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Executive Summary

UK lawtech remains a sector of emerging technologies. A period of start-up activity has created a diverse but fragmented ecosystem, but the sector is now ripe for a wave of consolidation and later-stage funding.

Lawtech remains less mature than other fields of digital disruption, most notably fintech, where funding and regulatory alignment are more advanced. Lawtech is currently less ‘disruptive’ technology-wise and more focused on creating efficiencies and automation than on delivering ‘new types of law’. Lawtech still has a relatively low penetration rate across all segments of the law. Even in big law firms, where adoption is most advanced, it is still used only in a relatively small proportion of client work.

The legal profession itself is playing catch-up with the digital adoption cycle blazed by other service-based industries, keen to deliver the greater efficiencies demanded by clients through higher productivity and a lower cost of delivery.

Lawtech adoption is part of the wider pressure for law firms to stop behaving like fee-earning partnerships and start behaving more like commercial businesses. Pressure to adopt lawtech is building from a number of sources including the need for greater efficiency; increasing workloads and complexity of work; the evolving demographic mix of lawyers toward younger and more ‘tech savvy’ personnel and, most importantly, greater client pressure on costs and speed. While key barriers to lawtech adoption remain an issue in the legal sector, they are beginning to break down as pioneering law firms become more progressive and culturally attuned to innovation.

The hype associated with some lawtech solutions has created an expectation gap between what law firms perceive can be delivered by the technologies, and the reality of training and deploying these solutions for live client work.

Different segments of the legal market are at different stages of maturity and are focused on adopting different technologies.

The business-to-business (B2B) market is the most mature, particularly within large law firms, with common adoption of artificial intelligence (AI) and machine learning (ML) driven applications. Growth areas of lawtech include legal analytics, legal project management, governance and compliance, and contract management. More established areas include collaboration tools, document management, IP management, and e-billing.

The business-to-consumer (B2C) legal market is lagging behind, with most traction found in those law firms delivering large-scale commoditised services, where automation is principally about driving efficiencies. Chatbots, DIY law, robo-lawyers and triage tools are all becoming more common, with a greater focus on the consumer experience. Legal ‘marketplaces’ is already a crowded space but has yet to gain real traction in consumer law when compared to other sectors.

Lawtech adoption will have significant implications for the future of the law and legal profession, with new skills, new delivery models and a new competitive environment slowly entering the sector.

This period of change and uncertainty means the Law Society is uniquely placed to help members make the most of the opportunities presented and to mitigate many of the challenges posed.
About TechMarketView

TechMarketView (TMV) was founded in 2008 by Richard Holway MBE and Anthony Miller, both well-known veterans of the tech analyst industry. Since then, the company has grown and evolved considerably. Under the stewardship of the co-founders, TechMarketView is proud to have become one of the most influential analyst and advisory companies in the UK tech market. We are now a trusted adviser to a growing band of tech companies – from global market leaders to innovative start-ups – and to tech users, including large swathes of UK government and the financial services sector.

TMV analysts are high-profile experts in their fields, respected for their strong opinions and for honest, independent advice supported by robust bottom-up research. The TechMarketView team now includes 11 analysts with brief biographies available here: http://www.techmarketview.com/our-people/

Core operations and the provision of research services

TechMarketView’s core subscription research is broken down into seven research streams – namely, Foundation Service, PublicSectorViews, FinancialServicesViews, ESASViews (Enterprise Software & Application Services), BusinessProcessViews, InfrastructureViews and SecureConnectViews. A selection of our clients can be viewed here: http://www.techmarketview.com/products/clients/

Other services include:

- **Research Projects** – TechMarketView delivers bespoke research projects commissioned by clients that require expert analysis in particular subject areas within the technology domain. Projects vary in size and duration.

- **Custom Engagements** – Subscribers to TechMarketView’s research services may commission custom engagements which typically involve face-to-face sessions with an appropriate analyst over a couple of hours. These engagements are tailored according to the client organisation’s needs.

- **Executive Advisory Sessions** – Our analysts’ forthright views on topics such as the outlook for the sector, disruptive trends that are shaping the market, areas of opportunity and threat and the evolving supplier landscape, are sought at the highest levels within client organisations and TechMarketView engages with the Executive teams to deliver these advisory sessions.
The TechMarketView Great British ScaleUp Programme (GBS) seeks to assist fast-growing UK tech SMEs to grow even faster. The programme offers a unique opportunity for fast-growing companies to develop their potential by tapping into the knowledge and experience of TechMarketView’s analysts, along with experts from our Advisory Sponsor, ScaleUp Group.

Our latest programme seeks to help tech suppliers find high-potential early-stage UK tech partners. The programme is built on the same foundation as TechMarketView’s Little British Battler and Great British Scaleup programmes, which have successfully brought many UK tech SMEs to the attention of the wider market and helped them scale up.

Our inaugural SME programme was launched in 2012 to find and support innovative SMEs that are punching above their weight in the tech sector.

UKHotViews – Our flagship product, UKHotViews, is a daily newsletter boasting a readership of over 20,000 individuals. It covers breaking news on the UK tech scene as it happens and is a must have resource for anyone with an interest in this market.
Introduction and background

The Law Society represents over 190,000 solicitors in England and Wales by debating, negotiating with and lobbying the profession’s regulators, government and others, and offers high quality training and advice across the profession.

The legal services market is facing widespread disruption with a more liberal regulatory environment, stronger commercial pressures, and increasing adoption of technology. In this context, the Law Society wants to take a lead role in helping lawyers, legal departments and law firms prepare for the future and engage with the ways in which legal technology can help them.

Rapid developments in lawtech\(^1\), and specifically in Artificial Intelligence (AI) and Machine Learning (ML), will have significant implications, both for the legal profession and for a number of areas of the law itself. The application of lawtech within the profession, and also in clients’ organisations, is likely to change the scope of work the profession undertakes. As well as reducing the more routine tasks, AI will be used by clients themselves to reduce complexity and ambiguity – which are currently two important reasons to consult lawyers.

In 2017, the Law Society published *Capturing Technological Innovation in Legal Services*, a report intended to explore how law firms and legal departments are using technology to their competitive advantage and to begin to understand the diverse technological landscape and its impact on the legal profession.

Recent years have seen a rise in the number of lawtech companies, but not an acceleration in the rate of lawtech adoption among legal practitioners. The research intends to find out why, and to understand what types of lawtech providers are gaining traction in different sectors of the profession and the drivers behind this, with a view to understanding how adoption rates might impact the future shape of legal process and delivery.

The legal technology landscape comprises both ‘big tech’ providers of technology to legal practitioners and a wave of lawtech start-ups that between them bring a broad variety of services to individuals, law firms and in-house legal departments.

Tech adoption difficulties are particularly acute for law firms. There is a rising awareness in the market that lawtech is important, that the legal market is going to change, and that law firms that adopt technology will have a competitive advantage over others. However, some of the barriers to adoption are fundamental to the industry and include the partnership model, the billable hours model and risks around compliance, alongside varying levels of awareness and confidence.

Overall, there is a strong desire to understand how progress in the lawtech marketplace will affect the profession’s work and working processes and what this means for the type of tasks and skills that might be required of members in the future.

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\(^1\) Lawtech in the context of this project should be seen as AI, Machine learning, RPA, advanced analytics, and algorithm-driven functions rather than Microsoft Office or long-established case management systems, for example.
Research aims

The research aims to capture a legal profession-wide understanding of lawtech markets and adoption. The key questions to be answered include:

- Which legal technologies are gaining traction in different sectors of the legal profession (B2B, B2C and in-house)?
- What are the drivers behind this traction?
- Which technologies are likely to have the greatest and most sustained impact on legal process, services and delivery?
- What does this mean in terms of shaping relevant legal services and what new/evolving skills might be required?
- How can the Law Society improve solicitors’ awareness of the technology available and help them identify the best tools to help their businesses?
- How does the uptake of legal technology compare across the profession and with other comparable professions – for example, Accountancy and Management Consultancy?
- Which technologies are ‘defunct’ versus ‘must-have’ versus ‘emerging’? How does this vary by market segment?

Some further themes to investigate, underpinning the research objectives, are as follows:

- The evolving shape of lawtech start-ups and their influence on the legal services marketplace.
- The role of incubators (including those based within law firms), Venture Capitalists (VCs) and crowdfunding in shaping lawtech ideas and adoption.
- The extent of understanding within law firms of the current lawtech landscape.
- The factors likely to impact on the future development of lawtech.

The findings of the research are intended to be used by the Law Society in the following ways:

- Understanding members’ levels of awareness of the technology available so the Law Society can help identify where education/awareness-raising could help members find tools with a good fit for their business.
- Gaining a snapshot of the adoption rates in the different areas of lawtech to help members cut through the hype by also showing which technologies have gone away or been subsumed by others.
- Developing a detailed understanding of market evolution/drivers and where tech may have the greatest and most sustained impact on legal process, services and delivery; this will help the Law Society shape relevant services and identify where new skills might be needed.
- Shaping internal strategic thinking in respect of changes to skills and business processes in the profession.
Methodology

**Literature review**

The development of lawtech and legal technologies more broadly has already been covered by Law Society research and a number of other organisations with a track record of publishing material in this space. To avoid ‘reinventing wheels’, this project therefore started with a comprehensive literature review and a bibliography of sources is included at the end of the report. The outputs from this exercise are contained in a separate summary report and were used principally to understand what knowledge and insight already existed in the wider marketplace and how it might be used to inform and address key research aims. The literature review was also used to inform a series of research hypotheses that were tested and refined during the primary research. More detail on this and the literature review can be found in the section titled ‘A hypothesis of lawtech adoption’.

**In-depth interviews with key audience groups**

To better understand the issues and capture a legal profession-wide understanding of lawtech and its adoption, the bulk of the research focused on engaging the views and experiences of both the legal profession and technology vendors.

In total, TechMarketView analysts conducted 47 semi-structured tele-depth interviews of between 30 and 45 minutes each with senior representatives of the following audience groups:

**Lawtech vendors**

Half of the interviews were conducted with a range of lawtech providers, where respondents were a mixture of senior executives from large multi-disciplinary technology providers or CEOs and founders of specialist lawtech providers. A pool of 120 lawtech vendors was identified across a variety of technologies, life-stages, maturities and applications, from which the interviewees were then recruited.

**Legal service providers**

The second major audience group for the research was a range of senior executives from legal service providers. Respondents were a mixture of senior lawyers, IT directors, innovation and strategy leads and general counsels from:

- Business-to-business (B2B) law firms (including a mixture of practice areas and locations)
- Business-to-consumer (B2C) law firms (including a mixture of practice areas and locations)
- In-house legal departments across a variety of sectors.

**Other stakeholder groups**

A small number of interviews were also undertaken with a mixed group of important stakeholders that included venture capitalists investing in the lawtech space, market commentators and opinion formers, media and lawtech conference organisers.

Prior to concluding the research, a discussion session with a cross section of the Law Society team evaluated and reviewed emerging themes from the primary research across all the different audiences.
The Lawtech landscape

Lawtech remains an emerging sector. After several years of furious start-up activity, the industry is now primed for its first wave of consolidation and later-stage growth financing. During the research, TechMarketView identified and looked at more than 100 lawtech companies operating in the UK. Typically, these companies have been started in a number of different ways. Many are ‘single point solutions’ – that is, focused around a single application and founded by a lawyer or an ex-lawyer who has identified a particular problem that needs addressing. Other lawtech vendors are tech providers that began by serving other sectors such as financial services and are now pivoting towards the legal market. This is typical of many providers serving the regulatory or compliance space.

The UK lawtech market is particularly competitive and extremely confusing for many law firms and in-house legal departments with so many different providers operating in the space, often with similar or overlapping solutions. The UK market is particularly crowded at the moment with a very healthy domestic start-up scene. The UK is also a very attractive geographic destination for US providers looking to enter the European market and for European businesses looking to expand internationally.

Ripe for consolidation

Both lawtech and law firm respondents to the research universally expected to see a market which is currently dominated by immature companies and single point solutions undergo significant consolidation. This is likely to produce a mixture of partnerships and alliances between lawtech providers targeting similar customer bases with complementary solutions (for example a document extraction company partnering with a contract automation provider) as well as acquisitions of new technologies by more traditional technology providers (for example iManage’s acquisition of RAVN).

Small companies notoriously struggle to gain traction with large scale clients and ‘death by procurement process’ is commonplace. Having greater scale and resources might provide some protection here, as well as allowing companies to better cross-sell/up-sell solutions.

Focused on efficiencies

Some law firm and in-house respondents argued that lawtech start-ups could not technically be classified as ‘disruptive’ as the technology is focused on delivering efficiencies rather than offering a ‘new type of law’. Contrast this with fintech and insurtech, for example, where a significant portion of start-ups are offering new ways of providing financial services or insurance products.

As one law firm senior executive explained, “I find the start-ups hard to engage with. Some that I have had dealings with seem to be set up by a disgruntled lawyer who happened to go to uni with an IT guy. I just feel that very few of them are actually doing anything new and tend to fall into three main types: they’re generating documents, reviewing and analysing documents or analysing Management Information such as legal spend or workflow. They are not necessarily reinventing the wheel but looking to provide a shinier newer wheel”.

Several respondents felt that the lawtechs gaining most traction at the moment in the market were ‘horizontals’ – that is, technology companies that have applications which work in law but also have experience and application in other sectors (cross-vertical success), such as professional services or fintech.
Funding environment

In the main, investors and lawtech companies that we consulted expressed the view that while the funding environment for lawtech in the UK was getting stronger and maturing all the time, it remained embryonic compared with fintech, insurtech or even proptech.

There are currently a large number of immature lawtech companies, with many lawtechs starting life funded by ‘friends and family’. A significant proportion of companies in the lawtech space are either pre-revenue or have a small number of clients and remain in an early stage of funding. The number of attendees at London lawtech conference, Legal Geek, looks very healthy with numbers doubling each year since it started three years ago. Anecdotally, we heard that client retention rates appear healthy with a lower failure rate among start-ups in the legal space when compared to other markets such as fintech or edtech.

As one market commentator we spoke to claimed: “Lawtech appears to attract very bright people, a lot of ex-lawyers who know the market and have connections; they seem to be better at beating the odds than elsewhere. Some parts of the law industry (the big B2B law firms) are relatively small markets, so easier in some ways to gain traction if you have the connections. It’s a much smaller market compared to fintech.”

An example of what can be achieved is Apperio, a London-based lawtech start-up helping companies analyse their legal spend, which announced mid-2018 that it had raised $10 million (£7.5 million) in a Series A round, led by Draper Esprit and supported by existing investors Notion, IQ Capital and some angels. There have been various other fund raisings in the £2-10m space this year such as Clarilis, Lexoo and Juro, a situation that was unheard of just a couple of years ago. We also know of venture capitalists employing ex-lawyers or in-house lawyers to help increase activity in this space. Apperio is the first lawtech investment for Notion, IQ and Draper, which have all made multiple fintech investments.

When asked what was holding them back, investor respondents suggested it was a lack of suitable companies and a scarcity of businesses at the right stage to take on multi-million-pound investment and (crucially) generate the necessary return. Another concern expressed by VCs was caution on the long procurement cycles of lawtechs targeting the B2B market where these small companies were out ‘hunting whales’.

One lawtech we interviewed that had been through an investment round explained:

“There are still plenty of investors that do not understand the size and potential of the market. This is a failing on the side of lawtechs like us to communicate the potential of the opportunity but also on the side of the investors, who just do not understand the market potential. However, even as the investor side matures, the lawtech space is still 12 months away from having enough companies at the right stage in decent enough volumes with the right metrics in place. We are just not there yet as a sector.”

Investors do expect lawtech to mature considerably over the next 12-18 months, as one start-up CEO put it: “there is still lots of noise in legaltech at the moment with some great businesses, but the crucial bit is that it needs to mature more on the investment side... businesses will grow and the investor community will become more receptive than they would have been 12 months ago.”

Several lawtechs we spoke to expressed frustration that the valuations being seen in the United States were much higher than in the UK, as “it is still early here and valuations are grouped together and based on what other companies have raised rather than taking the market potential on a case-by-case basis. We have found VC investment very challenging although luckily we have a great set of angels behind us.”

Further VC feedback was that lawtech businesses needed to have a minimum of £70k monthly recurring revenue for a Series A round funding and that a lot of lawtech vendors are nowhere near achieving this.
Segmentation by application

Lawtech encompasses a wide range of services, and as discussed earlier there are many companies delivering single applications. However, it can be broadly segmented by the following applications (see Figure 1 for examples):

- Legal research/analytics
- Contract management/analysis
- Intellectual Property
- DIY law
- eBilling
- Legal docs-as-a-service
- Marketplaces
- Practice management
- Risk and compliance

Figure 1: UK lawtech landscape by major applications
A hypothesis of lawtech adoption

Before starting interviews, we undertook a literature review of materials provided by the Law Society and sourced separately from third parties. A bibliography of materials consulted is in the final section of this report. One of the outcomes of this stage of the research was to confirm our decision to segment the legal services market into three parts, each with a different set of needs and requirements, as follows:

- Business-to-business (B2B) law firms
- Business-to-consumer (B2C) law firms
- In-house legal departments (mostly found in larger commercial or public sector organisations).

This segmentation would be crucial to structuring the sample of law providers contacted and interviewed during the primary research.

The literature review also allowed for a series of hypotheses to be developed that helped produce audience-specific discussion guides used in the expert interviews. The literature was particularly helpful in focusing on a defined set of technologies and applications to be considered. A hypothesis on which lawtech technologies and applications were going to be most prevalent was produced focusing on the following areas:

Figure 2: Hypothesis of technologies and applications for inclusion in the research

<table>
<thead>
<tr>
<th>Technologies</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robotic Process Automation (RPA) – automation of structured data</td>
<td>Contract management tools</td>
</tr>
<tr>
<td>Machine learning/AI – cognitive automation of semi-structured or unstructured data</td>
<td>Document automation</td>
</tr>
<tr>
<td>Natural language processing</td>
<td>eBilling</td>
</tr>
<tr>
<td>Blockchain</td>
<td>eDiscovery</td>
</tr>
<tr>
<td>Predictive analytics/data analytics</td>
<td>IP protection</td>
</tr>
<tr>
<td>Cloud based infrastructure and on-demand type services – for example, platform-as-service, software-as-service</td>
<td>‘Law for good’</td>
</tr>
<tr>
<td></td>
<td>Legal docs as a service</td>
</tr>
<tr>
<td></td>
<td>Legal services marketplaces</td>
</tr>
<tr>
<td></td>
<td>Practice management tools</td>
</tr>
<tr>
<td></td>
<td>Risk and compliance tools</td>
</tr>
</tbody>
</table>
While the interviews did cover a broader range of technologies and applications, the hypothesis was particularly important in focusing efforts on identifying lawtech providers within these areas. The hypothesis was also useful in helping prompt law firms to discuss the areas in which they had focused efforts to date.

The literature review also focused on identifying a series of barriers and drivers to lawtech adoption that could then be tested and refined within the expert interviews. The literature was particularly helpful in providing insight into barriers that are perceived to be specific to the law, such as the ‘partnership model’ or ‘billable hours’ and issues that have been in place for some time.

The hypothesis developed around key barriers and drivers was grouped as follows:

- Law firm’s approach to innovation
- Law firm’s ability/willingness to invest
- Client demand
- Demand for efficiencies
- Competition as a driver
- Role of disruptors and new market entrants
- Technology drivers
- Education/skills
- Data
- Regulatory requirements
- Liability/risk/ethics
- Collaborations/partnering

These topics formed the basis of interview guides but by no means precluded the discussion of other drivers and barriers that may have been present.

Overall the literature review provided a good level of insight into UK law firms’ awareness of lawtech as well as their approach to innovation, themes that the Law Society, in particular, had already covered in detail. There was less insight available into what sort of lawtech was being adopted, how and where. Reviews of law firm literature (websites, corporate literature etc.) did provide some insight into where partnerships were being announced and which law firms were claiming to be active. However, it was not possible to appreciate at this stage how deep or broad these relationships were in practice and, for example, whether a press release announcing a partnership was actually translating into a situation of genuine adoption on the ground. It was also apparent that only a minority of law firms were actually talking about lawtech, predominantly concentrated in the larger B2B law firms.

The literature review also allowed us to revisit TechMarketView’s research library, looking at the experience of other areas of digital disruption, so that comparisons could be made on adoption within fintech, insurtech and regtech. Insight from this is included throughout the report and contained in a dedicated section entitled ‘Comparison with other areas of digital disruption’.
Drivers for lawtech adoption

Compared to some other professional services, the legal sector has historically been a slower adopter of technology, protected by higher margins and lack of ‘a burning platform’. However, current market forces are driving a much greater level of innovation throughout the sector. For some components of the market, using lawtech is now difficult to ignore should they wish to remain competitive with ever-demanding clients flexing their muscles. In the most active parts of the market, the pace of change and adoption is increasing as the legal workforce becomes more mobile, younger and more tech-savvy.

While lawtech is still in many ways embryonic, pressure has been mounting to innovate and disrupt the status quo for some time. Efficiencies, in particular, are being demanded by in-house legal departments with large law firms keen to improve profit margins as the volume of activity increases. The need for lawyers to have mobile and ubiquitous access to data and information is also starting to transform the landscape. Elsewhere, there is demand for platforms addressing significant market developments such as new regulations (for example, anti-money laundering).

The figure below and the following section outline the key drivers for lawtech adoption:

Figure 3: Summary of key drivers for lawtech adoption
Client pressure

Pressure from clients has become the most significant driver for the adoption of lawtech in the UK legal services market. While different parts of the market are seeing this play out in different ways, it is fundamentally about economics, with the technology as a means to an end. Law firms are having to deal with the same issues that have faced every other sector, in having to do more with less.

In *AI Now: The growing adoption of Legal AI* (Tromans, April 2017), Richard Tromans outlines how the key drivers for law firms adopting AI – and advanced lawtech in general – include the need for greater efficiency and productivity in responding to client pressure on fees, as well as the need for lawyers to show how they are innovating in the clients’ interests.

Need for efficiencies

In the B2B space, pressure has been building from clients for some time for law firms to achieve greater efficiencies via a greater use of technology. There is increased pressure on fees particularly from larger client organisations with greater buying power looking for increased value for money from their legal budgets. For example, some GCs expect to see more due diligence or e-discovery within the same budget.

This is then impacting on the delivery model, as outlined by the Shared Services Director at a Magic Circle law firm: “Clients have a greater degree of confidence and are more trusting of the technology... in the past we might have had two sets of eyes undertaking a review and now increasingly clients are happy for one set of eyes plus technology doing a review.”

GCs are using the competitive tendering exercises for a place on their legal panels as a trigger for greater innovation and efficiencies. This in turn acts as a trigger for large law firms to start getting much more serious about lawtech awareness and adoption.

One market commentator explained: “Law firms’ clients are much savvier and know that technology can review documents in less than half the time and, what’s more, the law firms now know that clients know this – this is fundamentally changing the formula.”

Demand for transparency

One area where client pressure is directly translating into lawtech adoption is in the space of legal cost transparency. In-house legal departments have historically found law firms opaque when it comes to getting sight of existing and forthcoming legal fees, often complicated by multiple suppliers all billing with very different systems and processes. Each invoice is different, often confusing, and regularly sent separately by email. Billing is abstract and very difficult for in-house teams to decipher in an era when they need a much better understanding of cost and their aggregate spend on lawyers.

Traditionally, even CFOs accepted the high cost of legal services due to the risks associated with poor legal advice. There is now much greater scrutiny of legal services in-house which in turn means that they are paying much greater attention to their legal service providers and law firms. GCs have become more sophisticated buyers of legal services and understand what is acceptable. Lawyers cannot just trade on quality – they must also look at cost and efficiencies.

Transparency on cost is also beneficial for the law firms who, in the main, remain unsophisticated in their use of financial metrics and management information. In most other sectors there would be an understanding of things like average order value and profitability per project or per client. Law firms have traditionally been less focused on this and more interested in other measures such as profit per partner. Better transparency on cost and fees will also therefore help law firms better understand their services, how to price them and what tech could create efficiencies.

Better management information on metrics such as ‘cost to acquire’, ‘cost per client’ and ‘return on investment’ of business development activity are useful by-products of greater client transparency and the cultural shift towards driving efficiencies.
Demand for new ways of working

Corporate legal services have traditionally been a high margin activity. Law firms have for a long period been happy to maximise profits by actively avoiding changes in delivery model. Over time, cost pressure from clients, increased traction by Legal Process Outsourcers (LPO) and increased regulation and compliance pressures on in-house teams is forcing everyone to look at the cost of services. The need for cost saving and efficiencies is pressuring law firms to look at technology as a key component of service delivery and will ultimately force many law firms to change their business model.

Clients are putting increasing pressure on law firms to do things more cheaply and, in some cases, have progressed to requesting that law firms incorporate particular technology solutions within their services. While this is still the exception, particular sectors have been important in driving change, with banking and financial services, in particular, more prone to demanding new ways of working. We heard from the Programme Director at one Magic Circle law firm where big banking clients had “been the pushiest on getting their law firms to move out of the comfort zone and provide more than just traditional legal services.”

General counsel (GC) in banks are demanding new ways of working, demanding more than just ‘great lawyers’ and wanting to see the use of process experts, technologists, technology solutions, and professional project management – a full service model. The old model, based on partners simply having a good relationship with their GCs, has shifted to delivering efficiencies. However, it is not just about being cheaper – it is about speed and quality too.

While GCs from large organisations with big legal budgets are empowered to demand changes, GCs from mid-tier clients do not yet generally have this luxury and are more reliant on sourcing law firms offering alternative approaches, than being able to demand them.

Consumer demand

Client or consumer pressure in the B2C space is less impactful in driving lawtech adoption. There is, however, plenty of evidence to suggest that there is latent demand for lawtech innovation, where, for example, buying behaviours have changed with consumers comfortable interacting with service providers and consumer brands digitally to improve efficiency, decrease costs or get immediate answers to questions.

IT provider Olive Communications’ report Looking at Law: Closing the gap between technology and the consumer through AI (September 2018) revealed that consumers are now looking for greater digitisation in the legal arena, with 7 out of 10 respondents to the research saying they would choose a ‘lawbot’ to handle their legal affairs rather than a human lawyer because it is cheaper, faster and simpler. A third of respondents would also like their solicitors to offer digital services such as video conferencing, chat and instant messaging (IM). Martin Flick, CEO at Olive, commented: “Today’s busy, always-on and mobile-first consumer wants to buy goods and services, and communicate with sellers whenever, wherever and however they choose. Increasingly this is through digital interaction. Consumers want more control over their legal affairs with sometimes, little or no human intervention, and with the speed, efficiency and security that multiple channel web-based communications offers.”

Competitive pressure

Competition has been intensifying in the legal services market for some time. In the corporate law sector, new market entrants with a greater variety of operating models have been putting pressure on law firms. Legal Process Outsourcing companies (such as Conduent or Integreon) with a focus on industrialising processes and driving efficiencies have been effective early adopters of lawtech. According to the GC interviewees, LPOs have taken market share from law firms in certain activities and have the advantage of being able to line up people, process and technology with a clear focus on lower cost, lower margin activity.

In addition to LPO providers taking share, players such as the ‘Big Four’ accountancy providers or
some strategic management consultancies have also been moving across into the legal services space. Accountancy providers have been particularly successful at automating large swathes of their business processes, such as audit, and can point to a track record of technology-enabled service delivery that is more advanced than the norm for legal services. All of the ‘Big Four’ accountancy providers in the UK now have a legal arm. PwC’s legal operation was granted ABS status in early 2014, with KPMG and EY receiving their SRA approval later in the same year. In June 2018 Deloitte UK was awarded ABS status. The potential likely impact of this is covered in more detail later in the report.

While larger law firms have more scope to invest in lawtech, a number of vendors interviewed are actually gaining more traction in the mid-market in particular firms that are culturally entrepreneurial and looking to take market share from larger law firms. As such, lawtech adoption is a potential source of differentiation for smaller law firms with ambition to take on larger, more profitable work. An example here would be boutique law firms considering M&A work delivered primarily via technology, whereas previously they would have needed an army of associates or junior lawyers, unaffordable to them.

In the consumer space, law firms operating in the commoditised and industrialised areas, such as bulk conveyancing, are having to invest in lawtech solutions to drive down the cost to serve and remain cost-competitive as price pressure intensifies.

Lawtech hype and publicity

The hype and publicity associated with lawtech (particularly with AI and Machine Learning technologies) has had the positive effect of raising awareness throughout the legal sector. As such, law firms are much more likely to have lawtech on the agenda of their executive committees and to have an opinion on the subject than would have been the case just two years ago.

While the media focus has definitely raised awareness of lawtech, the flipside is that expectations have sometimes run ahead of what the technology can deliver. As explained by the business development director of one lawtech start-up:

“I feel the media is doing a disservice to the industry and making it sound much more advanced than it is which filters through to other parts of the ecosystem… we are getting asked by law firms and investors: “Where is your AI? Where is your Blockchain?” There needs to be greater focus on engagement and getting adoption of existing tools as a priority over more advanced solutions that are a few years away.”

A consequence of the rising awareness of lawtech is that we are seeing it move from, as explained by one Magic Circle IT director, an “IT industry push to a practice area pull” where law firms and legal teams are regularly taking the lead in starting conversations.

Regulatory drivers

Regulatory and compliance requirements have increased significantly, placing huge burdens on law firms and in-house lawyers. Examples include the expansion of anti-money laundering (AML) and know your customer (KYC) requirements into the legal sector. So-called ‘regtech’ companies that have already been providing solutions to financial services and banking have started to pivot into the legal space, applying automation technologies to streamline processes like KYC and AML with a view to reducing the unbillable hours with fast, automated policy checks speeding up client onboarding.

Legacy systems

Law firms have a myriad of legacy systems including document preparation, document retention and a range of finance-related systems to record time and billing; as is often the case with legacy, very few of these systems currently ‘talk’ to each other.

Legacy systems will drive adoption of lawtech in a number of ways. First, tools such as robotic process automation (RPA) can be adopted to extend the life of existing legacy systems and allow for disparate systems to talk to each other. Second, as legacy
systems come to the end of their life, law firms are naturally forced to come to market for new, more advanced systems.

Agility

A number of the law firms (across all markets) consulted as part of this research were supporting staff teams at all levels with greater flexibility of working. This cultural shift away from having to be physically present in the office is driving the need for greater mobility and agility, requiring an appropriate technology infrastructure to support it. One interviewee had a London-based office where nearly half of staff were either ‘hotdesking’ or working remotely. The move away from traditional offices towards ‘opening up of the law firm’ is placing greater demands on technology and IT to deliver a mobile working environment.

Changing demographics of the workforce

The current generation of lawyers now entering the workforce is in the main ‘digital native’ with digital technologies engrained in their everyday life. Expectations that technology should be the same in the workplace as it is at home – as well as this higher level of tech literacy – should promote lawtech adoption.

Supporting this is an increased focus on lawtech within law Schools and legal education. New courses will teach the next generation of lawyers both how to use these platforms and speak intelligently to the people building them. The University of Manchester Law School has introduced a lawtech module into its undergraduate curriculum. From Autumn 2018, final year students will be able to take a new optional module called “Legal Tech and Access to Justice” that is being delivered in partnership with AI company Neota Logic and law firm Freshfields Bruckhaus Deringer. The course will use Neota’s software to teach students to build applications designed to improve access to justice. One of the first projects on the course will see students engage with non-profit organisations that promote access to justice to build an application that helps improve their efficiency and free up resources (Manchester Uni joins forces with Freshfields to launch undergrad Lawtech module, Legal Cheek, June 2018).

A lack of lawyers?

Demand for B2C legal services is being affected by fewer consumers being able to afford advice or gain access to Legal Aid. This is one of several trends affecting the structure of the legal profession as outlined in the Law Society’s report The Future of Legal Services (January 2016) which predicts how the legal profession might look in 2020, with more female lawyers, more elderly solicitors retiring and fewer solicitors working in B2C markets.

Evidence from the research interviews suggest some small law firms in areas such as family law and conveyancing are struggling to hire staff and so are looking for technology to help them do more with the same staff teams. The Managing Director of one lawtech targeting this space commented: “Small law firms cannot or will not take on graduates to train up and so are looking to leverage the existing skills base further... There has been a generation of business owners in small law firms that have not invested in the future of their business by bringing younger people through and are now struggling to grow the businesses, so are having to use technology to scale up.”

Acceptance of cloud delivery

B2B law firms have been moving increasingly to cloud delivery over the last few years and this has been crucial to the expansion of lawtech. The majority of lawtech solutions are cloud-based software-as-a-service (SaaS) offering clients better usability, scalability and security than traditional on-premises legacy systems. Cloud computing has driven down the cost and commercial barriers to entry of a wide range of applications that can be brought into a business as legacy case management systems or practice management systems come to the end of their life.
Barriers to lawtech adoption

The pace of technological innovation and adoption in law has been slower than other service industries such as banking. There remain some significant structural barriers within the legal services market with law firms broadly wedded to their ‘billable hour’ and partnership structures, limiting change. Both in-house legal departments and IT departments in law firms are viewed as cost centres where they can come off second best to ‘core operations’ when it comes to investment budgets. The figure below and the following section outline the key barriers to lawtech adoption.

**Legacy systems**

Historical practice or case management systems have often suffered with poor usability and clunky functionality. These have often been adapted from accounting systems, resulting in software that fails to reach its potential within a law firm.

There is a perception among respondents that law firms have historically dedicated a lower percentage of their overall budgets to IT spend. Many law firms see themselves first as practices rather than businesses and are often not structured to free up the same level of capital available for investment in things like IT. While this is not true across the board – and indeed, the larger the law firm gets, the greater the apparent similarity with companies in other sectors – lack of capital does seem to have restricted technology investment within many law firms.

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**Figure 4: Summary of key barriers for lawtech adoption**

- **Legacy systems**
- **Technical barriers**
- **Process barriers**
  - Billable hour model
  - Partnership model
  - Market confusion
  - Security concerns
  - Longer sales cycle
  - Regulatory lag
  - Higher margins
  - Lack of customer/client centricity
  - Cost centre mentality
The need to replace old legacy systems can be a driver for change, but a history of underwhelming technologies has left some sceptical of the potential benefits, as the founder of one lawtech start-up commented: “There is a cynicism among some law firms as to what lawtech can do having been let down by underwhelming legal tech in the past.”

**Technical barriers**

A minimum viable product (MVP) is a product with just enough features to satisfy early customers, and to provide feedback for future product development. The MVP for early adopters in much of the lawtech space is relatively high and while one can do a lot of development work offline, building the product requires very heavy investment on the security side where requirements are particularly high in law. As one start-up founder commented: “We are just a five-person business but still have to invest heavily in ISO accreditation and spend lots of time focused on answering questions on AWS and cloud. The money needed to invest in people and infrastructure to have security in place precludes a lot of business that might thrive in other sectors.”

**Change management & process barriers**

True adoption of lawtech is much more than simply signing a contract with a technology vendor. Rolling out technology across a law firm requires significant change management that seeks to align people, process and technology. Or as one IT Director at a global law firm commented: “It’s hard work to adopt tech – you have to be very deliberate and it’s not going to happen overnight. It’s not going to happen by organisational osmosis... we spend huge amounts of money testing and trying things out... there is no quick fix although quicker wins will come over time as we improve our transformation strategies and get better at measuring adoption.”

Training lawyers on new technology or processes is a real challenge; finding the time in already busy schedules is difficult for junior lawyers, while with more senior lawyers there is the additional challenge of sometimes overcoming cultural reluctance to engage.

If it is a brand new technology, there are extra challenges in integrating it into existing working practices and, where changes are identified, communicating them. This requires successful collaboration between the lawtech vendor and the law firm with sustained follow up after successful pilots to deliver a roll out. It is not uncommon for tools to get picked up for a period and then to fall away as momentum is not sustained.

One lawtech CEO commented: “It is very hard to find a partner within a firm that is willing to be the first to deploy Machine Learning or Natural Language Processing on a live client project for the first time in a law firm... they just see the risk of it going wrong, losing the client and damaging the law firm’s reputation. This is the fundamental difference. Lawyers do not see lawyering as a business process and are therefore reluctant to focus on ways to automate and make it more efficient.”

**Billable hour model**

While there has been an increase in fixed fees and alternative models of charging for legal services (for example outcome based) the billable hour remains the de facto charging mechanism and can be a powerful barrier to adoption in B2B and B2C law firms. The billable hour mentality can provide a challenge to efficient legal practices as well as meaning that active lawyers have minimal time to explore the adoption of new technology and learn new tools. This is seen as a particularly significant barrier to driving adoption within large B2B law firms where billable hour targets restrict junior lawyers. There remains apprehension among a number of respondent law firms in moving away from the billable hour, as requiring a new method of measuring value-add is seen as complex.
A GC in a global financial services firm explained how things are changing: “Legal activities that are more documentation-based are now being offered to us predominantly for a fixed price although I am sure the billable hour is still being used to underpin the calculation... Where it’s more about getting legal advice requiring more thought then it’s still very much the hourly rate and it costs what it costs.”

**Partnership model**

The majority of law firms remain partnerships and money that would be spent on lawtech usually comes direct from the partner profit pool, something that can “create a high bar to adoption”. Partnerships also result in dispersion of responsibility, which can make gaining the support of all partners a very difficult task, particularly when partners close to retirement may be less motivated to invest in the future of the law firm.

There have been a number of law firms addressing this issue through stock market floats, with DWF reportedly the latest considering floating on the London Stock Exchange in order to raise money to invest in technology and its Connected Services division.

**Market confusion**

There is a perception among some lawtech vendors that their size counts against them and that it is difficult for small vendors to persuade larger law firms of the effectiveness of their solution. This is by no means specific to the legal sector; indeed, experience shows that SMEs struggle across the board to engage with large organisations. In order to combat a lack of trust stemming from lower awareness of their brands, some lawtech solutions are prioritising the need to develop a brand, which requires marketing spend – a potentially costly endeavour.

In the AI/ML space RAVN and Kira both have very good awareness and have been successful at selling into the very largest law firms. DocuSign in electronic signatures is another example where brand recognition has supported its penetration of the top 100 law firms.

In all three cases these firms have had the funds and support to invest in raising brand awareness helping 'de-risk' adoption.

Given the amount of start-up activity and hype associated with lawtech, there is a lot of confusion within the marketplace; all law firms consulted during this research expressed views on the challenge of keeping up to date. Larger law firms have the advantage of dedicated innovation teams and IT expertise to help navigate the rapidly-changing landscape. One initiative that seems to be effective is LITIG (Legal IT Innovators Group) which meets quarterly and has some 85 law firms onboard with a range of working groups delivering networking opportunities and the sharing of best practice. There is a partnership with Imperial College on innovation and leadership with guest speakers such as legal AI expert Richard Tromans (founder of the Artificial Lawyer blog) helping raise awareness.

For the mid-market (particularly regionally) and beyond, there remains a general lack of awareness of lawtech.

**Security concerns**

Cloud computing has gained significant traction in the legal services market over the past four years across a broad range of law firms. However, historically, law firms have looked primarily to build and run things internally rather than use an external provider. When compared to other sectors there remains less cloud-based infrastructure in place, and some IT departments still default to on-premises delivery. Therefore, technology companies selling a cloud-based proposition must make it compelling enough for law firms to see the value of overcoming the challenges of migrating from legacy providers.

In addition, law firms are naturally sensitive around the handling of client data and the associated rigorous security requirements can be a high barrier for lawtech vendors to overcome during procurement. The need to maintain a secure document environment has been an historical inhibitor as some law firms still perceive internal systems to be safer.
The time taken to go through security checks and obtain ISO27001 and cyber essentials, plus assurance, also adds to procurement delays.

**Longer sales cycle**

Lawtech interviewees frequently cited the time spent moving from an initial conversation to the final sale as being a frustrating and protracted process. In contrast, securing that first meeting was seen as more straightforward. A slow sales process can be a particularly significant impediment to small businesses. As one lawtech we spoke to explained: “Some law firms are so slow at procuring. We have law firms that are still trialling the product more than 12 months after they have told us they wanted it. I think some law firms are still finding their feet in the way they procure emerging technology and while they might be very good at procuring traditional IT, they don’t know how to adopt emerging tech. Every law firm has a slightly different approach – for some it will just be a Senior Partner who can push it through quickly, others it will be the innovation team or more complicated for a non-UK based law firm is where the global parent gets involved.”

A longer-than-average sales cycle can also have a knock-on effect with investors, with some venture capitalists taking a negative view.

While some lawtech providers feared ‘death by procurement’, there were others who found the SaaS model (such as charging for a ‘per-deal per-month’ basis) a much easier proposition and quicker to secure budget, particularly where the cost was added to the client’s bill on a specific deal that effectively just passed the cost on. The generally lower upfront cost of a SaaS solution and the ability for a law firm to exit a contract quickly and cheaply reduces procurement risk.

However, in some cases SaaS solutions’ low barriers to exit can make the sales process more complicated, as explained by the Managing Director of a SaaS-based lawtech: “When selling traditional software, you would target the law firm partners and sell and deploy top-down. Now because the software is not locked in (barriers to exit on SaaS being so much lower) you have to engage everyone from senior management all the way down to the reception desk... all users have to be bought into the process... it’s a much more democratised sale and deployment.”

**Higher margins**

Like most sectors, law typically has a wide variety of internal processes that are manual. The difference is that in most other sectors these processes have been heavily automated over the last 10-20 years and/or outsourced. Innovation here has been suppressed by the generally higher margins that law firms have been able to charge. Those industries with the lowest margins have often been at the forefront of automation – be that retail or manufacturing. Law firms’ higher gross margins have had the effect of dampening the need to standardise processes, automate or offshore.

**Regulatory lag**

One of the frustrations shared by a subset of lawtech vendors is the gap between the Regulator (the Solicitors Regulation Authority (SRA)) and the emerging lawtech ecosystem. The example of electronic signatures was referenced by a number of respondents as a specific case of where law firms were still unwilling to use new solutions (without being forced to do so by clients) even after a recent ruling by the Law Commission, as the law firms remain extremely risk averse.

In contrast, one of the advantages in the fintech sector is a close alignment with the Financial Conduct Authority (FCA) where the involvement of the regulator has had the effect of dampening the hype associated with a lot of the innovation and making firms more realistic in promising what they can achieve. FCA approval provides a level of trust in fintech that some feel is missing from the lawtech space.
Cost centre mentality

In-house legal departments are generally viewed as cost centres (part of the ‘back office’) within larger organisations and this as a general rule makes it harder to get approval for high levels of up-front technology investment. There were examples of respondent organisations where the legal team reported directly to the Finance Director and were consistently starved of investment, where a ‘back office’ came off second best in tech investment compared to core operations.

Similarly, the IT department within a law firm can also be viewed as very much a cost centre rather than a provider of core services and thus suffer a similar fate. Shifting the perception of IT towards being something of strategic value to law firms’ future growth and profitability will be key to securing higher levels of investment.

In some of the larger law firms the IT team very much focused on ‘business as usual’ IT work, while there is a separate ringfenced team with its own budget, leadership and a different skill set all geared to adopting lawtech.

Lack of customer/client centricity

One of the principal drivers for lawtech adoption has been the need to deliver efficiencies. The majority of lawtech solutions are offering some form of automation that principally offers a faster, cheaper or easier operation. There is an argument to be made that lawtech is currently less ‘transformative’ than other areas of digital disruption such as insurtech and fintech which often offer distinctly new ways of delivering financial services, more than just efficiency gains.

Lawtech generally remains focused on prioritising efficiency gains ahead of an improved user experience by delivering the client of legal services a genuinely different experience. This may of course change as the market matures and innovation boundaries are pushed further.
Lawtech adoption trends

Business-to-business (B2B) lawtech adoption trends

While lawtech in the B2B space has seen significant advances in maturity over the last 12-18 months, it remains less mature than other areas of new technological disruption – notably the market for fintech, but also regtech and insurtech. This was neatly summed up by one market commentator who said:

“It’s quite hard to take a temperature check of the market. I believe the appetite for lawtech is definitely maturing, there has been a huge ramp up in awareness and press exposure over the last two years. Lawtech has become somewhat ‘cool’... a bit like fintech but a less sexy cousin. We now have blogs on AI for law or using blockchain to solve legal problems – this was not happening two years ago. The focus was on law firms buying systems that never touched the actual provision of law, but we are now getting lawyers directly involved with the tech touching day to day legal work.”

However, the scale of adoption is still unclear, with internal roll-out looking patchy even across the largest law firms. As the Head of Sales at a larger legal technology provider explained: “We see lots of law firms with glossy announcements and tech incubators, but it doesn’t seem to be translating across the board to use of the product at scale... it’s very hard from the vendor side to tell how much the products are actually being used on live case work.”

The adoption of cloud-based software-as-a-service (SaaS) lawtech makes it potentially easier to scale as adoption takes off and the user base grows. However, we have been unable to identify any significant examples of adoption at scale within B2B law firms. Still much more common are proof of concept projects, pilots or deployment on specific projects, clients or teams.

One Magic Circle CIO commented: “Law just doesn’t have the ‘burning platform’ yet. Manufacturing and the retail sector have single digit gross margins which have forced them to scale automation industry wide. Law as a professional service has higher GPMs of more like 40% and therefore has less of a need to drive automation.”

Cloud

The adoption of cloud-based services has been happening in the B2B legal market over the last four years. Historically the mentality of legal technologists has been to do things internally, principally for security reasons. Law firms differ greatly in where they currently sit on their cloud journeys, but the overarching trend is one of cloud adoption and this has been crucial to the expansion of lawtech.

There are a number of drivers for cloud adoption including client pressure, desire for lower more flexible costs and better usability. Legacy document management systems or practice management systems coming to the ‘end of their life’ is a consistent trigger for law firms to look at doing something differently and at least look to test the market for cloud-based solutions.

This trend of slow adoption among law firms of all sizes will continue and movement to the cloud will act as a competitive advantage for technology-focused law firms looking to improve security, accessibility, and collaboration.

Indeed, in some cases it is the smaller, more flexible law firms that have “led the charge into the cloud” being able to deal with confidentiality, security, and due diligence issues more efficiently while seeing cloud-based services as a potential differentiator over larger competitors.

The need for collaboration between clients and law firms in areas such as litigation or M&A has helped drive adoption in larger law firms, allowing teams to share notes, documents, and evidence in a secure, web-based platform. There is also some evidence of hybrid-cloud solutions becoming popular in allowing law firms to migrate to the cloud at their own speed.

Cloud computing underpins the wider adoption of lawtech solutions in that so many of these technologies are delivered as SaaS or Platform-as-a-Service. The adoption of cloud can also foster the deployment of mobility solutions in that so many mobile apps are designed specifically for a cloud computing architecture.
The Law Society’s report, *Capturing Technological Innovation in Legal Services* (Chittenden 2017), outlines how many law firms are spending a disproportionate amount of their IT budget on simply making sure all their legal business software applications continue to work together. The benefit of adopting a platform approach means main IT components are resolved by a major IT player (for example, Microsoft). This lowers the cost for firms to gain access to the latest software and upgrades, ensures different systems speak fluently to each other and brings an ability to bolt on future new lawtech start-up solutions developed on (or compatible with) the same platform.

**Artificial Intelligence (AI) and Machine Learning (ML)**

Tools and applications based on AI and ML-based technologies have meant a small group of firms have become established in the legal market over the last four years. Providers like RAVN (now iManage), Kira and Luminance have gained traction in the B2B space. Initially these technologies were principally being adopted by the UK’s ‘top 100’ law firms. In the past 12 months they have started to filter into mid-tier law firms and have adjusted their pricing accordingly.

A lot of the focus of debate and publicity concerning lawtech has been in the AI/ML space, more so than was the case in fintech or insurtech. Pressure from corporate clients to demonstrate innovation in tendering exercises seems to have triggered interest that then progressed into a period of ‘innovation via press release’. There also seems to have been a period of law firms overestimating the current potential of AI/ML to easily enhance operating models.

This has led to a lot of hype and heightened expectations as to what AI and ML can deliver for lawyers. As the head of sales at a larger legal technology provider outlined: “I see a problem with law firms of all sizes that think this magic thing AI is going to solve all their problems. So you end up with situations such as Magic Circle or big US firms thinking that they can compete on price with smaller firms in areas where they currently make a low margin and don’t really want to compete or where you get a smaller or boutique firm who thinks they can compete with much larger resourced firms by using machines... in both cases they are not being realistic – the expectations of what you can do with AI are unrealistic at the moment.”

For those parts of the B2B legal market with the greatest awareness, the last 12-18 months has seen a much more realistic approach to what can be achieved by AI/ML. There is recognition here that this technology is not a ‘silver bullet’ and requires a lot of training specific to the legal space. As one Magic Circle IT director commented:

“ML in the legal space is a lot harder than it sounds. It’s pretty easy to ingest a document and extract the standard things but what is not easy is the understanding of contractual language – thus in a legal context it’s not so easy to be confident that you have extracted all the key data points. There is no standardisation of contract language and nicely labelled examples of learning documents for them all to learn from because much of the work to date is confidential – so there are all these complex issues with ML/MI and the law.”

However, with more and more successful use cases identified, and with the expectation gap between hype and reality starting to close, adoption of AI and ML applications is definitely progressing from the Magic Circle into mid-tier law firms.

The ability of AI and ML to help reduce risk is also extremely important. *Capturing Technological Innovation in Legal Services* (Chittenden 2017: 37) identifies that, for law firms, it is about managing risk – what is the risk profile of reviewing only one in 10 documents? Is one in 10 reviewed by a human less risky than an infant AI system looking at every document? The firm must ask if the outputs of the AI platform are within its tolerable risk/accuracy ratio. For commercial firms, there is potentially a greater risk in not adopting this type of technology in the long term.
Applications that are driving adoption

1. **Document review** has been the big area of adoption for law firms given the volume of activity that can be automated and a commercial desire, as put by one London law firm IT Director, to “move away from rooms full of junior lawyers going manually through documents, something that is time consuming and inefficient, with low accuracy.” Some of the law firms we spoke to estimated that using AI/ML tools resulted in a time saving of between 20 and 60% on the review. Lawtech vendors in this space estimated that at least 300-400 law firms and in-house legal teams around the world were using ML and Natural Language Processing (NLP) for M&A due diligence work.

Litigation is another good example of an area where there is a need to go through thousands of documents – work often currently outsourced to LPOs and offshored.

2. **Contract automation** is another lengthy process. There is increasing activity with investment in a number of tools in this space and this area is starting to look like a more vibrant market.

3. **Summarising and analysing documents** using NLP.

   For example, on legal claims, law firms are using NLP to analyse documents to data model an overall position on certain types of cases – average cost of certain types of claim, when best to settle certain types of claim, how long certain types of claim take, and ways to stop fraud based on the data.

4. **Chatbots** either to provide guided learning or answer a series of questions; chatbots will take users to a relevant piece of material or act. Some companies are developing these types of tools for clients so that they have a ready-made set of tools and resources. The level of NLP limits capability at the moment.

5. **Legal cost analysis** to help serve client demands for lower, more certain costs. Tools can put in place a rules-based approach to a project as to what will be charged and at what rate.

6. **Legal research** tools to automate some of the work currently done by legal library staff, increasing speed and accuracy.

7. **Litigation prediction/legal outcomes** is popular in the US, where litigation is more common. AI systems are analysing data relating to a case (for example, the judge and history of previous cases) and then making predictions on an outcome. The “panacea is using AI and ML driven tools that can accurately predict legal outcomes”, as put by the Strategy Director at one London law firm.

Under-utilisation of capability – an important caveat is that respondents from both law firms and lawtech vendors were fairly consistent in the opinion that while AI/ML led applications were gaining significant traction in law firms of different sizes, there was still an issue of driving adoption internally. Some law firms confessed that sporadic and inconsistent adoption of lawtech throughout their firms was an issue, admitting that the ‘internal sell’ of a new technology was often the hardest part of digital adoption. Some lawtechs confirmed this by admitting that they suspected the volume of work currently flowing through their software was significantly lower than expectations.

Process automation

The last couple of years have seen a number of regulations being applied to the legal sector that have been present in financial services for much longer – examples include anti-money laundering (AML) and know your customer (KYC). In addition to this, newer regulations like GDPR are driving the need for process automation and/or the deployment of lawtech solutions dedicated to this space. Larger law firms are naturally already engaged with these issues and now have a mixture of manual and automated processes, whereas the mid-tier of the sector remains mostly manual, and at the lower end it is extremely manual.

Compliance has become a core business process for financial services organisations and, while in legal services it remains ancillary, there are some law firms
that are investing in lawtech solutions to avoid having to continue spending money putting people in place and tolerating often long delays in client onboarding.

**Robotic Process Automation (RPA)**

Robotic Process Automation (RPA) is being adopted by some larger B2B law firms, particularly supporting business services centres and back-office type functions where there are high volumes of activity and defined processes. As a technology it is particularly good at dealing with structured data and with legacy applications. Law firms are not adopting the technology as enthusiastically as other sectors, particularly those with large back-office operations (for example, financial services, utilities and telecoms) that have used RPA as the gateway technology to more intelligent automation. ML, AI and NLP technologies have often been brought into an organisation after RPA has been deployed successfully, to increase the intelligence of what the automation can deliver. There is not yet evidence of this in the legal space.

In the legal market, RPA is having an impact on the sort of work that would historically have been offshored or put through an LPO provider. Those law firms that already have in-house transactional centres (particularly in legacy environments) tend to be the ones investing in RPA where there are defined processes in place that can benefit from automation. For example, "RPA... has become a high investment priority for larger law firms and is having the biggest impact on the off-shore model, as work once outsourced to humans in India or the Philippines can now be completed inside the firm, using robots.” (Chittenden 2017: 34)

In common with many other sectors, there is currently a distinct lack of automation strategies; deployment is very much focused on pilot and Proof of Concept projects, often delivered in isolation from each other.

**Blockchain**

While a number of law firms are actively looking at Blockchain and what a distributed ledger might mean for the sector, we did not come across any examples in the research of this being commercialised or used in client work. As with AI/ML, there is a lot of hype. The perception among even the most advanced respondents was that it remains two to four years away. One or two of the most progressive law firms are partnering with universities to explore how areas like Blockchain and Quantum Computing might impact on next-generation services.

Examples of areas where Blockchain may potentially play a role are real estate, conveyancing and functioning of the Land Registry. One CIO at a London law firm suggested that there may be potential use in the Smart Contract space, where pieces of code might covert NLP and automated clauses into a Blockchain.

**Legal analytics**

The use of analytics in a range of applications in the B2B legal market is becoming more commonplace. Examples include legal spend and legal trend analysis, which in particular has been gaining traction in the US. Using technology to understand how law firms service their clients – for example, reading and analysing bill narratives – is allowing the firms to become much more granular in understanding aspects of service delivery and associated commercial models.

**Models of accelerated adoption in B2B**

There are a range of different models or approaches being taken by B2B law firms to improve lawtech adoption within their organisations.
**Incubators/pilot projects**

A number of the larger law firms, such as Allen & Overy and Mishcon de Reya, now have their own technology incubators. Some of the best examples have been operating for at least a couple of years and are allowing lawtechs access to real business opportunities in a safer, controlled and supported environment where Proof of Concept or pilot projects can best be deployed. Some of these lawtech providers, having progressed through the incubators, are then being taken on by the law firm in a scaled fashion. Incubators provide lawtech firms with easier access to decision-makers and end users, but that does not guarantee that the technology will go on to be adopted.

**Equity stakes/spinouts**

As covered in the Cambridge University Law Society web post *Tech wizards: your guide to AI and the Magic Circle* (Huang 2018), some law firms are taking equity stakes in lawtech providers – such as Slaughter & May’s 5% equity stake in Luminance. Benefits of this approach for the lawtech provider include giving it access to live client work from which to train and develop its technology, while for the law firm it allows the technology to tailor and adapt to its client base.
Business-to-consumer (B2C) lawtech adoption

A lot of the hype and focus to date in lawtech has been in the B2B space. That is not to say that lawtech is not finding traction in B2C but that it is less mature and much more fragmented across a greater number of, generally, smaller law firms. These smaller firms will, in the main, not adopt certain technologies until they have become much more established and commoditised.

As one B2C legal market commentator said: “All the big law firms are engaged in it but [I’m] not sure it means much to the high street firm in Dorking – seems a world away. There are some smaller law firms that are leading here and competing through technology... But in general, smaller firms lack the investment to compete – they can’t speculate and are not first movers.”

Greatest traction: conveyancing automation & RPA

One area of B2C that is most responsive to lawtech and automation is conveyancing, which is extremely cost competitive and able to meet increasing client expectations around the customer experience. Automation and digital solutions are slowly filtering through, particularly where law firms are beginning to deliver more services online.

Conveyancing volumes in the larger, more commoditised and industrialised providers allow for process automation that can drive down the cost to serve. Examples here include Land Registry integration tools, production of welcome packs, and some mobile app services sharing information such as project milestones or automated notifications with the client. While these examples were in the conveyancing space, we heard of plans to expand into other areas, such as debt litigation.

One example cited during the interview process saw automated integration with the Land Registry on over 20,000 re-mortgage transactions (automatic title checking) that significantly impacted the number of staff employed, delivering notable savings back to the law firm.

As outlined by one conveyancing specialist interviewee: “Initiatives such as eMortgage deeds are a real game changer for the re-mortgaging process as until recently this document had to be paper-based and written. Now the Land Registry is starting to accept electronic deeds, the consumer can verify their own ID via the Government gateway in order to verify the documentation. This will deliver both savings for us and quicker turnaround for the customer.”

This type of innovation is by no means the norm but it does give us a view of a new standard in how conveyancing and re-mortgaging might be conducted.

Improving the client experience/DIY law

There is an increasing focus in consumer-based services on improving the client experience. The adoption of technology (most notably mobile) is key here and is forcing service providers across all sectors to invest in the digital experience. The business development director at a large conveyancing firm explained how this might impact law firms:

“Consumers are no longer comparing their digital experience with what others are doing in their service sector (for example, HSBC vs Barclays), but are ranking one service provider against the best regardless of sectors (for example, HSBC vs Amazon). Legal services are increasingly being judged against a range of other digital service providers that are much more advanced, and this will become increasingly problematic for law firms.”

A number of lawtech providers are developing mobile solutions specifically for B2C law firms, but uptake has been slower than expected as law firms remain reluctant to invest in technology even when consumer behaviour and expectation is more advanced than what is currently being offered by law firms.
However, the research suggests that self-service law with minimal interaction with lawyers is not that far away. One B2C law firm executive said: “We would like to become a self-service law provider enabling individuals to do conveyancing via an app on their phone, with notifications, payment through Android or Apple Pay. There would be no need to call up or log on to portals. Providing direct access via a phone will get things enacted much faster.”

As an extension of self-service, DIY law expands the boundaries of the legal sector by increasing the accessibility, affordability and automation of simple legal transactions. While there are limits to what non-solicitors can provide within reserved areas of work, chatbots have entered the B2C legal market offering legal guidance at lower cost, potentially posing a threat to more traditional law firms.

Chatbots

There has been an increasing amount of activity in the B2C chatbot space over the last twelve months following a slow start. Chatbots are a good first point of contact and one of the main technologies that B2C law firms are considering; examples include DoNotPay, with a ‘robo-lawyer’ that fights parking tickets, or virtual assistants that can help onboard new clients.

Chatbots are one of the tools that may help provide access to the ‘latent legal market’, which is the demand for legal services that currently cannot or will not pay for required legal advice. Robot lawyers may have a role to fulfil in this space.

While chatbots are becoming increasingly common (as they become easier to deploy), they are by no means disrupting the legal business model and they do not require a huge amount of change management (often being layered over the top of existing processes); as such, it is arguable whether their adoption constitutes a transformative technology.

The founder of a lawtech start-up explained: “Chatbots are becoming more common as they are easier to do and a first point of contact and probably the main customer facing thing that many law firms are looking at – but it’s not disrupting the business model or requiring change management – it is tinkering rather than redesign.”

The functionality of chatbots is also limited to what current natural language processing capability will allow, as explained by one large law firm CIO: “We are very interested in chatbots but again you need to manage expectations of what is possible. Very rarely can the bots use traditional language and the level of current NLP limits capability so it’s still better to enter inputs textually rather than by voice.”

Access to justice

There are a growing number of technology tools being developed to facilitate ‘access to justice’. As noted in Chittenden (2017: 62) many are in use or pilot mode with law firms and advice agencies, but new tools appear frequently, bolstered by events such as legal hackathons, law school competitions, innovation hubs and access to seed funding. However, adoption of these tools is sporadic, and their use is far from widespread. These tools are mainly found in B2C rather than B2B applications – for example, digital guidance, smart forms and assisted complete forms, and advice apps.

Recent reductions in Legal Aid provision have stimulated activity in the ‘access to justice’ space and a range of technology solutions are being used, including chatbots and Q&A decision tools.

The research found one example of a digital triage system developed internally for a law firm serving the family legal market aimed at dispute resolution. While take up among consumers had been high, efforts to commercialise the solution either by securing external funding or licensing had proved unsuccessful, with development now suspended.
Marketplaces

B2C marketplaces have experienced a lot of activity, with many companies moving into this space broadly doing similar things. The logic of legal marketplaces is that they provide increased efficiency and transparency, fundamentally changing the way legal services are bought and sold. Marketplaces provide directories that include ratings, reviews and profiles, and offer a wide range of products and services that should make the legal market more transparent, liquid, and fair to both buyers and lawyers.

The logic may be sound, and we have seen the rise of ‘Go Compare’ type services in many other service industries, but we have not yet seen evidence of marketplaces taking off in the legal market.

The experience of one marketplace lawtech founder was: "Very much baby steps at the moment in terms of its growth and acceptance. There has been plenty of noise for several years, but we are finding it difficult to move this market. We still believe that there is consumer demand for transparency and control over the legal process, products and services but are struggling to engage law firms in the idea beyond a small number of ‘progressive’ firms that are starting to get interested."
In-house legal services

One of the key drivers for the current wave of adoption of lawtech within B2B law firms is increased client pressure from large corporate clients and their general counsels. While a large portion of legal work takes place outside law firms, lawtech has not yet engaged with in-house professionals directly in a way that is anywhere near comparable with activity among the large B2B law firms.

There are of course exceptions, and below are a couple of examples of in-house legal teams, investing in lawtech solutions.

**Transparency & analytics**

General counsels are increasingly looking to get closer to real-time visibility on their legal spend. Lawtech is providing value here that is more advanced than the offer traditional eBilling platforms can provide. By providing visibility of everything that has been billed, and work-in-progress across a range of different legal providers, the surprise element of invoices appearing late, or unexpected bills, can be eradicated. In-house legal teams can then run analytics comparing spend by years or by region, or they can cut the data in many other ways to develop KPIs.

**Document review**

The pressure on law firms to start deploying AI/ML solutions in areas like document review started in-house. Corporates in sectors like banking are very comfortable deploying digital technologies in their operational areas and are less risk averse than law firms in transferring them into the legal space.

This has seen some GCs build technology requirements into the tendering process, as explained by the deputy CIO of a Magic Circle law firm: “Some GCs are really on the front foot in asking for specific technologies particularly around the more standard offerings of document review... There are examples of where we have lost work or not been shortlisted in pitches because we did not have the right solutions in place... losing work really focuses the mind.”

**Electronic signatures**

Another area where in-house feels more advanced is in the use of electronic signatures, where GCs have been much more progressive than external law firms. As explained by one electronic signature lawtech vendor executive: “E-signatures are very applicable to high volume processes and a number of high street law firms and in-house teams that operate in the volume space are big adopters. Our strategy has been to develop this as a bit of a shop window for the tech. In the B2B space there is adoption in certain areas but rollout across some firms has been undermined by lack of clarity on witnesses and deeds – that’s why the Law Commission’s clarity is so important.”

**Robotic Process Automation (RPA)**

RPA has been the leading automation tool adopted by large organisations across all sectors in the UK. This has seen the major RPA vendors – Blue Prism, Automation Anywhere and UiPath all achieve phenomenal growth on the back of strong sales.

As outlined in TechMarketView’s report series on Intelligent Automation, RPA is a ‘gateway tool’ to scaling automation capabilities within an organisation. RPA is still mainly viewed as a cost and efficiency driver as opposed to one that is geared towards business transformation or strategic change. The software is particularly well suited to high-volume, structured processes, often in legacy computing environments, and has gained traction right from the front office (customer services environment) through to the back office (finance, accounting, legal, HR, compliance, etc).

RPA is likely to become a platform for much greater intelligence and cognitive capabilities as AI and ML tools are incorporated – they will not replace RPA but will build on its capabilities.
Market maturity

Looking at the maturity of the lawtech sector as a whole, it is hard to argue that it is anything other than in the ‘innovation’ or ‘early adoption’ stage. Lawtech is not yet fundamentally transforming the provision of law. Furthermore, different segments of the legal market are at different stages of adoption, and are maturing at different speeds.

For the purposes of this research, we have segmented the legal services market for lawtech adoption into three segments – B2B, B2C and in-house – each of which is at a different stage in the adoption life cycle. It is also important not to generalise within segments, as significant differences exist between individual law firms/departments in terms of their digital readiness for tech adoption.

Figure 5 illustrates a typical technology adoption life cycle which, while simplistic, provides a useful framework for segmenting organisations based on where they fit in the adoption lifecycle. Traditionally, it has a flaw, in that mainstream markets do not emerge smoothly from the early market – a chasm lies in between. The most detrimental of all the chasms is the one between ‘early adopters’ and the ‘early majority’ and this is often where most start-ups get stuck while trying to make it from an early market to a mainstream one.

It is very hard to forecast the timescale in which ‘maturity’ is likely to happen. Experience tells us that, for most sectors, technologists tend to overestimate the speed of maturity but even if it were to take as long as 10 years, that is still a significant part of a law firm partner’s career and, without initiating change early on, there is a real risk of being left behind as competitors progress.

Figure 5: Technology adoption life cycle

![Technology adoption life cycle](image)
B2B market maturity

For much of the past three years, the focus in the B2B space – particularly with regard to AI/ML-led applications – has been on the technologies themselves rather than the business problems they address. Almost all interviewees felt that these technologies had suffered from significant overhype. This has manifested itself in ‘innovation by press release’ or ‘success theatre’, with law firms announcing AI partners in bright lights while in reality, the number of deals and the volume of work that is being put through these technologies is significantly smaller.

As a financial services GC put it: “Last year all the big law firms in London were buying [these types of technologies]. They were doing this primarily so that they could say that they had an AI solution in order to show clients that they were innovative.”

It appears that this situation is starting to change with large B2B firms moving from the ‘innovators’ phase into becoming early adopters. Although we are yet to see a change in operating models driven by AI/ML, the ‘chasm’ is being reached by some as law firms develop a more realistic view of where these technologies can add value. Key to this is a shift in focus, away from the technology per se and back towards the applications and the business problems they should be trying to solve.

As one lawtech founder commented: “The most successful early adopters were the big law firms with the war chests – they could sacrifice the human labour and free up expensive lawyers to focus on other things and take a mid to longer term view. These firms have had the opportunity to work with legal tech and get the most out of it.”

Security and compliance for large law firms has also been a significant barrier for lawtech vendors. A further segmentation of the B2B market highlights the difference found between law firms in attitudes, personality and leadership of the individuals involved. However, the following groups (in general) find themselves at different stages of the adoption curve.

- Large London law firms
- London mid-market law firms
- Regional law firms

There is still a perception among some respondents that a lot of lawtech activity remains London-focused. As one lawtech founder explained: “lawtech is still very concentrated in a London bubble around the Legal Geek network. To some degree it’s still the same people talking to each other – it feels that if you move outside London there is not much engagement.”

A view shared by a number of respondents in tech and law firms is that the last 12 months has seen a step change in maturity, but there is still a long way to go. This was explained by the Commercial Director of a lawtech start-up: “This year it has become much more meaningful – that has meant that law firms are becoming more educated as buyers – the focus has become much more use case focused. Buyers have also started to see through the marketing of the vendors. They are becoming more sophisticated as buyers BUT are not sophisticated buyers yet like they are in financial services.”

The head of IT at a global law firm commented: “We are a $2bn operation firm with lawtech now in the top five list on our strategic agenda. Although the percentage of revenue coming directly via lawtech is probably just a ‘rounding error’ that doesn’t mean it will not change.”

There are a number of lawtech vendors who would be keen to target mid-market law firms, but the consensus is that this space needs to be served by more ‘out of the box’ standard solutions that are not generally offered in the market at the moment at an appropriate price point.
B2C market maturity

The consumer space in many ways offers the greatest potential for future growth for lawtech. There is a large percentage of legal spend here, with high volumes of legal transactions spread across many thousands of law firms, often SMEs. On top of this, there is the potential of an even larger currently unmet addressable market, the consumer legal demand that is currently not being served at all. While volume legal service providers in areas such as conveyancing are starting to adopt automation and lawtech in a range of applications, new delivery models for the B2C space (such as DIY law and self-service options) are embryonic. The research has not been able to substantiate significant levels of uptake to date. As such, this segment appears to show both the greatest potential and the most immaturity and law firms here remain in the Innovators stage of the life cycle.

In-house market maturity

Client pressure from GCs looking to reduce legal spend, increase its value or refresh their panels with technology-driven services has been accelerating adoption and maturity for a number of years. Client organisations in areas such as financial services have been investing heavily in technology since the 1980s and are often much more sophisticated buyers and users. They have had the infrastructure and processes in place to support the deployment of new tech and are culturally used to bringing in and crucially successfully rolling out new solutions for the first time. As such, many of the most successful lawtech providers have been targeting the in-house market either directly or indirectly through panels of law and LPO providers.

In-house clients have become increasingly sophisticated customers for legal technology providers with professional procurement departments and ‘reverse auctions’ adding significant rigour to the process. As one regional law firm IT director commented: “They know that they have the buying power now and can use this to reduce exposure to legal fees.”
Comparison with other areas of digital disruption

To put the development of lawtech into context, this section looks by way of comparison at how other areas of digital adoption are developing in the UK, focusing on fintech and the linked areas of insurtech and regtech.

Fintech has become a central focus for financial services institutions, as a new set of competitors such as Monetize, Amazon and Monzo have entered the market and achieved market share. Whereas lawtech’s adoption is being primarily driven by large law firms searching for efficiencies, fintech is increasingly seeing new operating models designed to deliver new services underpinned by technology.

The example of overseas money transfers

A good example of fintech adoption in practice has been the transfer of money overseas. Traditionally this has been a cumbersome and complex process within banks that took several days and could cost around £30 even for the transfer of a modest sum. The ‘friction’ that existed within the system was to the benefit of the incumbent financial institutions.

Fintech companies have disrupted this market, with transfers now being conducted almost instantaneously and a range of new companies offering services for extremely small fees. New providers have circumnavigated the banking networks and the ‘old banking club’ and are now directly matching buyers and sellers of currency, taking only a small return.

Drivers for adoption

While lawtech adoption to date is most advanced in the B2B space, some of the more established fintech and insurtech companies are found in consumer markets where start-ups are capitalising on high levels of smartphone penetration and a preference for digital channels.

Consumer adoption of digital channels has had a knock-on effect in the B2B environment. Financial services workers have access to smartphone and digital technology at home that is much more advanced than that being used in their working environment. Financial services workers then go into their office and sit behind a ‘green screen’ with a mainframe when they are used to using an iPhone and cloud services at home. The gap between domestic and legacy corporate technology had become so large in financial services that change was inevitable.

This is a situation that will be apparent to many working for law firms where the ‘legacy gap’ will be increasing every time a new wave of smartphones is released.

As with lawtech, efficiencies have been a big driver for the adoption of both fintech and insurtech. In the case of the banks, the operational costs had become too high at a time when the amount of activity in banking was at reduced levels. Activity is being taken away by new competition and the spread, and actual fees that can be achieved from dealing or holding money in a bank account are now much smaller. The macro environment and interest rates are making the productivity issue much more keenly felt. Costs are high and cost reduction is a major issue and driver for activity within the banking sector.

Financial institutions are used to driving efficiencies through the use of outsourcing and automation, having invested heavily in both since the 1980s. Fintech and insurtech are just the latest wave in this

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2 Digital technology supporting or enabling banking and financial services
3 Digital technology to drive savings and efficiency from insurance industry
4 Digital technology to help companies (particularly financial services) comply with regulations
trend. The legal profession does not have such an established track record. Added to this, the types of legal process ripe for automation are seen by many as absolutely fundamental to the business of being a lawyer and thus more sensitive to change.

One lawtech respondent compared their experience with adoption in law with that of banks: “In banks there is a real commercial driver to automate and bring in technology to make the process more efficient and effective – they view the use of tech as just supporting a business process and are faster to adopt technology – all they care about is whether it works, is accurate and delivers savings. The law is different – these processes, currently delivered by a lawyer, are so central to being a law firm that they are viewed as much more than just a business process. The law firm sees their reputation being built on this type of activity and is therefore a lot more reluctant to swap a human for a machine.”

However, if you look at processes like conveyancing, writing a will or getting a legal power of attorney and compare that to the example of transferring money overseas, these are all structured processes, often slow and expensive that could be greatly enhanced by the use of technology.

**Barriers to adoption**

There have been a range of barriers to fintech adoption in financial services.

Banks and insurance companies, just like law firms, have a history of developing technology in-house with the rationale that they are different from other sectors. This meant that for a period, banking software was written by the banks themselves. Domain expertise is extremely important in financial services and to be a successful technology vendor here you must understand the client’s business, the jargon and the vernacular. This will be no different in the legal sector where firms will want to know that technology providers understand their business as well as they do.

Fintech has a number of barriers to adoption that are highly comparable to what we see in lawtech. Financial services institutions have a shortage of funds to invest, a shortage of the right people and a shortage of time to make the necessary changes. As with law firms grappling with lawtech, the financial services sector has struggled to analyse which is the best technology to use and who is best to implement it, what should it cost and what should be done first. All these barriers are consistent across the different sectors, as is the need to drive adoption throughout a bank or insurance company. Effective project management, project initiation and project assessment are all major issues within any organisation that is looking to make transformative changes.

**The crucial role of the regulator**

While many of the drivers and barriers to tech adoption in the legal and financial services sectors overlap, the role of the regulator has been very different. The Financial Conduct Authority (FCA) has taken a very hands-on approach to the development of fintech, firstly by regulating many of the start-ups directly and in pushing for the use of technology as a positive means to drive compliance. Over the last five years, regulation has become a great spur to adopt new technology within financial services.

As a consequence, the related field of ‘regtech’ has developed to support the Regulator’s need for improving audit trails, better treatment of the individual customer (know your customer (KYC)) as well as a more holistic view of an organisation’s risk profile. The FCA is also looking for much more regular updates on risk profiles moving towards daily rather than monthly reporting cycles. As a consequence, some 75% of IT spend in Financial Services has gone into improving regulatory standards.

As covered elsewhere in this report, regtech companies – particularly in areas like KYC and anti-money laundering (AML) – have started to move into the legal market as regulations have spread beyond financial services. This has created an adjacent market for regtech with law firms.
How financial services has accelerated adoption

Fintech took time to gain traction with financial services institutions, which initially ignored much of the start-up community, preferring to do things themselves. This saw banks and insurance companies spend large amounts of money and time trying to replicate what was already being done more quickly and cheaply elsewhere.

The next phase in fintech evolution saw some big banks and insurance companies set up their own scouting networks to identify and build relationships with start-ups. Following this has been the establishment of several fintech accelerators, where companies like Accenture have brought together multiple fintechs and financial services organisations to work together on practical problems. In some cases, they have gone on to acquire or invest in the most interesting ones, a very similar model to that being pursued by some large law firms.

Despite the willingness to engage, many large financial institutions have struggled to partner with fintechs where different cultures and approaches to innovation limit collaboration or the smaller company finds itself ‘swamped’ by the giant bank or insurance company. This has created the need for big institutions to have an interface with fintech to bring these organisations together via an innovation framework that encourages collaboration and prevents the fintech from being completely overwhelmed.

This has seen companies like Temenos and Finastra developing platforms on which fintechs can now sit, designed to allow financial services providers to access the technology in a way that protects the fintech. This has given rise to the super aggregator within financial services platforms such as Bud, an independent banking and aggregator platform.

Comparisons in market maturity

Fintech, insurtech and regtech (in its core market) are all more mature markets than lawtech, having been established earlier in verticals that invest heavily in technology. While many of the barriers and drivers remain consistent across industries, fintech has particularly benefitted from a regulatory environment that has accelerated adoption. The table below summarises the maturity of these different areas of digital disruption across a range of key criteria. The table cells are colour-coded as follows.
### Figure 6: Summary of market maturity across areas of digital disruption

<table>
<thead>
<tr>
<th></th>
<th>Lawtech</th>
<th>Fintech</th>
<th>Insurtech</th>
<th>Regtech</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size of ecosystem and start-ups</strong></td>
<td>Lots of companies ripe for consolidation</td>
<td>Well established and thriving UK cluster. Global centre of expertise</td>
<td>Very active market driven by UK’s large insurance sector</td>
<td>Thriving community of established providers of regulatory solutions and start-ups</td>
</tr>
<tr>
<td><strong>Funding environment</strong></td>
<td>2018 most active year to date but embryonic</td>
<td>Extremely well-funded with high-quality companies</td>
<td>Has become very active in the past 12 months</td>
<td>Remains niche for start-ups</td>
</tr>
<tr>
<td><strong>Current level of disruption</strong></td>
<td>Mostly focused on delivering efficiencies. Few genuinely disruptive approaches to the law</td>
<td>Different operating models that are tech enabled</td>
<td>New consumer and corporate services</td>
<td>Streamlining and creating efficiencies</td>
</tr>
<tr>
<td><strong>Regulatory environment</strong></td>
<td>Some disconnect between regulations and technology</td>
<td>FCA a driving force for adoption</td>
<td>FCA a driving force for adoption</td>
<td>GDPR, KYC, AML all driving adoption</td>
</tr>
<tr>
<td><strong>B2C adoption</strong></td>
<td>Embryonic market although one with large potential customer base</td>
<td>Many providers gaining traction and crossing over into mass market</td>
<td>Supply of new solutions is increasing but market still wedded to traditional providers</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>B2B adoption</strong></td>
<td>Gaining traction in large law firms but adoption within firms still inconsistent</td>
<td>Active market but with fintechs often still finding it hard to engage with large FS providers</td>
<td>Insurance companies increasingly investing in digital disruption</td>
<td>Regulatory compliance is one of the main areas of spend for Financial Institutions</td>
</tr>
</tbody>
</table>

**Key**

- Early stage
- Maturing
- Most mature
Implications for the future of law

Widespread adoption of lawtech and the increasing automation of legal services and processes will have a profound effect on the UK legal sector. This section looks at some of the potential implications on future skills, service delivery models and the competitive environment.

Future skills

The potential impact of lawtech on jobs and skills within the profession attracts a great deal of media attention. While it is too early to know exactly how this impact will play out, it is possible to explore some of the likely scenarios and to take lessons from other sectors that are further along the digital adoption journey. Key questions that need to be answered include:

- What (new) skills will organisations require?
- What does this mean for training and development of future lawyers?

The lesson from comparable professions in financial services or management consultancy, both of which are more advanced in their digital adoption, is that while technology has not led to huge headcount reductions, it has affected which skills are required and where they should be deployed. For example, some banks now employ almost as many technologists as 'bankers', while management consultancies have frequently moved their model from one-to-one bespoke advice to platform-based services that are technology enabled.

A consistent theme across all types of respondents was that law firms of the future will have to have a combination of skills straddling both technology and the law. While there was consensus on this point, views on the degree of integration between technology and legal skills differed significantly. On one end of the scale was a minority of respondents who felt that the future would be 'lawyers who can code', while others felt the two skill sets should be kept quite separate.

One large legal technology vendor’s view was: “I think it would be useful for lawyers to code although not necessary. It does give lawyers the ability to cut through the hype of tech vendors and makes it easier to work with as they can communicate better with the engineering team if the tech requires customisation and takes the product in a new direction that doesn’t come out of the box. It’s all about asking the right questions at the right time. This would definitely help collaboration between vendors and law firms and help with expectation management.”

The alternative view is expressed here by a GC at a large global company: “On skills I am a firm believer that legal services providers should not be looking for different skills. It’s fine having a COO and process management functions, but core lawyers are there to provide legal advice and their expertise here should not be watered down by a focus on other skill sets such as IT… a lawyer is not there to be a coder… that’s what the IT department is for. Lawyers should be hired for their legal knowledge.”

Some large law firms are bridging the gap between legal and technology skills by having separate entities running lawtech adoption, providing a mixture of technologists and lawyers not doing directly fee-earning work. They are employing into roles such as legal project managers, legal engineers and legal service delivery agents, all in a legal service centre environment. For law firms like these, the ideal candidate is a lawyer who understands technology and, unsurprisingly, most of the people who have founded these entities are lawyers passionate about tech. As an example, one Magic Circle firm has a legal tech team of 40 people with a ringfenced capability that keeps them away from ‘business as usual’ IT work, with a set of skills that did not exist in the IT department just 18 months ago.

Future ways of delivering legal services are likely to depend on a range of professionals, not only lawyers, and so having multi-disciplinary teams is likely to be key. Firms may also need to offer different career and work options so that they can retain access to
the best talent while benefitting from a more flexible staffing model.

The demand for new types of skills
There is little doubt that increased adoption of lawtech is going to drive recruitment for different skills both within law firms and within the wider lawtech ecosystem. The adoption of cloud computing within certain parts of the legal sector is already feeding through to different skill sets within legal IT departments. This translates into a greater need for internal consultants and architects over, for example, database managers or someone who can build a server.

Lawtech adoption, particularly AI/ML-led applications, is increasing the need in some law firms for data and analytics expertise and in some cases, they are already recruiting data scientists from leading universities or establishing their own data labs. Indeed, interest in this was also expressed by some in-house legal respondents particularly with regard to establishing a better understanding of their suppliers and costs.

Process management is another area where we are seeing investment, with a number of examples of process managers and management consultants joining law firms to bridge the gap between the law, business processes and technology, as one GC respondent explained: “There is still a missing link between the process managers, tech professionals and front-line lawyers. This group needs to work more efficiently and there has to be greater dialogue here for lawtech to be better adopted and crucially better deployed. The problem is not so much one of adoption into the business but of deployment within the business... These groups don’t speak the same language and it’s causing problems for law firms even when the intention is there.”

Legal engineering firms
To help bridge the gap between the law and technology, a small band of law firms describing themselves as ‘legal engineering firms’ has been established, operating in the space between the law, legal technologies and data. The market need that these firms are looking to serve is the very real requirement to build legal solutions at the interface of tech, data and the law – both for law firms and in-house legal departments. They are regulated law firms that look and talk like technology providers – Cambridge firm Wavelength Law is an example. While this is a niche offer at present, it is certainly one route that the wider legal services market could take in due course.

Future training and development of lawyers and the impact on succession planning
Future proofing legal skills is going to require modifications to law school syllabuses to ensure new graduates have the right blend of legal, technology and process skills that fit with client demands and service delivery needs. Some law firms are already building relationships with universities to develop partnerships looking at legal innovation and the intersection between the law and technology so that programmes can be developed for trainees covering areas such as natural language processing, automated fact checking, stats and analytics and AI.

Another consequence of increased automation, particularly in areas such as document review, could be the removal of the long-term need for so many graduates and paralegals. In the short to medium term this may be more than made up for by the demand for junior lawyers to help train up AI and ML systems, uploading contracts and using the new technology. However, in the longer term, the degree of demand for entry level legal skills remains uncertain. For these types of entry level positions, the often-repetitive tasks that were undertaken on behalf of clients were seen as a rite of passage and path to progression in law firms. Reducing the pool of graduates and paralegals may have significant knock-on effects to the flow of associates and partners of the future.
Future service delivery models

The law firms of the future are much less likely to look like current legal partnerships. While this model may well remain dominant for the foreseeable future, a number of respondents could see a variety of alternative models becoming adopted in the legal market. As one large London law firm Senior Director explained: “The law firm of the future may not be a partnership of lawyers, it might be a multi-disciplinary partnership, a public company, or a financial investor-backed private company. The transformation required to thrive in the new order will be costly and firms will have to look to alternative sources of funding to pay for it.”

A Business Development Director at a large technology company commented: “If you are not thinking about the fundamental disruption of your legal business then you will not be able to make the step changes that are necessary – you have to be looking at what legal services might look like in 20 years’ time and be ready to shift.”

A multi-model market

A scenario is developing where there is a greater variety of company structures and business models providing legal services in the UK. Law firms are not one homogenous group or indeed model – it is a multi-model market that includes at least the following:

- Alternative Business Structures (ABS)
- Listed ABS
- Private equity backed ABS
- SMEs/high street partnerships
- Legal marketplaces
- Big 4 accounting practices and management consultancies also doing law
- Magic Circle/global law firms
- London law firms
- (Regional) mid-market

Some of these models will be better than others at overcoming specific barriers to adoption. There are pros and cons across the models and it will be interesting to see which gain most traction in the lawtech space.

Changing commercial models

The adoption of ML and AI driven applications, particularly in the document review process, is forcing law firms to reconsider their commercial models. As the CEO at a London-based lawtech start-up explained: “If we don’t have the hundreds of paralegals to work through disclosure and discovery how do they (law firms) make the same money? What does the business model look like that fills the gap that is made by the efficiencies being delivered through tech? This is still a conundrum that they are trying to wrestle with, particularly with regards to who benefits from the savings delivered through the software.”

The conundrum facing both law firms and client organisations is how best to share the cost savings and benefits of automation and technology adoption. In the early days it was a learning curve for the law firms as to whether to be transparent on cost savings or not. In some cases, to get buy-in from clients to use new lawtech solutions they might offer to ‘double up’ and use both human lawyers and machines and offer extra services to clients to de-risk new delivery models. Some law firms then started to realise that there were certain areas of the law where they could make a good return on investment. Examples that emerged during the course of this research were mainly in the regulatory and compliance areas. As clients have become increasingly savvy there has been greater pressure to pass on cost savings delivered through technology. The conundrum for law firms remains on how to do this without reducing profits.

Commercially there are already a variety of models beyond the classic ‘cost per hour’. Clients are used to LPO providers charging per document and there are technology providers charging per project. Fixed costs have become increasingly common (particularly for those client organisations large enough to demand them) but they are often still based on the previous hourly rate model.
One respondent from a big technology company felt it was “generational differences driving different commercial models – baby boomer norms vs millennials.”

The winners of the future are likely to be those who best respond to the changing needs of clients. Clients have long been frustrated with the cost of legal service delivery and some may respond by taking more work back in-house, supplemented by bringing in individual lawyers through ‘lawyer on demand’-type providers.

**Future legal services for consumers**

The B2C market’s adoption of lawtech is less mature and less advanced than much of the B2B space but, given the size of the spend, the number of law firms operating in this space and the latent legal market currently unserved by law firms, the potential remains huge.

Mark Edwards of Rocket Lawyer stated: “We know that about 80% of people and small businesses don’t go to lawyers to get legal advice, even though they need it. My belief is that by using technology to reduce costs and make the service simpler and more accessible by delivering it online, people will use it. We will end up bringing in that 80%, in turn creating a demand for more lawyers to provide legal services.” (The Guardian, December 2017).

The role lawtech ultimately plays in helping reshape consumer legal services is partly about ‘access to justice’ and ensuring that key legal services remain available to those with limited ability to pay, but also that quality legal services that can be afforded by the mass market. The size of the ‘latent legal’ market – the latent demand for law that consumers are currently unwilling or unable to pay for – is potentially huge and there are a number of lawtech providers looking to deliver technology-based solutions to serve this market in an automated fashion.

Robot lawyers, Q&A sites, digital triage, robo-advice (the latter often being provided by non-lawyers) are all increasingly moving into the consumer market looking to offer legal services in different and more affordable ways. While the knowledge is provided by lawyers, these companies are often not regulated in the same way, which will require careful communication to consumers.

There are also a number of Q&A websites purporting to offer legal advice online. This type of service is popular in the US and we are starting to see signs of US providers setting up in the UK – for example Rocket Lawyer. Again, few of the companies offering this are lawyers.

One example of a ‘robot lawyer’ that we spoke to in the real estate market believes that lawyers should be engaging with this type of consumer mass market solution to ‘future proof their careers’. The interviewee explained: “If you can brain dump into these systems it’s like having a royalty for life – lawyers can use their knowledge to interact with clients one-to-many rather than one-to-one in the old model. We are asking lawyers to put their knowledge into our solution and use that as a lead generator for higher value work as their details are stored in the app with many clients still asking for human advice to top and tail what the machine can provide. I believe more systems like this would in the long run generate more work for human solicitors - particularly in the high-end expertise type advice where some risk needs to be negated.”

**Virtual office and virtual law firm**

One scenario has the ‘law firm of the future’ as a network of lawyers made available through backend infrastructure, eliminating the need for human administrative roles and allowing for lower prices for consumers and increased productivity.

The future of the virtual office also means that executives can employ a workforce in multiple locations and enable staff to work from home, opening up access to a geographically and demographically more diverse labour pool allowing law firms to reach a broader skills base.
Potential to develop law as a platform

As new and emerging technology inevitably permeates law firms and becomes an increasingly key component of service delivery, law firms will have to decide the extent to which they wish to embed the technology capability. Some firms are likely to continue to take a more traditional approach, whereas others will embrace and fuse technology with legal practice. Firms of the latter type are likely to deliver technology-enabled legal services and, given the experience of other comparable sectors – most notably the experience of Management Consulting and Accounting professions – some law firms may migrate towards a 'platform-based' approach to service delivery or 'law-as-a-platform'. Indeed, there are already several examples of LPO providers migrating away from large offshore delivery centres to platform-based approaches in order to deliver legal services. One such provider, Conduent, is already offering in-house legal teams a mixture of LPO based on labour arbitrage, proprietary technology platforms for services such as eDiscovery, or managed services offering a combination.

Another potential platform-based approach is for law firms to develop a 'one-to-many' tech-enabled service. We encountered one example in the B2B space where a law firm was considering investment in platforms that appeared to clients to offer the best of a bespoke service but, in reality, was offering a mainly standardised service. When new bespoke solutions were created for one client, they would then be added to the platform and made available in turn to a multitude of clients to drive efficiencies in service design and standardisation.

Another area of interest is the ‘Uberisation’ of law. A 2017 blog from transformation consultancy Agility in Mind states that economic volatility has impacted the high street law firm B2C sector, with the ripple effect of the economic downturn being felt in property prices, consumer spending and lower interest rates, with cash-strapped clients more discerning. It describes this as the “Uberisation of the legal sector,” with clients’ purchasing power and their tendency to shop around directly affecting the nature of the services sought in high street law firms. Such a model could see law firms delivering services without actually employing any lawyers.

Lexoo, which recently raised $4.4m in Series A funding, is an example that uses a combination of a search engine and in-house legal team to match client briefs with law firms bidding for work. Clients pay nothing for the search and Lexoo takes a fee from the law firm winning the bid.

Client-centricity

Recent years have seen the majority of sectors become increasingly client-centric, with improved service design and digital usability increasing the importance of the client experience.

The perception among participants, particularly client organisations and the tech providers, is that law firms are less advanced than other sectors in placing their clients at the heart of everything they do. It is not that progress is not being made (examples were given of law firms producing portals for client use but finding they were not getting high levels of adoption and usage, which was proving frustrating). When law firms followed up with their clients to understand why the portals were not being used, clients outlined a situation where they had 10-15 different law firms all offering proprietary portals with little or no collaboration. While this is just one example, it illustrates how things are not always viewed through the client’s eyes and where clients were getting frustrated despite the efforts of the law firms.

As one GC in the banking sector commented: “There is a lot of noise at the moment about becoming more client-focused but I have yet to see the benefits. The basic service delivery has not been addressed – they still can’t really tell me what the costs of a particular legal service are going to be and help manage my expectations on the budget. I have internal stakeholders… the cost of legal sits in my CFO’s P&L and I find it very difficult to provide accurate forecasts on costs. I explain this to the law firms, but nothing seems to really change… we still get unpleasant surprises, which reflect on me badly.”
There was also some suspicion from a minority of in-house lawyers that it was the law firms themselves who were benefitting from lawtech efficiency savings but not passing these on to the client.

The client must be at the heart of everything that the law firm does. This should involve looking at all aspects of service delivery and listening to what the client wants and needs, then adapting accordingly. At present, in the main, law firms are not thinking like this. As quality in law firms becomes less of a differentiator (quality should be a given), firms are starting to differentiate on other things like innovation and technology but are not yet at the stage where law firms are commonly involving clients in areas like co-creation and service design thinking.

**Future competition**

The competitive landscape within UK legal services is undergoing disruption in a number of ways.

‘Big Four’ accounting providers pivot to legal services

All of the Big Four accounting providers (EY, KPMG, Deloitte and PWC) are currently establishing legal practices and were cited by a range of respondents as one of the most likely disruptors of the UK legal sector. As one Magic Circle law firm CIO explained: “Genuine disruption might have to come from an outside force with the Big Four looking like the most likely candidates – they know how to engage clients, procedurise activity, and outsource effectively – and are now buying up tech and legal capability such as EY buying Riverview. This could be the outside trigger that forces law firms to change.”

We know that GCs are under pressure to look at new ways to drive efficiencies, maintain quality and budget. There is an argument to say that if a GC is looking to get consistency across territories, using a supplier that is trusted by the Finance Director, that is practical and commercial, and that can integrate tax advice, consulting, legal all in a seamless process, the Big Four has a compelling proposition.

The Big Four also have a good technology story to tell, having driven high levels of automation through professional services such as auditing while also having ‘deep pockets’ from which to invest in lawtech. On the flip side, they may encounter real problems around conflict of interest and it can take four months or longer to clear conflict for certain clients to work with the Big Four on legal activity.

**The impact on small law firms (the eBay vs Amazon models)**

One argument is that lawtech will liberate some small boutique law firms to help them compete with larger firms that currently rely on larger workforces. Better application of lawtech might negate the advantage of having large teams. There is scant evidence of this happening in practice, but it was discussed by respondents as one scenario for putting more competitive pressure on large law firms.

One respondent put forward two scenarios for how technology platforms (marketplaces) might impact small legal providers. One is the ‘eBay model’, which is where tech marketplaces effectively empower small law firms to increase their reach with technology acting as an enabler. The alternative is the ‘Amazon model’, which will drive consolidation of supply through a dominant platform hoovering up market share.

While it is currently not clear how marketplaces will play out (and as discussed elsewhere in this report there has been little uptake to date despite a number of companies establishing services here), marketplaces have the potential to greatly impact law firms with a high street presence. Just like so many other retail offers (for example, banks, estate agents and insurance brokers), the online matching of services tends to reduce the need for high street real estate.

Small high street law firms were the hardest segment to engage in this research project and as one start-up founder explained: “Most law firms are very small and I feel that they are not really being represented in the lawtech debate – they are definitely underrepresented. If lawtech is rolled out on scale by large players, who are productising legal services there is a real risk that
these small businesses are going to suffer big time… they need to have a seat at the table.”

One B2C law firm senior partner went further: “If the (consumer) law sector does not get to grips with this, it will not be long before major disruptors drive a truck through existing business models doing it much cheaper and better with bots and tech driven solutions and opening up on mass in the UK. Just look at what has happened to retail. Why should law be any different?”

Legal process outsourcing (LPO)

Some of the most enthusiastic adoption of lawtech has been in the LPO space where providers are looking to move away from (off-shored) labour arbitrage models of delivery to tech-enabled platforms. Examples from a GC indicate where the tech adoption of their LPO roster was significantly more advanced than their law firm equivalent. Some LPO providers are offering technology, resourcing, outsourcing or a managed service, or a combination of these.

One senior LPO executive interviewed thought their competitive advantage was, however, based on volume and access to data: “The other advantage we (LPO providers) have is that buying the AI/ML application is often the easiest bit. What is more complex and time consuming is the training of the AI or deploying the automation and you need the volume of work to make this effective. Things have to be repeatable and lawyers have a tendency to see their work as unique… this is why there has been better traction of lawtech within the LPOs which are rarely run by lawyers and are always looking to standardise business processes.”
The role of the Law Society

Without exception, respondents were keen to express views on how the Law Society might add value to the lawtech ecosystem, with suggestions broadly categorised as follows.

Visionary piece/future of the law

A subset of respondents (mostly law firms) saw value in the Law Society helping its members prepare for future developments. This role as a ‘visionary’ for the sector would see the Law Society act as a facilitator or steward of the future, helping its membership focus on what the future might look like. A range of time horizons were put forward but the most common was a ‘2025/2030’ vision.

Some respondents were critical of the Law Society having been reactive to changes in the past and saw this visionary piece as a key way to “get on the front foot” with changes and developments in the sector, such as technological change. One respondent cited the example of social media and how long it took the Law Society to get to grips with the implications of this.

While respondents were sometimes critical of the Law Society’s engagement in helping to shape the lawtech debate, there was recognition that this had massively improved recently.

The Head of IT at a specialist UK law firm explained: “18-24 months ago if you spoke to anyone in tech in a law firm about where the Law Society could add value they would say it was behind – if you wanted tech or regulatory advice you would not go to the Law Society as they were so far behind. However things seem to be changing – with new leadership and other activities in last 12 months they are much more visible and relevant – their involvement in Eagle Lab is a great example of this, commitment to tech and more accessible and taking tech more seriously... they need to be agile and be ahead of where the law firms are... The work that is being done on the social impact of AI is a good example of new ways of working at the Law Society. This is much more relevant and more of this would be welcome.”

Some respondents felt the Law Society’s role as a ‘neutral broker’ would ensure that there was more ‘honest’ reporting in the lawtech space and could move the thinking forward in a way that did not build on hype and a hollow excitement that may have damaged expectations and progress.

Future of skills

A key component of any future vision will relate specifically to what technology means for the future of skills within the sector. This might involve working with law schools and helping keep their syllabus relevant for the lawyer of tomorrow.

Training might also need to address the issue that future delivery models may be more complicated, with professions beyond lawyers providing legal services – for example, legal services could be provided by a team of lawyers, technologists, data analysts and operations specialists, potentially using outsourced providers.
**Education**

By far the most popular response to the question of how the Law Society might help its membership prepare for the future and deal with the challenges and opportunities posed by lawtech, related to education.

The focus on what that education might look like in practice differed considerably between respondents with a wide variety of suggestions put forward by participants, as outlined below.

- Training on technology and legal design
- Coding and digital skills for lawyers
- Working parties on tech and regulation – like the example of ‘women in law’
- Training geared towards getting the technology functions of law firms and its management team to work more closely
- Realising the business benefits of lawtech
- Engaging the tech vendors to get training and exposure to different types of systems. Help with guidance and testing of systems that would save time for law firms that are not able to afford to do this themselves
- Best practice in lawtech to help reduce perceived risks
- Education that is practical (“can't be 3-hour webinars for CPD points”)
- Conferences and seminars to link vendors and members – not necessarily a Law Society software guide but better connecting technologists in law firms with the partners and then the vendors
- Greater focus on the applications rather than the core technologies
- Comparison with other sectors that are being disrupted, for example retail.

AI was cited by a number of respondents as an area where particular focus would be welcome, given the hype and confusion associated with the technology and associated applications. It was suggested that helping translate the technologies into practical examples of what they can do for a law firm would be valuable. Case studies, AI strategy and best practice were also put forward as requirements.

A lawtech commercial director explained:

“Education is needed on AI. What can it do and how can it be used by lawyers on daily tasks? Show lawyers how to embed this into the firm so that tech ‘is not just sold and chucked over the fence’ but is actually properly embedded.”

Education was seen as a crucial part of helping law firms of all sizes navigate the confusing lawtech landscape.

**Benchmarking/tech adoption index**

It was apparent from the law firm interviews that there is a real curiosity to know how they are faring in comparison with peers in the adoption of lawtech. Law firms want to know where they sit relative to the competition.

One potential proposition, presented to a number of respondents, was the concept of a Tech Adoption Index or benchmarking exercise where law firms were able to get an independent validation of their lawtech adoption and journey to date with potential support to help accelerate ‘up the adoption curve’.

While the response to the proposition was broadly positive, the point was made that any benchmarking would need to be relevant for the law firm in comparing adoption with genuine peers. To be useful, “apples must be compared with apples”. As such, getting that segmentation right will be key to the utility of such an exercise.

It was felt particularly appropriate for smaller law firms and those firms that did not have technology or innovation teams and who may need the most help navigating the changing landscape. However, the challenge here is that this group may be the hardest to engage in the lawtech ‘conversation’ and have fewer resources to take this forward.
One B2C law firm respondent observed that it "could be interesting to see where the high street firms are sitting and may encourage them into action. The advice and practical support that comes off the back of it must resonate with its audience... Helping them break through the hype – some sort of tick list to help keep focus on where they actually are as a firm in reality versus where the hype of the sector is sitting could be very useful."

While larger law firms are more engaged in the lawtech debate, they have more resources available internally to approach technological possibilities in a bespoke manner.

A Tech Adoption Index was seen as a potential tool to help lawyers to be less risk averse and more confident in this space – and could involve identifying areas that law firms need to know about and recommending approaches to tech innovation. As one small high street law firm commented: "We would welcome guidance, we do not even have an internal IT department and need help to know if things are worth doing and what the regulatory impact might be."

There was also a perception shared by a minority that the Law Society should be embracing in-house lawyers more closely and this might be a tool to help do that around the education of lawtech adoption. Some of the in-house lawyers interviewed felt they were one-step removed from developments in lawtech and would benefit from having their awareness raised.

There was also some scepticism among a small subset of large law firms around the Law Society developing a range of products and rolling these out to the membership on mass.

The key to engaging different segments of the market is making the tool relevant and useful to law firms of different sizes with different sets of needs and challenges.

**Education on vendors and offerings**

The role the Law Society might play in helping to educate members on vendor offerings divided opinion into two main camps. One group suggested that it was vital that the Law Society remain technology agnostic and should not be endorsing any specific vendor or its solution. While it might provide advice on technologies or applications it should not recommend specific companies.

The other camp suggested that an independent evaluation of suppliers would be an extremely valuable service and a way for start-ups to gain credibility with major law firms.

One specific example is AI where a leading provider interviewed suggested the following: "I haven’t seen anyone doing a ‘horse race’ between the big AI providers in lawtech. The Law Society could really help here... Law Society papers in this space help with an understanding of AI and RPA but some of the vendor claims do not represent reality and what can be achieved by AI and, crucially, what effort a client organisation will have to put in to get AI to work.... this is a big gap in the market at the moment and somewhere that the Law Society could take a lead."

Helping members appreciate what can currently be done and how much effort they need to spend might help bridge the current expectations gap between AI vendors and law firms.

In the consumer space there is potential for the Law Society to help consumers navigate new and emerging offerings such as marketplaces. A Law Society brand or validation attached to a marketplace might provide levels of confidence that may support consumer uptake and provide a digital route to market for smaller law firms.

The fragmented lawtech landscape, with so many providers offering varieties of similar solutions, is incredibly confusing for law firms and consumers. Law firms are having to evaluate multiple vendors with similar offers and essentially ‘place a bet’ on a particular provider. The Law Society could help law firms minimise this risk. As one B2C firm expressed: "There is just too much (lawtech) out there and it’s massively confusing for law firms. Much of which is just looking at single solutions that only solve part
of the problem. There are too many companies that cannot all survive... I suspect we are all going to need systems integration specialists to help us. The Law Society could help here with due diligence and checks on technology vendors’ finances and customer base. This would definitely help provide confidence when picking a supplier.”

Independent expert adviser/trusted adviser/leveraging the Law Society brand

The Law Society’s brand allows it to play a key role in all aspects of education around lawtech when positioned as an independent expert adviser producing information and insight for its membership without being overly prescriptive. Informing the legal sector as to what is out there and helping law firms navigate the lawtech market is likely to strengthen trust in the Law Society brand.

Incubators and knowledge transfer

The Law Society’s partnership with Barclays on the Eagle Labs initiative was universally well received by respondents across the board and seen as a really positive step. There were some suggestions for future collaboration or focus for further initiatives of this type. One respondent from an innovative family law firm suggested the following: “Eagle Labs is a hugely exciting development. I would like to see something similar for High Street law firms as we are just not catered for by current incubators. We have been transferring tech knowledge from our local university into the firm via a Knowledge Transfer Partnership programme. Half the funding comes from the EU so who knows what will happen post-Brexit. Could there be a role for the Law Society to help firms like us fund this type of activity, particularly if it’s in the ‘Access to Justice’ space?”

Ethics (of AI)

One specific area that was raised as an issue by a small number of respondents was the ethics of AI and the role the Law Society might play. Issues relate to the fact that a relatively ‘narrow’ set of people are currently developing algorithms determining how AI will work and this needs consideration for its implications for the law. Related to this is Machine Learning and the assisted learning required where again the pool of people driving this might lack appropriate levels of diversity.

The wider issue here was suitably covered in Horizon Scanning: Artificial Intelligence and the Legal Profession, The Law Society, May 2018: “Today’s artificial intelligence (AI) lacks our general intelligence; nevertheless, some areas in which lawyers should expect to see an increasing number of tech-triggered legal problems are insurance, mortgages, data protection, IP, criminal sentencing, privacy, surveillance, medical diagnosis, AI created contracts, currency/banking and legal research. Additionally, robots powered by AI (for example, self-driving vehicles, robot surgeons, factory workers, drones) will bring growing legal challenges around liability, ethics and accountability – including difficulties such as how to cross examine an algorithm? In machine learning based systems, finding out what the system was ‘thinking’ at the time of an accident or error is a highly specialised task, and will require new approaches and types of expert witness. While some routine jobs may go, other new jobs will emerge. Issues of liability around AI systems could actually increase the need for legal support. Law firms will need far more tech-minded entrants implementing and monitoring new AI systems.”

Standards on procurement

As mentioned in the barriers to adoption section earlier in the report, one of the specific issues faced by lawtech vendors is the protracted and slow procurement process. A number of lawtech vendors
expressed their frustration with this during the research and suggested that there might be a role for the Law Society to play in helping improve processes and practice. While this might involve setting some standards on what is required in areas such as information security, it is more likely to cover best practice rather than lobbying for regulation to avoid adding extra hurdles.

**Regulation/lobbying the regulator**

A roundtable of Legal Futures and the CLC (Council for Licensed Conveyancers) discussing the adoption of sophisticated technology by conveyancers concluded that: “the greatest challenge will be to devise a regulatory framework sufficiently flexible that it does not require constant tinkering as the technology continues to develop – regulation has always had the problem of constantly trying to catch up with the market” *(Regulating the robots, Legal Futures, July 2017)*.

There is a perception among a group of respondents that regulation in the lawtech space is lagging behind the digitisation of services. Could there be a role for the Law Society lobbying to bridge that gap? As such, lawtech might benefit from closely aligned working between the Law Society and the SRA. The example given was the way in which the FCA had closely aligned itself to the fintech space, acting as a catalyst for adoption by providing clear regulatory certainty.

Some examples of areas of lawtech that might benefit from further regulatory certainty include:

- Pricing and liability with AI-led delivery – the move away from the traditional model of delivery poses problems around where liability should sit. If the tech company will not take liability, how might the law firm or the client accept more liability and price accordingly? Some sort of protocol might be needed around this.

- Regulators have not reached a consensus on cloud-based services in law so have to get specific permissions from clients. Electronic signature is an example given. Corporates are using cloud-based services in their BAU and have been for many years – why is that different in the legal sector?

The Law Society can help to bridge the gap between the regulator and law firms wanting to implement technology by helping provide better clarity on a range of issues. Checklists or ‘how to’ guides might shed some light or suppress some fears on the regulations.

**Lawtech ecosystem**

There is recognition that the UK has developed a vibrant lawtech ecosystem and, at present, there is no formal custodian of the ecosystem beyond some of the networks and conference organisers. A small number of lawtech respondents suggested that the Law Society should look to move the focus of the sector beyond just the individual companies. One lawtech commercial director interviewed stated: “There is a great opportunity for the Law Society to coordinate the lawtechs and help promote the sector. At the moment no one is really doing anything beyond the individual companies.”

Some respondents felt that the ecosystem was something of a ‘London bubble’, with limited engagement outside of the M25. The Law Society’s England and Wales remit may help address this perception and spread the focus beyond the South East.

One suggestion was that the Law Society have a physical space or room for AI, where buyers could engage with various sellers and understand different offerings in an efficient way. Alternatively, the creation of a digital community with or without the Law Society adding services to the mix would have potential. Other sectors were cited as having done this successfully – the construction sector with AI and Virtual Reality, where sector-wide solutions to specific problems can be sourced.
A pre-vetted and pre-screened online lawtech community would offer the Law Society a number of potential avenues for commercialisation.

**Engage with IT departments in law firms**

Several of the law firm IT directors interviewed felt that the Law Society had historically not engaged as effectively with technologists as it had with lawyers. When considering lawtech, they felt it was vital that they had a seat at the table to ensure that technology and legal went hand in hand. There was recognition that this situation had improved over the last 18 months or so. Law firm IT directors in general appeared keen to share best practice and learnings with potentially rival law firms – very much a peer relationship and there is an opportunity for the Law Society to help facilitate this.
Conclusion

This section outlines some of the key findings of the research and, crucially, links them back to the project aims as set out in the Introduction at the start of the report.

Adoption by legal market segment (B2B, B2C and in-house)

While lawtech in general terms – and certainly relative to what is going on in adjacent sectors such as fintech – is still embryonic, adoption rates by legal market segment across different technologies do vary.

The figure below summarises which technologies are gaining traction and where there will be the greatest sustained impact.

Current adoption by market segment is represented by colour coding (see key). While this is not a quantitative exercise, it does provide some degree of comparability relative to other legal market segments.

Layered over the colour coding of each segment is an assessment of where we expect to see the greatest sustained impact over the next few years. Clearly future gazing is a very inexact science, so for this purpose we are looking over approximately a five-year time horizon.

Figure 7: Current lawtech adoption by legal market segment and potential transformative impact over a five-year time horizon (continues on page 56)

<table>
<thead>
<tr>
<th>Technologies</th>
<th>B2B law firms</th>
<th>B2C law firms</th>
<th>In-house</th>
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<td>HIGH</td>
<td>MEDIUM</td>
<td>HIGH</td>
</tr>
</tbody>
</table>

Key

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>High sustained impact on the sector — transformative technology (new ways of doing things)</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>Medium impact — primarily efficiencies (doing things faster/cheaper)</td>
</tr>
<tr>
<td>LOW</td>
<td>Little or no impact</td>
</tr>
</tbody>
</table>
Figure 7 (cont): Current lawtech adoption by legal market segment and potential transformative impact over a five-year time horizon

<table>
<thead>
<tr>
<th>Applications</th>
<th>B2B law firms</th>
<th>B2C law firms</th>
<th>In-house</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal analytics/search</td>
<td>HIGH</td>
<td>LOW</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>Contract management/analysis</td>
<td>HIGH</td>
<td>MEDIUM</td>
<td>HIGH</td>
</tr>
<tr>
<td>DIY law</td>
<td>LOW</td>
<td>HIGH</td>
<td>LOW</td>
</tr>
<tr>
<td>IP protection</td>
<td>MEDIUM</td>
<td>LOW</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>‘Access to justice’</td>
<td>LOW</td>
<td>HIGH</td>
<td>LOW</td>
</tr>
<tr>
<td>Legal docs as a service</td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>Legal services marketplaces</td>
<td>LOW</td>
<td>LOW</td>
<td>LOW</td>
</tr>
<tr>
<td>Practice management tools</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
</tr>
<tr>
<td>Risk and compliance tools</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
</tr>
</tbody>
</table>

**Key**

- **Good adoption**
  - HIGH (High sustained impact on the sector – transformative technology (new ways of doing things))
  - MEDIUM (Medium impact – primarily efficiencies (doing things faster/cheaper))
  - LOW (Little or no impact)
What is driving this traction?

As covered in the earlier section on drivers of lawtech adoption, in B2B and in-house, GC pressure – particularly around reducing legal costs – has been the strongest catalyst for innovation. This has led to a focus on adopting technologies that firstly demonstrate innovation and, secondly, help deliver efficiencies. To date, the focus has not been on using these technologies to transform operating models, which largely remain intact. However, a likely by-product of this trend is that rising competitive pressure will eventually drive more transformative change further down the line as the legal profession adapts its service delivery models to the potential of the technology.

B2C is not currently experiencing such client pressure and has thus been slower to adopt. While some of the larger commoditised law firms are using technology to drive efficiencies this has yet to filter throughout the sector. More transformative change is much more likely to come from new market entrants in the DIY law/access to justice space that offer a different business model and address some of the structural challenges of B2C law, such as the latent legal market.

Technologies likely to impact on legal process, services and delivery

There is a wide range of lawtech solutions that currently offer similar outcomes faster and/or cheaper. Technologies like RPA in the back office or chatbots in client-facing environments offer value to law firms but do not require significant changes to existing business processes or service delivery models.

Greater potential for genuine digital transformation of the sector is more likely to come via the adoption of cognitive technologies such as AI/ML combined with the power of data analytics. However, this will require sustained change management programmes, significant levels of investment and a good degree of culture change for law firms’ service delivery models to catch up with the potential of the technology. While this may take several years, it is likely that the increasingly competitive environment of UK legal services will speed up this process, with new market entrants both in B2B and B2C likely to drive the change.

Shaping relevant legal services and requirement for new/evolving skills

The increasing integration of technology solutions into service delivery will require law firms to become much more focused on delivering outcomes for clients. A lot of legal services will become standardised and commoditised both in B2B and B2C and will require law firms to emphasise the quality of their higher value, more intellectually driven services. Some law firms will compete on scale and project complexity while others will have to trade on deep niche expertise. Law firms that are best able to bridge the gap between lawtech and the law, particularly in the short to medium term, are likely to have the greatest advantage.

Widespread lawtech adoption will impact on the skills mix within law firms. The demand for trainees to spend large amounts of time on routine legal work will diminish, affecting existing models of training and development and indeed future succession planning. Law schools must prepare the next generation of lawyers to work in a technology-enabled service environment.

Some new skills will need to be brought into law firms; these are likely to include data analytics, process management and business transformation expertise, as well as customer experience management.

Law Society role in improving solicitors’ awareness and identification of the best tools for their businesses

The report section on the role of the Law Society outlines a number of ways its members might be supported to make the transition to more technology-enabled services. The Law Society is uniquely placed to deliver impartial advice and education to raise awareness and promote adoption of lawtech. Much of this could be focused on educational initiatives and
benchmarking giving members an understanding of ‘what good looks like’ and where law firms sit adoption-wise relative to their peers.

The current UK lawtech ecosystem is large and fragmented and there is a potential role for the Law Society to help coordinate the sector and better connect it to law firms and in-house legal services in a way that is mutually beneficial. The Law Society is already skilled in running networks and lawtech is likely to benefit from such a structure, particularly at a time when there is such an expectations gap in certain areas of lawtech. Getting closer to the ecosystem as a whole would ultimately benefit the legal profession, giving the Law Society a role as an ‘honest broker’ with a much more strategic view of where lawtech can best add value.

**Comparison with other professions**

The legal services profession (particularly B2B) is on a similar path to technology adoption, trodden before by other professional services such as management consultancy and accountancy. While the legal sector is currently less developed in its adoption than comparable professions, there is little to suggest that it will not eventually follow a similar route. For example, since the 1980s, management consulting has increasingly moved away from highly bespoke expert services to delivering standardised methodologies, structured processes and technology-enabled services. For many management consultancies there has been a distinct blurring of the boundaries between strategic and technology consulting.

The accounting profession has some distinct outliers such as the Big Four which now straddle the unusual space of accountancy, consulting and increasingly law. These organisations aside, the main body of the profession has adopted technology primarily in the efficiency space, heavily automating some parts of the accounting process such as audit and account preparation. While technology adoption is more evenly spread across the accounting profession than the legal sector, in the main, it has not yet transformed operating models.

**Technology adoption maturity – ‘defunct’ vs ‘must-have’ vs ‘emerging’**

Different legal technologies are at different stages of adoption and maturity across the different legal market segments. Figure 8 plots legal technologies and applications by market segment outlining how mature adoption is relative to each other. The diagram shows that the majority of lawtech remains in the ‘emerging’ category although in broad terms the B2B and in-house markets are more mature in their adoption relative to B2C. While areas like AI/ML have become ‘must-haves’ in specific market segments, lawtech has a long way to go to penetrate the wider legal services market. Some of the more traditional legacy legal systems are coming to the end of their life. creating a ‘pull-through’ for newer systems and cloud-based services, but they will take several years to become truly mass market and mainstream across all legal market segments.
Figure 8: Technology adoption maturity by legal market segment
Bibliography


