

## Lawtech

## Leveling the Playing Field in Legal Services?

*John Armour and Mari Sako*

The legal services market is commonly thought of as divided into two “hemispheres” – PeopleLaw and BigLaw.<sup>1</sup> These segments represent, respectively, individuals and corporate clients. The last few decades have seen an increasing concentration of resources in the legal market toward serving corporate clients, to the alleged detriment of consumer clients. At the same time, the costs of accessing legal representation exceed the financial resources of many ordinary citizens and small businesses, compromising their access to the legal system.<sup>2</sup>

We ask: will the adoption of legal tech – new digital technologies in legal markets – lead to a leveling of the playing field between the PeopleLaw and BigLaw sectors? By “leveling,” we mean convergence of business models<sup>3</sup> in the two sectors so as to deliver a more equal opportunity to access legal services.

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<sup>1</sup> JOHN P. HEINZ & EDWARD O. LAUMANN, CHICAGO LAWYERS: THE SOCIAL STRUCTURE OF THE BAR (1982); John P. Heinz et al., *The Changing Character of Lawyers' Work: Chicago in 1975 and 1995*, 32 L. & SOC'Y REV. 751 (1998).

<sup>2</sup> DAVID CLEMENTI, REVIEW OF THE REGULATORY FRAMEWORK FOR LEGAL SERVICES IN ENGLAND AND WALES: FINAL REPORT (2004); Gillian K. Hadfield, *Higher Demand, Lower Supply? A Comparative Assessment of the Legal Resource Landscape for Ordinary Americans*, 37 FORDHAM URB. L.J. 129 (2010); COMPETITION & MKTS. AUTH., REVIEW OF THE LEGAL SERVICES MARKET STUDY IN ENGLAND AND WALES (2020), [https://assets.publishing.service.gov.uk/media/5fd9e53cd3bf740ccb335e1/Legal\\_Services\\_Review\\_-\\_Final\\_report.pdf](https://assets.publishing.service.gov.uk/media/5fd9e53cd3bf740ccb335e1/Legal_Services_Review_-_Final_report.pdf); Gillian K. Hadfield, *Legal Markets*, 60 J. ECON. LIT. (forthcoming 2022).

<sup>3</sup> David J. Teece, *Business Models, Business Strategy and Innovation*, 43 LONG RANGE PLAN. 172 (2010); Mari Sako, *Business Models in Strategy and Innovation*, 55 COMM'NS OF THE ACM 22 (2012); John Armour & Mari Sako, *AI-Enabled Business Models in Legal Services: From Traditional Law Firms to Next-Generation Law Companies?* 7 J. PROF. & ORG. 27 (2020).

Convergence in business models would enable legal service providers to exploit opportunities for scaling and cost reduction, and to meet more of the unmet legal needs of clients.<sup>4</sup> We focus, not on what legal tech in theory may be capable of doing, but on which use cases are likely to emerge in practice and take root. In order to do so, we use a causal framework that takes account of organizational complements<sup>5</sup> and regulatory constraints to the adoption of emergent business models.

By leveraging the regulatory differences between the UK and the US, we aim to gauge the relative importance of regulatory shifts in meeting unmet legal needs.<sup>6</sup> In 2007, the UK enacted a bold set of reforms.<sup>7</sup> By reducing the substantive domain over which lawyers have exclusive service rights, and by permitting alternative business structures (ABS), the intent was to stimulate competition and thereby more cost-effective legal services to meet latent demand.<sup>8</sup> Similar proposals have long been debated in the US,<sup>9</sup> and some states have taken tentative first steps.<sup>10</sup> Our comparison of secular trends in the UK (England and Wales, strictly speaking) and the US demonstrates that regulatory reforms may be necessary but not sufficient to bring about desirable changes in meeting latent legal demand.

This chapter proceeds as follows. Section 2.1 sets the scene with an overview of the development of the PeopleLaw and BigLaw sectors in Britain and the United States in the last few decades. Section 2.2 examines the adoption of legal tech in the BigLaw sector, to identify specific use cases and complementary changes taking place (or not taking place) to adopt emergent business models. Section 2.3 conducts

<sup>4</sup> Albert H. Yoon, *The Post-Modern Lawyer: Technology and the Democratization of Legal Representation*, 66 U. TORONTO L.J. 456 (2016).

<sup>5</sup> John Armour et al., *Augmented Lawyering* 2022 U. ILL. L. REV. 71.

<sup>6</sup> Hazel Genn, *Understanding Civil Justice*, 50 CURRENT LEGAL PROBS. 155 (1997); Rebecca L. Sandefur, *What We Know and Need to Know about the Legal Needs of the Public*, 67 S.C. L. REV. 443 (2015).

<sup>7</sup> Legal Services Act 2007, c. 29 (UK).

<sup>8</sup> See CLEMENTI, REVIEW OF THE REGULATORY FRAMEWORK.

<sup>9</sup> Gillian K. Hadfield, *The Price of Law: How the Market for Lawyers Distorts the Justice System*, 98 MICH. L. REV. 953 (2000); Gillian K. Hadfield, *Legal Barriers to Innovation: The Growing Economic Cost of Professional Control over Corporate Legal Markets*, 60 STAN. L. REV. 1689 (2007); Gillian K. Hadfield & Deborah L. Rhode, *How to Regulate Legal Services to Promote Access, Innovation, and the Quality of Lawyering*, 67 HASTINGS L.J. 1191 (2015); WILLIAM D. HENDERSON, LEGAL MARKET LANDSCAPE REPORT: COMMISSIONED BY THE STATE BAR OF CALIFORNIA (2018), <https://board.calbar.ca.gov/docs/agendaItem/Public/agendaitem1000022382.pdf>.

<sup>10</sup> See ARIZ. SUP. CT., TASK FORCE ON THE DELIVERY OF LEGAL SERVICES: REPORT AND RECOMMENDATIONS (2019), [https://www.americanbar.org/content/dam/aba/administrative/legal\\_education\\_and\\_admissions\\_to\\_the\\_bar/council\\_reports\\_and\\_resolutions/november2019/arizona-supreme-court-task-force-on-delivery-of-legal-services-final-report-2019-october.pdf](https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/council_reports_and_resolutions/november2019/arizona-supreme-court-task-force-on-delivery-of-legal-services-final-report-2019-october.pdf); STATE BAR OF CAL., TASK FORCE ON ACCESS THROUGH INNOVATION OF LEGAL SERVICES: FINAL REPORT AND RECOMMENDATIONS (2020), <https://www.calbar.ca.gov/Portals/o/documents/publicComment/ATILS-Final-Report.pdf>; UTAH STATE BAR WORKING GRP. ON REGUL. REFORM, NARROWING THE ACCESS-TO-JUSTICE GAP BY REIMAGINING REGULATION: REPORT AND RECOMMENDATIONS (2019), <https://www.utahbar.org/wp-content/uploads/2019/08/FINAL-Task-Force-Report.pdf>. Arizona has fully implemented its ABS approach, while others are actively considering reform via a regulatory sandbox.

a similar exercise for the PeopleLaw sector. Section 2.4 then provides an explicit comparison of the two sectors to address the question of whether or not legal tech will enable a convergence in the extent to which consumer or client needs are met. Our conclusion is that while legal tech and data aggregation have enormous potential to meet unmet legal needs, different constraints continue to hold back the realization of such potential. Major barriers are human capital and data aggregation in BigLaw, and financial capital and the technological limits to automating human lawyers in PeopleLaw. We discuss some regulatory policy options that might promote greater convergence between the two sectors.

## 2.1 OVERVIEW OF PEOPLELAW AND BIGLAW SECTORS

This section provides a macro-level overview of the state of PeopleLaw and BigLaw sectors.<sup>11</sup>

Differences in data availability mean the contours of these sectors can be outlined in sharper focus for the US than the UK. But in both countries, there is evidence that the share of PeopleLaw activities relative to BigLaw has been in secular decline over the past few decades. The similarity in this secular trend is striking, given that reforms have been under way for over a decade in the UK, whereas they have only just begun in some US states.

In the US, lawyers have long been aware of a distinction made between the part of the legal market that provides services to sizable corporate clients and the part that does not. This divide was brought to prominence in the seminal work *Chicago Lawyers: The Social Structure of the Bar*.<sup>12</sup> The study found that Chicago lawyers in 1975 devoted 45 percent of their total effort to services for individual or small business clients, unions, environmental plaintiffs, and state administrative agencies or municipalities. The same survey repeated in 1995 showed that this PeopleLaw proportion had declined to 35 percent of lawyers' total effort.<sup>13</sup>

A similar story emerges from US Economic Census Data reporting spending on services provided by lawyers employed in private practice. In 2005, 39 percent of this was attributable to individual clients.<sup>14</sup> By 2007, the share of PeopleLaw in total revenue was 29 percent; by 2012 it had declined to 24 percent, while the share of BigLaw grew over the same period from 68 percent to 73 percent.

Henderson also highlights striking differences between the economics of PeopleLaw and BigLaw. In PeopleLaw, lawyers (typically sole practitioners) charged an average \$260 per hour (data source: Clio), but billed for only 1.6 hours per day, amounting to \$422 a day, or \$105,000 in gross receipts over a fifty-week year. In

<sup>11</sup> We are aware that there are other segments including the government and the third sector (non-profit organizations) providing legal services. But we focus in this chapter on BigLaw versus PeopleLaw to simplify and sharpen our analyses.

<sup>12</sup> See HEINZ & LAUMANN, CHICAGO LAWYERS.

<sup>13</sup> *Id.*

<sup>14</sup> See Hadfield, *Higher Demand, Lower Supply?* The total figure was \$221.6 billion, of which \$85.6 billion was spent by individual clients.

BigLaw by contrast, Am Law 100 total gross revenue in 2012 was \$71 billion, with a total lawyer headcount of 86,272. So, average gross revenue per lawyer was \$822,978, while average profit per partner was \$1.48 million.<sup>15</sup>

The problem of access to justice for consumers led a handful of state bars to address this issue in recent years.<sup>16</sup> Regulatory reforms are intended to permit new providers including human non-lawyers and non-human non-lawyers (i.e., software) to operate in legal markets. It is too early to tell how these reforms would begin to meet the latent demand of consumers. For now, we know much more about cases of unauthorized practice of law by technology providers.<sup>17</sup>

The UK's legal services market, with a total turnover of £24 billion in 2017, is about a sixth (17 percent) of the size of the US market.<sup>18</sup> Unfortunately, UK national statistics do not shed light directly on the relative size of PeopleLaw and BigLaw sectors. Instead, we present two alternative approaches to gauging trends in two spheres of legal markets.

One approach is to break down law firm revenues into practice areas that predominantly serve individuals (B2C) and others that predominantly serve corporate clients (B2B). A recent study by KPMG reports that 60 percent of law firm turnover in England and Wales is in B2B and 20 percent in B2C.<sup>19</sup> This 60 percent does not take account of growth in in-house lawyers, rising from 16 percent of all solicitors in 2004 to 23 percent by 2019.<sup>20</sup> Because this growth is directed at corporate work, it is strongly suggestive of a corresponding decline of PeopleLaw's relative share in the overall legal services market.

Another approach draws on UK survey evidence investigating latent consumer demand for legal services. While differences in survey methodology over time impede identifying secular trends, the data clearly suggests that the legal services market is not meeting the needs of consumers. Adults based in England and Wales were asked about the legal issues they experienced in the four years prior to the survey and the help they sought in order to resolve them. In 2019,<sup>21</sup> the majority of

<sup>15</sup> See HENDERSON, LEGAL MARKET LANDSCAPE REPORT, at 14–15.

<sup>16</sup> See sources cited *supra* notes 9 and 10.

<sup>17</sup> See Benjamin H. Barton & Deborah L. Rhode, *Access to Justice and Routine Legal Services: New Technologies Meet Bar Regulators*, 70 HASTINGS L.J. 955 (2018); HENDERSON, LEGAL MARKET LANDSCAPE REPORT; see also Barton (Chapter 1 in this volume).

<sup>18</sup> This is slightly less than the ratio of population (67 million to 328 million, or 20 percent) but more than the ratio of GDP (\$2.83 trillion to \$21.43 trillion in 2019, or 13 percent).

<sup>19</sup> KPMG, CONTRIBUTION OF THE UK LEGAL SERVICES SECTOR TO THE UK ECONOMY: A REPORT FOR THE LAW SOCIETY (2020), <https://www.lawsociety.org.uk/topics/research/contribution-of-the-uk-legal-services-sector-to-the-uk-economy-report>. In this study, PeopleLaw (B2C) clients are taken to include not only individuals but also small businesses. BigLaw (B2B) clients are primarily corporate legal departments and big law firms.

<sup>20</sup> LAW SOC'Y ENG. & WALES, TRENDS IN THE SOLICITORS' PROFESSION: ANNUAL STATISTICS REPORT 2019 (2020), <https://www.lawsociety.org.uk/topics/research/annual-statistics-report-2019>.

<sup>21</sup> YOUGov, LEGAL NEEDS OF INDIVIDUALS IN ENGLAND AND WALES: TECHNICAL REPORT 2019/2020 (2020), <https://legalservicesboard.org.uk/wp-content/uploads/2020/01/Legal-Needs-of-Individuals-Technical-Report-Final-January-2020.pdf>.

respondents' legal needs remained unmet in all of the most commonly encountered types of legal issue, from family issues and property matters to labor and employment and personal injury.<sup>22</sup> While there are numerous reasons legal needs may be unmet, a significant component appears to be the perceived inaccessibility of the civil justice system.<sup>23</sup>

Policy concern over the unmet legal needs of consumers informed a major overhaul of UK legal services regulation in 2007.<sup>24</sup> This permitted for the first time ownership of law firms by non-lawyers through so-called Alternative Business Structures (ABS).<sup>25</sup> It is striking that the UK's PeopleLaw sector has continued to shrink relative to BigLaw, and that high levels of unmet consumer legal needs have persisted, despite these wide-ranging reforms.

To summarize, the PeopleLaw sector represents only a small fraction – estimated to be about a fifth to a quarter – of the overall legal services market in both the US and the UK. The evidence suggests that this fraction has been in secular decline in both countries for the past few decades. Moreover, UK citizens' unmet legal needs are not adequately addressed despite the major overhaul in legal services regulation a decade ago. We now turn to consider how technology has been impacting the provision of legal services in each of the two hemispheres, BigLaw and PeopleLaw, respectively.

## 2.2 DIGITAL TECHNOLOGY IN THE BIGLAW SECTOR

This section analyzes how digital technology is influencing the work of lawyers and emergent business models adopted by law firms and other providers in the BigLaw sector. A “business model” is a focused way of understanding how client needs are met, in ways that translate into sustainable profit-making for providers.<sup>26</sup> We first briefly survey digital technologies being deployed in BigLaw, focusing in particular

<sup>22</sup> LEGAL SERVS. BD., THE STATE OF LEGAL SERVICES 2020: EVIDENCE COMPENDIUM 20 (2020), <https://legalservicesboard.org.uk/wp-content/uploads/2020/11/The-State-of-Legal-Services-Evidence-Compendium-FINAL.pdf>.

<sup>23</sup> *Id.*; see also LEGAL SERVS. BD., THE STATE OF LEGAL SERVICES 2020 (2020), <http://legalservicesboard.org.uk/state-of-legal-services-report-2020>.

<sup>24</sup> Legal Services Act 2007, c. 29 (UK); see OFF. OF FAIR TRADING, COMPETITION IN PROFESSIONS: A REPORT BY THE DIRECTOR GENERAL OF FAIR TRADING (2001), [https://webarchive.nationalarchives.gov.uk/ukgwa/20140402142426/http://www.offt.gov.uk/shared\\_offt/reports/professional\\_bodies/oft328.pdf](https://webarchive.nationalarchives.gov.uk/ukgwa/20140402142426/http://www.offt.gov.uk/shared_offt/reports/professional_bodies/oft328.pdf); DAVID CLEMENTI, REVIEW OF THE REGULATORY FRAMEWORK; DEP'T OF CONST. AFFS., THE FUTURE OF LEGAL SERVICES: PUTTING CONSUMERS FIRST (2005), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/272192/6679.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/272192/6679.pdf).

<sup>25</sup> Managers and significant (>10 percent) owners of ABS must meet a “fit and proper person” standard set by regulators, and ABS must avoid involvement in any cases posing a conflict with the interests of any significant owner.

<sup>26</sup> See Teece, *Business Models, Business Strategy and Innovation*; Sako, *Business Models in Strategy and Innovation*.

on AI, and distinguish these from earlier waves of automation. We conclude that despite the availability of new business models, significant constraints remain in the form of human capital rather than financial capital, preventing BigLaw law firms from deploying technology more effectively.

### 2.2.1 *Technology Use Cases in BigLaw*

“Legal tech” may be defined as technology that supports or enables the provision of legal services. It is a broad category, encompassing the use of interactive websites, electronic documents, and elements of artificial intelligence (AI) to automate the review and prediction from text, and automation of workflow and matter management. In the BigLaw context, users distinguish between technologies supporting the “practice of law” – that is, supporting the delivery of legal services themselves – and those supporting the “business of law” – that is, supporting the management of client relationships and the allocation of human resource internally.

In the practice of law, a core system for most law firms and corporate in-house teams is document management, which provides digital indexing for legal services work product. Closely related to this, but more varied in their implementation, are knowledge management systems, which seek to aggregate content, including prior work done by the firm, in ways that are relevant and accessible for busy professionals. Increasingly, firms and corporate in-house teams are also making use of workflow automation platforms applying what in other industries might be referred to as robotic process automation (RPA) – that is, the automation of scalable and repetitive tasks. Increasingly common too are the use of extranets or digital deal-rooms that provide secure repositories of data that are accessible by the lawyers and clients or others outside their team. In large-scale litigation, or corporate transactions, there are typically huge volumes of digital documents that are provided by outside parties and need to be reviewable by a range of personnel across organizational boundaries.<sup>27</sup>

The deployment of AI differs from earlier generations of automation in that it requires training to parameterize a model that best classifies items of a particular category.<sup>28</sup> Training is done using a set of data labeled according to the variable of interest. This training requires data – the more the better – that is relevant and accurately labeled. In the litigation context, AI is now commonly used to identify

<sup>27</sup> See John Armour & Mari Sako, *AI-Enabled Business Models in Legal Services: From Traditional Law Firms to Next-Generation Law Companies?*, 7 J. PROS. & ORG. 27 (2020).

<sup>28</sup> Many current deployments of AI in legal services rely on machine learning, or deep learning, coupled with natural language processing (NLP). See Frankenreiter and Nyarko (Chapter 3 in this volume). However, some systems in operation make use of an earlier rules-based approach, and leading-edge applications seek to combine elements of both to deliver greater explainability. See John Armour & Alina Petrova, *AI and Judicial Precedents: A Review* (2021) (unpublished manuscript) (on file with the authors).

potentially relevant documents in a pre-trial discovery exercise.<sup>29</sup> This necessitates the training of new models for each suit, based on aspects identified as “relevant” by expert human reviewers. In the transactional context, AI is increasingly deployed to review contracts. In-house teams train AI systems to review their company’s everyday or “business as usual” contracts; BigLaw firms by contrast train AI systems to do due diligence, reviewing a large corpus of an M&A target’s contracts to identify clauses that may pose problems for buyers (such as change-of-control clauses).<sup>30</sup> In each case, the training requires legal expertise.<sup>31</sup> Moreover, increasing numbers of legal practitioners are making use of AI in support of their legal research, training tools that complement the offerings of the big legal data providers.<sup>32</sup>

In the “business of law,” technology is widely used to support accounts and time recording. BigLaw firms are beginning to deploy AI-based systems both to enhance and leverage the data from these earlier systems. An appropriately trained model can both help to fill gaps in time recordings and predict the likely time budget for new instructions. This opens up the possibility of output-based pricing, as opposed to the traditional input-based model of the billable hour. Similarly, lawyers are increasingly turning to customer relationship management (CRM) systems to support marketing and client relationships. These systems themselves increasingly make use of AI.<sup>33</sup>

### 2.2.2 *Augmented Lawyering and Business Models in BigLaw*

Focusing on the adoption of AI, survey and interview evidence suggests that it has multiple impacts on lawyers’ work.<sup>34</sup> The most well-understood effect is *substitution* – that is, AI systems replacing humans for repetitive, scalable tasks. At the same time, lawyers’ work in giving bespoke advice is *augmented* by the use of AI, freeing up their capacity to deliver judgment-oriented tasks for which humans remain uniquely capable. Here, lawyers are *consumers* of AI systems’ outputs, which augment the quality of their advisory work. Third, the deployment of AI *creates* new tasks for humans, necessitating a multi-disciplinary mix of skills and expertise – not just legal but also data science, information security, process and project

<sup>29</sup> Dana Remus & Frank Levy, *Can Robots Be Lawyers? Computers, Lawyers, and the Practice of Law*, 30 GEO. J. LEGAL ETHICS 501 (2017); David F. Engstrom & Jonah B. Gelbach, *Legal Tech, Civil Procedure, and the Future of Adversarialism*, 169 U. PA. L. REV. 1001 (2021); MARI SAKO ET AL., LAWTECH ADOPTION AND TRAINING: FINDINGS FROM A SURVEY OF SOLICITORS IN ENGLAND AND WALES (2020).

<sup>30</sup> See Armour et al., *Augmented Lawyering*; Engstrom & Gelbach, *Legal Tech*.

<sup>31</sup> It is an open question whether this legal expertise necessarily has to be supplied by a person qualified as a “lawyer.” See Armour et al., *Augmented Lawyering*.

<sup>32</sup> *Id.*; SAKO ET AL., LAWTECH ADOPTION AND TRAINING.

<sup>33</sup> See SAKO ET AL., LAWTECH ADOPTION AND TRAINING.

<sup>34</sup> See Armour et al., *Augmented Lawyering*.

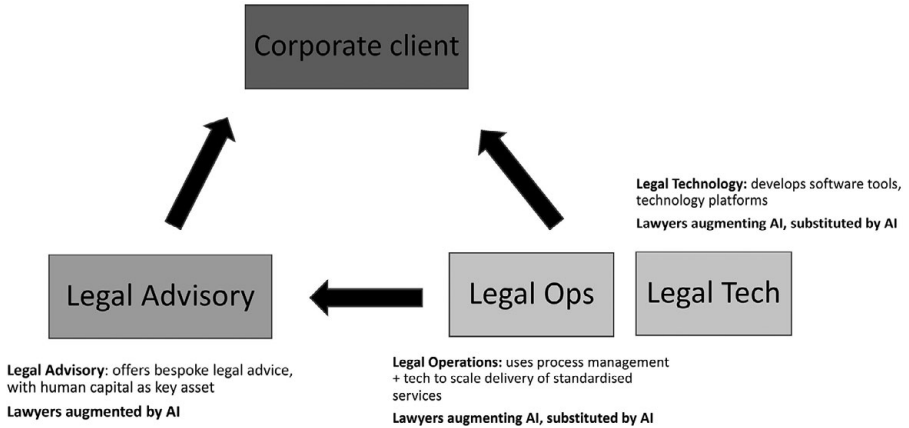


FIGURE 2.1 The BigLaw ecosystem

management, and user experience. Where lawyers work in such multi-disciplinary teams (MDTs), they are helping to *produce* AI-enabled legal services.

Having characterized these three distinctive ways in which AI affects lawyers' work, we need to determine where in the BigLaw ecosystem we can observe these in practice. The "ecosystem" consists of corporate clients as the ultimate customer, serviced by law firms – the traditional "outside counsel" – and by a rapidly growing congeries of other providers including law companies and legal tech providers (see Figure 2.1). In prior work, we sought to organize these relationships by reference to business models, which clarify how value is created for clients.<sup>35</sup> We distinguish between a traditional "Legal Advisory" business model, which entails the provision of customized advice or analysis, a "Legal Operations" business model that enhances efficiencies in legal workflows, and a "Legal Technology" business model that focuses on the development of technological systems for legal services.<sup>36</sup>

The Legal Advisory model focuses on work that requires skills that for the foreseeable future remain distinctively human; lawyers rely on AI predictions to augment their work. By contrast, in both the Legal Operations and Legal Technology business models, technology substitutes for humans in certain tasks. Technology in these business models also engenders new tasks, most obviously in young legal tech ventures, but also in large law firms and in-house corporate legal departments.

We characterize these business models as ideal types; in practice, experimentation in combining different business models is rife. For instance, some law firms have developed internal legal operations expertise and/or have an in-house legal tech capability either via organic growth or acquisition. In the US, Wilson Sonsini has a wholly owned subsidiary in the form of SixFifty, and in the UK, Simmons &

<sup>35</sup> See Armour & Sako, *AI-Enabled Business Models in Legal Services*.

<sup>36</sup> *Id.*



Simmons acquired Wavelength Law, a legal tech provider. At the same time, notable law companies have used legal operations excellence as a launchpad to move into legal advisory work. Elevate has its in-house law firm, Elevate Next, and UnitedLex created a subsidiary law firm, Marshall Denning. In the meantime, law companies and legal tech providers are partnering with law firms to access premier corporate clients.<sup>37</sup>

Combining all three business models – Legal Advisory, Legal Operations, and Legal Technology – under one roof in an integrated legal management company might be desirable from the point of view of providing a one-stop shop for corporate clients. However, such integration creates tensions in strategic focus and reputational capital. In particular, employing both lawyers-as-consumers of AI and lawyers-as-producers of AI under one roof is challenging, not least due to the need to establish career paths to integrate, or segregate, the two types of lawyers. As it stands, these career paths are yet to be clarified. And some firms are implicitly signaling which type of lawyer – lawyer-as-consumer or lawyer-as-producer of AI – they prioritize as their core human capital. Thus, human capital challenges, rather than the challenge of accessing external finance, are more central to the difficulty that law firm partnerships face in sustaining effective deployment of digital technology, including AI.<sup>38</sup>

### 2.3 DIGITAL TECHNOLOGY IN THE PEOPLELAW SECTOR

Legal tech also has potential to unlock capacity to address consumers' legal needs in PeopleLaw. Just as in BigLaw, technology promises to lower costs of delivery for PeopleLaw through exploiting economies of scale. However, there are differences in the way legal tech systems add value in the two contexts. For BigLaw, as we have seen, this is through a mixture of substitution by automated systems for some human tasks (lowering costs) and augmentation of high-value human work on bespoke tasks (enhancing productivity). In PeopleLaw, the tasks are in general more routine in nature, meaning there is relatively more potential for value to be created by legal tech through lower-cost substitution. As we shall see, technology adoption is as yet more limited in the PeopleLaw than the BigLaw context. We argue that this is determined by financial and technological constraints that currently limit opportunities for scaling legal tech to substitute for human lawyers.

We identify two significant constraints on the adoption of legal tech in PeopleLaw in contrast to BigLaw. First, PeopleLaw firms are generally much smaller than their BigLaw counterparts, limiting their ability to invest fixed costs

<sup>37</sup> THOMSONREUTERS ET AL., ALTERNATIVE LEGAL SERVICE PROVIDERS: 2021 REPORT – STRONG GROWTH, MAINSTREAM ACCEPTANCE, AND NO LONGER AN “ALTERNATIVE” (2021), <https://www.thomsonreuters.com/en-us/posts/legal/alsp-report-2021/>.

<sup>38</sup> Armour et al., *Augmented Lawyering*.

necessary to deliver automation. Second, the fact that PeopleLaw clients are not usually versed in the law (unlike the in-house counsel who typically purchase BigLaw services) means that technical solutions substituting for lawyers must also perform a lay-to-legal (and vice versa) translation function. We develop these points below.

We can usefully distinguish barriers to technology adoption in PeopleLaw that stem from the demand and the supply sides of the market, respectively. The demand side, discussed in Section 2.1's consideration of the BigLaw and PeopleLaw segments of legal services markets, is well understood. To recap, there are persistently high levels of unmet legal needs in many issue areas (see Figure 2.1), owing to individual (that is, non-corporate) consumers' inability to identify their problems as legal in nature<sup>39</sup> and, for problems recognized as legal, the perceived inaccessibility of the justice system and the costs of accessing lawyers. Survey evidence suggests consumers' budget constraints are binding.<sup>40</sup> Many consumers are unable to afford a lawyer to advise them whenever they have a problem at home (divorce, child custody, debt collection, etc.), at work (employment dispute), or when moving home (immigration, conveyancing, etc.). The adoption of legal tech could help resolve currently unmet legal needs by lowering the unit cost of legal service delivery, particularly in settings where such legal services can be productized.<sup>41</sup> In transactional contexts, this can take the form of providing standardized document templates or transaction-processing pipelines.<sup>42</sup> For contentious matters, this could involve technologically enabled dispute resolution mechanisms (commonly referred to as online dispute resolution, or ODR) that are quicker and simpler to execute than traditional court proceedings.<sup>43</sup>

Despite the clear potential for technology to meet latent demand, adoption of technology by solo practitioners and small law firms – the sort that traditionally service individual clients – remains lower than in larger firms. Several recent surveys in both the UK and US have asked firms about deployment of emerging technologies (see Table 2.1), and have consistently found that small firms are less likely to have done so.<sup>44</sup> Why does this pattern emerge so consistently in both the UK

<sup>39</sup> See Sandefur, *What We Know*.

<sup>40</sup> See LEGAL SERVICES BOARD, *THE STATE OF LEGAL SERVICES*.

<sup>41</sup> Gillian K. Hadfield, *The Cost of Law: Promoting Access to Justice through the (Un)Corporate Practice of Law*, 38 INT'L REV. L. & ECON. 43 (2014); see Yoon, *The Post-Modern Lawyer*.

<sup>42</sup> Frank Pasquale, *A Rule of Persons, Not Machines: The Limits of Legal Automation*, 87 GEO. WASH. L. REV. 1 (2019).

<sup>43</sup> CIV. JUST. COUNCIL (ONLINE DISP. RESOL. ADVISORY GRP.), *ONLINE DISPUTE RESOLUTION FOR LOW VALUE CIVIL CLAIMS* (2015), <https://www.judiciary.uk/wp-content/uploads/2015/02/Online-Dispute-Resolution-Final-Web-Version1.pdf>; Ethan Katsh & Colin Rule, *What We Know and Need to Know about Online Dispute Resolution*, 67 S.C. L. REV. 329 (2015); Colin Rule, *Online Dispute Resolution and the Future of Justice*, 16 ANN. REV. L. & SOC. SCI. 277 (2020).

<sup>44</sup> LEGAL SERVS. BD., *TECHNOLOGY AND INNOVATION IN LEGAL SERVICES – MAIN REPORT: AN ANALYSIS OF A SURVEY OF LEGAL SERVICE PROVIDERS* (2018), <http://legalservicesboard.org.uk/>

TABLE 2.1 *Use of digital technology by type in the UK in 2021*<sup>45</sup>

Which of the following legal technologies are you currently using, or planning to use, in your firm? N = 891	Currently using		Planning to use		Not planning to use	
	N	Row %	N	Row %	N	Row %
Vide Conferencing with clients	770	86.4	48	5.4	73	8.2
Model documents/templates on our website	217	24.4	149	16.7	525	58.9
Interactive website to generate legal documents in response to client input	88	9.9	173	19.4	630	70.7
Chatbots or virtual assistants	55	6.2	125	14.0	711	79.8
Online portals for matter status updates	137	15.4	189	21.2	565	63.4
E-verification/electronic signatures	332	37.3	226	25.4	333	37.3
Storing data in the cloud	587	65.9	102	11.5	202	22.6
Practice management software	550	61.7	87	9.8	254	28.5
Legal research software	449	50.4	90	10.1	352	39.5
Contract review software	65	7.3	120	13.5	706	79.2
Blockchain/distributed ledger	16	1.8	74	8.3	801	89.9
Data analytics with AI	45	5.1	92	10.3	754	84.6

and US, notwithstanding the considerable unmet legal needs in both countries, and the UK's reforms designed to liberalize legal services for the benefit of consumers?

Two complementary factors seem relevant. The first relates to fixed costs associated with deployment of automated systems. Small firms, such as those involved in PeopleLaw, have more limited capacity to bear fixed costs than do larger firms.<sup>46</sup> This means that technology is likely to penetrate first into BigLaw firms. It also implies that deployment in PeopleLaw is likely to be preceded by consolidation of service providers, and that constraints on external finance are likely to be more of a barrier to legal tech deployment for PeopleLaw than BigLaw.<sup>47</sup>

Second is the challenge of translation between how lay clients speak about their problems and the way in which the legal system frames these same issues. This translation exercise is a core part of a human lawyer's "client skills." Social intelligence – including the ability to empathize and communicate with a with range of

[wp-content/media/Innovation-survey-2018-report-FINAL-2.pdf](https://www.americanbar.org/groups/law_practice/publications/tech-report/abatechreport2019/); AM. BAR ASS'N, ABA TECHREPORT 2019 (2019), [https://www.americanbar.org/groups/law\\_practice/publications/tech-report/abatechreport2019/](https://www.americanbar.org/groups/law_practice/publications/tech-report/abatechreport2019/); MARI SAKO & RICHARD PARNHAM, TECHNOLOGY AND INNOVATION IN LEGAL SERVICES: FINAL REPORT TO THE SOLICITORS REGULATION AUTHORITY (2021), <https://www.sra.org.uk/globalassets/documents/sra/research/full-report-technology-and-innovation-in-legal-services.pdf?version=4a1bfe>.

<sup>45</sup> Adapted from SAKO & PARNHAM, TECHNOLOGY AND INNOVATION, 23.

<sup>46</sup> See SAKO & PARNHAM, TECHNOLOGY AND INNOVATION, 123.

<sup>47</sup> See Hadfield, *The Cost of Law*.

backgrounds – remains particularly elusive for AI systems.<sup>48</sup> In the BigLaw context, the users of technical systems are typically themselves lawyers, who are able to provide such translation for their ultimate clients, and the costs of having human lawyers provide this are typically small relative to the value of the service in question. For PeopleLaw, the cost of having a human lawyer remain in the loop may be prohibitive. This suggests that at least part of the unmet legal needs may be beyond the current technical possibility frontier.

### 2.3.1 Use Cases in PeopleLaw

For the reasons described above, deployment of technology in the PeopleLaw context remains relatively modest. One key use case is automated document assembly – that is, the production of customized legal documentation using an automated system. In particular, it is the only technology of the ten considered in the Legal Services Board's 2018 survey for which law firm respondents serving individuals were more likely to report adoption than those serving large businesses (25 percent v. 11 percent).<sup>49</sup> Transaction management tools are also increasingly widely deployed to assist in residential real estate and personal finance,<sup>50</sup> which have large throughputs of transactions for which individuals need legal services.

These tools are in many cases deployed in conjunction with transactional platforms that facilitate the connection of users to relevant human lawyers. They are typically fronted by a portal offering users simple Q&A on basic legal issues relating to their concerns, accompanied with document templates – perhaps automatically generated – and referrals to human lawyers as necessary. Each platform retains a network of lawyers whose work is ranked by users and to whom referrals are made.

Chatbots may seem a promising solution to the problem of engaging with lay users, but they need to be supported by systems capable of dealing with a sufficiently wide range of user inputs. Expert system approaches are constrained by the need to hard-code the relevant knowledge frameworks, creating limitations where user queries go outside this. Machine learning approaches trained on legal materials must not only be able to dispense and classify legal advice – beyond the capabilities of current systems<sup>51</sup> – but also to be able to translate this into how laypersons understand legal issues. There is evidently a serious gap between ordinary parlance used by laypersons and the specialized terminology of legal discourse. This gap tests the frontier of applying natural language processing (NLP) to use laypersons'

<sup>48</sup> Carl B. Frey & Michael A. Osborne, *The Future of Employment: How Susceptible Are Jobs to Computerisation?* 114 *TECH. FORECASTING & SOC. CHANGE* 254 (2017); Frank Pasquale & Glyn Cashwell, *Prediction, Persuasion, and the Jurisprudence of Behaviourism*, 68 *U. TORONTO L.J.* 63 (Supp. 2018).

<sup>49</sup> See *LEGAL SERVS. BD., TECHNOLOGY AND INNOVATION IN LEGAL SERVICES*.

<sup>50</sup> See *SAKO & PARNHAM, TECHNOLOGY AND INNOVATION*, 25–26.

<sup>51</sup> See Chapter 3 in this volume.

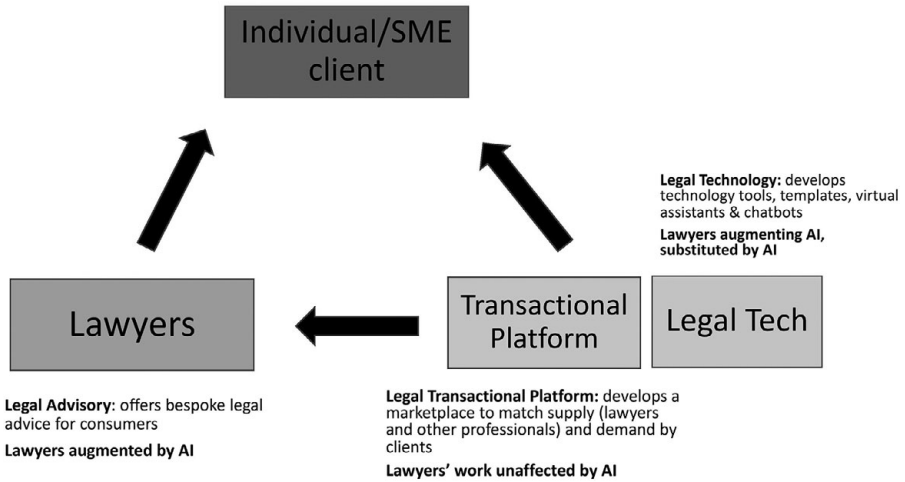


FIGURE 2.2 The PeopleLaw ecosystem

statements or queries as data for prediction.<sup>52</sup> Making progress with these technological challenges will permit chatbots and virtual assistants to give wider-ranging advice to consumers.<sup>53</sup> This current technological bottleneck may explain the relatively low rate of use of chatbots and virtual assistants (see Table 2.1). These technological constraints limit the extent to which legal tech systems can substitute completely for human lawyers.

### 2.3.2 *Augmented Lawyering and Business Models in PeopleLaw*

Legal tech is engendering new business models in the PeopleLaw context, just as for BigLaw. The PeopleLaw ecosystem, however, is somewhat different in both the stakeholders and the emergent business models (see Figure 2.2). In the PeopleLaw ecosystem, clients are individual consumers and small businesses, rather than large businesses. Thus, all the lawyers in the ecosystem are on the supply side, offering advice directly to lay consumers. In contrast, for the BigLaw ecosystem, the demand side is driven by in-house lawyers.

<sup>52</sup> For example, a study using a corpus of 5,842 cases of attorney misconduct initiated by citizen complaints in the US reports that fact statements by unguided self-represented litigants are far less amenable to machine-learning techniques to predict outcomes than are judicially drafted statements of facts. See Karl Branting et al., Predictive Features of Persuasive Legal Text (2020) (unpublished manuscript), <http://ceur-ws.org/Vol-2764/paper4.pdf>; Karl Branting et al., *Judges Are from Mars, Pro Se Litigants Are from Venus: Predicting Decisions from Lay Text*, 334 FRONTIERS A.I. & APPLICATIONS 215 (2020).

<sup>53</sup> Benjamin Alarie et al., *How Artificial Intelligence Will Affect the Practice of Law*, 68 U. TORONTO L.J. 106 (Supp. 2018).

In both settings we characterize a new legal tech business model, developing technological systems for legal services. The design and implementation of such systems engenders new tasks for persons with legal expertise, working together as part of multi-disciplinary teams. Lawyers working in such teams are producers of digital legal services.

The limits of existing technology to provide legal services directly to consumers mean that human lawyers remain in the loop in most PeopleLaw contexts. This means that, at present, there is less opportunity than in BigLaw for what we term the Legal Operations business model – leveraging technology to substitute for humans in the delivery of legal services.<sup>54</sup> Instead, much of the current deployment of legal tech in PeopleLaw has the lesser ambition of simply lowering search costs to match human lawyers to clients, just as e-Bay provides a marketplace for buyers and sellers. Thus, a legal tech firm offering such a marketplace acts as a two-sided platform<sup>55</sup> to lower costs of matching lawyers to consumer needs. Such platforms do not substitute for human lawyers; rather, their value lies in augmentation of human lawyers' productivity. We characterize the provision of such platforms as a "Transactional Platform" business model.

Some providers seek to capture further economies of scale by defining consumer needs more broadly than simply "legal" needs, offering a conveniently integrated package of legal and other services. For example, Farewill offers "death" services, combining will writing and funeral services;<sup>56</sup> other providers may offer a service in "moving home," combining conveyancing and mortgage brokerage, or in "injury" combining advice on personal injury law with insurance services.

The constraints we have identified mean that the full promise of legal tech to unlock value for PeopleLaw consumers has not yet been met. As of the early 2020s, legal tech is not yet capable of substituting effectively for human lawyers except in very simple tasks, such as generating standardized documents for wills or small business incorporation. The value created by legal tech in the PeopleLaw setting appears so far to be limited to augmenting human lawyers and lowering the search cost for end-users. While augmentation brings the overall costs of legal services down by increasing productivity, there is still a need for human lawyer input in many cases.<sup>57</sup> Paradoxically, the scope of potential gains from augmentation are likely smaller in PeopleLaw than BigLaw, because of the more routinized nature of the legal work.

<sup>54</sup> See Armour & Sako, *AI-Enabled Business Models*.

<sup>55</sup> Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EUROP. ECON. ASS'N 990 (2003); ARUN SUNDARARAJAN, *THE SHARING ECONOMY: THE END OF EMPLOYMENT AND THE RISE OF CROWD-BASED CAPITALISM* (2016); Marshall W. Van Alstyne et al., *Pipelines, Platforms, and the New Rules of Strategy*, 94 HARV. BUS. REV. 54 (2016).

<sup>56</sup> FAREWILL, <https://farewill.com>.

<sup>57</sup> For example, NetLawman provides a co-habitation (living together) agreement template for only £26.40, but the price rises to £176.40 for a "template + review" package. NET LAWMAN, <https://www.netlawman.co.uk/d/cohabitation-agreement>. Thus, the document template is only 15 percent of the cost of template + human lawyer review.

This helps explain the more limited deployment of legal tech in the PeopleLaw setting. In the future, if and when technology can substitute for human lawyers more comprehensively, there remains significant further scope for PeopleLaw providers to meet remaining latent demand for legal and associated services (see Figure 2.2).

### 2.4 IMPLICATIONS FOR CONVERGENCE: LEVELING THE PLAYING FIELD?

We are now in a position to return to our central question: Will the adoption of legal tech level the playing field through convergence in the PeopleLaw and BigLaw sectors' relative capacity to meet legal needs? To do so, we employ a causal framework based on the following elements (see Figure 2.3). First, we summarize the emergent business models that are theoretically possible given the nature of legal tech and other constraints. Second, we examine factors that encourage or discourage the adoption of these business models, including regulation and access to financial capital and relevant human capital, as mediated by organizational governance of law firms and other providers. Third, to the extent that it is possible, we draw implications for the market size and industry structure (the degree of concentration or fragmentation) of PeopleLaw and BigLaw markets, and their relative capacity to meet latent demand for legal services.

#### 2.4.1 *Convergence in Meeting Client Needs?*

We begin with a high-level consideration of the possibility of convergence and divergence using an economic lens. This focuses on the black boxes in Figure 2.3

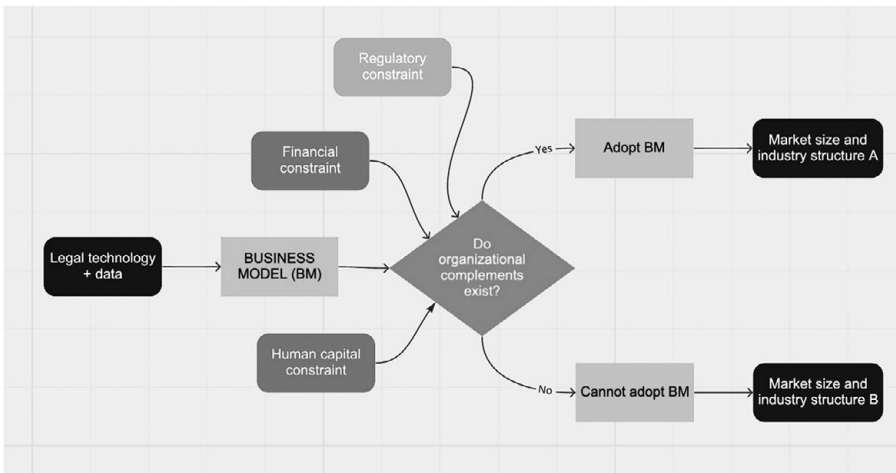


FIGURE 2.3 Causal framework for convergence-divergence

imputing causal links between legal tech and data on the one hand, and market size and industry structure on the other, while assuming that latent demand is more or less fixed.

Digital technology is a double-edged sword when it comes to leveling the playing field with respect to meeting client or consumer needs. To begin, the possibility for convergence relative to the past lies in technology's ability to reduce costs of delivery, expanding the "legal production possibility frontier" given user budget constraints.<sup>58</sup> The reduction in cost per unit of legal service delivery derives from both supply-side economies of scale, with technology facilitating automation (substituting human lawyers) and better workflows, and from demand-side economies of scale, the so-called network effects.

Other factors, however, suggest we may still be a long way from absolute convergence, and the two sectors may continue to diverge in meeting latent legal needs.<sup>59</sup> Convergence would require the demand curve to remain fixed, which may not be the case. For example, in the BigLaw context, while technology assisted review (TAR) lowers the unit cost of document review, its availability may simultaneously increase the level of effective demand (that is, the number of documents sought to be reviewed), thus raising the capacity needed to meet the overall demand. Thus, while the per-unit cost is lowered by technology, the equilibrium price might increase due to an increase in the size of the pie. (This assumes a relatively high price elasticity of demand or an outward shift in the demand curve.) This type of effect requires users to have significant financial resources, more readily available in BigLaw than in PeopleLaw.<sup>60</sup> In PeopleLaw, notwithstanding consumers' meager financial resources, inability (yet) to automate interfaces with end-users due to the translation challenge (from lay language to legal framing as discussed in Section 2.3) means that unmet legal needs are likely to remain significantly high.<sup>61</sup> In short, this is a scenario in which PeopleLaw will be left behind in the artificial intelligence revolution, while BigLaw leapfrogs in the scale and scope of AI adoption.

Thus, predictions of progressive convergence versus continued divergence entail assuming different conditions for each side of the market. On the supply side, the case for convergence is based on technology's capacity to reduce the cost of service delivery, but this may operate asymmetrically between the sectors – implying continued divergence – because of the uncertainty around technological capacity to translate lay language into legal framing. On the demand side, convergence

<sup>58</sup> See Yoon, *The Post-Modern Lawyer*.

<sup>59</sup> See Pasquale & Cashwell, *Prediction, Persuasion, and the Jurisprudence of Behaviourism*; Engstrom & Gelbach, *Legal Tech*.

<sup>60</sup> See Chapters 6 and 14 in this volume.

<sup>61</sup> Moreover, there remain considerable uncertainties regarding how great the savings in cost must be before technological solutions become attractive to consumer users: the documented identification of unmet legal need may not translate straightforwardly into willingness to pay. See J.J. Prescott, *The Challenges of Calculating the Benefits of Providing Access to Legal Services*, 37 *FORDHAM URB. L.J.* 303 (2010).



would come about if latent legal demand is more or less fixed. By contrast, the divergence perspective is grounded in a view that unmet legal needs are a movable feast, with latent demand turning into effective demand not only through a change in the price but also through outward shifts in the demand curve arising from societal and commercial forces.

Below, we start by comparing emergent business models and their complements in PeopleLaw and BigLaw, to unravel some of these differing conditions.

#### 2.4.2 *Technological Possibilities, Business Models, and Data: BigLaw and PeopleLaw Compared*

Our first task is to compare the technological possibility offered by legal tech and data to develop new business models in the two segments of the legal services market. In both the BigLaw and PeopleLaw sectors, the current phase of legal tech is based not only on rule-based expert systems to generate documents based on templates, but also machine learning that enables the generation of prediction. We have characterized four distinct business models (see Sections 2.2 and 2.3), which exist in both sectors but with some variations in relative importance (see Table 2.2). In particular, traditional Legal Advisory delivered by human lawyers remains significant in both sectors. However, the cost of such advice likely remains unaffordable for many PeopleLaw consumers. Legal tech solutions are now available in both sectors as inputs to Legal Advisory, augmenting the productivity of human lawyers-as-consumers of the technology. To date, however, the impact of this appears to have been more pronounced for BigLaw than PeopleLaw. The differing trajectories of the two sectors are due in part because the gains from augmentation are greater

TABLE 2.2 *Business models in BigLaw and PeopleLaw compared*

Business model	BigLaw	PeopleLaw
(1) Legal Advisory	Bespoke legal advice by lawyers for corporate clients; augmented by use of services/products from (2) and/or (3) as inputs.	Bespoke legal advice by lawyers, individual customers. Likely unaffordable for many consumers.
(2) Legal Operations	Improve workflow of legal service delivery at law firms and corporations by automation. May use products from (3) as inputs.	[Less important, as neither consumers nor PeopleLaw providers have large organizations.]
(3) Legal Technology	Develop software tools to automate processes and practices in BigLaw legal services.	Develop and provide tools to automate processes and practices in PeopleLaw legal services.
(4) Transactional Platform	Lawyers-on-demand for corporate clients wanting services on a project-by-project basis.	Marketplace to lower search costs for consumers to find lawyers with relevant experience.

where the legal problems are more complex (typically the case in BigLaw), and in part because the delivery of these gains to end-users requires them to be able to afford the cost of the human legal adviser who intermediates them (again, more likely the case in BigLaw).

What has not yet happened on a large scale is the delivery of legal tech solutions direct to end-users without human lawyer intermediation. We view this as primarily a function of technological constraints. Given this, the future application of legal tech to bypass lawyers by using chatbots and virtual assistants has high latent demand in PeopleLaw.

In making a distinction between legal advice (more bespoke) and legal services (subject to repeated and scalable delivery), the Legal Operations business model has wider application in BigLaw than in PeopleLaw. This is because large law firms and corporations in BigLaw would wish to exploit workflow efficiency and automation within their organizations, while solo practitioners and law firms in PeopleLaw have less need or opportunity due to their small scale. In other words, opportunities to seek efficiency and lower costs exist due to both supply-side and demand-side reasons, but BigLaw is in a position to benefit more from supply-side economies of scale than PeopleLaw.

With respect to demand-side economies,<sup>62</sup> network effects could be leveraged in both sectors by using the Transactional Platform business model. Not only do such marketplaces lower search costs, the possibilities of finding appropriate transactional partners rise exponentially with more users of the platform.

Last and not least, the central importance of training data in artificial intelligence is likely to give advantages to providers that can scale in both BigLaw and PeopleLaw.<sup>63</sup> First-mover advantage may accrue to data aggregators that have a head start in training their AI models using data. Both sectors face challenges in turning unstructured data into machine-readable structured data, while also developing NLP methods to analyze less structured data. However, there are granular differences in the dynamics. In PeopleLaw, data aggregation between users may be relatively straightforward in the marketplace, although this may recede with growing background constitutional data protection.<sup>64</sup> In BigLaw, between-user data aggregation requires careful negotiation that takes account of commercial sensitivity. For now, much of the data aggregation taking place in

<sup>62</sup> ERIK BRYNJOLFSSON & ANDREW MCAFEE, *THE SECOND MACHINE AGE* (2016).

<sup>63</sup> Engstrom & Gelbach, *Legal Tech*; Chapter 6 in this volume.

<sup>64</sup> For now, it is curious that LegalZoom appears to be the only PeopleLaw start-up that has scaled, which indicates a need to investigate barriers to scale-up beyond the nature of data. See Nancy J. King & V. T. Raja, *What Do They Really Know about Me in the Cloud: A Comparative Law Perspective on Protecting Privacy and Security of Sensitive Consumer Data*, 50 AM. BUS. L.J. 413 (2013); Salome Viljoen, *A Relational Theory of Data Governance*, 131 YALE L.J. 573 (2021).

BigLaw is within-user – for example, for a specific corporate client, be it a bank or an insurance company.<sup>65</sup>

Another possible route to scaling up, leading to convergence, is the emergence of providers that serve both BigLaw and PeopleLaw clients. If a machine learning algorithm can be used for contract analytics in BigLaw, why not deploy the same algorithm for tenancy agreements, employment contracts, and other documents in PeopleLaw? In reality, providers serving both market segments are not a common trend, reasons for which may include the vastly different price points to generate demand in the two market segments, and the importance of cultivating a client base as a market entry barrier.

### 2.4.3 Access to Finance including External Capital

We now shift our analysis to the boxes labeled “financial constraint” and “human capital constraint” in Figure 2.3 representing distinct constraints on the effective deployment of new business models that arise from organizational governance of law firms and other entities providing legal services in BigLaw and PeopleLaw. Our analysis suggests that the financial capital constraint is not an issue in BigLaw in the way that it might be in PeopleLaw, whereas the human capital constraint may be more of a problem in BigLaw than in PeopleLaw.

The inability of traditional law firm partnerships to raise external capital was considered a major challenge preventing law firms from adopting technology.<sup>66</sup> Our research suggests otherwise: The main challenge for law firms in the BigLaw sector is in human capital, and in recruiting and motivating non-lawyers working in multi-disciplinary teams to deploy digital technology for legal service delivery.<sup>67</sup> In PeopleLaw, by contrast, sole practitioners and small firms likely suffer from financial constraints, if they wish to access legal tech.

Given the absence of publicly available information on spending on digital technology by law firms and corporate legal departments, it is difficult to compare aggregate investments made in the PeopleLaw and BigLaw sectors. We focus instead on a subset of investment activity for which data are available: the amount of external funds that have been invested in legal tech start-ups. We here present insights from an analysis of legal tech start-ups for which investment data were available in the Crunchbase Pro database in January 2021.<sup>68</sup> In total, legal tech start-

<sup>65</sup> Greater between-user data aggregation in BigLaw will likely follow further shifts in the technology possibility frontier (for example, federated machine learning techniques that do not require centralized processing of data) and the setting of industry-wide standards for data sharing.

<sup>66</sup> See Hadfield, *The Cost of Law*.

<sup>67</sup> Armour et al., *Augmented Lawyering*.

<sup>68</sup> Crunchbase is a widely used commercial database of private company data. CRUNCHBASE, <https://about.crunchbase.com/products/crunchbase-pro/>.

ups in the UK raised \$853 million, compared to \$5.98 billion by legal tech start-ups in the US.<sup>69</sup> This divergence between investment in UK and US lawtech start-ups tracks differences in the overall levels of venture capital investment more generally, for which the US historically greatly exceeds the UK.<sup>70</sup>

Start-ups and their venture capital financiers tend to operate in geographically concentrated clusters, owing to the importance of regional networks and in particular the hands-on nature of the financing relationship.<sup>71</sup> We focus, in our analysis, on 129 legal tech start-ups with headquarters clustered in London (45), New York (37), and the San Francisco Bay Area (47).<sup>72</sup> By reading company descriptions in Crunchbase, LinkedIn, and company websites, we manually classified start-ups according to whether they primarily served the PeopleLaw (41) or BigLaw (61) sectors.<sup>73</sup> These start-ups target a wide range of legal work. In BigLaw, start-ups in all three locations were in contract analytics, knowledge management, practice management, or lawyers-on-demand marketplaces. In PeopleLaw, tech start-ups existed typically in will writing, residential conveyancing, and simplifying the process of setting up a new business for start-up founders (see Figure 2.4).<sup>74</sup>

In terms of money raised (including angel and venture capital financing) over the lifetime of all start-ups in our sample, BigLaw has raised significantly more overall than PeopleLaw. However, this is driven entirely by London; in the two US clusters, the levels of investment in legal tech firms are approximately equal across these sectors (see Figure 2.4). Total funds raised in San Francisco exceed those raised in each of the other two clusters.<sup>75</sup>

<sup>69</sup> SAKO & PARNHAM, TECHNOLOGY AND INNOVATION.

<sup>70</sup> For example, industry associations report aggregate venture capital investment in 2020 of \$2.29 billion in the UK against \$164 billion in the US. BRITISH VENTURE CAP. ASS'N, BVCA REPORT ON INVESTMENT ACTIVITY 2020 (2021), <https://www.bvca.co.uk/Portals/0/Documents/Research/Industry%20Activity/BVCA-RIA-2020.pdf>; NAT'L VENTURE CAP. ASS'N, 2021 YEARBOOK (2021), <https://nvca.org/wp-content/uploads/2021/08/NVCA-2021-Yearbook.pdf>. See generally John Armour & Douglas Cumming, *The Legislative Road to Silicon Valley*, 58 OXFORD ECON. PAPERS 596 (2006).

<sup>71</sup> AnnaLee Saxenian, *Inside-Out: Regional Networks and Industrial Adaptation in Silicon Valley and Route 128*, 2 CITYSCAPE: J. POL'Y RES. & URB. DEV. 41 (1994); PAUL A. GOMPERS & JOSH LERNER, *THE VENTURE CAPITAL CYCLE* (2004); Henry Chen et al., *Buy Local? The Geography of Venture Capital*, 67 J. URB. ECON. 90 (2010).

<sup>72</sup> The location of these firms' headquarters does not dictate the geographic spread of marketing of their products, save that firms are located in the US (UK) are more likely to target users of the US (UK) legal system.

<sup>73</sup> The remaining twenty-seven firms primarily served government, judicial, or voluntary sector clients, meaning they do not fit readily into either category.

<sup>74</sup> HybridLaw start-ups included those with tools for patenting and patent search, and tools for clients who were not-for-profit or for government organizations.

<sup>75</sup> The larger aggregate amount of funding in San Francisco may be due to the supply side – there is simply a larger pool of start-up founder talent with more serial entrepreneurs who target markets beyond legal, and a larger pool of angel and venture capital funding in San Francisco than in New York or London. See Mari Sako et al., *Scaling Up Firms in Entrepreneurial*

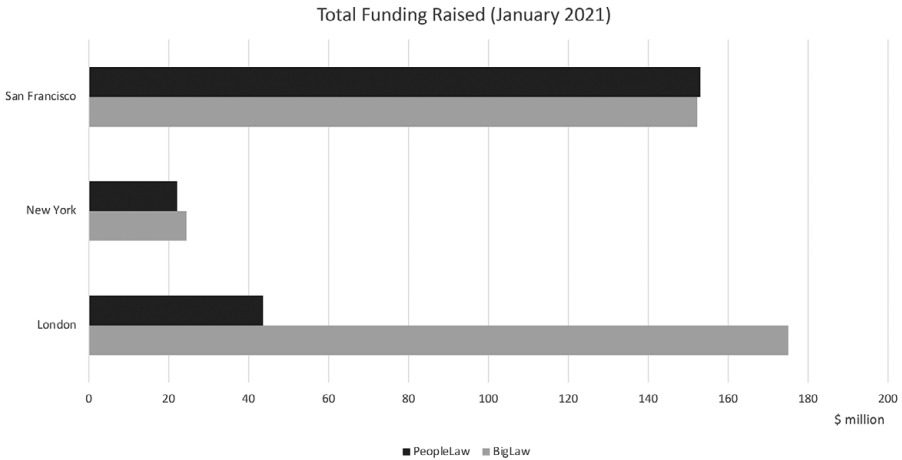


FIGURE 2.4 Investment raised by legal tech start-ups in three locations

However, fundraising by start-ups in BigLaw captures only a portion of the total investment in technology for this sector. Not only do BigLaw start-ups attract venture capital funding, they also receive complementary investment by law firm and corporate clients to co-create new technology and share data, and the latter also make their own proprietary investments in technology. For example, according to the annual financial statement submitted to Companies House, the English magic circle firm Allen & Overy LLP invested approximately \$27 million in internally generated software in 2018/19. This investment by a single large firm is equivalent to 15 percent of the total amount raised (\$175 million) by BigLaw legal tech start-ups in London, as shown in Figure 2.4. While in BigLaw, the start-up fundraising figures understate the total investment in technology, in PeopleLaw there is no corresponding investment by individual consumers.

To summarize, financial capital appears not to be a binding constraint for the BigLaw sector, given that law firms organized as partnerships are able to invest more in technology than the fundraising by start-ups. In PeopleLaw, because law firms serving the sector tend to be smaller and have fewer financial resources, outside capital is plausibly more important to enable more legal tech start-ups to emerge in this market segment.

#### 2.4.4 Access to Multidisciplinary Human Capital

We argued that an effective use of multidisciplinary teams (MDTs) in which lawyers-as-producers-of-AI work alongside non-legal professionals was essential for the effective deployment of legal tech. Here, we argue also that the problem of

accessing multidisciplinary human capital to enable MDTs is more pertinent in BigLaw than in PeopleLaw.

In BigLaw, clients are large law firms as lawyer-only partnerships and corporate legal departments. Within law firms, human lawyers are required for bespoke work, and these lawyers-as-consumers-of-AI do very different work from lawyers-as-producers-of-AI working in MDTs. Other non-legal professionals are also not given opportunities for promotion to top management, making it challenging to recruit and retain the best talent in data science, management, and other disciplines.<sup>76</sup> Thus, there is likely to be a bifurcation in legal service delivery, between law firm partnerships whose business model (Legal Advisory) continues to center on human capital, and corporations that are aligned better to implement MDTs, pursuing Legal Tech or Legal Operations business models.<sup>77</sup>

In PeopleLaw, the transformative impact of legal tech is likely to come about through legal tech start-ups that employ lawyers-as-producers-of-AI. There are of course law firm partnerships in the PeopleLaw sector, but the absence of career paths for multi-disciplinary non-legal professionals does not hit small law firms and sole-practice lawyers as much as large law firms, which are more prevalent in BigLaw. PeopleLaw may also be delivered by professionals other than lawyers – for example, experts in tax, insurance, real estate, and human resources.

In short, BigLaw faces a greater human capital challenge than PeopleLaw. BigLaw law firms' challenge lies in aligning its human capital investment as a complement to their newly adopted business models other than the Legal Advisory model. PeopleLaw lawyers can also take advantage of the Transactional Platform, which enhances individual lawyers' reputational transparency for consumers, thus reducing the significance of reputation pooling at the firm level.

#### 2.4.5 Regulation

From the foregoing discussion, the financial constraint appeared to be more binding, and the human capital constraint less binding, in PeopleLaw than BigLaw. This suggests that the UK's relaxation of rules that prohibited ownership of law firms by non-lawyers – which would facilitate the raising of outside capital – should have had more of an impact in the PeopleLaw than the BigLaw sector.

There are now over 1,000 licensed ABSs in the UK, as against a total population of over 10,000 law firms. For England and Wales, the Solicitors Regulation Authority (SRA) approved 1,089 ABSs by December 2020. Of these, 73 percent are limited

<sup>76</sup> Armour et al., *Augmented Lawyering*.

<sup>77</sup> This does not imply these firms will provide exclusively human capital-based services; simply that such services will dominate their business model and hence organizational governance and strategic planning. See Armour & Sako, *AI-Enabled Business Models*.

companies, and 22 percent are limited liability partnerships.<sup>78</sup> About half of these ABSs have transformed from law firm partnerships,<sup>79</sup> and a sizable number have consequently changed the way in which they raise finance, to invest more in technology and innovation.<sup>80</sup> Consistently with the foregoing account, the vast majority of these law-firm-to-ABS moves have been very small firms whose clients are individuals rather than businesses.<sup>81</sup>

This seems to suggest the UK's regulatory reforms had an impact on the PeopleLaw sector. In particular, we might expect to observe more capital being raised by the UK than the US legal tech start-ups in our sample. Figure 2.4, however, does not support this prediction. While supply-side considerations may explain the greater levels of investment in San Francisco, this evidence does tend to suggest that the impact of the UK's deregulation has been less than transformative. Put another way, access to financial capital may be necessary but not sufficient to transform PeopleLaw. Other regulatory reforms, not just those that aim to unlock capital flows, may be necessary – hence, UK policy initiatives such as the SRA's Legal Access Challenge<sup>82</sup> and the LawTech UK's sandbox hosted by TechNation.<sup>83</sup> These sandboxes are intended to not only give providers better access to granular regulatory expertise to test new service offerings, but also to enhance legitimacy and consumer confidence in the robustness of the underlying legal tech. This is consistent with the conclusion by Barton<sup>84</sup> that in the US, the speed of legal tech adoption, ironically led by providers serving the poor and corporate clients, is bounded by the technological barriers rather than the regulatory barriers alone.

#### 2.4.6 *Future of Market Size and Industry Structure*

Pulling these various strands together, we want to know what the likely future for PeopleLaw and BigLaw is in terms of their relative market size and industry structure. We attempt to address this question in the context of no change in current regulation, and first identify the scale-up possibilities and advantage of each

<sup>78</sup> Calculations are based on the SRA's Solicitors Register datashare data. SOLICIS. REG. DATA SHARE, <https://sra-prod-apim.developer.azure-api.net/>.

<sup>79</sup> LEGAL SERVS. BD., EVALUATION: ABS AND INVESTMENT IN LEGAL SERVICES 2011/12-2016/17 – MAIN REPORT (2017), <https://legalservicesboard.org.uk/wp-content/media/Investment-research-2017-Report-Main-report.pdf>.

<sup>80</sup> SOLICIS. REGUL. AUTH., RESEARCH ON ALTERNATIVE BUSINESS STRUCTURES (ABSs): FINDINGS FROM SURVEYS WITH ABSs AND APPLICANTS THAT WITHDREW FROM THE LICENSING PROCESS (2014), <https://www.sra.org.uk/globalassets/documents/sra/research/abs-quantitative-research-may-2014.pdf?version=4a1ac4>.

<sup>81</sup> LEGAL SERVS. BD., EVALUATION.

<sup>82</sup> *Legal Access Challenge Insights Show Legal Tech Potential*, SOLICIS. REGUL. AUTH. (June 18, 2020), <https://www.sra.org.uk/sra/news/press/2020-press-release-archive/legal-access-challenge-final-reports/>.

<sup>83</sup> *The Lawtech Sandbox*, LAWTECH, <https://technation.io/lawtechsandboxpilot/>.

<sup>84</sup> See Chapter 1 in this volume.

identified business model. Simply put, the Legal Advisory model does not scale. By contrast, the Legal Operations and Transactional Platform models are subject to supply-side and demand-side economies respectively. Legal technology that has a platform characteristic has the potential to scale and dominate,<sup>85</sup> while other technologies such as software tools may remain “point solutions” that do not scale without a platform.

In BigLaw, technology solutions that are specific to the legal industry are already wired into cross-sector technology solutions – for example DocuSign with its e-signature, Salesforce, and contract analytics tools that use the Microsoft Office platform. Moreover, data providers such as Thomson Reuters and LexisNexis are vying to become technology platform leaders via the acquisition of legal tech providers. One possibility is that legal tech for BigLaw will become more and more subject to the platform logic, leading to greater market concentration of technology providers, many of which hail from outside the legal industry. If that is the case, the UK Competition and Markets Authority’s recent recommendation for a unified register of legal tech providers may be necessary but not sufficient as effective public policy.<sup>86</sup> At a minimum, what is a legal tech provider, as opposed to simply a tech provider, needs to be defined.<sup>87</sup> Also, market concentration is more likely if governments do not implement policies to restrain anti-competitive behavior of big tech companies.

In PeopleLaw, market growth (and concentration) can accelerate if two things happen: first, the growth of Transactional Platforms, and second, technological solutions to the lay-to-legal-framing translation problem. While platforms may take off to provide a launching pad for scaling up, one side of the marketplace will remain human lawyers, rather than chatbots or virtual assistants, until this translation problem is addressed and resolved by data scientists and linguists. In the meantime, blurring the boundary between BigLaw and PeopleLaw market segments would not happen for some time to come in spite of the theoretical possibility of sharing the same platform and the same algorithms across segments. The reasons stated earlier include the difficulty of aggregating across-user data, the vastly different price points to solicit demand, and client base cultivation as a market entry barrier. Moreover, convergence is more likely to come about via “trickling up” rather than “trickling down,” consistent with Christensen’s idea of disruptive innovation.<sup>88</sup> That is, it is more likely for legal service innovation that starts by addressing the low end of the market whose needs are currently not met by incumbents to move up the value

<sup>85</sup> MICHAEL A. CUSUMANO ET AL., *THE BUSINESS OF PLATFORMS: STRATEGY IN THE AGE OF DIGITAL COMPETITION, INNOVATION, AND POWER* (2019).

<sup>86</sup> COMPETITION & MKTS. AUTH., *REVIEW OF THE LEGAL SERVICES MARKET*.

<sup>87</sup> Mari Sako & Matthias Qian, *A Taxonomy for Technology Venture Ecosystems* (2021) (unpublished manuscript), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3822606](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3822606).

<sup>88</sup> CLAYTON M. CHRISTENSEN, *THE INNOVATOR’S DILEMMA* (1997); Clayton M. Christensen et al., *Consulting on the Cusp of Disruption*, 91 *HARV. BUS. REV.* 106 (2013).



chain, and less likely that expensive high-end solutions will be adapted for low-end markets by stripping down functionality to achieve lower costs.

## 2.5 CONCLUSION

This chapter addressed a question of central importance to public policy, namely, whether or not the adoption of legal technology will level the playing field between two hemispheres of the legal services sector – PeopleLaw and BigLaw. In the late 2010s, PeopleLaw constituted only a fifth to a quarter of the total revenues in legal services markets in the US and UK. We argue in this chapter that, in order to level the playing field and to make PeopleLaw thrive relative to BigLaw, the use of legal tech is necessary but not sufficient.

Legal tech, together with the aggregation of data, has enormous potential to transform the way legal services and legal advice are delivered in both hemispheres. Repetitive and scalable tasks can be automated, substituting technology for human lawyers and lowering unit costs. Tasks requiring extensive customization or social intelligence remain in the exclusive competence of human lawyers, but their capacity is augmented by the deployment of technology for repetitive tasks. Through these channels, technology offers the potential to lower the costs of legal service delivery and thus reach consumers and clients whose needs had gone unmet. This would most obviously play out through the adoption of new business models (such as legal operations, transactional platforms, and legal tech) that focus on capturing economies of scale. In turn, these economies of scale would drive market concentration, with emerging winners likely being those who can best combine network externalities associated with both usage and data aggregation. This is a dynamic increasingly familiar from tech firms in other sectors. The change would be most obvious in PeopleLaw, which traditionally operates at a much smaller scale, but the underlying dynamic would be similar, and the process would lead to convergence in meeting client needs, business model adoption, and market structure.

However, the reality is far more complex, because – at least for now – various constraints create obstacles to market participants' ability to leverage technology through the adoption of new business models. In BigLaw, key barriers lie in the human capital constraints associated with mixing Legal Advisory with other business models. Legal Advisory is, by definition, focused on work that is human-centric, and so organizational and management structures that appeal to the humans with the relevant capital will be crucial for competitive advantage. However, these institutions correspondingly constrain the deployment of Legal Operations and Legal Tech business models, creating a constraint on concentration. Alongside this, users' hesitancy about data aggregation, at least for now, constrains the extent to which legal tech platforms are able to achieve concentration.

In PeopleLaw, the process of concentration appears to be well under way, with transactional platforms and integrated service delivery offerings capturing

economies of scale and scope. However, there remains a seemingly significant obstacle to meeting latent demand, through the fact that the “client-facing” aspect of service delivery still eludes complete automation. Because human lawyers have high costs, this translates into high prices that raise the bar on the extent to which demand remains latent. There is some evidence that financial constraints are also an obstacle, but this is challenged by the greater levels of legal tech investment in the US (where law firms are not permitted to raise outside equity) than in the UK (where they have been able to do so for a decade under the Alternative Business Structure model). This suggests that the stakes in the US regulatory debate may be lower than participants imagine. At the same time, these constraints are unlikely to be eased by a policy focus on price transparency and comparison shopping emphasized by the UK’s Competition and Markets Authority.<sup>89</sup> Legal services, however productized, are after all credence goods, and consumers and clients who purchase them must overcome information asymmetry and/or behavioral biases.

<sup>89</sup> COMPETITION & MKTS. AUTH., REVIEW OF THE LEGAL SERVICES MARKET.