

The Impact of Information Technologies Upon the Teaching of Ethics and Professional Responsibility

Holli Sargeant

© April 2020

Centre for Professional Legal Education

Bond University

14 University Drive Robina QLD 4226 Australia

www.bond.edu.au/cple

AUTHOR

Holli Sargeant

Solicitor

Herbert Smith Freehills

holli.sargeant@hsf.com

This Report was commissioned by the Bond University Centre for Professional Legal Education as part of the research project 'The Impact of Emergent Technologies Upon the Teaching of Core Law Units in the Australian Law Curriculum'. The project has Ethics Approval from Bond University: Ethics Reference Number CP01045.

ABOUT THE CENTRE

The Centre for Professional Legal Education is a community of legal educators, researchers, practitioners and administrators who collaborate in defining, understanding and promoting best practice in the teaching of law. The work of the Centre has a particular emphasis upon the changing nature of professional legal education and training in the context of an internationalised, transformed and technology-enhanced legal services sector.

DISCLAIMER

While the Centre for Professional Legal Education ('the Centre') and the Author have made every effort to ensure the accuracy of information presented in this publication, they do not guarantee the accuracy or completeness of that information. The information is provided as general information only and any use of or reliance on it should only be undertaken on a strictly voluntary basis after an independent review by a qualified legal practitioner (or other expert). The Centre and the Author are not responsible for, and disclaim all liability for, any loss or damage arising out of the use of or reliance on this publication.

LICENCE

The Centre for Professional Legal Education ('the Centre') grants parties utilising this Report a non-exclusive, royalty-free, worldwide, non-transferable licence to use, reproduce, adapt and exploit the content of the Report for education and research purposes. In return, the Centre requires that parties utilising the Report provide an acknowledgment of the Centre and of the authors of the Report in any use of the content of the Report.

ABOUT THE PROJECT



This Report was commissioned by the Bond University Centre for Professional Legal Education as part of the research project ‘The Impact of Emergent Technologies Upon the Teaching of Core Law Units in the Australian Law Curriculum’.

The structure of the accredited Australian law degree – both the Bachelor of Law (LLB) and the Juris Doctor (JD) – continues to be determined primarily by the need to demonstrate coverage of the ‘Priestley 11’ (P11) prescribed areas of knowledge: administrative law, civil dispute resolution, company law, constitutional law, contract law, criminal law and procedure, equity, evidence, professional conduct, property law and tort law. The P11 areas of knowledge are taught via a series of core law units within the law degree, the content of which is relatively consistent across Australian law schools.

Meanwhile, the practice of law is undergoing rapid change, largely because of the emergence of disruptive digital technologies. There is a clear need for law schools to adjust the way law is taught to ensure law graduates continue to be effectively prepared for contemporary

legal practice. Many of the recent reports regarding the future of legal education and of the legal profession call for an increased emphasis in the law curriculum upon teaching digital skills and knowledge of emergent technologies, equipping work-ready graduates for technology-enhanced or technology-centric practice, while at the same time emphasising the need to retain the existing emphasis upon more traditional legal knowledge and skills.

The challenge confronting Australian law schools is the fact that many of the legal academics responsible for teaching the core law units lack the time, resources and expertise to identify and evaluate the impact of emergent technologies upon the law curriculum. The objective of this Project is to assist Australian law schools to address this challenge.

The Project is investigating the impact of emergent technologies upon the teaching of the core law units in the Australian law curriculum. The Project Leadership

Team has settled the overall research questions and method and identified six categories of emergent technologies (CETs).

CET	DESCRIPTION	EXAMPLES
Experiential technologies	New ways of experiencing the world around us	Virtual reality, augmented reality, mixed reality, digital twins
Body technologies	New ways of using our bodies	Wearables and implantables, genome editing
Information technologies	New ways of thinking, communicating, processing and storing information	Artificial intelligence, advanced machine learning, digital technology platforms, mesh app and service architecture, conversational systems, adaptive security architecture, inevitable architecture, big data, cloud computing, quantum computing, biometrics and digital id
Creative technologies	New ways of creating and making	3D printing, additive manufacturing, robots
Connection technologies	New ways of connecting	The internet of things, smart cities, intelligent things, intelligent apps, automated vehicles, bots/robots
Transaction technologies	New ways of transacting	Blockchains and distributed ledgers, cryptocurrencies, smart contracts, 'everything as a service'

Legal scholars from a variety of Australian law schools have been invited to identify the impact of each category of emergent technology upon each P11 area of knowledge, and to prepare a Report identifying the

impact of particular emergent technologies upon a particular P11 area of knowledge and any consequent changes to the way the P11 area of knowledge should be taught.

The focus of this Report is upon the impact of information technologies upon the teaching of ethics and professional responsibility.

PROJECT LEADERSHIP TEAM

The current Project Leadership team is:

Professor Nick James	Bond University	njames@bond.edu.au
Associate Professor Francina Cantatore	Bond University	fcantato@bond.edu.au
Associate Professor Wendy Bonython	Bond University	wbonytho@bond.edu.au
Assistant Professor Kylie Fletcher	Bond University	kfletche@bond.edu.au

The following former Leadership Team members made important contributions to the Project:

Associate Professor Tania Leiman	Flinders University
Associate Professor Kate Galloway	Griffith University
Associate Professor Bobette Wolski	Bond University
Associate Professor Jodie O'Leary	Bond University

WHAT ARE INFORMATION TECHNOLOGIES?

[A description of the relevant category of emergent technologies.]

Information technologies are fundamentally changing the practice of law. 'Information technologies', in this instance, broadly refers to systems that store data, process data, and build algorithms to feedback outputs. Of particular relevance to this category of emergent technology (CET) are artificial intelligence (AI) and machine learning (ML). AI is a technology that enables a machine to simulate human behaviour. Machine learning is a subset of AI that allows a machine to automatically 'learn' from processing data without explicit programming. It involves the application of algorithms to locate patterns in the data to 'automate complex tasks or make predictions'.¹ Unlike the human brain, ML is able to accurately process mass-amounts of data without reference to preconceived modes of thinking or being prone to operational fatigue. In legal

practice, ML is currently used in discovery, document management including due diligence, legal research and problem solving, and sentencing.² AI and ML technologies rely on algorithms and 'these algorithms [learn] in a functional sense: they are capable of changing their behaviour to enhance their performance on some task through experience.'³ Therefore, they have the capacity to generate unique or unexpected solutions.⁴

The challenge for lawyers is to comprehend what all this means in the context of a legal system predicated on human decision making. Information technologies pose a particular challenge to determining the professional responsibilities associated with the deployment of this CET in the practice of law.

LITERATURE REVIEW

[A summary of current and likely future impact of the technologies upon the law in the P11 area of knowledge, and the way law in the area is administered, enforced and practised, according to recent scholarship and media commentary.]

Given the pivotal role that information technologies will play in the future of legal practice, it is important to establish the current and future impacts of this CET on professional responsibilities and ethics. To achieve this aim, this brief literature review highlights four prominent themes that repeatedly emerge throughout the literature on this topic: the definition of providing legal services; duty of competence; confidentiality and security; and modes of liability. This review relies on a thematic approach inclusive of additional references from similar international jurisdictions.

While there is literature on this topic from decades ago, mostly from prominent authors like Richard Susskind⁵ and Judge Christopher Weeramantry,⁶ the literature reviewed is limited to recent years for its specificity to current challenges.

The Definition of Providing Legal Services

The Australian Solicitors' Conduct Rules (ASCR), adopted by each of the states, provides a common set of professional obligations and ethical principles for Australian practitioners who provide legal services.⁷ Practitioners who provide legal advice in relation to

¹ Ellen Broad, *Made by Humans: The AI Condition* (Melbourne University Press, 2018).

² Rob Saccone, 'The Legal Industry's AI Landscape', *Medium* (Blog Post, 8 April 2017) <<https://medium.com/@robsaccone/the-legal-industrys-ai-landscape-e04b307c84f8>>.

³ Harry Surden, 'Machine Learning and Law' (2014) 89(1) *Washington Law Review* 87, 89.

⁴ Matthew U Scherer, 'Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies' (2016) 29(2) *Harvard Journal of Law and Technology* 353.

⁵ Richard Susskind, *Tomorrow's Lawyers: An Introduction to Your Future* (Oxford University Press, 2nd ed, 2017).

⁶ Christopher Weeramantry, *The Slumbering Sentinels: Law and Human Rights in the Wake of Technology* (Penguin Books, 1983).

⁷ Law Council of Australia, *Australian Solicitors' Conduct Rules 2011* (at August 2013) ('ASCR'); adopted as Law Society of South

legal proceedings are subject to ethical constraints and potential sanctions in the event of a breach of professional duty.⁸ The regulations around providing legal services ‘creates fuzzy distinctions between “legal advice” and “legal information”’⁹ and with the increasing pace of technological development, regulation will need to keep pace with new methods of delivering legal services.¹⁰ The importance of this distinction was highlighted in a case in the United States that found that a lawyer conducting document review was not engaged in ‘the practice of law’, and ‘any tasks that can be performed entirely by machines cannot, by definition, involve legal judgement.’¹¹ This emphasises the need to provide commentary and clarification on the unclear definition of providing legal services in the context of this CET.

Duty of Competence

Information technologies can assist lawyers to accurately and efficiently undertake many forms of routine legal work as well as due diligence, discovery, automation of contract drafting, smart legal contracts and legal research.¹² Further, these technologies are likely to affect competence obligations in undertaking these legal processes.

A lawyers’ ethical obligations are underpinned by the ‘fulfillment of competence thresholds’.¹³ A solicitor must ‘deliver legal services competently, diligently and as promptly as reasonably possible’.¹⁴ In the Australian context, it has been claimed that a lawyer who does not use the appropriate technologies, or who lacks the competence to use it in an increasingly sophisticated way, cannot undertake their work in complex cases in ‘anywhere near a sensible time frame at anything resembling a reasonable price’.¹⁵ Based on the increasingly challenging time and fee demands of clients, it may even be the case that lawyers cannot in fact competently represent their clients without these technologies.¹⁶

Confidentiality and Data Security

Some of the literature focusses on attempting to resolve issues relating to the accountability, confidentiality and data security of AI and ML within legal practice. Confidentiality is the cornerstone of the lawyer-client relationship.¹⁷ The President of the Law Council of Australia, Morry Bailes, has described lawyers’ increased use of information technologies and the challenges with data security as ‘patently alarming and a source of ethical risk for the profession’.¹⁸ Lawyers will

Australia, *Australian Solicitors’ Conduct Rules* (at July 2011); Queensland Law Society, *Australian Solicitors’ Conduct Rules* (at June 2012), The Law Society of NSW, *Legal Profession Uniform Law Australian Solicitors’ Conduct Rules 2015* (at 1 July 2015); Law Institute of Victoria, *Legal Profession Uniform Law Australian Solicitors’ Conduct Rules 2015* (at 1 July 2015); Law Society of the Australian Capital Territory, *ACT Legal Profession (Solicitors) Conduct Rules 2015* (at 20 November 2015); See also prohibition against engaging in legal practice when not an Australian practitioner e.g. *Legal Profession Act 2007* (Qld) ss 24 and 25.

⁸ *Council of the New South Wales Bar Association v Davison* (2007) 69 ATC 402.

⁹ Judith Bennett et al, ‘Current State of Automated Legal Advice Tools’ (Discussion Paper 1, Networked Society Institute, University of Melbourne, April 2018) <https://networkedsociety.unimelb.edu.au/_data/assets/pdf_file/0020/2761013/2018-NSI-CurrentStateofALAT.pdf>.

¹⁰ Erica Vowles and Tegan Osborne, ‘You Can Now Have a Chat Bot Write Your Will, but Some Legal Experts Are Worried’, *ABC News* (online at 7 April 2018) <<https://www.abc.net.au/news/2018-04-07/would-you-let-a-robot-make-your-will/9622908>>.

¹¹ *Lola v Skadden, Arps, Slate, Meagher & Flom LLP* 620 Fed. Appx. 37 (2nd Cir., 2015).

¹² Gino Dal Pont, ‘Unauthorised Practice of Law’ (2018) 45 *Australian Bar Review* 224.

¹³ Gino Dal Pont, ‘Unauthorised Practice of Law’ (2018) 45 *Australian Bar Review* 224.

¹⁴ ASCR r 4.1.3.

¹⁵ Tony Joyner, ‘The Inevitable Surprise: How Technology Will Change What We Do’ (2017) 44(10) *Brief* 14.

¹⁶ Joanna Goodman, *Robots in Law: How Artificial Intelligence Is Transforming Legal Services* (ARK Group, 2017); Carla Swansburg, ‘Artificial Intelligence and Machine Learning in Law: The Implications of Lawyers’ Professional Responsibilities for Practice Innovation’ (2018) 60 *Canadian Business Law Journal* 385; Judith Bennett et al, ‘Current State of Automated Legal Advice Tools’ (Discussion Paper 1, Networked Society Institute, University of Melbourne, April 2018) <https://networkedsociety.unimelb.edu.au/_data/assets/pdf_file/0020/2761013/2018-NSI-CurrentStateofALAT.pdf>; Andrew Arruda, ‘An Ethical Obligation to Use Artificial Intelligence: An Examination of the Use of Artificial Intelligence in Law and the Model Rules of Professional Responsibility Symposium: Technological Tools for an Efficient Esquire’ (2016) 40 *American Journal of Trial Advocacy* 443 <<https://heinonline.org/HOL/P?h=hein.journals/amjtrad40&i=467>>.

¹⁷ ASCR r 9; see also *Privacy Act 1988* (Cth).

¹⁸ Morry Bailes, ‘The Law and Legal Technology – Our Changing Work Practices’ (at the 2017 Australian Young Lawyers’ Conference, Sydney, 20 October 2017) <<https://www.lawcouncil.asn.au/media/speeches/the-law-and-legal-technology-our-changing-work-practices>>.

require at least a basic understanding of data security to fulfil their professional obligations.

Modes of Liability

Another consideration is whether clients of AI legal services are protected from potentially negligent advice in the same way they are protected from negligent lawyers.¹⁹ Professor John Flood has commented on the lack of legal regulation of AI and machines, and the idea that humans are responsible and accountable for the decisions of technology. However, lawyers and legal services will rely on third parties to deliver many of these services. The challenge is how lawyers can be held accountable for services they do not understand, and the extent to which lawyers remain liable for autonomous services. Professor Flood states that '[l]egal doctrines like "vicarious liability" will take care of some of these issues, but that line of accountability will thin out over time as machines become remote from their programmers.'²⁰ For this reason, 'AI legal services should not be permitted to hold themselves out as providing legal services without an actual lawyer's involvement and supervision.'²¹

Many online and AI legal service providers were created to allow members of the public access to justice and legal advice which most otherwise cannot afford. Designing and implementing technologies to improve access to justice is an important consideration in the analysis of the ethics of emergent technologies.²²

Conclusion

Legal practitioners are increasingly aware of the need for the profession to adapt to the disruptive force of information technologies.²³ This disruption will inevitably shape the way law is administered, enforced and practiced. The American Bar Association has already made amendments to the rules relating to technology and professional legal obligations.²⁴ Such an amendment is currently subject to the ongoing review of the ASCR,²⁵ and will inevitably be reflected in the ethical expectations of Australian lawyers by clients, the profession and the public. All of this creates an obligation for law schools to adapt their professional responsibilities and ethics unit so the next generation of legal professionals can balance these responsibilities and opportunities.

¹⁹ Joanna Goodman, *Robots in Law: How Artificial Intelligence Is Transforming Legal Services* (ARK Group, 2017) 80.

²⁰ Joanna Goodman, *Robots in Law: How Artificial Intelligence Is Transforming Legal Services* (ARK Group, 2017) 80.

²¹ Wendy Wen Yu Chang, 'Time to Regulate AI in the Legal Profession? (Perspective)', *Big Law Business* (Blog Post, 13 July 2016) <<https://biglawbusiness.com/time-to-regulate-ai-in-the-legal-profession-perspective/>>.

²² Morry Bailes, 'The Law and Legal Technology – Our Changing Work Practices' (at the 2017 Australian Young Lawyers' Conference, Sydney, 20 October 2017) <<https://www.lawcouncil.asn.au/media/speeches/the-law-and-legal-technology-our-changing-work-practices/>>; Gavin Sheridan, 'Access to Justice and the Urgent Need for a Law Tech Revolution', *Legal IT Insider* (Web Page, 25 July 2018) <<https://www.legaltechnology.com/latest-news/access-to-justice-and-the-urgent-need-for-a-law-tech-revolution/>>; Mary E. Juetten, 'Access To Justice Through Technology For 2018', *Above the Law* (Web Page, 19 December 2017) <<https://abovethelaw.com/2017/12/access-to-justice-through-technology-for-2018/>>; Jodie Baker, 'Australia Is Leading the Legaltech Revolution, but What Does This Mean for Lawyers, Firms and Clients?', *SmartCompany* (Web Page, 17 January 2019) <<https://www.smartcompany.com.au/technology/australia-legaltech-revolution/>>; Magda Ibrahim, 'Justice for All: How

Technology Is Promoting Public Access', *Raconteur* (Web Page, 30 November 2018) <<https://www.raconteur.net/risk-management/technology-public-access-justice/>>.

²³ Anna Patty, 'Numerous Jobs and Professions Will Change': Up to Six Million Could Be Lost from Automation', *The Sydney Morning Herald* (online at 3 March 2019) <<https://www.smh.com.au/business/workplace/numerous-jobs-and-professions-will-change-up-to-six-million-could-be-lost-from-automation-20190228-p510uj.html>>; Charlie Taylor et al, 'Australia's Automation Opportunity: Reigniting productivity and inclusive income growth', *McKinsey and Company* (Report, March 2019) <<https://www.mckinsey.com/~media/mckinsey/featured%20insights/future%20of%20organizations/australias%20automation%20opportunity%20reigniting%20productivity%20and%20inclusive%20income%20growth/australia-automation-opportunity-vf.ashx>>.

²⁴ American Bar Association, *Model Rules of Professional Conduct 1983* (as at 2018), r 1.1, comment 8.

²⁵ Law Council of Australia, 'Review of the Australian Solicitors' Conduct Rules' (Web Page, July 2013) <<https://www.lawcouncil.asn.au/policy-agenda/regulation-of-the-profession-and-ethics/australian-solicitors-conduct-rules/>>.



PRACTITIONER PERSPECTIVES

[A summary of the views of various law teachers and legal practitioners regarding the current and likely future impact of the technologies upon the law in the P11 area of knowledge, and the way law in the area is administered, enforced and practised.]²⁶

Law Teachers

Ethics and professional responsibility is taught as a Priestly 11 unit within the LLB and JD, and as a subject in the Graduate Diploma in Legal Practice. While the educators of these subjects diverge on what is viewed as the most immediate or salient ethical issue presented by information technologies, there is strong agreement that the content of the subject must ensure graduates are well prepared to analyse a variety of ethical challenges posed by the use of information technologies in legal practice. The core change to the legal profession as a result of use of this CET are the removal of lawyers

from the manual analysis of data and the use of technology in data-driven decision making.

Lawyers must continue to apply the current ethical and legal principles to their practice, but new technological processes will require a different application of these principles. Consequently, lawyers will need to have an understanding of AI, ML and other data-driven and algorithm-based processes and outcomes.

The current operating assumption that data is inherently impartial will need to be corrected. Data is collated from decisions and processes that reveal its

²⁶ *Aspects of practitioner perspectives have been integrated into other sections of this report. Interviewees included a member of the New South Wales judiciary, a member of the Victorian Bar and three academics, who were interviewed in July and August 2019.*

creators' preferences and biases that will, in turn, shape the goals and recommendations of algorithms trained on that data. A greater understanding about these processes will ensure better legal decision making and advice by ensuring awareness of the potential biases in data sets by both lawyers and technology teams.

Many ethics and professional responsibility subjects consider the need for improved access to justice within the Australian legal system.²⁷ The interviewed law teachers strongly recommended adding a discussion of technology's place in enhancing accessibility by the end users of the justice system, while acknowledging that there are spaces where human judgement and comfort are more valuable to vulnerable persons.

Legal Professionals

The interviewed legal professionals resoundingly agreed that information technologies are changing the practice of law in many ways.

Many law firms in Australia now have separate teams dealing with the technology platforms required to run large projects. Coordination between the technology professionals and legal professionals is fundamental to the success of innovative technological solutions, requiring at least a high-level understanding of each other's respective processes.

The practitioners regularly commented on the ethical challenges posed by information technologies, including ensuring that legal information technologies are able to assist lawyers to uphold their ethical and statutory obligations to maintain the confidentiality of their clients' data and to avoid any potential inadvertent disclosure.

Legal information technologies made accessible by members of the public need to not only be affordable but also use simple language and a user-friendly interface to break down barriers to legal services.²⁸ Legal information technologies also need to be 'designed holistically to enhance justice outcomes and [...] not obscure serious and important legal problems behind an interface, styled as an alternative to traditional legal services...'.²⁹

Some practitioners noted the differences in regulation between different jurisdictions. In the United Kingdom (UK), there were a number of reforms following the Clementi Report including the UK Legal Services Act adopted in 2007.³⁰ These reforms allow for nonlawyers to hold ownership and management positions in law firms, which increase opportunities for and public awareness of alternative legal service providers.³¹ These reforms encourage a multidisciplinary approach to traditional legal practice and bring together 'people who typically aren't brought together—in order to meet customer needs, and in order to improve access to justice and to legal services'.³²

Some practitioners commented that it is was not the role of law schools to teach students about the changing nature of the legal profession. They suggest that there is greater opportunity for students' to be educated about the changing nature of the legal profession through additional study and extra-curricular engagement with organisations and events.³³

The practitioners agreed that the increased use of information technologies was having a positive impact on the profession.

²⁷ Sally Kift, Mark Israel and Rachael Field, 'Learning and Teaching Academic Standards Project: Bachelor of Laws Learning and Teaching Academic Standards Statement' (Australian Learning and Teaching Council, December 2010) 10; Paula Baron and Lilian Corbin, *Ethics and Legal Professionalism in Australia* (Oxford University Press, 2017) ch 9.

²⁸ 'Robot Lawyers and Automating Legal Expertise with Chrissie Lightfoot', *Reimagining Justice* (Andrea Perry-Peterson, 31 March 2019) <<http://reimaginingjustice.libsyn.com/robot-lawyers-and-automating-legal-expertise-with-chrissie-lightfoot>>.

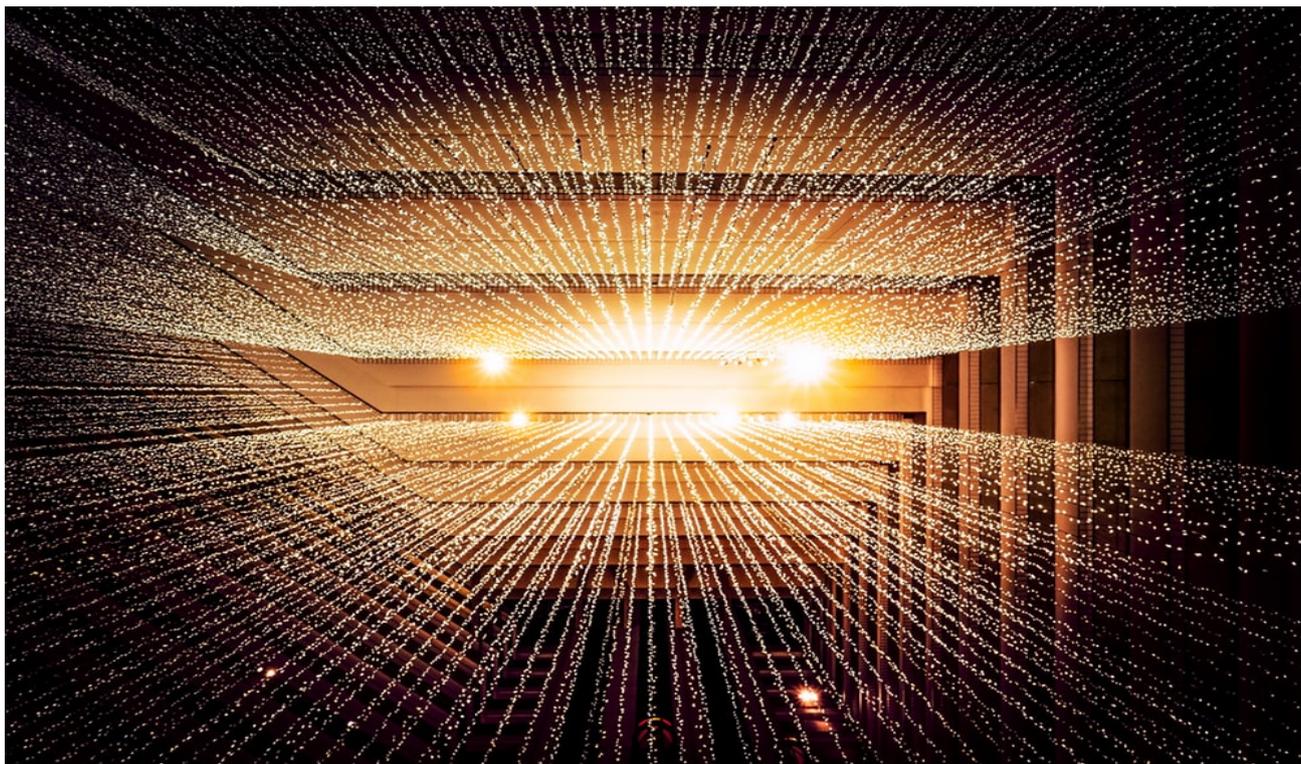
²⁹ Morry Bailes, 'The Law and Legal Technology – Our Changing Work Practices' (at the 2017 Australian Young Lawyers' Conference, Sydney, 20 October 2017) <<https://www.lawcouncil.asn.au/media/speeches/the-law-and-legal-technology-our-changing-work-practices>>.

³⁰ *Legal Services Act 2007* (UK).

³¹ 'Robot Lawyers and Automating Legal Expertise with Chrissie Lightfoot', *Reimagining Justice* (Andrea Perry-Peterson, 31 March 2019) <<http://reimaginingjustice.libsyn.com/robot-lawyers-and-automating-legal-expertise-with-chrissie-lightfoot>>.

³² Laura Snyder, 'Does the UK Know Something We Don't about Alternative Business Structures?', *ABA Journal* (Article, January 2015) <http://www.abajournal.com/magazine/article/does_the_uk_know_something_we_dont_about_alternative_business_structure>

³³ See e.g. The Legal Forecast, 'Advancing Legal Practice through Innovation' (Web Page) <<https://thelegalforecast.com/>>; '2019 Global Legal Hackathon' (Web Page) <<https://globallegalhackathon.com/>>.



CONSEQUENCES 1

[An explanation of how this will change what current and future lawyers need to know and be able to do.]

Lawyers now need to have a reasonable understanding of information technologies to be able to competently provide legal services. This is particularly significant in the context of the ever-increasing volume of documents to be interrogated in litigation and large commercial transactions. In order to competently deliver services in a timely and cost-effective way, lawyers are already expected to rely on information technologies,³⁴ and future lawyers will need to expand this expertise. Due to the profusion of technologies applicable to all aspects of legal practice, this expectation does not only apply to those practising commercial law.

Community legal centres and those engaging in pro bono work have new opportunities to enhance access to justice through innovative legal solutions and technologies such as online legal providers like LegalZoom and Rocket Lawyer,³⁵ online dispute resolution platforms like DoNotPay,³⁶ and legal chatbots like Ailira.³⁷ However, many of these innovative solutions remove the traditional protections offered to clients by their lawyer, their law firm and the regulator.³⁸ This decentralisation of legal services, without the necessary regulation and protections for vulnerable users, raises a variety of ethical concerns that

³⁴ Robert F van Beemen, Rupprecht Graf von Pfeil and Gerard J Tanja, 'Legal Tech and Digital Transformation: Competitive Positioning and Business Models of Law Firms' (Globe Law and Business Special Report, 2018); Andrew Arruda, 'An Ethical Obligation to Use Artificial Intelligence: An Examination of the Use of Artificial Intelligence in Law and the Model Rules of Professional Responsibility Symposium: Technological Tools for an Efficient Esquire' (2016) 40 *American Journal of Trial Advocacy* 443 <<https://heinonline.org/HOL/P?h=hein.journals/amjtr40&i=467>>.

³⁵ Rocket Lawyer, 'Affordable Legal Services, Free Legal Documents, Advice & Ask a Lawyer' (Web Page, 2019)

<<https://www.rocketlawyer.com/>>; LegalZoom, 'Start a Business, Protect Your Family: LLC Wills Trademark Incorporate & More Online' (Web Page, 2019) <<https://www.legalzoom.com/country/au>>

³⁶ Joshua Browder, 'DoNotPay' (App Store, 2019) <<https://itunes.apple.com/us/app/donotpay/id1427999657?mt=8>>.

³⁷ Ailira, 'Ailira Artificially Intelligent Legal Assistant' (Web Page, 2019) <<https://www.ailira.com/>>.

³⁸ Holli Sargeant, 'Ethical Obligations of 21st Century Lawyers', *Medium* (Blog Post, 4 February 2019)

must be addressed. Many NewLaw firms have embraced the use of information technologies and are implementing them successfully in developing innovative client solutions.³⁹ However, these NewLaw

forms are still required to uphold the same ethical obligations and duties to the client and the administration of justice.

CONSEQUENCES 2

[An explanation of how this will change the way the core law unit should be taught to law students, including the scope of the unit, the learning outcomes for the unit, the learning activities undertaken by the students, and how students within the unit should be assessed.]

The core law unit focussing on ethics and professional responsibility will need to be adapted to acknowledge the challenges information technologies create for current and future lawyers.

In general, the learning activities undertaken by law students must reflect an increasingly technology-dependent profession. The critical analysis of challenging ethical problems faced in legal practice will continue to be a focus, including analysis of the legislation and rules. However, issues outside the scope of the current legislation and rules will also need to be considered. While the Law Council of Australia is currently reviewing the ASCR, there is a current and future need to require law students to learn about the full breadth of ethical obligations and their application to situations involving the use of information technologies. Law schools should not wait for proposed amendments to legislation to be finalised before including consideration of these issues in the scope and learning outcomes of the relevant unit.

For example, an ethical dilemma such as the ‘trolley problem’ thought experiment could be raised in the context of autonomous vehicles, demonstrating the applicability of an age-old ethical dilemma to emergent technologies.⁴⁰ While this thought experiment has not ordinarily been posed specifically to law students, in a world where their clients will be seeking advice on

autonomous vehicles it becomes important and relevant. Law students will need to identify and critically analyse the ethical challenge of how individuals will be held responsible for technology and technological processes that are not within their expertise, and for autonomous decisions of technology.

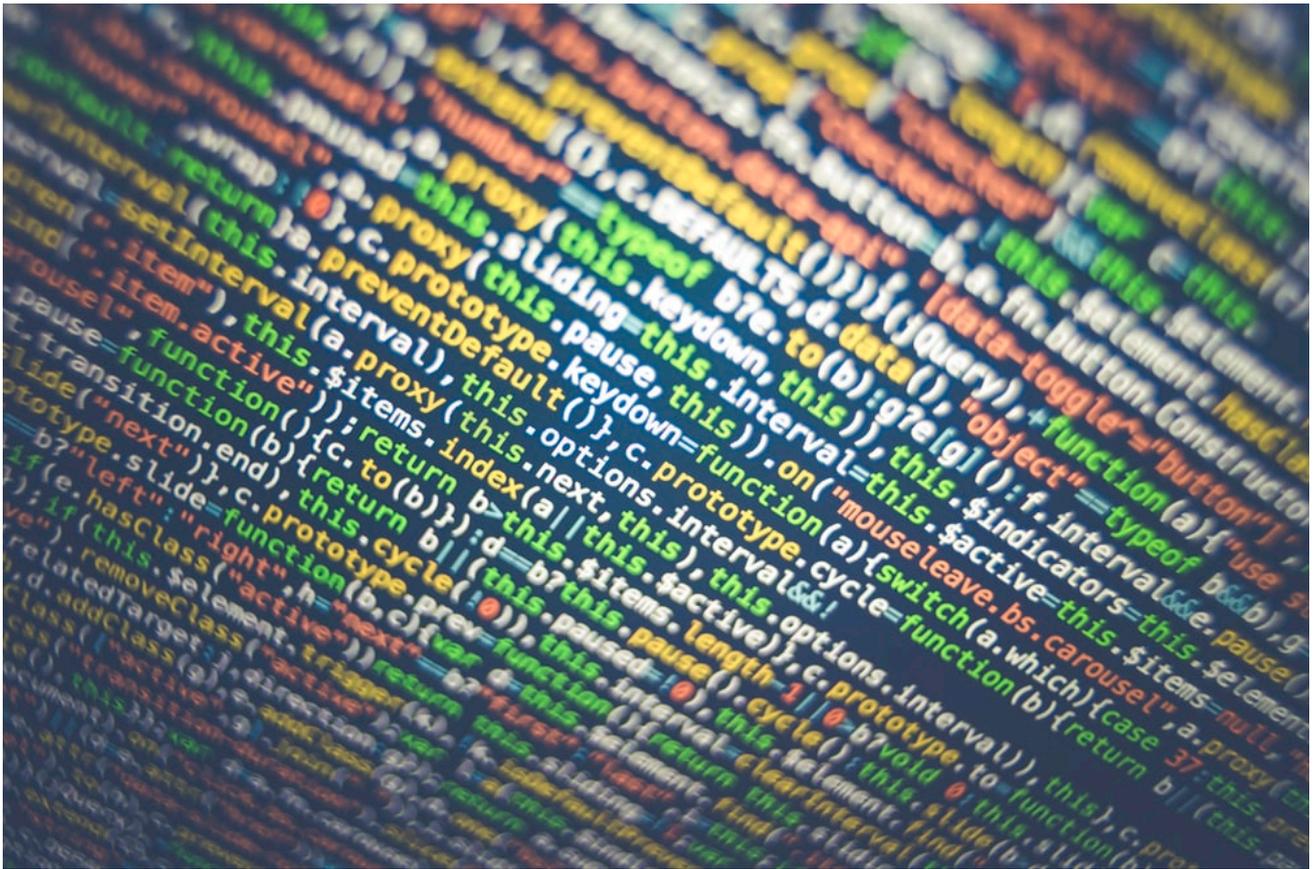
Students should be assessed on their ability to critically analyse ethical dilemmas that focus on future challenges to be faced by the legal profession in its entirety. This does not stray far from the critical analysis and reasoning currently required in ethics and professional responsibility units. However, it does require expansion and forward-thinking beyond the current limits of the legislation and rules.

Tomorrow’s lawyers will not be able to rely solely on their firm’s technology departments or staff when facing ethical and professional dilemmas involving the use of information technologies in the delivery of legal services. They will require at least a basic understanding of AI, ML and other information technologies to be able to competently provide legal services in a timely manner and in the best interest of their clients, and this will involve not only the ability to use new legal technological tools but also familiarity with the ethical and professional issues associated with their use. Law schools must accept responsibility for ensuring this familiarity.

<https://medium.com/@hollisargeant/ethical-obligations-of-21st-century-lawyers-287cc46f2b33>.

³⁹ The Law Society of New South Wales, ‘Future of Law and Innovation in the Profession: Drivers of Technological Change in the Legal Profession’ (Report, 2017) 21, 49.

⁴⁰ Massachusetts Institute of Technology, ‘Moral Machine’ (Web Page) <http://moralmachine.mit.edu>.



BIBLIOGRAPHY AND RECOMMENDED RESOURCES

[A list of resources referred to in the Report plus additional resources.]

A Articles/Books/Reports

Arruda, Andrew, 'An Ethical Obligation to Use Artificial Intelligence: An Examination of the Use of Artificial Intelligence in Law and the Model Rules of Professional Responsibility Symposium: Technological Tools for an Efficient Esquire' (2016) 40 *American Journal of Trial Advocacy* 443
<<https://heinonline.org/HOL/P?h=hein.journals/amjtrad40&i=467>>

Bailes, Morry, 'The Law and Legal Technology – Our Changing Work Practices' (Speech, Australian Young Lawyers' Conference Sydney, 20 October 2017)
<<https://www.lawcouncil.asn.au/media/speeches/the-law-and-legal-technology-our-changing-work-practices>>

Baker, Jodie, 'Australia Is Leading the Legaltech Revolution, but What Does This Mean for Lawyers, Firms and Clients?', *SmartCompany* (Web Page, 17 January 2019)
<<https://www.smartcompany.com.au/technology/australia-legaltech-revolution/>>

Baron, Paula and Lilian Corbin, *Ethics and Legal Professionalism in Australia* (Oxford University Press, 2017)

Bennett, Judith, et al, 'Current State of Automated Legal Advice Tools' (Discussion Paper 1, Networked Society Institute, University of Melbourne, April 2018)
<https://networkedsociety.unimelb.edu.au/data/assets/pdf_file/0020/2761013/2018-NSI-CurrentStateofALAT.pdf>

Bowles, David, 'Ethics and Protection of Confidentiality in a Digital World', *Queensland Law Society* (Web Page, 16 March 2017)
<https://www.qls.com.au/Knowledge_centre/Ethics/Resources/Confidentiality/Ethics_and_protection_of_confidentiality_in_a_digital_world>

Broad, Ellen, *Made by Humans: The AI Condition* (Melbourne University Press, 2018)

Chang, Wendy Wen Yu, 'Time to Regulate AI in the Legal Profession? (Perspective)', *Big Law Business* (Blog Post, 13 July 2016) <<https://biglawbusiness.com/time-to-regulate-ai-in-the-legal-profession-perspective>>

Dal Pont, Gino, 'Unauthorised Practice of Law' (2018) 45(3) *Australian Bar Review* 224

Goodman, Joanna, *Robots in Law: How Artificial Intelligence Is Transforming Legal Services* (ARK Group, 2017)

Horton, Fabian, 'Law, Technology and New Ethics' [2016] (Technology & The Law Special Issue) *Law Institute Journal* 28

Ibrahim, Magda, 'Justice for All: How Technology Is Promoting Public Access', *Raconteur* (Web Page, 30 November 2018) <<https://www.raconteur.net/risk-management/technology-public-access-justice>>

Joyner, Tony, 'The Inevitable Surprise: How Technology Will Change What We Do' (2017) 44(10) *Brief* 14

Juetten, Mary E, 'Access To Justice Through Technology For 2018', *Above the Law* (Web Page, 19 December 2017) <<https://abovethelaw.com/2017/12/access-to-justice-through-technology-for-2018/>>

Kift, Sally, Mark Israel and Rachael Field, 'Learning and Teaching Academic Standards Project: Bachelor of Laws Learning and Teaching Academic Standards Statement' (Australian Learning and Teaching Council, December 2010)

Patty, Anna, 'Numerous Jobs and Professions Will Change': Up to Six Million Could Be Lost from Automation', *The Sydney Morning Herald* (online, 3 March 2019) <<https://www.smh.com.au/business/workplace/numerous-jobs-and-professions-will-change-up-to-six-million-could-be-lost-from-automation-20190228-p510uj.html>>

Saccone, Rob, 'The Legal Industry's AI Landscape', *Medium* (Blog Post, 8 April 2017) <<https://medium.com/@robsaccone/the-legal-industrys-ai-landscape-e04b307c84f8>>

Sargeant, Holli, 'Ethical Obligations of 21st Century Lawyers', *Medium* (Blog Post, 4 February 2019) <<https://medium.com/@hollisargeant/ethical-obligations-of-21st-century-lawyers-287cc46f2b33>>

Scherer, Matthew U, 'Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies' (2016) 29(2) *Harvard Journal of Law and Technology* 353

Sheridan, Gavin, 'Access to Justice and the Urgent Need for a Law Tech Revolution', *Legal IT Insider* (Web Page, 25 July 2018) <<https://www.legaltechnology.com/latest-news/access-to-justice-and-the-urgent-need-for-a-law-tech-revolution/>>

Snyder, Laura, 'Does the UK Know Something We Don't about Alternative Business Structures?', *ABA Journal* (Article, January 2015) <http://www.abajournal.com/magazine/article/does_the_uk_know_something_we_dont_about_alternative_business_structures>

Surden, Harry, 'Machine Learning and Law' (2014) 89(1) *Washington Law Review* 87

Susskind, Richard, *Tomorrow's Lawyers: An Introduction to Your Future* (Oxford University Press, 2nd ed, 2017)

Swansburg, Carla, 'Artificial Intelligence and Machine Learning in Law: The Implications of Lawyers' Professional Responsibilities for Practice Innovation' (2018) 60 *Canadian Business Law Journal* 385

Taylor, Charlie, et al, 'Australia's Automation Opportunity: Reigniting productivity and inclusive income growth', *McKinsey and Company* (Report, March 2019) <<https://www.mckinsey.com/~/media/mckinsey/featured%20insights/future%20of%20organizations/australias%20automation%20opportunity%20reigniting%20productivity%20and%20inclusive%20income%20growth/australia-automation-opportunity-vf.ashx>>

The Law Society of New South Wales, 'Future of Law and Innovation in the Profession: Drivers of Technological Change in the Legal Profession' (Report, 2017)

van Beemen, Robert F, Rupprecht Graf von Pfeil and Gerard J Tanja, 'Legal Tech and Digital Transformation: Competitive Positioning and Business Models of Law Firms' (Globe Law and Business Special Report, 2018)

Vowles, Erica and Tegan Osborne, 'You Can Now Have a Chat Bot Write Your Will, but Some Legal Experts Are Worried', *ABC News* (online, 7 April 2018) <<https://www.abc.net.au/news/2018-04-07/would-you-let-a-robot-make-your-will/9622908>>

Weeramantry, Christopher, *The Slumbering Sentinels: Law and Human Rights in the Wake of Technology* (Penguin Books, 1983)

B Cases

Council of the New South Wales Bar Association v Davison (2007) 69 ATC 402

Lola v Skadden, Arps, Slate, Meagher & Flom LLP, 620 Fed. Appx. 37 (2nd Cir., 2015).

C Legislation and Regulations

American Bar Association, *Model Rules of Professional Conduct 1983* (at 2018)

Law Council of Australia, *Australian Solicitors' Conduct Rules 2011* (at August 2013)

Legal Profession Act 2007 (Qld)

Legal Services Act 2007 (UK)

Privacy Act 1988 (Cth)

D Other

'2019 Global Legal Hackathon' (Web Page, 2019)
<<https://globallegalthackathon.com/>>

Ailira, 'Ailira Artificially Intelligent Legal Assistant' (Web Page, 2019) <<https://www.ailira.com/>>

Browder, Joshua, 'DoNotPay' (App Store, 2019)
<<https://itunes.apple.com/us/app/donotpay/id1427999657?mt=8>>

Massachusetts Institute of Technology, 'Moral Machine' (Web Page, 2019) <<http://moralmachine.mit.edu>>.

'Robot Lawyers and Automating Legal Expertise with Chrissie Lightfoot', *Reimagining Justice* (Andrea Perry-Peterson, 31 March 2019)
<<http://reimaginingjustice.libsyn.com/robot-lawyers-and-automating-legal-expertise-with-chrissie-lightfoot>>

Law Council of Australia, 'Review of the Australian Solicitors' Conduct Rules' (Web Page, July 2013)
<<https://www.lawcouncil.asn.au/policy-agenda/regulation-of-the-profession-and-ethics/australian-solicitors-conduct-rules>>

LegalZoom, 'Start a Business, Protect Your Family: LLC Wills Trademark Incorporate & More Online' (Web Page, 2019) <<https://www.legalzoom.com/country/au>>

Rocket Lawyer, 'Affordable Legal Services, Free Legal Documents, Advice & Ask a Lawyer' (Web Page, 2019)
<<https://www.rocketlawyer.com/>>

The Legal Forecast, 'Advancing Legal Practice through Innovation' (Web Page, 2019)
<<https://thelegalforecast.com/>>