

Technology and Innovation in Legal Services

Annex Report for the Solicitors Regulation Authority

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TECHNOLOGY AND INNOVATION IN LEGAL SERVICES: ANNEX REPORT

Foreword

This Annex Report is structured into three main thematic chapters, each intended to address broad – but related – areas of interest regarding innovation and technology in legal services. The main chapters are as follows:

- Lawtech adoption and innovation (Chapter 1)
- Socio-economic changes: provider adaptions and consumer impact (Chapter 2)
- The legal technology ecosystem: funding, scaleup and policies (Chapter 3)

The Annex Report also provides an explanation of the methods used for our interviews (Chapter 4) and our survey (Chapter 5). Chapter 4 includes sample questions asked of interviewees, while Chapter 5 includes the questions we asked in the survey.

The main objective of this Annex Report is to provide an overview of prior research which, in turn, has helped shape our substantive investigation for the Solicitors Regulation Authority (SRA). The desk research involved reviewing relevant academic literature, prior empirical studies, and policy documents. It helped us:

- To clarify the concepts and tools to be used in our research
- To identify significant gaps in knowledge and evidence
- To inform what specific questions to ask in interviews and the survey.

The findings from our investigation are contained in the Final Report, available here.

While each chapter of this Annex Report is designed to be read independently, we also cross-reference other sections of the Annex Report and the Final Report, where appropriate.

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Chapter 1: Desk research on lawtech adoption and innovation

1.1. Lawtech: what is it, and what are the drivers of, and barriers to, adoption?

1.2. Innovation: what is it, and how it relates to technology adoption

1.3. Evidence on the drivers of, and barriers to, the adoption of lawtech and innovation in the UK legal sector

This chapter provides a brief overview of lawtech, innovation, and the relationship between the two. We also summarise previous research into the drivers to and barriers of lawtech and innovation within the UK legal sector.

1.1 Lawtech: what is it, and what are drivers of, and barriers, to adoption?

1.1.1. What is 'lawtech' in the academic literature?

The term 'lawtech' does not feature widely in the academic literature.¹ The more common phrase used is 'legal technology', typically abbreviated to 'legal tech' or something similar.² The terms appear to be relatively interchangeable.

The OED (2021) provides a definition of 'technology' as the application of knowledge dealing with the applied sciences for practical purposes. In the academic literature relating to lawtech, the 'applied sciences' referred to appear to be primarily computer and data science (see, for instance, Alarie et al's (2018) analysis of artificial intelligence (AI) or Grossman and Cormack's (2011) outline of the approaches involved in technology-assisted review). The 'practical purposes' are the uses to which these applied sciences are put in the context of legal services (see, for example, the scope of legal technology startups set out in Linna Jr (2016) or the various use cases included in Engstrom and Gelbach (2020)).

It should be noted, of course, that the application of computers in a legal setting is not a new phenomenon. In 1963, for instance, Colin Tapper published an article entitled 'Lawyers and Machines' in *The New Law Review* (Tapper, 1963), and the 'International Conference on Law and AI' was first held in 1987 (Bench-Capon et al, 2012). However, the majority of the academic literature on lawtech that was reviewed had been published since the emergence of a data-driven approach to machine learning in around 2012 (Marcus, 2020). Given the temporal conjunction between the development of new techniques in artificial intelligence (AI) and the proliferation of lawtech journal articles, we have assumed that the two matters are related, and view the emergence of 'lawtech' informed by this perspective.

¹ One potentially relevant paper in which it did appear was "The Profession(s)' Engagements with LawTech: Narratives and Archetypes of Future Law" (Webley et al, 2019), in which it was defined as "the adaptation and adoption of digital technologies to legal practice". The citation given for this definition was "Digital Technologies, Legal Design and the Future of the Legal Profession" (Corrales et al, 2019), a work in which the authors use the term to describe "legal technology" and "legal tech" rather than "LawTech", which suggest the various monikers deployed have a high degree of commonality and interchangeability.

² The various terms used include "legal tech" (Engstrom and Gelbach, 2020), "legal-tech" (Hongdao, 2019), and "LegalTech" (Chishti et al, 2020).

There are two further points to note at this stage. First, there are within the academic literature papers that investigate lawtech in the context of the 'practice of law' and those that consider it in relation to the 'business of law'. The former, which deal primarily with how lawtech applies to the provision of legal advice, are often found in journals with a traditional focus on law and legal issues, such as the University of Pennsylvania Law Review (Engstrom and Gelbach, 2020) University of Toronto Law Journal (Alarie et al, 2018), or The Georgetown Journal of Legal Ethics (Remus and Levy, 2017). The latter, which tend to consider the impact of lawtech on the management and organisation of firms in the legal services sector, are typically found in journals with less of a focus on the law, such as Sustainability (Hongdao, 2019), or more of an emphasis on the development of the professional services sector more generally, such as the Journal of Professions and Organization (Armour and Sako, 2020). There are, in addition, papers within the literature that take technology as their starting point and consider its impact on lawyers and the legal sector more generally, which are usually found in journals with an inter-disciplinary focus, such as Artificial Intelligence and Law (Surden, 2019), Duke Law & Technology Review (Semmler and Rose, 2017), or Law, Technology and Humans (Webley et al, 2019).

The second point to note is that there seems to be a distinction to be made between the part of the legal sector that provides services to sizeable corporate clients and the part that does not. This tracks a historic divide brought to prominence in the seminal work *Chicago Lawyers: The Social Structure of the Bar* (Heinz and Laumann, 1982), which found empirical evidence for what might now be called BigLaw on the one hand, and PeopleLaw on the other. This divide is occasionally referred to explicitly in the lawtech literature (see Rostain, 2017, for instance). However, it manifests itself more typically as an implicit tendency in the papers reviewed to focus on either matters relevant to the corporate client-facing sector exclusively (see Brooks et al, 2020, for example) or matters relevant to both the corporate client-facing sector and the individual consumer-facing retail sector (see Surden, 2019, for instance), but not matters predominantly relevant to the individual consumer-facing retail sector category appears to be under-developed compared to that which relates to the corporate client-facing sector.

1.1.2. What does the academic literature tell us about current usage of lawtech, the adoption of lawtech, or the drivers of or barriers to adoption?

While typically based on a discussion of current developments in the legal sector, papers found in the academic literature tended to be forward-looking and consider how lawtech might potentially impact the practice or business of law (see, for instance, Talley, 2017, for a proto-typical example of this approach). Primary research into the current usage and impact of lawtech, its adoption, or the drivers of or barriers to adoption, was limited, with the academic literature typically relying on industry reports, websites, marketing materials, or similar sources for empirical data in connection to these matters. The paper by Brooks et al (2020) represents a rare exception, although even then their study was based on interviews with only 15 individuals. Investigating legal services firms with over 250 employees, they found resistance to engaging with Al-based technologies based on established practices and structures, together with skills gaps, and fears associated with data security and privacy. This would suggest that special attention should be given to established norms, traditions

and culture within certain segments of the legal services sector when it comes to the usage and adoption of lawtech.

Despite the relative scarcity of primary research or theoretical frameworks for the usage and adoption of lawtech in particular, there is a more developed pool of literature on technology adoption generally. There are a number of technology adoption models, for instance, within the academic literature. These include, but are not limited to, the Theory of Diffusion of Innovations (Rogers, 2003), the Technology Acceptance Model (Davis et al, 1989), and the Unified Theory of Acceptance and Use of Technology (as amended, Venkatesh et al, 2012). Taking each in turn:

The Theory of Diffusion of Innovations was first proposed by Everett Rogers in 1962 (Rogers, 2003). In short, it holds that the rate of adoption of technology (and what he called 'innovations' more generally) depends on: i) the perceived attributes of the technology, ii) the process of decision-making, iii) the communication channels involved, iv) the nature of the social system, and v) the extent of promotion efforts by interested parties. It also posited that the diffusion process could typically be graphed as an 'S-Curve', with the percent of adoption increasing over time in a non-linear fashion. Following this model, the drivers of and barriers to lawtech adoption might include factors such as how lawtech is perceived by those who run law firms, make purchasing or licensing decisions, or by expected users of the technology; how the decision to adopt the technology is taken; how information spreads within the legal sector; the wider societal context influencing the decision; and the way in which the lawtech ecosystem promotes its various technologies. The diffusion process, it would suggest, would be relatively slow at first, then proceed to exhibit exponential growth, before levelling off as the adoption rate reaches saturation. For a study of the usage and adoption of lawtech, therefore, the key potentially relevant facets of the theory are the linkages it makes between technology diffusion and time, as well as its highlighting of the factors that may increase or decrease the rate of adoption of a given technological innovation.

The Technology Acceptance Model (TAM) was first proposed in the 1980s by Fred Davis and his collaborators (Davis et al, 1989). Unlike Roger's Theory of Diffusion of Innovations, which was intended to be generally applicable, TAM was specifically designed to apply to digital technologies. Its main tenet is that two particular beliefs - perceived usefulness and perceived ease of use – are the key factors to explain user acceptance of technology. For lawtech, then, this theory would suggest that the focus of research should be on the perceived usefulness and perceived ease of use of a given technology as drivers or barriers to use. The Unified Theory of Acceptance and Use of Technology (UTAUT) and its variations (Venkatesh, 2012) builds on the TAM and other theories of the acceptance and use of technology to provide a composite model of technology use and acceptance in an organisational context. In short, it claims that habit, facilitating conditions and behavioural intention, moderated by age, gender and experience, are the key factors to explaining technology use. For a study of lawtech usage and adoption, therefore, it suggests a focus on work practices, technological orientation and wider demographic and experiential contexts. However, it should also be noted that both the TAM and the UTAUT essentially take for granted the access of users to a given technology. These models, therefore, provide little

insight into the practical question of adoption: that is, in this case, how a given technology makes its way into the legal sector in the first place.

From the academic papers on lawtech and technology adoption models in the wider literature, then, it seems clear that an analysis that focuses primarily on the technology dimension may provide too partial a perspective for a relevant and impactful study of the adoption and usage of lawtech. For an approach that puts lawtech in its proper context within the legal sector, and which enables the factoring in of other potentially relevant dimensions for adoption, such as markets and organisations, it may therefore be necessary to broaden out the review to include academic papers on innovation more generally.

1.2 Innovation: what it is, and how it relates to technology adoption

1.2.1. What is 'innovation' in the academic literature?

The concept of innovation in the academic literature generally traces its roots back to the economist Joseph Schumpeter, who described it in the early twentieth-century as broadly encompassing the commercial application of new ideas, such as the introduction of new products, new methods of production, the opening of new markets, or new forms of organisation (Schumpeter and Elliott, 2017). Since then, there has been a proliferation of scholarship on the topic: Garud et al (2013), for instance, found that 7,000 articles with innovation in the title had been published between 1956 and 2012 in the domain of business and economics. It is not surprising given the breadth of the concept and the amount of literature, therefore, that there are different approaches to categorising various types of innovation. For the purposes of our study, we are primarily interested in the relationship between technology and innovation (what we will call 'technological innovation'). However, there are alternative frameworks which foreground the relationship between, for instance, processes and innovation, or business models and innovation (see, for instance, a reference textbook such as Goffin and Mitchell (2017) for an overview of these approaches). While we appreciate that these alternative frameworks may provide potentially useful perspectives from which to view the relationship between technology and innovation in the legal sector (see, for example, Bourke et al (2020) for a more processbased approach to innovation in the legal sector, or Armour and Sako (2020) for an approach that highlights the role of business model innovation in the legal sector), they have been given a secondary rather than a primary consideration in our study of the adoption and usage of lawtech, and are referenced only where they are necessary to enhance our understanding of lawtech in its proper context within the legal sector.

1.2.2. Technologically enabled service innovation in the legal sector

The legal sector is primarily based on the provision of services to clients. As such, our primary concern in a sense comprises technologically enabled service innovation in the legal sector. Bessant et al (2014) have proposed four dimensions along which service innovation can take place. First, 'product' – that is, the service offering, which in the context of lawtech might, for example, include providing a technologically enabled alternative dispute resolution platform for corporates (Barnett and Treleaven, 2018). Second, 'process' – this is how the service offering is created and delivered, which in a lawtech context might involve, for instance, using an AI-enabled platform to facilitate document review in a due-diligence context (Mikhail et al, 2020). Third, 'position' – in essence, this encompasses how a service

is portrayed to the market (see, for instance, Skjølsvik and Breunig (2018) on media coverage of virtual law firms). Fourth, and finally, 'paradigm' – this covers how a change is made to the 'rules of the game' and the underlying ideas about what a business involves (see, for example, Katz's (2012) prediction of an 'emerging age of data-driven law practice'). Despite the potential relevance of service innovation in the legal and professional services sectors, a discussion of it has, traditionally, largely been neglected in the relevant academic literature (Barratt and Hinings, 2015). However, this seems to be changing with the publication of papers on the subject of innovation in professional services firms such as those by Kvålshaugen et al (2015), Cromwell et al (2020), and Bourke et al (2020).

1.2.3 What are the types of technological innovation in the wider academic literature? In order to critically assess the contributions of the papers on technologically enabled service innovation, it may be helpful to situate them in the wider academic literature on typologies of innovation as they apply to technology more generally.

Perhaps the most famous distinction found in the innovation literature is that made between two types of innovation: 'disruptive' and 'routine' or 'incremental'. This was popularised by Clayton Christensen (2000) in 'The Innovator's Dilemma'. In short, disruptive innovation involves a smaller firm successfully challenging an established incumbent business by providing a new product or service to an under-served market segment, before moving on to mainstream success by using the advantages that drove its early success (Christensen et al, 2015). This can be juxtaposed with 'routine' or 'incremental' innovation, which essentially involves a firm building on its existing capabilities to service clients in its current market more effectively (Pisano, 2015). This distinction, it should be noted, can exist independently of technology: disruptive innovation does not necessarily require new technology, and routine innovation does not intrinsically eschew it.

A second common distinction found in the innovation literature, and one which puts technologically enabled innovation at its core, is that made between 'architectural' and 'radical' innovation (Henderson and Clark, 1990). Whereas radical innovation poses a purely technological challenge to a firm, architectural innovation combines technological and business model disruptions (Pisano, 2015). It seems common in the lawtech academic literature for scholars to refer to 'disruptive innovation' without distinguishing between the conceptually different 'disruptive', 'radical' or 'architectural' innovation types (see, for instance, Linna Jr, 2016, or Platt, 2015). However, it should be noted that each type of innovation can provide benefits to a firm and its potential clients, as suggested in Figure 1.1 below. Since each of these types of innovation can be technologically enabled to an extent, our study may assist in providing an understanding of how lawtech is a driver of or barrier to routine, radical, disruptive, and architectural innovation.

Figure 1.1: Typology of routine, radical, disruptive, and architectural innovation

DISRUPTIVE	ARCHITECTURAL
EXAMPLES	EXAMPLES
OPEN SOURCE SOFTWARE	PERSONALIZED MEDICINE
FOR SOFTWARE COMPANIES	FOR PHARMACEUTICAL COMPANIES
VIDEO ON DEMAND	DIGITAL IMAGING
FOR DVD RENTAL SERVICES	FOR POLAROID AND KODAK
RIDE-SHARING SERVICES	INTERNET SEARCH
FOR TAXI AND LIMO COMPANIES	FOR NEWSPAPERS
ROUTINE	RADICAL
EXAMPLES	EXAMPLES
A NEXT-GENERATION	BIOTECHNOLOGY
BMW 3 SERIES	FOR PHARMACEUTICAL COMPANIES
A NEW VANGUARD	JET ENGINES
INDEX FUND	FOR AIRCRAFT MANUFACTURERS
A NEW PIXAR 3-D	FIBER-OPTIC CABLE
ANIMATED FILM	FOR TELECOMMUNICATIONS COMPANIES
	EXAMPLES OPEN SOURCE SOFTWARE FOR SOFTWARE COMPANIES DEC ON DEMAND FOR DVD RENTAL SERVICES RIDE-SHARING SERVICES FOR TAXI AND LIMO COMPANIES NECTOR EXAMPLES A NEXT-GENERATION BMW 3 SERIES A NEW VANGUARD MOEX FUND A NEW PIXAR 3-D

LEVERAGES EXISTING TECHNICAL COMPETENCES REG

REQUIRES NEW TECHNICAL COMPETENCES

Source: Pisano (2015)

Another common concept found in the innovation literature relating to technology is that of 'open innovation'. This was popularised by Henry Chesbrough (2003) in 'Open Innovation: the new imperative for creating and profiting from technology'. In essence, the argument is that a firm ought to combine its internal technological capabilities with external developments to innovate in a way that creates most value for its clients and itself. To do this, Chesbrough (2003, cited in Marques, 2014) posits six principles of open innovation:

- 'not all the smart people work in our organization'
- 'external R&D can create value for our organization'
- 'internal R&D is needed to grasp that value'
- 'we have to be involved in basic research to benefit from it, but the discovery does not have to be ours'
- 'if we make better use of external and internal ideas and unify the knowledge created, we will win'
- 'we should optimise the results of our organization, combining the sale or licensing of our innovation with the purchase of external innovation processes whenever they are more efficient and economic'

The extent to which technological innovation in the legal sector proceeds in accordance with these principles may provide further insights into the drivers of, and barriers to, the adoption and use of lawtech.

Finally, 'platform innovation' is a concept increasingly prevalent within the innovation literature relating to digital technologies in particular. Although there does not appear to be a generally agreed definition of 'platform' (Bonina et al, 2021), it has been noted that platforms are 'often associated with 'network effects': that is, the more users who adopt the platform, the more valuable the platform becomes to the owner and to the users

because of growing access to the network of users and often to a growing set of complementary innovations' (Gawer and Cusumano, 2014). Platforms can, for instance, 'allow their owners to achieve economic gains by reusing or redeploying assets across families of products developed by either the firm or its close suppliers', or 'allow firms to manage a division of innovative labor that originates beyond the confines of the firm or its supply chain' (Gawer and Cusumano, 2014). Platforms have been lauded as 'powerful engines of commerce' that are 'transforming economies' around the world, 'making life easier and better for billions of people' (Evans and Schmalensee, 2016, cited in Gawer, 2020), but it has also been pointed out that they have a dark side too, with 'spies, terrorists, counterfeiters, money launderers, and drug dealers all [having] found ways to use digital platforms to their advantage' (Cusumano et al, 2020).

Platforms can be classified as either 'transaction' or 'innovation' platforms (Cusumano et al, 2019, cited in Gawer, 2020). A transaction platform serves as an intermediary for direct exchange or transactions, subject to network effects; an innovation platform serves as a technological foundation upon which other firms develop complementary innovations (see Figure 1.2). Both types of platform can contribute to the broader notion of 'platform innovation', which is an umbrella concept typically used to refer to the wider ideas associated with innovation (see above for examples) in a platform context (Bonina et al, 2021). However, with the exception of a passing reference in a paper by Kerikmäe et al (2018), a discussion of the potential impact of technologically enabled platforms on innovation in the legal sector is largely absent from the academic literature.

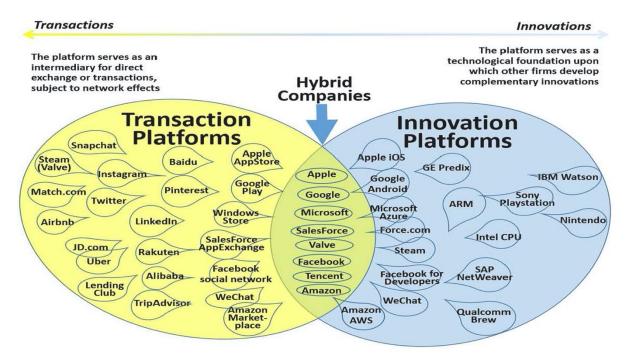


Figure 1.2: Transaction platforms and innovation platforms

Source: Cusumano et al (2019), cited in Gawer (2020)

1.2.4. What are the theories of innovation in the wider academic literature?

Having set out a selection of potentially relevant typologies of innovation, it follows that an overview of theories of innovation in the wider academic literature that attempt to explain the drivers of, barriers to, and timing of innovation should also be provided. There are, in short, five models of innovation (Dodgson, 2018, adapted from Rothwell, 1992). First, there is the 'science-push' or 'supply-push' model. According to this view, product and process innovations are founded on basic research, and are then pushed out to customers. Second, there is the 'demand-pull' model: this holds that innovations are brought into being to satisfy new or growing demand, and so in a sense are 'pulled' by customers. Third, there is the 'coupling' model, which holds that innovation is iterative, with feedback loops between supply and demand in the market. Fourth, there is the 'collaborative' model. This posits that innovation is primarily the result of collaboration between suppliers and customers in a given sector, as well as collaboration within suppliers themselves. Finally, there is the 'strategic integration and networking' model, which involves firms developing and enacting innovation strategies that are highly integrated with their partner network and ecosystem, such as 'lead customers', particularly demanding users, and wider co-creators of innovation, as well as making use of digital technologies in support of innovation. Although the models provide different perspectives on innovation, each may nevertheless provide insights into the drivers of and barriers to the adoption and use of lawtech.

1.2.5. What innovation strategies may be most applicable to firms in the legal sector in relation to lawtech?

According to Pisano (2015), strategy might be thought of as 'a set of coherent, mutually reinforcing policies or behaviours aimed at achieving a specific competitive goal'. An 'innovation strategy', then, might be conceptualised as the set of steps taken by a firm to align its innovation efforts with its overall business priorities. From a review of the academic literature on lawtech in legal services and the papers on professional services firms more generally, there appears to have been limited published material in this space. And, while the substance of innovation strategies is not central to this research project, our survey nevertheless explored the drivers (or lack of) of certain technology deployments and innovative working practices. Our findings on this point can be found in Chapter 2 of our Main Report.

For many firms in the legal sector, it can be assumed that their innovation strategy would involve realising an increased profit from an innovation by creating and capturing value in the market. The economist David Teece (1986), however, has proposed that innovating firms with a first mover advantage often fail to obtain significant economic returns from an innovation. He argues that when imitation of an innovation is easy then profits may accrue to the owners of complementary assets rather than the innovator. In such circumstances, the firm would need to establish a position in the relevant complementary assets prior to innovating to avoid this occurrence. Again, however, the extent to which innovations based on lawtech are easy to imitate or the need for firms in the legal sector to take positions in complementary assets prior to innovating if they are to benefit economically does not appear to have been the subject of sustained study in the academic literature on lawtech, legal services, or professional services firms. 1.2.6 What are the organisational capabilities that comprise the drivers of and barriers to the adoption and use of lawtech and technological innovation in the legal sector? It has been argued that successful innovation derives from organisational capabilities to manage resources (Dodgson et al, 2013). These organisational capabilities, it follows, may to a large extent comprise the drivers of and barriers to the adoption and use of lawtech and technological innovation in the legal sector. The organisational capabilities of law firms in particular have been the subject of study in the academic literature. A systematic literature review by Tomo et al (2019), for instance, found that the main capabilities that had an impact on innovation in the legal sector were:

- learning
- individual skills
- accumulated expertise
- knowledge
- human resource (HR) practice
- culture, values and norms
- technology
- relationships
- resource re-combination.

A few examples are provided below from the wider academic literature as it relates to law firms and the legal sector more generally.

Learning

In a study of European patent-law firms, Wagner et al (2014) explored the extent to which external learning is limited geographically and technologically. They found that organisations could acquire external knowledge by accessing technologically enabled external knowledge repositories, thereby to an extent overcoming geographical localisation. This learning could then provide a source for promoting innovation by increasing a firm's knowledge pool and potentially enabling it to adapt more successfully to changing environments.

Individual skills

As professional services firms, law firms face what has been described as 'the challenge of retaining and directing highly skilled employees' (von Nordenflycht et al, 2015, cited in Smets et al, 2017). As a result of their valuable human capital, lawyers have traditionally held a substantial degree of bargaining power with their employers, which has led to organisations with a high decentralisation of operating control and decision-making enabling the lawyers to realise their preferences for autonomy and discretion (Smets et al, 2017). Smith (2016), however, has suggested that individual skills and expertise are needed to make emerging technologies such as AI get deployed effectively and work in law firms. These include skills such as the organisation of data, the identification of learning and training content for machine learning, and the ability to quality test the output from lawtech tools. These skills for innovation are typically to be found in knowledge and information teams within law firms, rather than with the frontline lawyers. Thus, without the right organisational structure and processes, a firm may employ the individuals with the skills needed for innovation, but may not be able to innovate effectively.

Knowledge

Knowledge-intensity is commonly accepted to be one of the defining features of a law firm (Smets et al, 2017). It follows that how firms in the legal sector organise, structure and make use of their knowledge is one of the core elements of innovation. For instance, Malhotra et al (2016) studied knowledge in the context of exploration and exploitation activities in international law firms. They noted that different types of knowledge and legal reasoning were needed for different tasks and at different levels of seniority within a law firm. They found that the way in which the professionals holding these different types of knowledge and reasoning capabilities apply them and how they are organised directly affects a firm's innovation capacity. Further, they identified an interplay of career pathing and innovation capacity within the law firms, which implies that new organisational structures can enhance knowledge-related innovation capabilities within the legal sector.

Further, in a review of knowledge management in law firms, Kabene et al (2006) posited that: 'Firms have discovered that the innovation and application of tacit knowledge contributes to one's competitive advantage, especially during a time in which information transformed into knowledge is progressively more valuable and more powerful than ever before.' They suggest that knowledge management applications can generate environments where people possessing various disciplines can collaborate to create new knowledge and contribute to innovation, but noted that: 'Resistance to technology is [...] major barrier to the use of KM practices in law firms.' It follows that the drivers of and barriers to adoption for lawtech in general may also be connected to how knowledge is created, used, managed and made available across the legal sector. We do not explore the capture, usage and management of knowledge within firms in our study. However, in Chapter 5 of the Final Report, we highlight several related issues – data sharing between organisations and regulatory compliance relating to data collection and usage.

HR practices

Brivot et al (2014) examined promotion decisions in a French law firm. They found that promotion criteria were diverse and included items such as hours worked, technical legal skills, management ability, the capacity to manage and maintain peer and client relationships, and the ability to generate new business and realise substantial fees. In particular, hours worked by associates were found to be positively related with an increased chance of promotion. They also found that use of the firm's knowledge management systems was not directly linked to better promotion prospects (although they did find that it was positively associated with the volume of hours billed, which was, in turn, associated with an increased chance of promotion).

Accumulated expertise

In a study of UK-based law firms, Gardner et al (2008) investigated how diversification into innovative domains through the creation of new practice areas can enable a firm to benefit from a wider array of expertise and knowledge and adapt to changes both in the external knowledge environment and also the configuration of its own internal knowledge assets. They found that an element of the legitimacy requirement for creation of new practice areas that diverged radically or incrementally from a professional firm's domain of activity was the extent of related accumulated expertise. For example, a partner's experience in construction and finance practice areas could be subsequently leveraged to create a new

project finance practice area. This accumulated expertise capability may therefore be relevant in the lawtech context in determining what types of matters are taken forward.

Culture, values and norms

In a study that included law and accountancy firms in Germany, Kühn et al (2016) found a lack of understanding among law firm partners about their freedom to think and act in innovative ways. They noted, for instance, that a forced exit of a law firm partner is not uncommon where they have failed to perform well in terms of individual revenue metrics, whereas a failure to pursue an innovation-inspired business case is considered less important and unlikely to lead to an exit. This implies that organisational capabilities related to culture, values and norms can be important for the adoption of lawtech and its use in innovative ways within the legal sector. Similarly, a study of Australian law firms by Hogan et al (2014) has found that organisational culture, norms, and artefacts can support the types of innovative behaviours that can benefit firm performance. In our Final Report, our survey-based insights offer a sector-wide overview of the importance of firm strategy, arguably a manifestation of firm culture, in driving (or not) technology and innovation deployments. These findings can be found in Chapter 2 of the Final Report.

Technology

In a study of professional services firms in Australia (of which firms in the legal sector made up over 20 percent of the sample), McCole and Ramsey (2005) profiled the differences between adopters and non-adopters of e-commerce technology. The main points to note are summarised below.

They found that adopters tended to be more aware of opportunities, such as the ability to offer new services, provided by the new technology, and they were also more customerorientated and sensitive to the changes taking place in the environments of their clients as well as their competitors. They further noted that their findings were in keeping with other studies, which had found that factors acting as drivers to technology adoption included pressure by major clients or other influencers in their business environment, and competitive pressures that firms faced within their particular industry (whether reactively, or proactively in an attempt to maintain a favourable competitive position) also played an important role.

Non-adopters, on the other hand, were slower in terms of detecting how changes in technology might affect their business and found that negative mindsets – such as not trusting a technology, believing it to be highly risky, or not fully understanding the potential benefits – were the biggest factors impeding technology adoption. They again noted that their findings were in keeping with other studies. These had found that factors acting as barriers to technology adoption included an unwillingness of managers to be responsible for technical change, ignorance about technology leading to concerns about security, costs, legal issues, or interoperability, and an unwillingness to spend valuable resources of time and effort to incorporate the technology into the firm's existing stack.

Relationships

Based on an archival dataset produced by an annual innovation contest held in the legal industry, Cromwell et al (2020) studied how service innovations in law firms can be cocreated through client-professional collaboration. They found a tension between the need for lawyers to establish and maintain long-term relationships with their clients, in order to properly understand their client's business and provide effective solutions, and the tendency for such deep relationships to generate shared lawyer-client perspectives that could undermine the development of innovative ideas. From this, they theorised that the capability on behalf of the law firm to adjust its type of client relationship on a matter depending on whether it was 'high' or 'low' stakes could affect its ability to provide innovative solutions.

Resource re-combination

In a study of large law firms in the United States, Sherer et al (2002) noted that 'organizations facing resource scarcities will seek to be more competitive in acquiring resources or to innovate in ways that allow them to make use of alternative resources'. It follows that the organisational capability to recombine resources in novel ways, whether by necessity or to utilise an existing strength, can be important for innovation in the legal sector. Our research explores resource recombination in several ways, including in relation to the purpose of lawtech deployments (labour substitutions), the acquisition of already innovative legal services businesses, and the recruitment of non-lawyer personnel who specialise in lawtech. Our substantive findings on these points can be found in Chapters 2 and 3 of the Final Report.

1.3 Evidence on the drivers of, and barriers, to the adoption of lawtech and innovation in the UK legal sector

There are two previous reports in particular that have partially studied the drivers of and barriers to the adoption and use of lawtech and innovation in the UK legal sector: *Innovation in Legal Services: A Report for the Solicitors Regulation Authority and the Legal Services Board* (Roper et al, 2015) (the 2015 SRA Innovation Report) and *Technology and Innovation in Legal Services – Main Report: An Analysis of a Survey of Legal Service Providers* (Legal Services Board, 2018) (the 2018 LSB Technology and Innovation Report).

1.3.1. The 2015 SRA Innovation Report

The 2015 SRA Innovation Report investigated innovation in legal services organisations in England and Wales in the context of changes to the legislative and regulatory framework surrounding legal services, such as the introduction of Alternative Business Structures (ABS). They distinguished between 'service innovation', which they defined as 'relating to the production and delivery of new (or improved) legal services by existing suppliers' and 'business process innovation', which they defined as relating 'to the way in which legal services are delivered'. Within the latter category, they defined four further subcategories:

- 'strategic innovation' 'reflecting the impact of a change in corporate strategy'
- 'management innovation' 'involving the implementation of new managerial approaches'
- 'organisational innovation' 'involving structural changes to an organisation'
- 'marketing innovation' 'involving changes to marketing concepts or strategies'.

The key findings from the 2015 survey based on 943 responses were that:

- Large firms are more likely to innovate.
- Alternative Business Structures are more likely to innovate.

1.3.2. The 2018 LSB Technology and Innovation Report

The 2018 survey undertaken by the Legal Services Board maintains the same categories of innovation, and extends the framework into eight types as follows:

- Service innovation
- Radical service innovation
- Delivery innovation
- Radical delivery innovation
- Strategic innovation
- Management innovation
- Organisational innovation
- Marketing innovation

The LSB (2018) survey also asked about the use of 'emergent technology' which it classified into 10 categories:

- Interactive website
- Live chat or virtual assistants on the website
- The cloud or similar for data storage
- ID checking tools, use of electronic signatures and email security
- Custom-built smart device applications for clients, enabling them to access advice or updates from the firm
- Technology-assisted review (TAR) Software to search and classify documents based on inputs from expert reviewers
- Automated Document Assembly (ADA) Software that automates the drafting of customised legal documents, using rules and decision trees
- Robotic Process Automation (RPA) software that automates high-volume, repeatable processes or tasks
- Predictive technology (PT) Advanced data analytics that uses statistics, predictive modelling, and data mining to analyse data in order to make predictions about the future, such as the likely outcome of cases
- Blockchain or Distributed Ledger Technology, including smart contracts (DLT) a digital record of transactions that is distributed, ie transactions are recorded

In our survey, discussed in Chapter 2 of our Final Report, we have taken the pragmatic decision to focus on those elements of innovation we regard as being most closely related to technology – a key focus of this study. For this reason, our study mainly focuses on product innovation, delivery innovation and, to a lesser extent, marketing innovation, rather than all eight categories set out in the above-mentioned LSB report. In Chapter 2, we also outline the dynamic between technology and innovation generally by reference to these three innovation types, using specific examples gathered during our interview-based research. In our survey, the specific legal technologies we explore the adoption of by SRA-

regulated legal practices is inspired by, but also distinctive to, the technologies specified in the LSB study.

1.3.3. Barriers to the adoption and use of legal technology and innovation in the UK legal sector

In terms of barriers to the adoption of legal technology and innovation, the 2018 LSB study highlights some of the most common inhibiting factors. Below is an extract from this survey report, containing survey responses from solicitors in relation to both service innovation and technology developments. This survey reveals a broad range of constraints or barriers, including internal resources, regulatory considerations and a potential lack of demand. Also, constraints for innovation and for technology adoption are similar but different. We build on these insights and offer more recent survey findings regarding barriers to innovation and technology deployments in Chapter 2 of our Final Report.

Table 1.1: Key constraints on service developments in 2018

Constraints	% of respondents
Lack of capacity/expertise in business	50%
Regulatory factors	44%
Lack of necessary finance	41%
Limited market for new services	40%

Note: multiple responses are allowed, so percentages do not add up to 100.

Source: LSB (2018), Table 7.

Table 1.2 Key constraints on technology development in 2018

Constraints	% of respondents
Risks involved with using unproven technology	52%
Lack of IT expertise	45%
The availability of finance	42%
Legal services regulations	41%
UK government regulations	35%
Lack of qualified personnel	37%

Note: multiple responses are allowed, so percentages do not add up to 100.

Source: LSB (2018), Table 8.

1.3.4. Conclusions

This chapter briefly outlined the parameters of what we regard as technology and innovation in a legal sector-specific context, and also what is currently known about it in the academic literature. We also highlight several, more general concepts, that might usefully assist in thinking about legal sector innovation, such as platforms and open innovation. Where possible, we have signposted where our study builds on existing studies regarding legal sector technology and innovation. This includes findings regarding patterns of legal technology take-up and types of barriers to adoption of legal technology.

References

Alarie, B., A. Niblett, and A. Yoon (2018) How Artificial Intelligence Will Affect the Practice of Law. *University of Toronto Law Journal* 68(1) (supplement): 106–24. https://doi.org/10.3138/utlj.2017-0052.

Armour, J. and M. Sako (2020) AI-Enabled Business Models in Legal Services: From Traditional Law Firms to next-Generation Law Companies? *Journal of Professions and Organization* 7(1): 27–46. <u>https://doi.org/10.1093/jpo/joaa001</u>.

Barnett, J. and P. Treleaven (2018) Algorithmic Dispute Resolution – The Automation of Professional Dispute Resolution Using AI and Blockchain Technologies. *The Computer Journal* 61(3): 399–408. <u>https://doi.org/10.1093/comjnl/bxx103</u>.

Barratt, M. and B. Hinings (2015) Service Innovation in Professional Service Firms in Empson, L., Muzio, D., Broschak, J. and B. Hinings (eds) *The Oxford Handbook of Professional Service Firms* 1. Oxford: Oxford University Press. <u>https://doi.org/10.1093/oxfordhb/9780199682393.013.16</u>.

Bench-Capon, T., M. Araszkiewicz., et al (2012) A History of AI and Law in 50 Papers. *Artificial Intelligence and Law* 20: 215–319. https://link.springer.com/article/10.1007/s10506-012-9131-x

Bessant, J., C. Lehmann, and K.M. Möslein (2014) Service Productivity and Innovation. In: Bessant, J., C. Lehmann and K.M. Möslein (eds) *Driving Service Productivity: Management for Professionals*. Cham:Springer: 3–15. <u>https://doi.org/10.1007/978-3-319-05975-4_1</u>.

Bonina, C., K. Koskinen, B. Eaton B. and A. Gawer (2021) Digital Platforms for Development: Foundations and Research Agenda. *Information Systems Journal*, isj.12326. <u>https://doi.org/10.1111/isj.12326</u>.

Bourke, J., S. Roper, and J.H. Love (2020) Innovation in Legal Services: The Practices That Influence Ideation and Codification Activities. *Journal of Business Research* 109: 132–47. https://doi.org/10.1016/j.jbusres.2019.11.057.

Brivot, M., H. Lam and Y. Gendron (2014) Digitalization and Promotion: An Empirical Study in a Large Law Firm. *British Journal of Management* 25(4): 805–18. <u>https://doi.org/10.1111/1467-8551.12060</u>.

Brooks, C., C. Gherhes, and T. Vorley (2020) Artificial Intelligence in the Legal Sector: Pressures and Challenges of Transformation. *Cambridge Journal of Regions, Economy and Society* 13(1): 135–52. <u>https://doi.org/10.1093/cjres/rsz026</u>.

Chesbrough, H.W. (2003) *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Boston, Mass: Harvard Business Press.

Chishti, S., S. Adams Bhatti, A. Datoo, and D. Indjic (eds) (2020) *The Legaltech Book: The Legal Technology Handbook for Investors, Entrepreneurs and Fintech Visionaries*. Hoboken: John Wiley & Sons.

Christensen, C. M. (2000) The Innovator's Dilemma. Rev. Boston, Mass: HarperBusiness.

Christensen, C.M., M.E. Raynor, and R. McDonald (2015) What Is Disruptive Innovation? *Harvard Business Review* 11.

Corrales, M., M. Fenwick, and H. Haapio (2019) Digital Technologies, Legal Design and the Future of the Legal Profession. In Corrales, M., Fenwick M. and H. Haapio (eds) *Legal Tech, Smart Contracts and Blockchain. Perspectives in Law, Business and Innovation*. Singapore: Springer: 1–15,. <u>https://doi.org/10.1007/978-981-13-6086-2_1</u>.

Cromwell, J.R. and H.K. Gardner (2020) High-Stakes Innovation: When Collaboration in Teams Enhances (or Undermines) Innovation in Professional Service Firms. *Journal of Professions and Organization* 7: 2–26. <u>https://doi.org/10.1093/jpo/joz017</u>.

Cusumano, M.A., A. Gawer, and D.B. Yoffie (2019) *The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power*. New York, NY: Harper Business.

Cusumano, M.A., D.B. Yoffie, and A. Gawer (2020) The Future of Platforms. *MIT Sloan Management Review* 61(3): 46–54.

Davis, F.D., R.P Bagozzi, and P.R. Warshaw (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science* 35(8): 982–1003.

Dodgson, M., and D. Gann (2018) *Innovation: A Very Short Introduction*. 2nd edition. Oxford: Oxford University Press.

Dodgson, M., D. Gann, and N. Phillips (2013) *The Oxford Handbook of Innovation Management*. Oxford: Oxford University Press.

Engstrom, D.F. and J.B. Gelbach (2020) Legal Tech, Civil Procedure, and the Future of Adversarialism. *University of Pennsylvania Law Review* 169: 62.

Evans, D.S. and R. Schmalensee (2016) *Matchmakers: The New Economics of Multisided Platforms*. Boston, Mass: Harvard Business Review Press.

Gardner, H.K., N. Anand, and T. Morris (2008) Chartering New Territory: Diversification, Legitimacy, and Practice Area Creation in Professional Service Firms. *Journal of Organizational Behavior* 29(8): 1101–21. <u>https://doi.org/10.1002/job.557</u>.

Gawer, A. (2020) Digital Platforms' Boundaries: The Interplay of Firm Scope, Platform Sides, and Digital Interfaces. *Long Range Planning* 102045. <u>https://doi.org/10.1016/j.lrp.2020.102045</u>.

Gawer, A. and M.A. Cusumano (2014) Industry Platforms and Ecosystem Innovation. *Journal of Product Innovation Management* 31(3): 417–33. <u>https://doi.org/10.1111/jpim.12105</u>.

Garud, R., P. Tuertscher, and A.H. Van De Ven (2013) Perspectives on Innovation Processes. *Academy of Management Annals* 7(1) 775–819. <u>https://doi.org/10.1080/19416520.2013.791066</u>.

Goffin, K. and R. Mitchell (2017) Understanding Innovation and Innovation Management. In Goffin, K. and R. Mitchell. *Innovation Management*. London: Macmillan Education UK: 1–40. <u>https://doi.org/10.1057/978-1-137-37344-1_1</u>

Grossman, M.R. and G.V. Cormack (2011) Technology-Assisted Review in E-Discovery Can Be More Effective and More Efficient Than Exhaustive Manual Review. *Richmond Journal of Law and Technology* 17(3): 49.

Heinz, J. P. and E.O. Laumann (1982) *Chicago Lawyers: The Social Structure of the Bar*. New York, Chicago: Russell Sage Foundation.

Henderson, R.M. and K.B. Clark (1990) Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms. *Administrative Science Quarterly* 35(1): 9–30. <u>https://doi.org/10.2307/2393549</u>.

Hogan, S.J. and L.V. Coote (2014) Organizational Culture, Innovation, and Performance: A Test of Schein's Model. *Journal of Business Research* 67(8): 1609–21. <u>https://doi.org/10.1016/j.jbusres.2013.09.007</u>.

Hongdao, Q., S/ Bibi, A. Khan, L. Ardito, and M. Khaskheli (2019) Legal Technologies in Action: The Future of the Legal Market in Light of Disruptive Innovations. *Sustainability* 11(4):1015. <u>https://doi.org/10.3390/su11041015</u>.

Kabene, S.M., P. King, and N. Skaini (2006) Knowledge Management in Law Firms. *Journal of Information, Law and Technology* 1

https://www.semanticscholar.org/paper/Knowledge-Management-in-Law-Firms-Kabene-King/ccc20485ef1927952735e7aa19d2ecb05c7bdb19.

Katz, D.M. (2012) Quantitative Legal Prediction, or How I Learned to Stop Worrying and Start Preparing for the Data Driven Future of the Legal Services Industry. *Emory Law Journal* 62:909.

Kerikmäe, T., T. Hoffmann, and A. Chochia (2018) Legal Technology for Law Firms: Determining Roadmaps for Innovation. *Croatian International Relations Review* 24(81): 91– 112. <u>https://doi.org/10.2478/cirr-2018-0005</u>.

Kühn, C., T. Eymann, N. Urbach, and A. Schweizer (2016) From Professionals to Entrepreneurs: Human Resources Practices as an Enabler for Fostering Corporate Entrepreneurship in Professional Service Firms. *German Journal of Human Resource Management* 30(2): 125–54. <u>https://doi.org/10.1177/2397002216632134</u>.

Kvålshaugen, R., K.M. Hydle, and P.O. Brehmer (2015) Innovative Capabilities in International Professional Service Firms: Enabling Trade-Offs between Past, Present, and Future Service Provision. *Journal of Professions and Organization* 2(2): 148–67. <u>https://doi.org/10.1093/jpo/jov005</u>.

Legal Services Board (2018) Technology and Innovation in Legal Services – Main Report.

Linna Jr, D.W. (2016) What We Know and Need To Know About Legal Startups. *South Carolina Law Review* 67 (2):389

Malhotra, N. (2016) Career Pathing And Innovation In Professional Service Firms. *Academy of Management Perspectives* 16.

Marcus, G. (2020) The Next Decade in AI: Four Steps Towards Robust Artificial Intelligence. *ArXiv:2002.06177 [Cs]*, 14. <u>http://arxiv.org/abs/2002.06177</u>.

Marques, J. P.C. (2014) Closed versus Open Innovation: Evolution or Combination?' *International Journal of Business and Management* 9(3): 196. https://doi.org/10.5539/ijbm.v9n3p196.

McCole, P. and E. Ramsey (2005) A Profile of Adopters and Non-Adopters of ECommerce in SME Professional Service Firms. *Australasian Marketing Journal (AMJ)*, 13(1): 36–48.

Mikhail, M., A. Roegiest, K. Anello, and W. Wei (2020) Dancing with the AI Devil: Investigating the Partnership Between Lawyers and AI. In *Proceedings of the 2020 Conference on Human Information Interaction and Retrieval*, 397–401. CHIR 20. New York, NY: Association for Computing Machinery. <u>https://doi.org/10.1145/3343413.3378014</u>.

Nordenflycht, A.V., N. Malhotra, and T. Morris (2015) Sources of Homogeneity and Heterogeneity across Professional Services. In *The Oxford Handbook of Professional Service Firms* 1, Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199682393.013.7.

Oxford English Dictionary. technology, n., 2021. https://www.oed.com/.

Pisano, G.P. (2015) You Need an Innovation Strategy, Harvard Business Review 12.

Platt, A. (2015) Disruptive Innovation: New Models of Legal Practice. *Hastings Law Journal* 67: 85.

Remus, D., and F. Levy (2017) Can Robots Be Lawyers? Computers, Lawyers, and the Practice of Law. *The Georgetown Journal of Legal Ethics* 30: 501.

Rogers, E.M. (2003) *Diffusion of Innovations*. 5th edition. Riverside: Free Press, Ebook Central. <u>https://ebookcentral.proquest.com/lib/oxford/detail.action?docID=4935198</u>.

Roper, S., J. Love, P. Rieger, and J. Bourke (2015) *Innovation in Legal Services: A Report for the Solicitors Regulation Authority and the Legal Services Board*.

Rostain, T. (2017) Robots Versus Lawyers: A User-Centered Approach. *The Georgetown Journal of Legal Ethics* 30: 559.

Rothwell, R. (1992) Successful Industrial Innovation: Critical Factors for the 1990s. *R&D Management* 22(3): 221–40. <u>https://doi.org/10.1111/j.1467-9310.1992.tb00812.x</u>.

Schumpeter, J.A. (1911) *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Elliot, J.E. (ed) Social Science Classics Series. London: Routledge

Semmler, S., and Z. Rose (2017) Artificial Intelligence: Application Today and Implications Tomorrow. *Duke Law & Technology Review* 16(1): 15.

Sherer, P.D., and Lee K. (2002) Institutional Change in Large Law Firms: A Resource Dependency and Institutional Perspective. *Academy of Management Journal* 45(1): 19. https://doi.org/10.2307/3069287

Skjølsvik, T., and K.J. Breunig (2018) Virtual Law Firms: An Exploration of the Media Coverage of an Emerging Archetype. *International Journal of Law and Information Technology* 26(1): 64–88. <u>https://doi.org/10.1093/ijlit/eax023</u>.

Smets, M., T. Morris, A.V. Nordenflycht, and D. M. Brock (2017) 25 Years since 'P2': Taking Stock and Charting the Future of Professional Firms. *Journal of Professions and Organization* 4(2): 91–111. <u>https://doi.org/10.1093/jpo/jox006</u>.

Smith, A. (2016) Big Data Technology, Evolving Knowledge Skills and Emerging Roles. *Legal Information Management* 16(4): 219–24. <u>https://doi.org/10.1017/S1472669616000499</u>.

Surden, H. (2019) Artificial Intelligence and Law: An Overview. *Artificial Intelligence and Law* 35: 34.

Talley, E.L. (2017) Is the Future of Law a Driverless Car? Assessing How the Data Analytics Revolution Will Transform Legal Practice. *Journal of Institutional & Theoretical Economics* 34.

Tapper, C. (1963) Lawyers and Machines. *The Modern Law Review* 26(2): 121–37. https://doi.org/10.1111/j.1468-2230.1963.tb00703.x.

Teece, D.J. (1986) Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy. *Research Policy* 15(6): 285–305. <u>https://doi.org/10.1016/0048-7333(86)90027-2</u>.

Tomo, A., G. Mangia, S. Consiglio, and P. Canonico (September 2019) Innovation in Knowledge-Based Professional Service Firms. An Integrated Conceptual Model. *Technology Analysis & Strategic Management* 31(9): 1118–36. <u>https://doi.org/10.1080/09537325.2019.1585801</u>.

Venkatesh, V., J.Y.L. Thong, and X. Xin (2012) Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly* 36(1): 157–78. <u>https://doi.org/10.2307/41410412</u>.

Wagner, S., K. Hoisl, and G. Thoma. (2014) Overcoming Localization of Knowledge – the Role of Professional Service Firms: Overcoming Localization of Knowledge. *Strategic Management Journal* 35(11): 1671–88. <u>https://doi.org/10.1002/smj.2174</u>.

Webley, L., J. Flood, J. Webb, F. Bartlett, K. Galloway, and K. Tranter (2019) The Profession('s) Engagements with LawTech: Narratives and Archetypes of Future Law. *Law, Technology and Humans* 25: 6–26. <u>https://doi.org/10.5204/lthj.v1i0.1314</u>.

Chapter 2: Desk research on socio-economic changes: provider adaptions and consumer impact

- 2.1. Why focus on unmet legal need in a legal innovation and technology study?
- 2.2. Defining unmet legal need
- 2.3. Potential barriers to solicitors' instruction
- 2.4. Case history in unmet legal need focusing on employment law
- 2.5. Conclusions

This chapter provides an overview of prior research into unmet legal need (ULN), with the aim of understanding how technology and innovation by legal service providers might help mitigate it.

2.1 Why focus on unmet legal need in a legal innovation and technology study?

On 25 September 2015, heads of state from around the world formally adopted 17 sustainable development goals (SDGs) at a special UN summit (United Nations General Assembly, 2015). One of these SDGs, SDG 16, is particularly pertinent to this study. SDG 16, which focuses on peace, justice and strong institutions, includes a specific target (16.3) to 'promote the rule of law at the national and international levels and **ensure equal access to justice for all'** [our emphasis] by 2030. As part of its voluntary 'national review of progress towards meeting its sustainable development goals', the UK government recently confirmed, specifically in relation to SDG 16.3, that 'the ability of individuals to resolve legal issues and access support when they need it is vital to a just society' (HM Government, 2019). And, as part of that objective, the government further committed to fostering a culture of innovation in the legal sector, thereby supporting 'people's access to justice in ways that truly reflect today's society' (Ministry of Justice, 2019). There is now, therefore, both an international and a domestic objective in place to support equal access to justice in the UK.

Arguably, an important way to support equal access to justice for all is to reduce incidences of what is known as unmet legal need (ULN). Although the precise definition of ULN is contested (Curran, 2007), the core idea is straightforward: collectively, individuals and organisations have legal assistance requirements – but those legal assistance requirements are often not met by existing service providers (either at all, or to the satisfaction of the affected person). Indeed, as Figure 2.1 below shows, recent research from England and Wales suggests the level of legal need that remains unmet can often exceed met need by a considerable margin (Legal Services Board, 2020).³

Recognising that ULN is a global problem, a proposition has long-since been made: legal practice innovation, be it technology-led or otherwise, may be able to help reduce the current levels of ULN (Simshaw, 2018; Legal Services Commission, 201349;

³ In the LSB's definition of ULN, a need can still be deemed "unmet" if an issue took too long to resolve, or if help provided was not deemed "adequate". This approach, that we do not directly follow in this chapter, may help explain why matters such as residential conveyancing may sometimes be regarded as falling within ULN, even if legal advice was obtained.

Schoonmaker, 2017; OECD, 2016; Tulk, 2020; Saab Fortney, 2019; The Law Society, 2019). Indeed, our research starts from the assumption that this proposition is plausible, but requires further investigation regarding the exact causal mechanisms that might usefully be deployed to bring about such an improvement. Most obviously, technology can bring down the unit cost of delivering those legal services that are capable of being automated (Armour, 2021; Robinson, 2016), thereby rendering them more affordable for consumers. We discuss the relevance of costs in relation to ULN later in this report.

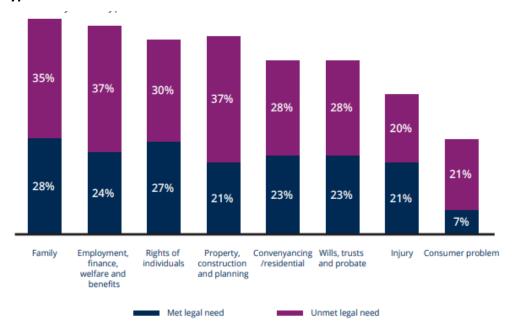


Figure 2.1: Estimated met and unmet legal need: resolved contentious legal issues, by issue type

Base: All who had a resolved contentious legal issue that started in 2012 or later (9,231), rights of individuals (n=617), consumer problem (n=1,007), conveyancing/ residential (n=1,672), family (n=1,307), injury (n=1,129), property/ construction/ planning (n=1,899), employment/ finance/ welfare/ benefits (n=2,350), wills/ trust/ probate (n=2,337)

Source: LSB (2020)

To understand the possible impact of practice/technology innovation on ULN, this literature review briefly synthesises what is known about ULN, across two key stakeholder groups: consumers (which encompasses individuals and small businesses) and producers of legal services. On the consumer side, we explore a typical legal needs journey, identifying the key points at which a legal need appears to transform into an unmet legal need. Meanwhile, in relation to producers, we briefly analyse what prior research tells us about the manner in which legal services tend to be delivered, with a view to identifying how these existing delivery mechanisms may (potentially) exacerbate ULN. Understanding both consumer and producer perspectives regarding ULN allows us to understand where ULN barriers appear to be concentrated. This, in turn, will enable us to then explore the extent to which legal practice innovation and technology might help mitigate against ULN.

While this literature review evaluates both consumer and producer elements of ULN, the substantive research in our Final Report mainly explores how innovation and technology might mitigate against ULN from the perspective of legal services producers. We take a

producer-focused view of ULN for the pragmatic reason that our research has been commissioned by a regulator of legal service producers – the SRA. As this review demonstrates, the producer perspective is also less well researched compared to the consumer perspective. The SRA wishes to know how the practices it directly regulates may potentially increase access to legal services for the benefit of consumers, principally via innovation and the use of technology.

To keep the scope of our project manageable, this literature review focuses on ULN in the 'PeopleLaw' segment of the English and Welsh legal market. By PeopleLaw, we mean the area of the legal market that principally serves individuals and small businesses owned by individuals (Heinz, 2005). Prior literature indicates that, even within the PeopleLaw market, these two consumer types face subtly different ULN challenges. Therefore, while we shall discuss the ULN challenge of both individuals and small business owners within the same overarching framework, we shall also draw distinctions between their distinctive ULN needs and challenges, where appropriate.

It is not our intention, in this literature review, to identify every situation where ULNs exist, and highlight every way in which ULNs might be mitigated against via practice innovation and technology. Instead, we briefly explore one specific area of legal need where ULN appears particularly problematic (see Figure 2.1, above): employment law. The rationale for selecting employment law-related services as our case history will be discussed shortly. In Chapter 4 of our Final Report, we offer illustrative examples of legal service providers that are innovating in relation to their delivery of employment law-related services.

2.2 Defining unmet legal need

Unmet legal need is a long-established concept and has been the focal point of numerous investigations around the world over many years (Pleasence, 2014; OECD, 2019). However, in order to understand how, and if, technology and practice innovation might help mitigate against ULN, the term first needs to be unpacked. This is because the term is often regarded as containing multiple distinctive elements (Australian Government Productivity Commission, 2014; YouGov, The Law Society et al, 2019). Our overarching approach to unpacking the ULN concept, adopted in this report, is based on a schema initially articulated by Bradshaw (1994; 2013) in relation to healthcare, and subsequently translated into a legal sector setting by Curran and Noone (2007). The Bradshaw / Curran and Noone ULN taxonomy contains four key elements:

- Normative need a need as defined by an 'expert'
- Felt need a need that is experienced
- Expressed need a need that is turned into action
- Comparative need the equivalent of a need, if people with similar characteristics are in need of a service that is not available to all.

2.2.1 Normative need

An obvious prerequisite of the existence of an ULN is that the need must relate to a legal right in some way – ie the matter must be 'justiciable' (Genn, 1999). Helpfully, because legal

need has been extensively investigated over many years in numerous national surveys, what amounts to a justiciable matter is now codified in an OECD / Open Society Foundation framework (OECD, 2019).

In this study we shall seek, so far as possible, to avoid conflating the term 'legal need' with 'legal problem' – because not all 'legal needs' are arguably rooted in legal 'problems'. Instead, when we refer to legal need, we generally mean 'legal issues' – a terminology adopted in the recent YouGov / Law Society / Legal Service Board study (YouGov, 2019). Viewing 'legal need' through the lens of 'legal issues' means we can explore ULN issues that are both contentious and non-contentious. This is helpful, because many of the more commonly experienced legal issues – especially among consumers – are likely to be non-contentious. For example, in the above-mentioned 2019 YouGov / Law Society / Legal Service Board study, two out of the four most commonly experienced legal issues were buying and selling – or trying to buy or sell – a house or flat (11%), and making changes – or trying to make changes – to a will (11%).

2.2.2. Felt need

Arguably, a second key element of ULN is the recognition and appreciation by those affected that what they are experiencing is a legal issue (ie a felt need). Perhaps surprisingly, evidence gathered in a number of countries suggests that many people fail to recognise that their need is legal in nature – sometimes by a considerable margin (Balmer, 2013). For example, a 2015 survey of 8,912 individuals designated as having dealt with a legal issue in England and Wales found that, at a matter's outset, 67% of research participants said they did not appreciate that the matter was, in fact, legal. This compared with 25% of survey respondents who did recognise that the matter was legal from the outset, and 8% who did not know (Ipsos MORI / Social Research Institute, 2016). Other studies, undertaken both domestically (YouGov, The Law Society et al, 2019) and internationally, have uncovered broadly similar perceptions among study participants. By way of illustration, Table 2.1 below indicates whether individuals – who have directly experienced a legal problem in the past two years – actually regard this problem as being legal in nature. Across all 10 illustrative countries, less than half of all survey respondents consistently recognised the problem as being legal – with recognition in the UK a mere 19% (World Justice Project, 2019). In terms of which type of legal matters are least likely to be recognised as such by a country's citizens, UK-specific research has found that, among consumers, employment, debt, housing and discrimination have tended to be regarded as being 'not legal' rather than legal (Pleasence, 2014). This lack of recognition regarding the legality of specific matters is also prevalent within the SME business community, who often regard legal issues as being a private business or bureaucratic matter (Pleasence, 2013).

Why does it matter that someone might fail to recognise that they have a legal right in relation to a specific issue? It matters because research has indicated that the more an issue is regarded as being 'legal', the more likely an individual is to seek professional advice, including from a lawyer (Pleasence, 2014; BMG Research, 2018). However, for the purposes of this study, the evidence cited above also challenges an assumption that lays behind it – that technology and innovation may help mitigate against ULN. This is because, in the absence of a felt legal need, a person is unlikely to initiate a process that ultimately causes them to seek any type of advice, still less advice from an SRA-regulated entity.

	Bad luck/part of life	Bureaucr atic	Family / private matter	Legal	Political	Social/co mmunity matter	Economic
Australia	50%	27%	33%	25%	14%	28%	32%
France	35%	36%	22%	24%	7%	27%	33%
Germany	45%	41%	35%	31%	10%	24%	35%
India	56%	49%	45%	41%	35%	36%	51%
Japan	28%	17%	42%	17%	8%	27%	34%
Netherlands	57%	42%	26%	26%	17%	31%	31%
Russia	41%	43%	29%	23%	12%	37%	29%
Spain	45%	35%	28%	34%	12%	32%	50%
UK	52%	34%	21%	19%	8%	29%	29%
US	44%	30%	26%	27%	10%	24%	36%

 Table 2.1: How legal problems are perceived across various major world economies

Source: World Justice Project (2019)

Does that mean that legal regulators are powerless to explore the lack of awareness issue? No: indeed, unusually among legal regulators internationally (Terry, 2011 - 2012), the England and Welsh regulatory system for lawyers has a clear statutory objective addressing the 'felt need' issue - specifically, Section 1 (1) (g) of the Legal Services Act 2007. This statutory objective focuses on 'increasing public understanding of the citizen's legal rights and duties'. It is, therefore, arguably within scope of the English and Welsh legal regulators (including the SRA) to seek to increase citizens' awareness of their legal rights and duties perhaps using innovation and new technology to do so. More challenging for the regulators is to define to whom such a regulatory objective might attach, and whether any overt awareness raising obligation imposed on them would make any meaningful difference to the working practices of solicitors and law firms. As a purely practical consideration, raising awareness of legal issues – with a view to obtaining instructions – is already a long-standing legal marketing activity (Maister, 2003; Young, 2005; Hodges, 2009; The Law Society, 2013). Arguably, therefore, the problem is not that law firms are not seeking to raise awareness of legal issues with their client base and society at large. Rather, it is that - in common with other jurisdictions around the world – English and Welsh residents consistently fail to recognise the existence of their legal rights in sufficiently large numbers to substantially reduce incidence of ULN.

2.2.3. Expressed need

Having recognised that they have a legal need, the obvious next step for any individual or business owner is to decide what (if anything) they should do about it. Below, we summarise several of the key options open to individuals and SME businesses at this point in their legal needs journey. The findings set out in Tables 2.2 and 2.3 below represent a summary of previous UK-specific legal needs research, undertaken on behalf of the Legal Services Board (LSB) over the past decade – 2019 data is not included, because its findings are not directly comparable. For individuals, this research shows, with a fair degree of consistency, that a significant minority of individuals did not receive any help (in 2019, this percentage was 34%). And, among those that did receive help, around 1 in 10 obtained it from friends and families rather than professional advisors (in 2019, this percentage was 11%). Finally, a small percentage ultimately did nothing, either from the start or later on – 2019 percentages, 'didn't think or try for any help' (21%); 'tried, but didn't get any help' (13%) (bdrc continental, 2012; Ipsos MORI / Social Research Institute, 2016; YouGov, The Law Society et al, 2019).

Action	2012	2015
Did nothing/took no action	12%	13%
Did it myself without help	24%	31%
Dealt with it myself with the help of family/friends	12%	15%
Obtained advice/assistance/help	36%	30%
Tried but failed to get advice but dealt with it myself	3%	3%
Tried and failed to get advice then did nothing	1%	2%
Tried to handle alone then obtained help/assistance/advice	6%	5%
Other	4%	-

Source: bdrc continental (2012); Ipsos MORI / Social Research Institute (2016)

Among SMEs, research suggests that only a minority of businesses owners sought any form of advice from an independent adviser (including lawyers) (Blackburn, 2015; BMG Research, 2018). Instead, a majority – albeit a decreasing one across each survey – acted entirely on their own to address the issue. These findings are set out in Table 2.3 below.

Action	2012	2015	2017
Took no action	8.3%	8.6%	10%
Acted entirely on own	53%	52%	50%
With help from external business friends/colleagues	11.2%	9.8%	9%
Outside business friends/colleagues sorted out the problem (or are sorting it)	N/a	N/a	3%
With help from independent adviser / representative/support service	16.1%	15.3%	17%
An independent adviser/representative/support service sorted problem (or are sorting it)	8.1%	8.1	9%
With help from family members	N/a	5.6	3%
Family members sorted out the problem (or are sorting it)	N/a	1.4	1%
Don't know	5.0	4.0	n/a

Table 2.3: What (if any) advice was taken in response to a legal need by SME?

Source: Blackburn (2015); BMG Research (2018)

In terms of what type of legal matters people are most likely to obtain help for, Figures 2.2 and 2.3 (below) set out market norms, for both individuals and SME owners. Across both cohort types, different types of legal issues are likely to result in differing likelihoods of obtaining professional assistance. For example, in relation to individual matters, citizens are considerably more likely to seek professional help for matters relating to injury (69%) than in relation to consumer matters (22%) (YouGov, The Law Society et al, 2019). Meanwhile, research indicates that businesses are more likely to obtain help in relation to trading issues than for environmental matters (Pleasence, 2013).

From the findings above, it is not entirely clear whether survey respondents have tended to handle their legal matters themselves because they were straightforward, or whether third-party support would have been preferable. What is known, however, is that there appears to be some correlation between the perceived seriousness of a legal problem and the tendency to obtain advice in relation to it (YouGov, The Law Society et al, 2019; Franklyn, 2017; Pleasence, 2011; Legal Services Corporation, 2017). Essentially, the more serious the problem is perceived to be, the greater the likelihood that any help will be received, including professional help (Figure 2.4, below). This is not to say that serious legal needs never go unmet – as Figure 2.4 also illustrates – just that they are less likely to, compared with less serious legal needs.

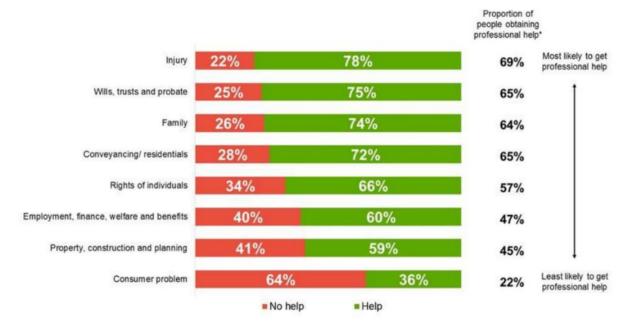
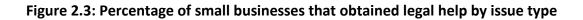
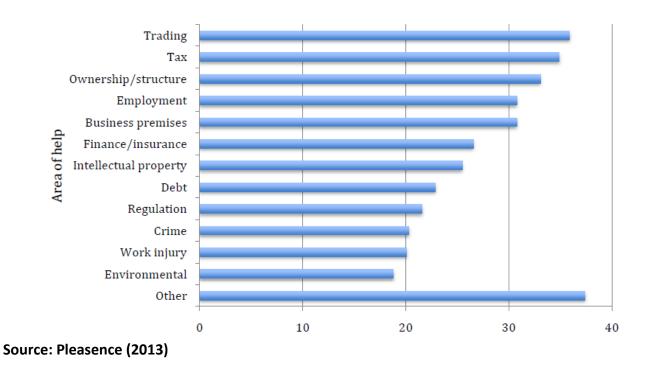


Figure 2.2: Percentage of consumers who received help by legal issue type

Source: YouGov, The Law Society et al (2019)





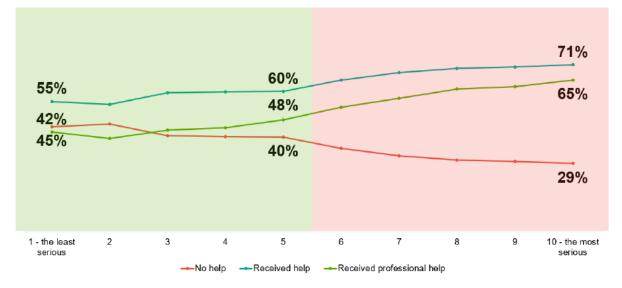


Figure 2.4: Proportion of people who successfully receive help or not by (their self-rated) severity of the legal issue

Base: all adults who experienced a *contentious legal issue* in the past 4 years (n=13,442)

Source: YouGov, The Law Society et al (2019)

To put the seriousness consideration in context, research suggests that most recent legal problems faced by SME owners in the UK had either low (40%) or moderate (33%) impact, compared with a small percentage that were either high (23%) or very high impact (4%). Many legal problems were also low in financial value (47% were valued at less than £1,000), and fairly short in duration, with around half (42%) lasting six months or less (BMG Research, 2018). Taken in the round, therefore, the 'seriousness' consideration discussed above suggests that, on some occasions, a legal service would need to be very accessible indeed, in order to overcome the 'too difficult'/'not important enough' consideration that prevents some people obtaining professional advice (LSB, 2020). This consideration may be relevant, in terms of the likely impact of technology and innovation in mitigating against ULN.

Our final observation in relation to taking advice is that there are many different sources of support that individuals and business owners can turn to, over and above solicitors' firms. In the consumer space, alternative providers include not-for-profit advice centres, other regulated legal professionals – such as licenced conveyancers and barristers – plus trade unions and professional bodies (YouGov, The Law Society et al, 2019). In the SME business space, non law firm-based sources of legal guidance can include accountants, insurance companies, government websites, membership of trade bodies, and financial advisers (BMG Research, 2018). Indeed, it has been estimated that around half of the individual UK legal needs market is being delivered by unregulated legal service providers (LSB, 2016). Moreover, the UK is not a notable outlier, in terms of the diversity of legal services suppliers. By way of comparison, table 4 below outlines common sources of legal services advice for personal legal problems, across the same 10 major global economies previously highlighted in table 1 (World Justice Project, 2019). The sources of help identified below are different from those set out in the UK-specific study, highlighted in Table 2.2. However, the key finding is the same: consistently, across almost all countries, lawyers only comprise a small proportion of the legal advice market.

	Friend/family	Lawyer/professional adviser	Government legal aid office	Court/government body/police	Health or welfare professional	Trade union or employer	Religious or community leader	Other organisation	No adviser
Australia	31%	33%	23%	23%	18%	9%	6%	17%	67%
France	42%	36%	10%	8%	14%	10%	2%	15%	66%
Germany	43%	49%	12%	17%	12%	6%	4%	5%	67%
India	50%	26%	11%	19%	4%	4%	11%	2%	83%
Japan	43%	38%	8%	13%	11%	2%	2%	9%	69%
Netherlands	44%	36%	13%	11%	15%	7%	3%	18%	53%
Russia	62%	37%	12%	7%	11%	2%	2%	7%	70%
Spain	49%	51%	14%	7%	11%	5%	3%	8%	61%
UK	47%	38%	4%	13%	10%	7%	2%	17%	72%
US	49%	38%	6%	15%	8%	4%	5%	18%	67%

Table 2.4: Who do individuals turn to for legal advice? An international comparison

Source: World Justice Project (2019)

From an individual consumer's perspective, the fact that so many individuals do not seek advice (at all), or seek advice from an unregulated legal professional in relation to their legal needs, is also pertinent to this study. SRA-regulated legal practices will only be able to mitigate against ULN via enhanced innovation and use of technology if individuals a) opt to seek legal assistance (at all) and b) then seek advice from those SRA-regulated entities who are innovating / deploying new technology. We offer this observation in order to offer a realistic observation of the likely total impact on ULN as a result of technology and innovation adoption by SRA-regulated practices. This is not to say such activity is not worthwhile, or will not aid those who directly benefit from such innovation. However, it should also be appreciated that – in itself – technology and innovation should not be regarded as a panacea for addressing ULN.

Additionally, the fact that a substantial element of legal service provision is undertaken in the UK by unregulated entities is also directly relevant to our research agenda, which focuses on producers. Given the unregulated legal market's obvious importance to legal service provision in England and Wales, it would appear sensible that our research into legal practice innovation and technology deployments should explore the activities of unregulated providers in addition to those that are SRA regulated. Our research interviews therefore included both provider types in its sampling.

2.2.4. Comparative need

Bradshaw defines the concept of comparative need thus: 'this person X is in receipt of a service because he has the characteristics A-N. This person Z has also the characteristics A-N but is not receiving the service. Therefore Z is in need' (Bradshaw, 2013). Because Bradshaw's original concept was defined by reference to a medical setting, the examples he offers are not relevant to this study. Unfortunately, when adapting Bradshaw's overall legal needs concept to a legal sector-specific setting, Curran and Noone (2007) do not explain how this specific element of ULN might be unpacked. Given this lack of prior guidance, our preferred approach to the comparative need concept is to assume it means that ULN is likely to affect different cohorts of people in different ways.

Precisely how an individual's personal circumstances might impact on their legal need is, we observe, both complex and multifaceted. At every stage of the legal needs journey (normative need, felt need, expressed need), a person's own demographic status, the nature of their legal needs and the dynamics of the wider legal services market can – and do - interact, and in several different ways. To offer a few illustrative examples: it has been found that the number of legal issues (normative need) a person faces along each step of the legal needs journey can be influenced by a variety of factors, including their age and disability status (Pleasance, 2014). It has also been found that a person's awareness (of felt need), and tendency to seek advice (for expressed need), can vary – both according to their own demographic profile and the legal matter in hand (Balmer, 2010; Buck, 2008). Which type of adviser (an element of expressed need) an individual instructs can also vary by demography (Ipsos MORI/Social Research Institute, 2016). Occasionally, these complex interactions can generate surprising outcomes – notably, that the type of legal need a person has can be a stronger determining factor about whether they actually take legal advice than their income (Kritzer, 2008) – with the important proviso that this particular likelihood can also be influenced by external factors, such as access to legal aid (Pleasence, 2012) or legal insurance usage (van Velthoven, 2011).

In light of the above-mentioned complexity, we feel it would be all but impossible for our study to select a focal point for our investigation into innovation and technology deployment, based (for example) on that particular need being the most significant ULN overall. We shall explain our rationale for picking employment law as a vehicle for exploring legal practice innovation and technology deployment shortly. But, in relation to ULN specifically, one important contributing factor behind our research focus is the high prevalence of ULN in relation to this legal issue. This can either be because the legal needs are often entirely unmet (Figure 2.1) or because professional help is often not obtained (Figure 2.2).

2.3 Potential barriers to solicitors' instructions

2.3.1. Overview

Let us assume that a consumer or SME owner has a 'judiciable' (ie legal) issue; that they recognise it as being such; and that they desire to seek the services of a solicitor, with a view to addressing it. At this point in their legal needs journey, what are the barriers that might prevent the person from doing so? Here, the OECD/Open Society Foundation suggests various considerations that are potentially relevant (OECD, 2016), including:

- Geography the physical location and/or inability to reach services.
- Shortage in services delivery fewer legal professions reside in and operate in practices in rural/remote settings.
- The social relations of space the way that interactions and actions of the residents in the community influence help-seeking behaviour.
- The digital divide which includes gaps in online activity (by providers), and socioeconomic factors that may inhibit internet access by users.
- Costs high costs and perceived high costs of accessing services.

Some of the major barriers to accessing legal services, outlined above, appear mainly consumer-driven, whereas other barriers appear to be more producer-driven. For example, an inability to afford internet access will be a consumer-driven inhibition to accessing legal services delivered online, whereas a shortage of service provision will be a producer-driven inhibition. Therefore, in order to give focus to our investigation, our preferred approach is to consider barriers to legal practice instruction through the consumer/producer prism, rather than directly via the framework set out above. This alternative approach will, we believe, allow us to identify where producer innovation and technology are more likely to ease the ULN challenge – and also where such efforts are likely to be less impactful, because the barriers are largely in the hands of consumers. Drawing on, but distinctive to, the above framework, our preferred approach is therefore to focus on three issues potentially relevant to ULN: access to legal services (in general); access to digital services (specifically); and the cost of legal service provision, irrespective of delivery mechanism.

2.3.2. Access to legal services (in general)

Prior to the pandemic, the most common form of legal service delivery by producers – for both individuals (bdrc continental, 2012) and SME business owners (BMG Research, 2018) – were services delivered face-to-face. While not the majority method of service delivery for either client type, this approach remained significantly more commonplace than its alternatives, notably telephone or email.

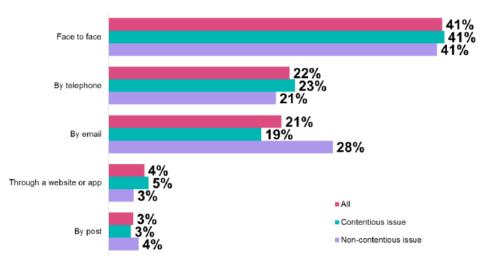


Figure 2.5: Main legal service delivery mechanisms for consumers

Source: YouGov, The Law Society et al (2019)

Delivery mechanism	Percentage using as main delivery mechanism
Face-to-face	38%
By email	29%
By telephone	22%
By post	6%
By internet (excluding email)	2%
By text	0%
Other	2%

Table 2.5: Main legal service delivery mechanism for SME business owners

Source: BMG Research (2018)

This commonplace method of service delivery is potentially relevant to ULN, for two main reasons. Firstly, it is possible that this form of service delivery may hinder access to legal services by those who are unable to physically travel to a provider's offices (OECD, 2019), owing to a lack of access to transport – and a significant minority of the UK population do not have such access to transport (Chatterjee, 2019). Indeed, prior UK research has suggested that those who had motorised transport 'were significantly less likely to 'do nothing' than those without' in terms of obtaining advice (Buck, 2008). Secondly, it is possible that this heavy tendency for legal service producers to deliver legal advice face-toface may contribute to what is known as advice deserts. Essentially, in an advice desert, potential clients are unable to access legal services because there is a lack of local provision. Unfortunately, while there is modest a body of evidence about the existence of advice deserts in the UK by reference to a lack of local provision for specific legal specialisms (Owen, 2017; Graint, 2020; Law Society of England and Wales), with the notable exception of Newman (2016), this research tends not to discuss the possible impact of remote legal services provision on ULN. Instead, prior evidence has tended to focus on the factors that contribute to advice deserts, such as cuts to legal aid funding. More research on the interaction between ULN, advice deserts and service delivery mechanisms may therefore be helpful. Now would arguably be an opportune time to undertake such research, given the recent shift towards greater online legal services provision across the entire legal services sector. We discuss this trend towards a greater provision of online legal services, across both legal service providers and governments, in Chapters 2 and 4 of our Final Report.

Turning now to a consumer perspective on legal services delivery mechanisms, perhaps surprisingly, prior research (albeit that conducted prior to the pandemic) indicates a significant level of consumer support for the face-to-face legal delivery of legal services. In terms of which law firm individuals tend to instruct, research conducted as recently as 2019 found that 77% of survey respondents had opted to use a small local firm (Legal Services Consumer Panel, 2019). This compared with a mere 8% of respondents who used a large corporate firm, and 7% of respondents who used a national brand with a local office. Here, it may also be relevant that – according to 2019 Law Society data – close to 87% of all law firms in England and Wales contain four partners or fewer, with barely 13% larger in size. Individuals, it seems, have not generally gravitated to larger firms for their advice – despite such firms now employing the vast majority (69.2%) of solicitors (The Law Society, 2020). Moreover, this tendency by consumers to instruct small local firms cannot be entirely explained away by any claim that 'national brand' firms do not offer PeopleLaw advice –

some do. To offer one illustrative example: according to the Chambers & Partners UK legal directory, two of the most highly-regarded claimant personal injury firms in the UK are also respectively, the largest 25th and 37th, respectively, by UK law firm revenues (The Lawyer, 2021). Moreover, both of these firms have multiple offices across the UK. The problem is not that large, national, well-resourced, PeopleLaw firms do not exist – rather, that they are not the type of practice that consumers tend to turn to for PeopleLaw-related advice.

The ongoing importance for local service delivery is also reflected in the reasons that consumers engage specific law firms to advise them: as Figure 2.6 below indicates, consistently over many years, consumers have placed a far greater importance on local branch office convenience than, for example, the ability to track their matters online (Legal Services Consumer Panel, 2019a). As shown below, local provision is not the top consideration for consumers in terms of their law firm selection criteria – it is fourth, behind reputation, price and specialism. Moreover, local provision is a more notable instruction consideration than online tracking, ranked 11th out of 11.

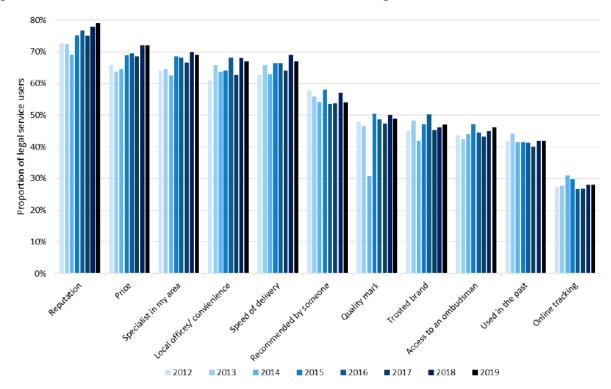


Figure 2.6: Consumers' choice considerations when selecting law firms

Base: All legal service users (2012=1435, 2013=1484, 2014=1060, 2015=1067, 2016=1523, 2017=1625, 2018=3535, 2019=3589)

Source: Legal Services Consumer Panel (2019a)

Furthermore, consumers have also – historically – tended to be satisfied by face-to-face service provision: in a 2019 study of consumers in England and Wales, the vast majority of survey respondents described themselves as being very satisfied (57%) or satisfied (34%) with this approach. As Figure 2.7 (below) indicates, the percentage of consumers who were content to receive their legal service face-to-face (91% in total) is fractionally larger than

those who were satisfied receiving their legal services via other means, including via telephone (89%), email (88%) or website or app (87%) (YouGov, The Law Society et al, 2019). We can therefore state with some confidence that (pre-pandemic at least) face-to-face was not regarded as a sub-optimal form of legal service delivery. If anything, it was fractionally preferred, compared with the alternatives.

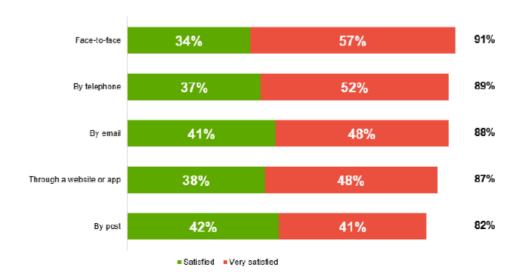


Figure 2.7: Proportion of people who are satisfied with their legal service received, broken down by method of service delivery

Base: all adults who successfully received help from a *main adviser* to deal with a *legal issue* in the past 4 years (n=9,825), Face-to-face (n=4,015), Telephone (n=2,192), Email (n=2,226), Website or app (n=427), Post (n= 284)

Source: YouGov, The Law Society et al (2019)

Taken together, the above evidence indicates that consumer preferences may (potentially) be an inhibitor of practice innovation and technology deployments. This is because consumers are not, in significant percentages, instructing larger firms – who are arguably best placed to devote time and resources to new technology and legal practice innovation. Nor are consumers indicating an overwhelming preference for legal services delivered online. For many, advice delivered face-to-face or via telephone or email is an acceptable alternative.

Turning now to whether this historic tendency by law firms to offer face-to-face advice can lead to advice deserts, thereby perpetuating ULN: unfortunately, supply-side evidence on this point in England and Wales is exceptionally modest, and largely confined to small geographical areas (Newman, 2016), single provider types (Jomati, 2019), a small number of practice areas (Law Society of England and Wales), or a combination of several of these factors. However, while this evidence base is modest, an alternative method of understanding supplier availability suggests that an inability to find a suitable legal adviser is not – in reality – a major problem for most individuals and SME owners in England and Wales. For example, in a 2019 survey of individuals, 93% reported that searching for legal

service providers was 'easy' (YouGov, The Law Society et al, 2019). A separate study, undertaken during the same year, found that 73% of survey respondents felt that they had a wide choice of providers available (Legal Services Consumer Panel, 2019). Compared with individuals, prior research suggests that SME owners have historically regarded the geographical proximity of their legal services adviser as being far less important. In a 2017 study, convenience regarding where the legal services provider was located was regarded as the most important factor in legal practice selection by just 8% of survey respondents, while distance from where they live was rated by 4% of respondents. These considerations were therefore ranked as the sixth and eleventh priority considerations, behind a variety of alternative factors that include reputation (26%), prior use (26%), specialism (20%) and cost (20%) (BMG Research, 2018). This overall preference ranking by SMEs has not changed significantly over a number of years (Blackburn, 2015). Indeed, with exception of prior use and geographical proximity, the selection criteria used by SME businesses regarding their legal services providers broadly reflects those of their individual purchaser counterparts, shown previously in Figure 2.6. Unfortunately, the SME research series does not ask about suppliers' use of technology, either as a criterion for law firm selection, or as a factor relevant to service satisfaction.

Finally, it is also worth noting that, currently, less than a third of individuals and SME owners tend to shop around for legal service providers – with the proviso that consumers have become more likely to shop around in recent times (Legal Services Consumer Panel, 2021; BMG Research, 2018). This finding may have some relevance to clients' likelihood of switching between legal service providers in response to certain providers offering innovative new services.

2.3.3. Access to digital legal services (in particular)

Innovative digital legal services have the potential to mitigate ULN in many different ways. These include the potential to provide public legal education, legal advice and legal documentation at little or no cost (The Law Society, 2018; Armour, 2021; Schoonmaker, 2017). However, the provision of digital legal services requires two pieces of infrastructure to be in place, in order to be successfully delivered: firstly, consumers must have easy access to reliable broadband, as a prerequisite for using such services. Secondly, legal service providers must actually offer digital legal services, which customers can then use.

Starting first with the consumer access element: positively, prior research indicates very high levels of broadband availability in the UK. According to Ofcom, the vast majority of UK properties (95%+) now have access to superfast broadband, while more than nine in 10 properties have reliable indoor/outdoor 4G mobile phone coverage (OFCOM, 2020). Meanwhile in terms of broadband affordability, separate research from Ofcom reveals that only a tiny percentage of broadband (0.4%) or mobile phone (1%) bill payers struggle to afford to pay their bills to the extent that they have cancelled a service. In terms of lack of service provision, non-access was (pre-COVID) concentrated among the elderly, the long-term sick and disabled, and also among lower income households (Office for National Statistics, 2019). Among those who are unable to afford telecoms services, the largest group of individuals are likely to be the currently unemployed and those looking for work (OFCOM, 2020). Taken in the round, this research indicates modest pockets of non-supply and take-up of broadband services in the UK, rather than widespread non-availability. In our study,

we shall therefore assume that access to innovative legal services, delivered online, will generally be a realistic option for most English and Welsh-based consumers.

Turning next to the provider side of digital legal services provision: we suggest that – in reality – this is likely to be a far more significant ULN challenge than a lack of broadband access by clients. This is because prior research has consistently indicated that overall take-up of legal technology in England and Wales (in general) remains low (Sako, 2020), with the lawtech B2C market – specifically – described as 'embryonic' (The Law Society, 2019). For example:

- A 2018 LSB study found that barely 6% of solicitors' firms offered services online, and just 9% more were planning to do so in the next 12 months (Legal Services Board, 2018). A separate analysis, undertaken in early 2019 by the Legal Services Consumer Panel (LSCP), found that, while email/internet/online-based legal service delivery had increased over time, it was still a minority delivery option, rising from 21% in 2011 to 33% in 2019 (Legal Services Consumer Panel, 2019.
- A 2020 LSB study found that barely one in three (35%) of legal practices used interactive websites – what amounts to an interactive website was not defined – while a mere 6% used custom-built apps. Automated document assembly solutions, often a prerequisite for offering self-service websites, was currently used by just 20% of surveyed providers. Moreover, the LSB survey revealed that take-up of these technologies was unlikely to reach more than 50% within the next three years (see Table 2.6 below) (Legal Services Board, 2020).

Technology type	Using	Plan to use in the next three years	No plans and not using	Unsure
Interactive websites	35%	14%	46%	5%
Custom-built apps	6%	12%	77%	6%
Automated document assembly	20%	9%	66%	6%

Table 2.6: Current and planned usage of selected technologies

Source: LSB (2020)

Neither the LSB's nor the LSCP's findings indicate that the English and Welsh legal profession is embracing client-facing technology with gusto. In Chapter 2 of our Final Report, we shall explore whether the pandemic has had any noticeable impact on this culture of non-technology adoption by law firms. Our findings are revealed via a mixture of survey and interview-based insights.

Of course, just because a minority of legal services providers now offer their services online, it does not follow that only a minority of potential clients have access to such websites: one of the most important aspects of the above-mentioned types of legal technology is that they are designed to facilitate the delivery of commoditised legal services, delivered

automatically online (Susskind, 2017). Rather more important is whether such services being deployed are being used by clients on such a scale that they are changing the wider legal services market. Here, modest evidence from the US indicates that this may not be happening. Taking online legal service provider LegalZoom as an illustrative example, (Robinson, 2016) suggests that LegalZoom's easily available low-cost wills – delivered online – had not, almost a decade after the company's creation, resulted in any significant change to the percentage of probate filings that included wills.

In the UK, while various new online-based legal services providers have entered the legal services market following the passage of the Legal Services Act, 2007 (Flood, 2012), the briefest of analysis of their most recent revenues – as submitted to Companies House – suggests that many of these practices have revenues that are so low that they would struggle to feature in the bottom quarter of *The Lawyer* magazine's top-200 law firms by UK fee income. We should therefore be wary of assuming that, just because cost-effective, innovative legal services are available in a jurisdiction, the legal services market will invariably be transformed by their mere existence. Arguably, what matters far more is that existing dominant players in the UK PeopleLaw space (including large SRA-regulated law firms) – also begin to offer such services at a such a scale that they reduce ULN significantly. At present, the PeopleLaw market appears stuck between innovative, but low revenue generating, new market entrants on the one hand, and more well-resourced traditional law firms on the other, many of whom do not offer genuinely innovative services that significantly address ULN. In Chapter 4 of our Final Report, we offer examples of legal services.

In order to quantify producer investment in legal services innovation by the SRA regulated community, it would arguably be helpful to capture data on producer activity, covering such data points such as percentage of revenues from innovative legal offerings, or the percentage of firm personnel dedicated to innovation. The collection of such data would arguably be permissible under part c and part d of the regulator's statutory objectives – that is: c) improving access to justice and d) protecting and promoting the interests of consumers. However, we understand that the SRA would prefer not to capture such data as a matter of routine in order to comply with better regulation principles and to avoid overburdening the practices it regulates. Rather, the SRA would prefer that such data would only be captured for specific research purposes.

Elsewhere in this study, we explore the extent to which SRA-regulated legal practices are embracing innovative practices and technology deployments via an all-practice voluntary survey. This survey captured participating firms' approximate revenues, and current areas of innovation focus. Thus, while our survey has not captured a sufficient volume of data to determine whether, and where, market-changing innovation is occurring – even by reference to SRA-regulated legal practices – it does offer greater insights than those that already exist. Our survey findings can be found in Chapter 2 of our Final Report.

2.3.4. Cost

In this section, we briefly explore whether cost might be a contributing factor in relation to ULN, and how technology and innovation can mitigate it. For purely practical purposes, we define cost narrowly – ie the cost directly associated with obtaining legal services from a

service provider, rather than ancillary costs associated with asserting any legal rights, such as court or tribunal fees. We are aware that, historically, these types of ancillary expenses have acted as a significant inhibitor to access to justice, particularly in relation to employment law matters (Busby, 2016).

Starting first with a consumer perspective: for both individuals and SME business owners alike, research suggests that the cost of purchasing legal services is often an important consideration, in several different ways. Most notably, right at the start of their legal purchasing decision-making journey, some people will decide against even seeking professional advice, on the assumption that it will be too expensive (Legal Services Board, 2020; Department for Business Energy & Industrial Strategy, 2020; Pleasence, 2014) – even for serious matters, such as domestic violence (Ipsos MORI/Social Research Institute, 2016). Others will obtain advice, but only on a limited basis, saving money by handling a proportion of the work themselves (Trinder, 2014). This process is often known as unbundling of legal services (Kimbro, 2013). In some circumstances, unbundling can be regarded as a positive thing for clients, because it maximises the value for money aspect of the legal service provider they use, while still providing them with expert representation (Ipsos MORI/Social Research Institute, 2015). Prior research tells us that only a relatively small percentage of legal work in England and Wales is unbundled, the greatest concentrations of which are in relation to immigration (47%), benefits/tax credits advice (40%), probate (33%) and employment dispute services (30%) (Legal Services Consumer Panel, 2020). We explore law firms' current, and planned usage, of software that enables the unbundling of services in chapters two and four of our Final Report. The unbundling of legal services appears to be a current policy priority for both the Legal Services Consumer Panel and the SRA. The former has issued a report, highlighting the 'untapped potential' of unbundling, while the latter is planning a pilot on how to extend the scope of unbundling, working in partnership with other legal regulators (Hilborne, 2021).

Perhaps surprisingly, a large percentage of purchasers of legal services in England and Wales do not pay for this service. For example, among consumers, research suggests that 57% pay nothing, compared with 30% who pay for everything - the remainder either pay for part of it (5%) or did not know (8%) (YouGov, The Law Society et al, 2019). Among consumers who pay, most (51%) pay from savings, while around a third (36%) pay from regular income or salary. The remainder have borrowed from friends or family (6%), via their property (3%) or taken out a loan (3%). Meanwhile, among SMEs, just over half of businesses pay for some or all of the help they receive, while just under half pay nothing, including those covered by a subscription or insurance. Just over half of businesses pay for legal services from turnover (51%), with the remainder from savings reserves (27%), personal savings (16%) or other means (7%) (BMG Research, 2018). Overall, this paints a mixed picture: positive, in that so many people do not have to pay at all, but also negative in that a significant minority can only afford to pay for legal services thanks to their day-to-day income or borrowing – a precarious position for many, especially at this point in time. In Chapter 4 of our Final Report, we interview legal service providers where clients do not pay for some – or all – of their legal services. Here, technology is able to act as an enabler of free, or differentiated, pricing.

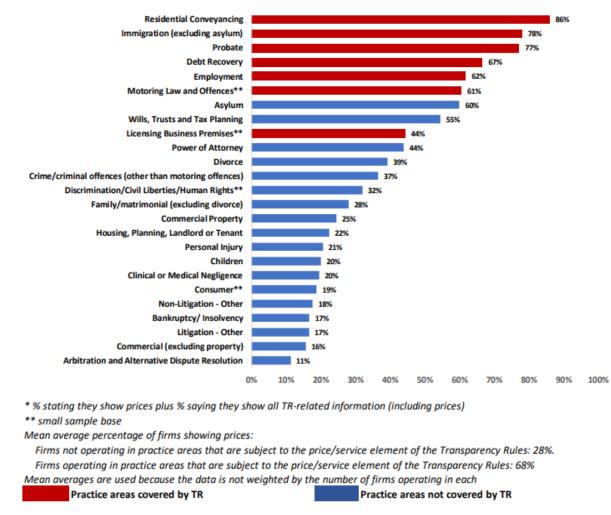
Where clients do pay for their legal service, costs can influence which specific legal practice they instruct when faced with a choice of several. For consumers, research suggests that price is regarded as the second biggest consideration (after reputation) in influencing purchasing decisions, identified by 72% of study participants (Legal Services Consumer Panel, 2019a). However, notwithstanding the large variances in prices charged by consumerfacing legal service providers (CMA, 2020), consumers' reluctance to shop around endures. Although more now do so than before (30% in 2020 compared with 23% in 2012), it remains a minority activity (Legal Services Consumer Panel, 2020). More positively, consumers are generally satisfied that their main legal adviser offers them value for money (YouGov, The Law Society et al, 2019).

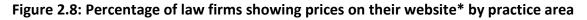
Finally, in relation to consumer legal services, of direct relevance to our investigation: prior research has found that there is often little price difference between services delivered in person or remotely (LSB, 2017). This is perhaps a surprising finding, which may help explain the enduring appeal of small local firms, previously discussed (Legal Services Consumer Panel, 2019). Indeed, research indicates that it is the unbundling of services – and also the location from where the service is provided – that is more likely to result in a lower cost of legal services, rather than whether the service itself is delivered online (CMA and LSB, 2020). We explore this issue further in Chapter 4 of our Final Report, where we offer provider insights into the financial consequences of both unbundling and online legal services service provision. It remains to be seen whether consumers, having become less dependent on face-to-face instructions during the pandemic, opt to engage cheaper legal service providers elsewhere in the country – an approach advocated by the LSB (Rose, 2020).

Among SMEs, price sensitivity has – historically – been somewhat lower than in the consumer markets: in a 2015 study of SMEs, this consideration was ranked as the most important consideration by 15.7% of survey respondents, significantly behind reputation (30.1%), specialism (24.5%) and prior usage (24.4%) (Blackburn, 2015). SME owners additionally tend to regard legal service providers as a 'provider of last resort' when seeking to resolve their business problems, largely because a significant minority do not regard them as being particularly cost effective (BMG Research, 2018).

How is the affordability challenge of legal services being addressed, from a regulator perspective? In recent years, there has been a particular focus on enhancing price and service transparency as a tool for increasing competition (CMA, 2016, 2020). Regulated legal practices have been mandated to publish key elements of their pricing on their websites for specific types of work, along with other information relating to the service they provide. In relation to legal practices regulated by the SRA, price transparency rules were introduced on 6 December 2018 for residential conveyancing, uncontested probate, summary motoring offences, immigration (excluding asylum), unfair and wrongful employment tribunal work, debt recovery up to £100,000 in value, and business premises licensing applications (SRA, 2018). Indeed, research conducted prior, and subsequent, to the introduction of the price transparency increased substantially over time (LSB, 2020), but transparency is also heavily concentrated in the types of work where disclosure is now mandatory (SRA, 2018; Giddings, Macfadyen et al, 2020) – as Figure 2.8 (below) illustrates. In our study we will not, therefore, regard a practice as being innovative simply because they disclose their prices, especially if

such disclosure is now a regulatory requirement. In terms of consumer behaviour, the SRA has recently published research which indicates that consumers are more likely to regard law firms as being affordable after the change in transparency rules. Prior to the rule change, more than half of consumers thought that instructing a lawyer would be an unaffordable option. Post-rule change, just 10% of consumers who had reviewed prices on law firm websites regarded these services as unaffordable (SRA, 2020b)





Source: Giddings, Macfadyen et al (2020)

As an aside on this point, a recent report – jointly produced by the LSB and the CMA – has found that the above-mentioned reforms 'appear to be having limited impact on competition so far', suggesting this may be because such reforms are so recent (CMA and LSB, 2020). Another possible, and potentially more long-term, challenge regarding price transparency is the apparent absence of a natural home for such data – in particular, online legal services price comparison sites, also known as digital comparison tools (DCTs) (Giddings, Macfadyen et al, 2020). Historically, participation in such sites by law firms has been very low – and few consumers have used them either (CMA, 2020). We explore the issue of DCTs further in the next section of this Annex Report. In this next section, we discuss recent regulator activity which aims to increase DCT engagement from both law firms and consumers. In Chapter 5 of our Final Report, we discuss initial findings of a frontline regulator-led pilot scheme involving 9 DCTs.

2.4 Case history in unmet legal need – focusing on employment law

In our main study, we focus on how law firms (and other legal service providers) are innovating in a way that might help reduce ULN in relation to employment law. Employment law has been selected as a case history for a variety of reasons, including the fact that it affects both individuals and business owners alike, and can be contentious (ie employment disputes) and non-contentious (ie the provision of documents and advice); it can be adversely impactful on those affected, and is relatively more likely to require the service of solicitors' firms, as opposed to other types of service providers (BMG Research, 2018; Blackburn, 2015; Europe Economics, 2018; LSB, 2016; LSB, 2020; Balmer, 2013). This specific legal specialism is also perceived, among English and Welsh consumers, to be one where there is less supplier choice available compared with several other PeopleLaw specialisms, and the advice given is less likely to provide value for money (Legal Services Consumer Panel, 2019). It is also a service that has a particular topicality at this time, given the strong possibility that redundancy rates in the UK are rising (Office for National Statistics, 2021), and are likely to continue to do so as a consequence of the COVID-19 driven recession (Office for Budget Responsibility, 2021).

Objectively, employment law-related issues are also one of the more commonly experienced, by individuals and business owners alike. In the individual needs space, it has been estimated that close to one in 10 UK adults have had an employment-related legal need in the past four years (YouGov, The Law Society et al, 2019). Moreover, the type of matter (along with finance, welfare and benefits) is regarded by consumers as being of above-average seriousness, and disproportionally likely to induce stress and financial loss. Meanwhile, in the SME space, research into the legal needs of UK-based companies has consistently put the issue as one of the 'big three' problems affecting the sector, along with trading and tax issues (LSB, 2020; Pleasence, 2013; Blackburn, 2015). However, in order to keep the scope of this investigation achievable, our study only focuses solely on employment law-related innovation by English and Welsh legal services providers. It does not explore employment law-related innovation activities being undertaken, for example, by the HM Courts and Tribunals Service (Senior President of Tribunals, 2019).

To set the scene regarding the type of employment matters that are typically experienced by SMEs, Table 2.9 summarises findings from three previous England and Wales legal issues surveys, focusing on the experiences of SME business owners. Perhaps invariably, there is a strong contentious focus in the findings below. We therefore include Table 2.9 solely to (imperfectly) illustrate the range of legal needs that typically fall within the broad umbrellas of employment law-related work. Research undertaken elsewhere, which focuses on the types of service that legal professionals typically deliver, indicates that – in addition to 'advice' itself – services delivered can include assistance with form-filling, representation in court, help with negotiation, and referral to online information sources (Legal Services Corporation, 2017). We have been unable to locate granular data regarding the prevalence of employment law-related legal needs in relation to individuals. But, according to the OECD/Open Society Foundations (2019) framework for conducting legal needs surveys, these needs include the following events:

- Application and promotion
- Disciplinary procedures
- Termination including unfair dismissal and redundancy
- Right at work including pay, pensions, working conditions, maternity and paternity and contract changes
- Harassment

Table 2.9: Experiences of employment problems by small businesses – problem types

Employment problem	% of businesses reporting		
	2013	2015	2017
Overall	7.9%	6.5%	7.0%
Staff misconduct (including unauthorised absence and disciplinary procedures)	2.5%	2.0%	2.0%
Dismissal (or threat of dismissal) of staff	2.1%	1.5%	2.0%
Payment of wages/pension	1.6%	1.5%	2.0%
Making staff redundant	1.9%	1.1%	1.0%
Content or exercise of parental rights (including maternity) leave/pay or flexible working requests	0.7%	0.5%	1.0%
Working conditions	1.1%	0.8%	1.0%
Employee injury at work	0.7%	0.7%	1.0%
Other employment contract issues (including changes to contract terms)	1.5%	1.0%	1.0%
Adjustments to jobs/workplace for disabled workers	0.3%	0.2%	0.2%
Complaints/grievances made by employees/job applicants (including allegations of discrimination and harassment)	0.5%	0.6%	0.5%
Employment of non-EU nationals	0.3%	0.2%	0.2%

Source: BMG Research (2018); Pleasence (2013); Blackburn (2015)

Turning now to practice innovation and technology deployments in relation to employment law. In a UK-specific context, the recent LSB Technology and Innovation in Legal Services study (Legal Services Board, 2018) appears to be the most systematic attempt to quantify the level and type of investment that has occurred in recent years. But, even then, the LSB's insights into this issue are modest. Focusing on surveyed firms in the employment law market segment, of the 10 emergent technology types identified, only three (use of the cloud, ID checking and automatic document assembly) contain any findings - for the remainder, no data is available. Insights were slightly more extensive in relation to nontechnology-related innovations for legal practices in the employment market segment, where findings were offered in relation to five out of the eight innovation types evaluated. Our take-home from the LSB's analysis, both in relation to emergent technology usage and service innovation, is that innovation rates among English and Welsh legal practices in the employment law market segment is low - sometimes imperceptibly so. In this study, we therefore explore what technological and other innovations looks like in the employment space, albeit on a qualitative rather than quantitative basis. Our findings can be found in Chapter 4 of our Final Report.

Innovation	Specific innovation form	% take-up
type		among
		surveyed firms
Emergent	Use of cloud technology	64%
technologies	ID checking	37%
	Automated document assembly	16%
	Interactive website; live chat/virtual assistant; custom-	No data
	built app; technology-assisted review; robotic process	
	automation; predictive technology; distributed ledger	
	technology	
Innovative	Introduced new or significantly improved service	25%
service	Made significant changes to the way services are delivered	20%
delivered in	Introduced advanced management techniques	10%
the past	Introduced major changes to organisational structure	6%
three years	Introduced changes in the marketing strategies or	38%
	channels	
	Introduced new-to-market service; introduced new-to-	No data
	market ways of delivering services; introduced a new	
	corporate strategy	

Table 2.10: Types of employment-related innovation, identified in the LSB study

Source: LSB (2018)

2.5 Conclusions

This literature review has addressed the likely impact of practice innovation and new technology on unmet legal need (ULN). By emphasising that several key elements of ULN occur before individuals seek any professional advice, we have sought to clarify at which point in the legal instruction journey practice innovation and technology might – potentially – make a practical difference to ULN. It is worth noting, for example, that barely 19% of UK residents surveyed who had a genuine legal need appreciated that they did. And, even when people do have a legal need, many currently do not seek to enforce it, especially if it is not deemed to be a serious problem. Unless either of these issues – a lack of appreciation of a legal need, or a lack of desire to address it – can be mitigated by technology and innovation, then the impact of technology and innovation on ULN is likely to be modest. In reality, the impact of technology and innovation on ULN is likely to be concentrated on those issues where barriers to actual advice-seeking is likely to be more relevant, such as the price of advice.

In relation to what might (potentially) be barriers to instructing legal practices specifically, several findings from our literature review stood out. Firstly, we were surprised to discover the extent to which – just before the pandemic – legal services were delivered face-to-face, rather than online. Given the almost overnight switch to remote working, we will be intrigued to discover from our legal practice interviews and survey whether this historic preference for face-to-face legal advice will endure, post pandemic. We will also be intrigued to explore whether the historically low levels of online legal services provision

have increased as a result of the pandemic. We regard the relative lack of provision of services delivered online as a far more significant hindrance to legal need provision than any digital exclusion caused by a lack of access to broadband.

In relation to price as a potential barrier to legal practice instruction, we were also surprised about the high percentage of clients who do not pay for their legal services, and also that services currently delivered remotely are not necessarily cheaper than those delivered by local providers. We are therefore uncertain about how legal practices that offer innovative services will make a reasonable return on their investment.

Our literature review also points to scarcity of evidence about how providers are investing in innovation and legal technology specifically to meet unmet legal needs. Our review also points to a tension between what consumers want – local provision – and what providers must normally do to reap returns from investing in innovation or technology – ie scaling to reduce the unit costs of production. In Chapter 4 of our Final Report, we highlight what legal practices are doing to transform their offering into a more location-agnostic services.

Our literature review suggests that we currently have very few insights in relation to innovation in the employment law market segment of the English and Welsh legal services market. In Chapter 4 of our Final Report, we offer new insights into innovation-related activities currently being undertaken in relation to this important area of legal work.

References

Armour, J. and M. Sako (2021) Lawtech: Levelling the Playing Field in Legal Services? *Legal Tech and the Future of Civil Justice*. Online, Stanford University.

Australian Government Productivity Commission (2014) *Productivity Commission Inquiry Report: Access to Justice Arrangements* Australian Government Productivity Commission **1**.

Balmer, N. (2013) *English and Welsh Civil and Social Justice Panel Survey: Wave 2*, Legal Services Commission.

Balmer, N., A. Buck, A. Patel, A., Denvir C. and P. Pleasence (2010) *Knowledge, capability and the experience of rights problems*. Public Legal Education Network: PLENet, London

bdrc continental (2012) Legal Services Benchmarking Report 11516, Legal Services Board.

Blackburn, R., J. Kitching and G. Saridakis (2015) The legal needs of small businesses: An analysis of small businesses' experience of legal problems, capacity and attitudes, Kingston University.

BMG Research (2018) The legal needs of small businesses 2013–2017, BMG Research.

Bradshaw, J. (1994) The conceptualization and measurement of need: a social policy perspective. In: Popay J. and G. William, (eds) *Researching the People's Health*. London and New York: Routledge: 45–58.

Bradshaw, J. (2013) A Taxonomy of Social Need. In Cookson, R., Sainsbury, R. and C. Glendinning (eds) *Jonathan Bradshaw on social policy: selected writings 1972–2011*. York, University of York: 1–3.

Buck, A., P. Pleasence and N. Balmer (2008) Do Citizens Know How to Deal with Legal Issues? Some Empirical Insights. *Journal of Social Policy* **37**(4): 661–681.

Busby, N. and M. McDermont (2016) Access to justice in employment disputes: private disputes or public concerns. In: Palmer, E., Cornford, Y. and A. Guinchard (eds) *Access to justice: beyond the policies and politics of austerity*. Hart Publishing: 175–196.

Chatterjee, K., B. Clark, A. Nguyen, R. Wishart, K. Gallop, N. Smith and S. Tipping (2019) *Access to Transport and Life Opportunities.* NatCen/University of the West of England.

CMA (2016) Legal services market study: Final report. Competition and Markets Authority

CMA (2020) Review of the legal services market study in England and Wales: An assessment of the implementation and impact of the CMA's market study recommendations. Competition and Markets Authority.

CMA and LSB (2020) *Prices of Individual Consumer Legal Services in England and Wales 2020*. Wave 3 of a survey of prices for commonly used legal services, Competition and Markets Authority and Legal Services Board.

Curran, L. and M.A. Noone (2007) *The challenges of defining unmet legal need. Journal of Law and Social Policy* 21: 63–88.

Department for Business Energy & Industrial Strategy (2020) *Survey of Employment Tribunal Applications: Findings from the 2018 survey*.

Europe Economics and YouGov (2018) *Price transparency in the legal services market: a study of small businesses with legal issues*.

Flood, J. (2012) Will there be a fallout from Clementi? The repercussion for the legal profession after the Legal Services Act 2007. *Michigan State Law Review* 537–565.

Franklyn, R., T. Budd., R. Verrill, and M. Willoughby (2017) Findings from the Legal Problem and Resolution Survey, 2014–15. *Ministry of Justice Analytical Series*. Ministry of Justice.

Genn, H. and National Centre for Social Research (1999) *Paths to Justice: what people think about going to law*. Oxford and Portland, Oregon:Hart Publishing.

Giddings, G., J. Macfadyen, and D. Mort (2020) *SRA Transparency Rules: Year One Evaluation*. Coventry: IRN Research.

Grant, S (2020). *An overview of immigration advice services in England and Wales*. Paul Hamlyn Foundation.

Heinz, J. P., R.L. Nelson, R.L Sandefur, and E.O. Laumann (2005) *Urban Lawyers: The New Social Structure of the Bar*. Chicago and London: University of Chicago Press.

HM Government (2019) *Voluntary National Review of progress towards the Sustainable Development Goals*. HM Government.

Hilborne, N. (2021) SRA eyes pilot to promote greater unbundling of legal services, *Legal Futures*.

Hodges, S. (2009) *Marketing legal services to medium sized companies*. Nottingham Trent University

Ipsos MORI/Social Research Institute (2015) *Qualitative research exploring experiences and perceptions of unbundled legal services*, Legal Services Board/Legal Services Consumer Panel.

Ipsos MORI / Social Research Institute (2016) *Online survey of individuals' handling of legal issues in England and Wales 2015*. The Law Society/Legal Services Board.

Jomati (2019) The legal sector in Wales – a rapid review. London.

Kimbro, S. (2013) Using Technology to Unbundle in the Legal Services Community. *Harvard Journal of Law and Technology Occasional Paper Series*.

Kritzer, H.M. (2008) To Lawyer or Not to Lawyer: Is that the Question? *Journal of Empirical Legal Studies* 5(4): 875–906.

Law Society of England and Wales. *Legal aid deserts* from <u>https://www.lawsociety.org.uk/campaigns/legal-aid-deserts</u>. (Retrieved 4 March 2020)

LSB (2016) Mapping of for profit unregulated legal services providers Legal Services Board.

LSB (2017) *Price of individual consumer legal services 2017 – Main Report*. An analysis of a survey of prices quoted for commonly used legal services, Legal Services Board.

LSB (2018) *Technology and Innovation in Legal Services – Main Report*. An analysis of a survey of legal service providers, Legal Services Board.

LSB (2020) The State of Legal Services 2020 – evidence compendium. Legal Services Board.

Legal Services Commission (2013) *Report of The Summit on the Use of Technology to Expand Access to Justice*. Legal Services Commission.

Legal Services Consumer Panel (2019a) *Tracker Survey 2019 – How consumers are choosing legal services*. London: Legal Services consumer Panel.

Legal Services Consumer Panel (2019b) *Tracker Survey 2019 – How consumers are using legal services*. London: Legal Services Consumer Panel.

Legal Services Consumer Panel (2020a) *Tracker survey 2020: how consumers are choosing legal services*. Legal Services Consumer Panel.

Legal Services Consumer Panel (2020b) *Tracker Survey 2020: How consumers are using legal services.* Legal Services Consumer Panel.

Legal Services Consumer Panel (2021) *Tracker Survey 2021: How consumers are using legal services.* Legal Services Consumer Panel.

Legal Services Corporation (2017) *The Justice Gap: Measuring the Unmet Civil Legal Needs of Low-income Americans*. Washington DC: University of Chicago for Legal Services Corporation.

Maister, D.H. (2003) *Managing the professional service firm*. London: Simon & Schuster UK Ltd.

Ministry of Justice (2019) *Legal Support: The Way Ahead. An action plan to deliver better support to people experiencing legal problems.* Ministry of Justice.

Newman, D. (2016) Attitudes to justice in a rural community. *Legal Studies* 36(4): 591-612.

OECD and Open Society Foundation (2016) *Leveraging the SDGs for inclusive growth: Delivering access to justice all.*

OECD and Open Society Foundation (2019) Legal Needs Surveys and Access to Justice.

Ofcom (2020a) *Affordability of communications services: A summary of initial findings*. Ofcom.

Ofcom (2020b) Connected Nations 2020: UK report. London: Ofcom.

Office for Budget Responsibility (2021) *Economic and fiscal outlook*. Office for Budget Responsibility.

Office for National Statistics (2019) *Exploring the UK's digital divide*. Office for National Statistics.

Office for National Statistics (2021) *Employment in the UK: February 2021*. Office for National Statistics.

Owen, R. (2017) Lawzone: Mapping Unmet Legal Need, Swansea University.

Pleasence, P. and N. Balmer (2012) Caught in the middle: justiciable problems and the use of lawyers. In: Trebilock, M., A. Duggan, and L. Sossin, *Middle income access to justice*. Toronto: University of Toronto Press: 27–54.

Pleasence, P. and N. Balmer (2013) *In Need of Advice? Findings of a Small Business Legal Needs Benchmarking Survey.* Cambridge: Legal Services Board.

Pleasence, P. and N. J. Balmer (2014) How People Resolve "Legal" Problems. Cambridge: Legal Services Board: 8

Pleasence, P., N. Balmer, and S. Reimers (2011) What Really Drives Advice Seeking Behaviour? Looking Beyond the Subject of Legal Disputes. *Oñati Socio-Legal Series* 1(6): 1.

Pleasence, P., C. Courmarelos, S. Forell, H.M. McDonald, and G. Mulherin (2014) *Reshaping legal assistance services: building on the evidence base – A discussion paper*. Law and Justice Foundation of New South Wales.

Robinson, N. (2016) When Lawyers Don't Get All the Profits: Non-Lawyer Ownership, Access, And Professionalism. *The Georgetown Journal of Legal Ethics* 29: 1–61.

Rose, N. (2020). Shop nationally for cheaper legal fees, LSB tells consumers. Legal Futures.

Saab Fortney, S, (2019) Online legal document providers and the public interest: using a certification approach to balance access to justice and public protection. *Oklohoma Law Review* 72: 91–123.

Sako, M., J. Armour, and R. Parnham (2020) *Lawtech adoption and training. Findings from a survey of solicitors in England and Wales*. Oxford: University of Oxford/Law Society.

Schoonmaker, S.V. (2017) Withstanding Disruptive Innovation: How Attorneys Will Adapt and Survive Impending Challenges from Automation and Nontraditional Legal Services Providers. *Family Law Quarterly* 51(2)

Senior President of Tribunals (2019) *The Modernisation of Tribunals: Innovation Plan for 2019/2020*, Senior President of Tribunals.

Simshaw, D. (2018) Ethical Issues in Robo-Lawyering: The Need for Guidance on Developing and Using Artificial Intelligence in the Practice of Law. *Hastings Law Journal* 70: 173–212.

SRA (2018) *Price transparency,* from <u>https://www.sra.org.uk/solicitors/resources/transparency/transparency-price-</u> <u>service/.(Retrieved 20 July 2021)</u>

SRA (2020a) How diverse is the legal profession? from <u>https://www.sra.org.uk/sra/equality-diversity/key-findings/diverse-legal-profession/</u>. Solicitors Regulation Authority (Retrieved 10 March 2020)

SRA (2020b). Better information in the Legal Services Market – Year One evaluation of the Transparency Rules from <u>https://www.sra.org.uk/sra/how-we-work/reports/better-information-legal-services-market/</u> Solicitors Regulation Authority (Retrieved 19 July 2021)

Susskind, R. (2017) *Tomorrow's lawyers: an introduction to your future*. Oxford: Oxford University Press.

Terry, L.S. (2013) Why your jurisdiction should consider jumping on the regulatory objectives bandwagon. *The Professional Lawyer* 22(1): 28–42.

Terry, L.S, S. Mark, and T. Gordon (2011–2012) Adopting Regulatory Objectives for the Legal Profession. *Fordham Law Review* 80: 2685–2760. The Law Society (2013) *Law Firm Marketing Toolkit*. London: The Law Society.

The Law Society (2018) *Artificial Intelligence and the Legal Profession*. London: The Law Society.

The Law Society (2019a) Lawtech Adoption Research, The Law Society.

The Law Society (2019b) *Technology, Access to Justice and the Rule of Law: Is technology the key to unlocking access to justice innovation?* London: The Law Society.

The Law Society (2020) *Trends in the solicitors' profession Annual Statistics Report 2019*. The Law Society.

The Lawyer (2021) The Lawyer's top 200 UK law firms revealed.

Trinder, L., R. Hunter, E. Hitchings, J. Miles, R. Moorhead., L. Smith, M. Sefton, V. Hinchy, K. Brader, and J. Pearce (2014) *Litigants in person in private family law cases*. Ministry of Justice.

Tulk, N., C. Gorst and L. Shanks (2020) *The Legal Access Challenge – Closing the legal gap through technology innovation*.

United Nations General Assembly (2015) *Transforming our world: the 2030 Agenda for Sustainable Development.* (Resolution adopted by the General Assembly on 25 September 2015).

Velthoven, B. van and C.M. Klein Haarhuis (2011) Legal Aid and Legal Expenses Insurance, Complements or Substitutes? The Case of the Netherlands. *Journal of Empirical Legal Studies* 8(3): 587–612.

World Justice Project (2019) *Global Insights on Access to Justice: findings from the World Justice Project General Population Poll in 101 Countries*. Washington DC/Seattle: World Justice Project.

YouGov, The Law Society and Legal Services Board (2019) *Legal needs of Individuals in England and Wales: Technical Report 2019/20.* Legal Services Board/The Law Society.

Young, L. (2005) *Marketing the professional services firm*. Chichester: John Wiley & Sons Ltd.

Chapter 3: Desk research on the lawtech ecosystem - funding, scaleup and policies

- 3.1. Introduction: an ecosystem perspective
- 3.2. Overview: the lawtech ecosystem landscape
- 3.3. Lawtech entrepreneurial finance: an investment perspective
- 3.4. Government policies for promoting tech adoption, innovation, startups and funding

In this chapter, we provide an overview of the lawtech ecosystem including founders and funders. We pay particular attention to support given to the ecosystem by government policies.

3.1 Introduction: an ecosystem perspective

In this section of our report, we explore which legal sector innovations and technology deployments might scale up to be market changing, including which innovations and technology deployments are appealing to investors. Here, our main focus is on legal technology company investments and scaleups, rather than traditional law firms. This is for three main reasons: firstly, the whole point of lawtech startup companies is that they typically focus on automating tasks and roles traditionally performed by lawyers – that is, they are change-makers. Secondly, prior research indicates that the legal technology sector has recently gone through a significant growth period in recent years, both in terms of new companies formed and also investments made (Hongdao, Bibi et al, 2019; Legal Geek and Thomson Reuters, 2019; The Law Society, 2019; Atomico, 2020; Lawtech UK, 2020; Tracxn, 2020). Thirdly, the UK legal technology sector has received both UK government and legal regulator support, both in terms of pro-growth policies and funding (Bradley, 2019). This suggests that this legal market segment is of particular interest to policymaking stakeholders.

Although this literature review will narrowly focus on the legal technology sector, we shall also take an expansive approach regarding which stakeholders are part of it. In common with other researchers who have explored technology sectors (Tripathi, Seppänen et al, 2019), we shall take an 'ecosystem' (Moore 1993) approach to exploring legal technology (Lawtech UK, 2020; Sako, Qian et al, 2020). That is, we will not narrowly focus on individual companies, or their founders – a cohort of market participants that have been subject to intense research scrutiny (Van de Ven, Hudson et al, 1984; Thompson, Purdy et al, 2018). Instead, our approach seeks to identify what we regard as the key participants in the legal technology ecosystem that, collectively, help it to grow. Out of necessity, our approach will require a brief – rather than in-depth – analysis of each stakeholder type within the ecosystem.

When seeking to identify key legal technology ecosystem participants, we are guided by the huge body of policy-led and academic research on business ecosystems (Isenberg, 2011; World Economic Forum, 2014; Stam and Spigel, 2016; Alvedalena and Boschmaa, 2017; Jacobides, Cennamo et al, 2018). We are also guided by the startup ecosystem literature – in general (Tripathi, Seppänen et al, 2019) – and also prior research into sectors that are closely associated with legal technology, notably fintech (Diemers, Lamaa et al, 2015; Lee

and Jae Shin, 2018; Sako, Qian et al, 2020). However, because there is no consensus within this prior literature regarding the identities of key ecosystem participants, we shall pay particular attention to the prior research that has specifically explored the legal technology sector. Our ecosystem framework therefore most closely resembles that of Hook's (2019) study. Hook identified several key stakeholders involved in the legal technology development lifecycle, but did not expressly use the term ecosystem to describe the key stakeholders she identified. However, Hook's analysis is a useful starting point for our own legal technology ecosystem analysis.

The remainder of this literature review is structured as follows. In section 3.2, we sketch out those stakeholders we believe are the main participants in the lawtech ecosystem. In section 3.3, we focus on entrepreneurial finance in relation to legal technology, both globally and by reference to the UK legal technology market specifically. Here, we also briefly explore lawtech startup founder characteristics, to the extent that they appear to influence scaleup potential. In section 3.4, we review UK government and regulatory policies that promote lawtech startup founding and scaleup.

3.2 Overview: the lawtech ecosystem landscape

Figure 3.1, below, represents our attempt to map key members of the lawtech ecosystem at the highest level. At the centre of our illustration is arguably the central actor of the legal technology universe – namely lawtech startup companies. However, because our research is mainly focused on lawtech startups (Linna Jr, 2016) and scaleups (Logan, 2019; Sako, Qian et al, 2020) rather than legal technology companies in general (including established players), the bulk of this literature review will focus on the former.

We are not only interested in identifying legal technology ecosystem participants, but also in exploring the linkages between these market participants. For example, some data-driven lawtech startup companies that use machine learning rely on data often held by third parties, in order to train, develop and deliver their service offering. In Figure 3.1, we therefore indicate a connection between lawtech startup companies and data providers. We address data access by lawtech companies, and initiatives to facilitate it, in Chapter 5 of our Final Report. Lawtech startups can also serve clients in different ways. Some lawtech companies (eg Farewill and Rocket Lawyer in the PeopleLaw space) provide services directly to clients. Others (eg Icertis) provide services to legal technology-enabled legal practices (LELP) which, in turn, use the legal technology solution to serve their clients. For that reason, we include a multiplicity of relationship lines between these three stakeholders. Similarly, technical infrastructure providers may provide services to various members of the lawtech ecosystem, independently of their relationship with lawtech companies. We have consciously decided not to overlay the boundaries of the regulated legal sector onto Figure 3.1 because almost any ecosystem participant could, potentially fall within the boundary to a varying degree. For example, at an institutional level, a lawtech startup company may, or may not, also operate as regulated legal practice, depending on the nature of their offering. Similarly, at an individual level, lawtech funders and investors may, or may not, be regulated lawyers. Chapter 5 of our Final Report explores the lawtech ecosystem funding, scaleup and policies. Our interviews for this chapter included ecosystem participants who were both regulated and unregulated.

3.2.1. Lawtech startups

In common with other researchers who have explored this cohort, our research takes an expansive approach to what amounts to a lawtech startup company – ie it 'is simply about the application of software technology in the legal profession' (Hartung, Bues et al, 2018). Our ecosystem is also agnostic about the underlying technologies used by lawtech companies – that is, unlike other studies (Becerra, 2018), we do not focus exclusively on those legal technology companies that use artificial intelligence (AI). However, as previously indicated, because our research explores the growth of the legal technology sector, we are particularly interested in lawtech startups (Linna Jr, 2016).

Prior research indicates that there are hundreds, if not thousands, of lawtech companies around the world. (Costa Damasceno, 2019;Tracxn, 2020). Some of these are mature companies, but many are startups (AngelList, 2021; The Law Society, 2019). Closer to home, an interrogation of various online database that capture and classify lawtech companies reveals that .between 107 (Crunchbase) and 169 (Legal Technology Hub) are believed to be headquartered in the UK alone – Herr, Godel et al's 2020 study puts the number at 148, while Tech Nation's curated UK legaltech list contains 109 companies. We offer these totals tentatively, on the understanding that Crunchbase's 'Legal Tech' company tagging leaves something to be desired, and misclassifies some leading legal technology companies that are headquartered in the UK. Our research for this project compensates for this shortcoming by cross-referencing UK-headquartered firms in Crunchbase and the Legal Technology Hub.

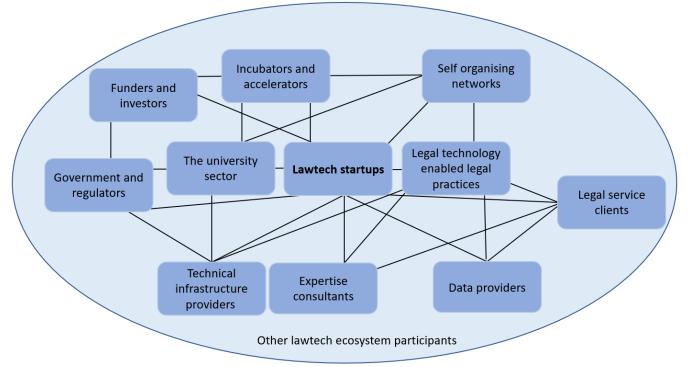
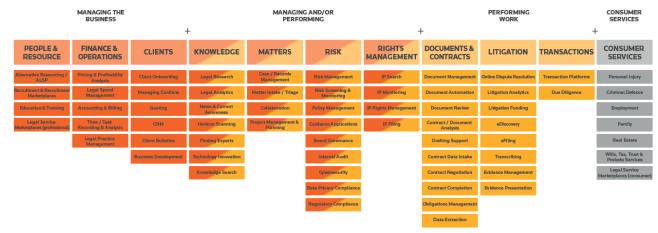


Figure 3.1: Categorising the lawtech ecosystem landscape

The solid lines indicate transactions or support with financial and personnel flows. The lines are drawn from the perspective of lawtech startups, and are not meant to be comprehensive.

Source: Oxford University research team

In light of the large number of lawtech startup companies now operating, prior research has progressed beyond offering illustrative examples of such companies, and on to developing taxonomies that seek to classify them. This can be done in several different ways. For example, Linna Jr's (2016) analysis of lawtech startups begins by looking 'at the current legal industry, the legal supply chains that have developed, and how those supply chains are being disaggregated', before 'identifying the market segments that legal startups serve'. Using this approach, Linna Jr's legal technology categories include 'Business to Consumer, Including Small Businesses: Find a Lawyer' and 'Business to Lawyer, Including Law Firms and Legal Departments: Transactional Tools'. Other taxonomies, such as those produced by Legal Geek and Thomson Reuters (2019), take an approach based on aspects of legal practice – see Figure 3.2, below. Legal Geek's top-level categories therefore include 'managing the business', 'managing and/or performing work', or providing 'consumer services'. A similar 'use case' approach is taken by the industry search tool, Legal Technology Hub (https://legaltechnologyhub.com/).





Source: Legal Geek and Thomson Reuters (2019)

Combining the above approaches, and several more besides, is Sako and Qian's (2021) 'technology ventures' ecosystem taxonomy, devised partially by reference to lawtech startup companies. Sako and Qian's taxonomy includes six dimensions: areas of work (ie tasks to be carried out by users of the technology), purpose of technology use (ie generating documents, automating routine tasks), types of clients (ie individuals and households, corporations or corporation functions), value capture strategy (ie one-time purchase, usagebased billing), founder and funder characteristics (ie founder knowledge domain mix, funder identities), and geographical footprint (headquarter locations, employee cluster locations). Also taking a multidimensional approach is Costa Damasceno (2019), whose taxonomy focuses on geography, work type, technology and customer segmentation. Finally, we note that the Global Legal Tech Report (2020) has attempted to classify legal technology companies by reference to their underlying technologies – including by reference to the type of AI technology used, where relevant. Why do taxonomies matter? One notable justification for their usage is that they can help investors and others identify the size of a market, and also market gaps. For example, use case-based taxonomies can help investors – and governments – understand where investment is currently flowing (Hongdao, Bibi et al, 2019; Legal Geek and Thomson Reuters, 2019; Tracxn, 2020), and also where it is not (ie a market failure may be occurring). In a legal technology-specific setting, Sako and Qian (2021) argue that understanding and classifying a company's value capture strategy can help gauge its potential for growth. It is, therefore, useful to be able to identify and classify this value capture strategy.

3.2.2 Legal technology-enabled legal practices

Legal technology-enabled legal practices (LELP) are another key stakeholder group within the lawtech ecosystem. An LELP can be thought of as a legal service provider that uses legal technology to deliver legal services to clients. LELPs can be both traditional law firms, such as those shown in Tables 3.1 and 3.2 below, and alternative legal service providers (Chambers and Partners, 2020; Thomson Reuters, 2021). An LELP may use legal technology in various ways. For example, they may buy – or build – their legal technology offerings, customise an existing legal technology solution, or partner with one or more legal technology companies to offer a bespoke service, in a process sometimes known as 'bricolage' (Jomati Consultants, 2018).

Law firm	Tech partner	Output / product	When launched
Allen & Overy	Kira Systems (Al tool)	Al-assisted contract review, delivered	July 2017
		across several practice areas	
Norton Rose	IBM Watson	Several 'Parker'-branded chatbots,	December 2017
Fulbright		covering EU, Canadian and Australian law	onwards
MinterEllison	IBM Watson (Explorer)	A client and work type-specific took to	2018
		improve efficiency.	
Taylor	Rainbird (Automated	Chabot advises clients about Modern	August 2017
Wessing	decision-making platform	Slavery Act reporting requirements	

Table 3.1: Examples of tech-enabled legal practices who buy, or customise, an existing legal technology legal service tool

Source: Jomati Consultants (2018)

Table 3.2: Examples of tech-enabled legal practices engaging in bricolage with legal technology vendors to produce bespoke legal technology solutions

Law firm	Solutions output	Tech partner one	Tech partner two
Akerman	Tailored data and	Neota Logic (Al	Thomson Reuters Legal
	privacy risk research platform) Managed		
	and reporting	Services	
Gilbert + Tobin	More efficient due	Wizdocs (due diligence	Relativity (document
	diligence process	data aggregator)	review platform)
Slaughter and May	Project management	Tiki-Toki (workflow	HighQ (secure document
	tool	solutions vendor)	sharing tool)
Winston & Strawn	Digital dashboard	Tableau (data	Alteryx (data aggregator)
		visualisation tool)	

Source: Jomati Consultants (2018)

Whatever their organisational form, a sub-set of LELPs do not just support legal technology companies by buying their solutions: rather, they help them to develop. This assistance can take several forms. Some provide lawtech startup companies with guidance during their product development and design phase (Slaughter and May, 2016; Deloitte, 2019). Others deliver access to data – particularly useful for AI-legal technology solutions in need of training data for their algorithms (Armour, Parnham et al, 2020). Some provide support via formal incubators and accelerators (Artificial Lawyer, 2019; Legal Geek and Thomson Reuters, 2019). A few part-fund (or acquire) legal technology companies (Elevate, 2019; Hill, 2020).

To further illustrate the complex web of relationships between lawtech ecosystem participants and lawtech startups, LELPs and clients sometimes work in partnership in a multitude of overlapping relationships. For example, a traditional law firm or in-house legal function may instruct a LELP (as a client), in order to use the LELP's legal technology-enabled services (Chambers and Partners, 2020; Thomson Reuters Institute and Profession, 2021). However, the legal technology used by the LELP to provide this service to a client may, in fact, have been developed by a third-party lawtech company. To offer an illustrative example: the AI-assisted contract review service offered by LELPs Integreon, Axiom and Elevate are understood to be partially underpinned by a solution developed by lawtech company Kira Systems (Artificial Lawyer, 2017b). These LELPs, in turn, offer AI-assisted contract review services to their clients (Kira Systems, 2017; Ambrogi, 2017; Elevate, 2018), which include both law firms and in-house legal teams.

3.2.3. Legal services clients

While legal technology startups and LELPs represent the supply of the legal technology ecosystem, legal services clients represent the demand side. Clients (ideally, paying clients) are fundamental to the lawtech ecosystem – unless a legal technology service ultimately becomes profitable, it will not survive. Legal technology clients can include consumers, small businesses, large corporations with in-house legal departments, and governments (Linna Jr, 2016). However, as indicated in the previous section, clients can also include law firms and in-house clients. Indeed, UK-specific research suggests that the largest single target market for both lawtech startups and more established lawtech companies is law firms (Legal Geek and Thomson Reuters, 2017; Global Legal Tech Report, 2020). Similarly, while the Legal Technology Hub lists 169 lawtech companies based in the UK, only five of these legal technology companies have specified small businesses, as opposed to corporates or law firms, as their target market. Note that the Legal Technology Hub does not collect data on consumer-facing legal technology.

The above-mentioned prior research may have policy implications for our own investigation: if the principal objective of many of the legal technology solutions is to improve the performance of law firms, we cannot simply assume that the overall beneficiaries of the legal technology investments now taking place will be the end customers of legal services, either B2C or corporate. This is an issue we explore (albeit tangentially) in our online survey, where we ask respondents to rank the principal reasons for making investments in innovation or legal technology, including both internal and client-facing justification for investments. That said, it is also worth noting that some lawtech companies serve more than one client segment: indeed, building on observations made previously regarding the complex web of relationships between lawtech companies, LELPS and clients, some lawtechs also partner with legal practices to deliver services to clients. For example, a British lawtech company, ThoughtRiver, works in partnership with Eversheds and its end-client G4S on an automated contract pre-screening programme, in an arrangement described as a 'strategic relationship' (Pullen, 2019). This example illustrates how a lawtech company's client base is not, therefore, necessarily 'law firms *or* purchasers of legal services' – it can sometimes be both.

3.2.4. Funders and investors

One of the most defining characteristics of traditional law firms is that they are not particularly reliant on external capital (Von Nordenflycht10; Smets, Morris et al, 2017), even when they have been allowed to seek or obtain it (Roper, Love et al, 2015). By contrast, lawtech startups are thought to require a higher level of external capital (Armour and Sako, 2020; Kronblad, 2020). For this reason, funders and investors are an important part of the lawtech ecosystem. We shall explore external funding by lawtech startups in some detail in the following sections. But, for now, it is worth noting that the UK legal technology sector has received both public and private finance in recent years. An example of a public funder would be Innovate UK, a non-departmental public body funded by the UK government. An example of a private sector investor would be Seedcamp, a tech-focused investor that is known to have invested in at least six lawtech startups (Tracxn, 2020).

3.2.5. Data providers

Data providers are an important part of the lawtech ecosystem. For the purpose of this study, data providers fall into two broad categories: public data providers (ie data provided in some way by the state) and private data providers (ie data provided by private sector organisations). However, there is often a degree of overlap between the two categories, involving collaboration among the public, private, and third-sector organisations. For example, legal judgment data may emanate from a public sector organisation – ie a court – but be captured and commoditised by a private sector institution (ie a legal publishing company). It is for this reason that, for example, the University of Oxford's recently announced agreement to analyse a 400,000-strong dataset of judicial decisions (University of Oxford, 2020), was made in partnership with BAILII – a UK charity, hosted by UK and Irish Universities – rather than the UK judiciary. More recently, in June 2021, it was announced that the National Archives will take a lead in promoting open access of important tribunal and court judgments (Ministry of Justice / HM Courts & Tribunal Services, 2021). This example demonstrates how the ownership of data used by lawtech companies can change over time.

To offer some illustrative examples of public data providers: in the US, data provided by the Securities and Exchange Commission (SEC) – via its publicly available contracts database (EDGAR) – has been used by legal AI solutions providers. They train AI-assisted due diligence solutions (Roegiest, Hudek et al, 2018) and to help with the development of AI-assisted contract drafting tools (Betts and Jaep, 2017; Foster and Lawson, 2018). Meanwhile, in the UK, the HM Land Registry has made data available to the Geovation accelerator programme (Vancauwenberghe and van Loenen, 2019), with a view to helping startups to create products or services that rely on property-related data. This programme has, in turn,

assisted lawtech startup companies to cross over into the PropertyTech and GeoTech markets (Artificial Lawyer, 2020). In terms of private data sources that have helped with the development of legal technology, one important data source can be an organisation's own internally generated data. This internally produced data might include, for example, corporate clients' legal agreements, law firm billing information (Artificial Lawyer), guidance notes (Al-Abdulkarim, Atkinson et al, 2017), or organisation-specific insights into its own past matters (Son, 2017).

Access to data appears to be an emerging issue in relation to the legal technology sector, and a potential source of a digital divide among businesses (Gallagher, 2020). Indeed, according to a recent study involving UK-based legal, accountancy, and insurance services AI and data companies, '64% of AI and data startups/SMEs responding to the survey agreed that lack of data was a key challenge, with 43% agreeing strongly' (Herr, Godel et al, 2020). Data access can be problematic because, according to those directly involved in creating Alassisted legal technology solutions, 'law firms and companies are not particularly willing to share their legal documents with outside sources, at least not without redaction. As a result, finding sufficient amounts of legal documents to train machine learning models can be particularly difficult, especially when one tries to ensure diversity among document types' (Roegiest, Hudek et al, 2018). This is not to say that private data sources are impossible to come by for lawtech startup companies; just that some feel compelled to publicly reassure potential clients that use of their data will be limited, and either not shared at all (Eigen Technologies, 2021) or only shared with consent (ThoughtRiver, 2020). This 'limited sharing' or 'no sharing' approach to data access is already standard practice in the eDiscovery space (Tredennick, Pickens et al, 2018; Legg and Bell, 2020), a common use case of AI in legal practice (Sako, Armour et al, 2020).

Occasionally, the use of private data by lawtech companies can be contentious, and spill over into conflict. Here, one notable example is the ongoing dispute between ROSS Intelligence and Thomson Reuters, owners of the Westlaw legal research platform (Moran, 2020; McAfee, 2021). While this dispute highlights the importance of the legal publishing sector as a private data source for lawtechs, it also illustrates how legal publishers might limit the development of the legal technology sector, should they decide to restrict thirdparty access to their proprietary datasets. That said, legal publishers may also facilitate data access via acquisition of those lawtech companies that are synergistic with their own offering (Flanagan and Hook Dewey, 2019).

3.2.6. The university sector

Universities are an important component of the entrepreneurial ecosystem (Malecki, 2018), supporting the entrepreneurial ecosystem in many different ways. In general terms, universities can foster a culture of respect for entrepreneurship, and provide graduates for new companies (World Economic Forum, 2014). More specifically, they can also facilitate spin-offs by university academics (Shane and Khuran, 2003) and graduates (Hayter, Lubynsky et al, 2016), and then incubating these companies (Theodoraki, Messeghem et al, 2018).

To date, the role of universities in the development of the legal technology sector has not – to the best of our knowledge – been explored. However, by drawing on various public domain data sources – noticeably grant award notifications – we can tentatively suggest that the university sector appears to play an important role in the *formation* of lawtech startup ventures in the UK, if not their subsequent scaleup. To illustrate this point, Table 3.3 – below – offers illustrative examples of known UK-specific university partnerships with lawtech startups (Genie AI, Teal Legal, Orbital Witness, Solomonic). And, to offer a fuller picture of the university sector's involvement with the wider lawtech ecosystem, we also offer illustrative examples of universities working with LELPs (Family Law Partners (UK), Riverview Law UK, Withers) and – on occasions – LELPs and lawtech startups (Withers/Genie AI).

Academic partner	Law / legal technology partner	Brief description of project	Grant awarded	Dates
University of	Family Law	To embed knowledge engineering	£97,012	Oct 2016
Brighton	Partners	expertise to develop a rules-based	(Innovate	– Feb
	(UK)	decision support system to underpin	UK)	2019
		a novel model of family law provision.		
Imperial College	Withers/	Project focusing on the acquisition of	£1,530,000	Feb 2019
London /	Genie Al	confidential data.	(Innovate	-
University of			UK)	unknown
Oxford				
Keele University	Teal Legal	Project to examine how AI could	£137,000	Feb 2019
		improve the 'decision' stage of the		-
		conveyancing process.		unknown
University of	Riverview	To leverage the university's expertise	£180,240	Sept
Liverpool	Law UK	in areas of artificial intelligence to	(Innovate	2014 –
		facilitate the creation of a new service	UK)	July 2017
		line.		
Southampton	Land	Project to use AI to 'extract and	£313,000	Feb 2019
University	Registry/	analyse legal rights and obligations'	(UKRI)	-
	Orbital	related to property and land.		unknown
	Witness			
University of	Kennedys	To develop and embed an intelligent	£79,936	Nov
Manchester	Law	data-driven fraud prevention and		2017 –
		detection service to support		May
		insurance claim handling utilising		2020
		modern machine learning, text		
		analytics techniques and semantic		
		technologies.		
Warwick Business	Solomonic	Project to investigate the feasibility of	£309,000	Feb 2019
School		applying machine learning algorithms		-
		to the large-scale collection of		unknown
		accurate data from court documents.		

Table 3.3: Illustrative examples of recent UK university / legal technology partnerships

Source: Innovate UK, Artificial Lawyer (2019), Hilborne (2019)

Notably, all of these exploratory collaborations between universities, legal technology companies and /or LELPS have been financially supported by the UK government, via its UK Research & Innovation or Innovate UK funding bodies (Innovate UK, 2021; Artificial Lawyer, 2019; Hilborne, 2019). The UK government therefore provides an important *input* into very early-stage lawtech startups, even if the *output* of that investment is not yet known. We return to the role of UK government funding in the UK legal technology sector later in this chapter.

In relation to the World Economic Forum's suggestion that universities can help with the provision of graduates to new companies, we are not aware of any prior research that explores this issue, specifically by reference to lawtech startups. Indeed, what little evidence exists provides some evidence to suggest that lawtech startup founders tend to have other careers prior to starting their ventures (Legal Geek and Thomson Reuters, 2017; Sako, Qian et al, 2020) – ie they are not recent graduates. What is known, however, is that many universities around the world now offer legal technology-related courses (Galloway, Webb et al, 2019; Hook, 2019; O'Leary, 2019; Ryan, 2020; Ziercke, Hartung et al, 2020; Barczentewicz, 2021) – a potential source of specialist labour for lawtech startups seeking graduates who have a combination of legal and computing skills. That said, possibly because these university courses tend to be new, we are not aware of any research that has evaluated the subsequent career trajectories of those who have studied legal technology courses, and whether lawtech startups have treated these courses as an important talent pipeline.

3.2.7. Incubators and accelerators

Globally, there are known to be hundreds – if not thousands – of incubators (Mian 2021) and accelerators in operation across sectors. Indeed, research conducted in 2017 suggests that there are 205 incubators and 163 accelerators in the UK alone (Bone, Allen et al, 2017). There is no universal definition of what this amounts to either. But generally, incubators tend to support the establishment and initial growth of new ventures, whereas accelerators are more associated with company growth and fundraising (Lukosiute, Jensen et al, 2019). It has also been suggested that incubators tend to be non-cohort-based and open-ended in their duration, whereas accelerators tend to be cohort-based and operate for a fixed duration (Bone, Gonzalez-Uribe et al, 2019). Before the COVID-19 lockdown in spring 2020, incubators were somewhat more likely than accelerators to be based in a physical space (Bone, Allen et al, 2017). After the lockdown, nearly all moved to virtual interaction.

UK-specific research indicates that there are now several legal sector-specific incubators and accelerators, as well as a small number of incubators that cross over into the legal sector. Table 4, below, summarises those law-related incubators and accelerators based in the UK. In the table, we defer to Herr, Godel et al (2020) regarding how each incubator or accelerator should be defined, appreciating that the distinction between the two support formats is not always obvious. For example, while these scholars regard Mishcon de Reya's MDR Labs as an accelerator, Legal Geek and Thomson Reuters (2019) describes it as an incubator, and MDR Labs states it is a 'programme'.

Irrespective of what support mechanisms are called, how important are they to the lawtech ecosystem? Unfortunately, we have been unable to identify in-depth prior research, which might have attempted to calculate the total number of UK lawtech startups to have been

supported via these incubators and accelerators. Our best attempt at capturing the total number of lawtech companies (most of whom we assume are startups) to have passed through a formal incubators/accelerators programme is therefore set out below in Table 3.4. This research is derived from legal press sources, where cohort numbers were announced, and correspondence with operators, in the case of the Barclays Eagle Lab (Artificial Lawyer, 2017a; Artificial Lawyer, 2017b; Artificial Lawyer, 2018a; Artificial Lawyer, 2018b; Artificial Lawyer, 2019a; Artificial Lawyer, 2019b; Artificial Lawyer, 2019c; Artificial Lawyer, 2019d; Global Legal Post, 2019; Artificial Lawyer, 2020a; Artificial Lawyer, 2020b; Global Legal Post, 2020).

Table 3.4: Selection of known legal technology-specific incubators and accelerators in
2021

Name of entity	Supported by	Incubator or accelerator?	Estimated legal technology cohort size
Barclays Eagle Lab (legal	Various, including Law	Incubator	18* (in 2019)
technology-only cohort)	Society		
Collaborate	Slaughter and May	Incubator	13
Deloitte Legal Ventures	Deloitte Legal	Incubator	14
Fuse	Allen & Overy	Incubator	22
MDR Lab	Mishcon de Reya	Accelerator	18
Scale LawTech	PwC	Incubator	16

Source: Legal Geek and Thomson Reuters (2019); Herr, Godel et al (2020); various incubator/news websites, correspondence with operators. *Totals known cohort until 2021, except from Barclays Eagle Labs, which is until December 2019.

Our findings do not represent the total number of lawtech companies supported by LELPs and other entities. This is because our findings do not include those lawtech companies supported by such entities outside of formal incubator or accelerator programmes – of which, anecdotally, we understand there are many. Moreover, we cannot be certain that the figures stated accurately represent the total number of supported lawtech startups, because some lawtech companies have been through multiple schemes. Furthermore, some incubators and accelerators are not exclusively based in the UK. However, even allowing for these complicating factors, we observe that there 101 known participants in the incubators and accelerators shown in Table 3.4. This number represent a significant majority of the lawtech companies believed to be operating in the UK – 107 according to Crunchbase, and 169 according to the Legal Technology Hub. This suggests that UK-based legal technology accelerators are an important part of the legal technology ecosystem.

In terms of the geographic locations of these schemes, at least two of the above-mentioned incubators (Allen & Overy and Barclays Eagle Lab) were physically based in London before the COVID-19 lockdown in spring 2020 (Allen & Overy, 2017; Cross, 2018). Also roughly one third of professional service-based tech startups (Herr, Godel et al, 2020) – including lawtech startups (Tech Nation) – are understood to be based outside London. In our interviews with UK lawtech startups, accelerators and incubators, we briefly explore the extent to which "geography matters', in terms of whether lawtech startups participate in

accelerator/incubator programmes. During the pandemic, several of the UK legal technology incubator programmes operated on a remote basis (Artificial Lawyer, 2020; Global Legal Post, 2020).

3.2.8. Government and regulators

In sector 3.4 of this chapter, we provide an overview of UK government policy towards the legal technology sector. In light of the high levels of support being offered, we suggest that government and regulators should also be regarded as an important part of the lawtech ecosystem.

3.2.9. Self-organising networks

According to TechNation and others, there are in excess of 3,500 technology-related groups in the UK across different sectors (Tech Nation, 2018). Prior research suggests these types of groups tend to serve a multiplicity of purposes, including education, skills development and network-building (Ingram and Drachen, 2020). Because they have such standalone functions, we regard these groups as a distinctive part of the lawtech ecosystem, even if – in reality – there is some overlap between members of a self-organisation network and other of our suggested ecosystem participants.

Unfortunately, we have been unable to locate any prior research which has attempted to document self-organising legal technology networks in the UK. Therefore, we document known groups in Table 3.5 below. Some of these groups (eg the Legal Hackers, Society for Computers and Law, Meetups) appear to have a fairly strong geographical focus, while others (eg the Legal Software Suppliers Association, Litig, the UK Legal Tech Association) appear more geographically agnostic. Most operate in their own right but some, such as those operated by the Birmingham Law Society and Law Society of England and Wales, sit within a wider entity. Please note that Table 5 is an illustrative – rather than exhaustive – list of self-organising UK legal technology groups (we have also excluded LinkedIn groups, which are numerous). Additionally, we have been unable to verify how many of these groups have survived the pandemic and remain active.

3.2.10. Technical infrastructure providers

The legal technology ecosystem is heavily dependent on what we describe as technical infrastructure providers (TIP). In essence, TIPs are technology providers whose solutions are, in turn, used by tech companies (Legg and Bell, 2020). In the legal technology space, one example of a TIP might be an optical character recognition (OCR) software provider, whose solution is used by an eDiscovery vendor to extract usable text from scanned digital images (Brown, 2016). A more general example of a TIP would be Microsoft, because many legal technology solutions are accessed from within Microsoft Office. Moreover, cloud storage and computing providers, such as Amazon Web Services, Google Cloud Platform, and Microsoft Azure, are included in this category.

We are not aware of any research that seeks to identify the most significant TIPs within the legal technology ecosystem. However, Crunchbase does capture details of specific

technologies that underpin the companies listed on its database. These companies include legal technology companies.

Group	Group description (s)/membership details	
Law and technology education network	45 institutions, mainly UK universities. The group shares information and materials, discusses law and technology education in the UK and beyond, and encourages new collaborations.	
Legal Hackers	'Legal Hackers is a global movement of lawyers, policymakers, designers, technologists, and academics who explore and develop creative solutions to some of the most pressing issues a the intersection of law and technology'. In the UK, the group list chapters in Belfast, Bristol, London, Manchester, Preston and Sheffield.	
Legal Tech Committee (Birmingham Law Society)	'Formally established in January 2021, we meet monthly, have weekly officers' meetings and an events team.'	
Legal Software Suppliers Association	'The Legal Software Suppliers Association is the UK industry body for legal systems developers and vendors. Representing most of the leading UK suppliers, it aims to both set and maintain professional standards within the industry and manage areas of mutual interest between lawyers and software providers.'	
Litig	'Litig, the Legal IT Innovators Group, is a non-profit organisation specifically designed to support senior professionals involved directly in all aspects of the implementation, use and support of Legal IT systems.'	
Meetup / EventBrite	Specialist legal technology groups include LawTech London (834 members), Improving Legal With Tech (1,566 members) Women in LawTech (543 members) and Bristol+Bath LegalTech (268 Twitter followers).	
Society for Computers and Law	'SCL's mission is to inform and educate legal and technology professionals, academics and students and the wider audience on the impact of IT on law and legal practice through the promotion of best practice, thought leadership, and the fostering of a global tech law community.'	
Technology and Law Committee (Law Society of England and Wales)	The committee has various objectives, including assisting the profession to adopt relevant new technologies and comply with IT-related professional obligations and regulatory requirements.	
UK Legal Tech Association	'The UKLTA's mission is to form a community where legal professionals, technology providers and consumers of legal services can come together in order to help shape the future of legal services delivery collaboratively.'	

 Table 3.5: Illustrative example of self-organising UK legal technology groups

Source: Organisation websites/correspondence with groups

3.2.11 Expertise consultants

There is now a clear sub-market of expert 'change agents' (Henderson, 2018) within the legal sector, who advise on – and assist with – the deployment of legal technology solutions, some alongside giving advice on legal operations. Here, the Big Four accountancy firms are understood to be notable market participants (Deloitte, 2017; Jomati Consultants, 2018; KPMG, 2020; PwC, 2020), although it is not always clear whether these services are offered globally, or on a UK-specific basis. More firmly within the UK are various legal technology deployment advisory businesses, including those offered by law firms, independent agencies and alternative legal service providers (ALSPs). Examples of UK-based expertise consultants include Simmons Wavelength and Eversheds Konexo (law firms), 3Kites Consulting and SYKE (independent consultancies), and Elevate and UnitedLex (ALSPs).

3.2.12. Other lawtech ecosystem participants

In terms of organisations, important members of the UK legal technology community arguably include legal technology conference organisers and the legal technology trade press and blog sites. Examples of the former include the British Legal Technology Forum and Legal Geek, while examples of the latter include the *Legal Technology Insider*, *Artificial Lawyer*, *Legal Futures*, and *The Legal Technologist*.

3.3 Legal technology entrepreneurial finance: an investment perspective

In this section, we will explore what is known about the funding of lawtech startups at various levels of granularity. We shall first explain what is known about levels of investment, at both a global and UK-specific level. To offer some context for this analysis, we shall also briefly outline recent trends in lawtech startup formation. Next, we explore the focal point of funding to date, focusing on 'use cases'– ie what solutions do – that have tended to receive funding, and on client types. Here, we are particularly interested in those lawtech startup companies that appear to receive the least amount of funding, and where gaps in the funding market are. We then explore the types of funding received by lawtech – seed, series A, B, C – and who is providing this funding. As part of this analysis, we explore the focal points of government (and quasi-government) funding. We then briefly explore what is known about access to funding from a diversity perspective. Here, we discuss two issues: the geographical diversity of funded companies, and the gender of the founders of funded lawtech companies. Finally, we briefly discuss what is known about the factors that contribute (or not) to the scaleup of lawtech startups.

This review draws on a diverse range of data sources (Tracxn, Crunchbase, Pitchbook etc), and each uses its own methods for identifying lawtech companies, including startups. As previously mentioned, there is no universally agreed taxonomy within this sector. Perhaps not surprisingly, therefore, these data sources come to different conclusions regarding specific issues which we wish to explore below. We therefore indicate where there appears to be broad agreement between comparable data sources, and also where there is not.

3.3.1. Legal technology funding – UK and global

Starting first with a 'big picture' overview of funding for lawtech companies: Table 3.6 is an extract from what we regard as the most exhaustive public domain studies of lawtech venture financing to date, produced by research company Tracxn. Please note that Tracxn

does not declare its data sources. Its legal technology report also states that it excludes law firms, managed legal services companies and companies based in China, except otherwise stated (Tracxn, 2020). We therefore treat Tracxn's findings as 'the best available at present' and 'nearly global – but not quite'.

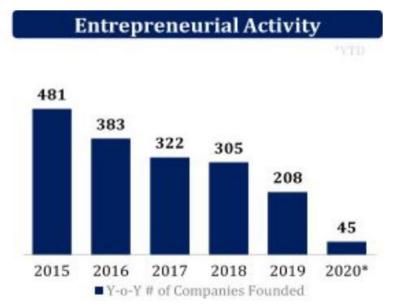
The Tracxn (2018, 2020) studies were undertaken two-and-a-half years apart, allowing a modest trend analysis. Drawing on Tracxn data in the published reports, we make two main observations. Firstly, that the number of lawtech startups globally (China-based companies excepted) appears to be increasing over time, although, as Figure 3.3 shows, new company formations per year appear to be decreasing. Secondly, the total value of third-party funding for legal technology is increasing. However, both of these observations come with important caveats. In relation to the rapid increase in the number of lawtech startups between January 2018 and July 2020 (1,800 to 3,764), we cannot be sure whether this increase is due to an absolute growth in company numbers, because the sector is expanding rapidly, or because of better data capture by Tracxn, as they do not disclose their methodology. With this caveat, granular Tracxn reporting also indicates market growth. For example, the numbers of recorded legal contract management solutions increased from 208 in 2018 to 532 in 2020; legal practice management solutions rose from 426 to 1,037, and IP management solutions from 166 to 328.

Table 3.6: Lawtech company population	and funding trends in the world, 2018–2020
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Key finding	January 2018	July 2020
Number of lawtech companies identified	1,800	3,764
Number of lawtech companies funded	382	857
Total value of funding	US\$2.7bn	US\$5.7bn

Source: Tracxn (2018, 2020)

Figure 3.3: Lawtech startup formations per year, globally



Source: Tracxn (2020)

In relation to the increase in third-party funding of lawtech companies, Tracxn reports that the average value of funding per funded lawtech company startup *declined* slightly from US\$7.07m per company in January 2018 to US\$6.65m per funded company in July 2020. (Other commentators have noted faltering overall annual legal technology investment values in recent years (Page, 2017a; Page, 2017b; Hongdao, Bibi et al, 2019)). Additionally, in terms of the percentage of lawtech companies that received funding remained almost unchanged, 21.22% in January 2018 and 22.77% in July 2020.

Closer to home, there is modest evidence to suggest that the above-mentioned trends are also prevalent within the UK. Firstly, prior research by Legal Geek and Thomson Reuters indicates that lawtech startups have grown over time, albeit at a lower rate since the mid-2010s (see Figure 3.4) (Legal Geek and Thomson Reuters, 2017; Legal Geek and Thomson Reuters, 2019; The Law Society, 2019; Herr, Godel et al, 2020). This echoes a trend seen globally (Tracxn, 2020) and also in other jurisdictions, such as Australia (Acritas, Legal Executive Institute et al, 2019). We reveal findings from our analysis of lawtech startups in the UK and US in Chapter 5 of our Final Report.

In terms of funding, the recently published UK strand of the Global Legal Tech Report (2020) suggests that 56% of lawtech companies have received funding, although it is not clear from this study what type of funding was received by these companies. The percentage of funded lawtech companies in the UK is therefore somewhat higher than the global average calculated by Tracxn, 21-23%, as discussed above.

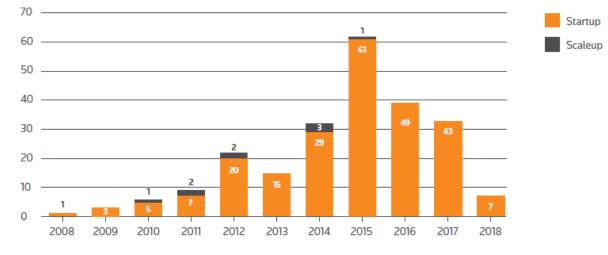


Figure 3.4: Number of UK legal technology startup formations over time

Source: Legal Geek and Thomson Reuters (2019)

In terms of the total values of funding received research undertaken by Tech Nation suggests that, as of May 2020, £230.4m has been raised by lawtech startups (Tech Nation, 2020). And, in terms of average funding values for each company, a LawtechUK report, dated December 2020, suggests the median investment raised by UK lawtech startups was £1m (LawtechUK, 2020) – a similar figure to a 2017 Legal Geek/Thompson Reuters' study, which suggested a value range of US\$900,000 –1,110,000 (Legal Geek and Thomson Reuters, 2017). We discuss why these investment levels are low below, where we evaluate

the type of funding received by lawtech companies – seed, angel, series A etc. But, to put these investments in context, it is worth noting that, not surprisingly, various publicly traded law firms have raised more money from investors compared with lawtech startups: £30m (Gateley); £20m (Gordon Dadds); £15m (Keystone Law); £43m (the Rosenblatt Group), £50m (Knights) and £95m (DWF) (Décideurs Magazine, 2019). It is therefore useful to note that the lawtech sector is not the only vehicle for third-party legal practice investment – at least, in the UK.

3.3.2. Focal point of funding – use case and clients

Turning now to the focal point of lawtech investments, based on use case. Here, at a global level, Tracxn arguably offers the most exhaustive insights (excluding China, law firm investments etc). In terms of investment value made, Tables 3.7 and 3.8 summarise the financial values of investment made – overall, and also within the past two years. Table 3.7 (all investments) focuses on top-level use cases (ie the broadest definition of what the legal technology solution does), whereas Table 3.8 (investments made in the past two years) focuses on more granular use cases. Notably, Tables 3.7 and 3.8 show how some use cases – notably contract management and eDiscovery – have consistently received high levels of funding. By contrast, legal technology company types, notably eSignature providers (which appears in Table 3.8 only), appear to come to funding prominence more recently. This is perhaps not a surprising development, given the rapid takeup of E-signatures in response to the pandemic. We discuss current and planned usage of E-signatures in Chapter 2 of our Final Report.

Another noticeable observation arising out of these two tables is that, at a global level, BigLaw use cases consistently receive significantly more funding than their PeopleLaw equivalents. In terms of total investments, the 'legal forms' category is the most notably PeopleLaw-centric classification, focusing as it does on 'online DIY legal form services for individuals, SMBs and enterprises'. In Table 3.7, this PeopleLaw use case type is ranked fifth (out of seven) in terms of total funding received. In terms of funding received during the past two years (Table 3.8), 'will planning' appears to be the most PeopleLaw-focused area of legal technology. During this period, this use case is ranked seventh (out of nine) in terms of funding received. We explore the BigLaw/PeopleLaw funding further in Chapter 5 of our Final Report. In Chapter 5, we compare BigLaw/PeopleLaw funding levels on a comparative UK/US basis.

Use case	Companies tracked	Companies funded	Total funding received (US\$)
Legal contract management	532	154	\$1.8bn
eDiscovery	155	60	\$948m
Legal practice management	1037	165	\$741m
IP management	328	104	\$499m
Legal forms	218	51	\$411m
Enterprise management suites (ie not just legal practice management)	33	9	\$275m
Legal research	292	84	\$274m

Table 3.7: Global legal technology funding by use case – total
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Source: Tracxn (2020)

Use case	Companies tracked	Investment values
Contract lifecycle management	139	\$343m
Legal practice management – suite	324	\$310m
eDiscovery – review and analysis	48	\$196.m
Contract analytics and due diligence	72	\$180m
Brand protection and anti-counterfeit	59	\$76.4m
Case and matter management	250	\$59.7m
Will planning	60	\$51.9m
Document assembly and automation	142	\$47.9m
E-signature	179	\$31.6m

Table 3.8: Legal technology funding by use case – last two years

Source: Tracxn (2020)

Turning now to UK-specific legal technology investments, research from 2019 (Legal Geek and Thomson Reuters, 2019) indicates that similar to global trends, lawtech companies that focus on contracts and documents (mainly in the BigLaw space) have received the largest levels of investment to date (between £70m – 80m). But consumer services were also one of the most popular sources of legal technology investment in the UK even if – in absolute terms – the overall financial value of these investments was lower (between £20m - and £30m) (see Figure 3.5). Legal Geek/Thomson Reuters' definition of consumer-based legal technology services includes consumer marketplaces for finding and engaging lawyers, criminal, employment, family and real estate-related services, dispute resolution platforms, templates for documents and contracts and also wills, tax, trust and probate services.

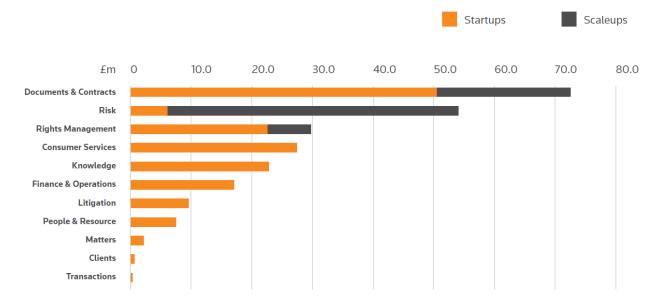
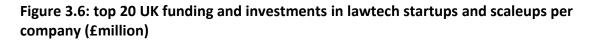
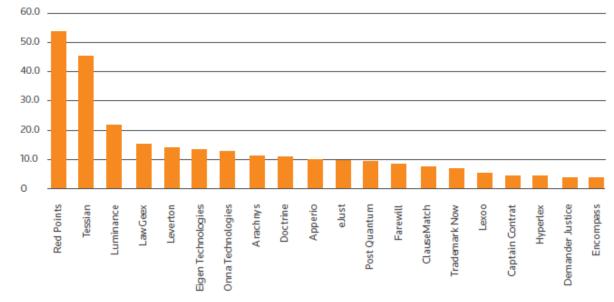


Figure 3.5: UK legal technology funding by use case

Source: Legal Geek and Thomson Reuters (2019)

The Legal Geek / Thomson Reuters' research does not provide a comprehensive breakdown of these investments by named companies across the startups and scaleups it evaluates however, by reviewing the top 20 investments by total value, it is possible to ascertain that a significant percentage of funding received by use case appear to be concentrated into a small number of blockbuster finance deals. For example, a significant percentage of the £70m - £80m contract-related funding – shown in Figure 3.6 below – can probably be accounted for by investments in just three companies: Luminance (founded in 2015, raised £20m - £30m), Leverton (founded 2012, raised £10m - £20m) and Eigen Technologies (founded 2015, raised £10m - £20). Similarly, around one third (£7.5m) of the consumer services funding is accounted for by just one company: Farewill (founded 2015). This suggests that, in addition to a small number of companies that received a high percentage of the industry sub-sector's overall funding, there is also a long tail of companies in the same industry sub-sector that receive little or no funding.





Source: Legal Geek and Thomson Reuters (2019)

On a related point, the same study also indicates the importance of the consumer services segment within the UK legal technology sector. Even evaluated by client type, as opposed to use case (table 3.9, below), the largest single cohort of UK legal technology companies target consumers as their client base, not legal services providers. This appears to be at odds with the global BigLaw-focused legal technology tendency, outlined in Table 3.8 above.

Table 3.9: Customer focus of UK lawtech startup and scaleup companies, by percentage of companies

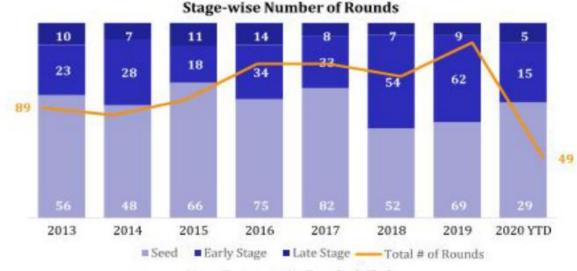
Client type	Percentage
Consumers	36%
Law firms and corporates	20%
Law firms	16%
Corporates – wider business	25%
Corporates – in-house only	2%
Other	1%

Source: Legal Geek and Thomson Reuters (2019)

3.3.3. Types of lawtech company startup investment, and funder identities

Turning now to types of investment in lawtech companies – seed, angel, series A etc: research from various sources indicates that, possibly owing to the 'embryonic' nature of the lawtech sector (The Law Society, 2019), we are currently at the stage of sector development where levels of investment are typically fairly low. On a funding stage basis, Tracxn's analysis indicates that – consistently over several years – the largest single cohort of lawtech company funding rounds are at seed stage. Other studies, including that by Henderson (2019), concur with this analysis. This is not to say that high-value, later stage investments do not happen in legal technology – they do (Ambrogi, 2019; Raymond James, 2020). However, as Figure 3.7 clearly illustrates, in all years shown bar 2018, seed stage investments were the largest single number of investment rounds. For the sake of clarity, Tracxn's 'seed' stage investments cover both angel (friends, family etc) and seed funding (the first significant funding round by venture capitalists); 'early stage' investments cover both series A and B funding rounds, and 'late stage' investments cover series C and above funding rounds, plus private equity.





New Entrants in Funded Club

Source: Tracxn (2020)

In Figure 3.8, below, we illustrate the median deal size and range of legal technology investments between 2011 and 2017, broken down by funding stage. Figure 3.9, meanwhile, illustrates the average value of funding deals, again broken down by funding stage. Both figures illustrate the elastic nature of legal technology funding rounds. Not only are there wide variations in funding values within each funding classification, the funding value of a specific investment type can also fluctuate over time.

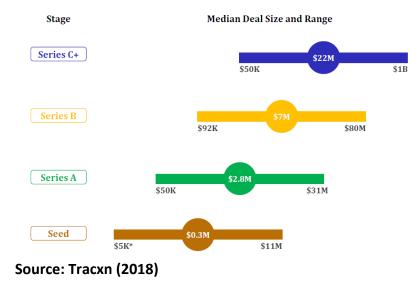


Figure 3.8: Median deal size and range in global lawtech company investment, 2011–2017

Figure 3.9: Trends in average deal size, 2011–2017



Trend of Average Deal Size (\$M)

Source: Tracxn (2018)

In terms of 'where companies are at' at any one time, Tracxn's 2018 report offers the most recent insights. Of the 1,800 companies founded, a total of 382 (21.2%) are funded (at all). And, of these 382, 123 (6.8% of the 1,800 total) have progressed from series A, 58 (3.2%) to series B and 38 to series C or above (2.1%). A 2017 US-specific study, which used Crunchbase as its data source, had somewhat different percentages but a similar overall narrative – the later the series funding, the smaller the percentage of companies who have received funding at that stage. In this study, 46% of surveyed companies were at seed stage, 18% at series A, 7% at series B, and 1% at series C – the remainder were either convertible note stage (ie in-between funding, issued at a discount) (7%) or unknown (20%) (Page, 2017). In Chapter 5 of our Final Report, we identify the total number of funding rounds undertaken by UK and US-based legal technology companies.

Our final observation regarding legal technology investments is the apparent lack of dominant players in the funding market for lawtech companies. For example, Tracxn's research (2020) shows that, between July 2015 and June 2020, the single most active seed stage legal technology investor was Seedcamp. However, even this funder made just six legal technology investments. By contrast, most other leading seed funders identified by Tracxn had made no more than two investments in the sector. Moreover, this behaviour was repeated at both early and late-stage investments. Given that these leading lawtech investors appear to be otherwise fairly prolific (as evidenced from their Crunchbase investment profiles), this indicates to us that even leading legal technology investors may be adopting a 'spray and pray' approach – ie they invest in many companies and hope that some investments ultimately generate positive results (Lerner and Nanda, 2020). That said, and by way of contrast, repeat investments were noticeably more apparent in incubators and accelerators. Here, five investors each made in excess of 10 investments in lawtech companies. These investors were: Plug and Play Tech Centre (16 investments); 500 startups (15 investments); Y Combinator (12 investments), MassChallenge (12 investments) and Duke Law Tech Lab (12 investments) (Tracxn, 2020).

At present, we are not aware of any prior research that has aimed to establish the concentration (or otherwise) of investors in UK-headquartered lawtech startup companies. Arguably, the closest equivalent are various curated lists of <u>lawtech companies</u> and <u>investors, accelerators and incubators</u> data view, offered by Tech Nation.

Returning to the Tracxn data, one of the notable UK-specific findings contained in this research is a high level of UK government-related financial backing of legal technology, notwithstanding the fact that Tracxn data is (almost) global in outlook. To explain, by reference to key investors, active between July 2015 and July 2020, as identified by (Tracxn, 2020):

- The seventh most notable incubator/accelerator was Tech Nation, with five investments. Tech Nation is supported by the UK government.
- Among 'other notable investors' identified by Tracxn, the highest ranked with three investments is the UK government itself.
- The seventh-highest ranked 'other notable investor' is UK Research and Innovation, a UK -government-backed academic grant-making body.

• With two investments, one of the leading seed stage investors is the Northern Powerhouse Investment Fund (NPIF). The NPIF is supported by the UK government-owned British Business Bank.

Elsewhere in this Annex Report – notably, our commentary on university funding (earlier in section 3.2.6) and government policies for promoting tech adoption (in section 3.4) – we identify various government-funded legal technology projects. And, while we have been unable to cross reference these funding sources with the Tracxn summary above, our strong assumption is that there is a commonality between the projects identified. If so, we would assume that UK government legal technology funding has tended to focus on early-stage, low value, investments. By contrast, more substantive venture capital investments, outlined above, tends to begin at a slightly later stage of the investment journey.

3.3.4. Lawtech funding: diversity issues

Turning now to diversity issues relating to legal technology financing, in a broad sense of the word: on a geographical basis, prior research has indicated the locations of UK-based legal technology startups and scaleups, revealing a strong London/south-east bias (Tech Nation; Herr, Godel et al, 2020). In relation to gender, prior UK-specific research has discovered that just 15% of UK lawtech startup founders or c-suite members are female (LawtechUK, 2020). This is a lower percentage than several other world regions, including both North America (where 21% of founders are female) and Asia, where the percentage of female founders is 30% (Global Legal Tech Report, 2020). Combining gender and funding issues, we are not aware of any prior research that has attempted to evaluate access to third-party funding by UK legal technology companies, by reference to the genders of their founding team. Our findings on this issue appear in Chapter 5 of our Final Report.

3.3.5. Factors that contribute (or not) to scaling up lawtech startups

Prior research contains countless rich accounts of the factors that might contribute to company scaleups, including the relative importance of many ecosystem participants identified elsewhere in this literature review. However, in terms of the legal technology sector specifically, we are aware of very little research into factors that contribute to legal technology scaleups. Indeed, possibly because many UK lawtech startups in the UK appear to have headcounts/revenues that are below mandatory Companies House reporting thresholds, we have even been unable to locate any research which establishes how many of these legal technology companies are currently profitable – arguably the most elemental basis for the sector's long-term sustainability and growth.

To date, arguably the most exhaustive account of factors that contribute to the scaleup of lawtech startups is research conducted by our own research team. This research explored the importance of founders' social networks to scaleup potential, including by reference to 137 lawtech startup companies in London, New York, and San Francisco. Perhaps one of the most significant findings of our study is that lawtech startups founded by people with recognised legal skills were 19% less likely to scale than those founded by people with other skills, including coding or finance skills (Sako, Qian et al, 2020). This is arguably an important finding from a funding perspective, given that just under half of lawtech startups are

believed to be founded by individuals with a background in law (Legal Geek and Thomson Reuters, 2017).

Offering more qualitative insights than either Sako, Qian et al's 2020 study or the Global Legal Tech Report, banking and wealth management group Investec recently identified various factors that investors and buyers of legal technology companies are looking for. These factors include a 'strong market position' (first to market, legal technology, scale), 'high recurring/structurally repeating revenues' and 'sticky, blue-chip customer base' (Investec, 2019). This latter consideration, in particular, would appear to suggest that Investec is not proposing that its lawtech investor should target the B2C or PeopleLaw market segment.

3.4. Government policies for promoting tech adoption, innovation, startups and funding

In recent years, the UK government has actively promoted technology adoption, innovation, startup founders and funders within the legal sector in a multiplicity of ways. Broadly, this promotion has come through four main government channels, plus one additional regulatory channel. These are firstly via the Department for Business Energy & Industrial Strategy (BEIS) and, secondly via the Ministry of Justice, thirdly, via the Competition and Markets Authority (CMA), and fourthly via regional development agencies. Finally, we briefly explore the overall regulatory framework for legal technology companies, which consists of a mixture of general governmental law and sector-specific regulations.

3.4.1. BEIS support

Starting first with BEIS: the UK Government's (2017) Industrial Strategy document has been the catalyst for much recent activity. The Industrial Strategy included what was known as a series of 'grand challenges' (Hall and Pesenti, 2017). These grand challenges, in turn, led to a series of industry-focused 'sector deals'. One of these sector deals – with an investment value of £1 billion – explicitly focused on the promotion of artificial intelligence (AI) (Department for Business Energy & Industrial Strategy and Department for Digital, 2018) and, in particular, 'next generation services' (NGS) (HM Government, 2017). One small segment of this £20m NGS fund, worth approximately £3m, ultimately resulted in funding for three academic research programmes to examine the use of AI in accounting, insurance and legal sectors (Office for Artificial Intelligence, 2019). One of the three is a multidisciplinary programme known as *Unlocking the Potential of AI for English Law* at the University of Oxford (Department for Business Energy & Industrial Strategy, UK Research and Innovation et al, 2018).

Another outcome of the UK Government's 2017 Industrial Strategy was the establishment of the £10m Regulators' Pioneer Fund (HM Government, 2017). This fund enabled various schemes, including a £943,000 award to the SRA to 'support business innovations that will use AI to transform the legal services market for small businesses and consumers' (Department for Business Energy & Industrial Strategy, Medicines and Healthcare Products Regulatory Agency et al, 2018; Kantar Public UK, 2021). The SRA partnered with Nesta to host the Legal Access Challenge, an access-to-justice focused initiative to 'support early-stage digital technology solutions that could directly help individuals and SMEs better understand their legal problems' (Tulk, Gorst et al, 2020). Besides assisting these digital

solutions providers directly, the Legal Access Challenge provided lessons learned that fed into the SRA's Corporate Strategy for 2020–2023. The Regulators' Pioneer Fund also impacted on the wider legal services market. For example, the Fund provided a £992,000 grant to the Intellectual Property Office to develop AI solutions relating to the online filing of intellectual property rights. It also provided a £332,000 grant to the Financial Conduct Authority for exploratory work relating to digital regulatory reporting (Kantar Public UK, 2021).

A third strand of UK government support to the legal sector that arose from the Industrial Strategy was the awarding of various grants, worth a total of £6.4m, for legal AI and data analytics projects. These grants, funded by the Next Generation Services Industrial Strategy Challenge Fund (NGSISCF), were overseen by UKRI. The 16 projects supported by UKRI / NGSISCF included a wide range of beneficiaries, including law firms, legal technology startups, universities, Citizens Advice Bureau and HM Land Registry. With support typically worth £350,000 or less (Hilborne, 2019), the funding offered was more akin to seed funding for experimental new offerings, rather than latter stage funding to help established solutions to scale. Additionally, and outside the NGSISCF, UKRI also funded several law firms and legal technology companies, drawing on a separate funding stream which aimed to support businesses through the COVID-19 pandemic. These awards were each worth between £25,000 and £100,000 (Rose, 2020a; Rose 2020b).

One noticeable aspect of these supported projects was both their geographical (Tulk, Gorst et al, 2020) and stakeholder (Hilborne, 2019) diversity. Arguably, the UK government's approach to legal technology sector support was therefore akin to an 'ecosystem', rather than a cluster-based (Swann and Prevezer 1996; Pitelis, 2012), approach. In very general terms, cluster-based support tends to focus on industry agglomeration within a defined geographical area, whereas an ecosystem approach tends to focus on multiple interacting stakeholders, with a lesser emphasis on their geographic locations.

As funding from the Government's 2017 Industrial Strategy comes to an end, a policy document published in spring 2021, *Build Back Better* (HM Treasury, 2021) provides an indication of priority sectors the government wishes to support as engines of innovation and growth. They include life sciences, the digital and creative industry sectors, clean energy, fintech, and defence and security (HM Treasury, 2021). While legal is not explicitly mentioned on this list, it is notable that *Build Back Better* retains the Industrial Strategy's prior support for greater use of AI and data – the initial 'hook' for much of the Industrial Strategy-related funding described above. Moreover, *Build Back Better* also includes a specific commitment to drive development of regtech apps, arguably a companion sector to lawtech. To aid this specific development, *Build Back Better* talks of converting 'UK business legislation into machine-readable data'. Separately, *Build Back Better* highlights the forthcoming Digital Strategy, which may also have some relevance to the legal sector.

Focusing specifically on AI, the most recent policy statements regarding this technology indicate that it appears to be an ongoing UK government priority, notwithstanding the cessation of the 2017 Industrial Strategy. At present, we are waiting to see what form future government support for AI might take (GOV UK, 2021). To date, the strongest indication of future government policy can be found in the recently published *AI Roadmap*, produced by

the AI Council (2021). The AI Council explicitly states that the UK's AI startup vendor community should be supported. It also states that: 'The UK cannot, and need not try to, compete equally in all economic sectors so it must shape its strategy carefully to ensure it prioritises and is able to act selectively to lead and to capture markets around the world.' Moreover, the sectors identified in this document do not include the legal sector. Instead, the report identifies the public, defence and security sectors as being a focus for support. The *AI Roadmap* also highlights the importance of access to data and governance issues surrounding the move to Net Zero carbon emissions (AI Council, 2021).

In terms of current and future government financial support to legal technology, we make three principal observations. Firstly, COVID-based support aside, UKRI's new research and innovation funding focus appears to support classic industry clusters (Porter, 2000) rather than the more geographically dispersed ecosystem approach, discussed previously. This cluster approach is demonstrated by the UKRI's recent funding awards via its Strength in Place Fund (UK Research and Innovation, 2021a; UK Research and Innovation, 2021b). Secondly, another potential source of UK government funding, the British Business Bank (BBB), is sector agnostic, in terms of the businesses it provides direct startup and scaleup financing to (British Business Bank, 2020). Moreover, the BBBs' two main subsidiaries, British Patient Capital and British Business Investments have not placed a heavy emphasis on legal technology investment (see figures 10 and 11 below). By contrast, both of these institutions have expressly drawn attention to their support for the fintech sector. Thirdly, the British Patient Capital/British Business Investments approach to funding emphasises investing in investment funds – which, in turn, then invest in tech companies including, occasionally, lawtech startups. Finally, we do not currently have visibility regarding future BEIS support for digital technology and innovation in legal services. Potential support may emerge as the top-level policy positions set out in Build Back Better and the Al Roadmap translate into funding streams for specific programmes of activity – notably in relation to regtech.

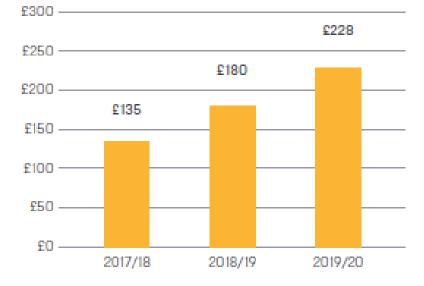
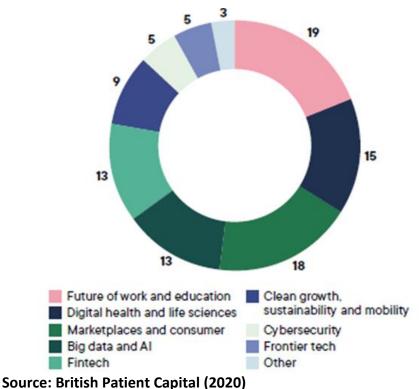


Figure 3.10: British Business Investments' cumulative fintech commitments (£m)

Source: British Business Investments (2020)

Figure 3.11: British Patient Capital's investment portfolio by theme, as of March 2020 (%)



3.4.2. Competition and Markets Authority support

We now briefly turn to the role of the CMA in promoting the development of the legal technology ecosystem. Here, we focus on the CMA's attempt to promote the take-up of consumer-focused digital comparison tools (DCTs) – essentially tools that are intended to make it easier for consumers to shop around for legal services (CMA, 2020). We focus on this issue for two main reasons. Firstly, because DCTs are arguably the most legal technology-focused aspect of the CMA's current interest in the UK legal sector, and secondly, because consumer marketplaces (CMs) are one of the largest single subcategories of legal technology. According to research conducted by Legal Geek and Thomson Reuters (2019), CM-focused lawtech startups account for 24 of the 110 legal technology companies based in the UK.

DCTs and CMs do not entirely overlap with each other, in terms of their function and purpose. However, they are closely associated with each other. Legal Geek and Thomson Reuters describe a CM as being an 'online portal or platform for finding and engaging a lawyer or legal firm for a variety of services'. Meanwhile, the CMA's definition of a DCT is a service that helps 'consumers compare providers of legal services.' Here, the CMA's long-standing areas of focus regarding legal sector DCTs are (a) price comparison capabilities and (b) a capability to allows consumers to select providers directly (CMA, 2016).

In order to promote the development of CMs/DCTs, the CMA has been working with frontline legal regulators, including the SRA. Here, the focal point of activity has been the encouragement (or mandating of) greater transparency from regulated legal practices,

particularly in relation to the pricing and quality of services. CMA has also advocated improving the standardisation of pricing information being made available to DCTs, and has called for improved information regarding quality and consumer reviews (CMA, 2020). This enhanced transparency, the CMA states in its 2020 report, will help drive the development of the DCT market. In particular, it would be difficult to have DCTs function effectively without such standardised data.

Obtaining buy-in from relevant stakeholders to grow this market has historically been difficult. Echoing our earlier observation regarding the challenge of accessing data, the SRA found that – in relation to DCTs – 'only 2% of providers provide information to DCTs and only 2% said that they intend to in the future' (SRA, 2020). Moreover, recent research has shown that just 13% of individual consumers and 22% of SME customers have used legal price comparison sites and 21% and 26% have used legal review sites (Giddings, Macfadyen et al, 2020). Here, it may be relevant that the CMA (2020) recently observed that some of the DCTs are 'either inactive or have very little activity', while Money supermarket's singular legal focus is in relation to conveyancing. Collectively, this may explain the current low takeup of DCTs by providers and consumers alike: the legally-focused DCTs do not yet have market traction to warrant consumers and providers using them to a significant extent, while Moneysupermarket – which does have market traction – does not provide coverage across the vast majority of PeopleLaw specialisms. The other mainstream DCT that covers the legal sector – TrustPilot – provides supplier reviews, but does not offer a price comparison service. Perhaps for that reason, the CMA recently observed that 'it appears that the overall scale of [legal sector] DCT activity remains fairly low especially for price comparison services.' (CMA, 2020).

In an attempt to increase engagement from legal services providers and consumers with DCTs, in February 2021, the SRA launched a pilot scheme in relation to conveyancing and employment law. This scheme aims to improve the information regarding quality and consumer reviews available to consumers through DCTs, to help consumers compare providers. The SRA has informed us that 'the initial results are promising with both Trustpilot and Review Solicitors reporting significant increases in engagement from law firms and in the numbers of consumers using their platforms'. The SRA has also informed us that it apricates that 'engagement with price comparison websites has been slower to grow, and regulators will need to understand the barriers to engagement with this type of DCT and how they might be overcome if shopping around for legal services is to truly take-off.' More recently, and reflecting the multi-regulator attempts to promote legal DCTs, the LSB has indicated a willingness to initiate an accreditation scheme for DCTs (Legal Futures, 2021).

Overall, the CMA / SRA / LSB activities show a clear determination by all parties to grow this particular segment of the UK legal technology sector – using regulatory powers to do so where necessary. Whether this regulatory activity will ultimately bear fruit remains to be seen. What is currently unknown is whether the current low levels of legal sector DCT usage is mainly due to a (historical) lack of useful data (especially pricing and review data) which has hindered the market from developing, or because of consumers' long-standing tendency not to shop around for legal services. If, ultimately, this legal technology market segment

fails to grow to any significant degree, it will not be for lack of prior regulator encouragement.

3.4.3. Ministry of Justice support

Here, we focus on the Ministry of Justice (MoJ) and its associated organisations. To the best of our knowledge, the MoJ has supported two strands of innovation activity – one valued at £2m and one valued at £1bn.

The £2m support package aims to support new and emergent technologies in the legal sector (Ministry of Justice, 2019b). This investment was made via an innovation grant to Tech Nation (Hill, 2019a). Tech Nation, in turn, supports LawtechUK. The principal activities of Lawtech UK are a lawtech sandbox pilot (a safe environment to innovate, test and learn about lawtech solutions), supported by a 'fast response forum' (Hilborne, 2020) of regulators for advice and support); an SME dispute resolution platform; a Regulatory Support Unit, and an online hub and training centre and toolkits (Tech Nation, 2021). The LawtechUK sandbox pilot came to an end on 25 March 2021 (Swallow, 2021).

The £1bn court reform programme aims to modernise and improve the experience of those who use the court service. Arguably, the main output of this initiative to date is that members of the public 'can now apply for uncontested divorce online, apply for probate online, make pleas online for low-level offences (such as traffic offences or evading bus fares), respond to jury summonses, track social security and child support appeals online, and issue and respond to civil money claims online' (Ministry of Justice, 2019a). Legal practitioners can now also make use of the MyHMCTS online case management solution. Practice areas covered by MyHMCTS include divorce, probate, financial remedies, immigration and asylum, and family public law services (Chapman, 2021). The objective of this project therefore is two-fold. On the one hand, a significant element of this project appears to aim to displace the role of lawyers to reduce costs, by allowing private citizens to self-serve their legal needs. On the other hand, MyHMCTS appears to be focused on improving legal service delivery for lawyers, by creating an online case management tool.

3.4.4. Regional development agency support

Finally, we turn to government-backed regional development support for fostering innovation in legal services. Here, a notable sector example is Belfast, which is arguably well on its way to becoming a successful legal sector innovation cluster (Swann and Prevezer 1996; Pitelis, 2012). Belfast's journey to becoming this innovation cluster was not triggered solely by entrepreneurs coalescing in the city and creating new businesses, as some prior research literature suggests (Porter, 2000; Feldman, Francis et al, 2005). Instead, the initial driver of this market change was Invest Northern Ireland, a regional development quango. Since 2011, Invest Northern Ireland has been highly successful in attracting nearshore centres of major law firms (Jomati Consultants, 2016) to Belfast, to the point at which this market is now considered saturated (Jomati Consultants, 2019). Subsequently, the territory has developed a more broad-based legal technology ecosystem, including legal technology companies such as iManage, SaltDNA and Repstor (Invest Northern Ireland), in-house legal support functions for BT (Invest Northern Ireland, 2020) and The Financial Times (Law Society of Northern Ireland, 2020), and Ulster University's Legal Innovation Centre (Ulster University, 2017).

The level of financial support given by Invest Northern Ireland to individual organisations to establish in Belfast are not large: typically ranging from tens of thousands of pounds to £2.5m (Jomati Consultants, 2019). However, the net result of this proactive government championing is a legal and professional services sector that now employs around 16,000 people (Invest Northern Ireland). Of those, close to 2,000 are understood to work for those organisations that Invest Northern Ireland directly helped bring to Belfast. On a per-head basis, the levels of public sector investment per job created in Belfast are estimated to range from £4,000 to £15,686 (Jomati Consultants, 2019). In Chapter 3 of our Final Report, we explore the geographical dispersion of legal technology and innovation-related jobs and salaries commanded.

3.4.5. Regulatory framework for lawyers' use of legal technology

Finally, we turn to lawyers' regulatory framework as a possible tool for facilitating the deployment of legal technology (Hook, 2019). For example, in some US states, lawyers are now under a professional obligation to be competent in the use of technology (Johnson, 2020; Shope, 2021) – to the extent that it is arguably a professional requirement to use specific legal technology solutions in certain situations (ie eDiscovery) (Browning, 2019; O'Leary, 2020). Because the legal technology environment of England and Wales appears to be largely unregulated (Hook, 2019; Mayson, 2020), we are not aware of any general duty on lawyers in England and Wales to have a legal technology competency. Instead, the overall approach of the UK government – and its various legal regulators – has been to encourage legal technology usage within the sector while not generally mandating it. At the same time, there is a pressing policy concern about how the UK government and its regulators should extend their regulatory remit beyond the regulated sector. In order to inform this debate, Chapter 3 of the Final Report outlines the unregulated legal sector from a labour market perspective. Additionally, in Chapter 5, we discuss the size and shape of lawtech startup companies which are largely – with a few exceptions – in the unregulated sector.

3.5 Conclusions

In this chapter, we have set out what we regard as the main participants in the lawtech ecosystem. Overall, we find a broadly positive picture. At the earliest stage of lawtech startup development, we find an engaged university sector, willing to work alongside startups and other ecosystem participants to develop new solutions. We also find a respectable cohort of legal technology-focused incubators and accelerators that have supported a significant majority of UK lawtech startups. We find a reasonable – if diffuse – spread of investors, willing to fund a diverse range of lawtech startups, and a government and legal regulatory arrangement that is both proactive, both in terms of funding provision and market-growing regulatory activities. We observe a wide range of self-organising legal technology groups which, we hope, have survived the pandemic.

There are, of course, notable challenges facing the sector. Firstly, we simply do not know how many UK-based lawtech startup companies are currently trading profitably. This will not become clear until more companies grow to a sufficient size that full financial reporting becomes mandatory. Secondly, and more generally, we note that data access is regarded as a challenge by some lawtech startups, although proactive steps are being taken by the UK government and regulators to mitigate against this challenge. We also note the geographical imbalance in the UK lawtech community, and also the gender imbalance in those who found lawtech companies.

References

Acritas, Legal Executive Institute and P. Monitor (2019) *Australia: State of the Legal Market*, Thomson Reuters.

AI Council (2021) UK AI Council: AI Roadmap.

Al-Abdulkarim, L., K. Atkinson, T. Bench-Capon, S. Whittle, R. Williams, and C. Wolfenden (2017) *Noise induced hearing loss: an application of the Angelic Methodology*. Legal Knowledge and Information Systems – Jurix 2017: The Thirtieth Annual Conference, Amsterdam and Clifton: IOS Press.

Allen & Overy (2017) Applications now open for Fuse, a new tech innovation space by Allen & Overy. London.

Alvedalena, J. and R. Boschmaa (2017) A critical review of entrepreneurial ecosystems research: towards a future research agenda. *European Planning Studies* 25(6): 887–903.

Ambrogi, B. (2017) Legal Services Innovator Axiom Unveils Its First AI Offering. *Above the law*.

Ambrogi, B. (2019) At \$1.2 Billion, 2019 Is A Record Year for Legal Tech Investments — And It's Only September. Lawsiteblog.com.

AngelList. Retrieved 04 May 2021, from https://angel.co/legal.

Armour, J. R. Parnham, and M. Sako (2020) *Augmented Lawyering*, European Corporate Governance Institute.

Armour, J. and M. Sako (2020) AI-Enabled Business Models in Legal Services: From Traditional Law Firms to next-Generation Law Companies. *Journal of Professions and Organization* 7(1): 27–46.

Artificial Lawyer. *AI 100/Billing + Time Analysis*. from https://www.artificiallawyer.com/al-100-directory/billing-time-analysis/.(Retrieved 27 April 2021)

Artificial Lawyer (2017a) Allen & Overy Picks iManage/RAVN For Fuse Tech Programme. *Artificial Lawyer*.

Artificial Lawyer (2017b) Kira Systems Partners with Global LPO Integreon in Major Client Win. *Artificial Lawyer*.

Artificial Lawyer (2017c) MDR LAB Incubator Announces Legal Tech Participants. Artificial Lawyer.

Artificial Lawyer (2018a) Allen & Overy Announces Second Cohort for Fuse Incubator. *Artificial Lawyer*.

Artificial Lawyer (2018b) Legal Tech Incubator MDR LAB Launches 2nd Cohort. *Artificial Lawyer*.

Artificial Lawyer (2019a) Allen & Overy's FUSE Tech Space Welcomes HighQ + 3 Other New Members. *Artificial Lawyer*.

Artificial Lawyer (2019b) The Full List: Which Law Firms + Tech Co.s Won Innovate UK Funding? *Artificial Lawyer*.

Artificial Lawyer (2019c) MDR LAB Legal Tech Incubator New Cohort Announced. *Artificial Lawyer*.

Artificial Lawyer (2019d) PwC LawTech Scale-Up Accelerator – The Full Cohort List + Contract Mill Comment. *Artificial Lawyer*.

Artificial Lawyer (2019e) Slaughter and May Announces Collaborate Legal Tech Incubator Cohort. *Artificial Lawyer*.

Artificial Lawyer (2020a) A&O's Fuse Returns With Legal + FinTech Streams. Artificial Lawyer.

Artificial Lawyer (2020b) Geovation Accelerator Calls For Applicants – PropTech, GeoTech, (+ LegalTech). Artificial Lawyer.

Artificial Lawyer (2020c) PwC LegalTech Accelerator Reopens Via Zoom, Clarilis Join. *Artificial Lawyer*.

Atomico (2020) The State of European Tech. Atomico.

Barczentewicz, M. (2021) Teaching Technology to (Future) Lawyers. *SSRN*, University of Surrey; University of Oxford.

Becerra, S.D. (2018) The Journal of Business, Entrepreneurship & the Law. *The Journal of Business, Entrepreneurship & the Law* 11(1): 27–52.

Betts, K.D. and K.R. Jaep (2017) The Dawn of Fully Automated Contract Drafting: Machine Learning Breathes New Life into a Decades-Old Promise. *Duke Law & Technology Review* 15: 216–233.

Bone, J., O. Allen, and C. Haley (2017) *Business incubators and accelerators: The national picture*. London: Department for Business, Energy & Industrial Strategy.

Bone, J., J. Gonzalez-Uribe, C. Haley, and H. Lahr (2019) *The impact of business accelerators and incubators in the UK*. Department for Business Energy & Industrial Strategy.

Bradley, A. (2019) Closing the legal gap through technology. *Legal Futures*.

British Business Bank (2020) Annual Report and Accounts 2020: Supporting smaller businesses across the UK. British Business Bank.

British Business Investments (2020) Annual Report and Accounts 2020: Investing to support growth, British Business Investments.

British Patient Capital (2020) Annual Report and Accounts 2020: Fuelling innovation, powering growth. British Patient Capital.

Brown, S. (2016) Peeking inside the Black Box: A Preliminary Survey of Technology Assisted Review (TAR) and Predictive Coding Algorithms for eDiscovery. *Suffolk Journal of Trial & Appellate Advocacy* 21(2): 221–288.

Browning, J.G. (2019) The New Duty of Digital Competence: Being Ethical and Competent in the Age of Facebook and Twitter. *University of Dayton Law Review* 44(2): 179–198.

Chambers and Partners (2020) Alternative Legal Service Providers 2020.

Chapman, S. (2021) A year in review: How MyHMCTS has become an essential service for professional users. *Inside HMCTS* https://insidehmcts.blog.gov.uk/2021/02/17/a-year-in-review-how-myhmcts-has-become-an-essential-service-for-professional-users/?utm_medium=email&utm_source= (Accessed 18 April 2021).

CMA (2016) Legal services market study: Final report. Competition & Markets Authority.

CMA (2020) Review of the legal services market study in England and Wales: An assessment of the implementation and impact of the CMA's market study recommendations. Competition & Markets Authority.

Costa Damasceno, E. (2019) *How business models and technologies are being integrated in Legal Tech companies?* Masters thesis, Universidade Do Porto

Cross, M. (2018) Eagle has landed: latest lawtech incubator opens doors. *Law Society's Gazette*, Law Society.

Décideurs Magazine (2019) DWF Goes Public: Anatomy of a Law Firm IPO. *Decideurs Magazine*

Deloitte A changing world requires a new approach to law.

Deloitte (2019) *Deloitte Legal launches programme to propel next generation of legal technology*. Deloitte.

Department for Business Energy & Industrial Strategy and Department for Digital, Media & Sport, (2018) *Industrial Strategy: Artificial Intelligence Sector Deal*.

Department for Business Energy & Industrial Strategy, Medicines and Healthcare Products Regulatory Agency, Ofgem, Ofcom, Civil Aviation Authority and Rt Hon Greg Clark MP (2018) *Projects lay the groundwork for a future of robolawyers and flying cars.*

Department for Business Energy & Industrial Strategy, UK Research and Innovation, Ministry of Justice, Economic and Social Research Council, the Rt Hon Greg Clark MP, Innovate UK and the Rt Hon David Gauke (November 2018) *New era of tech-driven legal and financial services to boost productivity and improve customer experience*.

Diemers, D., A. Lamaa, J. Salamat, and T. Steffens (2015) *Developing a FinTech ecosystem in the GCC. Let's get ready for take off*, Strategy&.

Eigen Technologies. How we're different/security. Retrieved 27 April 2021, from <u>https://eigentech.com/product/#how-companies-use-it</u>.

Elevate (2018) *Elevate Acquires LexPredict, Expanding Capabilities in Artificial Intelligence and Data Science*, Elevate.

Elevate (2019) Elevate Acquires Yerra Solutions. London.

Feldman, M.P., J. Francis, and J. Bercovitz (2005) Creating a Cluster While Building a Firm: Entrepreneurs and the Formation of Industrial Clusters. *Regional Studies* 39: 129–141.

Flanagan, P. and M. Hook Dewey (2019) Where do we go from here? Transformation and acceleration of legal analytics in practice. *Georgia State University Law Review* 35(4): 1246–1268.

Foster, W.E. and A.L. Lawson (2018) When to Praise the Machine: The Promise and Perils of Automated Transactional Drafting. *South Carolina Law Review* 69(3): 597–636.

Gallagher, H. (2020) The Deployment of Big Data Analytics Technologies in Law Firms in Ireland and the Potential Impact on the Future Delivery of Legal Services: Risks and Solutions. *Hibernian Law Journal* 19: 45–81.

Galloway, K., J. Webb, F. Bartlett, J. Flood, and L. Webley (2019) The Legal Academy's Engagements with Lawtech: Technology Narratives and Archetypes as Drivers of Change. *Law, Technology and Humans* 1(1): 27–45.

Global Legal Post (2019) Deloitte Legal launches UK tech incubator with 14-strong cohort. *Global Legal Post*.

Global Legal Post (2020) Slaughter and May unveils remote legal tech incubator programme. *Global Legal Post*.

Global Legal Tech Report (2020) The United Kingdom 2020 – A Report on the Business of Legal Tech *Global Legal Tech Report*.

GOV UK (2019) *Legal Support Action Plan*. <u>https://www.gov.uk/government/publications/legal-support-action-plan</u>.

GOV UK (2021) New strategy to unleash the transformational power of Artificial Intelligence. GOV UK, https://www.gov.uk/government/news/new-strategy-to-unleash-thetransformational-power-of-artificial-intelligence

Hall, W. and J. Pesenti (2017) *Growing the Artificial Intelligence Industry in the UK*. Department for Digital Culture Media & Sport; Department for Business Energy & Industrial Strategy.

Hartung, M., M. Bues, and G. Halbleib (2018) *Legal Tech: A Practitioner's Guide*. Bloomsbury Publishing Plc

Hayter, C.S., R. Lubynsky, and S. Maroulis (2016) Who Is the Academic Entrepreneur? The Role of Graduate Students in the Development of University Spinoffs. *The Journal of Technology Transfer*: 1–18.

Henderson, W.D. (2018) Innovation Diffusion in the Legal Industry. *Dickinson Law Review* 122: 395–478.

Henderson, W.D. (2019) *The Current State of Play in Legal Innovation: A New Era of Evolution in the Making* (109) <u>https://www.legalevolution.org/2019/08/the-current-state-of-play-in-legal-innovation-a-new-era-of-evolution-in-the-making-109/</u>. (Retrieved 9 May 2021)

Herr, D., M. Godel, R. Perkins, and J. Forrester (2020) AI for Services: Full report 2020.

Hilborne, N. (2019) Government pumps £6m into legal AI and analytics projects. *Legal Futures*.

Hilborne, N. (2020) Five businesses chosen for 'lawtech sandbox' pilot. Legal Futures.

Hill, C. (2019a) As MoJ invests £2m in legal tech legaltech we need to fixate on details not ideals. *Legal Technology Insider*.

Hill, C. (2019b) The French ban: The Law Society comments. *Legal Technology Insider*.

Hill, C. (2020) DWF to acquire managed services business Mindcrest for US\$18.5m. *Legal Technnology Insider*.

HM Government (2017) *Industrial Strategy: Building a Britain fit for the future*. HM Government.

HM Treasury (2021) Build Back Better: our plan for growth, HM Treasury.

Hongdao, Q, S. Bibi, A. Khan, and L. Ardito (2019) Legal Technologies in Action: The Future of the Legal Market in Light of Disruptive Innovations. *Sustainability* 11.

Hook, A. (2019) *The Use and Regulation of Technology in the Legal Sector beyond England and Wales*. Hook Tangaza.

Ingram, C. and A. Drachen (2020) *How do Software Professionals Use Local Informal Meetups?* Digital Creativity Labs: University of York.

Innovate UK. *Completed Partnership Search*. <u>https://info.ktponline.org.uk/action/search/complete_res.aspx?srchtype=simple&tech=-1&sic=00&kbp=-1&loc=XX</u>. (Retrieved 29 April 2021)

Invest Northern Ireland. *Legal technology & innovation* <u>https://www.investni.com/legal-technology-and-innovation</u>. (Retrieved 19 April 2021)

Invest Northern Ireland. *Professional and legal services* <u>https://www.investni.com/invest-in-northern-ireland/professional-and-legal-services</u>. (Retrieved 19 April 2021)

Invest Northern Ireland (2020) *BT to establish Northern Ireland Legal Hub with over £2m investment and up to 30 jobs.* Invest Northern Ireland.

Investec (2019) LegalTech & NewLaw: Q2 19 Update. Investec.

Isenberg, D. (2011) *The Entrepreneurship Ecosystem Strategy as a New Paradigm for Economic Policy: Principles for Cultivating Entrepreneurship*. Babson College, Babson Park MA: Babson Entrepreneurship Ecosystem Project.

Jacobides, M.G., C. Cennamo, and A. Gawer (2018) Towards a theory of ecosystems. *Strategic Management Journal* 39(8): 2255–2276.

Johnson, L.D. (2020) Navigating Technology Competence in Transactional Practice. *Villanova Law Review* 65(1): 159–190.

Jomati Consultants (2016) *Re-engineering legal services. How traditional law firms are – finally – learning to embrace alternative working practices*. London: Jomati Consultants.

Jomati Consultants (2018) *Law firm innovation and use of LegalTech – a reality check*. London: Jomati Consultants

Jomati Consultants (2019) *The legal sector in Wales – a rapid review*. London: Jomati Consultants.

Kantar Public UK (2021) *Evaluation of the Regulators' Pioneer Fund (Round 1)* Project Descriptions.

Kira Systems. Integreon leverages Kira to help a global ride-sharing company reduce overall contract review time by 40%. <u>https://kirasystems.com/resources/case-studies/integreon/</u>. (Retrieved 4 May 2021)

KPMG (2020) KPMG launches legal department transformation offering KPMG

Kronblad, C. (2020) How Digitalization Changes Our Understanding of Professional Service Firms. *Academy of Management Discoveries* 6(3): 436–454.

Law Society of Northern Ireland. (2020) Legal Counsel – Belfast (The Financial Times) <u>https://www.lawsoc-ni.org/legal-counsel-belfast-the-financial-times</u>. (Retrieved 19 April 2020)

LawtechUK (2020) Lawtech: a shared opportunity. Global LegalTech Summit 2020, Online.

Lee, I. and Y. Jae Shin (2018) Fintech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons* 61: 35–46.

Legal Geek and Thomson Reuters (2017) *Movers and shakers – lawtech startup* Legal Geek, Thomson Reuters.

Legal Geek and Thomson Reuters (2019) Legaltech startup report 2019: A maturing market.

Legal Services Consumer Panel (2020) *Tracker survey 2020: how consumers are choosing legal services*, Legal Services Consumer Panel.

Legg, M. and F. Bell (2020) *Artificial Intelligence and the Legal Profession*. Oxford: Hart Publishing.

Lerner, J. and R. Nanda (2020) Venture Capital's Role in Financing Innovation: What We Know and How Much We Still Need to Learn. *Journal of Economic Perspectives* 34: 237–261.

Linna Jr, D. (2016) What We Know and Need to Know about Legal Startups. *South Carolina Law Review* 67(2): 389–418.

Logan, A. (2019) *What is a Scaleup?* <u>https://technation.io/news/what-is-a-scaleup/</u>. (Retrieved 9 May 2021)

Lukosiute, K., S. Jensen, and T. Tanev (2019) Is Joining a Business Incubator or Accelerator Always a Good Thing? *Technology Innovation Management Review* 9(7): 5–13.

Malecki, E.J. (2018) Entrepreneurship and entrepreneurial ecosystems. *Geography Compass* 12(3): 1–21.

Mayson, S. (2020) *Reforming legal services: regulation beyond the echo chambers*. Centre for Ethics & Law, University College London.

McAfee, D. (2021) Ross Intel Must Face Thomson Reuters' Westlaw Copyright Lawsuit. *Bloomberg Law*.

Mian, S.A. (2021) Whither modern business incubation? Definitions, evolution, theory, and evaluation. In Mian, S.A., M. Klofsten, and W. Lamine, *Handbook of Research on Business and Technology Incubation and Acceleration: A Global perspective*: 17–38.

Ministry of Justice (2019a) *Legal services and LawTech bolstered with £2 million of government funding* Ministry of Justice.

Ministry of Justice (2019b) *Legal Support: The Way Ahead. An action plan to deliver better support to people experiencing legal problems*. Ministry of Justice.

Ministry of Justice. (2020) *Ministry of Justice: Data First.* <u>https://www.gov.uk/guidance/ministry-of-justice-data-first#history</u>. (Retrieved 5 May 2021)

Ministry of Justice/HM Courts & Tribunal Services (2021). *Boost for open justice as court judgements get new home*. Ministry of Justice/HM Courts & Tribunal Services (Retrieved 8 July 2021)

Moore, J.F. (1993) Predators and Prey: A New Ecology of Competition. *Harvard Business Review*: 75–86.

Moran, L. (2020) ROSS Intelligence will shut down amid lawsuit from Thomson Reuters. *ABA Journal*. ABA

O'Leary, D. (2020) 'Smart' Lawyering: Integrating Technology Competence into the Legal Practice Curriculum. *SSRN*. Suffolk University Law School

O'Leary, D.L. (2019) License to Hack. New York University Law Review Online 94: 56–95.

Office for Artificial Intelligence (2019) *AI sector Deal: One Year On*. Office for Artificial Intelligence.

Page, H. (2017a) Lawyer Culture: The Boundary To VC Funding For Legal Startups? *Crunchbase News*.

Page, H. (2017b) Legal Tech Fails To Sustain Deal Counts And Dollar Amounts. *Crunchbase News*.

Pitelis, C. (2012) Clusters, entrepreneurial ecosystem co-creation, and appropriability: a conceptual framework. *Industrial and Corporate Change* 21(6): 1359–1388.

Porter, M.E. (2000) Location, Competition, and Economic Development: Local Clusters in a Global Economy. *Economics Development Quarterly* 14(1): 15–34.

Pullen, T. (2019) *ThoughtRiver announces pre-screening tech roll-out to G4S partnering with Eversheds Sutherland*. ThoughtRiver.

PwC (2020) *Legal tech strategy*. <u>https://www.pwc.co.uk/services/forensic-services/digital-forensic-investigations/legal-tech-strategy.html</u>. (Retrieved 30 April 2021)

Raymond James (2020) *European Legal Tech & Services*. Raymond James.

Roegiest, A., A. Hudek, and A. McNulty (2018) A Dataset and an Examination of Identifying Passages for Due Diligence. *The 41st International ACM SIGIR Conference on Research & Development in Information Retrieval*. Ann Arbor MI

Roper, S., J. Love, P. Rieger, and J. Bourke (2015) *Innovation in legal services: A report for the Solicitors Regulation Authority and the Legal Services Board*. OMB Research Ltd, University College Cork.

Rose, N. (2020a) Government awards cash for Covid lawtech innovation. Legal Futures.

Rose, N. (2020b) Law firm and start-ups awarded government cash to develop lawtech. *Legal Futures*.

Rose, N. (2021). LSB eyes accreditation scheme for comparison websites. *Legal Futures*.

Ryan, F. (2020) Rage against the machine? Incorporating legal tech into legal education. *The Law Teacher*: 1–13.

Sako, M., J. Armour, and R. Parnham (2020) *Lawtech adoption and training. Findings from a survey of solicitors in England and Wales*. Oxford: University of Oxford / Law Society.

Sako, M. and M. Qian (2021) A taxonomy for technology venture ecosystems. *SSRN* University of Oxford

Sako, M., M. Qian, M. Verhagen, and R. Parnham (2020) Scaling up firms in entrepreneurial ecosystems: fintech and lawtech ecosystems compared. *SSRN*, University of Oxford.

Scott, S. and R. Khurana (2003) Bringing individuals back in: The effects of career experience on new firm founding. *Industrial and Corporate Change* 12(3): 519–543.

Shope, M.L. (2021) Lawyer and Judicial Competency in the Era of Artificial Intelligence: Ethical Requirements for Documenting Datasets and Machine Learning Models. *The Georgetown Journal of Legal Ethics* 34: 191–222.

Slaughter and May (2016) *Luminance launches with the backing of Invoke Capital and in collaboration with Slaughter and May*. London.

Smets, M., T. Morris, A.V. Nordenflycht, and D.M. Brock (2017) 25 years since "P2": Taking stock and charting the future of professional firms. *Journal of Professions and Organization* 4(2): 91–111.

SRA (2020) CMA Call for Inputs: SRA Response. Solicitors Regulation Authority.

Son, H. (2017) JPMorgan Software Does in Seconds What Took Lawyers 360,000 Hours. *Bloomberg.com*.

Stam, E. and B. Spigel (2016) Entrepreneurial Ecosystems, Tjalling C. Koopmans Research Institute.

Swallow, J. (2021) What can we learn from the application phase of the Lawtech Sandbox *Pilot?* Tech Nation.

Swann, P. and M. Prevezer (1996) A comparison of the dynamics of industrial clustering in computing and biotechnology *Research Policy* 25: 1139–1157.

Tech Nation. Lawtech UK: *Transforming the UK legal sector through tech – the landscape*. <u>https://technation.io/lawtechuk/</u>. (Retrieved 30 April 2021)

Tech Nation. *Our focus and work programme*. <u>https://technation.io/lawtechuk-vision/our-focus-and-work-programme/</u>. (Retrieved 18 April 2021)

Tech Nation (2018) *Report 2018: Connection and collaboration: powering UK tech and driving the economy*.

The Law Society (2019) *Lawtech: a comparative analysis of legal technology in the UK and in other jurisdictions*. The Law Society.

Theodoraki, C., K. Messeghem, and M.P. Rice (2018) A social capital approach to the development of sustainable entrepreneurial ecosystems: an explorative study. *Small Business Economics* 51: 153–170.

Thomson Reuters (2021) Alternative Legal Service Providers 2021: Strong Growth, Mainstream Acceptance, and No Longer an "Alternative". Thomson Reuters, Georgetown Law Centre on Ethics and the Legal Profession, and Said Business School, University of Oxford. <u>https://www.thomsonreuters.com/en-us/posts/legal/alsp-report-2021/</u>

Thompson, T. A., J. M. Purdy, and M.J. Ventresca. (2018). "How entrepreneurial ecosystems take form: Evidence from social impact initiatives in Seattle." *Strategic Entrepreneurship Journal* 12: 96 - 116.

ThoughtRiver. FAQ/Is my data going to be shared with other users? from <u>https://www.thoughtriver.com/faq</u>. (Retrieved 27 April 2020)

Tracxn (2018) Tracxn sector report: Legal Tech. Tracxn

Tracxn (2020) Tracxn Feed Report: Legal Tech. Tracxn

Tredennick, J., J. Pickens, T.C. Gricks, and A. Bye (2018) *TAR for Smart People: How technology Assisted Review Works and Why it Matters for Legal Professionals*. Catalyst.

Tripathi, N., P. Seppänen, G. Boominathan, M. Oivo, and K. Liukkunen (2019) Insights into startup ecosystems through exploration of multi-vocal literature. *Information and Software Technology* 105: 56–77.

Tulk, N., C. Gorst, and L. Shanks (2020) *The Legal Access Challenge – Closing the legal gap through technology innovation*.

UK Research and Innovation (2021a) Strength in Places Fund. UK Research and Innovation.

UK Research and Innovation (2021b) *Wave 2 seedcorn-funded proposals.* UK Research and Innovation.

Ulster University (2017) Ulster University launches new Legal Innovation Centre.

University of Oxford (2020) *AI for English Law project granted unprecedented access to British and Irish Legal Information Institute dataset*. University of Oxford.

Vancauwenberghe, G. and B. van Loenen (2019) Governing Open Spatial Data Infrastructures: The Case of the United Kingdom.In: Rodríguez Bolívar, M.P., Bwalya, K.J. and C.G. Reddick *Governance Models for Creating Public Value in Open Data Initiatives*. Cham:Springer: 33-54.

World Economic Forum (2014) *Entrepreneurial Ecosystems Around the Globe and Early-Stage Company Growth Dynamics – the Entrepreneur's Perspective*. Geneva: World Economic Forum.

Von Nordenflycht, A. (2010). "What is a Professional Service Firm? Towards a Theory and Taxonomy of Knowledge Intensive Firms." *Academy of Management Review* 35(1): 155 - 174.

Van de Ven, A. H., R. Hudson, and D.M Schroeder.(1984). "Designing new business startups: entrepreneurial, organization, and ecological considerations." *Journal of Management* 10(1): 87 - 101.

World Economic Forum (2014). Entrepreneurial Ecosystems Around the Globe and Early-Stage Company Growth Dynamics – the Entrepreneur's Perspective. Geneva, World Economic Forum.

YouGov, The Law Society and Legal Services Board (2019) *Legal needs of Individuals in England and Wales: Technical Report 2019/20*. Legal Services Board/The Law Society.

Ziercke, E., D. Hartung, and K.S. Hohenstatt (2020) What does the digital revolution mean for legal education? In Jacob, K., D. Schindler, and R. Strathausen (eds) *Liquid Legal – Towards a Common Legal Platform*. Cham: Springer: 513–536.

Chapter 4: Methodology for interviews

A total of 50, mostly hour-long, interviews were undertaken as part of this research.

Of the 50 interviews undertaken, 30 were with SRA-regulated legal practices that the legal press and other influential legal sector figures regard as being innovative. We additionally selected interviewees on the basis that they were diverse in terms of their 'BigLaw' and 'PeopleLaw' focus, their total lawyer headcounts, their headquarters locations across England and Wales, and their legal specialisms focus. We deliberately oversampled legal practices that were innovating in relation to employment law, the subject of our unmet legal need case history. Although it was not our intention to oversample for ABSs, 15 of our 30 SRA-regulated legal practice interviewee firms had this status.

The remaining 20 interviews were undertaken with a broad cross-section of the wider legal technology and innovation ecosystem, including government and non-governmental policy stakeholders, legal technology incubators and accelerator operators, legal technology company founders and financiers, legal sector insurance professionals, and operators of non-SRA regulated alternative legal service providers. Some interviewees sat across multiple interview cohort classifications, including policy organisations that financially supported legal technology companies, and legal technology companies that were also SRA regulated legal practices.

All interviewees for each interview cohort were asked a standard list of questions, developed by the University of Oxford research team and approved by the SRA. Illustrative samples of these questions, asked of SRA-regulated law firms and lawtech companies, are shown overleaf.

While a small number of policy-related interviewees were requested by the SRA, most – including all but one SRA-regulated legal practices – were independently sourced by the University of Oxford research team. The SRA has not been informed of the identities of any research interviewee. Nor will the SRA be granted access to any of the research team's interview notes, recordings or transcriptions. To protect their anonymity, all interviewees quoted included in the report are provided on a 'no-names' basis.



Legal services innovation: drivers and barriers



This independent research, undertaken by the University of Oxford on behalf of the SRA, aims to help the SRA to understand the drivers of, and barriers to, legal services innovation. You have been invited to be interviewed for this project because we believe your firm offers innovative service(s). Our aim in undertaking this research is to share (on an anonymous basis) the insights of individuals involved in service innovation. We believe that sharing these insights will help the SRA to further foster innovation across the legal services sector, with follow-on benefits to consumers.

- 1. Innovation as a driver of revenue growth?
- a. Please describe an innovative service you now offer clients. Why do you regard it as being innovative?
- b. If known, roughly what % of your firm's revenue is now accounted for by this service?
- c. Do you believe there is scope for further growth in the provision of this service? If so, what do you regard as being the main avenues of this further growth?
- 2. Technology adoption and practice innovation (in relation to this example)
- a. What role (if any) did novel / rare technology play in enabling the growth of the abovementioned service?
- b. What role (if any) did wider practice innovation play in the growth of this service?
- 3. Drivers and barriers of service innovation (in relation to this example)
- a. If your innovative service involved the introduction of new / rare technology (2a), what factors (internally or externally) facilitated the introduction of this technology?
- b. For this technology (2a), what were the main barriers / challenges (if any) that you encountered in introducing it?
- c. Distinctive from any enabling technology used, what were the most important internal / operational factors that helped you to roll out this service? What were the most important internal / operational challenges (if any) that you had to overcome to roll out this service?
- d. Who are the main beneficiaries of this service innovation?
- 4. Inspiration for service innovation (in general)
- a. From where do you obtain inspiration and information about technology and / or practice innovation? Generally, and in the case of the innovative service discussed above.
- b. How does your firm go about deciding which new / rare technology and innovative practices to adopt? Generally, and in relation to the innovative service discussed above.
- 5. Drivers and barriers of service innovation (in general)
- a. In general, what do you regard as being the main drivers (internally and externally) of practice innovation / new (rare) technology deployments within your firm?
- b. In general, what do you regard as being the main barriers (internally and externally) to practice innovation / new (rare) technology deployments with your firm?
- 6. Future plans for lawtech and innovation
- a) Do you have any plans to test / launch additionally innovative services? If so, over what timescale do you anticipate these services being deployed?
- b) For these innovative services, what/who are the main drivers for their launch?
- c) What (if anything) do you regard as the main challenges / barriers you expect to encounter in delivering this service? How do you intend to overcome these barriers (if applicable)?



Technology and Innovation in Legal Services A research project being undertaken by Oxford University on behalf of the Solicitors Regulation Authority



Questions for legaltech startup founders

Solutions creation

- Please describe your company's core offering. What does it do? What is its key underlying technology? What client need does it satisfy? To what extent does it automate what lawyers normally do?
- Who are its clients? Are you targeting one type of clients, or various? Why?
- What initially motivated / inspired you to establish this venture / company?

Development and support for scaleup

- How was your venture initially funded? How is it funded now? What changed (if anything)? If applicable, how did you locate the source (s) of your funding – initially, and latterly?
- What other third-party resources (people, connections, mentors, networking events, experts, regulators, clients) made it possible for you to realise your venture idea? How did you find them? Which initial third-party resource were most important to you, in terms of launching your venture?
- What other third-party resources have you drawn on since launch? How did you find them? Which were most important, in terms of developing your venture?
- Did you take part (or have you considered taking part) in any government / state-backed / regulator support schemes, pre or post launch? If yes, what aspects did you find most helpful, what aspects not?
- Do you belong to (or have you considered belonging to) an incubator and/or an accelerator (s)? If so, what did you perceive as being the main benefits of joining / belonging to this incubator / accelerator? Did you consider joining other incubators / accelerators, before settling on this one? What factors influenced your decision?

Location and the ecosystem – pre-pandemic

- Why did you decide to establish your venture in its current location? What (if any) were the
 perceived advantages and disadvantages of being based in this location?
- To what extent was the location of your business relevant to the location of your clients?
- To what extent was the location of your business relevant to its workforce?

Location and the ecosystem - pandemic impact

How - if at all - has the pandemic affected your business, in relation to the following considerations:

- The current, and likely future, locations of your workforce?
- Your client base?
- Access to funding / third party support including incubator support, if applicable?

Growth plans - and challenges

- Does you firm have a growth strategy? If so, to what size, in terms of turnover or number of employees? Over what timescale?
- What is driving the takeup of your offering? Why do your clients use it?
- What do you regard as the main sources of future business growth for your offering?
- What do you regard as the most significant challenge (s), in terms of growing your business?
- Has the pandemic had any significant impact on your company's offering?
- Is there anything that legal regulators, governments etc could do to actively incentivise / facilitate your organisation's growth (or to remove inhibitors / disincentives to growth)?

Chapter 5: Online survey methodology and survey questions

A questionnaire survey was developed with the SRA taking a lead in ensuring that the questions would be consistent with their current and future strategic priorities. A copy of the online survey questions can be found below. The SRA used an online survey platform called Alchemer. The SRA sent emails on 23 March 2021 to the population of 10,644 authorised signatories across all regulated entities and to 299 freelancers, asking them to fill in the online survey. Reminders were sent on 6 and 14 April 2021, and the survey closed on 16 April 2021.

Sample characteristics: 1,221 responded, of which 891 completed the whole survey. The distribution of survey responses is compared to the population distribution along three factors, namely size (measured by sales turnover), location, and firm age. The survey sample distribution reflects the population distribution well in terms of sales turnover and regional location but under-represents younger firms (see the tables below).

Turnover	Population	Survey Responses	Population % Distribution	Survey Sample % Distribution
Turnover	Population	Responses	DISTINUTION	Distribution
Up to £20,000	303	58	3.37	6.60
£20,000-£100,000	1659	178	18.43	20.20
£100,000-£200,000	1300	109	14.44	12.40
£200,000- £400,000	1571	116	17.46	13.20
£400,000 – £1m	1898	161	21.09	18.30
£1m – £2.5m	1198	110	13.31	12.50
£2.5m – £10m	746	96	8.29	10.90
£10m – £50m	222	30	2.47	3.40
£50m+	103	23	1.14	2.60
Total	9000	881	100.00	100.00

Annex Tables: Sample and Population Characteristics Compared

Region	Population	Survey Responses	Population % Distribution	Survey Sample % Distribution
East Midlands	384	46	4.31	5.20
East of England	619	37	6.95	4.20
London	2979	297	33.43	33.40
North East	236	28	2.65	3.10
North West	1239	92	13.90	10.30
South East	1101	145	12.36	16.30
South West	594	70	6.67	7.90
Wales	378	33	4.24	3.70
West Midlands	722	65	8.10	7.30
Yorkshire and The				
Humber	659	54	7.40	6.10
Nationwide*	0	22	0	2.50
Total	8911	889	100	100.00

		Survey Population %		Survey Sample %	
Age	Population	Responses	Distribution	Distribution	
Up to 2 years	1143	85	12.70	9.60	
2 – 5 years	1727	128	19.19	14.50	
6 – 10 years	2497	107	27.74	12.10	
11 – 20 years	2224	4 235 24.71		26.70	
21+ years	1409	326	15.66	37.00	
Total	otal 9000		100	100	

Note: Totals differ across these tables due to missing values in the survey and/or SRA data.

*This is not a category for the population as all SRA-regulated firms are categorised into a region based on their head office postcode, but the survey allowed firms to self-categorise based on where they offer their services.

Online Survey

The University of Oxford and the SRA would like to know how you and your firm are adapting to a constantly changing world – this includes your thoughts on any barriers and opportunities relating to technology and other innovations.

The survey should only take about 10 minutes. It is your opportunity to help shape the support that the SRA might be able to provide in the future.

Please feel free to respond openly. All responses will remain anonymous and will not be linked to you or your firm. The findings will be reported at an aggregate level only. Any questions with an asterisk (*) need to be completed before the survey moves to the next page.

Please answer all the questions on behalf of your practice or firm.

Thank you.

About you and your firm

This information will help us make recommendations to the SRA that are specific to certain types of firms or practices.

- 1) What is your job function? (tick all that apply)
- □ Owner-manager
- General manager
- Partner
- □ Practising solicitor
- Compliance officer
- Other:
- 2) Is your firm/practice a...?
- Sole practice
- Freelance practice
- Partnership
- C Limited liability partnership
- Incorporated company/company limited by shares
- Other: *
- 3) Is your firm an Alternative Business Structure?
- Yes
- O No
- O Don't know

4) What is the approximate turnover of your firm in the last 12 months?

- ^O Up to £20,000
- £20,001 £100,000
- £100,001 £200,000
- £200,001 £400,000
- £400,001 £1m
- £1m £2.5m
- £2.5m £10m
- £10m £50m
- More than £50m
- 5) Approximately how long has your firm been operating?
- C Less than 2 years
- 2 5 years
- 6 10 years
- 11 20 years
- O More than 20 years

About you and your firm

6) In which region is your firm mostly based? If more than one, please select the main region in terms of turnover.

- C East Midlands
- East of England
- C London
- North East
- O North West
- South East
- South West
- Wales
- West Midlands
- Yorkshire and the Humber
- O Nationwide

7) What is your firm's main client base?*

- Individual consumers
- Small and medium sized businesses
- C Large businesses
- Other: *

Practice areas

8) In which practice areas does your firm mainly provide services? Tick up to three (largest in terms of your turnover)* (Logic: Hidden unless: #7 Question "What is your firm's main client base?" is "Individual consumers", "Small and medium sized businesses", "Other".)

- Bankruptcy and insolvency
- □ Civil liberties, discrimination and human rights
- Consumer problems
- Company / commercial, including property and planning
- □ Conveyancing (residential)
- Criminal
- Debt
- Employment
- □ Family, including children and matrimonial
- □ Finance
- Housing, including landlord and tenant
- Immigration and asylum
- □ Injury and illness
- □ Licensing
- □ Litigation and dispute resolution
- 🗆 Тах
- □ Welfare and benefits
- □ Wills, probate, and trusts
- Other: *

9) In which practice areas does your firm mainly provide services? Tick up to three (largest in terms of your turnover)* (Logic: Hidden unless: #7 Question "What is your firm's main client base?" is "Large businesses")

- Administrative/public law
- □ Bankruptcy/insolvency
- □ Banking/capital markets/finance
- Company/commercial contracts
- □ Corporate M&A
- □ Financial services/insurance
- □ Employment/pensions
- Environmental, social, governance (ESG)
- □ Intellectual property
- Litigation and dispute resolution

Public	sector
--------	--------

- □ Real estate/construction/planning
- Technology/media/telecoms
- Transport
- Tax
- Other:

Changes in the last 12 months

10) Has your firm made any of the following changes in the last 12 months? Tick all that apply.*

- □ Introduced one or more new service(s)
- Stopped providing one or more service(s)
- □ Changed the way we deliver some or all of our services
- Changed the way we market some or all of our services
- □ Introduced new technology
- Improved or increased use of our existing technology
- □ None of the above

11) Are most of these changes, made by your firm in the last 12 months, likely to be permanent?

- Yes, all
- Yes, most
- O No, very few
- None will be permanent
- Not applicable, no changes were made

12) Did the pandemic lead to you introducing, or increasing your use of, any of the following types of technology since March 2020? Or had you already introduced or improved these prior to March 2020? Please leave blank if you made no changes to any of these.

	Introduced	Increased use
Technology to manage or process your work	0	0
Technology to interact with your clients	0	0
Technology to attract new clients	0	0

Innovation

By innovation, we mean significantly improving existing services or introducing new services, or making improvements to the delivery or marketing of your services.

Based on this definition, how innovative do you think your firm is, relating to the following areas?

 13) New or improved service Not at all innovative Very innovative 	 Not particularly innovative Extremely innovative 	Somewhat innovative
 14) Delivery of your services Not at all innovative Very innovative 	 Not particularly innovative Extremely innovative 	Somewhat innovative
15) Marketing of your servic Not at all innovative Very innovative	 es* Not particularly innovative Extremely innovative 	Somewhat innovative

16) Does your firm offer other (non-legal) services as well as legal services? For example, estate agency or funeral services?

0	Yes (please specify the non-legal service):	*
0	No	
\odot	Don't know	

Logic: Hidden unless: ((#13 Question "New or improved services" is one of the following answers ("Not at all innovative", "Not particularly innovative", "Somewhat innovative", "Very innovative") OR #14 Question "Delivery of your services" is one of the following answers ("Not at all innovative", "Not particularly innovative", "Somewhat innovative", "Very innovative")) OR #15 Question "Marketing of your services" is one of the following answers ("Not at all innovative", "Not particularly innovative", "Somewhat innovative", "Very innovative")) OR #15 Question "Marketing of your services" is one of the following answers ("Not at all innovative", "Not particularly innovative", "Somewhat innovative", "Very innovative"))

17) Is there anything stopping your firm from innovating, or innovating more? Select up to three main reasons. (

- It isn't needed at my firm
- Not a strategic priority
- Lack of staff expertise
- □ Staff reluctance or resistance

- □ Current regulatory uncertainty or barriers
- Possibility of unexpected legal or regulatory risk in the future
- Possibility of low consumer appetite
- Possible or actual difficulty in getting or claiming on insurance
- Uncertainty about the expected business benefits
- Potential change remains untested

Logic: Hidden unless: ((#13 Question "New or improved services" is one of the following answers ("Not particularly innovative", "Somewhat innovative", "Very innovative", "Extremely innovative") OR #14 Question "Delivery of your services" is one of the following answers ("Not particularly innovative", "Somewhat innovative", "Very innovative", "Extremely innovative")) OR #15 Question "Marketing of your services" is one of the following answers ("Not particularly innovative", "Somewhat innovative", "Very innovative", "Extremely innovative")) OR #15 Question "Marketing of your services" is one of the following answers ("Not particularly innovative", "Somewhat innovative", "Very innovative", "Extremely innovative"))

18) To what extent do your firm's innovation(s) involve using or adopting new technology?

Never
Sometimes
About half the time
Most of the time

Logic: Hidden unless: ((#13 Question "New or improved services" is one of the following answers ("Not particularly innovative", "Somewhat innovative", "Very innovative", "Extremely innovative") OR #14 Question "Delivery of your services" is one of the following answers ("Not particularly innovative", "Somewhat innovative", "Very innovative", "Extremely innovative")) OR #15 Question "Marketing of your services" is one of the following answers ("Not particularly innovative", "Somewhat innovative", "Very innovative", "Extremely innovative")) OR #15 Question "Marketing of your services" is one of the following answers ("Not particularly innovative", "Somewhat innovative", "Very innovative", "Extremely innovative"))

19) When your firm wants to innovate, how does it approach this? Tick all that apply.

- Recruit new staff
- □ Ask existing staff to work on it
- Buy, or merge with, a business that already offers that innovation
- Employ consultants to provide certain expertise
- Other:

Legal technology

By legal technology, we mean technologies that aim to support, supplement or replace traditional methods for delivering legal services, such as automating documents, chatbots, interactive websites, and artificial intelligence (AI)

20) Based on this definition, does your firm use or plan to use legal technology?*

- Currently using
- Not using but planning on using
- Not using and not planning on using
- O Don't know

21) What are the main purposes of using legal technology at your firm? Tick up to three.*

- □ Improve service quality
- □ Increase demand for our services
- □ Improve efficiency of workflows
- \square Allow staff to work more flexibly
- Reduce the overall cost of service delivery
- □ Improve security and/or compliance
- □ Reduce long-term business costs
- □ Recruit and retain legal talent
- Recruit and retain non-legal talent/other staff
- □ Improve end-to-end integration with other tools or software
- Other:

22) What will be the main purposes of using legal technology at your firm? Tick up to three.*

- □ Improve service quality
- □ Increase demand for our services
- □ Improve efficiency of workflows
- Allow staff to work more flexibly
- Reduce the overall cost of service delivery
- □ Improve security and/or compliance
- □ Reduce long-term business costs
- □ Recruit and retain legal talent
- Recruit and retain non-legal talent/other staff
- Improve end-to-end integration with other tools or software
- Other: *

23) Which of the following legal technologies are you currently using, or planning to use, in your firm? Tick all that apply.

	Using	Planning to use
Videoconferencing with clients	0	0
Model documents/templates on our website	0	0
Interactive website to generate legal documents in response to client input	0	0
Chatbots or virtual assistants	0	0
Online portals for matter status updates	0	0
E-verification/electronic signatures	0	0
Storing data in the cloud	0	0
Practice management software	0	0
Legal research software	0	0
Contract review software	0	0
Blockchain/distributed ledger	0	0
Data analytics with AI	0	0

24) How did you find out about the legal technology you are using or planning to use? Tick all that apply.

- Discussion with, or feedback from, clients
- \square Market research about what other law firms are doing
- □ Internal staff knowledge
- □ Legal technology provider
- Consultant on legal technology or legal operations
- Informal discussion with other lawyers
- Events, including technology and innovation conferences
- Other:

Support

We would now like to ask you about what might support or hinder your firm when using or planning to use legal technology.

25) How significant are the following potential barriers to your firm when adopting, or planning to adopt, legal technology?

	Not at all significant	Somewhat insignificant	Neither insignificant nor significant	Somewhat significant	Very significant
Not a strategic priority	0	0	0	0	0
Lack of financial capital to invest in technology	0	0	0	0	0
Lack of staff expertise to assess and implement technology	0	0	0	0	0
Lack of consumer appetite	0	0	0	0	0
Regulatory uncertainty or barrier	0	0	0	0	0

26) How significant are the following potential reasons to your firm not adopting or planning to adopt any legal technology?

	Not at all significant	Somewhat insignificant	Neither insignificant nor significant	Somewhat significant	Very significant
Not a strategic priority	0	0	0	0	0
Lack of financial capital to invest in technology	0	0	0	0	0
Lack of staff expertise to assess and implement technology	0	0	0	0	0
Lack of consumer appetite	0	0	0	0	0
Regulatory uncertainty or barrier	0	0	0	0	0

27) What do you think are the main regulatory uncertainties or barriers when adopting, or planning to adopt, legal technology? Tick up to three.

- \square Not knowing if wider regulations and legislation allow what we are considering
- \square Client confidentiality and data protection requirements
- □ Money laundering regulations
- □ Managing client money requirements
- Professional indemnity insurance requirements
- Other: *

Support

28) Have any of the following discouraged your firm from using or planning to use legal technology? Tick up to three main reasons.*

- □ We have not considered using legal technology at all
- □ It may not work as anticipated
- Clients may not like it
- Difficulty in getting buy-in from staff
- Support from the technology provider may be inadequate
- □ It may pose unexpected legal/regulatory risk to the business

 $\hfill\square$ Cannot claim insurance or compensation from the technology provider if things go wrong with it

- The investment in it might not bring any business benefits
- Other: *

29) What do you think are the main risks when adopting legal technology? Tick up to three.*

- □ It may not work as anticipated
- Clients may not like it
- Difficulty in getting buy-in from staff
- Support from the technology provider may be inadequate
- □ It may pose unexpected legal/regulatory risk to the business
- $\hfill\square$ Cannot claim insurance or compensation from the technology provider if things go wrong with it
- The investment in it might not bring any business benefits
- Other:

*30) Have any SRA regulations stopped your firm from making changes to your services or introducing new technology?**

- Yes (if so, please tell us what these regulations were?):
- No
- Not applicable

31) When you found that SRA regulations stopped your firm making change to your services or introducing new technology, what did you do? Tick all that apply

- □ Asked the SRA for advice
- Asked others for advice
- Adapted your idea or product and proceeded with this approach
- Didn't proceed with any change
- □ Other

32) If the SRA could do one thing to support your firm to adapt and/or use legal technology, what would that be?

Scenarios

Now, we would like you to imagine some scenarios that you might encounter when thinking about adopting legal technology. Please read the short description of each scenario carefully, then answer the question that follows.

[Randomised to show either 33] or 34)]

33) You have been given £100,000 from a UK government grant scheme that can be used to make improvements at your firm. The government will also provide funding for an expert who can give you advice on the regulatory aspect of offering a new service. How would you spend the government grant?

Which one of the following is your priority? Please choose one.

^O Make improvements in delivering or marketing existing service offerings

Decide to introduce a new service offering, after market testing to identify potential client base

34) You have been given £100,000 from a UK government grant scheme that can be used to make improvements at your firm. The government will also provide funding for an expert who can give you advice on the technological aspect of offering a new service. How would you spend the government grant?

Which one of the following is your priority? Please choose one.

Make improvements in delivering or marketing existing service offerings

Decide to introduce a new service offering, after market testing to identify potential client base

[Randomised to show either 35] or 36)]

35) Your firm is considering adopting a legal technology tool, a chatbot (software that conducts online conversation via text or speech with clients), that will cost about 3% of your total revenue per annum. Another tool with the same functionality has been suggested to you by a legal technology expert whose competence you trust. How much more are you willing to pay for this suggested tool?

- O% more (ie, the same as the one you found)
- ^O Up to 5% more
- ^O 6 -20% more
- ^O 21 25% more
- more than 25% more

36) Your firm is considering adopting a legal technology tool, a chatbot (software that
conducts online conversation via text or speech with clients), that will cost about 3% of your
total revenue per annum. Another tool with the same functionality has been accredited by a
government standards body. How much more are you willing to pay for this accredited
tool?

- 0% more (ie, the same as the one you found)
- O Up to 5% more
- O 6-20% more
- ^O 21 25% more
- more than 25% more

[Randomised to show either 37] or 38)]

37) Your firm is considering adopting an online web portal, so that your clients can monitor their matter status. You have noticed that your main competitors have adopted a particular software tool that seems suitable for this purpose. How likely are you to adopt that tool?

Extremely unlikely
 Somewhat unlikely
 Neither likely nor unlikely
 Somewhat likely
 Extremely likely

38) Your firm is considering adopting an online web portal, so that your clients can monitor their matter status. You have noticed that your clients are showing a keen interest in a particular software tool that seems suitable for this purpose. How likely are you to adopt that tool?

Extremely unlikely
 Somewhat unlikely
 Somewhat likely
 Extremely likely

Neither likely nor unlikely

Thank you

Thank you for completing the survey.

39) We appreciate any further comments on the topic of this survey. Please enter your comment below.

Thank you for completing the survey. Your responses have been submitted. We aim to announce the survey results later this year. You can follow the SRA on LinkedIn. And the SRA's website has more information about

the project.