



LEGAL SERVICES  
**BOARD**



## **STRIKING THE BALANCE:**

HOW LEGAL SERVICES REGULATION  
CAN FOSTER RESPONSIBLE  
TECHNOLOGICAL INNOVATION

**April 2021**

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## CHAIR'S FOREWORD

Technology has the potential to enhance access to legal services. It can help citizens to access legal services in a way, and at a time, that suits them. It can also help legal professionals to carry out their work in new ways and help them to automate routine and time-consuming tasks. This can reduce costs and help to create more efficient and effective legal services.

The important role that technology can play in the legal services sector has never been more apparent. Covid-19 has accelerated the pace and scale of technological change, with many legal service providers having to use technology to deliver their services.



The transformative potential of technology relies on a good understanding of its risks. In tandem with its ability to increase access, technology can also hamper access to services for those who do not have the digital skills, or adequate digital infrastructure, to make use of it. As the full effects of Covid-19 on the sector continue to unfold, it is important that the opportunities and challenges it offers are carefully evaluated and mitigated. By understanding the opportunities and risks, technology can be deployed in ways that consumers and legal professionals can trust.

Technology is constantly evolving, and the legal services sector needs to keep pace. Emerging technologies such as AI, Machine Learning (ML) and Automated Decision-Making (ADM) all pose real, or perceived, regulatory, ethical and practical risks. Regulators have an important role in helping to create an environment that fosters responsible technological innovation and that widens access to legal services.

In 2019/20, we began work to help ensure that regulation keeps pace with technological innovation. We set out to create an information resource for regulators to use in developing their own approaches to technology regulation. We are thankful to all those who contributed to this first phase of our work. This report distils what we have learnt through this work, the key challenges and questions that remain, and what we plan to do next on technology and innovation.

The challenges and questions that technology present are many and varied. How can the ethical and regulatory issues posed by Artificial Intelligence and other emerging technologies be addressed? How do regulators understand whether proposed uses of technology are in keeping with standards of “social acceptability”? Can the current regulatory framework keep pace with the changes in technology? How can regulators embrace the opportunities that technology offers in widening access while also protecting consumers from unnecessary risks?

The sector-wide strategy for the legal services calls for legal services to be reshaped to better meet society’s needs. Technology and innovation have important roles to

play in delivering fairer outcomes, stronger confidence and better services for citizens. We look forward to working closely with others from across the legal and technology communities on technology and innovation.

A handwritten signature in black ink that reads "Helen Phillips". The signature is written in a cursive, flowing style.

Dr Helen Phillips,  
Chair of the Legal Services Board

## EXECUTIVE SUMMARY

1. Technology is an increasing facet of how legal services are delivered and it is important to the realisation of our regulatory objectives.<sup>1</sup> Technology has the potential to enhance, or conversely, be detrimental to these objectives. For example, technology can improve access to justice by enabling people to access solutions to their legal problems online. Yet technology is constantly evolving, which can pose risks to protecting the interests of consumers and in promoting competition in the provision of services.
2. The [sector-wide strategy for legal services](#) that we published in March 2021 calls for a reshaping of legal services to better meet society's needs by delivering fairer outcomes, stronger confidence, and better services. Technology has the rare, transformative potential to not only to open-up access to citizens and small businesses currently excluded from the market, but to also improve quality by enabling providers to deliver services in different ways that better meet people's needs.
3. In 2019, we began a programme of work on technology and innovation. The first part of this work focused on establishing an evidence base to help regulatory bodies to develop their approaches to regulating the use of technology in legal services. We commissioned papers and podcasts from a range of experts in technology, regulation, and legal services. We also sought the views of technology developers, legal services providers, technology-based legal businesses, and consumer representatives. This report distils the key learning points from this work and sets out a future agenda for regulation.
4. The overarching lesson from the first phase of our work is a simple one: **technology and innovation can widen access to legal services, but the associated risks need to be considered and managed.** Embracing the opportunities that technology offers relies on a proactive approach by legal services regulators, and on several challenges being met:
  - Ensuring that those with low digital capability are not excluded from accessing legal services
  - Considering whether new ways of working can help open-up the profession to a more diverse range of entrants
  - Adequate investment in digital infrastructure
  - Enough quantities of good quality, accessible data
  - Legal professionals reflecting on and developing their own technological skills

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<sup>1</sup> The eight regulatory objectives are: protecting and promoting the public interest; supporting the constitutional principle of the rule of law; improving access to justice; protecting and promoting the interests of consumers; promoting competition in the provision of services; encouraging an independent, strong, diverse and effective legal profession; increasing public understanding of the citizen's legal rights and duties; and promoting and maintaining adherence to the professional principles.

- Understanding the ethical and regulatory challenges, and opportunities that advanced technologies, such as AI, pose
  - Considering whether any potential uses of new technologies are “socially acceptable”<sup>2</sup> to legal professionals and consumers
  - Understanding whether the regulatory framework is flexible enough to protect consumers from the current and future risks that technology pose.
5. The approach of the legal services sector to technology and innovation to date has largely been one of ‘wait and see’. This typically reactive approach has been compounded by several factors. Some are not unique to the legal services sector, such as the risk of excluding citizens without digital skills or access to technology from accessing services and the risk that businesses do not have resources to invest in digital infrastructure and skills. Others are specific to the sector, such as the difficulty innovators face in understanding what is regulated, how the traditional partnership model can inhibit investment in digital skills and infrastructure, and a lack of good quality, open data that helps innovators identify the challenges that technology can help overcome.

## Role of regulation

6. By proactively embracing the opportunities that technology offers and managing its risks, regulators can help unlock access to legal services for the public and enhance the ability of legal professionals to deliver services. For example, while the current regulatory framework is permissive compared to other jurisdictions, multiple regulatory bodies and the titled-based nature of the framework can make it difficult for innovators to understand what exactly is regulated and how they can comply with regulatory guidance and rules. By collaborating, regulators can help innovators navigate the regulatory framework, understand the common opportunities and challenges that technology poses and identify areas for joint working. Our work points to several practical steps that regulators can take in fostering responsible innovation, including:
- Leading by example by proactively engaging with legal services technology, including using technology in the discharge of their regulatory functions
  - Listening to consumers, their representatives, and the regulated community
  - Actively increasing knowledge about existing and emerging technologies, including the issues they present, how their regulated

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<sup>2</sup> We use the term “socially acceptable” to mean that the proposed use of a technology is broadly acceptable to legal professionals and consumers, as well as being compatible with general societal interests. We adopt this term from ‘[The Regulation of New Technologies in Professional Service Sectors in the United Kingdom: Key Issues and Comparative Lessons](#)’ by Professor Roger Brownsword.

community uses or could use them, how technology developers operate, and the issues they present

- Being open-minded and willing to learn from a wide range of sources, including other legal regulators, legal stakeholders, legal regulators in other jurisdictions, regulators in other professions and industries, general technology regulators, government, and other public bodies
  - Cooperating and collaborating with other bodies and complementing other regulatory initiatives, where possible (cooperation and collaboration are particularly important for smaller regulators to help them mitigate against their lack of scale)
  - Being accessible to the unregulated sector and technology developers
  - Developing a clear technology regulation strategy that addresses the needs of its profession and manages risks to consumers
  - Providing clear rules and guidance to its regulated community while, where possible, providing advice to unregulated legal providers and technology developers to encourage innovation.
7. The potential of technology to transform legal services is clear. From helping legal professionals to review documents in a fraction of the time traditionally spent, to enabling citizens to diagnose their legal problems, Artificial Intelligence (AI), algorithms and Machine Learning (ML) are increasingly changing how legal services are delivered.<sup>3</sup> Of course, these new, and emerging technologies are not without risks. For example, as consumers increasingly access legal services online, legal firms could begin to collect more data about consumers and could begin to use ML to tailor the services offered to different categories of consumers.<sup>4</sup> The risks that AI, ML and other algorithmic-based tools pose are not always easily understood, and as these technologies become more common, legal professionals and consumers need to understand how they are being used. This will help to ensure that they are used in ways that the public, and professionals, can trust.
8. As the oversight regulator for the legal services sector, the LSB has an important role to play in fostering responsible technological innovation. Our [strategy for the sector](#) suggests a series of priorities that will shape our work on technology and innovation in 2021-24, including:
- Considering the implications of technology as part of our scope of regulation work
  - Considering technology and innovation as part of our regulatory performance framework review

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<sup>3</sup> The Centre for Data Ethics and Innovation (CDEI) offers a detailed overview of the opportunities, risks and governance challenges associated with AI and data use in its "[AI Barometer](#)" report.

<sup>4</sup> The Competition and Market Authority (CMA) recently published a report "[Algorithms: How they can reduce competition and harm consumers](#)" which examines the potential harms to consumers in some detail.

- Using our convening powers to help regulators bodies in developing their own regulatory approaches and capabilities
  - Developing more and better open data
  - Ensuring emerging uses of technology are ethical and socially acceptable
9. The opportunities and challenges that technology and innovation offers in unlocking access to legal services transcend regulatory boundaries, and we will continue to support joint working and collaboration, wherever possible. Our work will continue to be underpinned by evidence. This will include tracking levels of innovation and adoption of technology and understanding the views of citizens through our Public Panel. Gaining insights into how people, and especially those in vulnerable circumstances, experience legal services will be a feature of our work, including how issues of digital exclusion and digital literacy can impede people's ability to access legal services.
10. Covid-19 has shown how technology can enable legal services to be delivered in a way that reduces costs, complexity and increases efficiency.<sup>5</sup> While the long-term impacts of Covid-19 on the sector continue to unfold, the question is *how* the opportunities and risks technology and innovation offers can be embraced and managed in ways that unlock benefits for both citizens and legal professionals. Regulation has an important role to play in realising these benefits.
11. While technology is not a silver bullet to all the challenges facing the legal services sector, it is an important tool that can help unlock access – for professionals and the public. Embracing its opportunities relies on a shared understanding of the enablers, and barriers, to technological adoption and on interested parties stepping forward when they can. This relies on effective joint working and common approaches, wherever possible. By working together to foster responsible innovation, technology can help reshape legal services and better meet society's needs.

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<sup>5</sup> See for example the OECD policy brief '[Access to justice and the Covid-19 pandemic](#)'

# **PART I: KEY CHALLENGES, THE 'IDEAL' REGULATOR, AND NEXT STEPS FOR THE LEGAL SERVICES BOARD**

## Key challenges

12. Technology is playing an increasing role in the design and delivery of legal services. From enabling citizens to apply for a divorce online, to assisting legal professionals in reviewing mass amounts of information in seconds, it can help to reshape legal services around society's needs. However, pre-Covid-19, the pace and scale of technological change within the sector was slow with many examples of cutting-edge, consumer-focused innovation largely confined to the peripheries.<sup>6</sup>
13. Covid-19 has accelerated the uptake of technology within the sector, and examples of how technology has helped users to access legal services now seem familiar. Of course, this large-scale shift to remote delivery has not been without its challenges, both for consumers and for legal professionals. Technology is not a silver bullet it offers opportunities, and carries risks, that need to be understood so that it is deployed in ways that are compatible with the regulatory objectives.
14. In striking the balance between supporting innovation and protecting consumers and the overall legal system from potential harm, regulators need to consider several challenges and questions. Some of these are not unique to the legal services sector, such as the risk that an increased use of technology will exclude those without digital skills. Others are unique, such as the risk that the current scope of regulation does not align with the greatest risks to consumers. We summarise these below:

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<sup>6</sup> Legal Services Board, Technology and Innovation Survey 2018.

	<p><b>Technology can help increase access to legal services, but there is a risk of excluding those with low digital capability</b></p>
	<ul style="list-style-type: none"> <li>▪ As processes increasingly move online, the risks of digital exclusion need to be understood and managed, while alternatives for essential services need to be maintained.</li> <li>▪ Covid-19 has accelerated the online delivery of legal services. As the full effects of the pandemic on the sector become clearer, there is a need to reflect on how technology has been used, and where alternative modes of delivery need to be maintained.</li> </ul>
<p>Key questions</p>	<p>As more processes move online, how can service designers and policy makers take account of the risks of digital exclusion?</p> <p>As the full effects of the Covid-19 pandemic begin to be felt, what has been learnt about the role of technology in solving different legal issues?</p>

	<p><b>Technology could help open-up the legal profession to a more diverse range of individuals, but its impacts need to be understood</b></p>
	<ul style="list-style-type: none"> <li>▪ Technology can help to improve diversity in the legal profession by enabling more flexible entry routes, training routes and different ways of working. This could encourage a more diverse range of entrants to the professions and help with retention and progression.</li> <li>▪ Covid-19 has fast tracked new ways of working across the sector, but the impacts of these new ways of working are not always well understood.</li> <li>▪ There are opportunities to evaluate whether these new ways of working have helped, or indeed hindered, diversity and inclusion.</li> </ul>
<p>Key questions</p>	<p>What is the role of technology in helping to improve diversity and inclusion within the legal services sector?</p> <p>How has Covid-19 impacted on diversity and inclusion in the legal services sector?</p>

	<p><b>Technological innovation can only happen if the underlying digital infrastructure is in place</b></p>
<ul style="list-style-type: none"> <li>▪ Legal services can only be designed and delivered differently where there is the underpinning digital infrastructure, such as adequate broadband and mobile coverage. A lack of access to adequate infrastructure can disadvantage certain communities, such as those living in rural areas. This may necessitate investment by government and the UK communications industries.</li> <li>▪ This may also require investment by legal service providers and businesses.</li> </ul>	
<p><b>Key questions</b></p>	<p>What are the barriers that legal service providers face in investing in digital infrastructure?</p>

	<p><b>Good quality, accessible data is needed to identify sector-wide problems and potential solutions</b></p>
<ul style="list-style-type: none"> <li>▪ Innovators rely on data to identify challenges, to develop solutions addressing those challenges, and to evaluate the effectiveness of those technologies.</li> <li>▪ Data also benefits regulators and consumers. Data is essential to effective regulation and helps regulators to understand if regulatory interventions are required, and whether regulatory interventions have been successful. Data can also help consumers to compare the cost and quality of different legal services providers through Digital Comparison Tools (DCTs).</li> <li>▪ Issues such as client confidentiality and legal professional privilege can pose challenges to making data available in the legal services sector. There may also be an overconcentration of data assets in certain segments of the sector, which may impact on the availability of data.</li> <li>▪ More, and better, data needs to be collected in the legal services sector, and made available to help identify the sector-wide and specific challenges that could benefit from technological solutions.</li> </ul>	
<p><b>Key questions</b></p>	<p>How can data help identify solutions to cross-sector challenges?</p> <p>How can more, and better, open data be made available in the legal services sector?</p> <p>Where are data assets within the legal services sector concentrated?</p>



### Legal professionals may need to build and develop their own technological skills

- As technology becomes an increasing facet of legal services, legal professionals may need to consider their own skills and capabilities.
- The core question is how to ensure that legal professionals are equipped with the right skills and capabilities throughout their career.
- This could mean that technology-specific training and education becomes part and parcel of training at the point of entry. It could also mean that technological competence becomes part of ongoing professional development.

#### Key questions

Should training and education pathways for legal professionals include technological skills?

How can ongoing education and training equip legal professionals with relevant technological skills?



### Advanced technologies, such as AI, pose ethical and regulatory challenges, as well as opportunities

- While widespread use of advanced technologies, such as AI and blockchain, is relatively immature in the sector, it is growing. These are transforming how legal services are designed and delivered – from automating certain tasks to assisting legal professionals and consumers in making decisions.
- The implications of these technologies, including whether and how they should be regulated, are live policy issues that go beyond the legal services sector. Organisations and bodies, such as the Centre for Data Ethics and Innovation (CDEI), Office for AI, and the Organisation for Economic Co-operation and Development (OECD) are helping to identify the most pressing opportunities, risks and governance challenges associated with AI and emerging technologies.
- Ethical concerns about the use of AI in decision-making points to a need for legal professionals to better understand its strengths and weaknesses, and for a consideration of ethical issues around accountability, client confidentiality and legal professional privilege, especially where services are provided directly to consumers by AI.

#### Key questions

- How can the ethical and regulatory issues posed by AI and other emerging technologies be addressed?
- How can legal professionals understand the strengths and weaknesses of AI and other emerging technologies?

	<p><b>The scale and success of technology’s use can be influenced by what is “socially acceptable”</b></p>
	<ul style="list-style-type: none"> <li>▪ Technology can transform how services are designed and delivered, but this relies on it being trusted by those who use it. In essence, this requires technology to be used in ways that are “socially acceptable”.<sup>7</sup> This means that technology’s use should be broadly acceptable to both legal services consumers and providers, and compatible with wider public interest.</li> <li>▪ It is likely that what is seen as a “socially acceptable” use of technology will change over time, influenced by the responsible use and deployment of technology. This points to a need for policy makers and regulators to regularly consider what is “socially acceptable” at any given point in time.</li> </ul>
<p>Key questions</p>	<p>Where do considerations of social acceptability arise in relation to the use of legal technology?</p> <p>How can regulators regularly consider standards of social acceptability?</p> <p>When can regulators use other measures, such as pilots and sandboxes to understand if a technology’s use aligns with the public interest?</p>

<sup>7</sup> We use the term “socially acceptable” to mean that the proposed use of a technology is broadly acceptable to legal professionals and consumers, as well as being compatible with general societal interests. We adopt this term from ‘[The Regulation of New Technologies in Professional Service Sectors in the United Kingdom: Key Issues and Comparative Lessons](#)’ by Professor Roger Brownsword.



**The current regulatory framework is conducive to innovation, but it may not be flexible enough to protect consumers from the evolving risks that technology pose**

- In our work, we heard how the current regulatory framework may be inhibiting innovation. The current list of reserved legal activities does not necessarily align with the greatest risks to consumers. Similarly, the title-based approach to regulation may result in differing regulatory approaches. This can lead to a regulatory environment that is difficult to navigate and with gaps in consumer protection.
- These risks are further compounded by the accelerated pace and scale of technological adoption in the legal services sector since the onset of Covid-19 in March 2020.
- Our research suggests that unregulated providers are more innovative and cheaper than traditional providers. However, there is evidence that consumer satisfaction with unregulated providers is lower than for regulated firms.<sup>8</sup>
- There are questions on whether the implications of technology can be effectively managed within the current regulatory framework, and we plan to consider this further as part of our work on the scope of regulation in 2021-22.

**Key questions**

Is the current regulatory framework adequately flexible to deal with the implications of technology?

Should technological products used in the legal services sector be regulated?

<sup>8</sup> Legal Services Board, [Technology and Innovation in Legal Services Survey](#) (2018)

	<b>Regulators have a role in fostering innovation</b>
	<ul style="list-style-type: none"> <li>▪ Technology developers can face challenges in navigating multiple regulatory regimes and in dealing with multiple legal services regulators. Regulators can work together, and with other sectors, to help people navigate the regulatory system. This could be through cross-sector guidance, or through a cross-regulator forum, such as the Regulatory Response Unit that is part of the Lawtech UK Sandbox pilot.<sup>9</sup></li> <li>▪ Regulators can take proactive, practical steps to fostering innovation, such as engaging with legal services technology, listening to consumers and their regulated community, and by building their own technology capabilities. This can help ‘de-risk’ innovation and provide innovators and legal services providers with information, advice, oversight, and ultimately confidence to pursue innovation and meet regulatory standards.</li> <li>▪ We outline the practical steps that regulators can take in fostering innovation below.</li> </ul>
<b>Key questions</b>	<p>How can legal services regulators work together, and with other sectors, to help innovators to navigate the current regulatory system?</p> <p>What practical regulatory approaches should regulators use to foster and support technology and innovation?</p> <p>Where can regulators lead by example and use technology to regulate effectively and efficiently?</p> <p>How can legal services regulators contribute to a cultural shift within the sector to help embrace the opportunities of technology?</p>

<sup>9</sup> <https://technation.io/lawtechsandboxpilot/>

## How regulators can foster responsible innovation

15. As technology increases in how and when it is used, the challenges and questions it raises also evolve. Legal service regulators need to have a clear approach to technology and innovation. This will help foster responsible innovation that increases access and enable future challenges to be understood and overcome. Our work points to several practical steps that an 'ideal' regulator can take in developing their approach:
  - Be **proactive in engaging** with legal services technology, including considering whether, and how, it can be used in carrying out regulatory functions
  - **Listen to consumers, their representatives, and its regulated community**, and work collaboratively with them to develop guidance and regulation
  - **Actively grow knowledge about technologies** including: the issues they present, how their regulated community uses or could use them, how technology developers operate, and the issues technology presents,
  - Be **open-minded and willing to learn** from a wide range of sources including other legal regulators, legal stakeholders, legal regulators in other jurisdictions, regulators in other professions and industries, general technology regulators, government, and other public bodies
  - Be **cooperative and collaborate** with other bodies and complement their regulatory initiatives. Cooperation and collaboration is particularly important for smaller regulators to help them mitigate against their limited resources and lack of scale
  - Be **accessible to the unregulated sector** and technology developers
  - Have a **clear technology regulation strategy** that outlines the approach to technology and that addresses the needs of its profession and manages risks to consumers
  - Provide **clear rules and guidance** to its regulated community while, where possible, providing advice to unregulated legal providers and technology developers to encourage innovation.
  
16. Our contributors suggest several actions that could assist in becoming an 'ideal' regulator, including:
  - Deciding whether to take a prescriptive or guidance-based approach to legal technology regulation
  - Creating standing advisory panels dedicated to considering legal technology regulation

- Using regulatory sandboxes and other practical approaches to enable the testing of technological solutions with regulatory support
  - Issuing sector-wide challenges to encourage the use of technology to address major, systemic issues in the legal sector, such as unmet legal need
  - Creating tool kits and guidance for innovators and technology developers to help them enter the legal services market, and
  - Working with technology developers to 'build-in' regulatory principles and safeguards into their products.
17. This image of an 'ideal' regulator is ambitious and while this 'ideal' regulator may not yet exist, it offers a useful model for regulators to consider as they continue to develop their regulatory approaches to technology.

## Next steps for the Legal Services Board

18. Collaboration, joint-working and evidence will underpin our work on technology and innovation going forward. This includes tracking levels of innovation and adoption of technology and understanding the views of citizens through our Public Panel. The experiences of citizens in vulnerable circumstances will also be an area that we will explore through our research and in cross-sector discussions, including how digital exclusion and digital literacy can compound people's ability to access legal services.
19. In [‘Reshaping legal services: a sector-wide strategy’](#), we lay out a series of priorities that will shape our work on technology and innovation in 2021-24.
  - Considering the implications of technology as part of our scope of regulation work
  - Considering technology and innovation as part of our regulatory performance framework review
  - Using our convening powers to help regulators bodies in developing their own regulatory approaches and capabilities
  - Developing more and better open data
  - Ensuring emerging uses of technology are ethical and socially acceptable

### Considering the implications of technology as part of our scope of regulation work

- The current regulatory framework is more permissive to innovation than other jurisdictions, but there may be consumer protection gaps between those who use regulated providers and those who use unregulated providers. There is also a risk that the current scope of regulation is limiting technological innovation in the sector.
- We want to understand whether the risks posed by technological innovation can be adequately addressed within the existing regulatory framework. If we conclude that the risks cannot be managed within the existing framework, we will consider what future regulatory models could foster technological innovation and protect consumers.

### Considering technology and innovation as part of our regulatory performance framework review

- As part of our planned review of our regulatory performance framework, we will consider the role of regulatory bodies in fostering innovation.
- We will also consider whether, and how, the capability and capacity of regulatory bodies to respond to developments in technology should be

assessed. This will include how we, and other regulators, could use technology in the discharge of our regulatory functions.

### Using our convening powers to help regulators bodies in developing their own regulatory approaches and capabilities

- Collaboration helps to identify opportunities for joint initiatives, avoids duplication and ultimately provides certainty to innovators. Initiatives that bring regulators together in support of innovation, such as regulatory sandboxes, can help 'de-risk' products or services and protect consumers.
- We want to ensure that cross-regulator collaboration and partnership working continues. This could be through the continuation of the Regulatory Response Unit, set-up as part of the Lawtech UK Sandbox Pilot, or through the creation of a dedicated advisory panel.
- We also believe that regulatory sandboxes should adhere to certain principles and we intend to articulate a set of good practice principles for regulatory sandboxes.
- Effective partnership working relies on a common understanding of the opportunities, and challenges, facing the sector. We will continue our market intelligence and research work, including carrying out the next round of our Technology and Innovation in Legal Services Survey. This will help to evaluate the scale of technological adoption in the sector, the barriers to its adoption, and how innovation is best enabled.

### Enable the availability of more, and better, open data across the sector

- Data has become an asset for economies and societies. It is estimated that the size of the UK data economy increased from €43.8 billion in 2013 to €89.7 billion in 2020. The government have laid out their plans on how the value of data will be unlocked to drive growth in the National Data Strategy.<sup>10</sup>
- Data is essential for technological innovation. It helps innovators identify the sector-wide and specific challenges that could benefit from technology-enabled solutions. It also helps legal businesses improve their services and allows policy makers to evaluate whether interventions are working as intended, and to identify where further interventions may be needed. Regulators are also increasingly using data to develop risk-based approaches.
- We want to use our convening role to enable the provision of more, and better quality, data in the legal services sector. This includes understanding how data assets are currently used, and how data standards and different approaches can enable openness. This could

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<sup>10</sup> [UK National Data Strategy](#) (9 December 2020)

be achieved through existing initiatives, or through dedicated joint working. We recognise the importance of aligning with existing initiatives, and we look forward to exploring how better-quality open data can be embedded across the sector.

#### Ensure emerging uses of technology are ethical and 'socially acceptable' to professionals and the public

- New technologies, including AI and ML, and applications like automated document assembly and chatbots, as well as developments such as blockchain, are transforming how legal services are provided. Some technologies are well-established and have gained public trust. Other emerging uses are more controversial.
- The extent to which consumers, and legal professionals, trust new technologies impacts on their likelihood of using them. If new technologies are going to play an increasing role in how legal services are designed and delivered, this needs to be in ways that are trusted and 'socially acceptable' to professional users and to society, especially where it is a substitute for human involvement.
- We plan to explore what 'social acceptability' means in the context of emerging technologies, such as AI, with our Public Panel. Our planned Technology and Innovation Survey will also offer insights into how these technologies are used in the legal services sector.

# PART II: DETAILED ANALYSIS

20. The [sector-wide strategy for legal services](#) calls for legal services to be reshaped to better meet society's needs. We encapsulate the challenges facing the sector into three strategic themes:
  - Fairer outcomes
  - Stronger confidence
  - Better services.
21. We have carried out research into how innovative legal services providers are to better understand legal services providers' perceptions of the benefits and risks of innovating, and the factors that assist or deter them from doing so including regulation. Our most recent report on [Technology and Innovation in Legal Services in 2018](#) showed that innovation, including the use of technology, had stalled, and had indeed fallen in some respects.
22. One of the findings of our research was that legal services providers want to make use of technological innovations to improve the services they offer, but many do not because of real, or perceived, regulatory, ethical, and practical risks. The individual regulatory bodies<sup>11</sup> are at the forefront of creating such an environment by understanding the benefits and risks raised by new technologies and anticipating and responding to them. Sir Geoffrey Vos, Master of the Rolls, noted in an article published as part of our '[Perspectives on LawTech and Regulation](#)' series the need for regulators to engage with technological innovation to create such an environment by providing the necessary legal underpinnings and mechanisms so that regulators supplement, rather than prevent, innovation.
23. To help foster the creation of this regulatory environment, in 2019/20 we began work to help ensure that regulation keeps pace with technological innovation. This involved commissioning a series of expert papers as an information resource for regulatory bodies to use in developing approaches to technology regulation. As an exploratory project, our work often identified more questions than answers. This report summarises the issues and questions that regulators, including the LSB, will need to consider.

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<sup>11</sup> The Solicitors Regulation Authority (SRA), the Bar Standards Board (BSB), the Chartered Institute of Legal Executives Regulator (CILEx Reg), the Council of Licensed Conveyancers (CLC), the Institute of Chartered Accountants in England & Wales (ICAEW), the Intellectual Property Regulation Board (IPReg), The Faculty Office (FO), the Costs Lawyers Standards Board (CLSB).

24. This report marks the conclusion of our first phase of work on technology and innovation. The report aims to:
- Review the information that we have collected
  - Draw out the common themes and, where relevant, make our own observations about them
  - Draw conclusions about approaches to technology regulation that regulatory bodies may wish to follow
  - Set out our plans for future work on technology and regulation.

## Approach

25. The information we review in this paper consists of a series of papers and supplementary podcasts.<sup>12</sup> The papers' authors are all experts in legal services, technology, or both, and include academics, legal professionals, and technology specialists. To help ensure that the papers and podcasts would be as relevant as possible, we discussed which topics they should address with an external academic and received input from each author as to the specific issues that should be covered. We set five learning aims for the papers and podcasts:
- Capture lessons to be learned from other jurisdictions' and professions' experiences of technology regulation
  - Explore the challenges that the current legal services regulatory structure in England and Wales presents for technology regulation
  - Consider the ethical, legal, and regulatory issues that the use of technology in delivering legal services raises
  - Review how legal educators and regulators might ensure legal education keeps pace with the profession's use of technology, and
  - Look at the regulatory issues raised by some high-profile technologies, such as Artificial Intelligence and blockchain.
26. We commissioned the following papers:
- [The Use and Regulation of Technology in the Legal Sector beyond England and Wales](#) – Alison Hook, Hook Tangaza
  - [The Regulation of New Technologies in Professional Service Sectors in the United Kingdom: Key Issues and Comparative Lessons](#) – Professor Roger Brownsword, KCL
  - [Tending the Flame: Technological Innovation and the Legal Services Act Regime](#) - Professor Noel Semple, University of Windsor, Ontario, Canada
  - [Blockchain: Developing Regulatory Approaches for the Use of Technology in Legal Services](#) - Dr Anna Donovan, UCL
  - [LegalTech Education – Considerations for Regulators](#) - Dr Adam Wyner, Swansea University
  - [Ethics, Technology, and Regulation](#) - Professor Lisa Webley, University of Birmingham
27. We also recorded interviews with the authors of each paper in our 'Talking Tech' podcast. This allowed us to further explore the issues they discussed and the recommendations they made.

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<sup>12</sup> Legal Services Board, [Technology and regulation](#).

28. We also published a collection of short articles from legal service providers, technology companies, legal regulators, consumers and other stakeholders as a collection entitled "[Perspectives on LawTech and Regulation: How can legal services regulation support responsible technological innovation that improves access to justice?](#)" These articles illustrate how different participants in the legal services sector perceive technological innovation and its capability to improve access to justice. They also outline the potential risks that face the sector, as well as the likely opportunities presented by legal technology, and how regulators can help ensure the benefits are realised.
29. To complement this work and to broaden our understanding of the regulatory issues raised by technology's use in delivering legal services, we also engaged with a wide range of organisations from the legal, technology and regulatory sectors.
30. The observations made and conclusions drawn by the authors of the papers we commissioned are their own and their views do not necessarily represent those of the LSB. We recommend that this paper be read in conjunction with the commissioned papers, podcasts and articles.
31. We wish to thank everyone who has contributed to this project and acknowledge the work in this area which has been done by several other bodies including the Legal Services Consumer Panel, the Solicitors Regulation Authority, the Institute of Chartered Accountants of England & Wales, the Lawtech Sandbox Pilot, and Professor Stephen Mayson.
32. Prior to March 2020, it was clear that technology was playing a small, but steadily increasing, role in the legal sector. Government ambitions and initiatives, such as the HMCTS Reform programme, have cemented the importance of technology in public policy. While the long-term consequences of the Covid-19 pandemic for the legal sector are unclear, it has accelerated the uptake of technology in the legal services sector. This experience may help to break down cultural barriers around technological innovation that have existed in the legal profession up to now. From the consumer perspective, it may also lead to changes in their expectations about lawyers' abilities to use technology to communicate with them. It might also show the limits of using technology to engage with clients, particularly where they are vulnerable or do not have access to technology themselves.

## **‘Technology’, ‘Lawtech’, and ‘Legaltech’ - How should regulators assess and categorise legal technologies?**

33. Throughout our work, we have observed a tendency to refer to ‘technology’ in the singular rather than ‘technologies’ in the plural. There are a wide range of technological applications with a range of functions. Some of these applications can help manage any kind of business, while some are specifically designed to support legal professionals to do their work more efficiently. Others go further and are designed to emulate lawyers’ reasoning processes.
34. Given this variety of technologies and their uses, we consider that the use of the term ‘technology’ may be counterproductive. It could make issues appear amorphous and overwhelming and may make lawyers and regulators less inclined to engage. It may imply that technology is a single issue that can be dealt with in a singular way. It may also give rise to unrealistic expectations as to how technology may or may not change legal services. The good and bad aspects of technological innovation are often overstated and when a technology does not lead to a wholesale transformation, people may come to think that talk about technology is just ‘hype’ and not really important.
35. We think that the distinction between ‘substitutive’ and ‘supportive’ technologies, suggested by Professor Stephen Mayson and considered by Professor Semple in his paper, is helpful in assessing and categorising the risks posed by a given technology. Up to now technologies have been mostly ‘supportive’ in that they have assisted persons in delivering legal services but not displaced their labour. However, some newer technologies are, or have the potential to be, ‘substitutive’ in that they can displace human labour.
36. We suggest two additional categories of technological applications. ‘Substantive’, where technologies are intended to assist with substantive legal work involved with the delivery of services to clients, and ‘practical’, where they are primarily intended to assist with the running of legal practices.

37. We suggest the following broad categorisations that may assist regulators when discussing and assessing the challenges posed by legal technologies:

- **Supportive-Practical**

This category could include those technologies that are primarily intended to assist with legal practice management or other practical work. It also includes other general technologies used by legal practices, such as e-mail and video communications software, and the Cloud.

- **Supportive-Substantive**

This could include technological applications that support legal practitioners on specific legal work, such as some types of document review, assembly and drafting software, and legal research tools, and potentially distributed ledger and blockchain technologies.

- **Substitutive-Substantive**

This could include technologies that emulate or enhance human interactions and/or decision-making processes such as chatbots, case analysis and prediction and strategy development. It may also include aspects of smart contracts, such as code which automatically triggers payments on performance of a contract.

- **Substitutive-Practical**

This category could include software and tools that analyse business performance and support the operation of legal practice, such as work allocation tools.

38. We recognise that technologies may not fall neatly into one category, and that the distinction between supportive and substitutive, for example, may not always be clear because how supportive or substantive a technology is may depend on the legal expertise of the user. For example, will-drafting software, if it is used by a lay member of the public, will almost certainly be wholly *substitutive* in nature. However, for an experienced lawyer, the software could be *supportive* in nature, as he or she could use their expertise to check that the document meets his or her client's requirements. So, when considering how, or whether, to regulate a technology, regulators will need to consider who is using it and how this increases, or decreases, the risks involved.

## Key themes

39. We have extracted some key themes, including benefits, risks, lessons, and recommendations, to help inform our own and others' future work. We note three overarching themes:
- The need for regulators to respond to legal technologies
  - The practical steps regulators can take
  - The substantive issues regulators will need to consider

## The need for regulators to respond to legal technologies

40. There are several compelling reasons why regulators need to engage with legal technology, which Alison Hook sets out in her paper. The first is to ensure that technology is implemented in a way that supports regulators' objectives by benefiting consumers, improving access to justice, and supporting the legal sector in general. She observes that globally it is large corporate law firms who have been driving the development of legal technologies, particularly the use of AI. This points to a need for regulators to act to ensure that technology benefits the whole sector, and she points to the steps the US courts have taken, in their role as legal regulators, as an example of how technology can address access to justice issues.
41. The potential for technology to help increase access to justice is also noted by the Legal Services Consumer Panel (LSCP) and CILEx Regulation. The LSCP says that while technology could play a role in supporting access to justice, there is also the possibility that it could exclude consumers, particularly older people, and those in rural areas. CILEx Regulation suggest that the role of a legal services regulator is not to curb innovation but to ensure it grows in a way that benefits consumers and that by getting involved, regulators will have greater scope to promote initiatives that support access to justice.
42. There are other ways that regulators' engagement with technology can benefit the legal sector. Alison Hook notes that regulation can play a positive role in the legal technology market's development. In particular, she discusses how industries will often develop their own rules, i.e. self-regulation. While self-regulation can bring benefits to both consumers and service providers, it can also reduce competition and inhibit entry to the market, which can harm consumers. Regulators should therefore be willing to intervene in the market to ensure it develops in a way that benefits consumers and the public interest.
43. Dr Donovan makes several points about the need for regulation of Distributed Ledger Technologies (DLT) such as blockchain technology, which are equally applicable to legal technology in general. She explains that for the potential of DLT to be realised, and its benefits to be experienced, legal regulators need to identify and, where possible remove, barriers to its use and provide certainty as to the status of cryptoassets and how existing legal principles are likely to apply to it.

44. Regulators may also have a role in attracting investment to legal technologies. Alison Hook suggests that if legal regulators do not act then investment that could flow to legal technologies could go to other sectors where regulators have made it easier for technology developers and investors to navigate the regulatory environment. Similarly, Sir Geoffrey Vos emphasises the need for UK legal regulators to make the right choices in balancing innovation and regulation to ensure that legal technology businesses do not look for a more friendly environment. To obtain the benefits of technologies, Alison Hook suggests that legal regulators learn about the technology sector's business model and adapt their regulatory practices so that they can respond quickly to developments.
45. Finally, there is a risk that regulators could be overwhelmed by the evolving challenges that new technologies present. Alison recommends that regulators start to engage in whatever way they are able, so that they can begin to acquire the knowledge and skills they will need.

## Practical steps regulators can take

46. So, what actions can regulators take to meet the regulatory challenges posed by new technologies? Our contributors suggested a wide range which we believe fall into two main categories:
- Communication, cooperation, and learning, and
  - Practical regulatory approaches

## Communication, cooperation, and learning

47. Several contributors highlighted the importance of legal regulators:
- Communicating and cooperating with each other and other legal stakeholders, such as courts and lawyers
  - Consulting consumers and the public for their views on technology
  - Learning about technology regulation in other jurisdictions, professions, and industries
  - Engaging with general technology regulators, government, and legislatures to influence and advance regulatory initiatives
  - Building internal knowledge and understanding of legal technologies by learning how the technology sector works and understanding the technologies relevant to their professional community.

48. The consensus from our contributors is that technology is not an issue that legal regulators should approach individually and with a traditional regulatory mindset. Legal sector regulators are all at different stages of engaging with technology and have very different levels of resources. Alison Hook notes that some smaller regulators may find it difficult to develop their own responses to technology without collaboration or without assistance from the LSB.
49. Several contributors discuss how legal services regulators can cooperate with and learn from the rest of the legal sector and beyond. Cooperation between regulators enables them to learn from each other, pool resources, and develop best practices and standards enabling legal technologies to be used safely. This could just as easily apply to cooperation between legal services regulators, or between legal regulators and those in other sectors.
50. Alison Hook describes how regulators in other jurisdictions are facing the same issues and are often at a similar stage in considering how to address them. As well as learning from other regulators' experiences, she suggests that the LSB sets up a standing advisory panel on legal technology, modelled on the example of the panel created by the US Conference of State Bank Supervisors. This could consist of the regulatory bodies, as well as people from other relevant backgrounds, such as practitioners, entrepreneurs, technology developers, consumer advocates and, as appropriate, regulators from other sectors, to share knowledge and build a common understanding about how legal regulators should approach technologies.
51. Although regulation can be a field where governments seek to gain competitive advantages for their own countries' industries, there is a real need for regulators from different jurisdictions to cooperate. Many technology-based legal services providers, including those from the UK, want to operate in several jurisdictions, and where their activities are beneficial, regulators will want consumers to benefit from them. To facilitate cross-border cooperation, Alison Hook suggests that the LSB build on the work of the International Conference of Legal Regulators<sup>13</sup> to bring together regulators from different jurisdictions who are interested in the regulatory consequences of legal technology. In a similar vein, Professor Brownsword suggests that there may be opportunities for cross-border cooperation between national regulators.
52. Professor Brownsword discusses how there are regulatory challenges that occur across all professional sectors and all technologies and that these challenges can be amplified where new technology is involved. Legal services regulators can learn from how other professional sectors have addressed these challenges. The automobile industry, for example, is grappling with issue of liability for accidents involving self-driving cars, which may offer useful learning in considering the implications for users of any decision-making AI, including lawyers. The challenge of finding the right balance

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<sup>13</sup> The ICLR aims to bring legal regulators from around the globe together, to share knowledge and best practice, and to find solutions to common challenges. More information is available at <https://iclr.net/>

between capturing the benefit of new technologies and managing the risks they pose is also evident in the financial and health sectors.

53. There have been several legal technology regulation initiatives launched by other bodies, such as the government backed Lawtech Delivery Panel. These initiatives, and similar ones, help facilitate coherent regulatory approaches to technology. There is also a need for legal regulators to communicate and work with general technology regulators, such as the ICO, as well as government and Parliament.
54. As each legal services regulator covers a different set of legal services, there will likely be some differences in the technologies, or their application, for each regulated community, and in the technology companies that each regulator will encounter. Alison Hook suggests that every regulatory body start a dialogue with relevant businesses, including the legal professionals they already regulate, new entrants to the regulated sector, unregulated sector participants (where possible) and technology developers. Legal regulators should take time to understand the technologies that are relevant to their part of the sector and to set-up dedicated, internal working groups to understand how technology is affecting their regulated community and its market.

## Practical regulatory approaches

55. Our contributors suggest several practical steps that regulators can take to develop their regulatory approaches. These include:
  - Developing a clear regulatory approach
  - Setting up a standing advisory panel
  - Using sandboxes and systemic approaches to address problems in different ways
  - Setting challenges for regulators to address problems
  - Creating a toolkit for legal technology start-ups
  - Technology that can support regulation

### A clear approach to regulation

56. Professor Lisa Webley notes that the model of regulation adopted by a regulator will affect how positively or cautiously, and how quickly, it is able to respond to innovation. Where the consequences of the development and use of a technology is fast moving and cannot be easily predicted, regulators need to reason from first principles in order to balance the competing interests of consumers and service providers.

57. Professor Brownsword compares two regulatory models: the rules-based 'hard law' and the guidance-based 'soft law'. He suggests that legal regulators look at the successes of these different models in other sectors, particularly the use of the 'soft law' approach in health insurance in relation to genetics. This is echoed by Dr Donovan, who, in the context of blockchain, cautions against rules-based 'hard law' for specific technological applications because of the risk of unintended consequences. Regulators need to develop guidance, based on research and evidence, to create an appropriate regulatory response for advanced technologies, such as blockchain. She emphasises the need for regulators to provide leadership and to support innovation, and the need for a dialogue between regulators, developers and users which can improve developers' understanding of the regulation they need to comply with. Professor Brownsword also makes the point that where regulators work with 'regulatees' this seems to improve the chances of regulation being successful.
58. Dr Donovan suggests that as well as regulators developing guidance specifically for the use of a technology, they should also consider developing guidance for activities that support its use, such as data governance, privacy, and compliance.
59. By undertaking activities like research, education and training of regulators' staff and others, and developing guidance, regulators can assist in creating a common regulatory language and approach across different jurisdictions. This can help to reduce inconsistencies which can slow innovation.
60. Guidance from regulators could help technology developers. Legl<sup>14</sup> suggest that regulators clarify the misinformation about technology that exists. A simple process that enables law firms or technology suppliers to request clarification of specific regulatory questions would also be helpful. They also suggest that regulators could encourage firms to adopt technology, particularly where it is consistent with technology used in other regulated industries. Clerksroom<sup>15</sup> believes regulators should issue more detailed guidance about regulatory requirements.
61. The LSCP also advocates for regulators to work together to develop joint guidance for providers on technology. In its contribution to our article series, the SRA said that it was considering developing guidance for innovators and that its Legal Access Challenge has provided it with a better understanding of the obstacles that innovators face.

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<sup>14</sup> A supplier of client onboarding, online payment, and legal crowdfunding applications

<sup>15</sup> An on-line barristers' chambers

### Standing advisory panel

62. To facilitate ongoing dialogue between regulators, legal services providers and technology developers, Alison Hook proposes the establishment of a standing advisory panel. This would be an example of what Dr Donovan describes as regulators' ability to convene multi-disciplinary groups to address issues. As well as having an overarching aim of fostering a supportive regulatory environment for legal technology, it could address specific questions and produce recommendations for the legal sector, including regulators. Alison Hook suggests that any panel should consist of more than regulators and include industry participants, consumer representatives, technology and data experts, and academics.
63. While legal regulators in any jurisdiction may find the creation of a standing advisory panel helpful, we believe that such an advisory panel would be particularly useful in England and Wales where the relationships to be managed are not just those between legal regulators and others, but also amongst several legal regulators. An advisory panel would need to ensure its work does not duplicate that of other groups, such as the Lawtech Sandbox Pilot.

### Regulatory Sandboxes

64. Several authors consider that sandboxes, which test, under controls that protect consumers, how technological applications perform under market conditions, could be useful tools for legal regulators. Professor Brownsword notes that as well as a way for regulators to support innovation, they can help regulators and innovators understand the risks a product or service may involve. This can 'de-risk' the product or service, reduce regulatory uncertainty, and protect consumers. This ability to address the needs of regulators, innovators and consumers has made sandboxes attractive to regulators in several sectors. Dr Donovan notes that the Financial Conduct Authority (FCA) has included several DLT businesses in its regulatory sandbox programme. Professor Brownsword notes that sandboxes, as well as proving useful in the financial sector, are also being introduced in health care.
65. Professor Brownsword considers whether sandboxes are consistent with a 'technology-neutral' approach to regulation. He discusses the different meanings that 'technology-neutral' can have. First, it can mean that a regulator avoids supporting or requiring the use of a specific technology which subsequently turns out to be less good than another which the market would prefer to use. Alternatively, it could mean a commitment to regulatory fairness in competitive markets, i.e. choosing to support a new technology or start-up over an existing one. Finally, he notes that by choosing to support innovations, regulators are taking a risk. These innovations may benefit consumers, but they may have significant negative effects on existing providers.

66. Professor Webley also talks about the concept of technology-neutral regulation. In her view, this is not possible as regulation always results in one product, service or technology being privileged over another. She suggests that regulators try not to be technology-neutral but that they instead approach technology regulation by considering what objectives they want to achieve and why. In doing so, regulators need to consider objectives beyond consumer protection and maximising access to legal services, such as upholding the rule of law and the integrity of the justice system.
67. Alison Hook also notes that sandboxes have limitations. They can only test products or services against the current set of rules and can only provide for gradual innovation through the waiver or modification of specific rules. She states that sandboxes cannot consider how technology can solve systemic problems, such as access to justice. These systemic problems require both decisions by policy makers and incentives for entrepreneurs to focus on them.
68. There are examples of sandboxes within the sector. The Solicitors Regulation Authority (SRA) has already used a sandbox to assess technologies as part of its Legal Access Challenge<sup>16</sup> and the LSB and other regulators are participating in the Lawtech Sandbox Pilot.
69. In July 2020, [the Legal Services Consumer Panel published a discussion paper on developing regulatory sandboxes for legal services innovation. Sector.](#) It outlines a number of considerations for legal services regulators including offering access to regulated and unregulated firms in any sandbox initiatives, having clear eligibility and admission criteria and the value in regulators working together to mitigate against multiple sandbox-type programmes running at the same time.

### Sector-Wide Challenges

70. Continuing in the vein of addressing systemic issues, Alison Hook suggests that the LSB could set a target for regulators to examine how they can encourage technology developers to address persistent sector-wide problems, such as unmet legal need.<sup>17</sup> Alison suggests that in future, regulators may want to examine how solutions for some systemic issues could be addressed from the consumer perspective. For example, rather than assuming a consumer always has to go to a lawyer to solve a ‘legal’ problem, a range of relevant services could be bundled into an app which the consumer could use to solve problems, whether legal or not. She notes that integrating legal services into such an app would be much easier in England and Wales than in other jurisdictions where who can provide legal services is much more strictly regulated.

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<sup>16</sup> The Legal Access Challenge supported innovative digital technology solutions that directly help individuals and SMEs to better understand and resolve their legal problems. It was delivered by Nesta Challenges in partnership with the SRA. More information available here: <https://legalaccesschallenge.org/>

<sup>17</sup> See the Legal Services Board and The Law Society jointly commissioned [Report on the Legal Needs of Individuals in England and Wales 2019/20](#)

71. These types of sector-wide, systemic challenges could act as a focal point for bringing together existing initiatives under an overall strategy. This could demonstrate how regulation can be a positive force to solve perennial problems and show that it is an enabler of innovation.

### Tool kits

72. In line with the suggestion that regulators produce guidance, regulators could create a 'tool kit' for legal technology start-ups. This would provide them with the information they need to enter the market, e.g. what their product can and cannot do, and/or what services they can and cannot provide, what legal and general regulations they will, or will not, need to comply with, and how to seek further information from relevant regulators.
73. As well as helping to provide businesses, investors and possibly insurers with certainty, the development of 'tool kits' could also underpin the creation of standards for technology regulation. We note that the LawTech Delivery Partnership's LawTech Sandbox Project and its wider programme of work may be an example of this 'tool kit'-type information.

### Technology that supports regulation

74. Finally, technology can enable more effective regulation and make it easier for the regulated community to comply. While Professor Brownsword's paper excludes a detailed consideration of the use of technology by regulators, he notes how regulators are increasingly open to using technology in discharging their regulatory functions. For example, the Legal Ombudsman is interested in using technology to assist its regulatory work.
75. Alison Hook suggests that regulators engage with technology developers about 'reg tech' i.e. technology applications specifically designed to assist regulators or professionals to comply with regulations.<sup>18</sup>

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<sup>18</sup> The term 'RegTech' is defined by the Financial Conduct Authority (FCA) as a term that applies to new technologies developed to help overcome regulators challenges in financial services.

## Substantive issues regulators need to consider

76. There are substantive issues that regulators will need to consider in developing their regulatory approach to technology. Our contributors touched on many of these, including:
- The limits of the current legal regulatory model
  - General regulatory challenges, such as
    - Need for consultation
    - Key regulatory concepts
      - Lawfulness
      - Social acceptability
      - Compliance and sustainability
  - Artificial Intelligence
  - Data
  - General ethical issues
  - Education and training

### The limits of the current legal regulatory model

77. Our contributors suggest that regulators should not assume that their current regulatory model is the most appropriate for dealing with legal technologies. For example, regulators should consider whether their regulatory approach is too narrowly focused and prevents them from seeing the bigger picture. Alison Hook notes that this may particularly be relevant where regulation is based on title rather than activity. If regulators are only concerned about regulating their profession's use of technology, this could lead to inconsistencies in regulation and levels of consumer protection between the regulated professions.

78. Alison suggests that the distinction between regulated (reserved) and unregulated activities in England and Wales may no longer be appropriate where technology is a factor, and especially when a technology application can be used by consumers as well as legal services providers. For example, applications that provide legal advice on unreserved legal activities are currently regulated to the same extent as a person providing advice would be, i.e., they are not subject to specific legal regulation and the recipient of the advice is only protected by general consumer law. However, the risk to a consumer may be greater when they use an application rather than deal with a person. This is because the consumer may not be able to tell if the application is designed for his/her jurisdiction or if it is being used properly. A misleading app available on the internet could be accessed by many more people than an ill-equipped human adviser. This means that the potential for harm is much greater. In contrast, where a legal professional uses an app, then that legal professional could use their expertise to check if the app's output is correct.
79. We also heard how the reserved/unreserved activities distinction can create friction for unregulated legal services providers whose work cuts across both.
80. Professor Webley notes that where technological products are used directly by consumers, there may be a case for regulating the products themselves, rather than the service provider, particularly where the service provider is unregulated and outside of the legal regulators' jurisdiction. If technological products become sufficiently complex, it may not be possible for professionals to interrogate the results they produce. She suggests that this supports a case for directly regulating these products, and for considering the creation of a specific legal technology regulator to do so.
81. Other sectors are adopting an activity-based approach to the regulation of technologies. Alison Hook notes that in the medical sector, the EU is creating a new regulatory regime which treats software as a medical device. Medical regulators, similar to the Medicines and Healthcare Products Regulator Authority (MHRA), have stressed that where apps deliver the same types of functions as medical devices they will be subject to the same regulation. To achieve a similar position to the medical sector, legal services regulators would have to be able to regulate technologies directly, which they currently cannot do. Alternatively, a distinct legal technology regulator with the relevant powers would need to be established.
82. We asked Professor Noel Semple to consider whether the LSA 2007's legal and regulatory framework is able to support new technologies for legal service delivery and respond appropriately to the risk these technologies may create. Professor Semple identified the need for regulators to strike a balance between supporting innovation and protecting consumers. If this balance is not properly struck, regulators run the risk of under-regulating technological innovation and potentially harming consumers and others, or over-regulating it and inhibiting the benefits that innovation can bring.

83. Overall, Professor Semple considers that the LSA framework, including the legal regulators and bodies like the LSCP, Legal Ombudsman and CMA, has the capability to monitor and respond to any new risks technology may create, especially as it is complemented by an active academic community. He cautions against regulators being too proactive. In his view, the risks involved in legal services are not as great as those in other sectors and both the potential benefits and detriments that technologies bring are often overestimated. If legal services technology does start to damage consumer or public interests, regulators can act then.

## General regulatory challenges

### Need for consultation

84. Professor Brownsword and Dr Donovan both highlight the need for regulators to understand the technologies that they are dealing with, and to consult widely before such technologies are introduced or regulated. Consultation enables regulators to understand the extent of resistance to a technology's introduction, so that they can better prepare the 'regulatory space'. Consultation also helps regulators understand the knowledge and tools that they will need, and to prepare the market for how they will approach regulation.
85. Dr Donovan also points out that consulting the regulated community can help with compliance as professionals are likely to consider regulation more legitimate if their views are sought and considered.

### Key regulatory concepts

86. Professor Brownsword discussed three key concepts that legal regulators should consider in respect of technology: Lawfulness, Social Acceptability and Compliance and Sustainability.

### Lawfulness

87. When technologies are first developed or used in new ways, it may not be clear how the law, general legal principles or existing regulations apply to them, but regulators may need to act to protect consumers or the public interest. Sir Geoffrey Vos notes that technological development needs a firm legal foundation, including, if necessary, legislation so that potential investors have the confidence to support legal technologies.
88. Professor Brownsword offers key lessons on how regulators can help ensure that the law is sufficiently clear and flexible to support technology regulation. First, it may be that there is no applicable law or regulation in place. Professor Brownsword suggests that this would be a rare occurrence and cites the example of AI, where even if there are no AI-specific laws or regulations, there are other relevant laws and regulations, such as those relating to how data is used.

89. Professor Brownsword comments that a lack of relevant laws or regulations should not equate to legal regulators doing nothing. First, they should consider whether the technology or its use promotes or runs counter to their regulatory objectives. Depending on their conclusion, regulators may choose to support technology's use, or they may take whatever steps they can to protect consumers and the other regulatory objectives.
90. Legal regulators can also identify and communicate the legislative gaps that exist. They can also work with other sectoral and general regulators to resolve conflicts that may arise between different laws and regulations. Such actions are particularly important in fields where there is rapid technological change

### *Social acceptability*

91. As well as considering what they can do under the law, regulators will need to reach regulatory positions that are "socially acceptable". This means that legal regulators' approaches to technology should be broadly acceptable to both legal services consumers and providers, and compatible with wider public interest.
92. The "social acceptability" of a technology will depend on several factors. The first is how the technology is used and whether such uses cross any societal 'red lines'. This could mean that the regulated community, or wider society, considers the technology's use to be unconscionable. In sectors like food and medicine, issues around GM crops and human dignity and privacy, respectively have raised concerns. Professor Brownsword suggests that 'red lines' in the legal sector could be where a technology had the effect of restricting access to justice, or the provision of legal services by smart machines instead of humans.
93. If no red lines are crossed, regulators will need to assess whether the balance of benefits and risks and how they are distributed between, say, providers and consumers are acceptable. This can have the effect of de-risking technologies for both consumers and providers.
94. There is a need for regulators to consult fully, inclusively and in good faith on the "social acceptability" of technologies. By consulting, and through complementary measures, such as pilots and regulatory sandboxes, regulators can better understand whether a technology's use will align with consumers', third parties' and the public interest.

95. Several authors and stakeholders raised concerns about how AI applications are, and could be, used to deliver legal services to the public. Some also highlighted the related issue of how client data is used, including in AI applications, and whether the safeguards that apply to regulated legal services providers should also apply to unregulated providers. The real and potential concerns raised about AI and data include:
- autonomous automated decision-making/humans out of the loop
  - possible discrimination (e.g. underlying biases in data used to educate AIs)
  - transparency of decision-making
  - unsecure data and record-keeping
  - individual fairness being less important than general utility.

The specific points raised by authors on AI is considered in more detail below at para. 99.

96. The use of technology to deliver legal services is relatively new, and as such, some of the regulatory concepts associated with technology will be new to legal regulators. “Social acceptability”, which has tended to arise more in other sectors, will become relevant to legal regulators as the use of technology becomes a normal part of service delivery.
97. Whether a technology is “socially acceptable” will, in part, depend on how risky it is. Risk assessment usually focuses on two factors: the likelihood of the risk occurring and the seriousness of the harm it could cause. While risk assessment experts tend to focus on likelihood, the public usually focuses on seriousness. So even if a technology is unlikely to result in harm, if the potential harm is serious enough, or perceived to be serious, the public, including consumers and legal services providers, may want regulators to provide assurance.
98. So how can regulators address concerns about technology while also supporting and facilitating innovation? Professor Brownsword suggests that where technologies could lead to existential or catastrophic risks, these should be considered thoroughly before being allowed onto the market. To address concerns about social acceptability, regulators will have to consider these issues from both the consumers’ and the innovators’ perspectives and will need to develop means of testing technological applications and understanding their risks. Pilot schemes and regulatory sandboxes can help them to do this.

99. Professor Brownsword also notes the importance of human involvement in relation to the “social acceptability” of technology. This could be human involvement in assessing the performance of technology, or people’s preference for interacting with humans rather than technology. In either case, it is unclear whether it will be “socially acceptable” to remove humans ‘from the loop’ and any proposal to do so should be handled very carefully.

### *Compliance and sustainability*

100. It is not enough for regulators to issue rules and to anticipate how technologies may develop and be used. Regulators should not assume that ‘regulatees’ will necessarily act in a way that is consistent with regulatory objectives. To ensure that ‘regulatees’ comply with regulation consistently and that regulation and regulators remain relevant, regulators should seek to secure cooperation. They can do this by ensuring that regulations are as up-to-date and relevant as possible to technologies’ current use. However, Professor Brownsword cautions that cooperation with ‘regulatees’ should not compromise regulators’ independence nor infringe against social acceptability by, say, exposing consumers to serious risks.
101. To maximise regulatory compliance and sustainability, Professor Brownsword suggests that regulators:
- Seek to achieve a mix of prescriptive rules and softer guidance
  - Anticipate how those they regulate may react
  - Be mindful of unintended consequences.
102. Regulatory sandboxes can encourage innovation and encourage cooperation with regulatees, which can lead to better compliance and sustainability. Professor Brownsword cautions against regulators making broad statements about technological concepts such as AI, transparency, explicability, and technology-neutral regulation. Instead, regulators should seek to understand these concepts in detail and how they should be applied to the legal sector. In a similar vein, the LSCP suggests that that regulators consider legal technologies on a case-by-case basis.

### *Artificial intelligence*

103. Many potential ‘red lines’ concern the use of AI technologies. These are complex and evolving issues which are discussed in detail by our contributors, but we summarise the main conclusions here.

104. Professor Webley suggests that AI could increase the number of power imbalances that lawyers mediate. Currently, lawyers manage possible power imbalances between their client (e.g. an individual) and other parties to a matter (e.g. a large corporation). AI could introduce a new imbalance to the equation - between AI technology developers and the lawyers who use their products. To mitigate against this, legal professionals, who are not technology experts, will need to understand AI decision-making tools, their potential weaknesses, and the issues they may give rise to in order to do the best for their clients and ensure that fundamental values and principles are protected. CITMA suggest that users of AI decision-making technology should have a duty to provide explanations for the decisions that it reaches.
105. Regulators can gain insight into the challenges posed by AI by engaging with developers and other experts. The SRA, for example, notes how its Legal Access Challenge has provided insight into the development of AI decision-making.
106. Professor Brownsword notes that while use of AI technology in legal services may not present similar human dignity concerns to those raised in the context of health care, there may be common regulatory issues around human accountability and respect. Technologies in legal services are not risk-free and, in the case of AI, not wholly understood. An over-reliance on AI could undermine people's ability to take responsibility.
107. Professor Brownsword suggests that regulators should be careful about making broad statements about AI and related relevant concepts. Similarly, Alison Hook suggests that legal regulators look at the issues posed by specific AI-based technologies and their use, the extent of regulation required to address these issues and who should be liable when AI goes wrong or is misused. Should there be greater regulation when AI is used to provide services directly to consumers? Is it sensible to expect the legal services providers who use AI-based applications to understand how they work and were educated? If the answer is no, then should regulators be setting standards for AI and its use? These issues warrant greater consideration. There may also be value in regulators setting out minimum guidance for AI's use, as advocated by the LSCP.

## Data

108. Technology and innovation rely on the availability of good quality, accessible data. Our contributors discuss several issues relating to data that legal services regulators should have regard to.

109. The first is whether there are restrictions relating to the availability of data. Professor Webley discusses the relationship between client data and legal professional privilege and how these concepts are applied differently in the legal sector and other professions, particularly medicine. She suggests that rules and approaches on consent of data that work in the general economy or other sectors may not be applicable for the legal sector. This may make it more difficult to make certain kind of data available and accessible.
110. She considers whether there is a case for extending the strict data protection and professional privilege rules that apply to regulated legal professionals to unregulated ones, or at least making it clear to consumers what level of data regulation their legal services provider is subject to.
111. Finally, she explains how legal confidentiality does not just protect individual clients but also the overall integrity of the justice system and the public's trust in it. In the case of data regulation, this goes beyond a regulatory model based on clients' informed consent about how their data is used.
112. Alison Hook considers the issue of data from a different perspective. She raises concerns about the potential for overconcentration of ownership of the legal industry's data assets. Legal data is essential for the development and 'education' of AI applications. If ownership of this data is concentrated in the hands of a few it may have a negative effect on the overall development of legal AI, and on competition between developers. Similarly, CITMA expresses concern that a small number of companies developing AI tools may end up owning the data underpinning AI decision-making processes.
113. Alison also makes a point about the availability of data on the performance of the legal market. She considers that the data currently gathered and made available by regulatory bodies is helpful, but that the legal services market will only work well when there is enough data available about the sector-wide problems the LSB wants to resolve. She suggests that the LSB undertake a review of the ownership of the legal industry's data assets. This should consider what data exists, its availability, its usability and how the situation could be improved.
114. Data can help regulators understand how technology is developing. This could help identify where their efforts should be focused. CILEx Regulation, for example, say that creating and maintaining a comprehensive and current dataset about how legal technology's development, shared by regulators and others seeking to promote innovation, is necessary to determine what a responsible legal technology environment would be.

## General ethical issues

115. Ethical practices in legal regulation need to consider issues beyond consumer protection. They should also support society's need for a fair, legitimate, and effective legal system. Professor Webley suggests that the regulatory objectives anticipate that regulation will do more than just look after consumers' interests and ensure quality of services. They can also be used as a force to protect individuals, the rule of law and the public interest.
116. To properly protect these wider issues, legal regulators will have to address the ethical issues that AI and the use and storage of the data needed to enable it presents.

## Education and training

117. Regulators should consider how they can provide reliable and authoritative information about technologies. Dr Donovan emphasises the importance of this in relation to technologies that may be subject to hyperbole as far as their benefits and risks are concerned, such as blockchain technologies. Regulators should ensure that where members of their regulated community are interacting with a technology, such as DLT, they understand the technology and its interplay with legal, professional, and regulatory requirements.
118. Regulators can assist their professional community by providing insight into how they might interpret professional obligations and compliance in relation to a specific technology. Regulators can also provide guidance as to what legal professionals working with a technology ought to know. In doing so, they can help encourage engagement with technologies.
119. Dr Donovan suggests three considerations when developing an educational programme for technology:
  - The first is whether there is likely to be a significant gap between perceived and actual digital skills. If there is a significant gap, an education programme may seek to address basic digital concepts and skills
  - The second is whether the programme needs to be designed to reach the widest audience and in a way that allows it to be easily updated
  - The third is a suggestion that legal regulators support the development of educational programmes that introduce technology developers to core legal principles.
120. Professor Webley suggests that lawyers working with AI applications will need sufficient training and support to use the tools correctly and to be able to interrogate the results they produce. She suggests that traditional 'apprenticeship' training models, based on passing down knowledge and experience, may not be effective for new technologies. While AI offers the

opportunity to automate many processes, the need for person-to-person interaction will continue, so lawyers may need to put more emphasis on 'soft' skills. New types of legal professionals and legal technicians may appear, which may require different regulatory approaches. Sir Geoffrey Vos also emphasises the importance of training legal professionals about technologies.

121. Dr Adam Wyner makes similar points, particularly around providing technology developers with an understanding of legal principles. He considers what regulators can do to ensure legal education addresses the challenges presented by legal technology and to ensure that legal professionals have the skills to use, and shape, legal services technology. He points to five issues that legal regulators and educators should address:

- Standards for, and openness of, legal information and processes,
- Integration of professional legal services' standards for and openness of legal information and processes with those of government legal services and the judicial system,
- Responsible AI,
- Alignment of legal technology education with the LSA 2007's regulatory objectives and the regulators' objectives,
- Hybrid courses and programmes in law and computer science.

Dr Wyner proposes that by addressing these issues, regulators will help to ensure that legal technology education will be as relevant, useful, accessible, supportive of ethical behaviour and future-proof as possible.

122. Dr Wyner also considers how legal education is currently addressing legal technology and how regulators should identify the technical knowledge and skills lawyers will need to serve their clients, and what legal educators and regulators should know about how computer scientists are trained and how this could be included in legal technology courses.

## CONCLUSION

123. The issues that technology poses for legal regulators are many and varied. Many of the issues highlighted in this paper are not ones that can be tackled individually, or even as a sector. For example, the ownership and use of data is governed by general laws and regulations, so legal regulators will need to engage with bodies such as the ICO and government to help steer the development of future data regulation so that it supports, rather than hinders, legal technological innovation. Cross-sector guidance may help innovators to understand which regulatory body they should engage with, and what the limits of the current regulatory framework are.
124. The LSB and regulatory bodies have a great deal of work to do to develop their own, and the sector's, approaches to legal technology regulation. This project has highlighted the complexity of the issues and challenges that legal regulators face, particularly in striking the balance between supporting technological innovation that could bring real benefits while protecting consumers and the overall legal system from potential harm.
125. Striking this balance will involve legal regulators working together and with others in a structured and coordinated way. We have to set out how we intend to take this work forward, and we look forward to bringing our convening powers to bear to facilitate joint work on legal technology, and in working with colleagues from across the legal and technology communities.