 37 of the ASCR²³ and maintaining the operator responsible for any errors of fact or jurisdictional differences. Additionally, cases like *Hawkins v Clayton*,²⁴ *Rogers v Whitaker*,²⁵ section 296 of the *LPUL*,²⁶ and section 50 of the *CLA*²⁷ also demand a level of professional care in utilising generative AI in legal practice.

Conclusion

In conclusion, by employing AI mechanisms, traditional professionals may one day evolve into cyber jurists, blending legal expertise with advanced technological capabilities to navigate the complexities of modern law. These cyber jurists maintain a strong results-driven position and provide an enticing vision to develop the technologies further while crafting an environment to sustain ethical practices for future generations. By providing a robust and high-performing suite of tools, generative AI warrants a serious assessment of its feasibility in the legal environment. While traditional lawyers are not in immediate danger of replacement, there are increasingly fewer reasons to deny innovation, new ideas, and a restructured legal process driven by processing power.

²² *Re THALER* (2021) 162 IPR 381.

²³ ASCR n 17.

²⁴ *HAWKINS v CLAYTON and OTHERS* (1988) 78 ALR 69.

²⁵ *ROGERS v WHITAKER* (1992) 109 ALR 625.

²⁶ *Legal Profession Uniform Law (NSW) No 16a of 2014* (NSW) s 296.

²⁷ *Civil Liability Act 2002 No 22* (NSW) s 50.

Bibliography

A. Articles

‘AI Tools for Lawyers: A Practical Guide’, *Bloomberg Law* (1 August 2023) <<https://pro.bloomberglaw.com/insights/technology/ai-in-legal-practice-explained/>>

Atkinson, Katie, Trevor Bench-Capon and Danushka Bollegala, ‘Explanation in AI and Law: Past, Present and Future’ (2020) 289 *Artificial Intelligence* 103387

Baldini Soares, L, N FitzGerald, J Ling and T Kwiatkowski, ‘Matching the Blanks: Distributional Similarity for Relation Learning’ in *Proceedings of the Association for Computational Linguistics* (2019)

Bevan, R, A Torrisi, D Bollegala, F Coenen and K Atkinson, ‘Extracting Supporting Evidence from Medical Negligence Claim Texts’ in *Proceedings of the International Joint Conference on Artificial Intelligence* (KDH@IJCAI, 2019) <https://www.csc.liv.ac.uk>

Brownsword, Roger and Han Somsen, ‘Law, Innovation and Technology: Before We Fast Forward—A Forum for Debate’ (2009) 1(1) *Law, Innovation and Technology* 1

Chen, H, D Cai, W Dai, Z Dai and Y Ding, ‘Charge-Based Prison Term Prediction with Deep Gating Network’ (arXiv preprint, arXiv:1908.11521, 2019) <https://arxiv.org/abs/1908.11521>

Edunov, S, M Ott, M Auli and D Grangier, ‘Understanding Back-Translation at Scale’ in *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing* (Association for Computational Linguistics, 2018) 489

Gautam, Basu, "How Chat GPT Became so Much Famous?", *Medium* (25 October 2023) <https://medium.com/@basugautam_30456/how-chat-gpt-became-so-much-famous-f7d31432aa4a>]

Lai, Jinqi et al, ‘Large Language Models in Law: A Survey’ (No arXiv:2312.03718, arXiv, 25 November 2023) <<http://arxiv.org/abs/2312.03718>>

LexisNexis, ‘How Is Generative AI Disrupting Legal Workflows?’ (23 April 2024) <<https://www.lexisnexis.com.au/en/insights-and-analysis/practice-intelligence/2024/how-is-generative-ai-disrupting-legal-workflows>>

Liu, X, P He, W Chen and J Gao, ‘Multi-Task Deep Neural Networks for Natural Language Understanding’ in *Proceedings of the Association for Computational Linguistics* (2019) 4487

Pistor, Katharina et al, 'Innovation in Corporate Law' (2003) 31(4) *Journal of Comparative Economics* 676

Rissland, Edwina L, Kevin D Ashley and RP Loui, 'AI and Law: A Fruitful Synergy' (2003) 150(1) *Artificial Intelligence* 1

Torrise, A, R Bevan, K Atkinson, D Bollegala and F Coenen, 'Combining Textual and Visual Information for Typed and Handwritten Text Separation in Legal Documents' in *Legal Knowledge and Information Systems* (2019)

Xu, Ni and Kung-Jeng Wang, 'Adopting Robot Lawyer? The Extending Artificial Intelligence Robot Lawyer Technology Acceptance Model for Legal Industry by an Exploratory Study' (2021) 27(5) *Journal of Management & Organization* 867

B. Cases

Eisner v Macomber (1920) 252 US 189

HAWKINS v CLAYTON and OTHERS (1988) 78 ALR 69

Re THALER (2021) 162 IPR 381

ROGERS v WHITAKER (1992) 109 ALR 625

C. Legislation

Civil Liability Act 2002 No 22 (NSW)

Legal Profession Uniform Law (NSW) No 16a of 2014 (NSW)

Legal Profession Uniform Law Australian Solicitors' Conduct Rules 2015 (NSW)

D. *Books and Reports*

Nicholas M Pace and Laura Zakaras, *The Cost of Producing Electronic Documents in Civil Lawsuits: Can They Be Sharply Reduced Without Sacrificing Quality?* (RAND Corporation, 2012).