

# Building the data-driven law firm



EDITED BY ALEX DAVIES

**Head of events and books**

Leah Darbyshire

**Commissioning editor**

Alex Davies

**Editorial assistant**

Francesca Ramadan

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UK, Europe and Asia office  
5th Floor  
10 Whitechapel High Street  
London, E1 8QS  
United Kingdom  
Tel: +44(0) 207 566 5792  
publishing@ark-group.com

North America office  
4408 N. Rockwood Drive, Suite 150  
Peoria IL 61614  
United States  
Tel: +1 (309) 495 2853  
publishingna@ark-group.com

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# Executive summary

Like so many other professions, law is becoming increasingly influenced by an overwhelming amount of disparate, fragmented and complex data that can both help and hinder business. Data comes from a wealth of different sources, both internal and external, constantly changing, never still. Keeping control of all that data is one challenge; leveraging it to the greater good much harder.

Other professions have had years of experience integrating data analytics into their businesses and using analytics to predict outcomes; for legal, this is a relatively new challenge, and one that could potentially change the way the industry works.

Despite the huge amount of data in the average law firm, data-driven decision-making is relatively new and uncharted. With the knowledge that some 90 percent of data in the world today was created in the last two years, this needs to change.

*Building the data-driven law firm* looks at how the use of data has become inextricably linked with the practice of law; how it can be utilized to the good and the safeguards that must be put in place to mitigate the bad; how Big Data will revolutionize the way lawyers work, and the cases they will work on; and how new uses for data (including blockchain and the Internet of Things) will influence the law firm of the future.

To introduce the book, David Curle, director, enterprise content – technology and innovation at Thomson Reuters, examines the cultural and behavioral aspects of data. The use of data is relatively new to legal and requires big adjustments in culture and mindset. With the use of concrete examples from law firms, including Locke Lord, Shearman & Sterling and Alston & Bird, David looks at how some organizations are working to cross that cultural divide.

Following on from this, in chapter two, Thomas Hamilton, VP of strategy and operations at ROSS Intelligence, describes the underlying foundational concepts of AI and their various relationships with data, before examining the enormous opportunities provided by existing legal

data as well as the pitfalls and risks inherent in training data from a supervised and unsupervised machine learning perspective.

Focusing more on the detail of data, chapter three looks at how the utilization of Uniformed Task-Based Management System (UTBMS) billing codes have allowed both clients and law firms to track and compare specific legal services and expenses and then map these data points to particular outcomes – for over 20 years. Billing data can be used to improve many things – revenues, profits, realization rates and collection rates are all directly related to billing data and what it reveals. Using machine learning and AI with past billing and collections data can improve performance in real time, preventing non-billable or unbillable work. Tying billing data to underlying work product allows hyper-accurate budget projections, staffing need projections, timelines, and the like. It also allows firms to best optimize how they plan, budget for, and staff similar new matters. Stated differently, UTBMS codes allow “Moneyball” kinds of analyses for law firms and clients. This chapter, by Holly Urban at EffortlessLegal LLC, looks at how law firms can utilise data to improve their business.

Recent advances in machine learning – particularly advances in “deep learning” – and AI make it possible to automate some of the activities that lawyers have historically performed in the course of serving clients. Some examples include conducting legal research, aspects of document review in litigation or due diligence matters, and aspects of how we deliver legal advice via chatbots, expert systems, and data visualization. These technologies offer a path to better client serve and increased access to justice, while potentially improving lawyers’ work/life balance. In chapter four, Aaron Crews, Littler’s first chief data analytics officer, looks at how using machine learning and AI will improve legal practice and drive value to stakeholders and clients.

In chapter five, Edward Chan continues this theme. Written contracts represent the most abundant and valuable form of legal data. However, any such linguistic data needs first to be structured into digital format before its potential can be exploited by machine learning, blockchain, or smart contract technologies. Current technology cannot reliably convert historic data into a structured format useable for these purposes. Lawyers and clients, therefore, need to begin creating legal agreements in a manner that captures, at inception, all relevant data points in digital format. Legal practice will not become truly data-driven until there is a critical mass of structured contractual data. Over time, this will change the very nature of lawyering but in a way that provides better value and service to clients.



Chapter six then looks at how data is transforming the relationship between lawyer and client. Jennifer Roberts, manager, strategic research at InTapp, describes how data is a great starting point and important to creating an in-depth understanding of the client – from there it’s about the application of analytics, AI, and automation, along with process and people, to make the data actionable. There is plenty for legal to learn from outside the industry, taking a hard look at other professional services. However, within the industry there is progressive movement already underway, with firms hiring data scientists, adopting new technology, and transforming processes in order to better serve clients.

Another transformational use of data in legal is the Blockchain. In chapter seven, Robert Millard, founder and partner at Cambridge Strategy Group, looks at the ways in which data-driven law firms can use Blockchain to their advantage.

In chapter eight, Joanne Frears, solicitor at Lionshead Law, looks at the legal aspects of data, including the issues of data ownership and contractual elements when procuring both programs and data sets. Joanne touches on data security and refers to data protection legislation as it applies to the large data sets of big data. As legal service providers, we need to adopt a “gold standard” and ensure the data we capture is reliable, robust and accurate. Contracts need to reflect that and this chapter considers how that can be achieved.

To conclude the book, Simon Drane, managing director of earlsferry advisory, and former executive director of business development at the Law Society and LexisNexis, looks at how data will enable the shift towards the productization of legal services. The next decade will see a shift within legal service provision, where it will transition from a model that is predominantly geared around internal work processes to one geared around customer outcomes. Law firms will complete their evolution from a bill-by-the-hour service-based model to something closer to a product subscription model. This shift will deliver growth, sustainable recurring revenues at high margins, and new higher value service opportunities.

At the core of this shift, he maintains in chapter nine, is the changing nature of consumption driven by consumer technology and the inexorable drive for base level information to become free. Law firms are sitting on vast quantities of data, and yet very few are currently harnessing this effectively in their offerings. The effective use of data, combined with technology, will allow innovative organizations to provide a new form of productized offering that will not only drive new recurring revenues but will also allow them to offer higher value business advisory services. Whereas effective use of data within the organization will lead

to better evolutionary efficiency, quality, and risk management, the use of data in this way externally for clients will lead to more revolutionary changes. It will also blur the lines further between traditional law firms and LegalTech product businesses, in the way alternative legal service providers and the Big Four are already exploring.

# About the authors

**Edward Chan** is a partner at Linklaters LLP, specializing in the prudential regulation of banks. Edward read philosophy, politics and economics at Balliol College, Oxford University, and holds a master's degree in law from the London School of Economics. Edward is also the founder of Nakhoda, an internal start-up within Linklaters LLP, which is also the firm's flagship technology offering.

As Littler's first chief data analytics officer, **Aaron Crews** leads the firm's data analytics practice and Big Data strategy. Leveraging an extensive background focused on the intersection of technology, business, and the law, Aaron's team of lawyers, analysts, statisticians, and data scientists work with clients and case teams to harness the power of data to build superior legal strategies and improve legal outcomes. This team also advises the firm and its clients on the development, implementation, and use of analytic models, machine learning and algorithm-driven technologies (often called AI), and using data visualization/data storytelling to enable insight, drive understanding, and extract value. Littler's long-held dedication to innovation is exemplified in this team, and the firm is one of the first in the United States to hire a leader dedicated exclusively to data analytics and Big Data into a position in its C-Suite.

**David Curle**, director, enterprise content - technology and innovation, Thomson Reuters, supports Thomson Reuters' legal business with research and thought leadership about the legal technology and innovation ecosystem, and the changing legal services industry. Prior to joining Thomson Reuters in 2013, he led coverage of the global legal information market for the research and analysis firm Outsell, Inc., tracking industry performance and trends. He is a regular contributor to the Legal Executive Institute blog and *Forum Magazine*, and speaker at legal industry events. He has a JD from the University of Minnesota Law School and a BA in History from Lawrence University.

**Simon Drane** has held numerous positions within the professional services sector over the last 25 years – at a FTSE 100 legal information solution provider, a legal technology consultancy, a law firm, an accounting firm, and a legal membership organization. Simon has qualifications in law and tax, and deep experience in commercial product strategy. Simon has board level experience of both executive and non-executive roles, and as CEO of a technology start-up. He has a strong track record in creating innovative product strategies resulting in multiple new multi-million pound high growth lines of business. Simon led the new investments product strategy area at LexisNexis and created and launched many of the next generation content and workflow product offerings for lawyers. At the Law Society Simon ran the commercial arm of the organization and restructured a set of commercial investments through taking board seats. He also implemented a new commercial strategy including a significant shift in focus to legal technology innovation, including the launch of a legal tech-focused Barclays EagleLab accelerator. Simon has also held senior knowledge management roles in both law and accounting firms. Simon established earlsferry advisory towards the end of 2018 to help people with their product strategies, whether they are technology businesses, professional services businesses or investors into these spaces.

**Joanne Frears'** long legal career has been all about technology and she fills her time helping clients to protect IPRs across a range of outputs. Working mainly with suppliers, Joanne's current focus is on AI and machine learning, augmented reality and blockchain, but describes herself as a geeky butterfly who is easily distracted by interesting or innovative tech. Joanne speaks regularly at legal and technology conferences on the subject of legal futurology and how lawyers can use technology to provide better service to clients and improve their working lives. She is a member of the Accord project, a visiting professor at Aston University, and visiting professional at Reading University and the Goldsmiths Centre, Clerkenwell. She is a member of the IBA and holds a Masters' degree from Kings College London in Comparative EU, UK, and US IP Law.

**Thomas Hamilton** is the VP of strategy and operations at ROSS Intelligence, where he coordinates efforts across the company to ensure that sole practitioners, legal aid groups, law firms, government agencies, corporate law departments, state bar associations, and law faculties are

able to benefit from cutting edge developments in artificial intelligence research.

Thomas believes passionately in the ability of technology to improve access to justice worldwide, and as employee #1 at ROSS Intelligence, speaks to groups around the world on legal technology innovation, law firm strategy, and the transformative economic potential of artificial intelligence technology.

**Robert Millard** is director of Cambridge Strategy Group, former in-house business strategy specialist with Linklaters in London, former co-chair of the International Bar Association's Law Firm Management Committee, and the author of several important published works on law firm strategy and the 'law firm of the future'.

**Jennifer Roberts** manages the strategic research function at Intapp, responsible for the analytics and research component that supports product development and thought leadership for new initiatives. Leveraging her skills to advocate, evangelize and build data-fueled products and insight, she examines the professional services industry to drive analytical intelligence that informs strategic decisions and solves organizational needs. Prior to joining Intapp, Jennifer received her MA from the University of Minnesota in advanced statistical methodology and performance measures.

**Holly Urban** is the CEO and co-founder of EffortlessLegal LLC, an award-winning thought leader and innovator in software automation solutions for law firms. Holly has over 20 years of progressive experience in management and leadership positions in a variety of industries including technology, consulting, banking, retail and hospitality. For more information, visit <https://EffortlessLegal.com>.