Our findings showed that the many opportunities presented by artificial intelligence and other new technologies stand to improve legal outcomes, but also present ethical issues around use and regulation that must be mitigated to ensure a level playing field amidst ongoing development.
Summary

While the legal sector is facing disruption in job roles and service offerings, and challenges regarding how to best navigate the ethics around AI, an increased rate of tech adoption provides an opportunity to improve the quality of legal services across the board.

Based on the 2018 LexisNexis Australian Legal Tech Survey (‘Survey’) of 264 legal practitioners, LexisNexis hosted panel discussions with industry thought leaders across Australia to incorporate the views of legal professionals from corporate, academia, and other parts of the justice system. Live polling of attendees was conducted at each event.

The Legal Frontiers: From AI to Ethics LexisNexis Roadshow Report (‘Report’) examines the impact of AI on the Australian legal sector in 2018. The need to grapple with ethical considerations is becoming apparent as AI becomes more prevalent in the Australian legal sector. The rise of AI is challenging the traditional role of lawyers but is also opening the profession to a range of new tech-driven possibilities. Positive results have already been achieved by algorithms within a confined remit but ongoing supervision of data handling practices as well as the application of AI technology is required. AI provides a great opportunity to improve access to justice, but this must be supported by the creation of frameworks for ethical development and use to ensure greater fairness for all.
Among broader innovation, artificial intelligence stands out as a technology with some of the greatest potential to deliver unprecedented commercial benefits across a range of data-driven industries. The technology’s value is its capacity to automate systematic tasks and rapidly process and analyse huge volumes of data which can increase efficiency and quality simultaneously.

To explore the current state of AI in the legal sector, LexisNexis conducted a survey of 264 legal professionals, and convened panel discussions across six capital cities, bringing together some of the most forward-thinking legal professionals in Australia.

The Survey found that the legal community is already seeing a significant shift in the role of lawyers, with the removal of grunt work (44%) and subsequent changed nature of legal work (42%) selected as the most common implications of new technologies for organisations. Additionally, 65% of respondents believe that AI is likely to, or will definitely, affect their area of practice in the next five years.

By enabling greater efficiencies and new ways of working, AI-based technologies have resulted in a shift in how work is done in commercial legal practice, and the skills required of legal teams. The way that legal services are delivered is also changing and will likely provide tangible savings for clients and greater access to resources for the wider public.

Data privacy and protection is emerging as a significant concern for the majority of legal professionals, with 64% believing that stronger data privacy protections are needed; and 58% believing that Australia definitely needs a guiding ethical framework to support ongoing AI development and mitigate potential risks.

It’s not surprising that these results reflect a greater awareness of the issues surrounding data security, and a level of dissatisfaction with current protections given the prominent data scandals that have occurred over the last 12 months.

To move forward, collaboration is needed across all industries to address these ethical and legislative challenges and build a governance framework that clearly outlines correct and improper use of personal data. It is clear that the full impacts of technological innovation are yet to be realised, but through mindful innovation the power of these new technologies can be harnessed to provide positive outcomes for all.
Talent: Graduate and professional competencies
How is tech impacting graduate roles and opportunities?

33% of Survey respondents believe that digitisation and automation have caused a shift in the value chain and profile of lawyers – and at this stage that shift seems to have primarily impacted the graduate and junior roles in the profession.

When defining the impact of technology on graduate prospects, panellists were split into two schools of thought. The first sees a reduction in opportunities for legal graduates as there are simply fewer hours of work to be done due to the automation of time-consuming tasks such as discovery and due diligence, and offshoring of work overseas, particularly for document review.

The second school believes that growth in the volume of work and data required for analysis has offset these losses, and that junior lawyers will benefit more from spending their time on building cases than sinking hours into tasks like manual discovery.

“With discovery and due diligence type tasks, you’re not really becoming a better lawyer doing that, you’re just doing time-intensive work that the firm can bill for. So if that gets taken away, that means the graduate lawyers coming through get to do more substantive legal work under supervision. I think that’s a good thing.”

Luke Dale
Partner, HWL Ebsworth
Although the focus of concern is on jobs within the traditional firm structure, there is an increasing range of alternative legal jobs available to graduates, as legal tech start-ups offer a creative environment in which graduates have the space and support to innovate.

The panellists also challenged the assumption that it is the desire of all graduates to enter law via the traditional pathways. As Brenda Tronson, Barrister at Level 22 Chambers, highlighted: “For a very long time 50% of law graduates have chosen not work in law.” As such, it’s important to remember that the number of law graduates per year must not always equate to the available number of graduate legal roles.

“I think there’s an awful lot of opportunity for young people who are studying law to think more creatively about the application of law.”

James McKay
Executive Director,
Gov Law Tech
Do lawyers have a professional responsibility to understand the tech they use?

In 2013 the American Bar Association revised the ABA Model Rules of Professional Conduct to state that lawyers must have knowledge of the benefits and risks of technology in order to provide competent representation to a client. This raises the question of whether Australian legal professionals have a similar professional responsibility to understand technologies available to them.

While it is a given that every lawyer should be competent with basic computer applications, the depth to which lawyers’ tech knowledge should go is dependent on their role and practice area.

Lawyers who use analytics or AI-powered tools should have at least a basic understanding of the parameters and assumptions underpinning that tool, as this may ultimately have an outcome on the advice a lawyer provides to their client.

The issue is comparable to the use of simple tools such as spellcheck in a word processor. The user knows that spellcheck will pick up certain things, but may miss others – and they will likely have to complete a secondary check of their own to be sure that nothing has fallen through the cracks. This same level of understanding and diligence must be applied to more complex decision-tools.

Further to a professional obligation, there is an ethical consideration here: can a lawyer who relies on an AI-powered decision tool be sure they are providing the best possible advice if they are unsure of how the tool has arrived at a particular recommendation?

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Polling Data: Do lawyers have a professional responsibility to understand the tech they use?

Regardless of mandatory professional responsibility, knowledge of technology will improve efficiency, increase the volume of work produced, and enable confidence in the product of any work conducted using AI platforms.

In addition, while there is broad agreement that lawyers should understand how the tech they use may impact their decision-making, most lawyers are not technologists, and utilisation of cross-functional skill sets within legal teams can bring a valuable level of tech expertise to situations that may require it.

“I think you’ve got to draw a line at some point otherwise you stop being a lawyer and you start being a technologist. I’m sure that the two will blend at some point but we’re not quite there yet.”

Dudley Kneller
Technology Partner,
Madgwick Lawyers
Future Tech: AI & Chatbots
Current challenges & opportunities

The legal community is still refining its relationship with AI; we’re in a period of uncertainty around its uses, implications, ethical considerations, and how it can best be leveraged for positive commercial outcomes. What is clear is that there will be opportunities to benefit from AI both within the legal profession and in the interactions between the profession and the rest of society.

The common law tradition of publishing judgments in reports series has placed the legal profession in an enviable position, with vast amounts of historical data now being available as AI training data sets. Unfortunately, despite the pioneering early addition of catchwords as a form of metadata to assist with finding and categorising judgments, these documents remain largely unstructured. Consequently, the AI used to mine these documents will have to rely heavily on natural language processing adapted to handle the syntax and jargon which is peculiar to judicial writings.

On the other end of the scale, legislation is also widely published and available in common law countries but it is highly structured and so presents very different challenges. The structures used in statute are often unnecessarily complicated, subject to ongoing change, inconsistently used over time and highly varied across jurisdictions.

A natural affinity would seem to exist between the if-then statements of traditional computer programming and the objective of legislation to provide cogent guidance about how the law should be applied if certain facts are found to be true. It is easy to conceive of the entire body of legislation in a given jurisdiction as highly complex input, otherwise known as a ‘knowledge base’, for the creation of an expert system. Like a legal GPS, an AI solution might one day be created to help assess scenarios and navigate lawyers towards the appropriate provisions, indicating the level of traffic or activity associated with those provisions and predicting the likelihood of success.

“I think that there’s a perfect match here for tech and law because you’re rationalising decision-making and thinking logically about things... The first step is simplification: get your house in order and then we can look to the future.”

Aaron Taranto
Legal Counsel, QBE Insurance
Unregulated third parties

As AI becomes increasingly easy to adopt and tune for specific domains, there is a growing trend towards automated legal platforms – currently most commonly in the form of chatbots. Legal services chatbots tend to operate on the distinction between the giving of legal information and the provision of legal advice (which must be administered by a legal professional).

There is a grey area between what exactly constitutes legal information and what is legal advice – one that may have to be clarified in the future to allow further development in this space.

As the opportunity arises for third parties to provide automated legal advice at a low cost, there is concern that unregulated service providers will enter the market, potentially endangering consumers engaging with these platforms. There is no suggestion that any operators currently in this space are acting improperly.

The challenge for legislators will be to stay ahead of the curve and pre-emptively legislate to protect Australian consumers against products that may lack the input of a qualified legal professional, or any human review.

“Our legislators, at some stage may need to regulate unregulated services so that we can protect consumers and keep information asymmetry the same.”

Morry Bailes
President, Law Council of Australia
Data privacy & rights
Personal data

People in tech-centric industries worldwide are increasingly questioning the protections around how personal data is handled. But the general population seems less concerned about who has their data and what it is used for. Most consumers are happy to offer their data to companies in exchange for convenience.

“There’s a view that’s always if you’re not the paying customer, then you’re the product.”

Steven Tyndall
Managing Director,
NextLegal

AI and machine learning require huge amounts of data, most obviously in the form of training sets. The acquisition and preparation of this data raise questions around consent and privacy. While we often give consent for our personal information for services such as free apps, we do not necessarily contemplate, let alone agree to, the future uses of that information. The incremental way in which we grant our consent to each individual app or agency also makes it easy to overlook the vast amount of data we are in fact giving away about ourselves. This concern was reflected in the Survey results, in which Privacy was selected as the human right most likely to be threatened by AI.

The GDPR came into force in May 2018 in the EU, marking a huge shift in the governance of the acquisition, management and deletion of people’s data. By creating this framework, the EU aims to implement safeguards that enable the safe development of AI technology while protecting individuals, so that the region can be a leader in this field.
“Are we genuinely consenting to the collection and use of our data by clicking a button attached to a pop-up window? I think the answer is that from a legal point of view businesses will argue that we have. But does this one-click process pass the pub test? Clearly not. Should there then be some other framework that sits across the top of the ‘one click consent’ and protects us from our own laziness looking out for ourselves? Probably.”

Shaun Temby
Partner, Dispute Resolution and Litigation, Maddocks

Mirroring the changing global attitudes towards data governance, over 60% of Survey respondents believed that stronger data protections are needed in Australia, enforcing the belief of our panels that there is an expectation from consumers that our cyber safety will be safeguarded by the state.

There is a tension between the rights of individuals and the advances in AI and other technologies that must be addressed to enable sustainable progress and investment in this field. As for the GDPR in the EU, an Australian framework could build an environment in which there is confidence to invest, allowing Australia to perform better in a competitive global market.

POLLING DATA:
Are Australia’s current data privacy protections adequate or do we need to implement stronger legislation similar to Europe’s GDPR?

64% Stronger protections are needed
26% Current protections are adequate
10% Unsure
Algorithmic Bias

The legal profession is well placed to take advantage of AI; a long tradition of publishing judgments and legislation in common law jurisdictions has resulted in an extraordinary depth and breadth of legal data being available to train AI tools. However, the inherent dangers in using historical data to train algorithms are amplified when those algorithms are being used to materially impact an individual’s rights, privileges or penalties.

There have been well publicised issues in the legal industry around the topic of algorithmic bias. Most notably, in the case of Wisconsin v Loomis 881 N.W.2d 749 (Wis 2016), the Wisconsin Supreme Court held that the use of an algorithmic risk assessment tool to influence sentencing was not a rights violation. The algorithm in question was proprietary and thus not visible to the court, or anyone who might be subject to its assessment. This attracted criticism from rights groups who alleged that biased data was causing the algorithm to deliver biased assessments, and was thus a breach of due process by the court.

As Dominic Woolrych, CEO of LawPath noted, “the good thing for the legal industry is that we’re not the only industry facing this problem. There’s bias across all algorithms.” What is challenging for the legal industry specifically is that the output of algorithms is likely to have a very tangible impact on the lives of those to whom it relates.

The issue becomes one of how best to address the potential biases in the legal data set and the resulting algorithms. A core facet of this is a greater need for inclusion in the developmental stages of algorithm creation. Greater ethnic and gender diversity at the earlier stages may serve to assist with identifying biases that may not immediately be clear to a less diverse group of creators.

“Where does the bias actually sit? Does it sit with the machine learners, or does it sit with the machine teachers? Traditionally we have seen a fairly homogenous group of experts doing the teaching, so with that model you’re at risk of inherent biases creeping in.”

Natalie Skead
Dean & Head of School,
UWA Law School

Algorithmic bias may be an unsolvable problem – it is arguable that the creation of the perfectly balanced data set and the unimpeachably fair algorithm is impossible. However there is consensus that the best way to mitigate any potential issues is through openness and awareness of the strengths and weaknesses of AI in any particular application.
Human Rights & Equality

While there are many exciting developments in the world of AI, there are also ethical issues to be concerned about – and careful consideration is needed to ensure that the tools we build will act as forces for good, protecting equality and fairness in the future.

As Aaron Taranto discusses, “Someone from, for example, a low socioeconomic background can have better access to civil litigation and other rights of recourse. Or people who appear in court in a criminal matter are not judged by the way that they present - how they look, or how nice a suit they can afford. So I think that’s a huge positive influence for the law - principles of access and fairness are expanded, but only if we think about it intelligently, diligently and without bias.”

Not only can AI potentially help to ensure more efficient and just outcomes when Australians reach court, it may also improve access to justice and legal literacy generally for vulnerable groups by reducing the cost of obtaining advice.

“One of the things about the consumer profile in Australia is that there are some consumers who just aren’t using legal services at all because they can’t access them... So the great opportunity that technology provides us... is to enable people in a different way to understand their rights and entitlements.”

Morry Bailes
President,
Law Council of Australia

Despite a large number of Survey respondents (59%) and event attendees (64%) believing that AI threatens human rights, the application of algorithms in courts could provide benefits such as equal judgment under the law, and can improve access to justice.

AI has the potential to act as a force for equality and human rights protection in Australia and around the world. In developing nations it may also serve to decrease corruption and increase equality before the law. So while caution must be taken, the potential benefits of AI to act as a democratising force in expanding access to justice are enormous and should continue to be explored.
Conclusion
Over the past 10 years, the emergence of AI has revolutionised the way we live our lives, and the way we work. We are at the beginning of a disruptive period of technological development comparable to an industrial revolution, and, as such, do not have a clear picture of the ultimate consequences for the legal industry.

For law students anxiously seeking a prediction of what the future holds, this will become clearer as more capable AI tools are rolled out to cater to a broader range of commercial needs. Debates of whether there will be ‘more’ or ‘less’ work are fruitless – the fact being that there is a wider array of legal work available than ever before.

Regardless of whether a role necessitates tech skills, lawyers should have at least a basic knowledge of how new technology such as AI can be leveraged to create a more effective outcome for clients. A hybrid legal-tech skillset will be highly sought after in the coming decades, but for now, cross-functional teams can bridge the skills gap to provide the best client outcomes.

In the legislative and regulatory sphere, there is great opportunity for a class of AI tools trained on legislative structures to assist with a range of tasks from corporate risk assessment to prosecutorial decisions and sentencing. Similarly, as the provision of legal information (or advice) through automated platforms becomes increasingly common, a need for review and regulation will undoubtedly arise.

Consent as it pertains to personal data seems to be a grey area – one where perhaps the current contractual allowances of many users may not necessarily match up with the prevailing social attitudes. An Australian governance framework replicating Europe’s GDPR could serve to protect individuals while encouraging development and investment in AI and data-driven platforms.

Similarly, while there may be some trepidation around AI’s potential to breach fundamental human rights, there is broad agreement that with the right safeguards and thoughtful development, it could be a powerful force for equality and fairness.

In this foundational period, AI presents ethical challenges that must be worked through, but once these ethical issues are resolved and a safe environment for development has been created, AI will have the potential to deliver exceptional efficiencies and cost savings, improve human rights and development, and provide improved access to justice for the majority of society.
Methodology

Stage 1: Customer Survey

In August 2018 LexisNexis conducted a survey of 264 Australian legal professionals across a range of organisation types, including in-house, mid law and government. 83% of respondents had more than two years of legal experience.

Stage 2: Event Series

Legal Frontiers: From AI to Ethics convened panel discussions across six Australian capital cities that brought together legal professionals from corporate, academia, and the justice system, to discuss the state of AI in the legal sector in 2018 and the impacts that AI is having on legal professionals. The roadshow visited Adelaide, Sydney, Perth, Melbourne, Brisbane, and Canberra, with 435 total attendees, and 23 panellists collectively. The panel events were held in front of a live audience who engaged in live polling sessions. The results and comments are reflected through this report.
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