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## Attitudes toward lawtech adoption: Findings from a survey of solicitors in England and Wales

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At the commencement of the work outlined in this report, Dr Sophia Kununka was based in the Manchester Institute of Innovation Research, where she was employed over a two-year period from October 2019-June 2022 as a member of the research team, in which capacity she assisted in the conceptualization and development of the reported study and in the development and pilot testing of the survey instrument.

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#### EXECUTIVE SUMMARY

The adoption of digital technologies and related advances in artificial intelligence in the delivery of legal services is an issue that has rightly been a major focus of attention over the past decade, given the potential of these developments to fundamentally transform how the sector operates in respect of all aspects of its work. However, the rate and character of adoption of any new technology is fraught with uncertainty. The displacement of traditional ways of working and the accompanying shift of mind-set needed to fully embrace the potential opportunities that a new technology may offer presents significant behavioural challenges. Hence, the adoption of legal technologies poses some highly important unanswered questions regarding the attitudes and behaviour of legal services professionals toward them.

Addressing this shortfall, this report summarises the findings of a representative, cross-sectional survey of the attitudes and beliefs of 656 solicitors in England and Wales concerning the adoption of lawtech. The study, which was conducted online during February and March 2023, examined participants' perceptions of the nature and extent of lawtech adoption, their attitudes, and beliefs towards lawtech, and the extent of their current and intended future usage of lawtech.

Aided in the collection of the data by The Law Society, the study was conceived and otherwise run independently by the authors of this report, a team of academic researchers at the University of Manchester and University College London. The key findings of the survey are as follows:

- The adoption of lawtech remains relatively limited and is driven by two principal motives, namely, improving the quality of legal services delivery and improving the efficacy of legal services delivery.
- There was an indifference towards technological advancement among many legal
  professionals and a lack of confidence in their ability to engage and experiment with
  lawtech. While legal professionals saw the positive benefits of organizational adoption
  of lawtech in terms of increasing productivity, they are generally less convinced of the
  benefits to them personally.
- Perceptions of managerial and organizational support for lawtech adoption were negative or at best neutral and there were mixed perceptions as to whether top managers considered lawtech a strategic priority and therefore worthy of investment and other forms of support.
- Perceptions of client satisfaction with lawtech provision were mixed. Almost half of the sample judged it to be fair to middling, with few respondents reporting that their clients are either very satisfied or very dissatisfied.
- Over half of respondents reported using some type of lawtech at least weekly
  although more than one third of the sample said that they either didn't use lawtech at
  all or used it infrequently. More than half of respondents said that they intended to use
  lawtech more frequently over the next five years.



These findings suggest a number of important actions for enabling the potential of lawtech to be realised throughout the legal services sector:

- The role of senior leadership is critical to the effective adoption of virtually any innovation and, reflecting this reality, the senior leaders of firms need to provide greater direction and momentum to lawtech initiatives.
- Organizational encouragement and support for lawtech need to be improved markedly, particularly in the form of tangible and symbolic support on the part of senior managers.
- A strong business case is necessary but not sufficient for the adoption of lawtech. Senior leaders need to develop a compelling case for the personal benefits of adoption for legal professionals.
- Organizational decision makers must ensure that the necessary resources are available to support the adoption of lawtech, not least mechanisms to provide technical service support to staff engaging with new technologies.



#### INTRODUCTION

Lawtech is the broad term commonly used to describe "technologies which aim to support, supplement or replace traditional methods for delivering legal services, or transactions; or which improve the operation of the justice system." The growing spectre of digital and related Artificial Intelligence (AI) technologies transforming the legal services sector has rightly occupied the attention of a wide range of stakeholders over the past decade, not least the professional associations and regulatory bodies tasked with policy development and the governance of the legal profession. Given the potential of these developments for revolutionizing the way in which legal services are organized and delivered, a considerable amount of effort has been invested by the Law Society and the Solicitors Regulation Authority, among other bodies, in considering the attendant implications of lawtech for the development of present and future legal and paralegal professionals and their employing organizations.<sup>2</sup>

These efforts notwithstanding, surprisingly little is known about the present scale of adoption of lawtech and even less is known about how ready or otherwise those whose jobs might potentially be affected by these developments feel about them; or, indeed, what they think about them.<sup>3</sup> The project summarized in this report was designed and executed with the intention of remedying this shortfall.

Fundamental changes to the legal profession have been forecast, envisaging a future in which a surfeit of technological innovations reshape the offerings of lawyers to their clients and the manner in which they are accessed. The Law Society's Future Worlds 2050: Images of the Future Worlds Facing the Legal Profession 2020-2030 highlights the potential of Al and a varied assortment of emerging technologies to change the nature of business models and transform the day to day working environment of lawyers, altering fundamentally how services are delivered across all aspects of legal work. These technologies have the potential to streamline processes, enhancing both personal and organizational efficiency and effectiveness, and rendering the provision of legal services accessible to a broader spectrum of clients from across the population.

However, harnessing technological advances to these ends is also recognised as a prominent exemplar of "disruptive innovation" (also known as "radical innovation") - a development set to displace traditional ways of working.<sup>6</sup> As such, the successful adoption

<sup>&</sup>lt;sup>6</sup> It is well established that innovations of this magnitude have the potential to not only destroy the core competencies of firms but also pose major adaptive challenges to individuals and groups within and between firms. The defining feature of these challenges is that managers and employees alike, among other major stakeholders, are typically unable to break free from their pre-existing beliefs and behaviour, due to an assortment of emotional and cognitive mechanisms,



<sup>&</sup>lt;sup>1</sup> For instance, this definition, which is taken directly from The Law Society (2019, p. 9), is also the one adopted by Harper and Zhang (2021, p. 184) and, with minor modifications, by Sako and Parnham (2021, p. 14).

<sup>&</sup>lt;sup>2</sup> See, for example, Chittenden (2021); Law Society (2018); Law Society (2020); Sako, Armour, and Parnham (2020); Sako, and Parnham (2021).

<sup>&</sup>lt;sup>3</sup> Sako and Parnham's (2021) final report for the Solicitors Regulation Authority, for example, makes reference to barriers in terms of the financial resources required for investment, the need for staff expertise, and the need to address the important issue of regulatory uncertainty.

<sup>&</sup>lt;sup>4</sup> For a comprehensive discussion of the impact of these developments on the evolution of business models, see Armour and Sako (2020, 2021) and Susskind (2023).

<sup>&</sup>lt;sup>5</sup> For further details, see: <a href="https://www.lawsociety.org.uk/topics/research/future-worlds-2050-project/">https://www.lawsociety.org.uk/topics/research/future-worlds-2050-project/</a>

of lawtech demands an accompanying change of mind-set on the part of present-day legal services providers, policy makers, and regulators. Developing the requisite cognitive, emotional, and behavioural commitment needed to realize the benefits envisaged by the advocates of lawtech thus poses several highly significant psychological challenges that have yet to be confronted.<sup>7</sup>

For each of these reasons, a survey of lawyers' attitudes and beliefs pertaining to lawtech is timely, if not overdue. Extrapolating from the considerable evidence that has amassed concerning similar technological change initiatives in other sectors, attitudes to the adoption of lawtech are likely to vary considerably, thus placing a premium on finely honed leadership and management skills. However, in the absence of systematic evidence, purposefully gathered to ascertain the extent to which today's legal services practitioners feel suitably equipped, and are able and willing to embrace the opportunities afforded by the many and varied developments in lawtech, how can the providers of legal services and the regulators of those providers ensure that the profession is ready to meet the challenges ahead?

In short, the development of lawtech raises a number of unanswered questions regarding the attitudes and behaviour of legal services professionals toward its adoption. Our study constitutes one of the first attempts to provide much-needed answers to these questions and, in so doing, it provides important insights into the practical steps ultimately required on the part of key stakeholders if the benefits envisaged by lawtech advocates are to be ultimately realized. Our study posed questions about the use of lawtech more generally, as well as asking questions about the deployment of specific types of technologies in the delivery of legal services.

To address these concerns, the authors of this report, a team of academic researchers based at the University of Manchester and University College London, led by Professor Gerard P. Hodgkinson, approached the Law Society, with a view to undertaking a survey investigation. Full details of the research methods adopted are reported in Appendixes A-C. In outline, the online questionnaire was subdivided into separate sections covering:

- Participants' background characteristics and the nature of their organizations
- Participants' self-reported perceptions of the nature and extent of lawtech adoption in their organizations and the principal motivations for doing so
- Participants' attitudes and beliefs pertaining to technology in general and lawtech in particular

<sup>&</sup>lt;sup>8</sup> A large body of work, dating back to the classic work of Trist and Bamforth (1951), in the coal industry, demonstrates that the adoption of technological innovation in the workplace rarely proceeds smoothly, a key mechanism underpinning its success being participative leadership and decision making, with transparent communication, throughout all key stages. [In addition to Trist and Bamforth's landmark study, see, for example, Bhattacherjee and Hikmet (2007), Clegg (2000), Eason (1982), and Mumford (2006).]



which undermine variously their efforts to adjust to the various significant environmental shifts prevailing, such as the introduction of new technologies and the entrance of radically different competitors, as seems likely as lawtech gathers pace [see, for example, Abrahamson and Fombrun (1994), Hodgkinson (1997), Hodgkinson and Healey (2011, 2014), and Tripsas and Gavette (2000)]. Susskind (2023) raises similar concerns regarding the need for a change of mind-sets but his analysis is less specific regarding the behavioural mechanisms that drive such change (see, in particular, p. 25, and pp. 135-137).

• The present extent of personal lawtech usage and participants' future usage intentions

The sample of 656 participants who completed the survey was broadly representative across all major individual and firm level characteristics. (Further details of the profile of respondents and their organizations is available in Appendix B.)



#### **FINDINGS**

#### The nature and extent of lawtech adoption within the participants' organizations

To contextualize the main survey findings in respect of participants' personal attitudes toward lawtech, participants were presented with a series of 19 potential areas of lawtech application and asked to indicate what they believed to be the corresponding extent of actual use by their firms, by means of a five-point evaluation scale.

As shown in Chart 1, the overall scale of adoption in respect of all 19 domains of application is modest, at best, with the majority of participants reporting non-existent-or limited usage, indicated by the red and pink shaded areas of the chart. When the proportion of participants who indicated only some to moderate usage is added into the mix (indicated by the light and mid-green shaded areas) it becomes clear that, with the notable exception of 'legal databases' (28.2%), regular usage (i.e. usage 'to a large extent', indicated by the areas of dark green shading) falls somewhere between 0.6% (on line reverse auction platforms) and 16.16% ('legal practice management'), dependent on the particular area of application.

These findings resonate with those of the earlier lawtech adoption survey of Mari Sako and colleagues at the University of Oxford, which found similarly, "that take-up of many forms of lawtech are modest in England and Wales, and especially so for technology assisted by AI. Organizational type may be relevant to take-up: while survey respondents who work for law firms were more likely to adopt a broad range of non-AI lawtech applications than those who work in-house, the reverse was true for AI-enabled applications for legal research." (p. 19)

To identify more clearly the primary areas of lawtech adoption within the sample, responses indicating uncertainty or lack of familiarity (labelled as 'don't know' responses) were removed from consideration. Chart 2 presents the results of the reformulated responses, once again showing the distribution of adoption across the various categories. It clearly indicates a hierarchy of adoption among the respondents. The use of 'legal databases' is most common, with 80.6% of respondents using it to a greater or lesser extent. Conversely, 'online reverse auction platforms' represent the category with the least declared usage (6.7% of respondents).

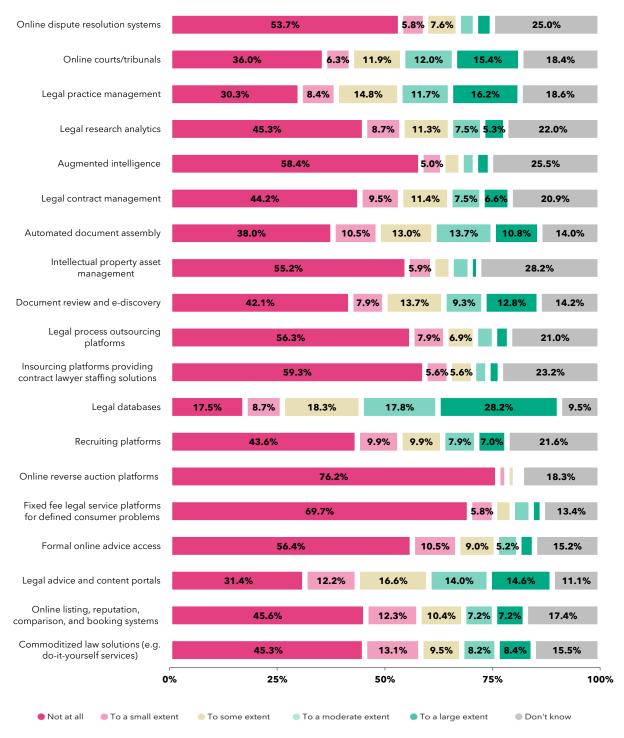
In order to probe more deeply into the reasons participants' organizations are actively deploying lawtech in each of the application areas listed in Charts 1 and 2, participants who responded affirmatively to a given application (i.e. by indicating that their organization uses lawtech in that area anywhere from "a small extent" to "a great extent") were directed to a set of corresponding additional questions that asked them to indicate which of nine potential reasons was the principal motivation for its usage. The detailed results pertaining to this supplementary analysis are reported in Appendix C.

In outline, however, the most striking finding arising from these follow up questions is that two motivational drivers, improving the quality and efficacy of legal services delivery, were identified as the most common reasons for lawtech adoption across many of the categories of lawtech usage incorporated in the survey. Improving service quality was stated as the primary motivation across 10 categories and improving the efficacy of workflows was listed as the primary motivation across 8



categories. Overall, these self-reported motivations clearly indicate that, where lawtech usage has been embraced, the principal drivers are efficiency gains and enhancements to the overall quality of service delivery. Other notable motivations included reducing the cost of overall service delivery and increasing demand for services (for further details, see Appendix C).

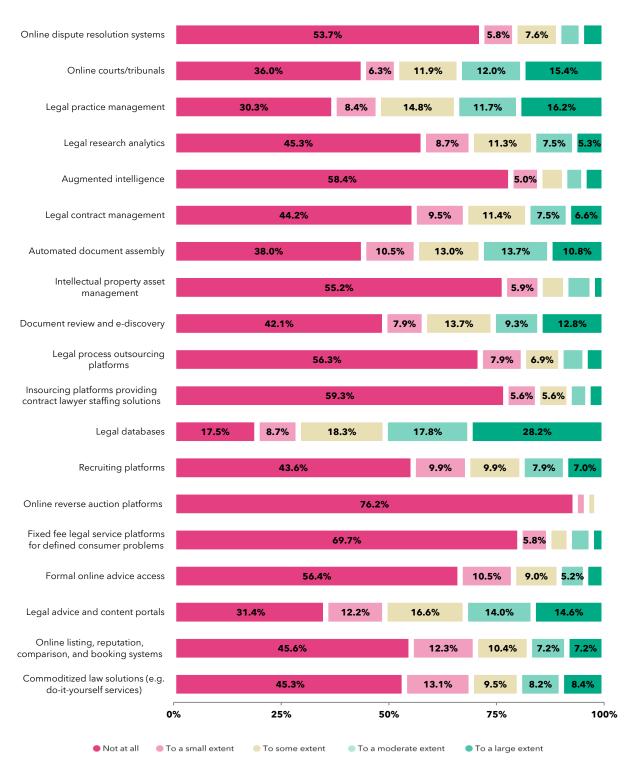
Chart 1. To what extent does your organization use lawtech in the following areas of application? \*



<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.



Chart 2. To what extent does your organization use lawtech in the following areas of application (with the don't know responses removed). \*



<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.



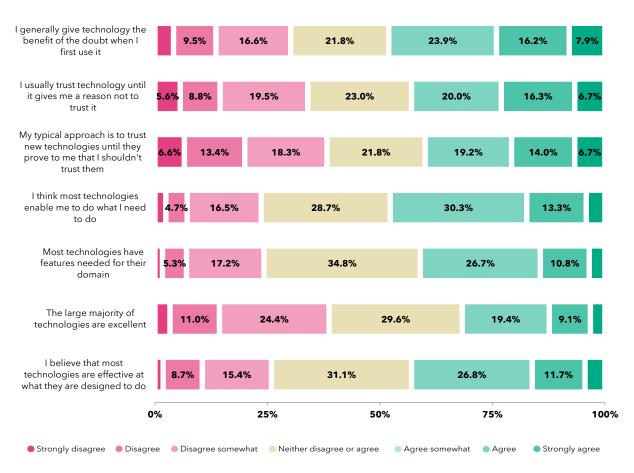
#### Participants' attitudes and beliefs pertaining to lawtech

Eleven attitude statements assessed the general sense of interest and willingness of respondents to engage with technology in general and lawtech related activities and skill development in particular.

#### Attitudes toward new technology in general

As shown in Chart 3, in response to each of the first 7 statements, between 25 and 30+ % of the sample display cautious attitudes toward technological advances in general, disagreeing to varying extents with the sentiments expressed. Furthermore, 20-30+% display neutral attitudes, neither agreeing nor disagreeing with the sentiments conveyed in each statement. Overall, only 40-45% of the sample positively endorsed these statements, of whom the majority only agreed somewhat that new technology is generally trustworthy and fit for purpose. Only 5-10% of the sample endorsed these statements to the maximum extent. The general picture emerging from these findings is one of mistrust and indifference, suggesting an uphill struggle for organizations planning to introduce significant technological change.

Chart 3. Participants' attitudes toward new technology in general. \*



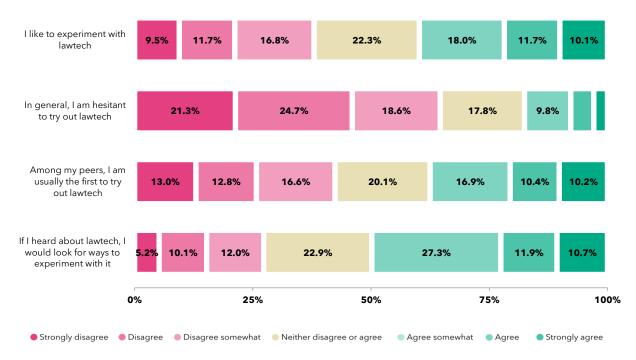
<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.



#### Willingness to engage and experiment with lawtech

As shown in Chart 4, the overall picture emerging from participants' responses to the remaining four statements, in this set, is one of mixed reactions, with well over half of the sample either reluctant or indifferent in terms of their willingness to experiment with lawtech. The last statement 'If I heard about lawtech, I would look for ways to experiment with it' is perhaps the most encouraging with around 50% of the sample indicating a positive response. This finding indicates an open-mindedness on the part of some respondents to the usage of lawtech within legal services delivery, which senior leaders within organizations could build on and incorporate within their business planning pertaining to technological adoption.

Chart 4. Participants' willingness to engage and experiment with lawtech. \*



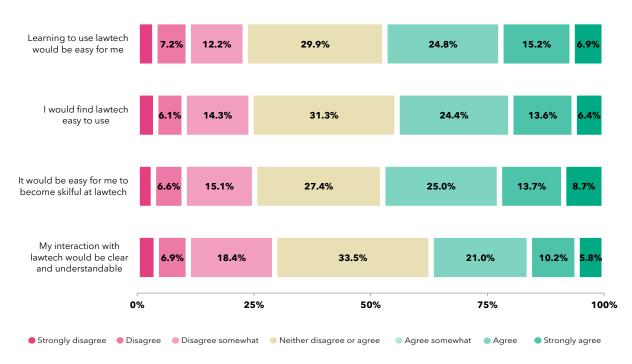
<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.



## Participants' sense of confidence in their ability to engage and experiment with lawtech

A further four questions assessed participants' sense of confidence in their ability to develop the knowledge and skills necessary to adopt lawtech in their work. As shown in Chart 5, a sizeable proportion of the sample (circa 25-30%) disagreed with the basic proposition that they would find it easy to learn how to use lawtech and implement it, and a further sizable proportion of the sample (circa 30%) displayed neutral attitudes toward this issue. Less than 10% of the sample strongly agreed that they would find it easy to comprehend lawtech and develop the necessary skills to implement it in a straightforward manner, the remainder of the sample agreeing somewhat (21-25%) or agreeing (10.2-15.2%) with the sentiments expressed in these particular attitude statements.

Chart 5. Participants' sense of confidence in their ability to engage and experiment with lawtech. \*



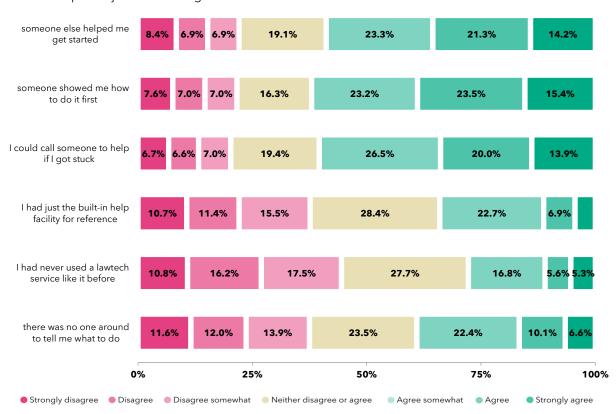
<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.

## Perceptions of organizational support mechanisms required to use lawtech effectively

Relatedly, six further attitude statements assessed participants' beliefs regarding the extent to which they would be able to perform jobs and tasks using lawtech when provided with particular types of support and assistance. The overall picture emerging from participants' responses to these questions (reported in Chart 6) is that organizations which are seeking to adopt lawtech are unlikely to succeed in their efforts unless they provide the necessary assistance in the form of dedicated inperson support. Even with such dedicated support, a sizeable proportion of the sample (35%+) either disagreed with (to varying extents) or displayed neutral attitudes toward the notion that they would be able to perform jobs and tasks when someone was on hand to assist. More positively, sizeable proportions of the sample believe that they would be capable of performing jobs and tasks using lawtech if someone else helped them to get started (58.8%), first showed them how to use the relevant technology (62.1%) or were available in the event that they needed help (60.4%), albeit to varying extents.

## Chart 6. Participants' perceptions of organizational support mechanisms required to use lawtech effectively. \*

I could complete a job or task using lawtech if...



<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.



#### Perceptions of organizational resources provision to support use of lawtech

Four questions assessed participants' perceptions of the extent to which they have the necessary knowledge, technical support, compatible systems, and other resources required to use lawtech effectively. As shown in Chart 7, the overall pattern of results in response to this set of questions presents a mixed picture, with 53.1% - 60% of participants expressing disagreeable (31.5% - 50%) or neutral (17.2% - 31.96%) attitudes toward the sentiments encapsulated in the various statements.

Fifty per cent of the sample disagree with the negatively worded statement 'lawtech is not compatible with other systems I use' and a further 31.9% express a neutral attitude, thus implying that systems incompatibility is not generally viewed as a problem, except by a minority of 18.1% of participants, most of whom (11.1%) only agree somewhat with this sentiment.

Chart 7. Perceptions of organizational resources provision to support the use of lawtech. \*



<sup>\*</sup>Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.

#### Perceived usefulness of lawtech to professional efficiency and effectiveness

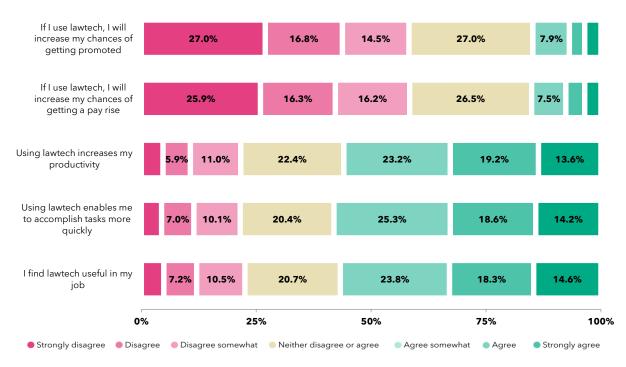
Five questions assessed participants' attitudes and beliefs concerning outcomes pertaining to the adoption of lawtech in their work. As shown in Chart 8, well over half of the sample agree to varying extents that lawtech is variously useful (56.7%), increases productivity (56%), and increases the speed of task completion (58.1%). Although a sizeable percentage of participants display neutral (20.4 - 22.4%) or disagreeable (21.5 - 22.6) attitudes toward these outcomes, **the evidence overall indicates that sizeable** 



numbers of legal professionals are in agreement that there are clear organizational benefits arising from the adoption of lawtech. The picture emerging from participants' responses to these three questions is markedly different from the one emerging in response to the other two questions in this set, which invited participants to reflect on their attitudes and beliefs pertaining to the personal benefits arising from adopting lawtech in their work.

Only 14.8% of participants positively endorsed the statement 'if I use lawtech, I will increase my chances of getting promoted', with 85.3% displaying either a disagreeable (58.3%) or neutral (27%) attitude toward this proposition. Similarly, 84.9% of the sample displayed disagreeable (58.4%) or neutral (26.5%) attitudes toward the statement 'if I use lawtech, I will increase my chances of getting a pay rise', with only a minority (15.1%) positively endorsing the sentiments thus expressed.

Chart 8. Participants' perceptions of the usefulness of lawtech to professional efficiency and effectiveness and personal recognition and reward. \*



<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.

In sum, two clear and distinctive patterns of findings emerge in response to this set of five questions. Whereas a small majority of legal professionals see positive benefits of lawtech to their employing organizations, in the form of enhanced efficiency and effectiveness, only a minority of them believe that positioning themselves to use the technologies in question will prove beneficial to them personally, by enhancing their pay and promotion prospects. In other words, although the business case for adopting lawtech is clear at the organizational level, the motivational calculous for doing so at the personal level, is lacking.9

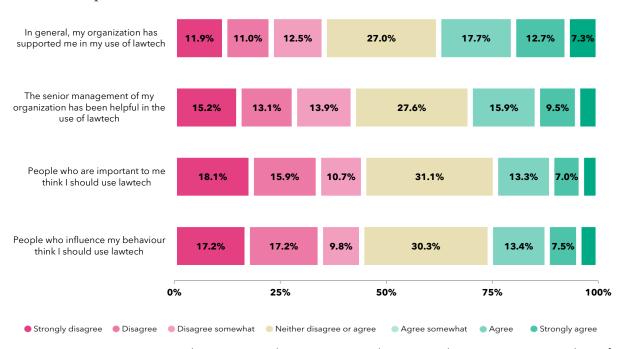
<sup>&</sup>lt;sup>9</sup> There is strong evidence demonstrating that users' acceptance of information technology varies as a combined function of intrinsic and extrinsic motivators. It is thus incumbent on leaders and



#### Perceptions of managerial and organizational support for lawtech adoption

Four questions invited participants to reflect on the extent to which they believed that their organizations are encouraging and supportive toward them in their use of lawtech, particularly senior management and other significant opinion leaders. The overall pattern of results emerging from the responses to these four questions further reinforces the overwhelming conclusion that the incentives ultimately required to fostering greater levels of employee engagement with lawtech are fundamentally lacking at the organizational level, much as they are lacking at the personal level (see Chart 9).

Chart 9. Participants' perceptions of managerial and organizational support for lawtech adoption. \*



<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.

The final two questions in this set assessed the extent to which participants are feeling a sense of normative pressure from people whose opinions they value to adopt lawtech. The proportion of participants who responded negatively (circa 44%) or neutrally (circa 30%) accounts for almost three quarters of the sample, with more than half of respondents whose answers were affirmative only agreeing somewhat with the sentiments encapsulated in the relevant attitude statements.

managers to recognize that unless they are able to redress the current widely held perception among employees of the lack of an instrumental link between making the personal investment in lawtech activity "and valued outcomes that are distinct from the activity itself" (Davies, Bagozzi, and Warshaw, 1992; not least pay and/or promotions), engagement with lawtech will likely remain suboptimal [See also Venkatesh, Morris, Davis, and Davis (2003)].

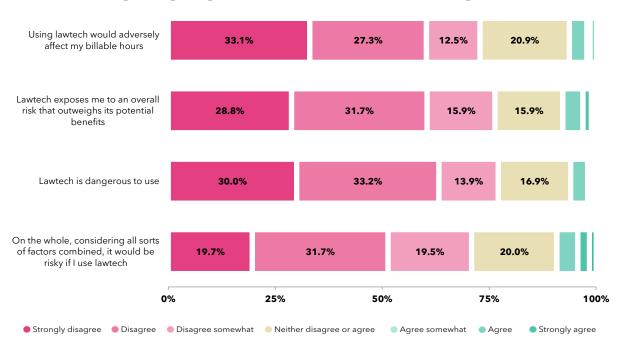


The overall findings emerging from this block of questions clearly indicate that unless organizational encouragement and support for lawtech are improved markedly, particularly in the form of tangible and symbolic support on the part of senior managers, the prospects of successful adoption at the scale envisaged by its growing numbers of advocates are remote indeed.<sup>10</sup>

### Perceptions of the riskiness of lawtech adoption

For firms seeking to adopt lawtech, the road ahead need not be as bleak as implied by the foregoing patterns of responses, with the proviso that organizational decision makers with the requisite power to implement the key decisions supporting such adoption ensure that the necessary incentives and support mechanisms are in place. Supporting this assertion is the overall pattern of responses to a further four questions, which invited participants to reflect on the extent to which they believe that using lawtech in their work poses significant risks that outweigh the putative benefits of its adoption (see Chart 10).

Chart 10. Participants' perceptions of the riskiness of lawtech adoption. \*



<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.

<sup>&</sup>lt;sup>10</sup> A substantial body of work, dating back several decades, demonstrates the fundamental importance of support at the highest organizational levels for successful technological change in the workplace and that without such support attempts to transform work practices rarely, if ever, succeed. In the words of Murray (1989, p. 287): "the development and implementation of IT strategies viewed through a critical use of processual analysis reveals this to be a social and highly political process, particularly where decision-making procedures are not well established. Within this open-ended process the dynamic structuring of social relationships is of crucial importance for the formulation, implementation, and outcome of apparently 'technical' decisions' [see also Pettigrew (1973, 1985, 1987, 2012)].

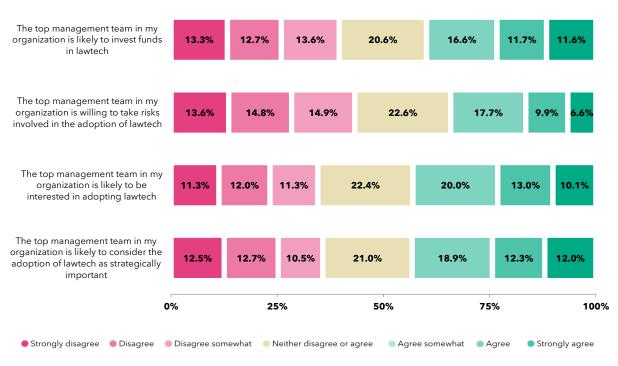
Each of the attitude statements pertaining to Chart 10 expressed negatively worded sentiments with which the overwhelming majority of participants disagreed, many of them strongly so (19.7% - 33.1%), with less than 30% of the sample responding neutrally (15.9% - 20.9%) or affirmatively (<10%). The overall picture emerging from this set of results is one of low risks to adoption, a particularly encouraging finding when viewed alongside responses to the block of questions concerning the perceived organizational benefits of lawtech (see Chart 8, above).

#### Perceptions of the strategic importance of lawtech adoption

Four further questions assessed the extent to which participants believe the top management team in their organizations considers lawtech a strategic priority and, as such, worthy of investment and other forms of support (see Chart 11). Again, the results present a mixed pattern of findings, with a sizeable proportion of participants (56.7% - 65.2%) expressing disagreeable (34.6% - 43.3%) or neutral (20.6% - 22.6%) attitudes toward the sentiments encapsulated in the various statements embodied in these questions.

More positively, affirmative responses ranged from 34.2%, in response to the statement 'the top management team in my organization is willing to take risks in the adoption of lawtech', to 43.2%, in response to the statement 'the top management team in my organization is likely to consider the adoption of lawtech as strategically important.' **As with the overall pattern of responses to the questions regarding organizational support for lawtech, these findings convey the impression that lawtech initiatives are not presently being driven by strong leadership within the upper echelons of organizations.** 

Chart 11. Participants' perceptions of the strategic importance of lawtech adoption. \*



<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values.



#### Perceptions of client satisfaction with current lawtech usage

Three questions were designed to assess the extent to which participants believe the services offered by their firms using lawtech are judged satisfactory by their clients. As shown in Chart 12, responses to the question "to what extent are your clients satisfied with your organization's level of lawtech provision?" yielded a rather mixed pattern of responses, the majority of responses falling within the 5<sup>th</sup> – 8<sup>th</sup> points of the 10-point evaluation scale, suggesting that the level of service provision is fair to middling. Responses to the question asking participants to evaluate the extent to which they believe they are meeting their clients' expectations in respect of lawtech are similarly distributed in a quasi-normal fashion, the majority of responses again falling within the 5<sup>th</sup> – 8<sup>th</sup> points of the 10-point evaluation scale, once more suggesting fair-middling levels of service provision (see Chart 13).

Chart 12. Participants' perceptions of their clients' satisfaction with lawtech provision.

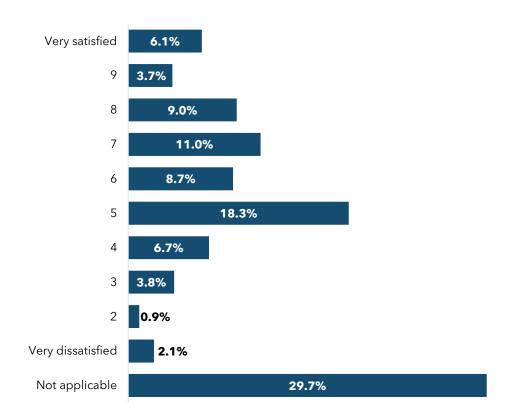




Chart 13. Participants' perceptions of the extent to which lawtech provision meets their clients' expectations.

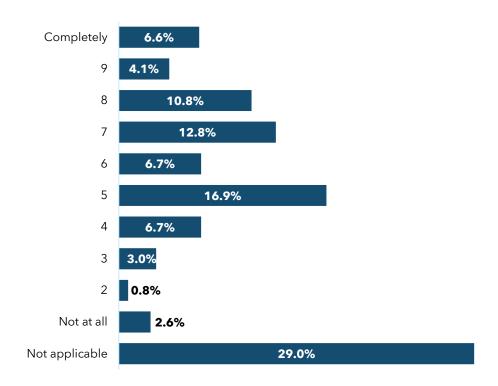
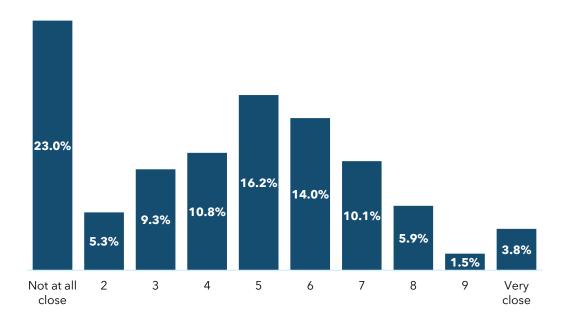


Chart 14. Participants' perceptions of the extent of (mis)alignment between ideal and actual lawtech service provision.



The third question in this series of three invited participants to indicate the extent to which they believe their organizations' present levels of lawtech service provision are close to

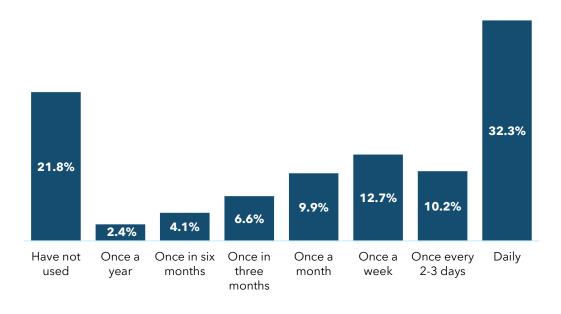
the ideal level of such provision. As shown in Chart 14, almost a quarter of participants (23%) endorsed the lowest point of the 10-point scale, while the remaining responses are distributed roughly in accordance with a bell-shaped curve.

In contrast with the responses to the previous two questions, one group of participants believe that present levels of lawtech service fall a long way short of the ideal level of provision, with another group once again believing that they are fair-middling vis-à-vis the ideal. It should be emphasised that the findings regarding this set of questions represent the participants' perceptions of their clients' expectations and satisfaction, as opposed to an evaluation of expectation and satisfaction sought directly from their actual clients. Nonetheless, the findings provide useful insights into the participants' own views of the extent to which they believe the incorporation of technology within the legal services they and their firms are delivering to clients is yielding satisfactory outcomes.

#### Present extent of lawtech usage and future plans

The final set of questions asked participants to provide an indication of the extent to which they presently use lawtech and to estimate the likely extent of their future usage over the next five years. As shown in Chart 15, almost a third of the sample (32.3%) report using lawtech on a daily basis, a figure which increases to almost two-thirds of the sample (65.2%) when combining the responses of participants who make use of it at least once a month. Over half of the sample (55.25%) report using lawtech at least once a week. At the other extreme, however, more than a third of the sample (34.9%), either don't use lawtech at all (21.8%) or do so highly infrequently (13.1%).



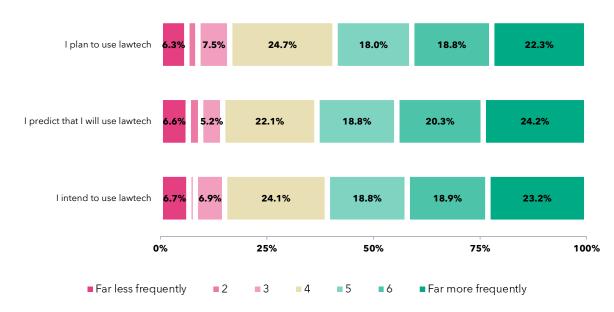


It is important to note that answers to this question do not provide any indication of the purpose(s) for which lawtech is employed. Earlier questions, however, did address this issue. Extrapolating from the pattern of responses to those earlier questions suggest that the majority of users are adopting it primarily in routine administrative applications

directed toward service delivery improvements, rather than more transformational applications of cutting-edge technologies, of the sort that might ultimately displace the jobs of legal services professionals.<sup>11</sup>

Chart 16 illustrates the response patterns to three questions that assessed participants' intentions to use lawtech over the next five years. The results are remarkably consistent across all three questions, with a majority of the sample indicating that they plan to use lawtech more frequently. Averaging participants' responses to the three questions reveals that 23.23% of the sample intend to significantly increase their lawtech usage. Although these findings are promising for lawtech advocates, it is important to balance them with the divergent views of the other participants. Nearly a quarter of respondents (23.6%, averaged over the three questions) expressed neutral intentions, predicting no change in their lawtech usage. Moreover, a considerable minority (15.4% of the sample, averaged over the three questions) anticipated using lawtech less frequently in the years ahead.

Chart 16. Participants' self-reported intentions to use lawtech over the next five years. \*



<sup>\*</sup> Box sizes vary in proportion to their corresponding percentage values. Boxes denoting percentage values of <5% have been left intentionally blank, to aid legibility.

<sup>&</sup>lt;sup>11</sup> According to Susskind and Susskind (2022, p. 405), "In the long run, increasingly capable machines will transform the work of professionals, giving rise to new ways of sharing practical expertise in society... we are confident that the change will constitute an incremental transformation rather than an overnight revolution." The findings of the present survey lend strong support to this incremental view of strategic change. However, whether the small-scale changes presently underway will eventually dismantle the legal services profession, "leaving most (but not all) professionals to be replaced by less expert people and high-performing systems," in "a post-professional society" that renders practical expertise openly accessible online, as ultimately envisaged by Susskind and Susskind (2022), remains to be seen (cf. Susskind, 2013, 2017, 2023).



#### SUMMARY AND CONCLUSIONS

The legal profession is at a crossroads, with new technologies that promise to transform virtually every aspect of the legal services sector starting to gather pace. The rate and character of the adoption of these new technologies has potentially profound implications for the future of legal services delivery, the shape of the legal services industry, and the skills ultimately required by the future profession. The study summarised in this report aimed to investigate a number of questions related to the adoption of lawtech by the legal profession in England and Wales, including perceptions of the nature and extent of lawtech adoption, attitudes and beliefs towards lawtech, and the extent of its current and anticipated future usage.

#### The nature and extent of lawtech adoption

- We found that the adoption of lawtech remains relatively limited, confirming the results of the earlier survey undertaken at Oxford University by Mari Sako and colleagues.<sup>12</sup>
- Legal databases were the most commonly used type of lawtech. The use of more advanced technologies is rare.
- Participants who reported the adoption of lawtech in their organizations, commonly identified two main motives for doing so, namely, improving the quality of legal services delivery, and enhancing the efficacy of legal services delivery.
- Other motivations for adoption included reducing the cost-of-service delivery and increasing demand for services.

### Attitudes and beliefs regarding lawtech

- We found a mixed picture when it came to the attitudes of the legal profession towards lawtech. There was a mistrust and indifference towards technological advancement in general, and well over half of our sample were either reluctant to experiment with new legal technologies or indifferent to this issue.
- A large proportion of participants reported that they would lack confidence in their own ability to engage and experiment with lawtech, even if dedicated support was provided by their organizations.
- Our results underscore the importance to successful adoption of organizations
  providing assistance to staff in the form of dedicated in-person support. Sizeable
  proportions of the sample believed that they would be capable of performing jobs
  and tasks using lawtech, with the proviso that they received initial guidance,
  together with demonstrations of how to use the technology or technologies in
  question, and ongoing assistance, as necessary.

 $<sup>^{12}</sup>$  For further details of the Oxford study, see Sako, Armour, and Parnham (2020) and Sako and Parnham (2021).



- We found a mixed picture when we asked participants about their perception of the extent to which their organizations provided the necessary resources to support use of lawtech.
- We found that although the business case for adopting lawtech was clear at the
  organizational level, the motivation for adoption at the individual level was lacking.
  A small majority of legal professionals saw the positive benefits of organizational
  adoption of lawtech in terms of increasing productivity. However, participants were
  less convinced of the benefits to them personally.
- Perceptions of managerial and organizational support for lawtech adoption were at best neutral and in many cases negative. Almost two-thirds of our sample disagreed with or were neutral towards the proposition that their organization has supported their use of lawtech, while less than one-third of participants believed that their senior managers had been helpful in the use of lawtech.
- There were also mixed perceptions as to whether top managers considered lawtech a strategic priority and therefore worthy of investment and other forms of support.
- Perceptions of client satisfaction with lawtech provision were similarly mixed, but largely reflected fair-middling levels of satisfaction.

#### Current and future usage of lawtech

- Over half of respondents reported using some type of lawtech at least weekly, although more than one third of the sample indicated that they either didn't use lawtech at all or used it infrequently.
- More than half of respondents said that they intended to use lawtech more frequently over the next five years.

#### Implications for the legal services sector

The findings of this study suggest a number of actions that need to take place in order for the potential of lawtech to be realised within the legal services sector. In closing, we want to highlight the following critical requirements for success:

- The role of senior leadership is critical to the successful adoption of work-related innovations; accordingly, top level managers and other senior leaders of firms need to provide greater direction and momentum to lawtech initiatives.
- Organizational encouragement and support for lawtech need to be improved markedly, particularly in the form of tangible and symbolic support on the part of senior managers. These actions are crucial for overcoming the indifference towards technological advancement that we found amongst many legal professionals.
- A strong business case is necessary but insufficient for the successful adoption of lawtech. Senior leaders need to pay attention to the development of a compelling case for the personal benefits of adoption for legal professionals.



• Organizational decision makers must ensure that the necessary resources are available to support the adoption of lawtech, not least the necessary mechanisms to provide technical service support to staff engaging with new technologies.

The last several decades have seen growing attention paid to digital transformation in the legal services sector through the adoption of lawtech. Our study shows a strong recognition among legal professionals of the potential of lawtech. At the same time, however, it highlights some of the behavioural challenges that still need to be overcome if lawtech is to be widely and effectively adopted. As Richard Susskind has so aptly noted, there is a need for a change of mind-set in the legal services sector. Our findings suggest that this change is needed among senior leaders as well as rank-and-file lawyers and offer important insights for accomplishing this all-important goal.

<sup>&</sup>lt;sup>13</sup> R. Susskind (2023). *Tomorrow's Lawyers: An Introduction to Your Future* (Third Edition). Oxford: Oxford University Press.

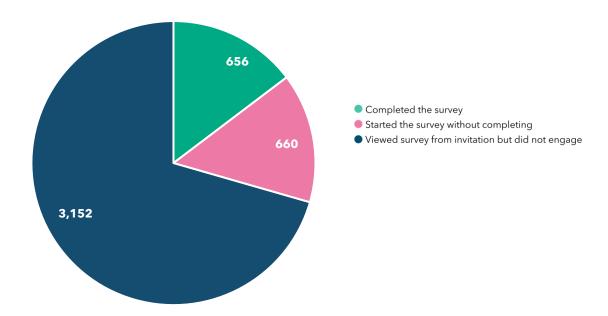


#### APPENDIX A – RESEARCH METHODS

The survey sampling frame comprised a representative cross-section of 40,000 Law Society members (approximately one in four of the Society's fee-paying membership), who were selected randomly from its membership database using a random number generator.

Participants were recruited by means of an email invitation to participate, which was sent by the Law Society on behalf of the research team to the full complement of its randomly selected members. As shown in Chart A1, a total of 4,468 prospective participants viewed the survey link in the email invitation, of whom 1,316 actively considered participating by starting to complete the online questionnaire. The final total number of participants who completed the entire survey was 656, representing a response rate of 14.68% and a completion rate of almost 50%.





In an attempt to maximize participation, the survey was publicised by the Law Society via its Professional Update Newsletter, in a short message highlighting the purpose of the study and the benefits of participating in it, which ended with a request to anyone who received a letter of invitation to take up the offer of participation. The Law Society included the same prompt in its widely read Gazette Jobs newsletter. As a further incentive to participate, everyone who completed the full set of questions was entered into a prize draw, with the chance to win £200.00 worth of Amazon vouchers (there were five such prizes in total).

The survey instrument was piloted on a small number of members of the Law Society before it was finalised for distribution to the main study sample. The final version of the questionnaire comprised a total of 91 questions, organized in three main sections, which addressed four major topic areas, as follows:



- 1) Background data about the research participants (Section A: 10 questions) and their organizations (Section B: five questions);
- 2) Participants' self-reported perceptions of the nature and extent of lawtech adoption in their organizations in respect of 19 areas of application and the principal motivations for doing so (Section B: 38 questions, 19 of which were answered on a selective basis);
- 3) Participants' attitudes and beliefs pertaining to technology in general (Section C: seven questions) and lawtech in particular (Section C: 34 questions);
- 4) Participants' present extent of personal lawtech usage (one question) and their future usage intentions (Section C: three questions).

The survey instrument incorporated questions that were variously adapted or borrowed directly from the following sources. Questions C1 and C2, which respectively examined participants' general attitudes towards technology and their personal innovativeness with IT, were derived from the work of McKnight et al. (2002). Questions C3 and C4, which assessed participants' motivational beliefs (known as "effort expectancy"), together with questions C5 and C6, which respectively assessed participants' perceptions of social influence and the facilitating conditions required for the successful adoption lawtech, were adapted from the work of Venkatesh et al. (2003).

Question C7, which assessed participants' self-belief in their ability to adopt lawtech (i.e., "computer self-efficacy"), was developed originally by Compeau and Higgins (1995). Question C8, which assessed participants' perceptions of the riskiness of lawtech adoption, was adapted from the work of Featherman and Pavlou (2003), and question C9, which assessed participants' perceptions of the strategic importance of lawtech adoption (including the perceived extent of top management support for lawtech adoption), was adapted from Sila (2013). Questions C10 to C12, which assessed participants' beliefs regarding the extent to which the incorporation of technology within the legal services they and their firms are delivering to clients is yielding satisfactory outcomes in the eyes of the latter, were adapted from Mägi (2003). Question C14, which assessed participants' behavioural intentions, was adapted from the aforementioned work of Venkatesh et al. (2003).

In keeping with standard best practice guidelines pertaining to the secondary use of extant attitude survey instruments, wherever possible, we retained the original wording of borrowed questionnaire items, as developed by their originators. However, where necessary, we reworded, dropped, and/or added particular sub-questions to align better our questionnaire as a whole with the specific purposes and context of our study.



# APPENDIX B – BACKGROUND CHARACTERISTICS OF PARTICIPANTS AND THEIR ORGANIZATIONS

To ascertain the extent to which the resulting sample was representative of the Law Society Membership, and hence was also representative of the wider profession, the first section of the questionnaire asked participants about their backgrounds and the nature of their current work organizations.

#### Profile of the research participants

A series of statistical analyses indicated that the sample of participants who completed the survey was broadly representative across all major individual and firm level characteristics. By way of illustration, the gender composition of the sample was almost evenly split between males (319 participants; 48.6%) and females (333 participants; 50.8%) and a wide-ranging cross-section of positions is represented in the sample, with an appropriate mix of seniority levels. The range of organizations, based on variations in size, organizational lifecycle, employment sectors, number of lawyers, and the types and areas of practice, is similarly, for the most part, representative of the profession as a whole.

One participant (0.2%) self-identified as non-binary and three participants (0.5%) preferred not to reveal their gender. The participants' ages ranged from 24 to 87 years (Mean =47.18; SD=11.70) and the distribution approximated a normal, bell-shaped curve.

The majority of the 656 participants (66.3%) reported their highest qualification as a bachelor's (265 participants; 40.4% of the total sample) or master's (170 participants; 25.9% of the total sample) degree in law and all but two of the participants held at least one qualification at degree level or above in one or more subjects. Their length of employment in the legal services sector ranged from 0.67 - 63.42 years (Mean=21.49; SD=11.67). All but four of the participants (i.e., 652 participants; 99.4% of the total sample) held practising certificates, of whom 604 (92.1%) were actively practising law at the time they completed the survey questionnaire.

As illustrated in Chart B1, a wide-ranging cross-section of positions is represented in the sample, with an appropriate mix of seniority levels. Participants whose positions fell within the 'other' category (34 participants; 5.2% of the total sample) encompassed a wide spectrum of roles including, but not restricted to, professional support roles, sole practice, and advocacy/adjudication, together with an assortment of freelance and advisory roles. The length of employment in respect of all the positions represented in the sample ranged from one month-59.50 years (Mean =6.38; SD=7.18).

We also asked participants to indicate which of the following activities were encompassed within their roles (note the breakdown of responses, which is shown in parentheses, does not sum to 100% because in some cases the question demanded multiple responses): work funded by legal aid (50 participants; 7.6% of the total sample); advocacy in the lower courts (147 participants; 22.4% of the total sample); advocacy in the higher courts (40 participants; 6.1% of the total sample); none of the above (486 participants; 74.1% of the total sample).



Chart B1. Which of the following best describes your current position?

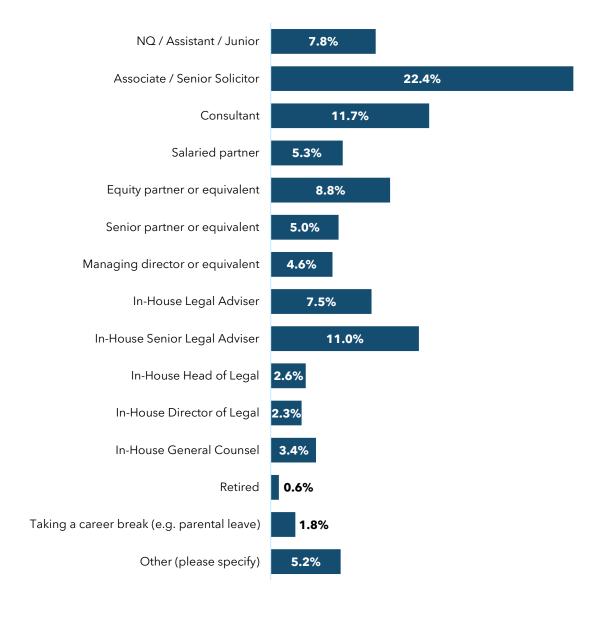
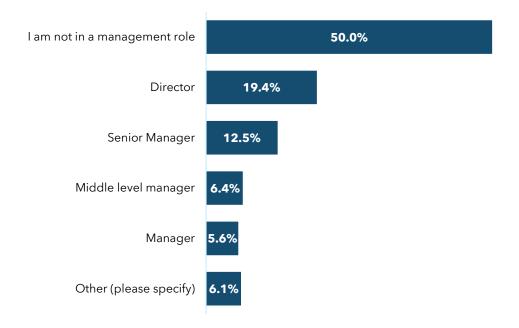




Chart B2. If currently in a management role, please indicate your managerial level.



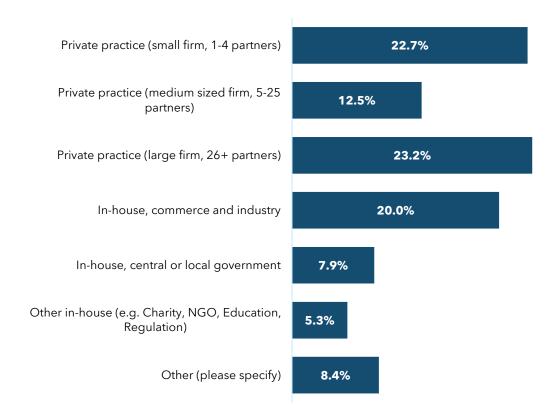
Finally, respondents were asked to specify whether they held a managerial role within their organizations and, if so, the seniority level of that role. As illustrated in Chart B2, the sample is evenly divided between non-management (328; 50%) and management (328; 50%) roles. Within the managerial subsample there are large numbers of directors (127 participants; 19.4%) and senior management (82 participants; 12.5%), suggesting an overrepresentation of senior roles. Nevertheless, when viewed the context of all of the background data, it is clear that the sample overall reflects a suitably representative cross-section of the profession to enable us to draw valid inferences about the wider population of solicitors in England and Wales.

#### Profile of the research participants' organizations

Although the focal unit of analysis of this survey was the individual respondents, an additional set of five questions asked participants about their organizational contexts, again with a view to ascertaining the overall representativeness of the resulting sample. The first of these questions asked participants to indicate their sector of employment. As shown in Chart B3, the distribution of responses to this question is broadly in alignment with the scale of provision within the sector as a whole, the majority of the sample (601 participants; 91.6% of the total sample) being drawn from firms in private practice (383 participants; 58.4% of the total sample) or organizations within which they, the survey respondents, provided in-house legal services (218 participants; 33.2% of the total sample), variously in commercial (131 participants; 19.7% of the total sample), governmental (52 participants; 7.93%), and miscellaneous (35 participants; 5.34% of the total sample) in-house settings. Respondents who endorsed the 'other' category, (55 participants; 8.4% of the total sample) predominantly reflected a wide assortment of specialist and generalist consultancy and advisory roles.



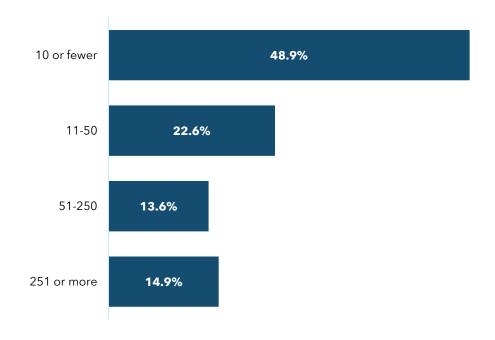
Chart B3. Which of the following best describes your sector of employment?



The second question within this set of five was designed to assess the overall scale of provision of lawyers who were operating within the organizational context of each research participant. As shown in chart B4, almost half of the sample (321 participants; 48.9% of the total sample) are operating in practices or teams with 10 or fewer lawyers, with roughly half of this number (148 participants; 22.6% of the total sample) belonging to practices or teams ranging from 11-50 in size, the remainder of participants being distributed almost evenly across medium-sized practices/teams composed of 51-250 lawyers (89 participants; 13.6% of the total sample) and larger ( $\geq$  251 lawyers) units (98 participants; 14.9% of the total sample).



Chart B4. Including yourself, how many lawyers are there in your legal practice/legal team?



Next, we asked participants who were in private practice to provide an indication of the scale and nature of their organization. Chart B5 summarizes the results, which show that over two thirds of the sample (411 participants; 62.7% of the total sample) were in varying forms of private practice, roughly half of whom (216 participants; 32.93% of the total sample) work in mid-market firms and SME-scale high street partnerships. The remainder of the distribution is roughly aligned with what would be expected of a representative sample and included magic circle/global law firms, Alternative Business Structures, and sole practice. The 'other' category (40 participants, 6.1% of the total sample) included boutique law firms and those providing niche, or specialist services.

Chart B5. If you are in private practice, how would you describe the practice that you work in?



The fourth question in this set asked participants to indicate the area or areas of law in which their organizations practiced. As shown in Table B1, the more predominant areas of practice were company/commercial and finance (342 participants; 52.13% of the total sample) matched with litigation/dispute resolution (343 participants; 52.29% of the total sample). Employment (265 participants; 40.4% of the total sample), commercial property/planning (256 participants; 39.02% of the total sample) and private client (240 participants; 36.59% of the total sample) represented the next three highest categories of legal practice. The 'other' category (87 participants; 13.26% of the total sample) included reference to such practice areas as regulation, housing/landlord and tenant, together with social care and education. (Note: the breakdown of responses reported in Table B1 does not sum to 100% because the accompanying question demanded that participants selected from the full list of multiple response options all of the ones applicable to their particular organizational contexts).



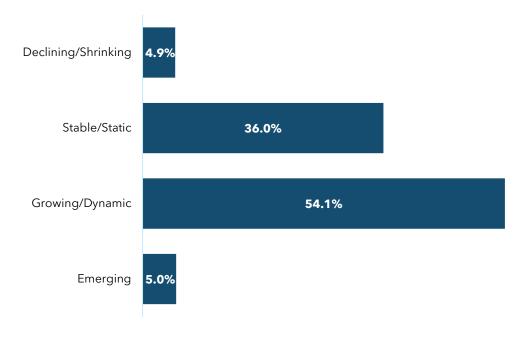
Table B1. Areas of Legal Practice

Legal Practice Area	N	%
Company/Commercial/Finance	342	52.13
Litigation/Dispute resolution	343	52.29
Residential conveyancing	205	31.25
Personal injury	126	19.21
Criminal	117	17.83
Family/Children	219	33.38
Commercial property/Planning	256	39.02
Immigration/Human Rights	101	15.40
Private Client	240	36.59
Employment	265	40.40
Intellectual property	183	27.90
Not applicable where working in-house advising (single client)	99	15.09
Other	87	13.26



The final question in this set asked participants to indicate what they considered to be their organizations' current stage of development, as viewed from a life-cycle perspective. Chart B6 summarizes the results, showing that a little over 90% of the sample viewed their organizations as growing/dynamic (355 participants; 54.1%) or stable/static (236 participants; 36%). Less than 10% of participants viewed their organizations as emerging or declining and the distribution overall is in line with what would be expected in any vibrant sector.

Chart B6. How would you describe your organization's current stage of development?



## APPENDIX C – SUPPLEMENTARY RESULTS

Table C1. Please state the main purpose for which your firm/organization has made use of each of the following types of technology. (Row wise percentages are shown in parentheses).

Type of Technology	Total numbers of respondents per row	Improve service quality	Increase demand for our services	Improve the efficacy of workflows	Allow staff to work more flexibly	Reduce the overall cost of service delivery	Improve security and/or compliance	Reduce long-term business costs	Recruit and retain talent	Improve end-to-end integration with other tools or software	Other Purpose
Commoditized law solutions e.g. do-it-yourself services	257	49 (19.07 %)	15 (5.84 %)	63 (24.51 %)	23 (8.95%)	27 (10.51%)	1 (0.39%)	4 (1.56%)	-	3 (1.17 %)	72 (28.02 %)
Online listing, reputation, comparison, and booking systems	243	56 (23.05 %)	55 (22.63 %)	33 (13.58 %)	18 (7.41%)	12 (4.94 %)	1 (0.41 %)	7 (2.88 %)	6 (2.47 %)	4 (1.65 %)	51 (20.99 %)
Legal advice and content portals	377	158 (41.91 %)	38 (10.08 %)	54 (14.32 %)	26 (6.90 %)	29 (7.69 %)	10 (2.65 %)	8 (2.12 %)	-	1 (0.27 %)	53 (14.06 %)
Formal online advice access	186	63 (33.87 %)	15 (8.06 %)	19 (10.22 %)	19 (10.22 %)	18 (9.68 %)	7 (3.76 %)	6 (3.23 %)	-	1 (0.54 %)	38 (20.43 %)
Fixed fee legal service platforms for defined consumer problems	111	17 (15.32 %)	21 (18.92 %)	16 (14.41 %)	5 (4.50 %)	15 (13.51 %)	1 (0.90 %)	2 (1.80 %)	-	2 (1.80 %)	32 (28.83 %)

Type of Technology	Total numbers of respondents per row	Improve service quality	Increase demand for our services	Improve the efficacy of workflows	Allow staff to work more flexibly	Reduce the overall cost of service delivery	Improve security and/or compliance	Reduce long-term business costs	Recruit and retain talent	Improve end-to-end integration with other tools or software	Other Purpose
Online reverse auction platforms	36	3 (8.33 %)	3 (8.33 %)	3 (8.33 %)	2 (5.56 %)	7 (19.44 %)	1 (2.78 %)	2 (5.56 %)		2 (5.56 %)	13 (36.11 %)
Recruiting platforms	227	18 (7.93 %)	3 (1.32 %)	16 (7.05 %)	5 (2.20 %)	18 (7.93 %)	1 (0.44 %)	9 (3.96 %)	122 (53.74 %)	3 (1.32 %)	32 (14.10 %)
Legal databases	478	242 (50.63 %)	9 (1.88 %)	81 (16.95 %)	34 (7.11 %)	24 (5.02 %)	23 (4.81 %)	11 (2.30 %)	4 (0.84 %)	12 (2.51 %)	38 (7.95 %)
Insourcing platforms providing contract lawyer staffing solutions	115	18 (15.65 %)	8 (6.96 %)	13 (11.30 %)	11 (9.57 %)	11 (9.57 %)	5 (4.35 %)	8 (6.96 %)	12 (10.43 %)	1 (0.87 %)	28 (24.35 %)
Legal process outsourcing platforms	149	25 (16.78 %)	8 (5.37 %)	39 (26.17 %)	6 (4.03 %)	15 (10.07 %)	4 (2.68 %)	8 (5.37 %)	3 (2.01 %)	3 (2.01 %)	38 (25.50 %)
Document review and e-discovery	286	82 (28.67 %)	8 (2.80 %)	97 (33.92 %)	15 (5.24 %)	34 (11.89 %)	14 (4.90 %)	6 (2.10 %)	-	-	30 (10.49 %)
Intellectual property asset management	109	25 (22.94 %)	4 (3.67 %)	27 (24.77 %)	4 (3.67 %)	4 (3.67 %)	7 (6.42 %)	6 (5.50 %)	1 (0.92 %)	2 (1.83 %)	29 (26.61 %)
Automated document assembly	314	66 (21.02 %)	2 (0.64 %)	147 (46.82 %)	16 (5.10 %)	36 (11.46 %)	5 (1.59 %)	13 (4.14 %)	1 (0.32 %)	7 (2.23 %)	21 (6.69 %)



Type of Technology	Total numbers of respondents per row	Improve service quality	Increase demand for our services	Improve the efficacy of workflows	Allow staff to work more flexibly	Reduce the overall cost of service delivery	Improve security and/or compliance	Reduce long-term business costs	Recruit and retain talent	Improve end-to-end integration with other tools or software	Other Purpose
Legal contract management	228	48 (21.05 %)	5 (2.19 %)	86 (37.72 %)	7 (3.07 %)	20 (8.77 %)	14 (6.14 %)	10 (4.39 %)	-	8 (3.51 %)	30 (13.16 %)
Augmented intelligence	106	35 (33.02 %)	2 (1.89 %)	24 (22.64 %)	4 (3.77 %)	11 (10.38 %)	3 (2.83 %)	5 (4.72 %)	1 (0.94 %)	2 (1.89 %)	19 (17.92 %)
Legal research analytics	215	98 (45.58 %)	6 (2.79 %)	46 (21.40 %)	10 (4.65 %)	15 (6.98 %)	8 (3.72 %)	7 (3.26 %)	2 (0.93 %)	3 (1.40 %)	20 (9.30 %)
Legal practice management	335	96 (28.66 %)	5 (1.49 %)	102 (30.45 %)	18 (5.37 %)	16 (4.78 %)	38 (11.34 %)	20 (5.97 %)	4 (1.19 %)	8 (2.39 %)	28 (8.36 %)
Online courts/tribunals	299	69 (23.08 %)	5 (1.67 %)	67 (22.41 %)	55 (18.39 %)	24 (8.03 %)	11 (3.68 %)	7 (2.34 %)	-	13 (4.35 %)	48 (16.05 %)
Online dispute resolution systems	140	40 (28.57 %)	5 (3.57 %)	27 (19.29 %)	11 (7.86 %)	9 (6.43 %)	3 (2.14 %)	4 (2.86 %)	1 (0.71 %)	3 (2.14 %)	37 (26.43 %)



### References and further reading

Abrahamson E., & Fombrun, C. J. (1994). Macrocultures: Determinants and consequences. *Academy of Management Review*, Vol. 19, pp. 728-755.

Armour, J., & Sako, M. (2020). Al-enabled business models in legal services: From traditional law firms to next-generation law companies? *Journal of Professions and Organization*, Vol. 7, pp. 27-46.

Armour, J., & Sako, M. (2021). Lawtech: Levelling the Playing Field in Legal Services? Working Paper, University of Oxford. [SSRN-id3831481]

Bhattacherjee, A., & Hikmet, N. (2007). Physicians' resistance toward healthcare information technology: A theoretical model and empirical test. *European Journal of Information Systems*. Vol. 16, pp. 725-737.

Chittenden, T. (2021). Future Worlds 2050: Images of the Future Worlds Facing the Legal Profession 2020-2030. London: The Law Society. [Available at: <a href="https://www.lawsociety.org.uk/topics/research/future-worlds-2050-images-of-the-future-worlds-facing-the-legal-profession-2020-2030">https://www.lawsociety.org.uk/topics/research/future-worlds-2050-images-of-the-future-worlds-facing-the-legal-profession-2020-2030</a>]

Clegg, C. W. (2000). Sociotechnical principles for system design. *Applied Ergonomics*. Vol. 31, pp. 463-477.

Compeau, D. R., & Higgins, C. A. (1995). Computer Self-Efficacy: Development of a Measure and Initial Test. *MIS Quarterly*, Vol. 19(2) pp. 189-211.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of Applied Social Psychology*. Vol. 22, pp. 1111-132.

Eason, K. D. (1982). The process of introducing information technology. *Behaviour & Information Technology*, Vol. 1, pp. 197-213.

Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: A perceived risk facets perspective. *International Journal of Human-Computer Studies*, Vol. 59, pp. 451-474;

Harper, C. M., & Zhang, S. S. (2021). Legal Tech and Lawtech: Towards a framework for technological trends in the legal services industry. In H. Gimpel, J. Krämer, D. Neumann, J. Pfeiffer, S. Seifert, T. Teubner, D. J. Veit, & A. Weidlich (eds.), *Market Engineering: Insights from Two Decades of Research on Markets and Information* (pp. 183-197). Cham, Switzerland: Springer Nature AG. [Available at: https://doi.org/10.1007/978-3-030-66661-3\_11]

Hodgkinson, G. P. (1997). Cognitive inertia in a turbulent market: The case of UK residential estate agents. *Journal of Management Studies*. Vol. 34, pp. 921-945.

Hodgkinson, G. P., & Healey, M. P. (2011). Psychological foundations of dynamic capabilities: Reflexion and reflection in strategic management. *Strategic Management Journal*. Vol. 32, pp. 1500-1516.



Hodgkinson, G. P., & Healey, M. P. (2014). Coming in from the cold: The psychological foundations of radical innovation revisited. *Industrial Marketing Management*, Vol. 43, pp. 1306-1313.

Law Society (2018). Horizon Scanning Report: Artificial Intelligence and the Legal Profession. London: The Law Society.

[https://www.lawsociety.org.uk/en/topics/research/ai-artificial-intelligence-and-the-legal-profession]

Law Society (2019). *Introduction to LawTech: A practical Guide to Legal Technology*. London: The Law Society. [Available at:

https://www.lawsociety.org.uk/campaigns/lawtech/guides/introduction-to-lawtech]

Law Society (2020). *Horizon Scanning Report: Digital Futures*. London: The Law Society [available at: https://www.lawsociety.org.uk/en/topics/research/digital-futures].

Mägi, A. W. (2003). Share of wallet in retailing: The effects of customer satisfaction, loyalty cards and shopper characteristics. *Journal of Retailing*, Vol. 79, pp. 97-106;

McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for ecommerce: An integrative typology. *Information Systems Research*, Vol. 13(3), 334-359;

Mumford, E. (2006). The story of socio-technical design: Reflections on its successes, failures and potential. *Information Systems Journal*, Vol. 16, pp. 317-342.

Murray, F. (1989). The organizational politics of Information Technology: Studies from the UK financial services industry. *Technology Analysis & Strategic Management*. Vol. 1, pp. 285-298.

Pettigrew, A. M. (1973). The Politics of Organizational Decision Making. London: Tavistock.

Pettigrew, A. M. (1985). The Awakening Giant: Continuity and Change in Imperial Chemical Industries, Oxford: Basil Blackwell;

Pettigrew, A. M. (1987). Context and action in the transformation of the firm. *Journal of Management Studies*. Vol 24, pp. 649-670.

Pettigrew, A. M. (2012). Context and action in the transformation of the firm: A reprise. *Journal of Management Studies*. Vol 49, pp. 1304-1328.

Sako, M., Armour, J., & Parnham, R. (2020). Lawtech Adoption and Training: Findings from a Survey of Solicitors in England and Wales. Oxford: University of Oxford.

Sako, M., & Parnham, R. (2021). *Technology and Innovation in Legal Services: Final Report for the Solicitors Regulation Authority*. Oxford: University of Oxford.

Sila, I. (2013). Factors affecting the adoption of B2B e-commerce technologies. *Electronic Commerce Research*, Vol. 13, pp. 199-236;

Susskind, R. (2013). *Tomorrow's Lawyers: An Introduction to Your Future*. Oxford: Oxford University Press.



Susskind, R. (2017). *Tomorrow's Lawyers: An Introduction to Your Future* (Second Edition). Oxford: Oxford University Press.

Susskind, R. (2023). *Tomorrow's Lawyers: An Introduction to Your Future* (Third Edition). Oxford: Oxford University Press.

Susskind, R., & Susskind, D. (2022). The Future of the Professions: How Technology will Transform the Work of Human Experts. Oxford: Oxford University Press.

Tripsas, M., & Gavette, G. (2000). Capabilities, cognition, and inertia: Evidence from digital imaging. *Strategic Management Journal*. Vol. 21, pp. 1147-1161.

Trist, E., & Bamforth, K. (1951). Some social and psychological consequences of the long wall method of coal getting. *Human Relations*, Vol. 4, pp. 3-38.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of Information Technology: Toward a unified view. *MIS Quarterly*, Vol. 27, pp. 425-478.

