

# Contents

Executive summary .....	vii
About the authors .....	xi
<b>Chapter 1: An introduction to legal AI .....</b>	<b>1</b>
<i>By Uwais Iqbal, founder, Simplexico</i>	
Defining AI .....	1
How to achieve AI? .....	2
Strong and weak AI .....	3
Will AI replace lawyers? .....	4
Beating buzzwords – NLP, Deep Learning, Generative AI, and LLMs .....	4
Generative AI and the legal industry .....	6
AI and electricity – technology, application, use .....	6
Horizontal and vertical AI .....	8
Legal AI .....	9
Principles for a legal AI future .....	9
Closing thoughts .....	11
<b>Chapter 2: Foundations of legal AI – evolution or revolution? .....</b>	<b>13</b>
<i>By Josh Kubicki, board member at the Center for Computer-Assisted Legal Instruction, and founder of Bold Duck Studio</i>	
AI – the old and the new .....	15
Legal is a profession – and a business .....	16
Impacting and transforming the practice .....	18
Foundational concepts .....	20
Using your own data with generative AI .....	22
Moving beyond digital to intelligent systems .....	23

<b>Chapter 3: Will AI augment and enhance – or replace?</b> .....	25
<i>By Sondra Rebenchuk, senior innovation counsel, Blake, Cassels &amp; Graydon LLP</i>	
Introduction .....	25
The building blocks of legal services .....	25
Evolving legal skill sets .....	30
AI in legal education .....	32
Partnering with other professionals .....	32
Impact of AI on alternative careers in law .....	33
Conclusion .....	35
 <b>Chapter 4: Becoming Iron Man, Esq.</b> .....	 37
<i>By Cat Casey, chief growth officer, Reveal</i>	
From Terminator to Iron Man – an evolution .....	38
Human + AI > AI .....	38
Augmented intelligence vs HCAI .....	39
Why does HCAI matter to legal? .....	41
How Gen AI can become your legal J.A.R.V.I.S. ....	41
Building your own HCAI Stark Industries .....	43
Embracing your inner Iron Man, Esquire – tips and tricks .....	46
 <b>Chapter 5: Generation AI — reimagining BigLaw lawyer formation in an era of unprecedented disruption</b> .....	 49
<i>By Jennifer Leonard, founder, Creative Lawyers</i>	
Historical underpinnings – the Cravath / Christopher Columbus Langdell model of lawyer formation .....	50
The value of the current model .....	52
Generative AI changes the nature of the work junior attorneys perform .....	52
Law schools .....	53
Power dynamics within law schools .....	54
The future of lawyer formation – approaches for each stakeholder .....	56
Conclusion .....	61

<b>Chapter 6: AI and privacy, data, and copyright</b> .....	63
<i>By Allison Williams, head of intellectual property and Amy King, senior associate, Norton Rose Fulbright, South Africa</i>	
Introduction .....	63
There is no protection in an idea .....	65
International copyright protection .....	65
Work performed for the State or through use of public funds or publicly funded institutions .....	66
Determining the ownership of copyright in a computer program or AI System .....	66
The relevance of literary and artistic works .....	69
The employment exception .....	70
The challenges surrounding computer-generated works .....	71
The challenges associated with proving originality .....	75
Conclusion .....	76
 <b>Chapter 7: AI and profitability</b> .....	 79
<i>By Josh Kubicki, board member at the Center for Computer-Assisted Legal Instruction, and founder of Bold Duck Studio</i>	
The direct financial impact of AI on legal services .....	79
Jane’s dilemma .....	81
Extracting key financial impacts from AI integration in legal practice .....	84
From solo practitioners to large legal teams .....	85
Citizen development .....	86
Charting a financially rewarding pathway – from seeding ideas to flourishing integration .....	89
Safeguarding profitability in an age of technological evolution .....	91
 <b>Chapter 8: Artificial intelligence, legal ethics, and public policy</b> .....	 93
<i>By Nerushka Bowan, founder, LITT Institute, and Gilad Katzav, candidate attorney, Norton Rose Fulbright South Africa</i>	
Introduction .....	93
Intelligence and ethics – an irreconcilable difference .....	94
Tried and time-tested legal ethics .....	96
AI, legal ethics, and institutionalized public policy .....	101
Conclusion .....	103

<b>Chapter 9: Challenges and ethical considerations in the age of Gen AI</b> .....	107
<i>By Natalie Pierce, partner, and Stephanie Goutos, practice innovation attorney, Gunderson Dettmer</i>	
Introduction .....	107
Introduction to ethical challenges .....	108
Evolution of ethical standards for technology in law .....	108
The critical role of technological competence in the practice of law .....	110
Challenges and professional obligations when using Gen AI ....	110
Does lawyers’ use of GenAI inherently lead to “legal dabbling”? .....	113
Leveraging Gen AI irresponsibly creates serious risks .....	115
Best practices for law firms to manage risks relating to Gen AI ..	117
Conclusion .....	120
<b>Chapter 10: AI and sustainability for legal professionals</b> .....	131
<i>By Dr Valérie M. Saintot, lawyer, adjunct professor in leadership</i>	
Summary .....	131
Starting with why .....	131
Navigating the technological transformation – a roadmap .....	135
Prompts for cultivating an inquiry mindset .....	140
Outlook .....	145
Further reading .....	146
<b>Chapter 11: Responsible generative AI – drawing governance principles and enabling a conversation</b> .....	149
<i>By Ilona Logvinova, associate general counsel and head of innovation, McKinsey Legal</i>	
<b>About Globe Law and Business</b> .....	155

# Executive summary

*AI and the Legal Profession: Transforming the Future of Law* explores the profound impact of artificial intelligence (AI) on the legal industry and the transformative possibilities it offers. AI technologies are advancing at an unprecedented pace, reshaping the practice of law, challenging traditional models, and unlocking new opportunities for legal professionals. Our opening chapter, by Uwais Iqbal, looks at what AI actually is. What do we mean by artificial intelligence anyway? Uwais clarifies the different kinds of AI, and explores the associated terminology surrounding machine learning, deep learning, natural language processing, and generative AI, before undergoing a deep-dive into how we can and should conceptually think about AI. Uwais then explores what goes into making an AI model, and whether this new category of Legal AI is even necessary. He ends by providing five guiding principles for a Legal AI future.

In chapter two, Josh Kubicki, board member at the Center for Computer-Assisted Legal Instruction, and founder of Bold Duck Studio, explores the underlying technology that allows AI to function within the legal sector and how these foundational elements support its application in law. Data is of course key, and Josh takes us through the importance of structured and unstructured data, and how various applications of AI in law (legal research, contract analysis, case prediction, due diligence, document automation, and litigation) will be pursued in the coming months and years.

Chapter three, by Sondra Rebenchuk, senior innovation counsel at Blake, Cassels & Graydon LLP, discusses how generative AI has the potential to have a significant impact on the role of human lawyers. But, she argues, the question should be what it will replace, not who. AI will change how certain tasks and responsibilities are handled, but there is a corresponding opportunity to grow the scope of legal service offerings with a focus on the true value that lawyers bring – expertise and human judgment. This chapter breaks down the tasks of lawyering – what is it that lawyers actually do and how each link in the chain will be impacted by AI. Sondra then discusses the growing importance of new skill sets for lawyers, from general AI literacy to prompt engineering, and how lawyers are beginning to partner with other

professionals such as computer engineers and data scientists to enhance service delivery. Finally, this chapter looks at some of the biggest professional opportunities for lawyers in the new era of generative AI at law firms, in-house, and with legal technology vendors.

Chapter four, by Cat Casey, chief growth officer at Reveal, looks at augmented AI. Human-centered AI combines human intelligence with AI that remains under human control. In legal, we deal with high stakes issues of liberty and reputation, where human insight is critical. Taking lessons from chatbots, smartphones, and even social media, legal can combine powerful AI with user-friendly interfaces to drive adoption. For legal, the human beings in the driver's seat (or the Iron man suit, as Cat playfully analogises) are critical for positive legal outcomes. And the human-centric design is critical for humans to want to use it. The use of AI is increasingly a differentiator for law firms and solo practitioners alike. Now is the time, she maintains, to embrace AI and legal technology. Otherwise, those who embrace their inner Iron man, Esq. will leapfrog ahead!

Chapter five, by Jennifer Leonard, founder of Creative Lawyers, looks at how the integration of generative AI both changes the role of the human lawyer and challenges the human lawyer to adapt, particularly in the early years of practice. If Gen AI lessens the need for the types of work junior lawyers have always trained on, how will we shape the minds of developing lawyers? How do we break their current roles into buckets of tasks, look at the tasks that might disappear or decline, and how do we build in formative scaffolding to ensure that future lawyers continue to develop the right skills? How do we avoid “magical thinking” – that “magically” junior lawyers without legal experience can instantly move to exercising judgment, counselling clients, and advocating in court without sufficient training supports? And how do we do all of this in a world in which the private sector market may no longer foot the bill for those training years? Where will the incentives come from?

Chapter six, by Allison Williams and Amy King of Norton Rose Fulbright, South Africa, looks at AI and privacy, data, and copyright. The chapter looks at the laws that current govern copyright and the challenges surrounding computer-generated works. Josh Kubicki then returns in chapter seven to explain how AI can improve profitability through increased efficiency, reduced human error, and more effective resource management and explores the potential financial implications of failing to adopt AI in the legal sector and the cost-benefit analysis of AI integration in law firms.

In chapter eight, Nerushka Bowan of the LITT Institute and Gilad Katzav from Norton Rose Fullbright look at AI and legal ethics. There is no occu-

pation whose followers do not have a “code” by which they justify their conduct. In order to appreciate the morals of any particular profession, we must look into its environment and seek to understand the different forces and dynamics which have, over time, collectively produced an accepted standard of behavior. The profession of law is no different. The primary role of the lawyer is to counsel and advice clients on the apparatus of the law (whether that be in respect of rights, obligations, or legal processes). Lawyers do not, by the mere fact that they are experts in law, have any superior insight into questions of morality and ethics. Lawyers generally advise clients on their legal position relative to the particular circumstances and issues of the matter; and consider questions of morality insofar as it is affixed to, or have an effect on, their advice.

This is not to suggest that lawyers are in any way indifferent or apathetic to ethical considerations which exist apart from the strict application of the law – in fact, the opposite is closer to the truth. Because lawyers are necessary and vital actors in upholding and maintaining the legal system – a system that expressly strives to achieve universal ideals such as justice, equality, fairness, integrity and dignity – lawyers are often measured against a higher standard of care and they are entrusted to act with the upmost good faith in relation to their clients, their colleagues, the courts, and to the public in general. Trying to reconcile the apparent difference between the law, on the one hand, and the dynamism of legal ethics required of actors within the law, on the other, is something lawyers have historically left to practical illustration rather than theoretical solution.

However, the emergence and rise of artificial intelligence technologies brings, for the first time in many years, new considerations from a legal ethics perspective. Although we are still in the fledgling phases of AI development, we are already seeing some lawyers succumb to the tantalizing allure of “automation” and AI tools that ostensibly appear to provide instant answers to any legal problem posed, but that ultimately reveal their lack of real care, skill, and diligence to the legal issue. This begs the questions: how does AI technology impact the practice of law? And how should legal ethical standards adapt in response to AI technology? This chapter explores the foundations of legal ethics in the face of AI technologies and seeks to underscore precisely why legal ethics, as we know it, matters now more than ever before.

The transformative impact of generative artificial intelligence (Gen AI) on the legal industry is inevitable, a change predicted to fuel global GDP growth by almost \$7 trillion over the next decade.

Amid growing concerns and even some calls for an outright prohibition of Gen AI in law firms, the authors of chapter nine continue this theme and

argue for a balanced, responsible embrace of the technology. Natalie Pierce and Stephanie Goutos of Gunderson Dettmer believe this stance is imperative for the future of the legal profession and can position legal professionals at the forefront of innovation and client service. At the same time, forward-thinking lawyers must learn to use these tools to uphold professional standards of client service which is ethical and not only competent, but exceptional.

Courts' recent acknowledgement of Gen AI's role in litigation, with requirements for its explicit disclosure, points towards its future ubiquity. In navigating this shift, the chapter emphasizes that lawyers must uphold their ethical standards and obligations outlined in the Model Rules of Professional Conduct. The authors address and confront counterarguments suggesting Gen AI's unsuitability for legal work, potential for ethics violations, and risks of inaccuracies, bias, privacy breaches, and legal risks. Acknowledging the inherent risks, they present strategies to mitigate these and continue competently delivering exceptional and ethical client service.

Highlighting the importance of responsible Gen AI usage, the chapter includes a comprehensive list of the top ten best practices for its ethical implementation within law firms and concludes by stressing that legal professionals' refusal to adopt Gen AI could lead to their obsolescence, predicting the prevalence of Gen AI policies across industries, including the legal sector, by the end of 2023.

In chapter ten, Dr Valérie M. Saintot, lawyer and adjunct professor in leadership, looks at the intersection of AI and sustainability law, championing the notion that AI and sustainability are deeply intertwined, sharing fundamental dynamics that should be harnessed in harmony to serve higher societal goals. In addition to traditional legal domain-driven expertise, the legal profession must build substantial capabilities at the intersection of technological proficiency and mindful environmental stewardship.

Finally, Ilona Logvinova, head of innovation at McKinsey Legal, turns the crystal ball to the future of AI in chapter 11 and makes some predictions to what the future of legal might look like in the brave new world of artificial intelligence.



# About the authors

**Nerushka Bowan** is the founder of the Law Innovation Technology Tomorrow (LITT) Institute. She creates and teaches exciting and engaging courses on the topics of AI, privacy, innovation, and career mentorship. She is recognized as an international thought leader in emerging technology law and in analyzing the future legal and regulatory issues of emerging tech. She has extensive experience in complex and strategic technology and privacy law matters, including outsourcing transactions and regulatory and compliance issues across various industry sectors. She is an advocate for legal innovation and is involved in the upskilling of lawyers for the future of law.

**Cat Casey** is chief growth officer at Reveal Brainspace, helping lead innovation for legal technology solutions, and a zealous advocate for AI in legal. She is a thought leader and outspoken advocate of legal professionals embracing technology to deliver better legal outcomes. She has two decades of experience assisting clients with complex eDiscovery and forensic needs that arise from litigation, expansive regulation, and complex contractual relationships. Cat is a published author, keynote speaker, podcaster, and all-around advocate for upskilling legal professionals facing the dawn of an AI renaissance in law.

**Stephanie Goutos** is a practice innovation attorney at Gunderson Dettmer, where she leads the strategic innovation and knowledge management initiatives for the firm's employment and labor practice. Stephanie's accolades include successfully defending multi-state class actions and implementing legal tech solutions that have revolutionized firm-wide processes. Her strategic foresight identifies risks and opportunities well ahead of the curve, making her an invaluable asset in dynamic, complex environments. With her background in class action defense, litigation, and employment counseling, Stephanie bridges her traditional legal expertise with an unyielding passion for forward-thinking innovation strategies. In doing so, she offers a uniquely holistic approach to problem-solving, providing exceptional value to stakeholders. She is passionate about spearheading transformative

change, achieving tangible outcomes, fostering innovation across organizations, and mentoring women to become more involved in the legal technology industry.

**Uwais Iqbal** is an AI practitioner with over half a decade's worth of experience designing and building AI systems in the legal sector. He has held roles as a machine learning engineer and a senior NLP data scientist at leading legal tech start-ups as well as a corporate innovation lab. Uwais is currently the founder and CEO of Simplexico, the legal AI consultancy focused on supporting law firms and legal companies on their AI journey, offering services around legal AI education, design, and development. They are on a mission to help legal professionals step into a future of collaboration, not competition, with AI.

**Gilad Katzav** is a candidate attorney with experience in various practice areas, including technology, privacy, data protection, and consumer law. Gilad has a background in legal research as he was a research associate at the Mandela Institute based within the Wits School of Law. Gilad's specific research focus is on technology, data protection, and digital constitutionalism. Gilad has appeared in multiple peer-reviewed publications, including an article in the *South African Law Journal*, South Africa's oldest and premier academic journal. Gilad assists clients on various technology-based mandates, including a recent research project on artificial intelligence, data protection, and intellectual property in South Africa.

**Amy King** is an intellectual property, insurance, commercial, construction and engineering litigation, and dispute resolution lawyer at Norton Rose Fulbright South Africa Inc., based in Durban. Amy focuses on intellectual property, insurance, commercial, construction and engineering disputes and advises on the preparation and negotiation of supply agreements for manufacturing clients, as well as assignment and licensing agreements. She has experience in international as well as domestic arbitrations, in relation to disputes arising out of construction projects and supply agreements. Amy also specialises in copyright and has experience in copyright and trademark infringement dispute resolution, in domain name dispute resolution, transactional IP, IP structuring, as well as social media take downs involving IP infringements, including on Facebook, as well as through the Internet Service Providers' Association of South Africa (ISPA). Amy holds a Bachelor of Social Science degree (majoring in Politics and Law) from the University of Cape Town and an LLB degree from the University of KwaZulu-Natal.

**Josh Kubicki** brings a distinctive, hands-on perspective to the confluence of generative AI and law. With a successful track record of constructing a \$20 million legal services business and leading transformative redesigns of multimillion-dollar practice groups, Josh is not merely an academic; he is a seasoned practitioner. As a former chief strategy officer and recognized law professor, he has been lauded by Fast Company and Bloomberg Law for pioneering innovative educational frameworks and establishing a groundbreaking legal business design hub. While many in the field speak from theory, Josh's insights emanate from direct experience and impactful experiments. Merging business acumen with strategic design and an intimate knowledge of generative AI, he champions not just enhancements, but also radical shifts in legal service delivery, driven by the profound potential of generative AI.

**Jennifer Leonard** is founder and CEO of Creative Lawyers, a company that helps law firms, corporate legal departments, and law schools adapt to change through strategic consulting, design thinking workshops, and innovation challenges. She previously served as chief innovation officer and executive director of the Future of the Profession Initiative at Penn Carey Law. She practiced law for ten years after graduating Penn Carey Law in 2004 before returning to the law school to build its center on professionalism, which became a nationally-recognized program for law student professional development. She teaches *Generative AI in Law Practice*, *Design Thinking for Lawyers*, *Law Firm Business Strategy*, and *Attorney Wellbeing as Ethical Obligation*, all at Penn Carey Law. She received Penn's Beverly Edwards Memorial Award for Excellence in Leadership and is a fellow with the College of Law Practice Management. She hosts several podcasts about the legal profession, including *Law 2030* and *Fast-Tracked: Emergent Issues in the Profession*.

**Ilona Logvinova** is the global head of innovation at McKinsey & Company, working across the legal department to identify, lead, and implement cross-cutting and impactful innovation initiatives. At McKinsey, Ilona is also a senior technology lawyer and team lead within McKinsey Digital, working closely with applications of emerging and cutting-edge technologies across use cases and industries. Prior to joining McKinsey, Ilona was senior counsel at Mastercard, where she worked on ground-up technology builds and tech transactions to leverage the company's core assets and explore broader partnership opportunities. Prior to Mastercard, Ilona was an associate at Fried Frank, where she specialized in leveraged finance representing borrowers

and lenders in secured and unsecured financings. Ilona has a BA from Columbia University with a joint major in Economics and Philosophy and her JD from the Benjamin N. Cardozo School of Law.

**Natalie Pierce** is a partner at Gunderson Dettmer and chair of the firm's employment and labor practice. Natalie is a trusted advisor to start-ups and venture capital and growth equity firms on all employment-related matters. She also focuses on the future of work, including counseling on transformative technologies, and is a frequent speaker and contributor on the topic. Natalie hosts Gunderson's *FutureWork Playbook* podcast and was selected as a Fast Case 50 Award Winner, one of *Daily Journal's* "Top Artificial Intelligence Lawyers" and "Top Labor and Employment Lawyers," and *San Francisco Business Times's* "Bay Area's Most Influential Women". She was also a member of the ABA's Center for Innovation Governing Council, and co-authored "Why Law Firms Must Responsibly Embrace Generative AI". Natalie earned her BA at UC Berkeley with Honors, and her law degree from Columbia University School of Law, where she was a Harlan Fiske Stone Scholar and recipient of the Emil Schlesinger Labor Law Prize at graduation.

**Sondra Rebenchuk** is senior innovation counsel and leads the practice innovation team at Blake, Cassels & Graydon LLP. She is responsible for identifying opportunities to improve legal processes internally and implementing and managing legal technology to drive efficiency at the firm. Sondra also works closely with clients to provide legal operations guidance and create new solutions that address novel legal and business needs. Sondra has been actively involved in the legal technology industry, including working as a legal knowledge engineer and then an AI practice consultant at Kira Systems. In her AI practice consultant role, she advised law firms on the integration of machine learning in their practice, with a specific focus on the transactional process. Following her admission to the Ontario Bar in 2012, Sondra practiced at Goodmans LLP in Toronto where she focused on M&A and securities.

**Dr Valérie M. Saintot** LL.M. is a lawyer (since 1994), visiting lecturer at Bucerius Law School (since 2021), and adjunct professor at SKEMA Business School (since 2022). She has worked in the private and EU public sector and has been featured as a legal design thinking pioneer (2022).

Valérie is an active member and ambassador for human-centric AI with the Liquid Legal Institute. She recently contributed to the update of the *Legal Digitalization Guide*. She has authored articles on the visual navigation of the law and legal knowledge visualization. She has extensive experience in legal functions, legal operations, and legal knowledge management. She is also actively promoting the transformation of legal ecosystems to take advantage of (generative) AI and technologies to actively preserve peace and democracy. She promotes mindfulness-based leadership to face with resilience and discernment the many societal transformations under way. She is a passionate international keynote speaker.

**Allison Williams** is an intellectual property and commercial lawyer at Norton Rose Fulbright South Africa Inc., based in Durban. She has extensive experience in intellectual property law of all kinds and descriptions, including the registration and enforcement of trade marks globally, copyright, passing off and unlawful competition, franchising, domain name dispute resolution, advertising complaints and transactional IP work, such as M&A deals containing IP elements or aspects, due diligences, licensing, assignments and, in particular, IP structuring. She has also had significant experience in social media take downs involving IP infringements, including on Facebook, WhatsApp, LinkedIn, and YouTube, as well as through the Internet Service Providers' Association of South Africa (ISPA). Allison has practised in the field of intellectual property law for 25 years. She has managed the global trademark portfolios for a number of local clients and has filed and enforced trademarks locally for a number of global clients. She is listed as a recommended intellectual property lawyer in the Legal 500 for the years 2015, 2016 and 2017, whilst she was a director of the firm.