The Role of Technology in the Resolution of Personal Injury Claims

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Abstract

This is the first study to focus on the role of technology within personal injury lawyering. The thesis draws on Science and Technology Studies methodologies to offer a unique and much needed approach to a highly topical and growing area of socio-legal research. Discussions of technology and the legal profession have been dominated by Richard Susskind who has consistently predicted greater computerisation in practice and, eventually, the replacement of lawyers by technology. The thesis moves forward these discussions by offering an empirically-based account of the role of technology within personal injury practice. It combines the insights gained from interviews with claimant practitioners with a review of the limited literature to explore the current uptake and use of technology in practice; practitioners' perceptions of technology; the impact of technology on practice; and the drivers and tensions that shape the use of technology.

This thesis argues that, while the LegalTech market has expanded rapidly, technologies for personal injury practitioners have changed little in the last two decades. Case management systems and legal research tools remain the principle technologies but not all practitioners have access to them. Participants recognised the benefit of the technologies they use, in stark contrast to the literature that portrays lawyers as technology deniers. However, none supported the view that technology will replace lawyers entirely. Though limited to automating legal processes, the systems have facilitated a shift towards greater use of non-qualified practitioners. This, with greater public access to digitised legal knowledge and an increasingly demanding clientele, challenges the expertise and autonomy of lawyers.

Financial pressure on personal injury practices was the primary driver towards technology reported at interview. However, this pressure is markedly different from that set out in the existing literature. Coming from policy changes which *prima facie* seek to tackle the pervasive issues of cost and delay within civil justice, the financial driver in this context has been as much socially and politically motivated as it has economically. The need to reduce costs is balanced with a concern for the quality of legal service. This is also a key tension against the disruption of legal services that Susskind and others predict. That tension is linked with issues of trust in technology which, in lieu of a legislative framework to establish liability where sophisticated technologies fail, is a primary barrier to professional and public acceptance of such systems.

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CHAPTER 1

Introduction

The businesses of law are increasingly relying on new technologies to drive processes and efficiencies. This trend is only going to continue as we advance into a Robotic Age with AI technology and legal businesses becoming ever more tightly connected. The companies that succeed in the near future will be those that take the time now to assess the role of technology in their delivery and service model.¹

1.1 Overview

The social impact of increasing technical capabilities has been a topic of discussion since the industrial revolution, with much focus on the impact of technology on jobs. The general assumption of this commentary is that the "technology in existence at any given moment in time clearly must have a great impact on the type and amount of work available". Technological unemployment was defined by Keynes as unemployment "due to our discovery of means of economising the use of labour outrunning the pace at which we can find new uses for labour". Key to Keynes' theory, however, was that unemployment caused by technology is "only a temporary phase of maladjustment". Whilst short-term unemployment by technology is widely accepted, the view that technology has long term effects on unemployment — referred to as the 'luddite fallacy' — is more controversial. The dominant view among economists has concurred with Keynes that "if the luddite fallacy were true we would all be out of work because productivity has been increasing for two centuries".

¹ Chrissie Lightfoot, Tomorrow's Naked Lawyer (Ark Group 2015), p.105

² Clive Jenkins and Barrie Sherman, *The Collapse of Work* (Eyre Methuen 1979), p.3

³ John Maynard keynes, 'Economic Possibilites for our Grandchildren' in JM Keynes (ed), *Essays in Persuasion* (W.W.Norton & Co. 1930), p.325

⁴ Ibid, p.325

⁵ Alex Tabarrok, *Productivity and Unemployment* (2003) available at: https://marginalrevolution.com/marginalrevolution/2003/12/productivity_an.html [accessed 2nd March 2020]

However, as automation has moved beyond manual tasks and begun to operate within service industries, where the technologically unemployed have traditionally found new work, there is growing concern that the increased productivity that automation can bring is not being evenly distributed, nor creating further employment.⁶ Moreover, as information technology has improved, the service industry and professional classes are no longer immune from potential disruption.

The development of the internet has particularly impacted the ways in which information, knowledge and expertise are communicated and this is predicted to fundamentally disrupt the traditional professions, with some suggestion that a transformation has already begun. A recent report produced by the McKinsey Global Institute claims that approximately half of all work activities in the global economy could be automated by technology. Meanwhile, within the legal profession it is predicted that "around a third of current jobs will be automated" within the next decade. Artificial intelligence presents particular challenges for professional services as a new competitor in the business of distributing knowledge and expertise. Thus, for some, the future of the professions is "at the mercy of artificial intelligence". Meanwhile, which is a predicted that "around a third of current jobs will be automated" within the next decade. Artificial intelligence presents particular challenges for professional services as a new competitor in the business of distributing knowledge and expertise. Thus,

At the forefront of commentary within the legal profession since the 1980s, Richard Susskind has consistently predicted radical changes to the ways in which legal services are delivered. He claims that there will be mass integration of disruptive technologies into legal practice, which will bring about entirely new methods of working; a prospect which naturally leaves many practitioners questioning their

⁶ Paul Krugman, 'Sympathy for the Luddites' *The New York Times* (New York 13th June 2013)

⁷ Marie R Haug, 'Deprofessionalization: An Alternative Hypothesis for the Future' (1972) 20(1) The Sociological Review; Richard Susskind and Daniel Susskind, *The future of the professions: how technology will transform the work of human experts* (Oxford: Oxford University Press 2015)

⁸ Jacques Bughin, James Manyika and Jonathan Woetzel, *Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation*, 2017), p.25

⁹ The Law Society, Capturing Technological Innovation in Legal Services, 2017), p.9

¹⁰ Frank Pasquale, 'Automating the Professions: Utopian Pipe Dream or Dystopian Nightmare?' (2016) Los Angeles Review of Books available at: https://lareviewofbooks.org/article/automating-the-professions-utopian-pipe-dream-or-dystopian-nightmare/ [accessed 11th February 2020]

¹¹ Richard Susskind, 'Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning' (1986) 49 Modern Law Review 168; Richard Susskind, *Expert Systems in Law: A Jurisprudential Inquiry* (Clarendon Press 1987)

future. 12 Although his work has evolved over time, the crux of his claims – that through greater use of technology the work of lawyers, and indeed the professions generally, will be radically transformed – has remained a constant. 13 As technology has become an ever-present feature of our social and work life, discussions and predictions on the future of technology in legal practice have become increasingly visible. Articles in the press, often citing Susskind's predictions, foretell a radical transformation of the role of lawyers as technology becomes increasingly capable.¹⁴ For the most part, these predictions have been aimed at technophilic practitioners to make a compelling, although visionary, case for why legal practice should embrace technical change. They tend to assume that technology will be the dominant driver of social change, based on the deterministic assumption that society adopts technologies because of their inherent technical superiority. Consequently, much of the current literature that discusses the impact of technology on the profession is "theoretical and speculative in nature". 15 The empirical insights offered come largely from studying macro trends from the professions and not the use of specific technologies in specific environments. 16 Within law, these insights are limited further as there is little to no discussion, empirically based or otherwise, of the application of technology outside the confines of commercial legal spheres.

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¹² Richard Susskind, *Tomorrow's Lawyers. An Introduction to Your Future* (Oxford University Press 2013), p.3

¹³ Three phases of commentary are identified in Chapter 2, throughout which Susskind's central prediction of the transformative force of technology for the legal profession is a constant. See generally ibidExpert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal ReasoningExpert Systems in Law: A Jurisprudential Inquiry (n 11); Richard Susskind, The Future of Law (Clarendon Press 1998); Richard E. Susskind, Transforming the law: essays on technology, justice, and the legal marketplace (Oxford: Oxford University Press 2000); Richard E. Susskind, The end of lawyers?: rethinking the nature of legal services (Oxford: Oxford University Press 2010); Tomorrow's Lawyers. An Introduction to Your Future (n 12).

¹⁴ Manju Manglani, 'Artificial Intelligence to Radically Transform the Role of Lawyers' *Managing Partner* (23 October 2015); Jonathan Ames, 'Top Firms Play it Smart with Al' *The Times* (5 October 2017); Sarah Burnett, 'Legally Al - Disruption in Legal Services and Beyond' *Legal Futures* (January 2017); Jane Croft, 'Legal Firms Unleash Office Automatons' *Financial Times* (16 May 2016); Jonathan Keane, 'Can Technology Bring Lawyers into the 21st Century? ' *BBC News* (16 February 2016); John Markoff, 'Armies of Expensive Lawyers, Replaced by Cheaper Software' *The New York Times* (4 March 2011); David Cowan, *Take a Glumpse of the Future* (Association of Corporate Counsel and LegalEx 2018)

¹⁵ Robert Brooks, Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (Temple University Press 2012), p.xi

¹⁶ Ibid, p.xi

This thesis adopts a different approach. It examines the role of technology within personal injury practice, gaining methodological insight from Science and Technology Studies. It draws on original data from 19 in-depth interviews with claimant personal injury practitioners ranging from paralegals to senior partners in various sized firms across England and Wales. Whilst other interview-based studies have covered the subject in part before, this is the first to focus exclusively on the use of technology within personal injury law. It is also the first to explicitly borrow its tools of inquiry from the Social Sciences. Being influenced by the Social Construction of Technology, this thesis explores the role of technology within practice from a constructivist perspective, which necessitates a departure from the deterministic assumptions of the current literature and encourages an in-depth conversation with practitioners about their interactions with and perceptions of technology – something starkly missing from the field at present. It, thus, offers a unique methodological approach to a highly topical area of legal research and fills the empirical gap within much of the literature on law and technology, but more especially within civil justice.

This thesis submits that the current uptake of technology within personal injury law is limited. However, the technologies that participants reported having access to – namely case management systems, some relatively 'low-tech' bolt-ons and other standard office technologies – are used in a variety of ways by different practitioners. On this basis it suggests that there is a correlation between the seniority of practitioners and their engagement with technology and offers some reflections on why this might be so. Having examined the current uptake and uses of technology, it then discusses the extent to which practitioners' use of technology has had a transformative impact on practice, concluding that this transformation has been limited to using technology to complete tasks more efficiently. As discussed in Chapter 5, this is referred to as automation, which stands in contrast to disruption, which involves "much more radical transformation". ¹⁹ Despite the transformation by

¹⁷ For a breakdown of participants, see Table 3.2

¹⁸ Tamara Goriely, Richard Moorhead and Pamela Abram, *More Civil Justice? The impact of the Woolf reforms on pre-action behaviour*, 2002)

¹⁹ Tomorrow's Lawyers. An Introduction to Your Future (n 12), p.81

technology being limited to automation, it has, nonetheless, been impactful within the practices studied. Chapter 5 concludes that practitioners' use of technology has encouraged and enabled a 'downgrading' of some work, now delivered by nonqualified practitioners under supervision. It notes that this example blurs the distinction between automation and disruption and calls for a more fluid approach to the categorising of technologies as well as the modelling of technological transformations. It further concludes that the wider social use of technology has had a transformative impact on practitioners' perceptions of clients' expectations and the relationship between the professional and the client, which has potential to undermine the expertise of the professional. In so doing, it distinguishes between ubiquitous technologies (those made for and used by society at large) and legal technologies (those made specifically for use within legal practice), hereafter referred to as 'LegalTech'.²⁰ The 'X-Tech' phenomenon is a relatively new development in the discussion of technology within service occupations, as shown in the final phase of commentary within law in Chapter 2. FinTech, the most established of the 'X-Tech' phenomena, is defined as the application of technologies designed to "improve financial activities". ²¹ LegalTech, for the purposes of this thesis, is similarly defined as technologies designed to improve the delivery of legal services.

Examining the drivers and tensions that encourage and discourage the use of technology, this thesis concludes that, whilst the predominant driver towards technology is, as existing literature suggests, a financial one, within personal injury law, it is politically as well as economically motivated and has more to do with policy changes than market forces. It also notes that practitioners' reservations towards technology are much more sincere than the current literature portrays and need to be addressed as a genuine tension to further technical integration.

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²⁰ LegalTech is the accepted terminology for technology (both hardware and software) developed specifically for use within legal services. Similar terminology is used within other service occupations, such as FinTech (financial services); MedTech (medical profession); and InsurTech (insurance industry).

²¹ Patrick Schueffel, 'Taming the Beast: A Scientific Definition of FinTech' (2017) 4 Journal of Innovation Management 32, p.32

This thesis does not make visionary predictions about the future use of technology within legal practice in general or personal injury practice in particular, this being one of its criticisms of the current literature. However, having examined the drivers towards technology to date, it does not shy away from making comment on their future applicability. The concluding chapter argues that, whilst there has been some transformation of personal injury law by technology, for now the sector appears to have adjusted and stabilised. Further transformation, therefore, seems unlikely without a further driver, most likely additional changes to the civil procedure rules.

This introductory chapter provides a justification for the focus of the study. It then discusses a brief history of law and technology from the mid-to-late 20th Century up to the present day. This gives background information as well as some developments from the last five decades relating to technology and the legal profession. Section 1.4 introduces the specific research questions to be answered in this study and explains how, in answering them, this thesis offers a new contribution to knowledge. Finally, s.1.5 outlines the key arguments of this thesis as well as the structure of its content.

1.2 The Focus of the Research

The focus of this study is a twofold question: why technology? And why personal injury? The latter of these two questions came first when designing the research proposal, which originally intended to focus on the impact of proportionality on access to justice within personal injury law.²² However, after completing a documentary analysis of selected policy documents²³ as part of a previous research

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²² Proportionality - the principle that one's costs should not generally be greater than the value of one's claim - was made an underlying principle of the Civil Procedure Rules by Lord Woolf in 1996 and was subsequently pursued with renewed vigour by Lord Justice Jackson in 2009. *See* Woolf, *Access to Justice - Final Report*, 1996), London: HMSO; L.J Jackson, *Review of Civil Litigation Costs: Final Report*, 2010).

²³ Ministry of Justice, Solving disputes in the county courts: creating a simpler, quicker and more proportionate system. A consultation on reforming civil justice in England and Wales, 2011); Ministry of Justice, Solving disputes in the county courts: creating a simpler, quicker and more proportionate system. A consultation on reforming civil justice in England and Wales. The Government Response, 2012); L.J Jackson, Review of Civil Litigation Costs: Preliminary Report. Volume One, 2009);

project, it became clear that access to justice is a contested phrase, exploited by policy makers, lawyers and legal activists alike.²⁴ The results of that study highlighted the extent to which the government's approach to civil justice fits within a wider agenda of reducing the burden of public institutions on the state, renegotiating the relationship between the citizen and the state and encouraging greater private responsibility of individuals. In short, the quasi-privatisation of public services.

By providing the mechanism for individuals and collectives to resolve disputes, civil justice secures the confidence on which economic and social stability can be sustained.²⁵ Whilst the majority of disputes are settled without the assistance of the courts, "the existence of a readily accessible and effective civil justice system forms the necessary condition on which consensual settlement rests".²⁶ Despite this, the wider social benefits of an effective system of civil justice have been, in no small degree, overlooked by policy makers, as "[s]uccessive UK governments have decided that, although civil justice may be a public service, it is not a public good".²⁷ To this end, "they see the system as providing only private benefits for individuals rather than collective benefits for society as a whole".²⁸

Overlooking the public benefit of civil justice and pressed by a need to reduce spending, policy makers turned to civil justice as a primary target for reform in a period of constrained resources.²⁹ Plagued by longstanding issues of cost and delay, civil justice, proclaimed to be in a "state of crisis", appeared ripe for such intervention.³⁰ Thus, in recent years policy makers have introduced, and since revisited with renewed vigour, an overriding aim for proportionality within civil

L.J Jackson, *Review of Civil Litigation Costs: Preliminary Report. Volume Two*, 2009); Review of Civil Litigation Costs: Final Report

²⁴ Oliver Wannell, 'Access to Justice: A Documentary Analysis of Civil Law Policy in England and Wales', Cardiff University 2015) unpublished MSc dissertation

²⁵ Hazel Genn, *Judging Civil Justice* (Cambridge University Press 2008), p.3; John Sorabji, *English Civil Justice after the Woolf and Jackson Reforms : A Critical Analysis* (Cambridge University Press 2014), p.10

²⁶ English Civil Justice after the Woolf and Jackson Reforms : A Critical Analysis (n 44), p.11

²⁷ Robert Dingwall and Emilie Cloatre, 'Vanishing Trials: An English Perspective' (2006) 2006(1) Journal of Dispute Resolution 51, p.67

²⁸ Ibid, p.66

²⁹ Judging Civil Justice (n 255) p.24

³⁰ Glasser, 'Solving the Litigation Crisis' (1994) 1 The Litigator, p.14

justice, such that the primary purpose is now to "promote access to justice at proportionate cost".³¹ This marks a shift from the previous aim of achieving individualised, substantive justice to one which is concerned with distributive justice alongside "the pursuit of economy, efficiency, expedition, equality and proportionality".³² For personal injury law in particular, these reforms have taken place on the backdrop of a "jaundiced view" of the law; a belief that the law has been corrupted and usurped by "opportunistic claimants, egged on by greedy lawyers".³³ The perceived compensation culture was, thus, "reinforced by politica [sic] seeking, reasonably, to control legal aid expenditure"³⁴ in bringing about reforms. In the USA and Australia, a similar phenomenon has led to the considerable tort reform in an attempt to "curtail corporate responsibility, reduce remedies and make access to them more difficult".³⁵ However, in the UK the focus has been on streamlining procedure, without making substantive changes to tort law, in order to drive down the costs of the system to the state.³⁶

The critical challenge with such reform has traditionally been that of "balanc[ing] fairness with accessibility, by finding procedures that commit to substantive justice without being overly complicated or expensive". Thousand Provide that neoliberal governance has eschewed the traditional ambitions for fairness and justice in favour of economic aims. The 'economisation' of social policy is thus framed as "supporting the autonomy of individuals, and giving freedom from state intervention" when in fact policy change is valued in "economic terms" at the expense of "other long-standing political aims". Debates on whether policy makers in the UK have achieved a successful balance have consequently reached an impasse

³¹ Review of Civil Litigation Costs: Preliminary Report. Volume One (n 23), p.2

³² English Civil Justice after the Woolf and Jackson Reforms : A Critical Analysis (n 44), p.3

³³ M Galanter, 'A World Without Trials' (2006) 7(1) Journal of Dispute Resolution 7, p.20

³⁴ Judging Civil Justice (n 25), p.43

³⁵ A World Without Trials, (n 333) p.20

³⁶ Annette Morris, 'Deconstructing Policy on Costs and the Compensation Culture ' in E Quil; and RJ Friel (eds), *Damages and Compensation Culture: Comparative Perspectives* (Hart 2016), p.134

³⁷ Judging Civil Justice (n 2525), p.15

³⁸ Wendy Brown, *Undoing the Demos: Neoliberalism's Stealth Revolution* (MIT Press 2015)

³⁹ Jess Mant, 'Neoliberalism, Family Law and the Cost of Access to Justice' (2017) 39 Journal of Social Welfare and Family Law 246, p.247

as practitioners and academics are committed to the traditional ambitions for access to justice, whilst policy makers have re-formulated their view of access to justice in economic terms. Thus, whilst the government claims that access to justice remains a "hallmark" of our society, 40 the Law Society claims that "access to justice is under threat". 41 This economisation of justice is not unique to personal injury, although the campaign against personal injury practice has been particularly strong. In the context of family law, Mant claims that "the value of policy [now] hinges upon whether or not it is cost-effective, promotes economic growth or contributes to the aim of reducing the national deficit" whilst policies that "pursue aims of equality, fairness and justice, are seen only in terms of their economic cost to the national budget, and as such are inevitably constructed as inefficient and wasteful". 42 Mant concludes that as a result family law is "now struggling to meet its obligations to ensure equality of access to justice for all, due to the economic constraints placed upon it by the reforms to legal aid".43

The emphasis on greater personal responsibility, coupled with the diversion of claimants towards alternative and online dispute resolution, risks claimants no longer making use of substantive tort law remedies to resolve their legal problems. The potential impact on claimants' ability to achieve an appropriate resolution – in the present study the ability for injured people to access the compensation to which they may be legally entitled - therefore calls for academic attention. Moreover, the political nature of the shift in ambition for civil justice, as well as the strength of the cultural mood against personal injury practice, makes personal injury a complex and multifaceted area for study.

Taking the pursuit of proportionality in the context of wider reforms to civil justice, it became clear that the new aim for civil justice – "the pursuit of economy, efficiency, expedition, equality and proportionality"44 - is intended to last. Accepting this,

⁴⁰, HC Deb 15 November 2010 vol.518 col.659 (Hansard 2010)

⁴¹ Andrew Caplen, Access to Justice Day - breakfast speech. (2014), no pagination

⁴² Neoliberalism, Family Law and the Cost of Access to Justice (n 39), p.247

⁴⁴ English Civil Justice after the Woolf and Jackson Reforms: A Critical Analysis, p.3

contributing to the debate on how proportionality impacts access to justice seems somewhat ineffectual. Now, the more pertinent question seems to be *how ought lawyers respond?* With a depleted amount of money available to spend resolving claims and stricter time restrictions aimed at reducing procedural delay, the challenge set for practitioners is clear: to make practice more efficient, where efficient practicing methods are "narrowly defined as those that are faster and cheaper". The dominant conclusion from commentary within the legal press is that the potential for technology to achieve the efficient practices needed makes investment in technology a highly probable response to this challenge. Indeed, it is claimed that emerging technologies are already systematizing and changing the way that lawyers work to meet efficiency aims.

An early scoping interview with the co-funders of this project suggested that predictions on the future use of technology within legal services have gained some impetus and exposure within the profession. It likewise affirmed that, in order to meet the need for efficiency, lawyers have begun to turn to technological solutions. However, despite increased interest by commentators and practitioners alike, and notwithstanding the rapid growth of technical capabilities, empirical research into the role of technology within law is limited. That which does exist relies heavily on anecdotal evidence from commercial fields and takes no account of the nuances of specific practice areas, not least personal injury. Consequently, the economic, political and social contexts alluded to above, which as Chapter 6 demonstrates have been a key part of the drive towards automation in personal injury practice, have been entirely ignored. Thus, this study arrived at a new focus on the role of technology in the resolution of personal injury claims.

Since 1999, all defended personal injury claims have been allocated to one of three tracks: Small Claims (up to £1,000, or £5,000 for road traffic incidents); Fast-Track

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⁴⁵ Colleen Hanycz, 'More Access to Less Justice: Efficiency, Proportionality and Costs in Canadian Civil Justice Reform' (2008) 27 Civil Justice Quarterly, p.102

⁴⁶ Productivity and Unemployment (n 14)

 $^{^{47}}$ The future of the professions : how technology will transform the work of human experts (n 7), p.68

(£1,000 to £25,000); and Multi-Track (£25,000 and over). To narrow the parameters of this study within the confines of a viable PhD, this thesis focuses on multi-track claims. The reasons for this methodological decision are twofold. First, fast-track claims are required to begin in the Ministry of Justice's Claims Portal; an online portal for secure, instant communication between claimants and defendants funded by a levy on defendant insurers. Whilst the impact of this is academically interesting, as fast-track practitioners have no choice but to use this technology there is less scope for a rigorous study into the dynamics of how and why they do so. However, in the multi-track, practitioners are not explicitly required to engage with technology in the same way. Therefore, the multi-track offers a more interesting area for study when considering the drivers and tensions that shape practitioners' engagements with technology. Second, the current literature distinguishes 'genuinely bespoke' and 'standard' areas of legal practice on which technology will have a disparate effect. However, it is not clear where the boundaries between standard and bespoke practice areas lie, nor how fixed these terms might be. The multi-track, being considerably more complex, has potential to reveal more of this dichotomy.

1.3 A Brief history of Law and Technology

Pre-1994

Although LegalTech is a relatively new phenomenon, the history of technology and Law dates back to at least the mid-to-late 20th Century, where the initial focus was primarily on technology within the courts. In December 1973, the Society for Computers and Law was founded and remains a leading organisation in the UK for lawyers working with and advising in the remit of IT. According to Susskind, it was only after the establishment of the society and "with a formal body in place, that it was possible for English lawyers, judges, and officials to work together in a systematic and sustained way in assessing the actual and likely impact of courtroom and litigation support technologies".⁴⁸ Twelve years on from its founding, the Information

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⁴⁸ Transforming the law: essays on technology, justice, and the legal marketplace (n 13), p.234

Technology and Courts Committee (ITAC) was established to provide a forum for lawyers, judges, academics and other stakeholders to discuss "their respective investments in IT and their plans for the future". Initially, the most active participants in ITAC came from the then Official Referees Court, now the Technology and Construction Court, which produced a protocol to set standards for the use of technology based litigation support systems. The protocol, since revised as the TeCSA IT Protocol, exists primarily to "facilitate and encourage the exchange of information amongst users of the Technology and Construction Courts through the use of information technology". So

Despite efforts for collaboration by the Society for Computers and Law, early developments in the Technology and Construction Courts were scarcely mirrored elsewhere. Nonetheless, important work was being carried out to modernise the judiciary and this was most notable with the JUDITH (Judicial IT Help) pilot project in 1992. JUDITH was a training programme for 25 judges funded by the Lord Chancellor's Department. 24 of the judges were given laptops and one a desktop PC with software packages designed to aid in their judicial duties. This included Computer Assisted Transcription (CAT) which allowed stenographers to rapidly transcribe the conversations in the courtroom to instantaneously appear on screen in front of the judge. Until the JUDITH project there had been some scepticism on the usefulness of CAT stenography. However, with technical assistance in the courts and prior software training, the judges involved were reportedly "impressed by the potential advantages of such systems". 51 Judge Mander, who reported on the project, concluded that a "Judge who uses a computer in court [...] is almost certain to be able to enable the hearing to proceed at a significantly faster pace, simply by eliminating the need for physically writing down what he needs to record". 52 Although this may seem obvious today, at the time getting members of the judiciary to invest in IT and

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⁴⁹ Ibid, p.234

⁵⁰ TeCSA, *TeCSA IT Protocol* (2003), preamble. Available at : https://www.tecsa.org.uk/dispute-resolution/tecsa-it-protocol/ [last accessed 1st January 2020]

⁵¹ His Honour Judge Michael Mander, 'The Judith Report' (1993) International Journal of Law and Information Technology , pp.266-267

⁵² Ibid, p.281

IT training was a significant step forward that "laid the foundations for the gradual adoption of IT by the English judiciary" such that by 1998 "about half were IT users". Despite this, the "general uptake of the technology across the civil justice system was neither rapid nor enthusiastic" with just a few practising lawyers embracing the use of litigation support technologies in the early 1990s. 54

1994 - 2000

In 1994, Lord Woolf was appointed to review the procedures governing civil justice in England and Wales. Although organised reform commissions within civil justice had been appointed previously, most notable in the early 19th Century, the Woolf reforms represented a "true revolution" in civil justice. 55 Woolf identified eight principles of an effective system of civil justice. It should:

- (a) be just in the results it delivers;
- (b) be fair in the way it treats litigants;
- (c) offer appropriate procedures at a reasonable cost;
- (d) deal with cases with reasonable speed;
- (e) be understandable to those who use it;
- (f) be responsive to the needs of those who use it;
- (g) provide as much *certainty* as the nature of particular cases allows; and
- (h) be effective: adequately resourced and organised.

The review, which is discussed further in Chapter 6, was driven by a fear that the cost of resolving claims in the civil courts was excessive; that the procedures were overly complex; and that, while many were denied access to justice, many more were profiting from bogus claims in a litigation explosion dubbed the 'compensation culture'. In Woolf's words "it is too expensive [...]; too slow in bringing cases to a conclusion and too unequal". Thus, Woolf set out to design a "new landscape for

⁵⁵ English Civil Justice after the Woolf and Jackson Reforms : A Critical Analysis (n 44), p.24

⁵³ Transforming the law: essays on technology, justice, and the legal marketplace (n 13), p.237

⁵⁴ Ibid, p.237

⁵⁶ Access to Justice - Final Report, London: HMSO s.1 para.1

civil justice",⁵⁷ the prevailing spirit of which centred around avoiding litigation and encouraging settlement between parties.⁵⁸ Where litigation does occur, Woolf sought a system that is less complex, less time consuming and cheaper by stripping away any "avoidable procedural waste".⁵⁹ Already one can begin to see here the development of a political discourse against personal injury practice and, as discussed above, a trend towards greater personal responsibility.

Although the focus of the Woolf Review was not technology, both the interim and final reports make recommendations for how Information Technology can assist in improving the efficiency of the civil justice system. Therefore, while most of the commentary on the reforms have concentrated on proportionality and procedural rationing, Susskind argues that improvements in Information Technology were "central" to achieving Woolf's main recommendations; so much so that "IT was to be a key part of the civil reform process". The most significant recommendations found in Woolf's proposals concerning Information Technology relate to the use of case management systems. Put simply, these are systems that help to organise and automate some functions of the civil justice system. They are used by and aid different agents depending on what category of system they are. Susskind suggests that there are five distinct categories of system, "each of which can meaningfully (but unhelpfully) be called case management systems":

"management information systems – to help (politicians, officials, judges and others) monitor the throughput and performance of our courts [...];

case administration systems – to support and automate the formidable back-office, administrative work of court staff;

judicial case management – including case tacking, case planning, telephone and videoconferencing, and document management, intended for direct use by judges;

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⁵⁷ Ibid, para.4

⁵⁸ Judging Civil Justice (n25), p.55

⁵⁹ A Zuckerman, 'A Reform of Civil Procedure - Rationing Procedure Rather than Access to Justice' (1995) Journal of Law and Society , p.3

⁶⁰ Woolf, *Access to Justice - Interim Report*, 1995), London: HMSO, chapter 13; Access to Justice - Final Report (n 56), chapter 21

⁶¹ Transforming the law: essays on technology, justice, and the legal marketplace (n 13) p.238

judicial case management support systems – being the systems used by court staff in support of judges who are involved with case management; and

non-judicial case management – to help court staff progress those many cases which are not disposed of judicially".⁶²

The Woolf reforms rely fundamentally on two of these: case administration systems and judicial case management systems. For claims in the fast-track, the court must have case administration systems that allow for the "efficient, reliable and effective" monitoring, particularly for cases on a fixed timetable. 63 For the multi-track, judges must have the support of adequate judicial case management systems if they are to fulfil their "new case management responsibilities" which require a proactive management of the cases.⁶⁴ Woolf's recommendations were intended not only to encourage judicial case management, but case management by claimant solicitors and defendant insurers as well. In 2002, a research project commissioned by the Law Society and Civil Justice Council to review the impact of Woolf's recommendations reported varied use of IT by claimant solicitors ranging from a "solicitor who boasted he did not have a computer on his desk" to firms with an interest in "computerised case management systems that included decision-making prompts".65 That report, which is considered further in Chapter 4, concluded that whilst investment in case management software within claimant firms had already begun, there was "little practical experience of using such systems" at the time. 66 For defendant insurers, it concluded that "Woolf encouraged the industry to design systems" that incorporate more deadlines and "enable supervisors to monitor compliance with timescales".67 As Chapters 4 and 5 demonstrate, claimant solicitors have since caught up with the

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⁶² Ibid, pp.238-239

⁶³ Ibid, p.239

⁶⁴ Ibid, p.239

⁶⁵ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (n 18), pp.47-50

⁶⁶ Ibid, p.49

⁶⁷ Ibid, p.59

insurance industry and are now using case management systems to similarly manage workflows, meet deadlines and supervise performance of case handlers.

It is difficult today to suggest that the IT recommendations found in the Woolf Reports are particularly innovative. However, it is important to note that the technology available today is far superior to that of the mid-1990s. It is inevitable, therefore, that in retrospect the technologies discussed do not appear innovative by today's standard. Moreover, these reforms came at a time when only half of all judges in England and Wales were IT users. What Woolf did by advocating digital case management and IT training programmes for judges was lay the foundation on which subsequent innovations could build. As Susskind writes in 2000:

"we are currently at the beginning of an evolutionary path which will lead in due course to an inevitably highly automated court system, under which the administration of cases will flow from start to finish in a largely automated environment".⁶⁹

Nonetheless, the impact of Woolf's recommendations on the use of technology within practice is not limited to the systems his reports advocate. The key features of the Woolf reforms (the three-track system, simplified procedure, encouragement of alternative dispute resolution and increased judicial case management) are each demonstrative of the economisation of social policy discussed above and are individually and collectively aimed at reducing the cost and delay of civil justice. In so doing, they encourage greater efficiency from practitioners which, as Chapter 6 explores, has encouraged greater use of technology within the claims process.

2000 -

After the Labour Party came to power in 1997, Sir Peter Middleton was appointed to review Woolf's recommendations. New Labour, in support of the recommendations, introduced legislation such that in 1999 the new Civil Procedure Rules came into force. It was clear from subsequent documents produced in the Lord Chancellor's

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⁶⁸ Transforming the law: essays on technology, justice, and the legal marketplace (n 13), p.237

⁶⁹ Ibid, p.240

Department that the Labour government was equally committed to reforming the civil justice system as the previous Conservative administration: "the Department continues to reform civil justice to make the system quicker, cheaper, and more certain".⁷⁰

Policy makers have since revisited the aims of the Woolf Report with renewed vigour. Perhaps the most striking example of this is the pursuit of proportionality within the Jackson Report which seeks to "promote access to justice at proportionate cost". This new overarching aim marks a shift from the previous aim of achieving individualised, substantive justice to one which is concerned with distributive, proportionate justice and was driven, again, by concerns of cost and delay. Thus, the main thrust of reforms have been packaged in three ways: first, a costs reduction exercise that, through improving the efficiency of civil justice, seeks to secure greater "access to justice"; second, a rebalancing of power between claimants and defendants to "challenge one of the roots of the developing compensation culture"; and third, an attempted 'cultural shift' where people "take more responsibility for addressing [conflicts] [them]selves" through non-litigious alternative dispute resolution. The economisation discussed in s.1.1 is now very clear to see.

As noted earlier, the challenge with such reform is how policy makers find the balance between efficiency and justice: "to balance fairness with accessibility".⁷³ This challenge manifested the overriding policy of proportionality – the principle that the costs of resolving a claim **must not** exceed the value of the claim. This policy effectively limits the amount of time and money that lawyers can spend on cases, encouraging them to seek alternative methods of handling personal injury claims. Although proportionality has always been present within the civil justice system, it has, since the Jackson Report, been placed at the very core of the Civil Procedure Rules which now begin with the "overriding objective of enabling the court to deal

⁷⁰ Lord Chancellor's Department, Departmental Report March 2001 (HM Treasury 2001), p.iii

⁷¹ Review of Civil Litigation Costs: Preliminary Report. Volume One (n 23), p.2

⁷²Solving disputes in the county courts: creating a simpler, quicker and more proportionate system. A consultation on reforming civil justice in England and Wales (n 23), pp.4-6

⁷³ Judging Civil Justice (n 2525), p.15

with cases justly and **at proportionate cost**". Thus, we can see the pursuit of economy noted by Brown and Mant has now taken primacy within civil procedure.⁷⁴

A short-term solution to providing legal services more cheaply has been a collective delegating of work from lawyers to paralegals by those who have re-assessed their business model, using standardised case management programmes administered by non-legally qualified claims personnel.⁷⁵ This method of working was reported at interview in the present study and is discussed in detail in Chapter 5. However, there has been concern that the strive for efficiency leads to the under settlement of claims and limited access to justice for claimants, such that lawyers have argued that access to justice is "under threat".⁷⁶ Nonetheless, the political desire to cut the cost of civil justice is deep set and by 2014, lawyers were beginning to reluctantly accept that the cost limitations are not going to be lifted. At an 'Access to Justice Day' in that year, Andrew Caplen, Law Society President, advocated that lawyers must now "explore innovative ways [...] to make their services more available to the public".⁷⁷

In July 2015, the Lord Chief Justice and the Master of the Rolls commissioned a further review of the structure of the civil courts, carried out by Lord Justice Briggs. In his Interim Report, Briggs highlights the development of an 'Online Court' as "the single most radical and important structural change with which [the] report is concerned". The Online Court, as envisioned by Briggs, "would be the first court ever to be designed, from start to finish, for use by litigants without lawyers [...] because it seeks for the first time in this country to take advantage of the facilities offered by modern IT at all stages in its process". The country to take advantage of the facilities offered by modern the facilities of the fac

The purpose of Briggs' Online Court is to overcome what he describes as "the single most pervasive and intractable weakness of our civil courts", that "most ordinary

⁷⁴ See Undoing the Demos: Neoliberalism's Stealth Revolution; Neoliberalism, Family Law and the Cost of Access to Justice

⁷⁵ Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (n 15)

⁷⁶ Access to Justice Day - breakfast speech. (n 41), no pagination

⁷⁷ Ibid

⁷⁸ Lord Justice Briggs, Civil Courts Structure Review: Final Report, 2016), p.75

⁷⁹ Ibid, p.75

people and small businesses struggle to benefit from the strengths of our civil justice system". 80 Reaffirming that access to justice remains a long-standing concern of civil justice, he claims that the system now only works for "the most wealthy individuals [and] for that tiny minority still in receipt of Legal Aid". 81 This view typifies one side of the "narrative of moral decline"82 which, for the government's part, has entrenched a "jaundiced"83 view of civil justice in the UK and secured support for the retrenchment of traditional values of civil justice in favour of cost-effective solutions.

The recent history of civil justice reform demonstrates the political nature of civil justice as well as the socio-economic drivers that have shaped values of justice and, more especially, the access to justice debate. Technology, whilst not at the centre of that debate, has been a consistent feature of reforms to civil justice – at times as a driver for change and at other times as an outcome of change. The use of video links and conference calling within court hearings is an example of the former, whilst the more efficient technologies in response to the economic pressures placed on practitioners is an example of the latter.84 The history of law and technology is, therefore, as much a political and economic story as it is a technical and legal one. As Chapter 6 demonstrates, the role of technology as a driver, facilitator and an outcome of changes to personal injury practice is consequently entangled in the political, social and economic desires for a cheaper and more efficient system of civil justice. It is not, as current literature suggests, an objective external force on legal practice. Predictions on the future uptake and use of technology must, therefore, not only consider the technical, but also the economic, political and social contexts in which they are intended to operate.

1.4 The Research Questions

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⁸⁰ Lord Justice Briggs, Civil Courts Structure Review: Interim Report, 2015), p.51

⁸¹ Ibid, p.51

⁸² A World Without Trials (n 33), p.20

⁸³ Judging Civil Justice (n 25), p.31

⁸⁴ See Chapter 6 for a discussion of the economic drivers towards automation

In light of the discussion so far, it is fair to say that personal injury practice has undergone considerable disruption over the last two decades as the target of a reform agenda that has sought to curtail the perceived compensation culture and reduce the burden of civil justice on the state. At interview with Goriely et al in 2002, one claimant personal injury solicitor claimed that they have "seen more changes in the last four or five years than perhaps all the rest of [their] career put together".85 That study concluded that the Woolf Reforms had not directly driven standardisation within personal injury practice, but had encouraged changes that "dovetailed" with those that were already taking place.⁸⁶ Since then, the Jackson reforms have intensified the need for efficiency within civil justice, as the pursuit of proportionality has been revisited with renewed vigour. Meanwhile, outside the confines of personal injury, predictions on the application of technology within practice have gained traction. However, as already noted, academic literature in this field is limited, particularly within non-commercial areas. Nonetheless, Susskind's leading account predicts radical change across legal practice as technology enables "entirely new ways of delivering legal services".87

Confronted with the discrepancy between relatively little technological impact reported in 2002, but predictions of significant technical change to come in the near future, this thesis examines the current uptake, use and impact of technology within personal injury law to date. In so doing, it is the first study to focus exclusively on the role of technology within personal injury practice. It seeks to uncover not only what technologies personal injury lawyers have access to, but how they engage with them. Having discussed practitioners' engagements with technology, it then looks to consider the extent to which engaging with technology has brought about a transformation for personal injury practice and the role of the legal professional in personal injury work. Finally, it seeks to develop an understanding of the drivers and tensions that shape these engagements, considering, in particular, the applicability

⁸⁵ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (n 18), p.17

⁸⁶ Ibid. p.57

⁸⁷ Tomorrow's Lawyers. An Introduction to Your Future (n 12), p.3

of the three drivers already cited in Susskind's account.⁸⁸ In line with these aims, this study develops its substantive submissions by addressing four research questions:

- i. What is the current uptake and use of technology within personal injury practice?
- ii. How do practitioners perceive the technologies with which they interact?
- iii. What changes have the use of technology engendered in practice?
- iv. What drivers and tensions have shaped the uptake and use of technology within personal injury practice?⁸⁹

As noted in the overview of this chapter, this thesis does not seek to make predictions about the future use of technology within legal practice in general or personal injury practice in particular. However, the above questions raise some pertinent points which should be considered if we are to hypothesise on the future role of technology in law. In particular, the drivers and tensions discovered in the present study must surely form part of those hypotheses. As this thesis rejects the deterministic drivers advocated in the current literature and, instead, identifies policy changes in respect of recoverable costs as the primary driver towards automation, the conclusive chapter notes that some similarly influential driver, and not just the further development of technology alone, will likely be required to move practice towards greater uptake and use of technology.

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⁸⁸ Ibid, pp.3-14. These are discussed in detail in Chapter 6.

⁸⁹ The method of answering these questions is outlined and justified in Chapter 3.

1.5 The Structure of this Thesis

This thesis argues that, whilst the LegalTech market has expanded rapidly in recent years, technologies available for, and used by, personal injury practitioners have not significantly changed in the last two decades. Notwithstanding the numerous issues that affect their ease of use, all participants recognised the benefit of the technologies they use. However, none supported the view that technology will replace lawyers entirely.

Chapter 2 discusses the current literature, offering an overview and critique of the main commentaries over the past forty years. To do this, it develops three phases of prediction to categorise and analyse the development of the commentary over time. A chronological running order for these phases demonstrates that development from early predictions of expert systems in law in the 1980s to predictions of LegalTech and the disruption of legal work in present day. Despite covering four decades, the body of literature is thin, as academic attention on how the use of technology might impact legal work had been limited. Existing literature focuses primarily on commercial areas of law and forms generalisations from macro trends about the use of technology within legal services as a whole. As Chapter 2 notes, this approach fails to acknowledge the role of practitioners in accepting, rejecting and shaping the technologies that they use, as well as the socio-economic and political tensions at play. It, therefore, makes the case for a new approach to the study of technology within legal practice.

Chapter 3 sets out the methodology that guided the research. It situates the research within a constructivist school of thought and highlights the methodological tools borrowed from the Social Sciences. In doing so, it provides the justification for a qualitative, interview-based study, explaining the overall benefit of this approach in capturing practicing perspectives. It sets out the overall research design, including the sampling method, interview design and method of analysis.

Drawing on the insights from the interview data, chapters 4 to 6 explore the four research questions consecutively. Chapter 4 outlines the LegalTech marketplace,

drawing attention to the limited technologies available specifically for personal injury practice. It assesses the current uptake and use of technology reported at interview, concluding that beyond case management systems, legal research tools and standard office equipment, there has been little uptake of technology within the practices observed. Examining the uses of these technologies at four levels of practitioner, it further concludes that despite the perception that senior practitioners use technology less, the systems in place are used regularly across the board, albeit in different ways. Chapter 4 also explores practitioners' perceptions of technology and argues that in spite of considerable and consistent user issues, the technologies reported are perceived as useful. It offers a breakdown of user issues and discusses some of the prevalent reasons for practitioners' quiet discontent with their systems.

In Chapter 5, the thesis examines various models for transformation by technology. It combines, for the first time, the three models of 'disruption', 'commoditisation' and 'externalisation' to make sense of their relationship with each other and produce a workable remodelling of the prevalent theoretical models. Using this as its framework, it argues that, though limited to automating legal processes, the systems reported have facilitated a shift towards greater use of non-qualified practitioners. This, along with greater public access to digitised legal knowledge and an increasingly demanding clientele, challenges the expertise and autonomy of the legal profession and professional.

Chapter 6 explores the drivers and tensions that shape practitioners' engagements with technology. It is here that the deterministic approach that this thesis rejects is explored in greater depth, with specific reference to Susskind's three drivers for change. Drawing heavily on the interview data, this final substantive chapter identifies policy changes with respect to recoverable costs as the primary driver towards technology within personal injury practice; a very different kind of financial driver to that identified in the literature. It concludes that practitioners' objections to disruption are more genuine than the existing literature recognises; and that concerns for the future quality of legal service and the trustworthiness of technology need to be addressed before a technologically driven future can be reached.

In Chapter 7, the various conclusions made throughout the thesis are brought together. The chapter constructs a story of the life of a multi-track personal injury claim, highlighting the technologies used throughout. It notes that during the life of a claim, the vast majority of client contact is made virtually, though the use of technology throughout is still limited. Section 7.4 highlights the contribution that this thesis makes to the study of law and technology and to socio-legal studies generally. Finally, Chapter 7 emphasises that, after four decades of visionary predictions, this thesis moves the conversation from the speculative to the empirical. It concludes that four more decades of speculation could be damaging to the legal profession and to the future prosperity of LegalTech.

CHAPTER 2

Technology and Legal Services – Predictions and Presumptions

The legal market is in an unprecedented state of flux. Over the next two decades, the way in which lawyers work will change radically. Entirely new ways of delivering legal services will emerge, new providers will enter the market, and the workings of our courts will be transformed. Unless they adapt, many traditional legal businesses will fail. On the other hand, a whole set of fresh opportunities will present themselves to entrepreneurial and creative young lawyers.¹

2.1 Introduction

Richard Susskind has been at the forefront of the commentary on technology and legal practice since the 1980s, consistently predicting radical changes to the ways in which legal services are delivered.² However, even though the wider body of literature is limited, there is some commentary that predates Susskind's leading account. For example, French jurist Lucian Mehl claimed, as early as 1958, that future mechanisations of legal processes could see technology assist legal practice in four ways: finding sources of legal information, developing legal arguments, legal decision making and checking the soundness of legal solutions.³ It has been argued that his paper, *Automation in the Legal World*, "first illustrated in a substantial way the idea that computers might be used to mechanise the process of legal reasoning".⁴

¹ Richard Susskind, Tomorrow's Lawyers. An Introduction to Your Future (Oxford University Press 2013), p.3

² Richard Susskind, 'Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning' (1986) 49 Modern Law Review 168; Richard Susskind, Expert Systems in Law: A Jurisprudential Inquiry (Clarendon Press 1987)

³ Lucian Mehl, 'Automation in the Legal World' (1958) Proceedings of a Symposium on Mechanisation of Thought Processes 755 National Physical Laboratory, p.757

⁴ Bryan Niblett, 'Computer Science and Law: An Introductory Discussion' in B Niblett (ed), Computer Science and Law (Cambridge University Press 1979), p.7

Therefore, despite a distinct lack of literature in this area, academic interest in the ways in which technology might impact the legal profession has been established for some time. Problematically, though, Mehl's predictions predate the development of much of the technology that he discusses. They are, consequently, made without a coherent understanding of the capabilities, usefulness or applicability of the technologies in question, nor any real sense of how practitioners will likely respond to them. This is characteristic of much of the literature in this area, including Susskind's, which fails to adequately comprehend the actual uptake and uses of technology within specific contexts. It is for this reason that much of the literature is visionary and speculative.

To illustrate this issue, Mehl suggests that legal technology, or 'law machines', can be divided into two categories: information machines that provide users with access to legal sources and consultation machines that provide users with direct and specific legal advice. ⁵ Today, we might refer to the former as information technology that can store, manipulate and disseminate information, and the latter as artificial intelligence that, at its most developed, might offer specific legal advice as a professional lawyer would. However, according to Mehl there is "no fundamental difference between these two types of machine [...] the difference is one of degree rather than of essence. The consultation machine will give an exact answer to the question put to it, whereas the information machine will only supply a set of items of information bearing on the problem".6 This submission alone demonstrates a lack of awareness, not only of the technical difference between each, but of the differing social complexities involved with their introduction. These differences came to light over the two decades succeeding Mehl's prediction, as information machines developed "rapidly and consistently"⁷ but consultation machines, now acknowledged as being of greater complexity, saw no such rapid development.8 Moreover, whilst lawyers were reportedly using information machines by the late-1970s to search legal sources,9

⁵ Automation in the Legal World (n 3), p.759

⁶ Ibid, p.759

⁷ Computer Science and Law: An Introductory Discussion (n 4), p.7

⁸ Ibid. p.7

⁹⁹ J Bing and T Harvold, Legal Decisions and Information Systems (Universitetsforlaget 1977)

they made "slim progress" in finding systems that were actually useful. Despite significant advancements in "the operation and capabilities of these machines", the even market leaders such as Lexis in the UK were still perceived to have "minimal utility to the majority of practising lawyers". This point demonstrates that the pitfalls of the literature discussed in this chapter are longstanding and reaffirms the importance of empirically examining the actual uses and perceptions of technologies in use.

Despite the shortcomings of Mehl's predicted consultation machines, pioneers in computer science maintained that, in time, "machines will be capable [...] of doing any work a man [sic] can do"¹³ as "within a generation" issues with current systems and "the problem of creating 'artificial intelligence' will substantially be solved".¹⁴ Thus, early visionaries within law predicted that "computer science may assist lawyers in both the study and performance of their legal reasoning", but that the solution to the problem of creating artificial intelligence that works within law will require "serious interdisciplinary work between lawyers and computer scientists to explore the computer's potential".¹⁵ In an influential paper published in 1970, Buchanan and Headrick argue that the potential application of computers, in particular artificial intelligence, to legal reasoning has had insufficient attention and should be explored:

"Computer science could enhance our understanding of the processes by which lawyers work and think. So far lawyers have not attempted to explore its relevance. They should" 16.

¹⁰ Bruce Buchanan and Thomas Headrick, 'Some Speculation About Artificial Intelligence and Legal Reasoning' (1970) 23 Stanford Law Review 40, p.40

¹¹ Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning (n 2), p.168

¹² Ibid. p.170

¹³ Herbert Simon, The Shape of Automation for Men and Management (Harper & Row 1965), p.96 referenced in Daniel Crevier, Al: The Tumultous Search for Artificial Intelligence (Basic Books 1993), p.109

¹⁴ Marvin Minsky, Computation: Finite and Infinite Machines (Prentice-Hall 1967), p.2 referenced in Al: The Tumultous Search for Artificial Intelligence, p.109

¹⁵ Some Speculation About Artificial Intelligence and Legal Reasoning (n 10), p.40

¹⁶ Ibid. P.62

In 1987, Susskind claimed that the shortcomings of the systems used by practitioners at that time were in part due to the accuracy and relevance (or rather inaccuracy and irrelevance) of much of the information such systems provided and in part due to their inability to harness and reproduce heuristic knowledge. These issues led practitioners to the conclusion that the systems are not useful. As a result, Susskind argued relatively early on in the discussion of technology and legal practice that "it is now necessary to attempt to develop computer systems in law that can be said to embody knowledge, and even exhibit intelligence". Although s.2.2 demonstrates that his thesis has changed over time, Susskind has consistently predicted that technology will disrupt the ways in which legal services are delivered. He suggests that "entirely new ways of legal services" are emerging and, as a consequence, the legal profession is currently "in an unprecedented state of flux". The crux of his claim is that, through greater use of technology, the work of lawyers, and indeed the professions generally, will be radically transformed.

In recent years, predictions on the future use and impact of technology have been frequently featured in the general as well as legal press, often citing Susskind's work as the leading academic source. These accounts report that technology will "radically transform the role of lawyers"²¹ to "bring lawyers into the 21st Century".²² They predict that artificial intelligence "is working its way into the legal services market at an increasing pace"²³ as "machines are now being taught to think like lawyers".²⁴ Although the majority of this reporting presents technology as "an indispensable tool"²⁵ for lawyers, somewhat more pessimistic accounts claim that technology

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¹⁷ Expert Systems in Law: A Jurisprudential Inquiry (n 2), pp.4-7

¹⁸ Ibid, p.7; and Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning (n 2), p.170

¹⁹ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.3

²⁰ Ibid, p.3

²¹ Manju Manglani, 'Artificial Intelligence to Radically Transform the Role of Lawyers' Managing Partner (23 October 2015)

²² Jonathan Keane, 'Can Technology Bring Lawyers into the 21st Century? 'BBC News (16 February 2016)

²³ Sarah Burnett, 'Legally AI - Disruption in Legal Services and Beyond' Legal Futures (January 2017)

²⁴ Jonathan Ames, 'Top Firms Play it Smart with Al' The Times (5 October 2017)

²⁵ Jane Croft, 'Legal Firms Unleash Office Automatons' Financial Times (16 May 2016)

"could kill lawyers"²⁶ as "armies of expensive lawyers [are] replaced by cheaper software".²⁷ Nonetheless, despite increased interest in this topic, academic research in the area remains limited.

This chapter outlines the predictions that have been made on the future use of technology within legal practice over the last four decades. The purpose of this discussion is to situate the current research and further build the case for a new approach to researching the role of technology within the specific context of personal injury law. It takes a longitudinal approach to the literature over four decades due to the limited commentary, but long-standing interest already noted, which characterise the field as 'long and thin'. However, it does not simply present an historical timeline of the commentary to date but, taking an analytical view of the literature, has identified and constructed three phases of prediction:

- early predictions of expert systems in law (1980s and 1990s);
- legal practice in a digital information society (1990s to late 2000s);
 and
- LegalTech and the delivery of task based legal services (late 2000s to early 2010s onward).

Although there is some other relevant commentary which is included in this chapter, as has already been noted, the field has been dominated by Susskind's work, which consequently takes up a considerable amount of the discussion. The lack of focus on the use of technology within legal practice, as well as the lack of empirical research within law and technology generally, means that much of the literature is only tangentially relevant to the present study. However, having identified the core question throughout Susskind's work – how will legal services be delivered and by whom in a more technically advanced society? – each of the three phases returns to this question, bringing the commentary back into line with this thesis. Section 2.3 focuses on the path to commoditisation, the process by which legal work is

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²⁶ Farhad Manjoo, 'Will Robots Steal Your Job?' Slate (29 September 2011)

²⁷ John Markoff, 'Armies of Expensive Lawyers, Replaced by Cheaper Software' The New York Tlmes (4 March 2011)

standardised, packaged and sold as a digital commodity. This is an account of the process by which Susskind believes technology will transform the legal profession, which is later reviewed in the context of the professions generally in Susskind and Susskind's collaborative work. Section 2.4 then critically addresses the shortcomings of the current literature, before the need for a new approach is explained in s.2.6.

2.2 Three Phases of Prediction

Reviewing the leading academic accounts, this thesis has identified three phases of prediction on the future use of technology within legal practice. These phases have been constructed as an analytical tool to help understand the journey of predictions over time. Although there is some overlap, they are roughly chronological in order with commentary on expert systems being largely confined to the 1980s and early 1990s. The IT-based or digital information society began to be discussed in the mid-1990s through until the mid-late 2000s, before commoditisation and disruption became the focus in the late 2000s to early 2010s and remains so today.

As the introduction to this chapter has already noted, the most prominent academic account comes from Richard Susskind, whose work, despite evolving throughout each of the three phases, has maintained one central concern. At its core, Susskind's work is consistently concerned with *how* legal services will be delivered, and *by whom*, in a more technically advanced society. As the most vocal commentator, much of the literature discussed in this section comes from his body of work. However, the discussion draws increasingly on other relevant literature as it moves through the second and into the third phases, as the subject has attracted more contributions as time goes on. This is particularly true in the third phase, where the commentary is not only greater, but also more diverse, as academics, technology enthusiasts and journalists from within legal, technology and general spheres have contributed.

Having produced an organised review of the broad literature within the area, s.2.3 will focus closely on Susskind's current thesis on the commoditisation of legal work.

That discussion, quite deliberately, stands distinct from the three phases of prediction in the present section, to mark the lack of interconnectedness between Susskind's theory of commoditisation (and latterly externalisation²⁸) and the rest of the literature. This point is scrutinised at length in Chapter 5, which goes some way to reconciling the awkwardness of the present situation with a holistic view to remodelling the theories of transformation by technology.

2.2.1 Early Predictions of Expert Systems in Law

Expert systems were among the earliest forms of artificial intelligence developed as commercially viable business tools.²⁹ They are a sub-set of Intelligent Knowledge-Based Systems "that have been constructed (with the assistance of human experts) in such a way that they are capable of functioning at the standard of (and sometimes even at a higher standard than) human experts in given fields".³⁰ They are designed to "reason, solve problems, draw inferences and offer advice in an apparently intelligent fashion"³¹ to, thus, "emulate the relevant competence of a human expert and thereby make that expertise more readily available".³² Expert systems in law are, therefore, defined as "computer programs that have been developed, with the assistance of human legal experts, in particular and usually highly specialised areas of law".³³ Predictions on the use of expert systems within a legal context are primarily found in Susskind's *Expert Systems in Law* (1987). Despite there being no fully operational expert system of use to legal professionals at the time, he concluded that "there are no theoretical obstacles, from the point of jurisprudence, to the development of rules based expert systems in law".³⁴

²⁸ See Richard Susskind and Daniel Susskind, The future of the professions : how technology will transform the work of human experts (Oxford : Oxford University Press 2015), Chapter 5.3

²⁹ T. Grandon Gill, 'Early Expert Systems: Where Are They Now?' (1995) 19 MIS Quarterly 51, p.51

³⁰ Expert Systems in Law: A Jurisprudential Inquiry (n 2), p.9

 $^{^{31}}$ Phillip Capper and Richard Susskind, Latent Damage Law the Expert System (Butterworths 1988), p.2

³² V Mital and L Johnson, Advanced Information Systems for Lawyers (Chapman & Hall 1992), p.28

³³ Latent Damage Law the Expert System (n 31), p.5

³⁴ Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning (n 2), p.181; see also Expert Systems in Law: A Jurisprudential Inquiry (n 2), p.vii

Susskind distinguished 'expert systems in law' from 'database systems in law', which more-or-less correspond with Mehl's consultation and information machines, respectively.³⁵ Whilst recognising that word processors, digital filing, time recording and accounts packages can all be considered forms of database system, Susskind highlights those systems which "store and retrieve the substantive law" (what we might now call legal search engines or legal research databases) as "paradigmatic of this category". 36 Expert systems, on the other hand, go beyond the storage and retrieval of data, which makes up only one of the three required components, known as the 'knowledge base'. It is within the knowledge base that expert systems contain the specialist subject knowledge within their relevant domain. The second component is the 'inference engine' or 'reasoning mechanism' which uses the knowledge base and applies it to the current scenario. Finally, the third component, the 'user interface', enables the user to interact with the system.³⁷ Thus, as a whole, the system "uses knowledge and inference procedures to solve problems that are difficult enough to require significant human expertise for their solution". 38 Hence, they are considered an early form of artificial intelligence.³⁹

By the mid-1980s, expert systems developers had produced a "series of resounding successes" mostly within banking and finance⁴⁰ and it was predicted that by the mid-1990s the market for expert systems would reach annual sales of \$4bn.⁴¹ At that time, Susskind argued that those developing expert systems in law should be guided by jurisprudential insights which would result in systems that "offer sound advice in a fashion acceptable to their legal users".⁴² Fifteen years of previous inquiries into the use of artificial intelligence in legal reasoning reportedly "yielded far fewer positive results than comparable efforts in other disciplines" due to the "differences between the nature of legal reasoning and the nature of other enterprises" which are "rooted,

³⁵ Expert Systems in Law: A Jurisprudential Inquiry (n 2)

³⁶ Ibid. p.4

³⁷ Latent Damage Law the Expert System (n 31), p.2

³⁸ E.A Feigenbaum, Expert Systems in the 1980s (1980), p.2

³⁹ Early Expert Systems: Where Are They Now? (n 29)

⁴⁰ Ibid, p.51

⁴¹ W.M Bulkeley, 'Technology: Bright Outlook for Artificial Intelligence Yields to Slow Growth and Big Cutbacks' Wall Street Journal (5th July), p.1

⁴² Expert Systems in Law: A Jurisprudential Inquiry (n 2), p.254

ultimately, in the empirically-based, causal, descriptive laws of the natural sciences". Susskind claims that no attempts were made to engage with "what is regarded by some as an 'epistemological' issue", hence the need for jurisprudential involvement has been largely ignored. Mence the need for jurisprudential involvement has been largely ignored. Mence the need for jurisprudential involvement has been largely ignored. Mence the need for jurisprudential involvement has been largely ignored. Mence the need for jurisprudential involvement has been largely ignored. Mence the need for jurisprudential involvements who design and construct expert systems, have traditionally been experts in computer programming. However, where computer scientists have attempted to develop expert systems in law, Susskind suggests they lack a satisfactory understanding of the field in order to succeed. Early commentators within law were in strong agreement with him that expert systems should be developed and evaluated "using an inter-disciplinary approach". Thus, it is argued that the development of successful systems in law requires a "serious and sustained interdisciplinary collaboration" between legal theorists, lawyers and computer scientists. And the same in the need for jurisprudential involvement is a sustained interdisciplinary collaboration between legal theorists, lawyers and computer scientists.

The UK's first fully operation expert system in law was Capper and Susskind's Latent Damage System, which was designed to calculate limitation periods under the Latent Damage Act 1986. Operating within the complex contexts of tort, contract and product liability cases, this rules-based system determines the limitation period by asking the user questions about their case. Applying the correct rules found within the Act, the system calculates the limitation period and offers the user justification of its calculation, thus explaining and simplifying an otherwise complex process. Although this system had considerable shortcomings, a range of potential future applications for expert systems in law were, nonetheless, predicted. Indeed, Susskind claimed that "whenever human expertise is required [...] it is conceivable

⁴³ Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning (n 2), p.181

⁴⁴ Ibid, p.182

⁴⁵ Expert Systems in Law: A Jurisprudential Inquiry (n 2), p.34

⁴⁶ Joseph Cannataci, 'Law, Liability and Expert Systems' (1989) 3 Al & Society 169, p.182; Some Speculation About Artificial Intelligence and Legal Reasoning (n 10); M.S Willick, 'Professional Malpractice and the Unauthorized Practice of Professions: Some Legal and Ethical Aspects of the Use of Computers as Decision-Aids' (1986) 12 Rutgers Computers and Technology Law Journal 1

⁴⁷ Expert Systems in Law: A Jurisprudential Inquiry (n 2), p.255

⁴⁸ Latent Damage Law the Expert System (n 31), p.vii

⁴⁹ Ibid, pp.vii-viii

⁵⁰ See ibid pp.7-17; pp.142-144.

that an expert system could be of help".⁵¹ In the short term, he predicted that expert systems will be capable of solving clear cases void of uncertainty. These systems will not contain heuristic knowledge and will only reason with statements of law, to "draw legal conclusions on the basis of literal interpretations of the formal legal sources".⁵² In the long term, however, he predicted that, provided legal experts are willing to offer their expertise to knowledge engineers, systems will evolve to include heuristic knowledge which would enable them to solve deductive cases, reason with uncertainty and make probabilistically drawn conclusions based on learning from previous experiences.⁵³

Later systems include JUDGE, a rules-based system designed to calculate sentences for criminal offences relating to homicide;⁵⁴ and ASHSD-II (Advisory Support for Home Settlement in Divorce), a system designed to calculate the likely outcomes of divorce settlements based on peripheral, significant and essential preconditions submitted by the user.⁵⁵ Fig. 2.1 illustrates an example of ASHSD-II's application in a family-protection case:

⁵¹ Expert Systems in Law: A Jurisprudential Inquiry (n 2), p.11

⁵² Ibid, p.255

⁵³ Ibid, p.256

⁵⁴ James Popple, A Pragmatic Legal Expert System (Dartmouth Publishing 1996)

⁵⁵ Kamalendu Pal and John A. Campbell, 'An Application of Rule-Based and Case-Based Reasoning within a Single Legal Knowledge-Based System' (1997) 4 The Data Base for Advances in Information System 28

Fig. 2.1 Application of ASHSD-II to a Family-Protection Case⁵⁶

IF

(applicant is the wife)
(respondent is the husband)

(respondent has used violence against the applicant)

(respondent has threatened to use violence again)

THEN

The court may make one or both of the following orders:

- [1] an order requiring the respondent to leave the matrimonial home;
- [2] an order prohibiting the respondent from entering the matrimonial home

Irrespective of the capabilities of expert systems in both the short and long term, Susskind was clear that the "users of expert systems in law should be lawyers, or at least those with considerable familiarity with the workings of the legal and court systems" and not lay people with little understanding of the law.⁵⁷ Thus, in this first phase the answer to Susskind's enduring question – how will legal services be delivered and by whom? – is by lawyers and with the aid of expert systems. Whilst other commentators agreed that expert systems are "not for the public at large" ⁵⁸ it has been contended that to limit their use would be untenable:

"it may be neither ethical nor possible, for a variety of definitional and practical reasons, to keep "professional" systems out of the hands of laymen. Despite the opposition by professional groups that can be expected, it appears that home computerization of many "professional" services is imminent".⁵⁹

⁵⁶ Pal Kamalendu and John Campbell, 'ASHSD-II: A Computational Model for Litigation Support' (1998) 15(3) Expert Systems , p.172

⁵⁷ Expert Systems in Law: A Jurisprudential Inquiry (n 2), p.12

⁵⁸ Bryan Niblett, 'Expert Systems for Lawyers' (1981) 29 Computers and Law referenced in Law, Liability and Expert Systems, p.169

⁵⁹ Willick, M.S. referenced in Law, Liability and Expert Systems (n 46), p.169

Key to this contention is the practical difficulty of preventing developers and vendors from making their product available to lay persons on an open market. Added to this is the ethical difficulty of allowing the professions' monopoly of practice to continue, even in the wake of a viable alternative. ⁶⁰ It is particularly ethically sensitive when that alternative, if proven to function appropriately, could provide legal expertise to clients at a fraction of the price of a professional lawyer. As Cannataci notes, the assurances guaranteed by the professional-client relationship are not necessarily lost in a supplier-user relationship. If expert systems are made widely available, then the responsibility of the professional shifts to developers and vendors, against whom users may have recourse, when needed, via product liability as opposed to professional negligence liability, as before. ⁶¹ Thus, provided the user-supplier relationship is agreed and issues of liability are decided, there is no reason to restrict the use of expert systems. ⁶² Nonetheless, the dominant view, and the view of Susskind, at that time remained that expert systems are for use "by a lawyer and not by the client". ⁶³

Whilst Susskind's 1987 prediction therefore does not foresee public use of expert systems, other commentators at the time clearly did foresee expert systems disrupting legal services in this way. However, despite the early success of expert systems within financial services and the growth of home computerisation, by 1995 only a third of those originally developed were reportedly still being used and maintained, with half reported as being abandoned all together. By 2000, expert systems were largely considered a failure and Susskind conceded that many of the applications he discussed "have not directly borne fruit". Nonetheless, he claims that the reason for their failure was not due to the technology itself, but that those predicting their success were "naïve about the business models that might best

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⁶⁰ Ibid

⁶¹ Ibid (n 46)

⁶² Ibid, pp.174-175

⁶³ Expert Systems for Lawyers (n 58), p.3

⁶⁴ Early Expert Systems: Where Are They Now? (n 29), p.68

⁶⁵ Richard E. Susskind, Transforming the law: essays on technology, justice, and the legal

marketplace (Oxford : Oxford University Press 2000), p.161

underlie [their] exploitation".⁶⁶ Moreover, he maintains that taking a wider view of his earlier work and a looser definition of what is meant by 'expert systems' will reveal the continued relevance of much of the thinking of the 1980s. Focusing on the purpose of expert systems as opposed to their function, he argues that "the main purpose of expert systems was to make scarce expertise and knowledge more widely available and more easily accessible" and "this spirit is more alive today (in mid-2000) than ever before".⁶⁷ This apparent reframing of his earlier work brings us to the second phase of commentary, legal services in a digital information society, which finds its focus in the sharing of legal expertise in an increasingly digitised world.

2.2.2 Legal Services in a Digital Information Society

The second phase of commentary is focused on the type of legal service predicted within a digital or IT-based information society where "information is increasingly on screen instead of on paper".⁶⁸ Although no universally accepted definition of an information society exists, it generally encompasses a society in which the creation and distribution of information is a significant socio-economic activity which has a transformative effect on the ways in which we live our lives.⁶⁹ Although information technology is a significant part of the information society and is frequently cited as a driving force behind it,⁷⁰ the *digital* information society implies an even greater emphasis on IT, in particular digital communication.⁷¹ The digital information society is, therefore, best understood as a place in which increased opportunities to interact with information digitally have a significant effect on the everyday lives of individuals within society. It is "a world of flexible spaces, of new relationships, and of greater possibilities for individual and group communication".⁷² Thus, in such a society, digital technologies offer alternative methods of accessing information and sharing

⁶⁶ Ibid, p.161

⁶⁷ Ibid, p.162

⁶⁸ M. Ethan Katsh, Law in a Digital World (Oxford University Press 1995), p.4

⁶⁹ Frank Webster, Theories of the Information Society (Routledge 2002), ch.2

⁷⁰ M Hilbert, Digital Technology and Social Change (2015)M Wark, The Virtual Republic (Allen & Unwin 1997), pp.21-28; Digital Technology and Social Change, University of California [online open course] https://youtube.com/watch?v=xR4sQ3f6tW8&list=PLtjBSCvWCU3rNm46D3R85efM0hrzjuAlg

⁷¹ Law in a Digital World (n 68), p.4

⁷² Ibid, p.4

knowledge. As a result, the fundamental claim in this phase is that IT will "reengineer the entire legal process and result in a major change in the predominant ways that legal services are delivered and justice administered".⁷³ In particular, "online legal guidance derived from the knowledge of practising lawyers, delivered across the internet, will come to be the dominant source of legal assistance in the future".⁷⁴

The premise of this claim is that the public is not "irreversibly tied to the way in which the law is currently administered" nor is it "so concerned with the nature of the justice system generally". 75 Rather, clients come to the law with a clear purpose of seeking legal knowledge and experience to resolve their issues, which has traditionally been provided by lawyers on an advisory, consultative basis.⁷⁶ Therefore, as alternative methods of gaining access to knowledge develop, departing from traditional practising methods in law will not be of public concern, especially if the new service being delivered is "cheaper, quicker or better". 77 Thus, in a digital information society, an entirely new legal market will emerge as legal knowledge is increasingly shared via digital products and services designed for direct use by nonlawyers who are less reliant on the professional to deliver specialist legal advice.⁷⁸ It is argued that this change will amount to a "shift in paradigm of legal service [...] from a service that is substantially advisory in nature today to one which will become one of many information services in the IT-based information society of the future".⁷⁹ Within Susskind's work, there is now a clear departure from his prediction in the previous phase, where expert systems were to be used by lawyers to assist in their delivery of legal advice. Here, he is of the view that digital technologies will be used by lay citizens to access legal expertise directly. Thus, in a fully-fledged IT-based information society, the principle users of digital legal technologies "will not be lawyers at all".80

⁷³ Richard Susskind, The Future of Law (Clarendon Press 1998), p.2

⁷⁴ Transforming the law: essays on technology, justice, and the legal marketplace (n 66), pp. viii-x

⁷⁵ The Future of Law (n 73), pp.1-2

⁷⁶ Ibid, p.2

⁷⁷ Ibid, p.2

⁷⁸ Ibid, pp.95-96

⁷⁹ Ibid, p.97

⁸⁰ Ibid, p.165; Transforming the law: essays on technology, justice, and the legal marketplace, p.101

Early commentaries of the 1970s which claimed that the expansion of knowledge and expertise in society inherently calls for *increasing* numbers of professionals rely on "two basic characteristics of profession – mastery over knowledge and a humanitarian approach in application of that knowledge". However, the digital information society is a place where there are increased opportunities for wider interaction with knowledge and expertise, which presents a significant challenge to these assumptions that underpin traditional practices. In such a society, much of the knowledge traditionally kept in the heads of professionals, supported by practitioner texts and paper files, is digitised and open access. The growth of technology, in particular the development of the internet, therefore, gives non-professionals access to previously inaccessible information which consequently "loses its esoteric character because anyone can retrieve it". The potential impact of this on the traditional professions is characterised succinctly by Marie Haug, whose thesis is revisited in Chapter 5:

"In a period when second graders are operating PCs in school, the time may be coming when the issue will not be who has the knowledge in her brain, but who knows the technique for extracting it from computer memory". 84

Developments that shape the ways in which information is distributed are particularly relevant to the practice of law as "law is oriented around information and communication". It is "in almost all its parts, dependent on communication and information".⁸⁵ Thus, "law and lawyers are profoundly affected by changes in information technology" even though "those effects receive less attention than they deserve".⁸⁶

⁸¹ Marie R Haug, 'Deprofessionalization: An Alternative Hypothesis for the Future' (1972) 20(1) The Sociological Review , p.195

⁸² Law in a Digital World (n 68), p.4

⁸³ Eliot Freidson, Professionalism reborn. Theory, Prophecy and Policy (Polity Press 2004), p.131

⁸⁴ Marie R Haug, 'A Re-Examination of the Hypothesis of Physician Deprofessionalization' (1988) 66(Suppl 2: The Changing Character of the Medical Profession) The Milbank Quarterly 48, p.51

⁸⁵ Early Expert Systems: Where Are They Now? (n 29), pp.6-7

⁸⁶ Peter Martin, Learning the Law from Littleton to Laser Disks and Beyond (1994)

In an information society, information technologies are predicted to "break down informational distances" giving lay-persons "easier or expanded access to information and the opening up of new sources of legal information". Ratsh argues that the pervasiveness of information online thus creates "a different distance between legal and non-legal information than there is in a print culture, and there will be a different distance between those who have controlled information in the past (the legal profession), and those who have not (clients and citizens)". The outcome is a "very different market for legal knowledge and expertise" driven by innovative technologies which encourage new working practices in law.

According to Susskind, this change represents a shift in the paradigm of legal service. The current legal paradigm, he claims, is advisory and consultative in nature and offers clients a reactionary service to resolve individual disputes based on specific case details. The law is consequently restrictive to clients and is often perceived as a barrier to overcome, rather than facilitative of business or personal goals. According to Susskind, specialisation has led to a restrictive legal focus, with lawyers limiting their work to legal analysis, without taking a pragmatic or holistic view of the wider context when advising clients. Finally, he characterises the law as print based and dominated by dedicated legal professionals who are remunerated on a time basis and not a productivity basis. 92 In the new legal paradigm that Susskind envisages, the law will provide information rather than advice, on a one-to-many basis. It will be proactive in pre-empting legal disputes and will empower people and businesses offering pragmatic, holistic and re-usable information rather than narrow advice limited only to current legal issues. IT will form the basis of sharing legal information which will be formulated by legal specialists and handled by information or knowledge engineers. 93 Thus, the former client-lawyer relationship will be displaced by a new set of relationships between users of legal information, legal specialists who

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⁸⁷ Law in a Digital World (n 68), p.84

⁸⁸ Ibid, p.88

⁸⁹ Ibid, p.84

⁹⁰ The Future of Law (n 73), p.270

⁹¹ Ibid, p.267

⁹² Ibid, pp.41-46

⁹³ Ibid, pp.285-292

create legal knowledge, legal information engineers who turn this knowledge into digital information and providers of legal information who provide a platform to make the information accessible. 94 Users will pay for the knowledge and expertise they receive on a commodity pricing basis as opposed to the current hourly billing basis. 95 In this new paradigm, lawyers will still be required to "interpret and repackage formal sources of law" but will "sell it not through one-to-one advisory work, but in the creation of legal information products and services". 96

Table 2.1 Susskind's Shift in Legal Paradigm⁹⁷

Today's Legal Paradigm	Tomorrow's Legal Paradigm
Legal Service	Legal Service
advisory service	information service
one-to-one	one-to-many
reactive service	proactive service
time-based billing	commodity pricing
restrictive	empowering
defensive	pragmatic
legal focus	business focus
Legal Process	Legal Process
legal problem solving	legal risk management
dispute resolution	dispute pre-emption
publication of law	promulgation of law
a dedicated legal professional	legal specialists & information engineers
print-based	it-based legal systems

⁹⁴ Ibid, p.266

⁹⁵ Ibid, pp.287-288

⁹⁶ Ibid, p.270

⁹⁷ Ibid, p.286

Writing in 1998, Susskind projected that this paradigm shift was not "likely to be realised in the next few years" but would come about within 20 years or so once the 'technology lag' is overcome. 98 The technology lag is defined as our relative inability to use technology to analyse, refine and manage mass data compared with our ability to use technology to capture, store and retrieve data. In other words: "we are more successful in programming computers to process data than knowledge"99 thus the "storage potential of technology exceeds the ability of technology to process and order the information so that it can be utilised". 100 As such, Susskind predicted a short to medium term transitional period between the print-based industrial society and the IT-based knowledge society, during which time the most vital function that IT will play is in automating current tasks "computerizing, motorizing, routinizing and systematizing existing products". 101 The paradigm shift will only come when our capacity to manage digital legal information more effectively is realised. 102 The technologies utilised by lawyers in the transitional phase to automate legal tasks will then not be used by lawyers at all. Lawyers, instead, will supply their "knowhow in packages which will become a form of marketable service". 103

The new legal paradigm is claimed to unlock what Susskind refers to as the *latent legal market* – lay members of the public who "today are generally unable to benefit from the legal input they require because conventional legal service is too expensive or impractical in the circumstances".¹⁰⁴ Although most commentators refer to this issue of inaccess to justice as *unmet legal need*, Susskind clarifies that "they are two sides of the same coin" as both characterise the present inability for many claimants to achieve access to justice.¹⁰⁵ However, Susskind's terminology deliberately emphasises that, from a lawyer's perspective, the issue of inaccess to justice

⁹⁸ Ibid, pp.96-97

⁹⁹ Ibid. p.58

¹⁰⁰ David Bausor, 'Review of Susskind, R, The Future of Law: Facing the Challenges of Information Technology' (1999) 2(1) Digital Technology Law Journal, p.1

¹⁰¹ The Future of Law (n 73), p.195

¹⁰² Ibid(n 73), p.285

¹⁰³ Ibid, p.165

¹⁰⁴ Ihid. p.27

¹⁰⁵ Transforming the law: essays on technology, justice, and the legal marketplace (n 66), p.114

represents an "untapped market".¹⁰⁶ The Open Society Justice Initiative and The Organisation for Economic Co-operation and Development define a legal need as unmet if a "justiciable issue is inappropriately dealt with as a consequence of effective legal support not having been available when necessary".¹⁰⁷

A recent survey conducted by the World Justice Project reported that unmet legal need is a globally ubiquitous and frequent issue. 108 Surveying over 100,000 people in over 101 countries, they found that half the people surveyed (49%) had experienced at least one legal problem within the last two years. 109 Less than a third (29%) of those respondents sought advice to understand or resolve their legal issue, despite the vast majority claiming that it had adversely impacted their lives. 110 From the survey data, they predict that "1.4 billion people have unmet civil or administrative justice needs", 111 thus supporting the view that "legal guidance is needed today far more extensively than it can be offered or taken". 112 Of these potential claimants, many "live in contexts with functioning institutions and justice systems," but "face obstacles to resolving their everyday justice issues". 113 These obstacles begin with an inability to recognise their problem as having a legal remedy: "fewer than 1 in 3 people (29%) understood their problem to be legal in nature as opposed to 'bad luck"". 114 That 71% of respondents did not understand their problem to be legal in nature is a clear failure of the current legal paradigm. It is in this sense that Susskind considers the advisory, reactive service as restrictive to access to justice. Thus, information technology in the new legal paradigm promises to improve access to

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¹⁰⁶ Ibid, p.114

¹⁰⁷ OECD and Open Society Justice Initiative, Legal Needs Surveys and Access to Justice, 2018) Paris: Organisation for Economic Co-operation and Development, p.22

¹⁰⁸ Sarah Chamness-Long and Alejandro Ponce, Measuring the Justice Gap: A People-Centered Assessment of Unmet Justice Needs Around the World, 2019)

¹⁰⁹ Ibid, p.13

¹¹⁰ World Justice Project, Groundbreaking Study Reveals Unmet Legal Needs Worldwide (2019) available at: https://worldjusticeproject.org/news/groundbreaking-study-reveals-unmet-legal-needs-worldwide [accessed 10th January 2020]

 $^{^{111}}$ Measuring the Justice Gap: A People-Centered Assessment of Unmet Justice Needs Around the World (n 108), p.13

¹¹² Transforming the law: essays on technology, justice, and the legal marketplace (n 65), p,55; p.114

 $^{^{113}}$ Measuring the Justice Gap: A People-Centered Assessment of Unmet Justice Needs Around the World (n 108), p.5

¹¹⁴ Groundbreaking Study Reveals Unmet Legal Needs Worldwide (n 110)

justice to the general public, by offering legal information *en masse* to empower and liberate the latent legal market. The ambition for technology to help solve the "crisis" of access to justice was shared by Lord Woolf, who saw improved access to justice, speedier recourse to the courts and an overall improved service for citizens as three of the key benefits of using information technology in civil justice. As information technology is anticipated to improve access to justice for claimants, it is also hoped that it will address the issue of perceived exploitation of the system by lawyers, who will no longer be able to restrict access to legal knowledge and charge hourly rates for access to their expertise. The shift in paradigm will consequently not present an "opportunity for exploitation or monopoly" by lawyers, "but the chance to contribute, at a fair rate of return, to the grave problem of inaccess to justice". 118

Although discussion of a new legal paradigm has now been abandoned in favour of discussing LegalTech and the commoditised delivery of legal tasks, ¹¹⁹ the potential for technology to improve access to justice remains a priority in some of the literature:

"With the advent of AI and potential for robotics in a law firm setting, I view this as an opportunity to right some wrongs:

- a) We can do more to help the poor and disenfranchised; and, in contrast,
- b) We can bring an end to the disingenuous 'rip-off' lawyers who bleed us dry with 'grotesque costs" 120

Now, however, the discussion is focused on the use of technology to undertake certain tasks that will either assist or replace the legal professional, both of which are anticipated to improve the efficiency and accessibility of justice.

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¹¹⁵ Transforming the law: essays on technology, justice, and the legal marketplace (n 65), pp. viii-x; pp. 101-102; pp.80-87; p.113; The Future of Law (n 73), p.27

¹¹⁶ Andrew Caplen, Access to Justice Day - breakfast speech. (2014), no pagination

¹¹⁷ Woolf, Access to Justice - Interim Report, 1995), Chapter 13

 $^{^{118}}$ Transforming the law : essays on technology, justice, and the legal marketplace (n 65), p.114 119 See s.2.3

¹²⁰ Chrissie Lightfoot, Tomorrow's Naked Lawyer (Ark Group 2015), pp.118-119

2.2.3 LegalTech and the Delivery of Task Based Legal Services

The third phase of commentary, which began roughly in the late 2000s and continues today, comes from considerably more diverse sources. In particular, the media within both legal and general spheres have begun to show interest in the impact of technology on the legal profession, as well as the professions generally, adding broader commentary to the debate on the future of legal practice. Despite a broader range of commentators, the commentary has a much tighter focus on the delivery of legal services and the use of technology in the execution of specific legal tasks. In contrast to the previous phase where there was a dual focus on the use of technology within the legal profession and the wider social use of technology, here the commentary is primarily directed at technology and the day-to-day tasks of practitioners. The central prediction in this phase is that their work is "on the brink of a fundamental transformation" 121 which will be driven by two forces: commoditisation, itself driven by a market preference for increased efficiency; and a pervasive uptake of LegalTech. 122 It is the broad conclusion of this phase that traditional practicing methods are unsustainable and, as restrictions to the ownership rules of legal businesses are lifted, entrepreneurial businesses that undertake legal work quicker and cheaper will emerge as new market leaders. It is predicted that such businesses will convert legal processes from traditional human handcrafting to fully automated processes using increasingly sophisticated systems. 123 Even where there is resistance from current market leaders, "technology solutions at the bottom of the market will push change throughout the market". 124 Consequently, "the delivery of legal services will be a very different business when financed and managed by nonlawyers".125

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 $^{^{121}}$ Richard E. Susskind, The end of lawyers? : rethinking the nature of legal services (Oxford : Oxford University Press 2010), p.1

¹²² Ibid, p.1; Commoditisation is discussed in s.2.3.

¹²³ Ibid (n 121), p.140

¹²⁴ Dana Remus and Frank Levy, 'Can Robots Be Lawyers?' (2017) 30 The Georgetown Journal of Legal Ethics 501, p.541

¹²⁵ The end of lawyers?: rethinking the nature of legal services (n 121), p.10

Nonetheless, despite the fact that "our systems and machines are becoming increasingly capable"126 and notwithstanding the introduction of new types of legal business, it is acknowledged that some legal tasks will require human input both in the short and long term. 127 For example, McGinnis and Pearce distinguish between "journeymen lawyers" or "standard legal practitioners" who undertake routine legal work and are susceptible to displacement by technology, and "other classes of lawyers" for whom technology is less threatening. 128 Thus, the main discussion point within this phase is how likely, and to what extent, might the development of technology disrupt the work of lawyers. From this, two broad themes have emerged that need to be distinguished: the use of technology to improve the efficiency of current legal tasks; and the use of technology to displace current legal tasks. In both, the adoption of technology has an impact on practice and, to varied extents, moves legal work away from the traditional bespoke approach. 129 However, in the former, legal tasks are to be carried out in a similar manner as before, as practices "standardize and systematize their routine activities" using technologies that support a "more efficient version of what we have today". 130 In the latter, technology stands to change practice much more fundamentally as "increasingly capable machines [...] disrupt much of the work of traditional professionals". 131 Although the distinction between these appears similar to the IT based information society and the transitional stage that precedes it, in the previous phase the discussion is based primarily on the role of information technology in making legal expertise ubiquitous. In the present phase, whilst the sharing of expertise still features, the primary focus is on the role of technology in relation to specific legal tasks, for example constructing a letter of claim or valuing an injury. Whilst the impact of this is still predicted to be

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 $^{^{126}}$ The future of the professions : how technology will transform the work of human experts (n 28), p.159

¹²⁷ The end of lawyers?: rethinking the nature of legal services (n 121), p.110

 $^{^{128}}$ Russell Pearce and John McGinnis, 'The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services' (2014) 82 Fordham law review , p.3042

¹²⁹ The end of lawyers?: rethinking the nature of legal services (n 121), pp.28-33

¹³⁰ The future of the professions : how technology will transform the work of human experts (n 28), p.9

¹³¹ Ibid, p.9

seismic, there is now no suggestion of a new legal paradigm, but rather a new market in which successful legal businesses leverage increasingly sophisticated technologies to (re)assess and (re)design their delivery and service model.¹³²

Perhaps due to the task-based focus of this phase, much of the public discussion has focused on the impact of technology on lawyers' jobs, with the media particularly focusing on the extent to which technology may or may not "replace" lawyers, 133 causing them to disappear from society "as other craftsmen have done over the centuries". 134 Academic commentary has, instead, focused on the legal market and the extent to which technology may sustain or disrupt the status quo. However, the terminology used within academic commentary has not been consistent and even within Susskind's leading account there has been change and disagreement. The challenges of this terminology will be addressed in s.2.4. However, it is sufficient to note for the purposes of the current discussion, that this thesis adopts the original terminology, developed within Management Theory, of sustaining and disruptive technologies. 135 Sustaining technologies are those that support or enhance the ways in which businesses or industries currently operate. They might offer more efficient methods of working but, overall, the market remains unchanged by their use. They, thus, fall within the first to the two themes introduced above: the use of technology to improve the efficiency of (or 'automate') current legal tasks. Disruptive technologies, on the other hand, are those that disturb and challenge the functioning of current businesses by introducing completely new practices and fundamentally changing the work that is being done. They have "the potential for revolutionizing an industry"136 by "unseat[ing] and bring[ing] about the demise of even market leaders"137 as new providers establish alternative practices that compete with the

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¹³² Tomorrow's Naked Lawyer (n 120), p.105

¹³³ Armies of Expensive Lawyers, Replaced by Cheaper Software (n 27)

¹³⁴ The end of lawyers?: rethinking the nature of legal services (n 121), p.4; Will Robots Steal Your Job? (n 26); Armies of Expensive Lawyers, Replaced by Cheaper Software (n 27)

¹³⁵ Clayton Christensen, The Innovator's Dilemma (Harvard Business School Press 1997)

¹³⁶ Clark Gilbert and Joseph Bower, 'Disruptive Change: When Trying Harder Is Part of the Problem' (2002) Harvard Business Review Available at: https://hbr.org/2002/05/disruptive-change-when-trying-harder-is-part-of-the-problem (accessed 07 November 2018)

¹³⁷ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.39

old.¹³⁸ This distinction between technologies that automate legal work and technologies that disrupt legal work is important for this thesis as it, along with the later discussion of commoditization, forms the basis of discussions in Chapter 5 on the transformative effect of technology on practice.

The crux of the predictions in this phase are that, in the short term, lawyers will employ sustaining technologies to achieve greater efficiency in their daily practice. Susskind and Susskind suggest that this "reassuringly familiar" 139 situation is one of two futures for the profession. "It is a more efficient version of what we have today." [...] [P]rofessionals continue working much as they have done since the middle of the nineteenth century, but they heavily standardize and systematize their routine activities". 140 The second future, which is predicted in the medium to long term, is one where technology takes a far greater role within professional practice. By increasing the use of information technology and machine intelligence, concerns of efficiency, costs and capacity within the profession stand to become largely dispersed. This future invokes a "transformation in the way that the expertise of professionals is made available in society" such that "increasingly capable systems will, in various ways, displace much of the work of traditional professionals". 141 Here, disruptive technologies are predicted to radically change the ways in which lawyers work, as "[e]ntirely new ways of delivering legal services will emerge [and] new providers will enter the market", 142 bringing improved methods that will steadily dismantle traditional legal practice. 143

In agreement with Susskind, McGinnis and Pearce argue that information technology stands to transform the function of professionals "more radically over the next two decades than [...] over the last two centuries". ¹⁴⁴ They caveat this, however, as until

¹³⁸ Disruptive Change: When Trying Harder Is Part of the Problem (n 136)

¹³⁹ The future of the professions : how technology will transform the work of human experts (n 28), p.9

¹⁴⁰ Ibid, p.9

¹⁴¹ Ibid. p.9

¹⁴² Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.3

 $^{^{143}}$ The future of the professions : how technology will transform the work of human experts (n 28), n.9

¹⁴⁴ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.xiii

"the combination of hardware, software, and connectivity progress to a certain point, machine intelligence represents no substitute for human activity". Nonetheless, their prediction is clear that as technology is advancing "a legal world will emerge that is manifestly different from today's". This view is, in effect, the same as Susskind's, that the full disruptive effect of technology will be felt by the legal profession, but not until after a period of automation. The consequence for lawyers is that "unless they adapt, many traditional legal businesses will fail. On the other hand, a whole set of fresh opportunities will present themselves to entrepreneurial and creative young lawyers". 147

Following a task-based focus, commentators have taken a much more practical approach than the previous two phases. In this phase, there is no discussion of jurisprudential issues, nor predictions of shifts in legal paradigm. Instead, the commentary highlights specific legal tasks that are predicted to change in the future, or technology types that are anticipated to transform practice. In this vein, McGinnis and Pearce suggest that there are five significant areas of legal practice that machine intelligence will transform in the near future: (1) discovery; (2) legal search; (3) document generation; (4) brief and memorandum generation; and (5) legal analytics. Table 2.2 displays how these five areas map on to the thirteen legal technologies predicted by Susskind to disrupt legal practice. 149

As the table shows, McGinnis and Pearce's five areas directly map onto just four of the disruptive technologies discussed by Susskind, with artificial intelligence having multiple potential applications. With the exception of workflow and project management, the remaining nine of Susskind's disruptive technologies are not concerned with specific legal tasks but are more generally predicted to disrupt the

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¹⁴⁵ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3045

¹⁴⁶ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.82

¹⁴⁷ Ibid, p.3

¹⁴⁸ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128)

¹⁴⁹ Tomorrow's Lawyers. An Introduction to Your Future (n 1)

legal market by introducing new methods of communication, marketing, digital learning and digital access to justice.

Table 2.2 Mapping McGinnis and Pearce's Technology Types with Susskind's Disruptive Technologies

McGinnis & Pearce	Susskind
Discovery	Artificial Intelligence
Legal Search	Intelligent Legal Search
	Artificial Intelligence
Document generation	Automated document assembly
	Artificial Intelligence
Brief and memo generation	Automated document assembly
	Artificial Intelligence
Legal analytics	Big Data & Artificial Intelligence
-	Relentless Connectivity
-	Electronic Legal Marketplace
-	e-Learning
-	Online Legal Guidance
-	Legal Open Sourcing
-	Closed Legal Communities
-	Workflow and Project Management
-	Embedded Legal Knowledge
-	Online Dispute Resolution (ODR)

Discovery is a pre-trial procedure in the USA whereby parties in a civil case obtain evidence from each other. In the UK this is known as disclosure and is the formal point of the litigation process at which parties are required to disclose relevant documents to each other. This work involves searching through case materials to ensure that only the relevant documents are disclosed and, once shared, the parties then have to read and digest the documents they have received. Artificial intelligence is predicted to take some of this time consuming and costly work away from the practitioner in a process referred to as 'e-Discovery'. At its simplest this is "the process by which computers search a database for keywords that lawyers agree are marks of relevance". More complicated systems use predictive coding to identify relevant sections of document and, thereby, reduce the amount of reading required by practitioners. Some large law firms already have in house e-discovery units; and new technology start-ups such as Modus in the USA offer e-discovery services at fixed prices. However, the majority still use traditional methods leaving a "legal market that still spends huge sums on lawyers to pore through legal documents". 153

Legal Search is an area in which technology already assists through search engines such as Lexis and Westlaw which, by the 1970s had transformed the ways in which lawyers and academics perform legal research. This started as early as the mid-1960s when the Ohio Bar Association began to develop an electronic system that effectively became the foundation for Lexis, which was made usable by the public in 1974. Artificial intelligence stands to take the technology considerably further than simple search engines that rely on key word searches. By introducing semantic searches, IBM's Watson promises to "allow lawyers to input natural language queries to computers, and the computers will respond semantically to those queries with

¹⁵⁰ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3047

¹⁵¹ Ibid, p.3048

¹⁵² Modus, 'Discover Modus' http://discovermodus.com/ accessed 10 October 2020

Williams, Modus Raises \$10m for Data Driven Approach to E-Discovery (2013) Available at: https://techcrunch.com/2013/06/11/modus-raises-10m-for-data-driven-approach-to-e-discovery/ [accessed 20th August 2020]

¹⁵⁴ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3048

directly relevant information". 155 In 2014, proponents of Watson claimed that "in the not-too-distant future, artificial intelligence systems will have the ability to reduce answering a legal question to the simplicity of performing a search". 156 By January 2016, ROSS Intelligence (a legal research tool powered by Watson) had come into being. 157 Promoted as "an advanced legal research tool that harnesses the power of artificial intelligence to make the research process more efficient"158 it promises to reduce the amount of time spent on legal research and improve results. 159 Unlike the traditional legal search engines, the software is designed to make judgments on the law that it finds, to effectively sort search results by precedent, not just by date, chronologically or alphabetically. If, as McGinnis and Pearce claim, "most lawyers can neither comprehensively evaluate the strength of precedent or recall all possible precedents to mind"160 then such systems stand to offer a considerable improvement to practice. This level of sophisticated legal search is what Susskind refers to as Intelligent Legal Search. 161 He predicts that, in the future, systems will be able to search, review and categorise legal documents more precisely, at greater speed and with lower cost than paralegals or junior lawyers who presently undertake these tasks.

Document generation is another area where technology already assists. Templates have long been used to assist lawyers in document generation; and, as systems have become more sophisticated, the input required to complete templates has decreased. With increased interconnectedness of data, the effectiveness of systems to generate documents is steadily improving and has gone some way to automating the work of lawyers beyond simple templates. Automated document generation

¹⁵⁵ Ibid, p.3049

¹⁵⁶ Josh Blackman, 'The Path of Big Data and the Law', Big Data, Big Challenges in Evidence-Based Policy Making (West Academic Press 2014), p.3

¹⁵⁷ Anthony Sills, 'ROSS and Watson Tackle the Law' 2016)

< https://www.ibm.com/blogs/watson/2016/01/ross-and-watson-tackle-the-law/> accessed 07 December 2018

¹⁵⁸ Ross Intelligence, 'Homepage: AI Meets Legal Research' < https://rossintelligence.com/ accessed 07 December 2018

¹⁵⁹ ROSS and Watson Tackle the Law (n 157)

¹⁶⁰ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 130), p.3050

¹⁶¹ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.47

refers to systems that generate documents automatically following a series of questions and answers via a user interface. At their most sophisticated, such systems are able to generate full and final drafts of documents within minutes and are even predicted, in some cases, to be capable of doing so without the need for assistance from a legal expert. 162 A current example of this is the software developed by US law firm Fenwick & West which automatically creates the documents required for incorporating start-up companies. Talking in interview, their Chief Information Officer claims the technology "reduced the average time we were spending from about 20 to 40 hours of billable time down to a handful of hours [...] In cases with even extensive documents, we can cut the time of document creation from days and weeks to hours". 163 Other companies such as LegalZoom 164, Epoq 165 and Rocket Lawyer¹⁶⁶ have prepared document templates that consumers can download directly from their websites. After answering a series of questions, the website tailors the document to the individual's needs. Remus and Levy note that there are circumstances of fact, as well as law, which can make document drafting a more complex process. In such cases, automated document generation has limited benefit, as the technology is presently incapable of taking account of such complexities. The working examples noted by Susskind come primarily from transactional legal areas, such as conveyancing and contract, as opposed to adversarial, litigation work which "has largely resisted automation". 167

It is also important to note that these current technologies are not sophisticated enough to produce full and final drafts, but in line with Susskind's predictions, McGinnis and Pearce predict that "within ten to fifteen years, computer-based

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¹⁶² The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3051; Paul Lippe and Daniel Katz, 10 Predictions About Hom IBM's Watson Will Impact the Legal Profession (2015), available at:

http://www.abajournal.com/legalrebels/article/10 predictions about how ibms watson will imp act [last accessed 10 June 2019]

¹⁶³ Will Robots Steal Your Job? (n 26), no pagination

¹⁶⁴ See Legal Zoom, 'Homepage' <www.legalzoom.com> accessed 10 August 2020; Legal Zoom,

^{&#}x27;Homepage (UK)' <www.legalzoom.co.uk> accessed 10 August 2020

¹⁶⁵ See Epoq, 'Homepage' <www.epoq.co.uk> accessed 10 August 2020

¹⁶⁶ See Rocket Lawyer, 'Homepage' <www.rocketlawyer.co.uk> accessed

¹⁶⁷ Can Robots Be Lawyers? (n 124), p.521

services will routinely generate the first draft of most transactional documents".¹⁶⁸ Once the artificial intelligence behind these systems reaches a proven level, it is predicted that such technologies will be totally disruptive to the future lawyers:

"Once we have fully artificial intelligence enhanced programs like LegalZoom, there will be no need for lawyers, aside from the highly specialized and expensive large-law-firm variety". 169

Briefs and memorandums are noted as less easy to generate than legal forms discussed above. Remus and Levy draw a distinction between document drafting and this form of legal writing. They define document drafting as "the development of legal documents such as deeds, contracts, wills, and trusts, that reflect the intent and agreement of the parties". Priefs and memorandums, however, are "written work that characterizes the state of the law and/or its application to a particular factual situation". The process of producing a brief or memorandum, they say, is considerably more difficult to automate than the process of producing a standard legal document, as a legal argument expressed in a legal brief cannot be simplified in the same way. However, McGinnis and Pearce assert that "machine intelligence will not stop with automating forms". Prief Although they acknowledge that only rough drafts that will require "very substantial additions and rewriting" can be automated using current technologies, they predict that over time more sophisticated technologies will be able to produce more useful drafts leading, eventually, to "finished products" useful "at least for low value transactions". 174

Tech start up Narrative Science uses artificial intelligence to write a narrative based on entered data. Their system, *Quill*, utilizes "advanced natural language generation

¹⁶⁸ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128) p.3051

¹⁶⁹ 10 Predictions About Hom IBM's Watson Will Impact the Legal Profession (n 162)

¹⁷⁰ Can Robots Be Lawyers? (n124), p.518

¹⁷¹ Ibid. p.519

¹⁷² Ibid, pp.519-520

¹⁷³ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3051

¹⁷⁴ Ibid, p.3052

[...] to automatically transform their data into narratives".¹⁷⁵ Their three-stage process first analyses data to identify the relevant facts before utilising natural language generation software to construct the narrative. Quill then tailors the narrative to the intended audience. This technology is, currently targeted towards businesses to aid with writing promotional materials and documents from their available data. However, applied and developed in a legal context it has the potential for drafting legal memos as McGinnis and Pearce predict.

Legal Analytics – using "fact patterns, precedent and case outcomes" lawyers make judgments and predictions to advise clients, based on their intuition and exposure to the law. 176 Using predictive analytics could aid that process as, in a similar way, predictive analytics uses known data to predict what might happen in the current situation. However, just as lawyers' predictions are never unequivocal, predictive analytics will always provide "likelihoods rather than certainties". 177 But, as artificial intelligence improves and data sets grow, legal analytics are anticipated to more effectively predict the outcome of a legal case. McGinnis and Pearce claim that predictive analytics is already "all the rage across the corporate world" and predict that when systems improve they "will reduce the value of the lawyer's assessment in at least some cases". 178 Nonetheless, they argue that there will remain a role for the expert professional lawyer to make judgments, using the insights that predictive analytics can offer. ¹⁷⁹ Susskind, on the other hand, argues that artificial intelligence based legal problem solving has potential to totally disrupt the perception of legal decision making in its entirety. He predicts a future where legal analytics, artificial intelligence and big data are utilised to provide enhanced online legal services without the need for legal 'human' expertise at all. 180

¹⁷⁵ Narrative Science, 'Homepage' <www.narrativescience.com> accessed 15 August 2020

¹⁷⁶ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3052

¹⁷⁷ Ibid, p.3052

¹⁷⁸ Ibid, p.3052

¹⁷⁹ Ibid, p.3052

¹⁸⁰ Ibid; Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.49

Predictive analytics has already made an appearance within intellectual property law where Lex Machina supply analytics for patent lawyers. However, this is a small and self-contained area of law and the money involved in this work makes the innovation required to start companies like Lex Machina highly lucrative.

The nine remaining disruptive technologies cited by Susskind but not referred to above are:

- Relentless connectivity the permanent connectedness of professionals to their clients via IT
- The electronic legal marketplace consumer websites for legal advice, for example price comparison sites between firms, reputation systems for individual practitioners and auctions for legal services
- E-learning the learning and training through multi-media technologies which could transform legal education and the dissemination of legal knowledge
- 4. Online legal guidance legal guidance for lay members of the public provided over the internet
- 5. Legal open-sourcing openly available repositories of legal materials, free for use by the public at large
- 6. Closed legal communities closed online communities of individuals and organisations collaborating to share legal knowledge and experience online
- 7. Workflow and project management systems designed to make the management of legal work more efficient and consistent
- 8. Embedded legal knowledge law being injected into machines that lay members of the public use in their everyday social and work lives in order to become embedded as part of the infrastructure, rather than a passive resource

¹⁸¹ See Lex Machina, 'Homepage' <https://lexmachina.com/> accessed 19 September 2020

9. Online dispute resolution – resolving legal disputes entirely or largely online without the need for physical hearings¹⁸²

It is Susskind's prediction that these technologies "will present fundamental, unavoidable, and pressing challenges for most legal businesses". They each have potential to disrupt the legal market, fundamentally changing the ways in which legal services are accessed, by introducing new competition to the market for providing legal services and, in some cases, by removing the legal professional all together. He concludes:

"Each technology on its own would be worrying enough; in combination, they will irreversibly and emphatically change the face of legal service". 184

Despite this bold apparent conclusion, not all areas of legal practice are predicted to be affected by disruptive technologies equally. The 'headline and caveat' approach that characterises the commentary in this phase makes it difficult to determine the extent of some of the predictions. The 'headline' claims that technology will "radically transform the role of lawyers" and "bring about the demise of market leaders", whilst the caveat notes that some "work cannot be standardized or computerized" and a "bespoke service is unavoidable". The weakness of this approach, identified and defined by this study as a 'headline and caveat' approach, is discussed further in s.2.4.

An additional caveat noted within this phase of commentary are 'expert trusted advisers' who "communicate their guidance not just with integrity and in a

¹⁸² The end of lawyers?: rethinking the nature of legal services (n 121), pp,100-145

¹⁸³ Ibid, p.145

¹⁸⁴ Ibid, p.145

¹⁸⁵ Artificial Intelligence to Radically Transform the Role of Lawyers (n 21), no pagination

¹⁸⁶ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.39

¹⁸⁷ Ibid, p.109

¹⁸⁸ Ibid, p.109

Confidential manner but in a highly tailored, customized, and personalized way". 189
They reportedly cannot be replaced by technology that can neither empathise nor sympathise with clients. Both of these caveats are difficult to assess as neither is sufficiently specific. 'Expert' and 'trusted' are both relative terms that are not explained or defined. There is, likewise, no explanation of when 'integrity' might be required or desired, nor any appreciation of the subjective nature of such a quality. The one example offered in the literature for wholly bespoke legal work is that of advocates and the judiciary in court, which is predicted to continue in many ways similar to the present day. 190 Again, this example suffers from the 'headline and caveat' approach, as in the headline we are told that "the workings of our courts will be transformed" 191 and in the caveat that "machines cannot yet orate in court" 192 and judicial decision making in difficult cases is "beyond the capabilities of current and foreseeable computer systems". 193

Although outside the scope of this project, it is worth noting that predictions of online dispute resolution in this phase have been particularly inconsistent. In 2013, it was Susskind's submission that judicial work will be impacted by sustaining technologies that will automate and standardise some judicial tasks but that it is neither possible nor desirable for technology to disrupt the judiciary.¹⁹⁴ He, likewise, predicted that the work of advocates will not see disruption, but that junior advocates will simply need to "prepare to engage in virtual hearings" as online dispute resolution is realised.¹⁹⁵ In 2019, however, Susskind's view fundamentally changed.¹⁹⁶ He now predicts and supports "the determination of cases by regular judges" but without a

¹⁸⁹ Ibid, p.110; See also The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3042

¹⁹⁰ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.58

¹⁹¹ Ibid. p.3

¹⁹² The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3042

¹⁹³ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.93

¹⁹⁴ Ibid, p.94

¹⁹⁵ Ibid, p.58

¹⁹⁶ See generally Richard Susskind, Online Courts and the Future of Justice (Oxford University Press 2019)

gathering of parties or a hearing by video-link, conference call or real-time chat. 197 In this future, "there is no hearing" as "cases are progressed and disposed of without oral argument". 198 With no hearing, there will be no advocates – a complete turnaround from Susskind's original prediction. Furthermore, Susskind refers to this as the "first generation of online courts, when human judges (and not AI based systems) are deciding cases". 199 By implication, subsequent generations may develop to disrupt the judiciary and replace human judges; a prospect that just six years earlier, Susskind outrightly opposed. Although Susskind does not directly address this change of view, in fact he claims his message has been consistent, 200 he does cite significant advances in technology as a cause for renewed focus on the online courts.²⁰¹ He claims that technological advances in law have been seen not only in the "growing capabilities" of systems, but also in the growth of providers of LegalTech.²⁰² Noting that there are now more than 2,000 LegalTech startups in comparison to fewer than 200 five years ago, Susskind argues that "machines are taking on more and more chunks of the work that people do". 203 This submission rather neatly demonstrates the deterministic thread that runs throughout the literature. As has already been noted, this approach makes the deterministic assumption that society adopts technologies because of their inherent technical superiority. It relies on macro trends in the market to speculate on the impact of technological advances, without even considering how many of the 2,000 LegalTech startups have actually successfully introduced systems into practice. Although present throughout the three phases, the assumptions of the deterministic perspective have become increasingly noticeable over time. This point is revisited in greater detail in ss.2.4 and 2.5, which offer a holistic critique of the literature to date

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¹⁹⁷ Richard Susskind, *My Case for Online Courts* (2019) available at https://www.legalcheek.com/2019/12/richard-susskind-my-case-for-online-courts/ [accessed 5th March 2020]

¹⁹⁸ Ibid

¹⁹⁹ Ibid

²⁰⁰ Online Courts and the Future of Justice (n 196), p.ix

²⁰¹ Ibid, pp.33-47

²⁰² Ibid, p.38

²⁰³ Ibid, p.38

and discuss the need for a new approach to the study of technology within legal practice, respectively.

One pertinent absence in the current phase of commentary, which is raised in s.2.5 as a weakness of the literature in general, is a lack of engagement with practitioners who, according to predictions in this phase, are going to experience considerable changes to their day-to-day work. Despite the commentary in this phase taking place on a broader platform, including practitioner-oriented publications, the prospect of practitioner resistance has not been addressed or resolved in any of the literature. Even if one accepts Susskind's view that practitioners' rejections of his claims are "irrational", 204 their role in accepting or rejecting technologies into their daily practice still needs to be addressed. The theoretical perspective introduced in s.2.5, and further outlined in the next chapter informs the method of this study, which captures practitioners' perspectives and begins to fill this apparent gap.

2.2.4 Conclusion

The above discussion has shown how the commentary on technology and the legal profession has developed and adapted over time. The literature in this area is thin, despite a longstanding academic interest. Hence, it has been presented in a longitudinal way starting in the early 1980s and ending in the present day. The three phases have been developed as an analytical framework in which to package and discuss the literature as a whole. From the discussion, there are three main points to observe. First, that the predictions made by commentators have had a mixed 'success rate'. This can already be shown, without looking at the empirical insights offered by the present study, by considering the reasons for the shifts between each phase. The abandonment of expert systems is a clear example that has already been noted. Equally, references to a new legal paradigm were notably dropped from the literature between the second and third phase. We already live in a world where information is stored, retrieved and shared digitally and the internet has liberated access to knowledge for the masses; but this has not affected a paradigm shift in legal practice

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²⁰⁴ Ibid, p.44

that, according to Susskind's predictions, should have been realised around two years ago, in 2018.²⁰⁵ We still have expert legal professionals. The purpose of this point is not to discredit the literature that has come before this study. Indeed, as Chapter 5 will show, the standardisation and digitisation of some legal tasks that Susskind predicts in the second and third phases have been demonstrated in the empirical data collected for this thesis. Rather, it is to highlight the speculative nature of the predictions that have been made and since abandoned, to emphasise the importance of investigating the actual uses and affordances of technologies within specific environments – a core contribution of this thesis which is discussed in Chapter 4.

Second, whilst the question articulated in the introduction – how will legal service be delivered and by whom in a more technically advanced society? - has remained consistent, the answers have shifted over time. In the first phase, legal services are predicted to be delivered by lawyers, assisted by expert systems. Although some dissent from this position has been noted, the majority view was that expert systems are for use by practitioners and not the general public. In the second phase, legal services are predicted to be delivered in a wholly different way, perhaps to such an extent that they are less 'delivered' and more 'accessed'. In this phase, the public access legal information from information providers on a one-to-many basis that makes redundant the traditional lawyer-client relationship. Finally, the third phase predicts rather a more mixed response. In the short to medium-term, legal services are predicted to be delivered by lawyers who make use of technology to carry out their work with greater efficiency. However, in the long-term disruptive technologies are predicted to replace all legal work that is not "genuinely bespoke" 206 and does not require an "expert trusted advisor". 207 Thus, legal tasks that are routine, standardisable and capable of being digitised are predicted to be accessed online via openly available sources or subscription sources; or to be delivered by non-legally qualified advisors, supported by digitised legal expertise. The role of lawyers here is

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²⁰⁵ The Future of Law (n 73), pp.96-97

²⁰⁶ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.59

²⁰⁷ Ibid, p.110; See also The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3042

restricted to providing expertise to legal knowledge engineers who design the systems; and to providing direct legal advice to clients in only limited areas that require them to do so. As s.2.4 discusses, the extent of these "genuinely bespoke" areas of practice is not made clear in any of the literature, which makes these claims difficult to assess and undermines much of the commentary within the third phase. This moves neatly into the third point to note, which is that as time has gone on, greater uncertainty has revealed itself within the literature as to the future role of technology and of lawyers in legal practice. Despite being literally closer in time to the futures predicted and, in theory, having a greater knowledge of the kinds of technologies that the profession might use, the third phase contains more uncertainty for the future of the profession than the two that precede it. As noted, the commentary within the third phase has taken place on a much broader platform and with that has come a greater amount of speculation on the future impact of technology on lawyers' jobs. However, even within the academic literature the predictions are speculative. This point, which is explored further in s.2.4, highlights the importance of understanding the perceptions of and drivers towards the use of technology in practice.²⁰⁸ Thus, it again emphasises the core submission of this thesis: that we must investigate the actual uses and affordances of technologies within specific contexts.

Despite the third phase focusing more strictly on the impact of specific technology types on practice, it nonetheless continues the deterministic thread that has characterised the literature to date. As s.2.4 discusses, it relies on a mix of specific examples from commercial legal contexts to make generalisations about the whole of legal practice. From these generalisations, Susskind's theory of commoditisation (the division legal work into packageable and saleable goods) emerges. This theory, though an aside to the three phases discussed above, is important for this thesis as it proposes a process of transformation by technology through which the legal profession will reportedly journey. The theory is outlined below and revisited in

²⁰⁸ These are discussed in Chapter 4 and 6 respectively

Chapter 5, where the transformations predicted in the literature are critically evaluated against the data collected in this study.

2.3 A Focus on Susskind's Commoditisation of Legal Work

The third phase outlined above represents a turning point in the commentary, which is now more strictly focused on the impact of specific technology types on day-to-day legal tasks and, more broadly, the future role(s) of legal practitioners. Within Susskind's work, this turning point is best demonstrated in *The End of Lawyers?*. ²⁰⁹ Distancing himself further from his original work on expert systems, Susskind acknowledges that he had previously emphasised the usefulness of "rule-based programming tools" at the expense of considering the future impact of the internet, which has since "rapidly become [his] preferred delivery vehicle" of legal advice.²¹⁰ Reiterating his previous claim that expert systems have been defined too tightly by those who seek to disprove their usefulness, Susskind iterates a new stance, stating that "whatever the underlying technology and knowledge models, the aim was the same: to spread legal knowledge and expertise using IT". 211 Directing his work towards practitioners (and, again, very much leading the way in the third phase) it is Susskind's central prediction that their work is "on the brink of a fundamental transformation".212 As noted above, this transformation will be driven by a combination of commoditisation, itself driven by a market preference for increased efficiency; and a pervasive uptake of technology. Having already discussed the forecast uptake of technology, this section now turns its attention to the commoditisation of legal work.

Commoditisation is described as a five-stage process that takes legal service from a bespoke, hand-crafted service to one that is standardised, packaged and made available to clients (now purchasers of a legal commodity) from a range of

²⁰⁹ The end of lawyers?: rethinking the nature of legal services (n 121)

²¹⁰ Ibid, p.16

²¹¹ Ibid, p.16

²¹² Ibid, p.1

suppliers.²¹³ As with the new legal paradigm discussed in s2.2, lawyers provide their service via digital platforms, on a one-to-many basis. However, here the driver is not a paradigm shift in society, but a stage-by-stage change in the ways in which legal services are delivered, driven by market demands for a cheaper and more efficient service along with increasing technical capabilities.²¹⁴

Fig.2.2 The Evolution of Legal Service²¹⁵



According to Susskind's theory, legal service begins as a bespoke service. This is defined as a "hand-crafted, one-to-one consultative professional service", "tailored for the specific needs of particular clients". In short, it is a highly customised and non-reusable service, that is acutely tailored by the professional to the present situation. This is the traditional legal service from which Susskind claims the profession is evolving. The second stage, a standardised service, takes its form from the first, but where tasks are recurrent and familiar, lawyers in some way standardise their approach to them. Legal processes are standardised when "a proven approach or method for some given legal job is captured and re-used"; and substantive legal work is standardised when "lawyers re-use pre-articulated bodies of text [...] opinions, advices or solutions". Standardisation can already be observed in the use of checklists, workflows, document assembly templates and precedents. As with

²¹³ Ibid, pp.28-33

²¹⁴ For further discussion of these drivers, see s.6.2

²¹⁵ The end of lawyers?: rethinking the nature of legal services (n 121), p.29

²¹⁶ Ibid, p.29

²¹⁷ Ibid, p.30

²¹⁸ See Chapter 4

the bespoke service, legal advice is still delivered in a personalised, one-to-one manner.

The third stage towards commoditisation is a systematised service. Here, lawyers make use of internal technologies (those used by lawyers with no client facing function) specifically developed to improve both the efficiency and quality of work. This is different to standardisation as it involves using technology not only to help reuse previous work, but to automate procedures that create new work. For example, instead of having reusable templates to assist with document assembly, the systems used in this stage might include a series of questions, the answers to which automatically generate the document for the user. As the systems are now undertaking more of the work, this stage requires more sophisticated technologies than standardisation. For example, the more sophisticated document automation systems described in s.2.3. The fourth stage, a packaged service, is again an extension of the stage before it, as it effectively takes those systems used internally and makes them directly accessible to clients. By communicating with clients directly, this is the stage at which the work of lawyers can truly be said to be disrupted by technology, as clients no longer require access to a legal expert in order to access legal expertise. Thus, the market will have fundamentally changed. Susskind references a system currently offered by Eversheds, which enables clients to generate their own employment contracts via the firm's website.²¹⁹ Other example exist, such as 'do-ityourself' tenancy agreements and wills, but none of these have yet disrupted the legal market.

The final stage, Susskind suggests, is the most controversial transition of all. According to his theory, legal service becomes commoditised once it is packaged and readily available on the market, from various sources, at a competitive price. A legal commodity is, thus, defined as "an electronic or online legal package or offering that is perceived as a commonplace, a raw material that can be sourced from one of various suppliers". In effect, the commoditised legal service is similar to the information service that Susskind previously predicted, as both offer legal

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²¹⁹ The end of lawyers?: rethinking the nature of legal services (n 121), p.31

information digitally on a one-to-many, commodity pricing basis. However, as already noted, commoditisation is a stage-by-stage process driven by efficiency and encouraged by technology — and a "gradual replacement of professionals by increasingly capable systems"²²⁰ — not a paradigm shift in legal service. Moreover, earlier commentaries, including Susskind's and McGinnis and Pearce's suggest that the paradigm shift will disrupt the vast majority of legal work. However, Susskind now cautions that legal work should not be considered a "monolithic block" but rather a series of tasks, some of which require a bespoke approach and some of which do not.²²¹ Whilst the headline remains that "increasingly capable systems will bring transformations to [legal] professional work that will resemble the impact of industrialization on traditional craftmanship",²²² Susskind's current thesis reveals more caveats and exceptions to this.²²³

Despite presenting the shift towards commoditization as a linear, progressive journey, Susskind acknowledges that different practice areas "may, quite properly, adopt different strategies" depending on the requirements of their work.²²⁴ Thus, commoditization is not an end that all legal tasks will reach, although all areas of practice should, he claims, move across the evolutionary path to some extent.²²⁵ In so doing, legal work will be decomposed and re-sourced in a variety of ways.²²⁶ The result is three general disruptions to the profession: that "traditional lawyers will in large part be replaced by advanced systems, or by less costly workers supported by technology [...], or by lay people armed with online self-help tools".²²⁷

Susskind and Susskind have since revisited the path to commoditisation. Claiming that the term carries negative colloquial overtones, they suggest that new

²²⁰ The future of the professions: how technology will transform the work of human experts (n 126126), back cover

²²¹ The end of lawyers?: rethinking the nature of legal services (n 121), p.43

²²² The future of the professions: how technology will transform the work of human experts (n 126), p.2

²²³ This 'headline and caveat' approach is discussed s.2.4 which critiques the literature to date

²²⁴ The end of lawyers?: rethinking the nature of legal services (n 121), p.42

²²⁵ Ibid, p.42

²²⁶ Ibid, pp.42-52

²²⁷ The future of the professions: how technology will transform the work of human experts (n 126), p.71; The end of lawyers?: rethinking the nature of legal services (n 121), p.2

terminology and a new way of thinking is necessary.²²⁸ Although the evolutionary process that they propose is fundamentally similar – "that routine professional work in most disciplines is being reduced to sets of standard practices, so that tasks that formerly required human experts can now be conducted by less knowledgeable, even lay, people with the support of appropriate processes and systems"²²⁹ – they now claim that 'externalisation' is a more fitting descriptor. As fig.2.3 shows, the first three stages of externalisation are as before. However, the fourth stage of externalisation (which can take place in three ways) replaces packaged and commoditised:

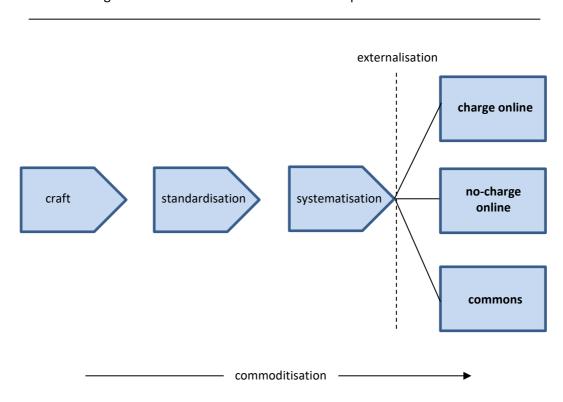


Fig.2.3 Susskind & Susskind's "evolution of professional work" 230

The charge online service is an online service where professionals maintain full ownership and control of content sold by subscription or commodity pricing. The no-

 $^{^{228}}$ The future of the professions : how technology will transform the work of human experts (n 126), p.196

²²⁹ Ibid, p.196

²³⁰ Ibid, p.197

charge online service is likewise owned and controlled by the profession but is free at the point of use. It may be funded indirectly by advertising, government funding or collecting commercially valuable data from users. The commons service is one in which content is made readily available and accessible to the general public without charge and where content control is not limited to the profession, much in the same way that Wikipedia operates.²³¹ As the evolutionary path moves from the left to the right of the diagram, the nature of the professional work changes from a bespoke craft to a commoditised service as before.²³² Hence, the journey is still holistically described as commoditisation, but the final stage "at which the practical expertise of human experts is made available to non-specialists on an online basis" is now externalisation.²³³

Although both commoditisation and externalisation rely heavily on the distinction between work that does and does not require access to a legal expert, discussion of expertise is notably lacking, particularly when compared with commentary in the first phase.²³⁴ That said, at no point in the literature is the concept of expertise comprehensively addressed.²³⁵ Avoiding expertise, the focus has instead been on the distinction between genuinely bespoke and commodifiable legal work. However, Susskind and Susskind give no real indication of where, on that scale, different tasks sit, nor of the key determinants of a task's susceptibility to commoditisation. Thus, finding the correct balance between a commoditised and bespoke approach (the difference between "clicks and mortals"²³⁶) is a central challenge raised, but not resolved, in any of the leading accounts. The switch to externalisation, in fact, makes this issue even more problematic as, by delivering all legal services online, each of the three externalisations removes the 'mortals' from the delivery entirely. Consequently, externalisation only addresses one of the three earlier outcomes of commoditisation: lay people armed with online tools. There is no discussion of how

²³¹ Ibid, p.203

²³² Ibid, p.205

²³³ Ibid, p.202

²³⁴ See s.2.2.1 Early Predictions of Expert Systems in Law

²³⁵ This is identified as an area of further research in Chapter 7

²³⁶ The end of lawyers?: rethinking the nature of legal services (n 121), pp.87-93

the internal use of technology to replace lawyers with advanced systems, or with less costly workers fits with the new model. Moreover, whilst Susskind acknowledges that not all legal tasks will reach commoditisation as an end, this point is not repeated in Susskind and Susskind's theory of externalisation. As s.2.4 notes, this lack of cohesion between earlier and later works is somewhat typical of Susskind's commentary. Overtime he develops new theories and terminology in a disjointed way, often creating more pitfalls than solving. Continuous throughout the commentary, however, is an ambiguity over how much of legal work he believes will be disrupted and how. Whilst commoditisation and, more latterly, externalisation begin to answer the *how* question, they do so from a purely theoretical perspective and without any real sense of how each theory sits with the wider commentary. Fundamentally, neither theory, nor any of the predictions explored above, has been empirically tested. The lack of clarity within and between theoretical models, exacerbated by the lack of empirical testing, underpins much of the criticism of the current literature discussed in s.2.4.

2.4 Critique of Literature

Academic accounts of the relationship between technology and legal practice have, thus far, sought to explain the ways in which technology might disrupt the profession and improve the efficiency of legal services. For the most part, they have offered a compelling, although often visionary, case for why legal practitioners should embrace technical changes. Susskind's work, as the leading example, highlights the potentially extensive possibilities for technology within legal practice, as he consistently predicts that technology will radically transform legal services. However, although Susskind situates the adoption of technology within the wider context of a changing legal market, he explores the development of technology in isolation from its social context, subsequently applying it to the legal profession as both a driver for and facilitator of change. This approach, which can be described as deterministic in nature, is not exclusive to Susskind's work but is typical of much of the literature on the social impact of technology. Within the limited literature on the legal profession

there is a deterministic thread, and two issues arise from this approach: first, such accounts fail to consider the reciprocal influence that the profession might have on development of technology, which leads them to the reductionist conclusion that, pressured by financial drivers, lawyers will adopt new technologies because they offer an inherently superior method of working to current practices. This point is revisited and discussed in greater detail in Chapter 6. Second, the lack of reflection on the relationship between technology and society leaves uncertainty as to the extent to which technology is driving change within the profession. Indeed, within the literature technology is described as "opening promising paths" ²³⁷ of which practitioners can voluntarily "take advantage", 238 but is also presented as something that is seemingly unstoppable: "the message here is that machines are coming". 239 The problem here is a mixed message both within and between commentaries which claim on the one hand that new technologies are inevitable – they "are changing [...] the work of lawyers"²⁴⁰ – and on the other that that they are merely probable – practitioners "may have little choice but to adopt" [my emphases]. Within Susskind's work specifically, technology is presented as both facilitative of change and as a pervasive driver for change within the legal profession. In the former, it is argued that the development of information technology can "enable and encourage legal service to change",242 whilst in the latter the development of technology is described one of three core drivers for change; part of an unavoidable "technology tidal wave"²⁴³ that "lies at the core of most of the changes"²⁴⁴ within the profession.

The mixed approach to the force of technology can, in part, be summed up by the extract below, which conflates what future technologies can, should and will do:

²³⁷ Can Robots Be Lawyers? (n 124), p.505

²³⁸ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3042

²³⁹ Ibid, p.3043

²⁴⁰ Can Robots Be Lawyers? (n 124), p.501

²⁴¹ Ibid. p.540

²⁴² Transforming the law: essays on technology, justice, and the legal marketplace (n 65), p.102

²⁴³ Tomorrow's Lawyers. An Introduction to Your Future (n 1), pp.11

 $^{^{244}}$ The future of the professions : how technology will transform the work of human experts (n 126), p.109

"Modern information technologies <u>can</u> and <u>should</u> provide the basis of, and even the catalyst for, the emergence of a quite different kind of legal service [...] information technology (IT) <u>will</u> eventually help re-engineer the entire legal process and result in a major change in the predominant ways that legal services are delivered"²⁴⁵ [my emphases]

From this short extract alone, one can see how the mixed use of language creates ambiguity as to what Susskind is saying about the future role of technology. Whilst the headline message of his work is clearly that technology is becoming "pervasive in our world"²⁴⁶ and will come to dominate our social and professional lives, ²⁴⁷ deeper consideration and analysis of his work reveals an obscurity in his thesis. This issue is made even more pressing when considering, first, that Susskind is at present the most vocal commentator predicting the future role of technology within legal practice. As such, his work has achieved significant exposure and appears to be gaining momentum. Yet, without clarity on the extent to which technology has driven or will drive change, there is clearly a flaw in his message. Second, as Susskind has already been shown to define, redefine and further define terminology, most notably on expert systems, to explain why his predictions have, in his own words, "not directly borne fruit", ²⁴⁸ one must surely be cautious that his present predictions are vague.

In a similar vein, there is no clear or consistent message on the extent to which legal work will be disrupted by technology, either between or within commentaries. Forecasting the susceptibility of a range of jobs to computerisation, Frey and Osborne predict that the work of paralegals and legal assistants is at a high risk of computerisation, but the work of lawyers who currently rely on legal assistants is at a low risk of computerisation.²⁴⁹ They cite the creative and social intelligence required by practicing lawyers as the two "engineering bottlenecks" that will need to be overcome to change this. As such, they predict that computerisation will

²⁴⁵ Tomorrows lawyers p.2

²⁴⁶ Tomorrow's Lawyers. An Introduction to Your Future (n 1), pp.11-12

²⁴⁷ Ibid, pp.11-12

²⁴⁸ Transforming the law: essays on technology, justice, and the legal marketplace (n 65), p.161

²⁴⁹ Carl Benedikt Frey and Michael A. Osborne, 'The Future of Employment: How Susceptible Are Jobs to Computerisation?' (2013) 114 Technological Forecasting and Social Change 254, p.41

complement lawyers' work in the medium term, however they give no indication of the long-term impact of computerisation. Susskind is clear that there will always be a role for lawyers to deliver bespoke legal services in some areas, but offers little clarity on what those areas might be or how they might be identified and distinguished from legal work that will be disrupted. He writes that "[w]hen work cannot be standardized or computerized, and bespoke service is unavoidable" then "expert trusted advisers" are required and cannot be replaced by technology. 250 However, there is no clear explanation of when legal work can and cannot be standardised or computerised, nor any discussion to identify which areas of work this may include. The only concrete example offered of legal work that will not be disrupted at all is the writing of opinions by barristers and advocates on complex legal issues which Susskind considers "genuinely bespoke work" for which there is "no obvious alternative source". 251 However, the extent to which their remaining work can be automated is as unclear as the rest of legal work discussed in his thesis. Susskind claims that in-court advocacy and judicial work will for the most part continue in many ways similar to the present day. Nonetheless, despite referring to advocacy as "the quintessentially bespoke legal service" Susskind suggests that online dispute resolution will be a real disruption to this work.²⁵² However, there is no firm indication of how far he believes online dispute resolution can, should or will go in displacing the work of advocates and judges, other than to say that "truly exceptional" (on an undefined scale) advocates will not be disrupted "for some time yet". 253 There is also his recent change in opinion on the role of the online courts, which has already been discussed in s.2.3. In addition to advocates, Susskind highlights lawyers who "communicate their guidance not just with integrity and in a confidential manner but in a highly tailored, customized, and personalized way"254 as less likely to affected by technology. However, again, there is no exploration of what kind of work can, should or will require such an approach both now and in the future,

²⁵⁰ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.110

²⁵¹ Ibid, p.59

²⁵² Ibid, p.58

²⁵³ Ibid, p.58

²⁵⁴ Ibid, p.110

nor any appreciation of the fact that many lawyers likely believe that they regularly deliver highly tailored guidance with integrity and in a personalised way, at least to some extent. The focus on what appears to be the personal approach of the individual lawyer, as opposed to the requirements of the work, adds a further layer of inquiry into the role of the individual in facilitating or obstructing technical change, which remains unexplored.

McGinnis and Pearce approach this issue in a similar fashion, referring to "journeymen lawyers" who undertake routine work and standard legal tasks, and "standard legal practitioners" as more susceptible to displacement by technology. 255 However, 'routine' and 'standard' legal tasks are not comprehensively investigated or determined, nor is the 'standard legal practitioner' defined or qualified within their commentary. Furthermore, at the other end of the scale, they refer to "superstars" and amenable lawyers who may benefit from embracing change and using "technology to extend their reach" and "take advantage of lower cost inputs made available by machines". 256 However, again, these practitioners and the type of legal work that they will undertake is not explored. In agreement with Susskind, they argue that there are "other classes of lawyers" unique from the standard legal practitioner on whom the effect of information technology will be significantly less, for three reasons: (1) Machines cannot yet orate in court; (2) machines work best in "routinized and settled areas" not specialist areas; and (3) machines cannot empathise with or relate to clients in order to "persuade unwilling clients to do what is in their selfinterest". 257 Taking Susskind's and McGinnis and Pearce's commentaries together, therefore, there is agreement that technology, at least for now, is not going to replace human advocacy in the courts, although the extent to which online dispute resolution and the online court expunge the need for the traditional hearings remains open. There is likewise agreement that machines will not be able to communicate in an empathetic or personal way with clients, however when, why and the extent to

²⁵⁵ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3042

²⁵⁶ Ibid, p.3042

²⁵⁷ Ibid. p.3042

which empathy is required between practitioners and their clients is not discussed. Finally, there is agreement that there is a spectrum on which legal tasks sit, ranging from those which are routine and relatively easy to automate, to those which are bespoke, or specialist, and cannot be automated. However, there is no firm indication of how much of current legal work sits on either side of that spectrum. Bespoke legal work that cannot be automated is referred to as exceptional or 'other' to the norm, which implies that most legal work is susceptible to automation. However, as with much the commentary discussed, this conclusion is inferred by the reader and not made explicit by the writer.

This conclusion, however vague, is undoubtedly going to be felt across the legal profession, provoking a range of responses from practitioners. Whilst there will be those who agree with the prediction, there will be some who strongly oppose it. The literature describes these practitioners as "cynics, sceptics and doubters" who hold a firm view that "computers cannot replace legal work. Full stop". 258 It claims that lawyers' attempts to stall developments in LegalTech will "prove ineffective in stemming the emergence of widespread machine lawyering" and is motivated not by genuine objections, but a desire to retain the current market structures.²⁵⁹ Whilst Susskind and Susskind show an appreciation of some professional objections, they nonetheless conclude that these objections are either unfounded or irrelevant, and are based on three underlying false assumptions. First, the objections confuse the legal profession as an end in itself, when in fact it is a means to providing lay citizens with access to legal expertise. Second, the objections fail to balance the promise of greater access to justice that technology promises to bring against losing the traditional bespoke legal service. Third, by claiming that technology cannot be trusted, objections place a higher moral burden on machines than they do on legal practitioners.²⁶⁰ Relevant objections for this thesis, namely a concern for the future quality of legal services; the bespoke nature of multi-track personal injury work; and

²⁵⁸ The end of lawyers?: rethinking the nature of legal services (n 121), p.274

²⁵⁹ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3042

 $^{^{260}}$ The future of the professions: how technology will transform the work of human experts (n 126), pp.267-269

the issue of trust in technology, are discussed further in Chapter 6, but for Susskind and Susskind, "none of them settles our belief [...] that the transformation of the professions we describe is the preferred direction of travel". McGinnis and Pearce are likewise firm that, despite opposition, "machines are coming". 262

Whilst the three assumptions that Susskind and Susskind highlight hold some weight, they nonetheless tackle practitioners' objections from a purely theoretical perspective. They consequently miss the point that, for whatever reason and based on whatever assumptions, practitioners have some objections to greater use of technology in law. It is possible, for example, to agree that the legal profession is not an end in itself, but still believe it to be the best means of delivering legal services. In this sense, Susskind and Susskind's first point is not mutually exclusive with practitioners resisting further automation or disruption. Stepping aside from the theory and engaging with practitioners to identify and understand their objections therefore remains a worthwhile endeavour, even if we accept what Susskind and Susskind say as true. On the other hand, continuing, as they have, not to engage with practitioners' objections would prevent us from understanding their concerns and determining how legitimate they really are. It is somewhat ironic that understanding practitioners' concerns could in fact be crucial to achieving the hi-tech future that commentators predict and desire, as the strength of feeling towards technology by practitioners may prove to be a barrier or driver towards that future. Thus, whether a technologically driven future for legal practice is desirable or not, engaging with the tensions (and not just theoretically discrediting them) as well as the drivers is an essential part of studying the relationship between law and technology that existing accounts have overlooked.

The issues discussed above can, in some part, be attributed to the nature of the commentary, which offers a very generic overview of technology within the legal profession as a whole. Without burrowing into the detail and examining the dynamics

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²⁶¹ Ibid, p.267

²⁶² The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3043

of different areas of practice (which bring about different demands of technology) it is difficult to have clarity on the extent to which technology is a driver for change, the limitations of that change and the legitimacy of the concerns held by practitioners. Referring to both the legal profession and technology in general terms is, consequently, a central failing of the literature thus far. This is typical of commentary from the determinist perspective, which tends to "speak of technology in general terms, as if there is no need to investigate the actual empirical affordances of a specific technology in a specific environment". ²⁶³

An extension of this issue is the extrapolation of successful technologies from one discreet area of practice to the whole of the legal profession. For example, McGinnis and Pearce use predictive analytics company Modus, which digitizes records and constructs predictive algorithms, as evidence that all lawyers will face disruption from start-ups that offer e-discovery services. This failing continues in Susskind and Susskind's most recent work, which takes an even more generalist view of the professions as a whole. In a similar manner, they highlight very discreet areas of disruption, for example the success of LegalZoom in providing automated legal documents for clients without the need for expert legal advice, and extrapolate this as evidence of future disruption to the rest of the profession. In so doing, "they fail to credibly estimate how much of extant legal work is as automatable". This approach, from the leading academic account on technology and legal practice, has fostered similarly unevidenced claims within the legal press, for example:

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²⁶³ Mireille Hildebrandt, Smart Technologies and the end(s) of Law (Edward Elgar Publishing 2015), p. 166

²⁶⁴ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services (n 128), p.3048

²⁶⁵ Frank Pasquale, 'Automating the Professions: Utopian Pipe Dream or Dystopian Nightmare?' (2016) Los Angeles Review of Books available at: https://lareviewofbooks.org/article/automating-the-professions-utopian-pipe-dream-or-dystopian-nightmare/ [accessed 11th February 2020]

"Once we have fully artificial intelligence enhanced programs like LegalZoom, there will be no need for lawyers, aside from the highly specialized and expensive large-law-firm variety". 266

As Chapter 4 demonstrates, considerable attention has been paid to the use of technology within commercial legal fields, from which most examples of technology in practice derive. Both Chapter 4 and Chapter 6 argue that the dominance of commercial legal commentary within the field has caused an exaggerated view of the current uptake of technology across the profession and led to a misguided theory of the active drivers leading to further technical change. These shortcomings stem from the generalisations and extrapolations revealed in the present discussion and highlight the need for more detailed enquiries into the role of technology within specific legal environments.

Finally, there is a conceptual difficulty within Susskind's work which, as the leading account, requires attention. In his earlier work Susskind adopts Christensen's distinction between *sustaining* and *disruptive* technologies, as developed within management theory.²⁶⁷ However, despite being widely accepted terminology, Susskind and Susskind adopt new terminology —*automation* and *innovation* — in their place.²⁶⁸ Automation is much the same as Christensen's original concept of sustaining technologies. In the context of professional work, it encompasses the streamlining and computerising of inefficient work in a way that complements the efficient delivery of professional work. As with the use of sustaining technologies, automation enables practitioners to leverage technology in order to assist in achieving outcomes more efficiently without resulting in a "fundamental departure from traditional ways of working".²⁶⁹ Innovation is defined as the introduction of a new technology that creates "an opportunity to deliver a [...] service in an entirely new way".²⁷⁰ In effect,

²⁶⁶ 10 Predictions About Hom IBM's Watson Will Impact the Legal Profession, available at: http://www.abajournal.com/legalrebels/article/10_predictions_about_how_ibms_watson_will_impact [last accessed 10 June 2019]

²⁶⁷ The Innovator's Dilemma (n 135)

 $^{^{268}}$ The future of the professions : how technology will transform the work of human experts (n 126), pp.109-113

²⁶⁹ Ibid, p.111

²⁷⁰ Ibid, p.112

this is similar to Christensen's view of 'disruptive' technologies; they both introduce new ways of performing a function so as to compete with and "displace traditional models" and existing markets. 271 Nonetheless, the departure from disruptive is deliberate, to address the semantic connotations of the word, which "introduces a negative undertone that [Susskind and Susskind] are anxious not to overemphasize". 272 'Disruption', as understood in management theory, generally refers to the overhaul of current methods and established providers.²⁷³ Though negative for them, disruptive technologies offer an opportunity for innovative and entrepreneurial new start-ups to provide a more efficient and accessible service to the public.²⁷⁴ Thus, disruption can have an equally constructive function that Susskind and Susskind fear may be overshadowed by the connotations that the label colloquially evokes. Problematically, innovation also has colloquial connotations that might equally confuse readers, but Susskind and Susskind have failed to recognise. An innovative technology might be colloquially understood as one that is wholly new or original and, hence, innovative. However, this is not how the word is intended to be interpreted. Following Susskind and Susskind's interpretation, an innovative technology is one that delivers a service in a wholly new way and displaces the current market, irrespective of how new, original or (colloquially) innovative the technology may be. Furthermore, sustaining or automating technologies that do not disrupt the market, and therefore do not meet Susskind and Susskind's definition of 'innovative', may still be colloquially described as such, or may indeed be used innovatively, despite sustaining the current markets. Therefore, Susskind and Susskind's terminology not only goes against the accepted terminology, but in trying to avoid the confusion caused by colloquial understandings of 'disruption' they have created further potential for confusion caused by colloquial understandings of 'innovative'. This change of terminology is entirely unnecessary, as Susskind had already clearly defined 'disruption' in line with Christensen's definition:

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²⁷¹ Ibid, p.113

²⁷² Ibid, p.110

²⁷³ Jill Lepore, 'The Disruption Machine. What the gospel of innovation gets wrong.' The New Yorker (https://www.newyorker.com/magazine/2014/06/23/the-disruption-machine

²⁷⁴ The future of the professions: how technology will transform the work of human experts, p.110

"When I refer to disruption I am generally speaking of the havoc wreaked on the supply side of the legal market, that is, to law firms and other legal service providers. For the buyers of legal services, this disruption is often very good news indeed".²⁷⁵

Much of the critique discussed in this section can be categorised as a lack of clarity and precision. In particular, a lack of clarity on the types of legal work that are susceptible to computerisation and the extent to which automation and disruption will take hold within the profession. There is a lack of precision and consistency with the terminology used throughout the commentary and, when taken over time, a lack of coherence between works, even of the same author. Furthermore, the extrapolation of examples from discreet practice areas to the profession as a whole mischaracterises legal practice as homogenous, despite the somewhat contradictory warning that legal work should not be considered one "monolithic block". ²⁷⁶ The root cause of much of this imprecision is the theoretical and speculative nature of the commentary to date, which typifies deterministic accounts of the relationship between technology and society. Practitioners' objections, for example, are mischaracterised and rejected on theoretical grounds that do not stand up to critical evaluation and preclude an exploration of the practicing perceptions of technology on which these objections are based. The vague conclusions offered and the 'headline and caveat' approach are likewise symptomatic of the speculative nature of the commentary, which jumps straight into the visionary predictions for the future of LegalTech, without first examining and understanding the dynamics of the technologies currently in use. This thesis, by contrast, investigates the current role of technology within the specific field of multi-track personal injury work and deliberately avoids speculative or visionary predictions for the future. It seeks to uncover the dynamics that shape practitioners' interactions with technology,

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²⁷⁵ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.40

 $^{^{276}}$ The future of the professions : how technology will transform the work of human experts (n 126), p.212

importantly including their reported perceptions of the technologies with which they engage.

2.5 The Contribution of this Thesis

Despite a longstanding interest in the social impact of increasingly capable technologies, academic commentary within law has been limited. Generally, as highlighted above, the tone of this commentary has been deterministic.²⁷⁷ That is, it suggests that "science and technology have their own objective logic to which society must adapt". 278 This view presents an over simplification of the complex relationship between technology and society which "cannot be reduced to a simplistic cause-andeffect formula", 279 but is in fact a multi-directional relationship influenced by social attitudes towards, uses and perceptions of technology. The epistemological failings of this approach and the consequent shortcomings of accounts that rely on it are discussed further in Chapters 3 and 6. However, in addition to these challenges, the dominance of the deterministic approach leaves a considerable gap in the literature: to date, there is very little empirical analysis on the actual uses and perceptions of technology within legal practice. That which does exist relies on discreet examples, often from commercial fields, supported by macro trends of changing practices, to extrapolate visionary predictions for the future of legal practice as a whole.²⁸⁰ This has already been exemplified in Capper and Susskind's Latent Damage Law, which relies on a "series of resounding successes" from within banking and finance as evidence of the imminent use of expert systems within law. 281 This is typical of the deterministic approach as, from this perspective, technologies work irrespective of the social group into which they integrate. Thus, engagement with social actors is deemed largely inconsequential and commentators consequently "speak of technology in general terms, as if there is no need to investigate the actual empirical

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²⁷⁷ Alan Irwin and Brian Wynne, 'Introduction' in A Irwin and B Wynne (eds), Misunderstanding Science? The public reconstruction of science and technology (Cambridge University Press 2003), p.19

²⁷⁸ Ibid

²⁷⁹ Andrew Murphie and John Potts, Culture and Technology (Palgrave Macmillan 2003), p.21

²⁸⁰ Robert Brooks, Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (Temple University Press 2012), p.xi; See generally Tomorrow's Naked Lawyer (n 120)

²⁸¹ Early Expert Systems: Where Are They Now? (n29), p.51; see s.2.1

affordances of a specific technology in a specific environment". As has already been noted, by failing to investigate the actual uses of technologies within specific legal contexts, the current literature fails to grasp the complexities of the sociotechnical relationship. As a consequence, there is a lack of clarity on the driving force of technology within the profession and an inconsistent message on the extent to which legal work has been, will or may be disrupted by technology. There is, likewise, limited understanding of the drivers and tensions that shape the uptake and use of technology within practice. Instead, influenced by the deterministic account of technology, the existing literature draws the reductionist conclusion that, aided by market forces, new technologies will come to disrupt and dominate the legal market because they are inherently superior to traditional practicing methods. Ignoring the social actors involved in determining the uptake and use of technology, existing literature overlooks practitioners' concerns and neglects to consider their role in accepting, rejecting and shaping the legal technologies of the future.

It is, therefore, a core submission of this thesis that a new approach is required, based on an alternative theoretical framework that takes account of the actual uptake, uses and perceptions of technology from within practice. This approach should be guided by an epistemology that accounts for the human, political and social drivers and tensions that shape the use of technology; and, more especially, one that encourages empirical observations over reductive speculation.

In taking such an approach, the method for which is detailed in Chapter 3, this thesis contributes not only to the LegalTech discussion, but also to socio-legal literature in general. For the former, it begins to repair some of the pitfalls of the existing literature by engaging with practitioners to discuss their perceptions of and interactions with technology. In so doing, it enables a better understanding of the role of technology, its impact on practice and the drivers and tensions that shape its use, within the discreet area of multi-track personal injury practice. This is, of course,

²⁸² Smart Technologies and the end(s) of Law (n 263), p.166

²⁸³ See 5.2.4

²⁸⁴ See s.6.2 for further discussion

only the beginning of the task ahead for the LegalTech community, which should ideally seek an understanding of these phenomena across all areas of practice. Moreover, as neither legal practice nor legal technologies is static, the questions asked in this thesis should be revisited in the future. What this thesis offers, which no other account has offered thus far, is a focused and theoretically informed empirical inquiry into of the role of technology within personal injury practice *today*. For the latter, this thesis adds to a growing body of literature within socio-legal studies and is the first to focus exclusively on the uses and perceptions of technology by personal injury practitioners. Borrowing its tools of inquiry from the social sciences, it develops a robust and systematic method (detailed in the next chapter), thus furthering the interdisciplinarity of using empirical methods within socio-legal research; and, more especially, socio-legal research within law and technology.

2.6 Conclusion

This chapter has examined the existing literature on technology and legal services, of which Susskind's account is the leading example. It began by outlining the predictions made on the future use of technology within practice over the last four decades. This discussion was organised into three phases (early predictions of expert systems in law; legal practice in a digital information society; and LegalTech and the delivery of task based legal services) which, despite some overlap, run roughly chronological in order from the 1980s to the present day. Three conclusions were drawn from this discussion. First, that commentators have had a mixed 'success rate' with the accuracy of their predictions. This point is further demonstrated in Chapter 4 which discusses the uptake and use of technology reported at interview. However, it can already be seen from the literature alone as predictions have been made and abandoned throughout the commentary over time. Second, whilst the question how will legal services be delivered and by whom in a more technically advanced society? has remained consistent, the answer has shifted over time. In the first phase, legal services are predicted to be delivered by lawyers assisted by expert systems. In the

second, legal information is accessed from providers on a one-to-many basis that disrupts the traditional lawyer-client relationship; and in the third, there is a mixed response depending on the legal task and the technology available. Third, although there is speculation and uncertainty throughout the three phases of prediction, it is most notable in the third, where vague distinctions are drawn between work that is "genuinely bespoke" and work that is not; and practitioners who are "expert trusted advisors" and those who are not. Thus, s.2.2 concluded that, as time has gone on, greater uncertainty is revealed within the literature as to the future role of technology within practice.

Section 2.3 focused on Susskind's theory of commoditisation (later remodelled as externalisation). The evolution of legal services that his theory generally promotes is a stage-by-stage shift away from a bespoke service and towards a standardised service that is packaged and sold like other standard commodities. The outcome is somewhat similar to the information serviced provided in the second phase of prediction, however it is not the result of a paradigm shift in practice. As with the third phase of commentary where the theory more comfortably sits, commoditisation focuses on individual legal tasks and their susceptibility to digitisation. The considerable issues of clarity in the third phase are, consequently, a pitfall of Susskind's theory of commoditisation and it was concluded that these issues are only exacerbated by Susskind and Susskind's later remodelling.

In s.2.4, the chapter discussed the prevalent pitfalls within the literature. It concluded that these can largely attributed to a lack of clarity and precision within the predictions for the future use of technology. One underlying reason for this is the deterministic approach that has characterised the literature to date and precluded the empirical study of the actual uses, affordances and perceptions of technologies in practice. Existing literature has failed to explore the dynamics of technologies currently in use in favour of making visionary predictions for the future of LegalTech, which are consequently vague, over generalised and speculative. It is for these reasons that this thesis rejects the reductionist thinking that has dominated the literature to date and makes the case for a new approach, guided by a framework

that accounts for the varied drivers and tensions that shape the uptake and use of technology. Finally, s.2.5 highlights that, in taking such an approach, this thesis makes a unique contribution to both the LegalTech debate and to socio-legal scholarship in general.

CHAPTER 3

Research Design and Methodology

3.1 Introduction

This project seeks to answer four research questions, as outlined in Chapter 1:

- What is the current uptake and use of technology within personal injury practice?
- How do practitioners perceive the technologies with which they interact?
- What changes have the use of technology engendered in practice?
- What drivers and tensions have shaped the uptake of technology within personal injury practice?

These questions are ultimately concerned with how technology is used and perceived by personal injury practitioners and what effect this has on their practice. They each prompt qualitative responses, hence a qualitative research design was adopted, consisting of semi-structured, in depth interviews, thematic analysis and desk-based research.

This research is located firmly within socio-legal studies; a varied branch of legal scholarship that "looks beyond legal doctrine" to analyse law within its social context.¹ Socio-legal studies is difficult to define and its precise meaning is contentious.² Although some narrowly define it as applicable only to the sociology of law, more typically socio-legal scholarship is accepted as a broad area of research activity. Wheeler and Thomas comment:

¹ Caroline Morris and Cian Murphy, Getting a PhD in law (Hart Publishing 2011), p.35

² F Cownie and A Bradney, 'Socio-legal Studies a challenge to the doctrinal approach' in D Watkins and M Burton (eds), *Research Methods in Law* (Routledge 2017), p.42; W.L Twinning, *General Jurisprudence: Understanding Law froma Global Perspective* (Cambridge University Press 2009), p227

"The word 'socio' in socio-legal studies means to us an interface with a context within which law exists, be that a sociological, historical, economic, geographical or other context".³

It is, by nature, an interdisciplinary field that borrows the "tools and insights" of other disciplines to understand the law as a "social phenomenon". Thus, it stands in contrast to the doctrinal approach to legal scholarship which uses statutes, case law and commentary to "analyse and synthesise the law". Such an approach is inappropriate for this project, which is not focused on the substance or 'black letter' of the law, but on the social interactions of law or, more accurately, legal practice.

Whilst 'socio-legal' is not synonymous with 'empirical', the capacity for empirical methods in socio-legal research is a marked departure from the traditional doctrinal approach. This is particularly true of research that draws on the social sciences, for which a "strong empirical base" is an essential characteristic, though not "to the exclusion of an engagement with theory". The aim of this thesis is, thus, to "conduct theoretically informed empirical research" in law that draws on perspectives and methodologies developed within the social sciences.

This chapter explains and justifies the methodological decisions that guided the research. Section 3.2 offers a justification for the research design. It notes the importance of an appropriate theoretical approach, choosing the Social Construction of Technology perspective, from within Science and Technology Studies, as the guiding perspective for this study. It discusses a qualitative methodology of in-depth interviews, outlining the benefits and pitfalls of this approach for this study. Section 3.3 describes the participants interviewed and outlines the sampling method by

⁵ ESRC, Review of Socio-Legal Studies: Final Report, 1994);

³ S Wheeler and P.A Thomas, 'Socio-Legal Studies' in D Hayton (ed), *Law's Futures* (Hart Publishing 2000), p.271

⁴ Getting a PhD in law (n 1), p.5

C Hunter, 'Introduction: Themes, Challenges and Overcoming Barriers' in C Hunter (ed), *Integrating Socio-Legal Studies into the Law Curriculum* (Palgrave Macmillan 2012), p.3

⁶ Terry Hutchinson, 'Doctrinal Research: Researching the Jury' in D Watkins and M Burton (eds), Research Methods in Law (Routledge 2013), p.9

⁷ M Adler, *RECOGNISING THE PROBLEM: Socio-Legal Research Training in the UK*, 2007), p.1; Sociolegal Studies a challenge to the doctrinal approach, p.53

⁸ RECOGNISING THE PROBLEM: Socio-Legal Research Training in the UK (n 7), p.1

which they were selected. Section 3.4 describes the interview design including the format of the interview and the construction of the interview schedules; and section 3.5 details the data handling and method of analysis that was systematically followed. Finally, ethical considerations are discussed in section 3.6.

3.2 Research Design

For the socio-legal researcher, "choosing the appropriate theoretical approach and the method of investigation is just as important as all other aspects" of the research.

⁹ It is, therefore, important to ensure that "the research questions, method and theoretical approach are clear". As discussed in the previous chapter, this project proposes a new approach to researching the relationship between technology and law that looks at the uptake of technology within a specific context and affords attention to the perceptions of those interacting with the technologies found. To do this, this thesis borrows its tools of inquiry from Science and Technology Studies and, more particularly, draws on the Social Construction of Technology as its guiding perspective.

The Social Construction of Technology "refutes positivist epistemologies in which social reality is an objective fact to argue that social reality is variable between social actors located in specific social contexts, times and places". ¹¹ In particular, it stands in contrast to the technological determinist approach already touched upon, which considers technology as independent from social or cultural influences. ¹² In this perspective, technology develops in isolation from such influences, "either following science or of its own accord" ¹³ and subsequently "determines its own impact on

⁹ Socio-legal Studies a challenge to the doctrinal approach (n 2), p.44

¹⁰ Ihid n 44

¹¹ Craig Gurney, 'Lowering the Drawbridge: metaphor and analogy in the social construction of home ownership' (1999) 36 Urban Studies p.1708

¹² Andrew Murphie and John Potts, *Culture and Technology* (Palgrave Macmillan 2003), p.17

¹³ Donald McKenzie and Judy Wajcman, 'Introductory essay: the social shaping of technology' in D McKenzie and J Wajcman (eds), *The Social Shaping of Technology* (Open University Press 1999), p.5

human society".¹⁴ It is consequently characterised as a "billiard ball"¹⁵ approach where "technology causes things to happen"¹⁶ through a ricochet effect. Murphie and Potts comment that it:

"treats technologies in isolation, as if they come into existence of their own accord and proceed to mould societies in their image". 17

The Social Construction of Technology, by contrast, holds that "technology [is] both socially shaped and society shaping". Rejecting the deterministic view that technology develops autonomously, it holds that technologies can be neither objectively nor scientifically shown to work. Rather, the success or failure of a technology comes down to how it is received by the social groups that engage with it: "machines 'work' because they have been accepted by relevant social groups". Thus, perceptions of technology among relevant social groups are significant as we cannot look to understand the ways in which technologies are used without understanding how they embedded within their social context. Following this perspective, an in-depth qualitative exploration of the perceptions and uses of technology among personal injury lawyers has potential to enhance the understanding of the relationship between technology and the law in practice within the personal injury context.

3.2.1 A Qualitative Methodology

As noted, the research questions in this study prompt qualitative responses. Hence, in line with the social constructionist approach, this research is guided by a qualitative methodology. It follows an inductive method, using the research questions to narrow the scope of the study and develop an understanding of the role of technology in the

¹⁴ Mireille Hildebrandt, *Smart Technologies and the end(s) of Law* (Edward Elgar Publishing 2015), p.165

¹⁵ Claude Fischer, *America's Calling. A Social History of the Telephone to 1940* (University of California Press 1992), p.8

¹⁶ David Croteau and William Hoynes, 'Media/Society: Industry, Images and Audiences', (Pine Forge Press 1997), p.266

¹⁷ Culture and Technology (n 12), p.17

¹⁸ Introductory essay: the social shaping of technology (n 13),p.XV

¹⁹ Wiebe E Bijker, *Of Bicycles, Bakelites, and Bulbs* (The MIT Press 1995), p.270

resolution of personal injury claims. This flexible approach seeks to explore the uses and perceptions of technology as they emerge from the data rather than test any predetermined hypothesis. As Webley notes:

"qualitative research unfolds – it develops as the researcher learns more; in other words the experiment is not usually set up and then allowed to run along a predetermined course".²⁰

3.2.2 In-depth Interviews

This thesis makes use of in-depth qualitative interviews carried out between March 2017 and June 2018. The method comprises one-to-one semi-structured interviews with 19 participants from within multi-track personal injury practice. The questions are open, allowing for the collection of "rich and detailed information" as opposed to "yes-or-no, agree-or-disagree responses".21 Where possible, interviews were conducted in person; otherwise they were carried out via telephone or video conference. There are numerous advantages to this approach. In-depth interviews, being "extremely effective at garnering data on individuals' perceptions" 22 have potential to uncover the "understandings, experiences and imaginings of research participants".²³ By giving participants greater opportunity to express themselves than a quantitative study or survey, in-depth interviewing allows for an exploration of various perceptions, discourses and relationships as well as the "significance of [their] meanings". 24 These advantages are particularly valuable for the present study given the research questions and the epistemological perspective outlined above. Although the project looks to understand the use of technology in the process of resolving a personal injury claim, the purpose is not to produce rich descriptions of practitioners' daily work. To produce such insight would require an ethnographic approach. Rather,

²⁰ L Webley, 'Qualitative Approaches to Empirical Legal Research' in P Cane and H Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (Oxford University Press 2010), p.932

²¹ Hernert J Rubin and Irene Rubin, *Qualitative Interviewing: The Art of Hearing Data* (3rd edn, SAGE 2012), p.29

²² Qualitative Approaches to Empirical Legal Research, (n 20) p.937

²³ Jannifer Mason, *Qualitative Researching* (2nd edn, Sage 2002), cited in Rosalind Edwards and Janet Holland, *What is Qualitative Interviewing?* (Bloomsbury 2013), p.90

²⁴ What is Qualitative Interviewing? (n 23), p.91

the purpose is to uncover and understand the ways in which practitioners interact with technology and gain insight into their own perspectives: how they feel about the use of technology and how they consider it affects their daily practice. Speaking directly with legal practitioners in a semi-structured, in-depth conversation is the most advantageous method of capturing these answers.

Although qualitative interviewing is a powerful and revealing method, the use of interview data has its limitations, many of which can be seen to contribute to one broad issue with interviews in general: that they give neither a factual, nor neutral account:

"Qualitative interviews make the problematic assumption that what the interviewees say can be treated as a report on events, actions, social processes and structures and cognitions".²⁵

Accepting this, one must, instead, treat them as a narrative between the interviewer and the interviewee which occurs within a non-naturally occurring setting "specifically set up for research purposes".²⁶ The interview is, therefore, a "performative rather than referential" social encounter.²⁷ This does not mean that interviews cannot provide useful or meaningful insights, but it does mean that one must recognise responses as personal accounts which cannot simply be taken at face value.²⁸

Brewton and Milward suggest that, "due to their openness to so many types of bias, interviews can be notoriously unreliable".²⁹ However, as reliability refers to the extent to which repeated trials will yield the same results, it is, one would suggest, unsuitable as a test of quality for interviews. If we accept that interviews present a personal account of a situation, then each account is subjective and susceptible to

²⁵ David Silverman, *Doing qualitative research* (Fourth edition. edn, London : SAGE Publications Ltd 2013), p.199

²⁶ Paul Atkinson and Martyn Hammersley, Ethnography: Principles in Practice (Routledge 2007), p.4

²⁷ Martyn Hammersley, Methodology: Who Needs It? (1st edn, Sage 2011), p.129

²⁸ Paul Atkinson, 'Qualitative Research - Unity and Diversity' (2005) 6 Forum: Qualitative Social Research

²⁹ Paul Brewerton and Lynne Millward, *Organizational Research Methods: A Guide for Students and Researchers* (1st edn, Sage 2001), p.74

change. Interviews, thus, capture a snapshot in time which, if compared longitudinally would often prove unreliable, irrespective of their individual validity or trustworthiness. Atkinson suggests that instead of being concerned with reliability, we should instead focus on the credibility or plausibility of accounts.³⁰ Nonetheless, the time specificity of interviews cannot be ignored when analysing the data and must be regarded when writing up the findings, if considered significant.

Adopting credibility as an alternative to reliability, issues of bias and accuracy remain; and these challenges can take several forms. The potential biases relevant to this project are mostly response biases – those arising from the tendency for participants to respond to questions inaccurately. In particular, the social desirability bias, where participants' answers are influenced by their perception of what is a socially acceptable or favourable answer, is a key concern. Hammersley and Gomm comment:

"what people say in an interview will indeed be shaped, to some degree, by the questions they are asked; the conventions about what can be spoken about; [...] by what they think the interviewer wants; by what they believe he/she would approve or disapprove of".³¹

To mitigate this bias, participants were briefed that the purpose of the interview was to capture their personal opinion and that there were no right or wrong answers to the questions. Questions were asked openly and were crafted to be non-leading. Likewise, the participant information sheet sent to participants before interview was carefully drafted to give participants sufficient information prior to participation without influencing the answers they give at interview. There was nothing during the interviews to suggest that participants were strongly influenced by social desirability bias. Nonetheless the possibility of social desirability bias remains and it is inescapable that, as participants were aware that the subject of the research is related to the use of technology, this alone may have influenced their answers,

³⁰ Paul Atkinson, *For Ethnography* (Sage 2015), p.101

³¹ M Hammersley and R Gomm, 'Assessing the radical critiques of interviews' in M Hammersley (ed), *Questioning Qualitative Inquiry: Critical Essays* (Sage 2008), p.100

irrespective of how open the questions asked may be. The following question and answer exemplify this:

- Q What do you think are the threats and opportunities to personal injury law in the future?
- A From technology?
- Q Well generally, but technology could be part of that if you think it is.³²

In this situation, the participant interpreted an open question on the threats and opportunities to personal injury law as a question about the threats and opportunities relating to technology. Awareness of the topic of research has evidently influenced their response. This exchange was only noted in a few of the interviews; however, awareness of the research topic may well have unavoidably influenced all participants' responses.

It was clear at interview that some of the participants had read at least some of Susskind's work and were familiar with his thesis. This was evident in some of the language used by them and was also disclosed during the interview. This is not considered problematic, however, as there was a mix of opinion among the participants on this and, in any case, their perspective as legal practitioners is valid irrespective of how well read they are within the field of law and technology. Their awareness of existing theories and theses is uninfluenced by this research project and merely forms part of the context in which the participants were found. However, that context may have formed their perspectives and it is sufficient to be aware of that. This point is revisited in the context of sampling below.

The final bias that participants are likely to display at interview is that of self-protection, which can be conscious or unconscious. Legal practitioners are clearly invested in the future of legal practice and may be inclined to give answers that protect their role. Consciously, participants may restrict their responses in order to do this, although there was no indication during the interviews that participants were

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³² Interview 17

not being transparent. Unconsciously, however, participants might underestimate the impact of technology within their field as a subconscious way of protecting their work. This was certainly evident in several of the interviews and was even self-identified by one participant, who recognised this in their own response:

I realise I'm biased in this it's a bit like asking a turkey about Christmas.³³

As this thesis seeks to understand the perceptions of lawyers towards the use of technology, such biases are not considered problematic, provided one is aware of them. Understanding the biases is part of understanding the perceptions and why they have formed. Moreover, each participant's account of the truth is subjective. Thus, we "cannot approach interview data simply from the point of view of 'truth' or 'distortion'" but must treat the interviews as accounts which are contextualised and influenced.³⁴

Some of the interviews that this research involves could be described as 'elite interviews'. Elites may be "loosely defined as [...] those with close proximity to power", 35 including "corporate, political and professional elites such as medics" and lawyers. 36 Participants have also been described as elites in a relational sense based on their position in relation to the researcher. 37 Whilst there is "no guarantee that an elite subject will necessarily translate this power and authority in an interview setting" 38 ideally a neutral setting serves to redress any imbalance of power between the researcher and the participant. However, for the most part, the face-to-face interviews in this study were conducted at the offices of the participant. This was largely unavoidable, particularly when asking senior lawyers to volunteer their time,

³³ Interview 1

³⁴ Paul Atkinson and Amanda Coffey, 'Revisiting the Relationship Between Participant Observation and Interviewing' in J Holstein and J Gubrium (eds), *Inside Interviewing: New Lenses, New Concerns* (Sage 2004), p.442

³⁵ Darren Lilleker, 'Interviewing the Political Elite:Navigating a Potential Minefield' (2003) 23(3) Doing Politics 207, p.207

³⁶ H.S Becker, 'How I Learned What a Crock Was' in I Hertz and JB Imber (eds), *Studying Elites Using Qualitative Methods* (Sage 1995) cited in Zoe Slote Morris, 'The Truth about Interviewing Elites' (2009) 29(3) Politics 209, p.209

³⁷ See N Stephens, 'Collecting Data From Elites and Ultra Elites: Telephone and Face-to-Face Interviews with Macroeconomists' (2007) 7 Qualitative Research

³⁸ Exeter University, Strategies for Conducting Elite Interviews , p.4

uncompensated, for a research interview. Where the researcher has built a relationship of trust and mutual respect with the participant, issues of authority become less challenging, enabling the researcher to obtain the high-quality data required of the interview, irrespective of the location. Ostrander argues that this relationship is developed over time, starting with the first contact that the researcher makes with the participant.³⁹ Hence, when contacting participants in preparation for the interviews, there was a concerted effort to present a professional (in the colloquial sense of the word) but amiable front, in order to encourage participation and build a rapport with the participants.

3.3 Sampling

3.3.1 Sampling Method

Participants were selected using purposive sampling which, as the name suggests, involves purposefully selecting participants who are likely to make "information-rich cases for study". 40 It is important to note that purposive sampling simply means selecting participants who are "relevant to the research questions being posed" 41 and not selecting participants on the basis of presumed or desired answers. Unlike probability sampling which systematically selects random participants from a population, purposive sampling identifies "groups, settings and individuals [...] where the processes being studied are most likely to occur" 42 to provide an information-rich sample of participants from whom the researcher "can learn a great deal about issues of central importance" to the inquiry. 43 As such, purposive sampling inhibits the researcher from identifying or extrapolating empirical generalisations from the data, as participants are unlikely to reflect the entire population. Nonetheless, "the logic

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³⁹ Susan Ostrander, '"SURELY YOU'RE NOT IN THIS JUST TO BE HELPFUL": Access, Rapport, and Interviews in Three Studies of Elites' (1993) 22 Journal of Contemporary Ethnography 7

⁴⁰ Patton 2002 p.230

⁴¹ Denzin and Lincoln 'Strategies of Inquiry' The Sage Handbook of Qualitative Research. P.245

⁴² What is Qualitative Interviewing? (n 23), p.6

⁴³ M Patton, Qualitative Evaluation and Research Methods (Sage 2002), p.230

and power of purposeful sampling" lies in its ability to provide meaningful "insights and in-depth understanding". 44

This project used a combination of heterogenous (or maximum variation) sampling and typical case sampling, both types of purposive sampling. Heterogenous sampling seeks to capture a range of perspectives relating to the research inquiry to identify shared and contrasting patterns across diverse cases; and typical case sampling seeks to create a profile of what is typical of a particular group, enabling the researcher to identify common characteristics from among the participants selected. The participants for this study consisted of 19 personal injury practitioners, who were purposefully selected to cover a range of practicing perspectives, including paralegals and legal executives; qualified solicitors; and qualified or unqualified managers and partners. Looking between each group, the range of perspectives offered by the three broad categories effectively cover the full spectrum of personal injury practitioners. It is this selection that can be described as heterogenous sampling. Within each group, the purpose is to understand and illustrate the common themes from each, i.e. the typical perspectives of unqualified case handlers, qualified case handlers and senior management respectively, thus representing the typical case sampling.

3.3.2 The Participants

One disadvantage of purposive sampling is that "it can be difficult for the reader to judge the trustworthiness of sampling if full details are not provided".⁴⁵ It is therefore useful to discuss the participants, how they were selected and why they were deemed relevant to answering the research questions.

Participants were contacted in three ways. First, contact was made with a firm, or an individual within a firm, inviting them to participate in the research. These were all chosen on the basis of their expertise in personal injury law and were largely chosen at random from a profile of firms that advertise themselves as specialising within this area. Second, individuals with whom some prior contact was established, either

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⁴⁴ Ibid, p.230

⁴⁵ Satu Elo and others, 'Qualitative Content Analysis: A Focus on Trustworthiness ' (2014) 4 Sage Open , p.4

directly or indirectly through a gatekeeper, were asked to participate in the study. This varied from lists of recent graduates held within Cardiff Law School, to personal contacts within practice. Third, participants were contacted via the co-funders of the project. These were a mixture of participants from within their firm and contacts they held from other firms. Irrespective of how contact was established, the same Letter of Engagement⁴⁶ was sent to all participants along with a Participant Information Sheet.⁴⁷ On agreeing to participate in the study, all participants were sent a Participant Consent Form⁴⁸ which was signed and returned before the interview was arranged.

Where participants were recruited through a general communication to a firm or via alumni mailing lists, the specific participants were identified on the basis of convenience in that they were "available by means of accessibility", ⁴⁹ although they were still purposefully selected as discussed above. Undoubtedly, the most successful means of gaining access to interviewees was through pre-established connections, whether direct or indirect. A mixed response came from other gatekeepers who in some cases would allow access to staff within their firm and in others would not, affirming their role as "people [who] can help or hinder research depending upon their personal thoughts on the validity of the research and its value".⁵⁰

Gaining access to participants was considerably more difficult than anticipated and there were two main reasons for this, both of which relate to the commercial implications of participation. First, the simple fact that legal professionals work on a billable hours system makes participating in academic research commercially disadvantageous, as time spent in interview is a distraction from fee earning work. This was noted by several lawyers who responded to the initial contact letter but did not commit to an interview as well as some who did commit to an interview, but only

⁴⁶ See Appendix 2

⁴⁷ See Appendix 3

⁴⁸ See Appendix 4

⁴⁹ What is Qualitative Interviewing? (n 23) p.6

⁵⁰ Carla Reeves, 'A Difficult Negotiation: fieldwork relations with gatekeepers' (2010) 10 Qualitative Research , p.317

within a restricted time frame, often their lunch hour. Second, law firms operate within a competitive market and there was a clear anxiety from some practitioners that questions about their investment in technology and internal systems might reveal commercially sensitive information. As expected, this second concern was a greater barrier to accessing junior case handlers, in particular paralegals and legal executives, whose supervisors were often willing to be interviewed themselves, but would not allow access to their team as a way of limiting exposure. Anticipating this, paralegals and legal executives were contacted first in order to capture their data before approaching lawyers, partners and managers for interview. As these junior practitioners often do not have personal web profiles, direct access was sometimes difficult, so gatekeepers identified through law school alumni networks were utilised to facilitate first contact. Both issues are captured in Munro's observation:

"The power dynamics underpinning empirical research are often complicated. In many cases, it involves negotiating with gatekeepers to identify minimally intrusive mechanisms for securing access to required data, and satisfying stakeholder participants of the impartiality of the researcher".⁵¹

Despite efforts to manage the interviews in such a way as to reduce the perception of risk to the commercial interests of participants, the response rate was low and data collection took much longer than expected. Most notably, access to participants in large national and multi-national high-volume firms (so-called "settlement mills"⁵²) was restricted. In total, 19 participants were interviewed, as shown in Table 3.1 below.

⁵¹ Vanessa Munro, 'The master's tools? : a feminist approach to legal and lay decision-making' in D Watkins and M Burton (eds), *Research Methods in Law* (Routledge 2017), p.209

⁵² Nora Freeman-Engstrom, 'Run-of-the-Mill Justice' (2009) 22 The Georgetown Journal of Legal Ethics 1485

Table 3.1

Type of interviewee	Number of interviews
Paralegal/Legal Executive	7
Lawyer	7
Partner/Senior Manager	5
	19

These participants were drawn from 11 firms across the UK and cover a range of claimant personal injury work from within the multi-track, with two participants also working on fast-track cases. Where relevant, any specialist work has been noted as a niche, without listing the specific type of specialism (e.g. niche medical negligence). This is because one participant reported that, as the only senior associate specialising in their niche area in London, referring to their specific area of work would make them identifiable from their descriptor. The participants are described in Table 3.2:

Table 3.2

Participant Number	Description
1	Senior Associate, multi-track, large regional firm
2	Paralegal, fast-track & multi-track, large national firm, regional office
3	Paralegal, multi-track (product liability), large regional firm
4	Senior Associate, multi-track, large regional firm
5	Legal Executive & Associate, fast-track & multi-track, small-medium regional firm
6	Lawyer, multi-track, small-medium regional firm
7	Legal Executive, multi-track medical negligence, medium regional firm
8	Paralegal, multi-track, large regional firm
9	Paralegal, multi-track medical negligence, large national firm, regional office
10	Legal Executive, multi-track medical negligence, large national firm, London office
11	Senior Associate, multi-track niche medical negligence, large national firm, London office
12	Lawyer, multi-track medical negligence, large national firm, London office
13	Senior Partner, high value multi-track, large national firm, London office
14	Managing Partner, high value multi-track, Large regional, London- based firm
15	Partner, multi-track, large national firm, London office
16	Senior Associate, multi-track (injuries abroad), large national firm, London office
17	Lawyer, multi-track medical negligence, large national firm, London office
18	Senior lawyer, multi-track, large regional firm
19	Senior Partner, high value multi-track, large national firm, non- London office

One difficulty with a sample of this kind is that the participating lawyers may have agreed to participate because of a favourable opinion preconceived of the research topic, or an existing interest in the area. This issue relates to the discussion in s.3.1 concerning the representativeness of data collected from purposively selected participants. The benefits of this selection method having already been discussed, it only remains to acknowledge this unavoidable limitation. In any case, the views of the participants discussed in Chapters 4-7 are not representative of personal injury practitioners generally. They are representative of the sample outlined above and offer rich insights into the perspectives of only a small part of the profession. As such, the conclusions drawn in this thesis, however illuminating, are not generalisable.

3.4 Interview design

3.4.1 Interview format

Each participant was informed of the aims of the research prior to interview to ensure that they had sufficient context to contribute to the discussion. The interviews followed a semi-structured format which was influenced by the literature review and the various conversations held prior to setting out the questions. The interview design seeks to capture a broad profile of practising perspectives, hence three schedules were constructed to represent three broad levels of practitioner: senior lawyer; lawyer; and paralegal/legal executive. However, over time it became clear that hard and fast distinctions between each level were not possible as firms would define and use different categories of personnel in often dissimilar ways. In particular, there were some distinct differences between firms on the role of legal executives; something that had not been factored into the original interview design. Thus, flexibility was required when using each interview schedule and judgments were necessary when interviewing some participants for whom more than one of the schedules might be appropriate. Using semi-structured interviews enabled the

⁵³ See appendix 4 for each interview schedule

focused, yet flexible, approach required for this and was integral to the exploratory nature of the research.

3.4.2 Interview Schedules

It was the initial intention to perform a scoping exercise — a set of interviews in which first contact could be made with stakeholders and potential participants. The scoping interviews were intended to help narrow the research questions and inform the development of the interview schedule. Interviewing stakeholders early in the research process as part of this exercise might also introduce them to the project as potential gatekeepers to later participants. However, on reviewing the limited literature on scoping interviews as a methodological tool, it became apparent that the distinction between a 'scoping interview' and a 'proper interview' was largely a fabrication and not necessarily a useful one to make. Accepting that the interview schedules and the researcher's own position might change over the course of the research, one must also accept the arbitrariness of distinguishing between transcripts that merely inform the method and transcripts that constitute data. As has already been noted: "qualitative research unfolds — it develops as the researcher learns more".54

Moreover, there is a difficult methodological question of where to end with a scoping exercise and where to begin the data collection, particularly taking into account the timescale of the project and, crucially, the fact that each participant in the scoping exercise is potentially one fewer for the data collection stage. While the idea of formalised scoping interviews was, therefore, abandoned, this project has enjoyed the support of a senior practitioner at Irwin Mitchell, who have co-funded the PhD, as well as former practitioners within the Law Department, who have informed the development of the project at key stages. The insights from these interactions

⁵⁴ Qualitative Approaches to Empirical Legal Research (n 20), p.937

101

assisted in constructing the interview schedules without the need for a formal scoping exercise.

There is not scope here to account for and justify each question asked at interview. The interview schedules can be found at Appendices 5-7, but as the interviews were semi-structured there was inevitably some deviation from, and addition to, these questions in each interview.

Each interview started with a discussion of the participant's daily interaction with technology. Inviting them to 'tell the story' of the life of a claim, whilst highlighting the technology used during the process, served as an important first question, relaxing them into the interview environment and encouraging them to start thinking about technology and their daily work. It also enabled me to understand what sort of work each participant is involved in, what processes and procedures they follow and, crucially, what kinds of technologies their firms have already adopted, thus giving me a good indication of where to pitch the rest of the questions. The common themes running through the interview questions focused on participants' interactions with technology; participants' perception of technology; and technology's impact on practitioners' work. This introduced a variety of further themes which ranged from the (often strained) relationship with clients to the management structures within their firm. Whilst the themes discussed varied to some extent dependant on the interviewee, in all interviews the changing role of technology within personal injury practice was the main focus.

3.5 Analysis of Transcripts

3.5.1 Recording and Transcribing

Each interview was recorded, with prior permission from the interviewees, to assist with transcribing. Verbatim transcripts were produced; a "word-for-word reproduction of verbal data, where the written words are an exact replication of the

audiorecorded words".⁵⁵ I chose to transcribe the interviews in full rather than selectively as this seemed the best way to become fully immersed in the data before making judgments on it.⁵⁶ After each transcript was produced in draft, it was sent to the relevant participant to confirm it as an accurate representation of the interview. At this stage participants had the option to redact any information that they did not want included within the data. No redactions or amendments were made. Once the transcripts were confirmed, the original recordings were deleted to ensure safer storage of data and reduce the risk of a data breach. In accordance with Cardiff University Ethical Guidelines, transcripts were stored digitally, on a University PC, with a back-up stored on an external hard drive kept in a locked drawer within a locked, shared office. Any printed copies were similarly stored in a locked drawer.

3.5.2 Thematic Analysis

The method of analysis adopted for this project is an adaptation of Burnard's thematic content analysis,⁵⁷ itself an adaptation of Glaser and Strauss' grounded theory approach.⁵⁸ The aim of this method is to produce a detailed record of the themes arising from the interview data collated within a category system. Recognising that "no one method of analysis can be used on all types of interview data"⁵⁹ the method has been tailored to this project, without compromising on its systematic approach.

To an extent, the method is simply a structured and systematic form of thematic analysis - "a method for identifying, analysing and reporting patterns in data". 60 However, the early stages of open coding and category organising take influence from content analysis as they seek to quantify, collate and organise references into identifiable categories before identifying wider themes. This enables the researcher

⁵⁵ Patricia M Davidson, 'Is Verbatim Transcription of Interview Data Always Necessary?' (2006) 19 Applied Nursing Research p.38

⁵⁶ This is an important step in the method of analysis detailed in s.3.5.2

⁵⁷ Philip Burnard, 'A Method of Analysing Interview Transcripts in Qualitative Research' (1991) 11 Nurse Education Today

⁵⁸ B G Glaser; and A L Strauss, *The Discovery of Grounded Theory* (Aldine 1967)

⁵⁹ A Method of Analysing Interview Transcripts in Qualitative Research (n 57), p.461

⁶⁰ V Braun and V Clarke, 'Using Thematic Analysis in Psychology' (2006) 3 Qualitiative Research in Psychology, p.79

to identify the more prevalent themes in the transcript as noted by the volume of references highlighted. However, unlike pure content analysis it does not formally quantify the volume of references within each category and therefore does not seek to obtain quantitative data from the qualitative transcripts. Rather, the initial stages of this method seek to assist the thematic analysis, offering a systematic way of identifying the categories in order to make "replicable and valid inferences from data to their context". In this sense, it is influenced by the spirit of content analysis – to take an objective and systemic approach – but is not concerned with a quantitative description of the data.

Burnard sets out a fourteen-stage approach which for this project has been amended to an eight-stage approach:

STAGE 1: becoming immersed in the data

The first stage is reading and re-reading the transcripts in order to become "immersed in the data" .63 There is no fixed number of times a transcript may need to be read; some may be read more times than others to understand what the respondent is saying. However, I was conscious of not over reading some transcripts such that preference was given to one person's response over others. During the first reading no notes were made, but from the second reading, first thoughts were noted on each transcript. These notes are not exhaustive, nor are they aimed at being first draft categories. They simply annotate the transcripts to highlight the respondent's "frame of reference".64

⁶¹ Although quantification is key to content analysis, the extent to which it is restricted to producing only quantitative description is contested.

⁶² Klaus Krippendorff, Content Analysis: an introduction to its methodology (SAGE 1980), p.21

⁶³ A Method of Analysing Interview Transcripts in Qualitative Research (n 57), p.462

⁶⁴ Rogers (1951) referenced in ibid, p.462

STAGE 2: open coding

Transcripts are read through again, this time with a view to start creating categories. On this reading multiple headings are written to annotate all parts of the transcript except for parts which are irrelevant to the research. These categories represent the first stage in coding, known as open coding.

STAGE 3: category organising

The list of categories from stage 2 are collected and organised into similar groups. Each group is then given a heading which becomes the new, broader, grouped category. For example, open categories are organised into grouped categories as follows:

Fig. 3.1 Example of Category Organising

Lawyer has a personal relationship with the client

Lawyer knows what works for the client

Clients need to talk to someone who will

listen

Lawyer is there to help individuals

Client service a priority

Importance of client-lawyer relationship

STAGE 4: category checking

The new list of categories is checked for repetitious and similar headings and if any are found, stage 3 is repeated. A sample of the transcripts are re-read, cross-

referencing these categories to ensure that they are relevant and all-encompassing of the interview data.

STAGE 5: category coding

Each transcript is coded using the final list of categories. This was done using a simple word processor with highlighting and font changing tools.

112 say anything about the role of legal professionals? Deprofessionalisation? 113 Oh right. Well I suppose it says that ... well ... it says 114 that the work they are doing isn't necessarily Detachment of 'my' work from 'other' work 115 technical as we might have once thought. So you don't 116 need first or second year associates to wrap up a road 117 traffic accident. That's a pretty standard case that 118 anyone with access to the right software and Deprofessionalisation 119 adequate training in how to use it could sort. Umm, I Splitting of work between 'standardized' 120 think I'm hesitant to say that it says something and 'non-standardized' 121 significant about the profession as a whole because Detachment of 'my' work from 'other' work 122 it's not true to say that claims management software

Fig. 3.2 Example of Category Coding

STAGE 6: collating

When the transcripts are coded, all instances of each code are collated into one document. Some of the extracts are collated with phrasing either side where it is deemed necessary to capture the context of the phrase. Collating the coded sections in this way enables a holistic view of all utterances or references to a particular theme, across all the interview transcripts.

Burnard warns "once sections of interviews are cut up into pieces, the whole of the interview is lost: it is no longer possible to appreciate the context of a particular

remark or piece of conversation".⁶⁵ Thus, it is important to keep a note of the transcript from which an extract came in order that the context of the phrasing is not lost as this may become vital for later reference.

Table 3.3 Example of Collated Data

Examples of deprofessionalisation		
	Transcript	
That's a pretty standard case that anyone with access to the right software and adequate training in how to use it could sort.	4	
it says that the work they are doing isn't necessarily as technical as we might have once thought.	4	
Although I do still use the software and that has definitely reduced the need for conscious judgments.	4	

STAGE 7: summarising themes

With all the similar sections organised into themes, the next stage is to write a commentary on each theme which links the examples together. The aim of this stage is to write a summary of each theme as found in the data in order to guide further reading and the final stages of the write up. It may be necessary to refer to the original transcripts to ensure that that the interpretation of the data is not detached from the context.

STAGE 8: revisit existing commentary

Using the summary of the themes it may be necessary conduct further reading or to revisit parts of the earlier literature review to develop one's understanding before progressing to the formal write up of the thesis, which should discuss the findings of the empirical research along-side or linked to existing work.

⁶⁵ Ibid, p.463

3.6 Ethical Considerations

Ethical approval for this project was granted in January 2017.⁶⁶ The main ethical considerations arise from the interviews and focus on ensuring that informed consent is given prior to interview and that data is stored securely. As discussed in s.3.2, each participant was given a Participant Information Sheet⁶⁷ prior to interview and, on agreeing to participate in the study, received a Participant Consent Form⁶⁸ to sign and return before their interview.

All of the participants are anonymised and referenced in gender neutral terms.⁶⁹ The exceptions to this are their relevant professional status, the type of work they do and the descriptor of their firm. For example, a participant may be described as *a paralegal within a multi-track medical negligence team at a London based large regional firm.*⁷⁰

As noted in s.3.5.1, all data was stored securely in accordance with Cardiff University's Data Protection Advice.

3.7 Conclusion

This chapter has detailed the methodological considerations that have guided the research for this thesis. Drawing on the limitations of existing research, detailed in the previous chapter, it has provided an outline of a new theoretical perspective from which to approach this topic. This approach focuses on the actual uses and perceptions of technology from among the relevant social group: practitioners handling and supervising multi-track personal injury claims. The chapter has offered a justification for the research design and a detailed description of the method taken,

⁶⁶ By the Ethics Committee at Cardiff University's School of Law & Politics.

⁶⁷ See Appendix 3

⁶⁸ See Appendix 4

⁶⁹ I interpret this as writing in a way that does not attribute a gender to the subject. This is adopted both as a way of further anonymising the participants and as a conscious choice to write inclusively. Although there is considerable commentary on the significance of gender with respect to technology, this was not seen as an integral part of this study. The genders of participants were neither asked nor assumed, therefore the participants must be reported with gender neutrality.

⁷⁰ See Table 3.2 for these descriptions in full.

including: the choice of in-depth qualitative interviews, the development of the interview schedules, the purposive sampling to select participants, the method of thematic analysis and the use of existing commentary.

Having set out the research questions and the method employed to answer them, the thesis now explores these questions over the next three chapters, beginning with the uptake and uses of technology to date.

CHAPTER 4

Examining the Uptake and Use of Technology in Personal Injury Practice

4.1 Introduction

The previous two chapters highlighted the need for a new approach to the study of technology and law. In particular, they emphasise the need for an empirical enquiry into the role of technology within practice and set out the importance of examining the uses and perceptions of technology from practicing perspectives. Having conducted 19 in-depth semi-structured interviews with practitioners and systematically analysed the transcripts, this chapter (the first of three examining and discussing the interview data) explains the current uptake, use and perceptions of technology within personal injury practice. It does so by discussing: the technologies available to practitioners; the technologies currently used by practitioners; how technologies are currently used; and practitioners' perceptions of the technologies currently in use. In so doing, this Chapter answers the first two research questions: what is the current uptake and use of technology within personal injury practice? And how do practitioners perceive the technologies that they currently use?

Section 4.2 outlines the current technologies available to legal practice, first in general terms and then with a focus on personal injury. To do this, it references the *Techindex* – a database that lists and categorises over 1,000 companies that supply legal technology.¹ It notes that the LegalTech market is heavily focused on commercial areas of practice and technologies available for personal injury practitioners are consequently in short supply. Section 4.3 discusses the current uptake of technology by personal injury practices as indicated at interview. It observes that case management systems are the most central technology within personal injury practice and that, from firm to firm, systems are broadly similar. It

¹ Stanford Center for Legal Informatics, 'CodeX Techindex' < https://techindex.law.stanford.edu/ accessed 20th December 2018, home page

further notes that beyond case management systems, the uptake of technology is consistent with any modern office. Section 4.4 considers the ways in which technologies are used. Due to the limited uptake of additional technologies, this discussion focuses on the varied uses of case management systems, concluding that there are six non-mutually exclusive uses. It suggests that, from the interviews conducted, there is an apparent connection between the role and seniority of a practitioner and their engagement with case management systems. Nonetheless, despite a shared perception that more senior practitioners use the case management system less, practitioners at all levels utilise case management systems as part of their day-to-day work, albeit in different ways.

Section 4.5 discusses practitioners' perceptions of the systems used. General and specific user issues are highlighted and these are categorised into issues of functionality; and issues of user ability. Notwithstanding the numerous user issues reported, there was unanimous agreement that technology has been a useful addition to practice. The general perception, therefore, remains positive. Contrary to what the current literature claims, none of the participants outrightly rejected or denied the benefits offered by LegalTech.

The chapter concludes with a review of the findings in preparation for Chapters 5 and 6, which discuss the extent to which technology has transformed personal injury practice; and the drivers and tensions that shape practitioners' engagements with technology, respectively. It concludes that the uptake of technology within personal injury over the last two decades has been underwhelming, particularly when compared with the growing investment in LegalTech. Nonetheless, the use of case management systems has increased, with the majority of participants reporting using a system on a daily basis. It notes that the positive perception of technology, in spite of difficulties, is a significant finding that rebuts Susskind's view of practitioners' objections.

4.2 Current Available Legal Technologies

It is often reported that the legal sector has consistently shown its "potential to be archaic, antiquated [and] slow"² in comparison to comparable industries, particularly with respect to technology.³ However, analyses that report this often focus on the current use of technology by lawyers without first considering the range of technologies available to them. In so doing, they omit to consider the actual uptake of technology in relation to the potential uptake. Conversely, reports on the LegalTech market invariably comment on the range of technologies currently available, or in development, without considering the actual uptake of technologies already on the market. Whilst both are useful exercises alone, in order to account for the difference between the uptake of technology and the availability of technology, each needs to be considered together. It is therefore necessary to give a brief overview of the LegalTech market in order to establish the extent of technologies available to practitioners, before assessing the uptake and use of technology reported at interview. This section therefore discusses the LegalTech market, first in general terms and then with a focus on personal injury practice.

Although the role of technology within practice has been discussed and acknowledged since the mid-late 20th century, the LegalTech market has only seen significant growth in recent years as both the number and variety of LegalTech providers has increased.⁴ According to a report published by technology consultants Tracxn, global investment in LegalTech was relatively stable until 2018, when the market experienced an "explosive growth"⁵ in investment.⁶ As Fig.4.1 shows, an

² James Tunney, 'The Problematic Role of Lawyers in the Creativity and Innovation Process' (2000) 9 Creativity and Innovation Management , p.224

³ The Law Soceity, *LawTech Adoption Research*, 2019), p.16; P Massey and P O'Hare, *Competition Law and Policy -in Ireland* (Oak Tree Press 1996), p.287

⁴ Robert Ambrogi, 'A Golden Age of LegalTech Start-Ups' (2017) 43 Law Practice, p.36

⁵ Valentin Pivovarov, '713% Growth: Legal Tech Set An Investment Record In 2018' *Forbes* (15 January 2019)

https://www.forbes.com/sites/valentinpivovarov/2019/01/15/legaltechinvestment2018/#1157077 47c2b>

⁶ Tracxn, Legal Tech Sector Landscape Report 2019)

increase from \$233m in 2017 to \$1.663bn in 2018 represents a 713.7% increase in overall global investment in legal technology.

Global Investment in Legal Tech
+713.7%

Fig. 4.1

This increase is attributed to the growing number of legal research tools, which constitutes the largest area in which companies specialise, and the development of e-Discovery.⁷ Although Fig.4.1 indicates a significant increase in interest among investors, there are two caveats to note. First, an increase in investment does not inherently mean an increase in the number or quality of technologies available, nor an increase in the technologies being used. Second, whilst \$1.663bn is a significant growth in investment for LegalTech, when compared with \$41.7bn invested in FinTech in the same year;⁸ or \$4.3bn of investment in artificial intelligence alone within MedTech between 2013 and 2018,⁹ it is clear that the legal sector is still behind comparable industries.¹⁰ Indeed, as The Law Society noted, the "pace of technological

1,800 1,600

1,400

⁷ 713% Growth: Legal Tech Set An Investment Record In 2018

⁸ FinTech Global, '2018 is already a record year for global FinTech investment' 2018)

https://fintech.global/2018-is-already-a-record-year-for-global-fintech-investment/ accessed 11 November 2019

⁹ CB Insights, *Top Healthcare AI Trends to Watch*, 2018), p.II

¹⁰ Law Geex, Legal Tech hits \$1 billion Investment as Lawyers Embrace Automation (2018)

innovation and adoption in law has been slower than other service industries".¹¹ Nonetheless, such rapid increase in investment surely indicates that LegalTech is now seen as a more lucrative investment opportunity. Hence, "legaltech is now attracting funding from a variety of sources".¹² This seems to support Susskind's submission that there are "great opportunities" for entrepreneurs and investors in the "UK's £25 billion legal market".¹³

In the same report, Tracxn reported over 2,600 LegalTech companies in operation globally, ranging from start-ups to established providers supplying a range of applications and tools for use across the profession. 14 The Stanford CodeX Centre for Legal Informatics has curated a database for legal technologies which lists and categorises over 1,000 companies providing LegalTech. 15 This database, known as the Techindex, is "intended as a resource for the legal community" to keep up to date with current and upcoming technologies. 16 With the LegalTech market quickly developing, the following account of available technologies, which uses the Techindex as its primary source, should be considered a snapshot in time taken at or as close to the time of interviews as possible. It has the sole purpose of highlighting some of the key technologies available to practitioners as a comparison to the actual uptake of technology discussed in s.4.3. The technologies highlighted from the index demonstrate that the focus of the LegalTech market is firmly on commercial practice areas. The companies supplying LegalTech have not developed systems intended for use within personal injury law despite their potential within this area. This point, discussed further below, emphasises the bias towards the commercial side of legal practice and the significant under representation of personal injury practice among

¹¹ LawTech Adoption Research (n 3), p.21

¹² Alara Basul, 'Investment in UK's Legaltech Sector Doubled Last Year' 2019)

https://www.uktech.news/news/investment-in-uks-legaltech-sector-doubled-to-61m-last-year-20191016> accessed 16 December 2019

¹³ Richard Susskind, *Tomorrow's Lawyers. An Introduction to Your Future* (Oxford University Press 2013), p.8. See Chapter 5 for further discussion on this point.

¹⁴ Legal Tech Sector Landscape Report (n 6)

¹⁵ CodeX Techindex (n 1), home page

¹⁶ Ibid, about page

the LegalTech community, as can be seen within the LegalTech market as well as the literature.

Companies listed on the index are usefully divided into nine areas based on the type of technology solution that they offer. Those directly relevant to personal injury practice, and this thesis in particular, are in bold:

Marketplace

Document Automation

Practice Management

Legal Research

Legal Education

Online Dispute Resolution

e-Discovery

Analytics

Compliance

Marketplace includes companies aimed at connecting lawyers with clients by advertising practitioners' competencies to be matched to clients' needs. For example, Law Trades markets itself as an "on-demand legal talent platform" where clients can assess, hire and review individual lawyers, giving themselves and future potential clients an informed choice of legal advisor. Susskind refers to this as "electronic legal marketplace". 18

Document automation refers to technologies that automate legal processes involving documents, including document generation and review. For example, Blue J Legal assists in tax law issues by automatically producing a report which provides evidence of due diligence based on the data it collects from clients.¹⁹ Kira,

¹⁹ Blue J Legal, 'Homepage' https://www.bluejlegal.com/ accessed 9 October 2019

¹⁷ LawTrades, 'Home Page' https://www.lawtrades.com accessed 12 March 2020

¹⁸ Tomorrow's Lawyers. An Introduction to Your Future, p.42; see Chapter 2.

on the other hand, assists in the review of documents by analysing the text within contracts and highlighting sections which it considers important.²⁰ Legal Zoom, one of the more successful tools with a reported 4 million users worldwide, automatically generates documents for use within personal services such as wills and probate, as well as business services such as trademarks and compliance.²¹ Its purpose is to create documents to be accessed by clients directly, without the need to instruct a lawyer. By integrating legal expertise into the system, they automatically produce accurate legal documents at a lower cost than traditional methods.

Practice Management encompasses anything that assists in the management and running of the firm, ranging from automated timekeeping packages to cloud based storage solutions for firms. These technologies are mostly aimed at streamlining and automating business functions of a law firm such as calculating bills and protecting sensitive data. Caseflow, a company currently operating in Australia and the USA, combines workflows, document automation and data capture in one system designed to improve the efficiency of working practices within firms.²² Originally focusing on personal injury, it now offers services within real estate, banking, family law and estate planning. This system is, in effect, a case management system with added tools to support management decisions at a firmwide level.

Legal Research is the research that lawyers undertake to find relevant precedents and materials. Lexis Nexis and Westlaw are market leaders in digital legal research the UK, having "set the standard for online legal research long ago".²³ However, short of incremental technical improvements and "variations on the same theme",²⁴ legal

²⁰ Kira Systems, 'Homepage' https://kirasystems.com/ accessed 09 October 2019

²¹ Legal Zoom, 'Homepage (UK)' <www.legalzoom.co.uk> accessed 10 August 2020

²² Caseflow Acumen, 'Homepage' https://caseflowacumen.com/#what_is_Caseflow accessed 09 October 2019

²³ Robert Ambrogi, *Upsetting The Applecart Of Legal Research* (2017) Available at: https://abovethelaw.com/2017/05/upsetting-the-applecart-of-legal-research/ [last accessed 16 December 2019]

²⁴ Ibid

research tools did not develop significantly in their first few decades.²⁵ Legal research has, consequently, been described as "the most staid area of legal technology".²⁶ More recently, LegalTech start-ups have developed new tools, many of which offer access to databases of precedents from within specific areas of practice, and there is now in excess of 70 different companies listed on the Techindex. Among the foremost of these is Ross Intelligence – a legal search engine that makes use of IBM's Watson to provide a cognitive legal research tool.²⁷ This is designed to enable users to describe their legal issue using natural 'human' language.²⁸ By using Watson's Al capabilities, Ross will make judgements on the law that it finds to return the case law most apposite to those facts. This promises what is claimed to be a "golden age of legal research innovation"²⁹ where only directly relevant results are displayed in order of their strength of precedent, not simply by date or alphabetically as other existing tools operate.³⁰

Online Dispute Resolution is often described as the online equivalent of alternative dispute resolution as it involves the mediation or arbitration of disputes digitally, via an online platform.³¹ This can include advice, mediation and adjudication.³² CourtNav is an example of online advice developed by the Royal Courts of Justice to guide people through the process of filing a divorce petition.³³ This technology uses a series of questions with yes/no or multiple choice answers to generate advice based on the responses. It also allows users to upload supporting documents and combines

²⁵, 'ROSS Intelligence Offers A New Take On Legal Research' *Above the Law* (29th May 2019) Available at: https://abovethelaw.com/2019/05/ross-intelligence-offers-a-new-take-on-legal-research/ [last accessed 07th October 2019]

²⁶ Upsetting The Applecart Of Legal Research (n 23)

²⁷ Ross Intelligence, 'Homepage: AI Meets Legal Research' < https://rossintelligence.com/ accessed 07 December 2018

Russell Pearce and John McGinnis, 'The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services' (2014) 82 Fordham law review , p.3048
 Upsetting The Applecart Of Legal Research (n 23)

³⁰ The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services, p.3048; Ross Intelligence, 'Ross Intelligence Features Page' 2019) https://rossintelligence.com/features.html accessed 16 December 2019

³¹ Arthur M. Monty Ahalt, 'What You Should Know About Online Dispute Resolution' The Practical Litigator 21, p.21

³² Civil Justice Council, Online Dispute Resolution for Low Value Civil Claims, 2015), p.6

³³ CourtNay, 'Homepage' http://courtnay.org.uk/ accessed 10 October 2019

automated document generation with online legal assistance from qualified lawyers to generate documents in preparation for court. Similarly, Fair and Square is an online mediation tool designed to divide assets fairly during a divorce, without needing to go to physical court or mediation meetings. However, the development of the Online Court for online adjudication has more complications and in 2016, Lord Justice Briggs reported that "there is not in actual operation anywhere in the world a recognisable precedent for the Online Court".34 Since then, HM Courts and Tribunals has developed the Money Claim Online (OCMC) portal, an online court for money claims with a value of up to £10,000 from no more than one claimant and against no more than two defendants. However, this has not been without controversy and has been criticised as "navigation [of the justice system] without lawyers".35 As noted in Chapter 2, Susskind has recently supported the "first generation of online courts" in which cases are determined without a gathering of parties or hearing.³⁶ Nonetheless, the OCMC portal remains the only active example of an online court in England and Wales today. The appetite for virtual hearings or even online adjudication without hearings has potential to shift post-Covid-19, as practitioners have been forced in some areas to adapt to the restrictions of this year. However, it has to be conceded that anecdotal reports on the success of recent virtual hearings have been mixed.³⁷

Analytics involves the interpretation of data to influence legal and business decisions within law firms. As noted in Chapter 2, this can range from decisions that influence the strategy of a case, for example when negotiating quantum, to decisions on how to run the business, such as where and how to advertise. Within the Techindex, Lex Machina³⁸ uses legal analytics to provide "insights about judges, parties, and

³⁴ Lord Justice Briggs, Civil Courts Structure Review: Final Report, 2016), p.44

³⁵ Diane Astin, *Navigation Without Lawyers: Access to Justice and the Online Court* (2016). Available at: https://www.lag.org.uk/article/202069/-lsquo-navigation-without-lawyers-rsquo---access-to-justice-and-the-online-court [last accessed 16 December 2019]

³⁶ Richard Susskind, *My Case for Online Courts* (2019) available at https://www.legalcheek.com/2019/12/richard-susskind-my-case-for-online-courts/ [accessed 5th March 2020]; *See also* Richard Susskind, *Online Courts and the Future of Justice* (Oxford University Press 2019)

³⁷ Jonathan Corman, *Heard the one about the vicar, the postman and the mother-in-law? Remote court hearings in the age of Covid-19* (2020) Available at: https://www.linkedin.com/pulse/remote-court-hearings-human-face-law-jonathan-corman/ [last accessed 2 October 2020]

³⁸ Lex Machina, 'Homepage' https://lexmachina.com/"> accessed 19 September 2020

opposing counsel"³⁹ to assist lawyers in crafting a "winning case strategy".⁴⁰ Originally focusing on intellectual property law, Lex Machina has since been subsumed by Lexis Nexis and branched into additional practice areas including employment, commercial transactions and product liability.⁴¹ Not listed on the Techindex, Liti-gate⁴² reviews documents submitted by the other side and identifies the relevant legal issues raised, finds precedents and suggests counter arguments to rebut the claim. Particularly useful for defendants, it identifies the risk and exposure within a case and reviews the success rates, merits and fallbacks of different arguments. In addition, it extrapolates key dates and tasks from the documentation to create actions required from the respondents, thus equipping lawyers to respond more efficiently.

One of the most pertinent things to note about the *Techindex*, alluded to above, is its lack of relevance to personal injury practice. The technologies listed on the index are heavily focused on commercial and transactional legal work such as contract writing, compliance, tax law assistance and, in rarer cases, conveyancing. Only one of the companies included on the index, Caseflow, was designed specifically for use within personal injury and even this example has since widened its focus to provide a general tool.⁴³ This illustrates a wider point noted in this thesis on the heavy emphasis towards the commercial side of legal practice and the significant under representation of personal injury practice among the LegalTech community. The Techindex demonstrates that this is not only true of the commentators from within academia and practice, but it also seemingly the case when taking a snapshot of the companies proving the technology. There are three potential explanations for this. First, there remains a perception that commercial and transactional legal work is easier to automate that non-commercial civil litigation. This work is mostly non-litigious and involves researching, reviewing and drafting documents alongside

³⁹ Ibid

⁴⁰ Ibid

⁴¹ Lex Machina, 'LexisNexis Acquires Premier Legal Analytics Provider Lex Machina' (23 November 2015)

⁴² Liti-gate, 'Homepage' <https://www.litigate.ai/> accessed 11 October 2019

⁴³ Caseflow Acumen, Homepage, (n 22)

negotiating and advising to bring parties together. It is often heavily specialised and standardised, enabling greater use of technology to automate routine tasks. Second, commercial firms operate within the 'corporate world' where expectations of them are likely different. Other industries also operating within this environment, such as the financial services industry, are vastly further ahead in terms of technological innovation and this puts pressure on commercial law firms to keep up with comparable sectors. 44 Moreover, corporate clients are "more price sensitive" 45 and, having finite budgets, are "no longer willing to pay high hourly rates to law firms for junior lawyers to do routine work" that can be automated or outsourced. 46 Third, it is axiomatic that there is significantly more money within commercial legal practice than personal injury practice. According to Law Society market intelligence data collected in 2016, the total turnover from personal injury work in England and Wales was £2,494m whilst the total turnover for commercial work, including intellectual property, was £10,935m.⁴⁷ This makes commercial practice a considerably more attractive area for technology developers as there is potentially more money to be invested in LegalTech by commercial firms than those offering personal legal services such as personal injury.

Despite this, there are technologies on the market which are directly relevant to personal injury practice, irrespective of whether they have been developed as such. Furthermore, the majority of the categories listed on the Techindex are, as Table 4.1 demonstrates, relevant to personal injury work. This strengthens the view that the bias towards commercial practice is more socially and economically motivated than technologically based.

⁴⁴ The Law Society, Lawtech Adoption Research, 2019), p.41

⁴⁵ Andreas B. Gunther, Entrepreneurial Strategies of Professional Service Firms: An Analysis of Commercial Law Firm Spin-offs in Germany (Springer Gabler 2012), p.136

⁴⁶ Steve Lohr, 'A.I. is Doing Legal Work. But it Won't Replace Lawyers, Yet' *The New York Times* (19 March 2017) https://www.nytimes.com/2017/03/19/technology/lawyers-artificial-intelligence.html [last accessed 22 December 2019]; Entrepreneurial Strategies of Professional Service Firms: An Analysis of Commercial Law Firm Spin-offs in Germany, p.136. The impact of the 2008 financial crisis on corporate law firms is a large part of Susskind's thesis which, as Chapter 6 demonstrates, is not applicable in the personal injury context.

⁴⁷ The Law Society, *The Future of Legal Services*, 2016), pp.22-24

4.2.1 Technologies for Personal Injury

Despite the focus on commercial and transactional practice highlighted above, this section identifies five principal technology types relevant to claimant personal injury practice and, more particularly, this thesis:

- case management systems as the core technology to standardise,
 digitise and automate aspects of case handling;
- document assembly tools to standardise and automate document generation;
- *legal research tools* to identify precedents;
- damage calculation tools to value claims more efficiently; and
- legal analysis tools to analyse legal documents efficiently.

These category labels are intended to more accurately describe the technology types vis-à-vis their application within the personal injury context. They are either taken as best examples from the literature or have been developed specifically for this thesis, taking account of the various labels used in the literature and within practice. Table 4.1 shows where these technology types overlap with the categories listed on the Techindex.

Table 4.1

Techindex categories	Technologies for Personal Injury
Marketplace	-
Document Automation	Document Assembly Tools
Practice Management	Case Management Systems
Legal Research	Legal Research Tools
Legal Education	-
Online Dispute Resolution	(Online Dispute Resolution)
e-Discovery	Document Analysis Tools
Analytics	Document Analysis Tools
Compliance	-
-	Damage calculation tools

As the table suggests, despite there being little relevant resource on the index for personal injury practice, the overlap between the technology types identified here and the categories on the Techindex is significant. This further illustrates the underrepresentation of personal injury practice among the LegalTech community and highlights the potential unmet demand for LegalTech within personal injury law. A sixth technology category, online dispute resolution, is included and briefly discussed below. This technology undoubtedly has relevance to personal injury practice, as policy makers support digitising the court process to enable civil disputes to be

"litigated by people without lawyers". 48 However the courts' use of technology is only tangentially relevant to the research questions of this thesis.

Case Management Systems are arguably the central technology for personal injury practitioners that incorporate several of the categories listed on the Techindex. Combining standardised templates, document generation, digital filing, diary systems, accounts packages, workflows and prompts, they are an all-encompassing case and practice management tool.⁴⁹ Case management systems have potential to support fee earners, enabling more efficient handling of claims; and practice managers, by gathering information on case progression and enabling digital supervision and monitoring. Taking market leader *Proclaim* as an example endorsed by The Law Society, the software includes data storage, document production and management, business development tools to analyse practice data, costs and budget management, workflows, time recording and auto-reporting of case progression. In addition, it has an integrated text messaging system to automatically send text updates to clients. However, it does not communicate directly with the court's systems despite there being interest in this from practitioners and enthusiasm for it in the Woolf Report.⁵⁰

Document Assembly Tools, discussed in Chapter 2 as automated or semi-automated document assembly, refers to the use of technology to create or assist in creating draft documents. This is a stage of automation beyond the templates and tools found within case management systems which, at present, require considerable input and editing by practitioners. By following workflows, these systems combine pre-existing text and data to create accurate new documents. At present, the technology is not at the level of complete automated document assembly, but there are systems already on the market which one would describe as semi-automation. Two leading systems,

⁴⁸ Lord Justice Briggs, *Civil Justice: My Vision for the Online Court* (2016) Available at: https://www.lawgazette.co.uk/practice-points/civil-justice-my-vision-for-the-online-court/5055277.article [last accessed 16 December 2019]

⁴⁹ Andrew Buchan, Jenny Kennedy and Eliot Woolf, *Personal Injury Practice* (Tottel Publishing 2008), pp.3-7

⁵⁰ Tamara Goriely, Richard Moorhead and Pamela Abram, *More Civil Justice? The impact of the Woolf reforms on pre-action behaviour*, 2002), p.49

Epoq and LegalZoom, offer document assembly service to companies, lawyers and lay persons. However, neither of these offer a service for personal injury law. Oyez Forms offers a similar service for personal injury practice, however the forms that it provides are more accurately described as templates than automated documents, as they still require user input to produce a usable, complete document. Clearly, therefore, there is some technology available for semi-automated document assembly; however, it requires further development, not least within personal injury, before being capable of producing fully automated final drafts.

Legal Research Tools. As already noted, the development of legal research tools has taken them beyond simple search engines towards more sophisticated systems that make judgments on the results they offer. In the not-too-distant future, it is claimed that "artificial intelligence systems will have the ability to reduce answering a legal question to the simplicity of performing a search" on one of these tools. ⁵¹ The leading systems already referenced operate across all areas of law, including personal injury. However, as noted, area specific tools developed by LegalTech start-ups have emerged, although as of August 2020 none was found specialising in personal injury.

Damage Calculation Tools are designed to assist with calculating the value of a claim when constructing a schedule of loss. They can be used to calculate general damages (compensation for injuries directly related to the claim, for example pain and suffering or reduced quality of life) as well as special damages (compensation for quantifiable financial losses incurred by the claimant, for example short- or long-term medical expenses or loss of income). Such tools are intended to be used by claimants, lawyers and the courts to provide fast and accurate estimations of expected damages. Early pioneers such as Quittance Legal Services, Harris Fowler and Bott & Co developed systems designed for use by claimants from as early as 2017, though

⁵¹ Josh Blackman, 'The Path of Big Data and the Law', *Big Data, Big Challenges in Evidence-Based Policy Making* (West Academic Press 2014), p.5

Najihan Awang Ali and others, 'The Personal Injury Claims Calculator (PICC) System' (2017) 7 International Journal of Academic Research in Business and Social Sciences , p.1361; Quittance, 'Personal Injury Compensation Calculator 2019 Update' 2019)

https://www.quittance.co.uk/personal-injury-compensation-claims-calculator accessed 8th October 2019

no similar calculation tools are available on other firms' websites.⁵³ These are intended for use by claimants to give an indication of their potential damages before speaking with a practitioner for further advice. Systems designed for use by practitioners are not widely advertised and there is yet to be any study into the use and effectiveness of them, however they are discussed briefly in section 4.2. Similarly, there is not yet a system established by HM Courts and Tribunals for use by the judiciary, who instead rely on the Judicial College Guidelines.⁵⁴ Defendant insurers, however, are reported to make use of systems that quickly value claims. Leading systems used by defendant insurers are ISO's Claims Outcome Advisor⁵⁵ and DXC Technology's Colossus,⁵⁶ both of which indicate a settlement figure based on data relating to previous settlements in similar cases.⁵⁷ For these systems to work effectively (and there is some disagreement on how effectively they do work) considerable data is required. The fragmented market on the claimant side of personal injury practice, in comparison with the condensed, oligopolistic insurance market, perhaps accounts for the development of data intensive systems by defendant insurers, whilst claimant solicitors, have no agreed way to share their claims data.

Document Analysis Tools or legal analytics use technology to analyse legal documents and precedents. *Liti-gate*, referenced above, uses artificial intelligence to scan and highlight legal documents in preparation for litigation. It can be used to review documents and link arguments to relevant precedents already within the system. As with other technologies noted in this section, its current focus is on commercial practice and its partnerships with firms such as Freshfields, Taylor Wessing and Mischon De Reya rather affirms that trend. However, it is not difficult to see the

⁵³ The Personal Injury Claims Calculator (PICC) System (n 52), p.1364

⁵⁴ Judicial College, *Judicial College Guidelines for the Assessment of General Damages in Personal Injury Cases* (15th edn, Oxford University Press 2019)

⁵⁵ Verisk, 'Homepage' https://www.verisk.com/insurance/products/manage-personal-injury-claims-more-effectively/ accessed 2 October 2020

⁵⁶ DXC, 'Colossus Homepage'

https://www.dxc.technology/p_and_c_general_insurance/offerings/26121/57637-colossus>accessed 2 October 2020

⁵⁷ Ministry of Justice, Civil Liability Act 2019: Reforming the Soft Tissue Injury ('whiplash') Claims Process - Impact Assessment 2019) MoJ 015/2016, p.48

application of this software to personal injury practice, which often involves considerable amount of time analysing documents and finding precedents. Much of the focus of this kind of technology has been on 'discovery', or disclosure in the UK. Although other commentaries define 'e-Discovery' as a separate category of legal technology, it is in reality a specific use for document analysis tools rather than a category of its own.

Online Dispute Resolution. In February 2015, the Civil Justice Council's ODR Advisory Group recommended the establishment of Her Majesty's Online Court, including three echelons: online advice, online mediation and online adjudication to handle civil claims up to £25,000.58 CourtNav and Fair and Square are examples of the first and second echelon operating within family law. However, there is not yet a prominent system providing online advice or mediation within personal injury. As already noted, the development of the online judicial court has been much slower and more controversial. The judicial application of the Online Courts to civil justice generally and personal injury specifically is consequently still uncertain, although the general view within practice is that online adjudication is "far from being an effective substitute [...] particularly for the most vulnerable" claimants.⁵⁹ Proponents of online dispute resolution point to the success of eBay's "low value high volume resolution process" which handles "over 60 million e-commerce disputes annually" as a model for imitation.⁶⁰ However, a system designed to provide access to civil justice for injured parties clearly requires greater consideration than an e-commerce dispute resolution system, to which both parties voluntarily and contractually consent. As has already been noted, anecdotal reports on the success of recent hearings held online due to Covid-19 restrictions suggest that there are significant technical and human barriers that need to be overcome before the online court is considered an effective

⁵⁸Online Dispute Resolution for Low Value Civil Claims (n 32), p.6

⁵⁹ New Law Journal, *Online court pilot begins amid warnings* (2018)

⁶⁰ Louis F. Del Duca, Colin Rule and Kathryn Rimpfel, 'eBay's De Facto Low Value High Volume Resolution Process: Lessons and Best Practices for ODR Systems Designers' (2014) 6 Arbitration Law Review 204, p.205

substitute for the courtroom.⁶¹ The speed and enthusiasm with which practitioners and judges return to physical hearings will similarly be anecdotally interesting. Engagement with these lawyers has potential to uncover insights into the possibilities of the online court. It is, therefore, noted as an area for future study in Chapter 7.

Having reviewed the technologies currently available from both a general and specific perspective, it is clear that the focus on commercial and transactional legal work highlighted in the literature in Chapter 2 is replicated on the LegalTech market. This is demonstrated well by the Techindex which, despite listing more than 1,000 LegalTech companies as a resource intended for the whole legal community, is almost entirely irrelevant to personal injury practitioners. It, therefore, appears that, despite the 700% increase in global investment in LegalTech illustrated in Fig.4.1, the development of personal injury focused technologies is limited. Nonetheless, as Table 4.1 illustrates, the five categories of technology identified in this study as directly relevant to personal injury practice do interact with the technology categories found on the index. It is, thus, significant that companies like *Proclaim* and Oyez Forms are not included. It is also significant that other than case management systems and legal research tools, no market leaders could be identified. There seems, therefore, to be a chasm between the technologies available for commercial practice areas and the technologies available for personal injury; and between the technologies predicted to disrupt legal practice and the technologies presently available to personal injury practitioners. Case management systems, legal research tools and relatively basic document templates are not only a far cry from the disruptive technologies that Susskind and others envisage, they are technologies which, as s.4.3 discusses, have been available to, and used by, personal injury practitioners for some time.

⁶¹ Heard the one about the vicar, the postman and the mother-in-law? Remote court hearings in the age of Covid-19 (n 37)

4.3 Current Uptake of Technology

In 2002, Goriely, Moorhead and Abrams reviewed the use of IT by claimant personal injury solicitors as part of a wider review of the impact of the Woolf reforms on civil justice. They found a spectrum of IT use from one solicitor who "boasted that he did not have a computer on his desk" to solicitors already investing in case management systems to assist in structuring legal decision making. However, despite there being some early pioneers, they reported that there was "little practical experience of using such systems". Having already explored the technologies available to personal injury practice today, the current section discusses the technologies that firms have reportedly invested in and, thus, participants now have access to. Section 4.4 then discusses the ways in which these technologies are used.

The interviews conducted confirmed that the principle technology found within personal injury practice is case management systems. This affirms the existing view that in order for personal injury practices to litigate a high volume of claims, they "will need a computerised case management package". Beyond this, the interviews indicated little uptake of additional assisting technologies, other than those which one would expect to find in any professional office: networked PCs and laptops, multi-line telephone systems, extensive use of emails and the occasional use of dictation software. Consequently, much of the following discussion is on the uptake of case management systems and the few 'bolt-ons' that participants reported having. There were, however, three additional legal technologies separate from case management systems highlighted in the interviews: legal search engines, damage calculation tools and document assembly tools. These are discussed in s.4.3.2. This suggests that, whilst the systems reportedly used by practitioners at interview are no doubt more advanced than those referenced in 2002, there has been no real innovative shift in the uptake of LegalTech by personal injury lawyers in the almost

⁶² More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (n 50)

⁶³ lbid, p.47

⁶⁴ Ibid, p.49

⁶⁵ Personal Injury Practice (n 49), p.3

two decades since, despite exponential growth in technological capabilities and seemingly innovative developments in the LegalTech market.

4.3.1 Case Management Technology

Across the interviews there was a range of different systems (and combinations of systems) in place to assist practitioners with case management. At one end of the spectrum were two participants⁶⁶ who had no access to a case management system, but instead used a combination of three separate systems designed to achieve the same outputs: a "glorified word processor" to generate and store documents, an accounts package and a time recording system in addition to using Outlook to send and store emails. This method of working was described as "behind the times" 68 and "quite bad" by the participants respectively, both of whom had previously worked with a case management system at another firm. In their view, a case management system would enable them to work faster and would mean less reliance on the individual to keep track of their work. They reported that their current method of working without a case management system was consequently less efficient. However, there was no suggestion from either participant that the inclusion of a case management system would change the substance of their work and the lack thereof was ultimately not considered a barrier to processing claims effectively. This fits with the view that case management systems do not "remove the skill from litigation" as it is still the practitioner "and not the computer who will have to make the careful analysis" of the case. 70 One of these two participants works within a firm that already has a case management system for use by the fast-track team. They commented that there was no real reason why a system was not in place for the multi-track team, but that it was perhaps easier due to the level of standardisation in the fast-track and more necessary because of the financial pressures of the fixed costs regime:

⁶⁶ Interview 1; Interview 3

⁶⁷ Interview 1

⁶⁸ Interview 1

⁶⁹ Interview 3

⁷⁰ Personal Injury Practice (n 49), p.5

⁷¹ Interview 1

I don't think there was a specific reason I think it was initially introduced for the lower value claims because it was perhaps easier because everything is practically standardised and because of the cost position that they are in in the fast track meant it was more important for them to have a case management system.⁷²

Although there is still considerable standardisation in the multi-track, it is true to note that "it is in the fast track where the problems of time management and date entry really lie" and, therefore, where case management systems are perceived as most beneficial.⁷³ Costs and standardisation are discussed further as the drivers and tensions that shape the uptake and use of technology are explored in Chapter 6.

Another participant made use of a cross-department system which, they claim, "nears a case management system" for other areas of work such as conveyancing, which they claim is more prescriptive and formulaic, but not personal injury. This view is congruent with the previous extract as it supports the submission that systems work more effectively in areas of work that are easier to standardise. This system combines a documents store, time and accounts package and diary system in one and contains a series of precedent letters to support fee earners in generating documents. However, it lacks a series of workflows and prompts to aid case progression which, in the participant's view, a case management system for personal injury work, would be expected to have. It is interesting that this participant rejects their system as a case management system all together, on the grounds that it is too generalist for their work and lacks certain features that a more sophisticated system might have. The Social Construction of Technology perspective tells us that different stakeholder groups interpret and define the same technologies in different ways. Here, we can see this interpretive flexibility in practice, as a case management system

⁷² Interview 1

⁷³ Personal Injury Practice (n 49), p.3

⁷⁴ Interview 5

⁷⁵ Trevor J Pinch and Wiebe E Bujker, 'The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology might Benefit Each Other' in WE Bijker, TP Hughes and TJ Pinch (eds), *The Social Construction of Technological Systems* (The MIT Press 1984), pp.40-44

is rejected as being such by a practitioner on the basis of their experience as a multitrack case handler.

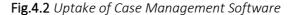
The remaining participants had access to comparable case management software. Some of these participants used 'off the shelf' systems, with others using a bespoke system commissioned by the firm at which they work. However, there was no real difference between the end products and their capabilities; something that participants who used bespoke commissioned systems were somewhat disappointed with as the expectation of having a better system, more tailored to the firm's requirements, had not become a reality. As one participant stated:

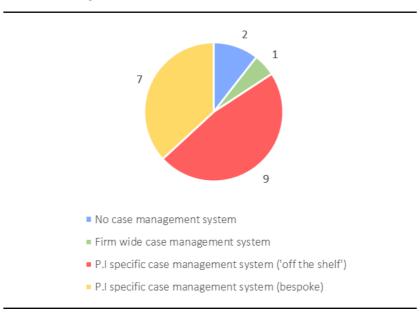
the firm would probably have been better off with an off the shelf system that could be tweaked to our need the people in IT were certain that they could design something better that would be smooth to run, but it hasn't come to light.⁷⁶

Fig.4.2 illustrates the breakdown of the uptake of case management software from among the participants interviewed. As the chart shows, in summary, the majority (17 out of 19) of participants interviewed reported having access to a case management system, whether it is a personal injury specific system or not, with a reasonably even distribution between those tailormade and those purchased 'off the shelf'.

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⁷⁶ Interview 13





Four of the participants had access to additional tools attached as a 'bolt-on' to supplement their case management system. The first of these was a damage calculations tool for calculating special damages, as described by two of the participants.⁷⁷ One of these was described as being directly linked to the case management system as a fully integrated bolt-on⁷⁸ and the other as a separate system within the firm's intranet that linked with the case management system.⁷⁹ These tools were also reported separately to case management systems and they are discussed in s.4.3.2.

The second bolt-on reported at interview was a court forms database which provides templates and standard form court documents in preparation for court

⁷⁷ Interview 4; Interview 8

⁷⁸ Interview 4

⁷⁹ Interview 8

proceedings.⁸⁰ As with damage calculation tools, this technology was also reported separately from the case management system and is discussed further in s.4.3.2.

The third form of addition bolt-on to a case management system, referenced by one participant, was a client facing portal which shows a timeline of their case via a web page or app. ⁸¹ This portal links directly with the case management system in order to give clients an up to date, focused timeline as well as access to read only files using a secure login. This enables clients to keep updated with the progress of their case and to have instant digital access to relevant documents without needing to make contact with anyone at the firm. Despite the claim that this technology is an optional extra that most of the mainstream case management systems have, only one participant referenced it:

A lot of the existing case management systems the main ones people use like pro claim are able to do that as an add on or a bolt-on for it but not everybody chooses to use them.⁸²

Even then, the participant who referenced this technology did not use it within their own firm, but was aware of its use in another firm that "particularly focuses on keeping people up to date". 83 Having interviewed 19 practitioners, none of whom personally make use of this technology, it seems something of a rarity despite being relatively simple and having an obvious benefit. It is noteworthy that the firm referred to by this participant is reportedly led by someone who is particularly keen on convenient client communication:

the guy who runs it really believes in the client being able to know precisely what's going on.⁸⁴

81 Interview 18

⁸⁰ Interview 7

⁸² Interview 18

⁸³ Interview 18

⁸⁴ Interview 18

Two other participants did, however, report a desire to develop a similar system that would enable clients to have direct access to information regarding their case, although these were expressions of interest and not declarations of intention. The first noted that such a facility would benefit clients who want information on their case at a time convenient to them and not at a time dictated by the practitioner's diary:

I think increasingly clients want to be able to get an update at the time that they want it not at the time that you are ready to give it [...] I think if people could log in and see for themselves then it would just be more transparent.⁸⁶

The increasing demand for transparency, referenced in the above extract, highlights the shifting relationship between the professional and the client, who is less deferential and more time demanding.⁸⁷ Simple technologies such as email and a client facing portal can assist lawyers in navigating that change by giving clients the access they demand without placing any great burden on the day-to-day work of the practitioner.⁸⁸ The second reference to this technology similarly notes that it has potential to improve the, currently un-pioneering, case management system:

I think [the case management system] does enable us to be more efficient and effective but it's not anything pioneering it doesn't have a facility that enables clients to go in themselves and see where their case is.⁸⁹

This reference rather neatly summarises the uptake of case management systems found within the interview data: that the systems currently in use are nether innovative nor pioneering and, whilst practitioners are aware of the additional

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⁸⁵ Interview 15, Interview 16

⁸⁶ Interview 15

⁸⁷ Marie R Haug, 'Deprofessionalization: An Alternative Hypothesis for the Future' (1972) 20(1) The Sociological Review; Marie R Haug and B Lavin, 'Practitioner or Patient – Who's in Charge? ' (1981) 22(3) Journal of Health and Social Behavior 212; Nina Toren, 'Deprofessionalization and its Sources' (1975) 2 Sociology of Work and Occupations

⁸⁸ The impact of this on the client-lawyer relationship and the authority of the professional is discussed in Chapter 5.

⁸⁹ Interview 16

technologies available to enhance their case management systems, they nonetheless do not have them.

4.3.2 Additional Technologies

As noted above, the interviews indicated little uptake of additional technologies beyond case management systems. The few additional legal technologies not connected to case management systems that participants reported using were damage calculations tools and legal form databases (both of which were also seen as bolt-ons to case management systems as discussed above); and legal research tools. These technologies were described in three forms: first, web-based technologies that firms rent on either a regular or an ad hoc subscription basis; second, software that firms have purchased for use across the firm or by specific teams within the firm; and third, systems developed by individual practitioners to assist with their work using desktop programmes already available to them.

Legal Research Tools

The technology most commonly highlighted at interview, excluding case management systems, was legal research tools. Legal research tools enable practitioners to research materials, most commonly case law, digitally. Surprisingly, despite being commonplace within the legal profession since the late-twentieth century, 90 not all participants reported having an active subscription to an online legal research tool. The vast majority of participants had access to one or more of these databases, the most popular being LawTel, Lexis Nexis and Westlaw, whilst one participant reported having access to neither, nor any comparable subscription service:

we don't as a firm have and you probably won't believe it but we don't have anything in terms of law tell Westlaw Lexis my understanding is that

⁹⁰ J Bing, 'Let there be LITE: a brief history of legal information retrieval' (2010) 1 European Journal of Law pp.29-30

the licences are run out and we don't have anything at the moment so in fact I couldn't actually find any case law to assist me easily.⁹¹

Although it is clear that this participant previously had access to at least one service, it is surprising that this subscription, which one might expect to be a priority, was allowed to expire. The participant's statement that they "couldn't actually find any case law to assist me easily"⁹² is alarming given the significance of case law in personal injury work, especially when litigated. This firm – a medium sized regional firm with three offices – has practitioners who collectively provide a range of personal as well as business legal services, all of whom should routinely make use of case law. It is in large part due to the significance of case law that "computerised legal research" was considered "commonplace, even a necessity" within firms as early as 1985.⁹³ This makes the lack of access to a system by a practitioner in 2018 all the more surprising and suggests that oversight and maintenance of systems is not a priority at their firm.

Damage calculations tools

In addition to the two bolt-ons discussed in section 3.1, five participants referenced damage calculation tools which operate independently of a case management system.⁹⁴ In total, only 7 out of 19 participants interviewed reported having access to a damage calculation tool, whether attached to, or separate from, their case management system. Those who made use of one highlighted their usefulness in calculating future loss, as part of special damages where calculations are often complicated:

where we calculate quite high schedules of loss for the client we've got a PI calculator whereas before we would have to sit down and make quite complex calculations for future loss now we've got a package where you

⁹¹ Interview 5

⁹² Interview 5

⁹³ William G Harrington, 'A Brief History of Computer-Assisted Legal Research' (1985) 77 Law Library Journal , p.543

⁹⁴ Interview 1; Interview 3; Interview 12; Interview 15; Interview 17

just type dates in and it does all the calculations for you so that's saved a huge amount of time for us.⁹⁵

We recently got some new software which helps you calculate special damages which has changed things quite a lot that's very helpful especially if you've got a lengthy schedule to work out or a lot of loss of earnings [...] it calculates it whereas before you'd have to do it yourself which took ages.⁹⁶

There are two points to note from the above extracts. First, that damage calculation tools appear only to be useful when calculating lengthy schedules of loss, to avoid long calculations. This implies that on lower value and less complicated cases, such technology may not be necessary as calculations are straightforward. Second, both participants have only recently gained access to these tools within their firms. As noted previously in this thesis, the legal profession has already been criticised for being slow to adopt technology. It is perhaps true that it suffers a cultural lag, that is a period of time to come up to speed with technological innovations, before investing in certain technologies. ⁹⁷ As two participants reported recent investment in damage calculations tools by their firms, this is perhaps an incoming technology that should be reviewed again in the near future.

Two further participants, whose firms do not have a formal damage calculation tool, referenced self-made systems used within their firms. The first explained that a colleague had developed an excel spreadsheet containing formulae that assists in generating a schedule:

the approach to [damage calculation] varies dependant on the individual for example when writing a schedule of loss one lawyer has developed a spreadsheet which generates a schedule which he can complete himself

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⁹⁵ Interview 1

⁹⁶ Interview 7

⁹⁷ F Ogburn, Social Change with Respect to Nature and Original Culture (Viking 1922)

whilst another will use hand written calculations dictate the entire schedule.⁹⁸

Using this self-made tool to automatically generate a schedule of loss was acknowledged as neither superior nor inferior to developing a schedule manually:

both valid ways of working and one is not superior to the other they're just different.⁹⁹

This submission seems odd given the previous participants' praise for the usefulness of damage calculations tools in saving time with long and complicated schedules of loss. However, coming from a firm that has no formal system for use, it is perhaps not surprising that the approach to damage calculation varies depending on personal preference. There are different factors that determine how useful an individual judges a technology and these are discussed later in Chapter 6.

The second of the two reported that, across the firm, Microsoft Excel is used to assist with calculating damages. However, this method does not automatically generate the schedule of loss, as above:

we tend to do ours bespokely and everyone will have a preferred method for doing it we do ours through Excel barristers tend to like it in word then we somehow combine the two back together to produce a large schedule of losses which will update automatically if we need it to and when we tweak it.¹⁰⁰

Including these self-made tools, still fewer than half of the participants make use of a tool to assist in calculating damages. All other participants reportedly rely solely on the Judicial College Guidelines and their own calculations to manually calculate general and special damages.

⁹⁸ Interview 14

⁹⁹ Interview 14

¹⁰⁰ Interview 6

Document Assembly Tools

The final additional technology, highlighted by just two of the participants, are types of document assembly tool. ¹⁰¹ The first of these, Oyez, is an online database of legal forms that stores up to date templates for court documents. ¹⁰² This technology, as referenced in s.4.3.1, attaches to the case management system as a bolt-on to assist in the preparation of documents for filing:

If we are heading towards court proceedings we will use a software called Oyez which holds all our templates for standard form court documents and that's integrated into our case management system as a bolt on.¹⁰³

The second tool reported, *Laser Form*, is described as "the market leading Legal Forms package" with a database of over 3,000 up to date forms. ¹⁰⁴ Similar to Oyez, this technology acts as an online repository of forms, court documents and templates, including precedent letters, for practitioners to download, edit and use. Both of these technologies are at the most basic end of the spectrum of document assembly tools as, whilst they are designed to assist in producing their documentation, they offer little more than a repository of templates to be completed by the practitioner. In this sense they are best considered a legal forms database, lacking any real automated assembly.

The remaining 17 participants did not report using a document assembly tool, or even a legal form database. However, for most of them, their case management system is sufficient to assist in document generation as they already contain templates, draft documents and precedent letters. The participant who made use of Laser Forms was one of the two without access to a case management system. They, therefore, make use of this technology to provide the templates and precedent documents needed.

¹⁰¹ Interview 1; Interview 6

¹⁰² Oyez Forms, website. Available at: http://www.oyezforms.co.uk/ [last accessed 2nd October 2020]

¹⁰³ Interview 6

¹⁰⁴ CloudForms, 'Laser Form Hub' <www.hub.laserform.co.uk> accessed 10 February 2020

The limited uptake of technology discussed at interview suggests that the systems in place now are not significantly different to the type of system described at the highest level of computerisation by Goriely et al in 2002: "systems that [go] beyond diaries and standard letters to structure decision making" with "checklists to ensure that crucial decisions [take] relevant factors into account" and include "decision-making prompts". 105 Certainly, the interviews conducted suggest that more, although not all, firms now have these systems in place and that those without a case management system and legal research tool are now in a clear minority. However, save incremental improvements in the technology and an increased, though still limited, number of optional 'bolt-ons' being used, none of the participants interviewed have systems significantly beyond that level.

As such, whilst technical capabilities may have grown at an exponential rate, uptake of new technologies at the firms analysed does not appear to have followed a similar trajectory. This may not be surprising as the legal profession is often characterised as un-innovative when it comes to "implementing new services or products". However, given the buzz generated among the LegalTech community and the sharp increase in investment noted in s.4.2, one might have expected greater uptake of technology than that reported. This further highlights the importance of analysing the actual uptake and use of technology in practice, to which this chapter is dedicated.

4.4 Ways in which Technologies are Currently Used

Having already rejected the deterministic view that technologies are developed and work objectively, this thesis also rejects the view that technologies have an objective or singular use. Rather, it accepts that technologies are interpreted and used by

¹⁰⁵ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour, p.49

¹⁰⁶ Ryan Caliguiri, 'Why law and accounting firms struggle to innovate' *The Globe and Mail* (6th October 2015) https://www.theglobeandmail.com/report-on-business/small-business/sb-managing/why-law-and-accounting-firms-struggle-to-innovate/article26596063/ [last accessed 2nd October 2020]

different agents in different ways. In order to avoid "speak[ing] of technology in general terms" it is necessary "to investigate the actual empirical affordances of a specific technology in a specific environment". ¹⁰⁷ As the previous section noted, the central technology for personal injury practitioners is the case management system, with little uptake of additional technologies being reported by the participants at interview. Therefore, this section focuses on the varied uses of case management systems reported at interview, with only a brief discussion of the uses of additional technologies thereafter.

4.4.1 Uses of Case Management Systems

Despite broad consistency in the type of case management system used, there were varied uses of case management systems among and between participants; and within and across firms. It may first be noted that, whilst the majority of firms now have sophisticated case management systems, this does not necessarily mean that all case handlers use them to their full potential. This was something that several of the participants recognised in themselves and their colleagues. One participant claimed that within their firm it appears that senior practitioners use the case management system less than junior practitioners:

it very much seems that depending on how senior you are depending on what your level is within the firm changes how much you might use the case management system and the precedents.¹⁰⁸

There are a number of potential reasons why this might be the case and, although not discussed at length, some possible explanations were alluded at interview. First, as one might expect, in general there is a positive correlation between seniority within a law firm and age, which is often cited as a barrier to individuals using technology. Several of the participants casually linked technical ability with age, suggesting that older practitioners are less comfortable and able using the

¹⁰⁷ Mireille Hildebrandt, *Smart Technologies and the end(s) of Law* (Edward Elgar Publishing 2015), p.166

¹⁰⁸ Interview 18

technology than younger, generally more junior, members of staff.¹⁰⁹ This was highlighted not only as a personal limitation for those individuals, but also as a barrier to computerisation in general:

I know certainly for the older solicitors here not so much the younger staff but people my sort of age and above do tend to panic when the system goes wrong or the screen freezes younger people [...] have grown up using computers and just have the confidence to use them more effectively.¹¹⁰

Generally, the participants were sympathetic towards older practitioners who, they say, cannot get on with the technology, citing a "generational shift" as the core reason. One participant referred to such a person within their firm rather affectionately as "old school" but nonetheless still highlighted their approach to technology as an area for improvement:

There's a lawyer in our department and he is the best ever but we're about to go paper light and he can't get it he's just too old school so there's still a lot of room for improvement.¹¹²

However, one participant was very much unsympathetic of older lawyers who, he suggests, could adapt to use technology, but do not through their own unwillingness:

One barrier is older lawyers who are unwilling to change because they personally don't get on with the technology. 113

It is important to note that this participant was the senior partner within their firm and over the age of 60. Another senior partner from within a different firm referred to an older practitioner who "is very very good at technology but he simply will not use the Case Management System". ¹¹⁴ Their language tells of the frustration they

111 Interview 19

142

¹⁰⁹ Interview 3; Interview 8; Interview 13; Interview 14; Interview 19

¹¹⁰ Interview 8

¹¹² Interview 3

¹¹³ Interview 13

¹¹⁴ Interview 19

have for a practitioner who they perceive as being able, but unwilling, to engage with the software; something which they casually attributed to age.

The willingness to adapt to technology was raised by another participant, who was more reticent to directly link ability with age, but nonetheless highlighted that age, ability and willingness are potentially connected as a barrier to the use of legal technology:

Age and ability and willingness to adapt which may or may not be related to age are a significant barrier to some lawyers. 115

Age is often cited as a barrier to using technology as, having grown up with personal computers, younger workers simply have more experience using technology. As one participant noted, "they are part of a generation for whom computers are part and parcel of their lives". ¹¹⁶ On the other hand, older workers may be less confident in their ability to render independent judgments about various facets of new technology due to their relatively more recent exposure to comparable systems. ¹¹⁷

Second, it is possible that senior practitioners do not feel that they need the support of a case management system, having developed expertise in handling cases over many years in practice. They may, consequently, feel that following a case management system is inferior to their own method of practice developed through years of experience:

we all have our own ways of working that we have developed over years of working and none is superior to another.¹¹⁸

There is a perception that junior practitioners, on the other hand, "wouldn't be able to [run cases] without this technology". 119 Of course, age, which might affect ability,

¹¹⁵ Interview 14

¹¹⁶ Interview 19

¹¹⁷ Michael Morris and Viswanath Venkatesh, 'Age Differences in Technology Adoption Decisions: Implications for a Changing Work Force' (2000) 53 Personnel Psychology 375, p.393

¹¹⁸ Interview 18

¹¹⁹ Interview 4

and experience, which brings tried and tested methods, are intrinsically linked. A combination of the two might, therefore, deter practitioners who have been in practice for many years from engaging with systems.

Third, it may simply be that practitioners working at different levels within a firm undertake different types of day-to-day work. Lewis and Morris note that experienced practitioners are more likely to personally handle higher value claims. 120 It is, therefore, possible that senior practitioners use case management systems less because their work is (perceived to be) less conducive to automation than lower-value work. Moreover, as noted below and discussed further in Chapter 5, senior practitioners are also involved in supervising junior practitioners and this too affects the ways in which they interact with their case management system.

One participant reported that there is often a sense that senior practitioners circumvent using the case management system simply because they can. Due, perhaps, to a combination of their expertise and the type of work that they handle, they are able to emphasise the importance of their time and avoid interacting with the technology:

I think that more senior members of teams can often get away with circumventing what's supposed to be done because we can use the excuse of oh I'm very busy or we're very important or we've got to see clients.¹²¹

They continued that as "junior members of the team have less resource and have to be more self-reliant" they have no choice but to use the case management system in order to meet targets without assistance and within budget. Although there is an element of seniority mindset here, this point does emphasise that senior practitioners do different work. For example, they are more likely to meet clients than junior practitioners. They are also more likely to have support staff to assist with their caseload. The key element to this is that, because of the level at which they

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¹²⁰ Richard Lewis and Annette Morris, *A Socio-Legal Analysis of Personal Injury Claims in Three European Countries: England and Wales* (Unpublished Manuscript 2019)

¹²¹ Interview 19

¹²² Ibid

work, senior practitioners have more resource and are less constrained by cost restrictions. Therefore, they are "able to offer a more bespoke service" irrespective of whether or not their work is conducive to automation. There is, consequently, less pressure on them to observe the efficient methods and procedures that their juniors are expected to follow.

Having conducted interviews as the empirical method of research as opposed to undertaking any ethnographic observations, it is important to remember that the interviews only reveal the participants' reported perceptions. ¹²⁴ Thus, although it may be their perception that senior practitioners use case management systems less, this may not be the case. Whilst the responses on the whole suggest that this is a shared perception, on asking the participants to describe their own interactions with the case management system, it was clear that the situation is less clear cut. Although senior lawyers did report that they spend less time using the case management system and that they use fewer of its functions than junior members of staff, their own descriptions of their daily work suggest that they still use the system on a daily basis throughout the life of a case, albeit in different ways.

 $^{^{123}}$ A Socio-Legal Analysis of Personal Injury Claims in Three European Countries: England and Wales, p.33

¹²⁴ See Chapter 2 section 2.2

Table 4.2 Uses of Case Management Systems

	Paralegal	Legal Executive	Lawyer	Manager/Partner
Document Store	X	x	x	x
Diary System	x	x	x	х
Document Generator	X	X	х	
Prompt	x	x	x	
Work-flow	x	х		
Management Data Collection				x

^{*}A large X signifies that all or nearly all of the respondents from within that category reporting this use. A medium X signifies that some of the respondents from within that category reporting this use. A small X signifies that very few of the respondents from within that category reporting this use.

Table 4.2 lists six key non-mutually exclusive uses of case management systems identified from the interview data. The table shows that as the functions listed in the left-hand column become progressively involved with the substantive handling of the case, fewer senior lawyers reported using them. Although there is insufficient data to extrapolate a concrete theory from these observations, among those interviewed at least, there appears to be a general pattern of use relating to the seniority of the practitioner. This pattern suggests that junior case handlers were more likely to use the case management system in a way that contributes to the substantive handling of the claim: by using it as a workflow to guide and process drive their cases, by

^{**}This table is to indicate a general pattern observed from the interview data and no quantitative conclusions are implied by the illustration

following prompts during the life of a claim and by making use of automatically generated documents and standardized letters. Conversely, senior case handlers reported using the case management system in a way that assists in the processual side of their role only: using it as a definitive repository of documents for each case and, to a limited extent, an automated diary system. Those with responsibility for more junior members of staff reported that they use the case management system to assist in supervising and maintaining oversight of their work, hence an accessible document store is key for them to gain access to the files on which their team are working.

At the most basic level, case management systems were used as a document store, to provide a definitive repository of documents for each case so that members of the relevant team could each access all documents at any time.

The ability for anyone to go into a case and in theory be able to pick up what's going on and have everything at their disposal on their screen rather than having to go and pick up hard copies it just pulls everything into one place;¹²⁵

I can access any of the documentation relating to the case via the system. 126

This was the only function that all levels of practitioner reported using consistently and was considered essential both for individual practitioners working on their own case load and for supervisors requiring access to files for which they were ultimately responsible.

The next level on from using the system as a document store was to integrate a diary system, enabling practitioners to receive reminders of work to be done and to record time spent on tasks automatically in their diary. Whilst not affecting the substantive handling of a case, this function enables case handlers to manage their time more

¹²⁵ Interview 11

¹²⁶ Interview 13

effectively and without the assistance of a diary secretary. This function was likewise seen across all levels of practitioner, but fewer qualified solicitors, managers and partners reported using this function compared with all paralegals and legal executives:

It's not only a database for all your information, standard letters, precedents umm all your court documents anything like that is all standardised within the case management system it diaries things for you tasks things on.¹²⁷

The above extract perhaps points to why senior practitioners opt not to use the diary function, as it automatically enters dates and sets future tasks and deadlines, thus removing some of their professional autonomy, to which they are accustomed.

Third, case managements systems were used to not simply store, but also generate documents. There was some variance in the capabilities of this function, with some participants reporting that their system will only generate very basic documentary information, whilst others use a series of questions to complete larger sections of documents. However, as noted in s.4.2.1, none of the systems currently available will generate full and final drafts of documents. It is at this level of computerisation, where Goriely et al suggest "one can start to talk about a standardised approach to case-management". 128 It is also at this level that a divide between qualified solicitors and other fee earners becomes more apparent. ¹²⁹ Paralegals and legal executives interviewed were much more likely to make use of the templates and tools within the case management system to assist in generating documents than qualified solicitors. Moreover, whilst a minority of the solicitors reported making use of this function, not one senior manager or partner reported using the case management system to assist in document generation. As already noted, because of the value of the cases that they generally handle and, perhaps, due to their seniority, there is less pressure on them to work within stricter costs. Three of these senior practitioners

¹²⁷ Interview 7

¹²⁸ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (n 50), p.48

¹²⁹ See Table 4.2 for an illustration of this

reported having a secretary, to whom they will dictate letters which, clearly, is a resource that junior practitioners will not have. 130

The fourth level of computerisation is the inclusion of prompts. These are different from the diary reminders noted above and relate to the substantive handling of a claim. These are described by Goriely et al as "decision-making prompts" as they assist to structure the decision making of the practitioner. In 2002, there was "little practical experience" of such functions, with only one of the firms in that study reporting having them within their case management system and even then only for use by "junior people". As with document generation, the interview data suggests that prompts are more likely to be used by paralegals and legal executives than solicitors, with only a minority of solicitors reporting making use of them and no managers or partners. Whilst all of the firms' systems now have this function, the lack of use by senior practitioners suggests that they are still only used by "junior people", as in 2002.

The final stage of computerisation through case management is the use of a workflow. In this function, the case management system effectively provides the process that the case handler ought to follow during the life of the case. This is supported by prompts to remind them of key dates and tasks in order to keep cases on the pre-determined course. However, none of the solicitors interviewed, and only three of the paralegals interviewed, reported using the workflows within their system. One participant suggested that this is because multi-track work is too unpredictable to follow a predetermined workflow:

What you don't find with multi track cases or higher value cases is work flows and things like that because the workflow changes significantly on a multi-track case depending on what type of work it is. But fast track is pretty predictable¹³³

¹³⁰ Interview 14; Interview 17; Interview 18

¹³¹ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (n 50), p.49

¹³² Ibid, p.49

¹³³ Interview 18

The challenge of constructing workflows and the extent to which multi-track claims are standardisable or bespoke is revisited in Chapter 6.

The final function listed in Table 4.2 is management data collection. Surprisingly, none of the participants reported using the case management system to systematically collect and analyse data on the cases that go through their system. Minimal data was reportedly collected on individual case handlers' caseloads and expected case completion dates in order to assist with their supervision:

We can run off spreadsheets for making sure the person's doing their targeted hours per day we can look at the data to see if they're billing what they should be billing that month.¹³⁴

As the above excerpt shows, the focus of data collection reported at interview was business management data, to ensure the smooth running of the business and not data to inform legal decision making, or supervision. The business benefit of using data was highlighted as a key interest of management who are:

particularly interested in computer systems that can predict for them the profit the billing the risk and also alongside that the performance of staff.¹³⁵

Even the first of the above two references, which is a comment on staff supervision, focuses on billing and time targets. This is in line with the narrative of change within civil justice that costs and delay are the primary areas for improvement. Moreover, it highlights that, for senior staff, and from an organisational perspective, LegalTech and data collection is seen as a greater benefit to the business side of the firm than the substantive law side of the firm, which has not yet been realised in any of the firms studied.

Two of the participants referenced the potential for future use of data to assist in

¹³⁴ Interview 1

¹³⁵ Interview 19

legal decision making, with one in particular comparing the use of data by claimant firms to that of defendant insurers. However, these comments were more aspirational than indicative of work in progress:

Big data held by defendant insurers means they have a lot of available knowledge and systems to use that knowledge claimant lawyers will need to do something to meet that level of sophistication [...] Insurers have all this data on when claims are likely to settle and for how much and that is something that claimant lawyers really need to develop; 136

if you had a big enough bank of inputted data from law firms up and down the country that was pooled together then it may [work].¹³⁷

Overall, in a similar vein to the conclusion of s.4.3, the interviews suggest that the uses of case management systems have not changed a great deal since 2002. At least, the use by qualified solicitors has not changed, despite some standardisation by the junior practitioners whom they supervise. The more sophisticated functions of case management systems are still perceived as being for "junior people" and, for a number of potential reasons, senior practitioners' interactions with the software is limited. One possible rationale for this is the focus of this thesis on multi-track work, where standardisation and automation has reportedly had a slighter effect. As the below extract demonstrates, there remains a perception that, whilst case management systems are of benefit in the multi-track, that benefit is limited to providing a definitive document repository that multiple practitioners can access:

you will find case management systems used in work other than fast-track and fixed costs but it is more as a document collection centre and way of ensuring that the teams can work together so everybody can get access to the file at the same time to do work on it.¹³⁸

¹³⁶ Interview 13

¹³⁷ Interview 6

¹³⁸ Interview 18

Hence, the more substantive uses of case management systems were not widely reported at interview. Nonetheless, all participants reported using a case management system in some way on a daily basis.

4.4.2 Uses of Additional Technologies

As noted above, the uptake of additional technologies reported at interview was low. However, the main technologies identified aside from case management systems were damage calculation tools, legal search engines, legal form databased and technologies one might consider standard in any office – among the foremost of these was email.

The majority (15 out of 19) of the participants reported using email as their primary method of communication both internally and to clients. Email was noted by all fifteen as the preferred choice of communication for both practitioners and clients due to the speed and convenience:

Email has made things much more efficient because you can get things signed quicker documents can be scanned hospital records can arrive much quicker [...] clients and family members can contact you at a time that's convenient to them and you can reply and a time that's convenient to you.¹⁴⁰

One participant commented that, whilst in the past email was never assumed to be the client's preferred communication method, it is now accepted as the default:

There was a time I used to ask client if they were happy to be emailed but now it's a bit of a given that people want to receive emails. 141

Another referred to email as the "absolute basic" form of technology, demonstrating how commonplace it has become within their practice. ¹⁴² Interestingly, whilst 15

141 Interview 11

142 Interview 10

152

¹³⁹ Those that did not report using email were Interviews 3, 5, 8 and 16

¹⁴⁰ Interview 15

participants highlighted email as the primary communication method, most failed to mention it when first asked what technologies they use on a daily basis. This suggests that email is not only commonplace in practice, but has now become so embedded within practice that it can be considered 'mundane'.¹⁴³

The remaining participants reported using email, telephone and letters in roughly equal measure, but with letters as the preferred medium for clients and emails primarily used internally.¹⁴⁴

Notwithstanding its popularity, two participants raised concerns with the use of email. In particular, that the instantaneous nature of emails can lead to a poorer quality of communication:

I think that email can lead to mistakes as well because email is instantaneous and sometimes you can fire something back without thinking through the consequences;¹⁴⁵

And that the "relentless connectivity" that email encourages does not enable practitioners to strike a healthy work-life balance:

instant communication 24-7 isn't good for the individual solicitor's worklife balance and is unnecessary for the vast majority of time in P.I.¹⁴⁷

It was also noted that, at present, there is still a considerable generational gap that means some clients cannot communicate via email. In these circumstances, telephone communication or the traditional method of letter writing is used. This was not simply noted as a minor anomaly, but a regular issue:

¹⁴⁵ Interview 19; the significance of this is revisited in Chapter 5.

¹⁴³ Mundane technologies are those which are considered so embedded into our everyday life that they almost become invisible to the user who may even cease to consider them a technology. *See for example*: Mike Michael, 'These Boots are Made for Walking..: Mundane Technology, the Body and Human-Environtment Relations' (2000) 6 Body and Society 107

¹⁴⁴ Interviews 3, 5, 8, 16

¹⁴⁶ Richard E. Susskind, *The end of lawyers? : rethinking the nature of legal services* (Oxford : Oxford University Press 2010), pp.105-108

¹⁴⁷ Interview 14

when you first speak to a client and ask do you have an email address a large percent of the answers from older clients are no.¹⁴⁸

Therefore, whilst email is clearly the dominant method of communication between clients and lawyers, there are noted limitations.

There was a much more mixed response from participants in relation to the use of email to communicate with defendant solicitors and the courts, with some commenting that they "do most service these days by email" and others reporting that they would only send "unimportant correspondence" to defendant solicitors. Nonetheless, the use of emails was highlighted as a significant change in practice within the last decade from the previous letter based communication:

I used to have a stack of letters to sign out every day and a stack of letters coming in but now the vast majority of my correspondence both with clients and defendants and with the courts is email because even judges now will communicate with you through email [...] ten years ago you would never have emailed a judge and a judge would never have given you an email address it would just be seen as being almost sacrilegious.¹⁵¹

As noted in s.4.3.2, the most commonly reported additional LegalTech was legal search engines, with LawTel, Lexis Nexis and Westlaw being the most popular. Due to the nature of this technology there are no real variations of use to report. 18 of the 19 respondents had access to a legal search engine and all made use of it to find relevant materials. The one participant who did not have access to a legal search engine stated that without it they "couldn't actually find any case law to assist [them] easily". One noteworthy point raised by one participant is that due to poor functionality, searches will often return irrelevant results, especially if the user only has a vague idea of what they are searching for. In this respect, they claimed that

¹⁴⁹ Interview 6

¹⁴⁸ Interview 15

¹⁵⁰ Interview 16

¹⁵¹ Interview 19

¹⁵² Interview 5

Google often has better search functionalities to help narrow down the enquiry, or failing that the traditional method of searching in a book may be a better option:

This needs to be vastly improved because at the moment it is no more use than a traditional hard copy library.¹⁵³

In this case, therefore, legal search engines are supplemented by Google searches and traditional library-based research due to shortcomings in their search functionalities, which is a clear failing of the system. This point is revisited in s.4.5.1.

Legal form databases were only reported by two participants.¹⁵⁴ However, the remaining 17 participants had this facility integrated into their case management system and from the interviews there was no noticeable difference between the two. The only reported use of legal form databases was to assist in writing letters, including letters to clients, defendant solicitors and medical experts. None of the participants interviewed used legal form databases to produce court documents, although templates were reported as routinely used and manually completed. ¹⁵⁵ Two methods of selecting a letter template were reported. First, a method whereby the practitioner answers a series of questions about the case and the system provides the relevant document:

the system will ask you questions and then you put in yes and no type answers and it'll generate other questions and then at the end of it it generates a letter for you to use;¹⁵⁶

And second, where the practitioner choses the document they wish to use from a selection of options:

you chose the most relevant [letter] and then make alterations to it to tailor your specific needs.¹⁵⁷

¹⁵³ Interview 14

¹⁵⁴ Interview 1; Interview 6

¹⁵⁵ See discussion in section 4.3.2

¹⁵⁶ Interview 2

¹⁵⁷ Interview 4

Some of the participants reported issues with the automatically selected templates, suggesting that the system does not always give them the most relevant one, but without being able to access the repository of templates, there is little that they can do about this issue. This is discussed further in s.4.5.1.

Once the document template is selected, the amount of bespoke editing that needs to be done varies. In some cases, the system reportedly produces much of the document and in others the practitioner is required to manually complete it. One practitioner summed this up simply: "most letters are to some extent bespoke". Although vague, this neat summary highlights two themes found across the interviews. First, that for the majority of letters, document generation is some way off producing full and final drafts and some bespoke editing is most often required. Second, that much like other legal tasks, there is a spectrum with regards to the extent to which document generation requires a bespoke approach. One participant reported that their system does little more than fill in the client's name and address:

with all our letters we would just open a standard letter headed paper which has a box for address and date but that's it. Other than that its's blank and we just write our letter.¹⁵⁹

In this circumstance, they either rely on memory or Microsoft Word's copy and paste function to construct standard and repeatable letters. Another participant who reported similar circumstances suggested that within their firm the document templates are not used at all because they are too brief and there is consequently no benefit to using them.¹⁶⁰

At the other end of the scale, three participants reported that their letters are "automatically processed" with only very minor adjustments and include standardised explanations of the letter to ensure that clients are able to understand

¹⁵⁸ Interview 14

¹⁵⁹ Interview 3

¹⁶⁰ Interview 10

¹⁶¹ Interview 6

them.¹⁶²The majority, however, were somewhere in between the two – their systems produce draft letters which practitioners are required to edit and finalise to varying extents. One noticeable trend across several of the interviews was that letters to clients and letters to defendant solicitors require more editing by the practitioner than letters to medical experts requesting medical evidence. These letters were reportedly much more standardised with little variation between each claim:

some documents such as a letter to request medical records the vast majority of that letter will be generated [...] but something like a letter of claim which varies dependent on the details of the case the system will automatically generate the preliminaries but you need to input the detail yourself.¹⁶³

This demonstrates that the extent to which even similar tasks (i.e. letter writing) can be standardised varies dependant on how genuinely bespoke the substance or output has to be.

The final additional technology reported at interview was damage calculation tools, used by 7 of the 19 participants. As with legal search engines, the nature of these tools means that there was little variation in the method of use. All participants who reported using damage calculation tools reported doing so only when lengthy or complicated schedules of loss are involved. As expected, tools that were designed by technology experts and purchased by firms were described as more advanced in that they will automatically produce a schedule of loss whereas self-made tools do not.

4.4.3 Conclusion

It is clear that case management systems are the most regularly used technology by the practitioners interviewed. Despite the perception that senior practitioners use their case management system less often, all participants reported using the system on a daily basis, albeit in different ways. A further perception persists that the more

¹⁶² Interview 6, 7 and 16

¹⁶³ Interview 11

sophisticated functions are only for "junior people" and in this sense the use of case management systems has not changed since 2002. 164 Nonetheless, case management systems are now undoubtedly considered a central tool within the multi-track. Similarly, legal research tools were regularly used by all participants who have access to one. The one participant who currently does not have access to one recognised the disadvantage that causes. All other LegalTech was considered optional and ultimately comes down to practitioners' personal choice. Consequently, legal form databases and damage calculation tools were not widely used.

Perhaps the most significant change in recent years is the now extensive use of email to contact clients. Practitioners' perception of email was largely positive; however, not all practitioners reported using email as their primary tool of communication. Some reported concerns about the dangers of instantaneous communication both in terms of the quality of communication and the strains on the practitioner. This is revisited in Chapter 5.

4.5 Practitioners' Perceptions of the Technologies that they Use

Having set out the uptake and uses of technology reported at interview, this section turns to practitioners' perceptions of the technologies that they use. This is an exercise with which none of the current literature has engaged. Instead, leading accounts mischaracterise practitioners as cynical, sceptical doubters of technology. Despite highlighting considerable difficulties with their systems, ¹⁶⁵ all of the participants acknowledged the benefits of the technologies that they use. In particular, participants reported that case management systems succeed in making their work more efficient and time effective:

It speeds everything up so it's much more efficient than the work would be without it. 166

¹⁶⁴ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (n 50)

¹⁶⁵ See s.4.5.1

¹⁶⁶ Interview 13

This reportedly benefits claimants who may have their claim resolved quicker and at less cost:

it's something that enables us to settle claims efficiently so that we can get the money to the client as quickly and at as low a cost as possible. 167

Even where systems were only used as a document store, this reportedly assists with effective supervision and monitoring of claims which contributes to an efficient process:

the main purpose of it is to give you the file in its electronic form and to make the monitoring of progress within the claim much easier for someone so that work can be done more efficiently. 168

Efficiency not only ensures that clients get access to compensation sooner, but that practitioners don't miss deadlines which could have substantial implications for the claimant as well as the practitioner:

It definitely speeds up the processing of their claim, it makes our work more efficient and it means that we don't miss deadlines. 169

However, despite a clear benefit to practice, this is notably limited to speeding up the process of a claim and not assisting substantial elements of the claim. The technology, therefore:

does enable us to be more efficient and effective, but it's not anything pioneering.¹⁷⁰

Consequently, the real benefit of case management systems was reportedly limited to those tasks which were considered menial, though time-consuming:

¹⁶⁷ Interview 4

¹⁶⁸ Interview 6

¹⁶⁹ Interview 4

¹⁷⁰ Interview 16

the laborious time-consuming tasks are done within two minutes compared to in the past where you would have to populate each letter individually so on the very basic tasks it's fantastic.¹⁷¹

As a result, two perceptions on the usefulness of case management systems were observed. First, that the technology primarily benefits junior members of staff, whose work is more standardised, and unqualified staff who are often responsible for the clerical and administrative tasks involved in case handling:

For the paralegals and things it probably has made things a bit more different because obviously they're doing the document processing and getting it all loaded on to the systems and things which is far more time consuming at the front end [...] for me it hasn't really changed my role a huge amount it means that I can access things quicker and I can pick things up wherever I am.¹⁷²

This extract connects strongly with the already reported perception that the more sophisticated functions are for "junior people" and supports the pattern of uses illustrated in Table 4.2.

Second, that the systems discussed at interview are often considered more effective on lower-value claims, where the work is more standardised. For example, document generation was reportedly more effective at this level:

I know there are some software systems that have a letter for absolutely everything and yes that's helpful perhaps best in fast-track but in multitrack higher value claims you find you have to tweak these letters more and more so they're helpful because it cuts out about 70% of the work [...] but the package has to be tweaked for the higher value claims.¹⁷⁴

¹⁷² Interview 6

¹⁷¹ Interview 6

¹⁷³ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (n 50), p.49

¹⁷⁴ Interview 1

This message is consistent with previous research which suggests that firms are "now taking quite different approaches to handling lower and higher value claims"¹⁷⁵ as cost pressures have encouraged greater commoditisation, automation and delegation for lower-value claims, whilst higher-value claims arguably still require a bespoke approach.¹⁷⁶ Despite these perceptions, by reducing the time spent on administrative, standard tasks, LegalTech reportedly has a secondary benefit of freeing up time to be spent on other, more involved work:

It makes the work more efficient and takes on some of the process, adminbased tasks technology can clear all of the process stuff to give the lawyer more time to think about the case.¹⁷⁷

Therefore, the benefit across the board is that it enables practitioners, at any level, to utilise their time to greater effect. For this reason, case management systems were overall considered crucial for the daily managing of personal injury claims across the multi-track cases, even if, on the face of it, they are only providing a basic solution:

The case management system is essential for the day to day running of cases in terms of saving documents in one place and in simplifying the procedural documents that need to be produced;¹⁷⁸

the case management system is very important in in personal injury. 179

By providing a definitive repository of documents and a digital log of every case, case management systems are reportedly "absolutely essential for good governance". This, along with effective supervision, is particularly important for large firms that

178 Interview 14

¹⁷⁵ A Socio-Legal Analysis of Personal Injury Claims in Three European Countries: England and Wales (n 120), p.34

¹⁷⁶ lbid, p.45; Robert Brooks, *Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law* (Temple University Press 2012). *See* Chapter 6 for further discussion on cost pressures as a driver towards automation.

¹⁷⁷ Interview 14

¹⁷⁹ Interview 15

¹⁸⁰ Interview 13

have a high volume of cases at any given time. The increased use of unqualified practitioners, supervised by lawyers who retain ultimate responsibility for a high caseload, has been a major shift in personal injury practice in recent years. As Chapter 5 discusses, the automation of simple tasks through case management is instrumental in facilitating new practicing methods.

The two participants who work without a case management system highlighted the similar benefit that such a system would bring to their work:

- So is a case management system better?
- Yes it is [...] Yes it would be a better alternative;¹⁸²

a claims management system would definitely make my job easier and would speed up the process¹⁸³

Thus, there was general perception that technology is a useful aid to practice and, within the specific context of personal injury law, this was most true of case management software. However, despite the prevalent perception that technology generally helps to make the process of resolving claims more efficient, frustrating user issues were consistently reported throughout the interviews. As s.4.5.1 discusses, these issues are split between poor system functionality and low user ability. At their worst, these issues combine systems that are not user friendly and users that are not technology literate. Individually and collectively, they cause user frustrations that have potential to overshadow the efficiency benefits of the technologies used. The consequent impact on the acceptance and use of technology is discussed in s.6.5.

¹⁸¹ Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (n 176)

¹⁸² Interview 1

¹⁸³ Interview 3

4.5.1 User Issues

Across the board, case management systems were described as "clunky";¹⁸⁴ "disconnected";¹⁸⁵ "not the most intuitive";¹⁸⁶ "too bitty";¹⁸⁷ "too fussy";¹⁸⁸ "not straightforward"¹⁸⁹ and "[not] particularly smooth or well-connected".¹⁹⁰ Certain tasks on the systems were described as "not the easiest function to set up"¹⁹¹ and several of the participants reported that their system had "more in it than users currently know or are able to use".¹⁹² All participants were able to highlight at least one perceived flaw in their system, from technical glitches to design flaws in the workflow, and there was a general feeling among participants that the 'perfect' case management system does not exist.

The user issues revealed at interview can be organised into two broad categories:

- poor system functionality; and
- low user ability.

Poor functionality was the most commonly reported issue at interview. Functionality issues can be subdivided into two contributory categories: design flaws which are inbuilt within the system; and software bugs, which inadvertently cause the system to malfunction. The design flaws reported were all of a similar nature; in short, the technology is simply not user friendly:

The system is clunky and has been described as such by a few members of staff it's not the most intuitive system and isn't very user friendly;¹⁹³

¹⁸⁶ Interview 13

¹⁸⁴ Interview 12; Interview 13; Interview 15

¹⁸⁵ Interview 8

¹⁸⁷ Interview 10

¹⁸⁸ Interview 10

¹⁸⁹ Interview 9

¹⁹⁰ Interview 14

¹⁹¹ Interview 6

¹⁹² Interview 13

¹⁹³ Interview 13

it's too fussy and there's too much going on and it's not straightforward;¹⁹⁴

it's just a bit clunky in places and sometimes you have to find the answer in the quickest possible way and the system doesn't always make it obvious how you get to that;¹⁹⁵

it does its job [...] but I think it's not so user friendly. 196

In addition to these general comments on functionality, participants highlighted a number of specific design issues. These were most commonly noted in relation to the workflows and task lists, specifically where workflows include steps that practitioners consider unnecessary. As a result, task lists were described as overcrowded and ineffective:

sometimes it will populate tasks that it thinks you need to do even though you've told it you don't need to do it and it won't get rid of them. 197

Due to the rigidity of the workflows, practitioners are unable to remove or hide irrelevant tasks from their list, leaving them with a long list of incomplete tasks on their desktop:

I think the way that the tasks remind you of things aren't as helpful as they could be because you can end up with a volume of tasks very quickly [...] it would be good to have a facility that limits the information you can see or hide certain things in different places to make it a bit more user-friendly. 198

¹⁹⁴ Interview 10

¹⁹⁵ Interview 15

¹⁹⁶ Interview 17

¹⁹⁷ Interview 6

¹⁹⁸ Interview 15

As the extract above highlights, the specific issue of crowded task lists relates back to the general theme described above, that the systems are not user friendly. As a result, participants reported that workflows and task lists are often not used:

there is also a task list which is generated by the case management system but it's not particularly useful it puts in a number of irrelevant tasks and you can't add your own tasks to it so I think as a whole it's not used. 199

A key reason for this reported at interview is the general 'one size fits all' approach to case management that takes little account of the diversity of personal injury work:

I think part of the problem is that a lot of firms use a one size fits all type

Case Management System which actually then suits nobody. 200

Because of this, the workflows are reportedly insufficiently adept at recognising the nuances of specific situations and practitioners are, consequently, prompted for irrelevant information. For example:

if you have recovered money for a client you have to update the system to say that you've recovered it but it will ask you some questions that aren't always relevant to your area of work.²⁰¹

There was a general perception among participants that the demands of case management in the multi-track are quite different to the demands of case management in the fast-track. As previously discussed, fast-track work is perceived as easier to standardise and automate. ²⁰² Consequently, the workflows and task lists that might be useful in the fast-track are considered less useful in the multi-track. Moreover, the variability of higher-end work means that even within the multi-track, the reported 'one size fits all' approach to case management does not work:

¹⁹⁹ Interview 10

²⁰⁰ Interview 19

²⁰¹ Interview 15

²⁰² See discussion in ss.4.3.1 (n 72) and 4.4.1 (n 133)

because fast-track and multi-track work is very different and even within multi-track work there also different niches and so buying an off the peg case management system and expecting everyone in your firm to use it and for it to work for everybody is not a good idea.²⁰³

However, despite this general perception, workflows and task lists were even reportedly problematic within the fast-track. For example, one participant who handles fast- and multi-track claims reported that their system cannot recognise or manage indefinite stays in the fast-track claims portal:

some of them are indefinite stays while it's in the claims portal but the system doesn't seem to be able to recognise those differences.²⁰⁴

Therefore, whilst it may well be easier to design a workflow for fast-track and lowend multi-track claims, it is clear that they lack the nuance required, even for some fast-track work. Moreover, issues with workflows and task lists are not only caused by the nuances of particular specialist areas, but can be aggravated when cases are unexpectedly interrupted or handled in an irregular way. One participant highlighted this issue as their firm had inherited cases that had been set up either incorrectly, or within a different system:

because previous steps have not been run in the order that they should have been and the majority of claims that we're dealing with are ones that have been inherited from firms have been taken over by our firm a lot of the processes won't work because lots of the work has already been done but the case steps haven't been run appropriately or haven't been run within our system.²⁰⁵

Thus, the workflows and task lists within the systems reported at interview are not sufficiently well designed to be followed absolutely, irrespective of the level at which

²⁰³ Interview 19

²⁰⁴ Interview 9

²⁰⁵ Interview 9

one may be working. The reported reason for this is the variability of personal injury work which requires a more sophisticated and nuanced system than practitioners currently have access to:

there are so many variables as to how a claim will go that it would have to be some super-duper program to be able to do that.²⁰⁶

Lazar et al point out that design flaws which cause user issues are commonly caused by systems which are "often designed with interfaces that are hard to use, and features that are hard to find". 207 Congruent with this claim, a second common design flaw highlighted at interview was the difficulty in finding specific functions contained within the systems. This was mostly reported with reference to precedent letters and document templates:

you've got tabs at each stage for example funding investigation and then within that you can run certain precedents but it's not clear what precedents are there so I think most people run a generic template for what they need and the draft their own;²⁰⁸

It will provide template letters to be used and they can be edited however one big issue is that there's no function to view a list of letters.²⁰⁹

The issue here is that without knowing what the system contains, practitioners cannot make a judgement on how appropriate the templates used are as they cannot see if a better option is available. From their perspective, the system simply generates a template that they are expected to use and trust:

you can't see what's already in the system it will just run a template you can't see all the different templates available for you to pick from [...]

²⁰⁶ Interview 1

²⁰⁷ Jonathan Lazar, Adam Jones and Ben Shneiderman, 'Workplace User Frustration with Computers: An Exploratory Investigation of the Causes and Severity' (2006) 25 Behaviour & Information Technology 239, p.242

²⁰⁸ Interview 10

²⁰⁹ Interview 14

there's no menu of options for you to sort of select from it just generates whatever is there.²¹⁰

This issue also means that practitioners cannot access a template or standard document in the system that they may know exists, because there is no menu of options from which to choose:

There's no indexing system that you can reference so unless you know exactly what you're looking for and what it's called you can't find it to access it this is a big failing of the current system.²¹¹

This perceived flaw was consistently reported across the interviews from practitioners using different systems. However, as the above extracts demonstrate, most of the participants have already identified the cause (and consequently solution) of the issue; that the systems currently lack an index or menu of options. Nonetheless, despite this awareness the issue was still reportedly a persistent bugbear for practitioners.

A similar issue was raised by one participant when discussing legal research tools:

The law library has a very poor search functionality [...] often a prior Google search is quicker to tell you exactly what you need to search for.²¹²

It is interesting to note that in this case a search on Google reportedly returns better results than the system designed specifically for legal research. Once Google has returned the result that the practitioner is looking for, the legal research tool can then be used secondarily to download the item. In this sense, the legal research tool is not meeting expectations, nor even living up to its name as a research tool. Rather, it is merely acting as a repository of information whilst the research is conducted via another platform. According to this participant, online library search tools were

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²¹⁰ Interview 8

²¹¹ Interview 13

²¹² Interview 14

consequently considered of no real benefit over the traditional method of using hard copy, un-digitised resources.²¹³

In a similar manner, another participant offered a further example where a technological solution is reportedly no better than the traditional method:

because it's not so user friendly I will often ask my assistant who is a paralegal to create documents because it is more cost effective for her to do them than for me to try and do them with the system.²¹⁴

Here, the technological solution is not only no better than the traditional method, it is reportedly more costly. Thus, the practitioner has opted for the traditional approach of using an assistant to draft documents over the technology assisted method. This example demonstrates that practitioners' perceptions of LegalTech are influenced by the perceived benefit of the system (in this case a cost benefit) and the perceived ease of use (i.e. user friendliness). The system design directly impacts both of these and, consequently, the user's perception of the system as a whole which, as demonstrated, ultimately determines whether the technology is used.²¹⁵

The second category of functionality issue, system malfunctions, was less commonly reported and mostly in relation to issues that have been resolved. It was commonly reported that systems incurred 'teething problems' when first introduced. These commonly related to one off issues of software and hardware compatibility:

We have had a few issues with the system crashing this was particularly a problem when we first introduced it and I don't know the technicalities of it but our IT people had to essentially improve the hardware capabilities to cope with the software.²¹⁶

²¹³ Interview 14

²¹⁴ Interview 17

²¹⁵ See Chapter 6 for further discussion on the impact of user perceptions on the use of technology

²¹⁶ Interview 8

Other malfunctions related to specific templates and automatic functions within the systems not functioning properly:

it had various faults with it for example a certain type of letter wouldn't generate and you had to contact IT and these issues as obvious as they were took a long time to fix. 217

Not all of these issues were reportedly fixed and instead practitioners have had to make do by finding a work around:

there is a template which is very helpful but when you go through the process it just won't properly create the letter so that it's just essentially a blank screen and you end up having to use a work around.²¹⁸

Although not widely reported, system malfunctions were said to be of significant disturbance to the client experience as they have capacity to disrupt the timely resolution of claims:

I think one of the big things that really affects the quality of service received is the speed at which we are able to resolve their case for them technology goes wrong and when it does it often takes a long time to fix.²¹⁹

The impact of user issues on the perception and use of technology is discussed further in Chapter 6, but system malfunctions specifically were said to cause resistance towards new technologies that are consequently perceived as regressive in comparison to earlier systems:

that did cause a stir with a lot of people complaining that we shouldn't have changed the system if it isn't going to work properly.²²⁰

²¹⁷ Interview 11

²¹⁸ Interview 11

²¹⁹ Interview 8

²²⁰ Interview 8

Even where malfunctions are remedied, they nonetheless shape users' perceptions and contribute to that general perception already highlighted, that the systems are not user friendly. As s.6.5 demonstrates, the perceived ease of use directly influences a user's attitude towards a technology which in turn has potential to shape their intentions to use and, ultimately, their actual use of the system.²²¹

System malfunctions reportedly affect older practitioners, who are less able and less confident to try to resolve issues themselves than younger practitioners:

I know certainly for the older solicitors here not so much the younger staff but people my sort of age and above do tend to panic when the system goes wrong or the screen freezes younger people tend to just manage to sort it out themselves as they have grown up using computers and just have the confidence to use them more effectively.²²²

Issues of age, capability and confidence raised in the above extract bring the discussion to the second user issue highlighted above: low user ability. Age has already been discussed as a potential barrier to use in s.4.4.1, but beyond age the issue of ability "which may or may not be related to age" 223 was raised by several of the participants. It was consequently reported that, notwithstanding the design flaws and system malfunctions discussed above, the systems are capable of working to a higher level than users presently know how to operate:

The system will do more and has more in it than users currently know or are able to use.²²⁴

As one participant commented in short: "we're not using the system to its best effect". 225 Across the interviews, it was clear that practitioners do not understand

²²³ Interview 14

171

²²¹ Fred D Davis, Richard P Bagozzi and Paul R Warshaw, 'User Acceptance of Computer Technology: A Comparison of Two Theoretical Models ' (1989) 35 Management Science; see s.6.5 for further discussion.

²²² Interview 8

²²⁴ Interview 13

²²⁵ Interview 9

how much of the technology they use works. When describing their systems, the language used presented the technology as mystical and unknown. This included references to "a fancy case management system" 226 and "some sort of magic program"²²⁷ of which practitioners are somewhat weary. Practitioners' own role in using these technologies is consequently reduced to "just pressing buttons". 228

There is a growing body of literature dedicated to demystifying the 'black box' of machine intelligence such that users can begin to understand how systems work. The black box metaphorically represents the opaque nature of technology (particularly artificial intelligence) that prevents its users from understanding how results are calculated or decisions reached.²²⁹ The perception among the practitioners interviewed was that not knowing how a system generates results from data is problematic. Referring to damage calculations tools, one participant said:

I don't think you should use the data to bibbidi-bobbidi-boo that's what it's worth.²³⁰

The cultural reference to a spell used in Disney's Cinderella emphasises the point that to many practitioners (in this case a paralegal under the age of 35 who regularly uses case management software to process claims) sophisticated technologies are an unknown. To them, the algorithms that operate within the 'black box' are about as well understood as a magical incantation. This clearly has potential to limit practitioners' interactions with future, more sophisticated, technologies. However, despite admitting their limited knowledge of how systems work and acknowledging that this has caused systems to be underused, none of the participants appeared too concerned. For example, s.4.3 notes that case management systems have been seen

²²⁷ Interview 1

²²⁶ Interview 3

²²⁸ Interview 10

²²⁹ The concept of the black box has been used in science and computing since the mid-20th Century to describe a system which users cannot understand due to the opaqueness of its internal working. See N Wiener, Cybernetics: or the Control and Communication in the Animal and the Machine (MIT Press 1961), p.xi

²³⁰ Interview 2

in practice since at least the early 2000s, yet participants still report that they struggle with the technology two decades on:

The case management system is helpful but for us not being IT based in terms of our degrees and educations [...] it's very difficult to get the case management system to do exactly what you want it to do.²³¹

This highlights that, whilst participants recognised their own technical inabilities at interview, IT training has either not been prioritised, or not been successful, in recent years. It was suggested by some participants that to get the most out of the technology would require considerable investment and, as a result, some of the technical functions are simply not used:

We won't use some of the functions that may be useful because it's going to take too much man power.²³²

Supporting the view that investment in IT training has not been prioritised, there were several suggestions at interview that lawyers simply "don't do enough as a profession to make our lives easier through technology". Current technologies were frequently described as being inadequate and approaches to using them as "behind the times". Nonetheless, all participants claimed that however poor their approach to embedding technology might be, this is a sector wide issue:

I think the legal profession as a whole has been quite slow to use technology.²³⁵

Recognising this, and in spite of the issues highlighted with the current technology, there was a general perception that the whole profession can and should do better.

²³² Interview 6

²³¹ Interview 6

²³³ Interview 11

²³⁴ Interview 1

²³⁵ Interview 19

There's a lot of scope for us to use technology a lot more than we do at the moment to be honest there's a lot of potential that we need to harness and I think a lot of firms not just us can do better.²³⁶

This comes in stark contrast to the denial that Susskind claims has held, and continues to hold, the profession back.²³⁷ Whilst some user issues may prevent practitioners from using particular functions, none have caused them to abandon or reject the systems entirely. Rather, practitioners have reportedly responded in an adaptive way to resolve or work around issues. The interview data, therefore, suggests that whether caused by perceived faults with the systems used, or by poor user ability, frustrating experiences with technology have not tarred the overall perception of technology which remains positive. The interplay between the perceived ease of use and the perceived benefit of systems is revisited in Chapter 6 where the drivers and tensions that shape the uptake and use of technology are explored.

4.5.2 Conclusion

Taking the issues of poor system functionality and low user ability together reveals a broader issue pertaining to the way in which LegalTech is developed and integrated in practice: that there is a void between those who develop the systems and those who use them. This issue was highlighted best by one participant who explains it as a key failing of their firm's tailormade case management system:

A key flaw is that the people designing the system weren't in contact enough with those using the system they lacked the legal knowledge of how to process a claim and consequently have created a system that isn't the best for the case handlers.²³⁸

This extract highlights two elements that contribute to this void: a physical distance between the stakeholders (they "weren't in contact enough") and a conceptual difference in their understanding ("they lacked the legal knowledge"). The anecdotal

²³⁶ Interview 12

²³⁷ Tomorrow's Lawyers. An Introduction to Your Future (n 13), p.77. See Chapter 5 for a discussion on the role of denial in the journey towards automation

²³⁸ Interview 13

issues discussed in s.4.5.1 exemplify this gap as in many cases the solutions are self-evident, yet the issues reported persist. When asked about the technologies they use for this study, participants were keen to give their perspective. However, when asked about opportunities to participate in discussions about technology, all of the participants confirmed that no such opportunities exist within their firm, other than ad hoc complaints to their line manager or IT department.

The user issues discussed above, as well as the overall positive attitude towards technology, highlight the importance of capturing practicing perspectives of technology not only for academic research, but to inform and improve practicing methods. It enables the discussion on LegalTech to move beyond the assumptions that practitioners' objections are founded on cynicism and denial; and highlights that the prevalent issue is a lack of cohesion between tech developers and tech users. The impact of user issues is revisited in Chapter 6 as the thesis discusses the drivers and tensions that shape the use of technology. Over and above these issues, however, engaging with practitioners' perceptions has emphasised that the overarching perception of technology in practice is positive.

4.6 Conclusion

Section 2 of this chapter demonstrated that, despite a significant increase in global investment in LegalTech, the legal sector is still considerably behind other comparable sectors in terms of technology investment. Moreover, it noted that the majority of LegalTech available on the market is aimed towards commercial, non-ltigious areas of law and there is, consequently, a lack of technology solutions available to personal injury practice. Nonetheless, five relevant technologies were identified: case management systems, document assembly tools, damage calculation tools, analysis tools and online dispute resolution. Section 4.3 demonstrated that the case management system is the principle technology for personal injury law with the vast majority of participants having access to a system. Beyond this, however, investment in LegalTech among the practitioners interviewed has been almost non-existent with only basic applications such as legal search engines and very simple legal

form databases being found. Looking into the uses of case management technology, it is clear from the data that while there is a perception that senior practitioners use the technology less, they in fact use the system in different ways. The trend illustrated in Table 4.2 demonstrates that as one progresses through the seniority of a firm, the role becomes increasingly about supervision and, therefore, the use of the case management system alters to reflect that.²³⁹ Overall, the interviews suggest that the uptake and use of new technologies since 2002 has been underwhelming, especially when compared with the considerable growth in investment that LegalTech has reportedly seen. However, given the limited technologies identified as specifically relevant to personal injury, this is perhaps not surprising.

Finally, this chapter has demonstrated that practitioners' frustrations with the systems that they use are a foremost concern. Case management systems were almost unanimously described as difficult to use and a number of specific issues relating to system designs, system malfunctions and user ability were identified. Nonetheless, whilst these all have potential to detract users, there was equally unanimous agreement that the technologies reported at interview are useful tools. Moreover, there was a general perception that the profession as a whole could use technology more effectively and should do more to overcome the human barriers to greater technical integration. This is a key finding of this thesis as it strongly rebuts Susskind's claim that practitioners' objections to disruptive technologies are due to a cynical denial of technology altogether.²⁴⁰ This point is revisited in the next chapter which critically analyses Susskind's theory of denial in the journey towards automation and disruption. Practitioners' attitudes towards technology, in particular the user issues discussed here, are also revisted in Chapter 6, which considers the impact of user attitudes on the uptake and use of technology.

²³⁹ The role of LegalTech in the supervision of junior and non-qualified practitioners is explored in more depth in the following chapter

²⁴⁰ The end of lawyers?: rethinking the nature of legal services (n 146), p.274

CHAPTER 5

The Transformative Impact of Technology on the Legal Profession(al)

Law firms in the digital age are transforming across every dimension of their business model. No element of it is unchallenged. Even more fundamentally, the central importance of technology at the heart of the legal delivery model is creating the biggest change to the way legal advice is provided in over 100 years.¹

5.1 Introduction

The previous chapter highlighted that the use of technology by the practitioners interviewed is limited to variable use of case management systems, limited use of additional LegalTech and use of standard office technologies. This suggests that personal injury practice is considerably far behind the technologically driven future that commentators predict. Nonetheless, whilst none of the participants come close to engaging with the types of disruptive technology predicted, the technologies reported have impacted practice. This chapter, therefore, discusses the extent to which the use of technology has transformed both legal practice and practitioner.

Section 5.2 models the technical transformation of the legal profession to frame the analysis and discussion. Rejecting Susskind's linear model that moves from denial, through automation, and arrives at disruption, it proposes that automation and disruption are best considered processes, and not destinations, in which doubt and denial play a continuous role. Harmonising and developing the three existing models of transformation, it identifies four transformations reported at interview: automation, lawyers replaced by non-lawyers using systems, commons (public access to legal knowledge)² and some bespoke work.

¹ Chris Bull and David Bason, Law Firms in the Digital Age (Managing Partner 2013), p.VIII

² See s.2.3

Section 5.3 discusses the transformation of practice by LegalTech. It notes that the focus of LegalTech reported at interview is overwhelmingly concerned with the digitisation of administrative and processual tasks and, thus, the practices observed are presently somewhere in the automation phase. There remains considerable room for bespoke legal work within the practices reported. However, despite no disruption being reported, LegalTech has facilitated a considerable transformation to practice by enabling the digital supervision of junior and non-qualified practitioners. This has not replaced lawyers as Susskind envisages, but has displaced and redeployed them to a new supervisory role. It concludes, therefore, that whilst bespoke work remains, LegalTech has encouraged both automation and lawyers being displaced by non-lawyers using systems.

Section 5.4 discusses the transformation of practice by ubiquitous technologies. It notes that the use of ubiquitous technologies is limited, but that telecommunications, in particular email, have had a significant impact on the professional-client relationship. As clients demand greater connectivity with practitioners, this relationship is increasingly shaped by clients' expectations to which practitioners have responded. It highlights this as a challenge to practitioners' authority.

Finally, s.5.5 explores the challenge that the digitisation of knowledge presents to the expertise and autonomy of the legal profession and professional. It highlights clients' use of technology to undertake independent research and to discuss their claim with others as a challenge to both professional expertise and autonomy. Section 5.5.2 discusses the role of technology in facilitating an increase in non-qualified practitioners who, in carrying out work previously handled by qualified lawyers, further challenge the autonomy of the legal profession.

5.2 Modelling the transformation of legal practice by technology

Chapter two outlined the thirteen technologies predicted to disruptive the legal profession. That discussion highlighted inconsistencies in the terminology used to

categorise technologies and concluded that, for the purposes of this thesis, Christensen's original distinction between sustaining and disruptive technologies was most appropriate.³ Returning to this issue, Susskind's original thesis proposes that there are three stages of integrating technology through which the legal profession will traverse: denial; resourcing; and disruption.

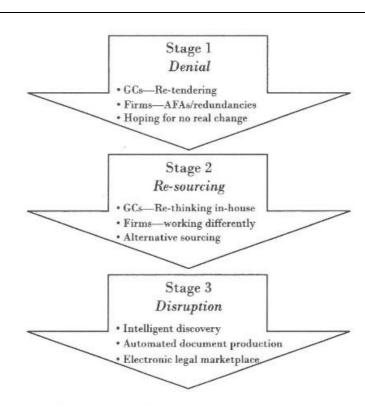


Fig. 5.1 Susskind's Pathway to Disruption⁴

³ See chapter 2 section 2.3

⁴ Richard Susskind, *Tomorrow's Lawyers. An Introduction to Your Future* (Oxford University Press 2013), p.77

Denial is, as we would colloquially understand it, the denial that fundamental changes within the legal marketplace are likely to happen. This encompasses a denial, firstly, that the pressure on firms to reduce costs will have such significant impact as to promulgate change; and, secondly, that future technical capabilities will be sufficient to displace the work of the legal profession.⁵ At this first stage, lawyers will respond to financial pressures by making minor efficiencies where possible, but assume that they will eventually be able to return to the *modus operandi*.⁶ Resourcing will then come as partners and managers notice that legal costs are not falling, so they enforce new efficient working methods. At this stage lawyers will focus their efforts on reducing labour costs by identifying "ways that the most straightforward, procedural, and administrative-based activities and tasks can be sourced differently".7 This includes employing unqualified staff such as paralegals to undertake rudimentary tasks; outsourcing tasks to third parties who can complete the work at a cheaper rate; and computerising processes to improve efficiency. Finally, disruption involves "much more radical transformation".8 This stage envisages the widespread use of disruptive technologies to deliver legal services. It is at this stage that lawyers are predicted to convert their processes from human handcrafting to intelligent IT-based methods, whilst the electronic legal market brings about an entire change for the legal market.9

This model of technological change is problematic for three main issues. First, there is no clear discussion of how the stages of denial, re-sourcing and disruption relate to sustaining and disruptive technologies. Disruption is described as the "widespread and pervasive deployment of disruptive technologies", ¹⁰ from which one may infer that disruptive technologies are primarily employed during this stage and, by extension, sustaining technologies are primarily employed in the resourcing stage. However, this is neither explicitly stated, nor explained. In 2015, the issue is made

⁵ Ibid, pp.77-79

⁶ Ibid, p.79

⁷ Ibid, p.80

⁸ lbid, p.81

⁹ Ibid, p.82

¹⁰ Ibid, p.82

even more complex, as Susskind and Susskind adopt new terminology, now referring to automation (the streamlining and computerising of inefficient administrative work); and innovation (the introduction of a new technology that creates "an opportunity to deliver a [...] service in an entirely new way)".^{11,12}

In this work, there is no discussion of the transition between automation and innovation to represent the transformative impact of technology on professional practices. Whilst 'automation' and 'innovation' are referred to as direct replacements for 'sustaining' and 'disruptive' (from which one may infer that the transformation of professional work by technology now evolves through automation and into innovation, as indicatively shown in Fig. 5.2) there is, again, a lack of clarity on which technologies are active in which stage and, consequently, how they impact practice.

2013 Denial Re-sourcing Disruption

Automation Innovation

Second, the suggestion that denial is a stage in itself is challenging, as it implies that denial is a fixed phase out of which practitioners evolve once they begin to adopt sustaining technologies. It not only seems unlikely that practitioners' concerns about the use of technology will be suddenly and unexplainably allayed, such that doubt and denial are restricted to this phase only, but it also seems unlikely in the converse,

 $^{^{11}}$ Richard Susskind and Daniel Susskind, *The future of the professions : how technology will transform the work of human experts* (Oxford : Oxford University Press 2015), pp.110-112

¹² See S.2.4 for this critique of Susskind's account

that there will be no use of technology (sustaining or disruptive) whilst scepticism about technology remains. In 2013, Susskind claimed that lawyers were still at the denial stage, but predicted that, by 2020, intelligent IT-based production will be commonplace in the legal profession. In 2015, the denial stage is not discussed, suggesting Susskind and Susskind already consider the professions beyond this stage. Indeed, their discussion of automating technologies within law further points to that conclusion. However, conversations with practitioners indicate that doubt and denial about the capabilities of technology persist, even among those who already make use of technology within their daily work. Referring specifically to intelligent legal research, one participant commented:

I really don't see how improvements in technology could change that part of the process. 16

This participant already makes use of an online legal research tool, but simply cannot foresee a more sophisticated system, improved by artificial intelligence, benefitting practice further. They, a senior solicitor of 20 years' experience at a large regional firm, were generally positive about the use of technology within practice and have even contributed to national discussions on LegalTech, as a senior member of the Association of Personal Injury Lawyers. Yet, despite being an advocate for greater use of technology, they still could not see that the benefits of legal research could go further than the tools they already have. Speaking more generally, another participant stated:

It's one thing to dumb down the work and use software to assist as we do but its another thing to get technology and remove the person completely.¹⁷

Whilst on the face of it this view seems stronger than the previous extract, both participants are making a similar point: that the use of sustaining technologies to

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¹³ Tomorrow's Lawyers. An Introduction to Your Future (n 4), pp.77-79

¹⁴ The future of the professions: how technology will transform the work of human experts (n 11)

¹⁵ Ibid, pp.66-71; pp.110-111

¹⁶ Interview 11

¹⁷ Interview 4

automate legal tasks and improve efficiency is quite different from the use of disruptive technologies that replace the practitioner all together. As the first of these participants noted "I'm more in the camp of [technology] being used to improve efficiencies without the big bang changes". 18 They claim that disruption that removes the professional is not appropriate for legal work as "people still want the actual advice from somebody". 19 It is, therefore, clear that even where practitioners already make use of technology, vocal opposition against greater use of technology persists.

The two examples of denial already given focus on the replacement of the professional by technology. Other doubts included the ability for lawyers to use technology; the ability for technology to respond to particular circumstances of a case; and the appropriateness of a standardised, technology-based approach within multi-track work. The impact of practitioners' perceptions is discussed in greater detail in Chapter 6. Suffice to note here that the general concern highlighted by all but one of the participants, was for the impact that greater use of technology might have on the quality of the work produced:

I think it would push the standard down if you based [legal decision making] on technology.²⁰

The reservations about the future use of technology widely reported at interview demonstrate that Susskind's approach mischaracterises denial as a single phase in the journey towards disruption, when in fact it is a continuous thread throughout the conversation of technical capabilities. It is perhaps this mischaracterisation that leads him to the conclusion that those who criticise LegalTech are "cynics, sceptics and doubters" who will be left behind when the rest of the profession makes technical progress.²¹

¹⁸ Interview 18

¹⁹ Ibid

²⁰ Interview 2

²¹ Richard E. Susskind, *The end of lawyers? : rethinking the nature of legal services* (Oxford : Oxford University Press 2010), p.274

The interviews in this study do reveal some scepticism, particularly on the future use of artificial intelligence and disruptive technologies in law. However, none of the participants showed a generally antagonistic or cynical attitude. For the most part, doubts and denial about the future use of technology reported at interview appeared to be based on genuine misgivings about the future capabilities of technology and a firm belief that access to justice for claimants requires lawyers. In short, a denial that technology can perform legal work, and provide for claimants, as a lawyer can. This point is revisited in Chapter 6, where the perceived trustworthiness of technology found at interview is examined alongside practitioners' perceptions of public trust in the profession and, ultimately, concern for the future quality of legal service is considered a barrier to the uptake of technology.

The third and final issue with Susskind's pathway to disruption, which follows from the second, is that the distinction between each stage, and the linear progression between them, is too artificial. The boundary between re-sourcing and disruption (or automation and innovation), as well as the progression from the former to the latter is flawed. For example, Susskind suggests that in the re-sourcing stage new third party providers such as accounting firms or specialist start-up companies will play a bigger role in handling and resolving cases.²² By doing so, such providers evidently disrupt the current market, providing a more efficient service than traditional legal businesses and, thereby, introducing new competition. By fragmenting legal work and outsourcing tasks, practitioners are losing their monopoly over the process as a whole and this, surely, amounts to disruption, even by Susskind's own definition, despite being considered part of the re-sourcing/automation stage. Whilst Susskind and Susskind acknowledge that automation itself "could be transformative", they nonetheless insist that technologies used at this stage "do not challenge the traditional approach to professional work". 23 However, the example they give of nonlegally qualified third parties resolving legal cases arguably does just that. As s.5.3 demonstrates, within personal injury practice the use of sustaining technologies has

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²² Tomorrow's Lawyers. An Introduction to Your Future (n 4), pp.33-38

 $^{^{23}}$ The future of the professions : how technology will transform the work of human experts (n 11), p.111-112

led to transformative changes to the ways in which cases are handled, encouraging the use of paralegals to handle cases relatively independently. This transformation does challenge the traditional approach to handling cases beyond 'back office' changes that characterise automation. Moreover, whilst it does not undermine the dominance of established providers in the market for providing legal services, it does disrupt the market for legal practitioners which has traditionally been closed off from those who are not legally qualified. This, coupled with the liberalisation of legal services discussed in Chapter 6, presents a clear challenge to the legal professional and disrupts parts the legal services market. It is, nonetheless, not captured by the present automation-disruption dichotomy, nor the binary distinction between sustaining and disruptive technologies. The rigidity of the three-stage model is consequently flawed and the distinction between automation and disruption, whilst useful, needs to be considered more fluidly.

Moreover, the suggestion from Susskind's three stage model is that denial leads into re-sourcing and re-sourcing into disruption in a linear, evolutionary manner. Although disruption is clearly the more extreme transformation, Susskind's approach implies that automation necessarily precedes it. Whilst in many cases this characterisation may be accurate, not least because disruptive technologies often develop from pre-existing sustaining technologies,²⁴ there is nothing to suggest that anecdotal evidence of automation preceding disruption indicates a generalisable model that is applicable to all technologies across legal practice.

In summary, it is clear that, whilst the three-stage model proposed by Susskind is an accessible starting point from which to consider the transformative effect of technology on legal practice, it does not stand up to critical evaluation. In particular, the discussion has demonstrated that Susskind's linear, staged model that develops from denial, through automation and finally arrives at disruption is flawed. The aim of this discussion is not to attempt to create a new model for disruption, but to point out the difficulties, both conceptual and practical, in modelling the process of

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²⁴ Clayton Christensen, 'Disruptive Technologies Catching the Wave' (1995) Harvard Business Review p.3

transformation by technology. This thesis, therefore, proposes that automation and disruption are best thought of as processes and not stages – less so destinations – in which doubt and denial play a significant and continuous role.

5.2.1 Harmonising the Models of Technological Transformation

Taking a wider view of the commentary to date, there are three models for the transformative effect of technology that have already been discussed: automation and disruption (Christensen and Susskind);²⁵ commoditisation (Susskind);²⁶ and externalisation (Susskind and Susskind).²⁷ The lack of consideration for how the automation-innovation dynamic, as revised by Susskind and Susskind, sits with sustaining and disruptive technologies has already been discussed. However, considering all three models together reveals a further conceptual gap: that the models of disruption, commoditisation and externalisation are discussed in silos, leaving the field with no explanation of how they relate to each other, if at all.

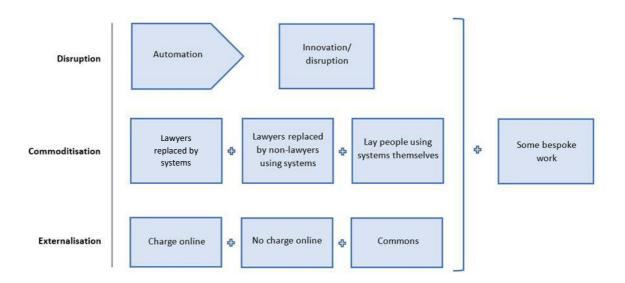
Fig. 5.3 is useful to this thesis as an illustrative device and an analytical tool. As an illustrative device, it demonstrates the lack of connectedness between the three models by showing each on separate rows, unconnected. It further illustrates that the existence of some bespoke work is common to each of them. As an analytical tool, it is the first stage in attempting to draw the connections between them. It may, therefore, be considered the basis for Fig. 5.4 which, although not a remodelling of the transformation of legal practice by technology, is an original attempt to illustrate how the models interact with each other, in so far as one is able to infer from the existing literature that they do. This is important not only to fill the conceptual gap highlighted in the current literature, but also to provide a workable model to help frame the discussion within this chapter.

²⁵ Clayton Christensen, *The Innovator's Dilemma* (Harvard Business School Press 1997); Tomorrow's Lawyers. An Introduction to Your Future (n 4)

 $^{^{26}}$ The end of lawyers? : rethinking the nature of legal services; Tomorrow's Lawyers. An Introduction to Your Future

²⁷ The future of the professions: how technology will transform the work of human experts (n 11)

Fig. 5.3 Three Models of Transformation by Technology²⁸



Susskind defines a commoditised legal service as one that is "readily available at no or low cost on the internet". ²⁹ Thus, by definition, commoditisation must be a form of disruption as it fundamentally alters the market for providing legal services. By extension, the three outcomes of commoditisation must all be outcomes of disruption as by replacing lawyers, they each alter the market for sharing legal expertise. Hence, in Fig. 5.4 below, the outputs of commoditisation are displayed as types of disruption. Furthermore, externalisation, as defined by Susskind and Susskind, involves "less knowledgeable, even lay, people with the support of appropriate processes and systems" accessing expertise directly, online. ³⁰ Thus, the three forms of externalisation are all examples of the third outcome of

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²⁸ This figure has been constructed as a visual representation of the three main models of transformation highlighted already in the review of current literature. It is combination of theories from Christensen, Susskind (2010 & 2013) and Susskind and Susskind (2015). *See* The Innovator's Dilemma (n 25); The end of lawyers? : rethinking the nature of legal services (n 21); Tomorrow's Lawyers. An Introduction to Your Future (n 4); and The future of the professions : how technology will transform the work of human experts (n 11)

²⁹ Tomorrow's Lawyers. An Introduction to Your Future (n 4), p.28

 $^{^{30}}$ The future of the professions : how technology will transform the work of human experts (n 11), p.196

commoditisation: *lay people using systems themselves*. Hence, on the whole, the following model is derived:

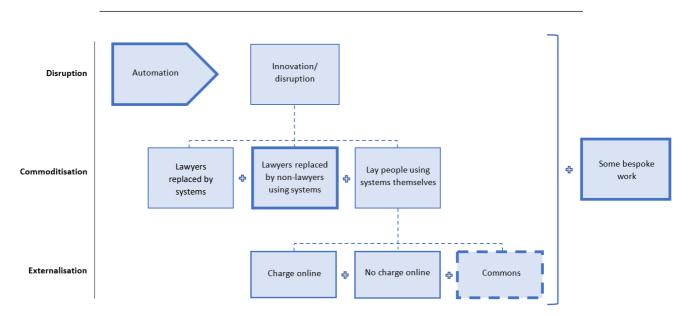


Fig. 5.4 Three Models of Transformation by Technology Combined

Whilst it has already been stated that the aim of this chapter is not to present a new model of transformation by technology, Fig.5.4 is an original illustration that attempts to make sense of those already articulated. Building on Fig.5.3, it adds the connections between each model, harmonising them into one useful illustration. The significance of the bold and dashed outlines of four of the boxes is explained later.

Susskind and Susskind recognise that their model, like most, is a simplification of reality and that there will be some overlap of the categories and stages that they propose.³¹ As a combination of their work, Fig. 5.4 is likewise a simplification. However, it serves two purposes. First, it begins to fill the conceptual gap between each model identified above; and second, by providing a holistic overview, it highlights where the current literature is deficient.

³¹ Ibid, p.197

Three issues pertinent to this thesis come to light from studying Fig.5.4. First, the assumption that automation necessarily leads into disruption is highlighted in the first row. Second, the lack of attention paid to the ways in which automation transforms practice is made apparent. Whilst, again, the purpose of this chapter is not to develop a new model, the modelling of transformation by technology has evidently focused on disruption at the expense of developing a theoretical model for automation, which is instead simply labelled "a more efficient version of what we have today".32 As ss.5.3 and 5.4 demonstrate, the uptake of technology identified in this study have predominantly been to automate legal tasks. Despite not being disruptive, this has nonetheless had a transformative impact on practice and practitioner which makes the lack of academic focus on automation within legal services all the more poignant. Third, although the combined model in Fig. 5.4 is useful for the purposes of this thesis, the second output of commoditisation – *lawyers* replaced by non-lawyers using systems – as a form of disruption is problematic and would need to be addressed further for this model to have wider validity. For example, lawyers may be replaced by paralegals whom they supervise without disrupting the current legal market. This is an example of automation and "delawyering", the delegating of work to non-qualified practitioners making use of systems.³³ Susskind refers to this as resourcing, a form of commoditisation.³⁴ However, it is clear from his definition quoted above that this is not an example of commoditisation, which involves disruption, as the legal market remains unchanged. Conversely, a lawyer being replaced by a legal information provider, who accesses legal expertise from a system and makes it available to the public online would be both disruption and commoditisation. Clearly, therefore, there are different causes and outcomes of lawyers being replaced by non-lawyers using systems, highlighted by the analysis of Fig. 5.4, that the current literature has failed to reconcile. As s.5.3 demonstrates, in the former example lawyers are still present but undertake a supervisory role over unqualified practitioners. As a result, lawyers have not been

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³² Tomorrow's Lawyers. An Introduction to Your Future (n 4), pp.33-34

³³ The end of lawyers?: rethinking the nature of legal services (n 21), p.47

³⁴ This is not to be confused with the 'resourcing' referred to in Fig. 5.1 which is an earlier reference to automation and a further example of the careless use of terminology in Susskind's work.

replaced, but have been redeployed to undertake a new role in case handling. Thus, when discussing de-lawyering in this sense, or 'para-professionalisation' as Haug labels it,³⁵ this chapter will make this distinction clear, where the current literature has not.

In spite of the issues discussed, the combined model harmonises the prevalent theoretical models of transformation, enabling a better understanding of their collective influence and providing a workable model from which to discuss their application. In this sense, Fig. 5.4 is a useful starting point from which to discuss the transformations found within this study. As noted, four of the boxes illustrated in Fig. 5.4 are highlighted with either a bold or dashed outline. These are highlighted to mark the four transformations reported in the present study:

Fig. 5.5 Four Transformations Reported at Interview



'Automation'; 'lawyers replaced by non-lawyers using technology'; and 'some bespoke work' are each outlined in bold to indicate that these categories were all reported at interview by participants. 'Commons' is outlined in dashed bold to indicate that this was found, but only to a very limited extent and not in a way that disrupts the current legal market. These are discussed in ss.5.3 and 5.4, which explore the transformation of personal injury practice by LegalTech; and the transformation of personal injury practice by ubiquitous technologies used by society at large, respectively.

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³⁵ Marie R Haug, 'Deprofessionalization: An Alternative Hypothesis for the Future' (1972) 20(1) The Sociological Review , p.198

5.3 The Transformation of Practice by Practitioners' Use of LegalTech

The previous chapter concluded that, whilst more practitioners now report having access to case management software, the uptake of new technologies since 2002 has been underwhelming.³⁶ It also noted that none of the technologies reported can be described as innovative, in the colloquial sense of the word. Nonetheless, the four technologies reportedly used by the participants (case management systems, document assembly tools, legal research tools and damage calculation tools) have had some impact on practicing methods, standardising, digitising and to some extent automating legal work. On the whole, however, none has come remotely close to disrupting, commoditising or externalising personal injury work. Nonetheless, as the following discussion demonstrates, the limited automation reported has facilitated the employment of non-qualified practitioners, under supervision. As discussed above, this thesis refers to this as the 'redeployment' of lawyers as opposed to the 'replacement' of lawyers which, as Susskind's thesis argues, involves the disruption of legal work.

The uses of case management systems discussed in s.4.1 demonstrate that case management technology has been used to standardise, digitise and to some extent automate tasks. Document storage, as their first reported use, simply uses the technology to digitally file documents that were previously held in hard copy. Although only a very basic example of digitisation, it nonetheless offers greater efficiency to case filing than traditional methods. Enabling practitioners to access files digitally has also assisted lawyers to supervise junior and non-qualified fee earners:

It makes it very easy for me to supervise my team because I can just log on to their files and see what they're up to [...] I can see what they reviewed what they've noted.³⁷

The digitisation of documents was consequently noted as a primary benefit by all participants. A key point to note is that this technology has not only benefitted

³⁶ Tamara Goriely, Richard Moorhead and Pamela Abram, *More Civil Justice? The impact of the Woolf reforms on pre-action behaviour*, 2002)

³⁷ Interview 7

practitioners individually, but has enabled practitioners to "work together in a team like way so everyone can access the file at the same time". 38 It, thus, benefits those handling cases on a day-to-day basis and those in a supervisory role simultaneously. This point is revisited with particular attention to supervision below.

The second use, a digital diary system, is again a very basic example of digitisation, replacing traditional hard copy diaries. There was some automation reported in this use, as dates are automatically scheduled into the diaries by the case management system – "it diaries things for you".³⁹ As with the previous use, this digitisation also assists with supervision, as supervisors are able to access digital diaries of junior staff. Both prompts and work-flows are likewise forms of standardisation as they encourage the case handler to follow a standardised process for handling a claim:

you are task driven [...] it's prescriptive in that you know what you've got to do and you follow that.⁴⁰

Although, again, only a simple form of standardisation, one can see its significance as case handlers become driven by tasks that the system tells them to complete and not by outcomes that their expertise tells them they need to achieve. Thus, as Brown and Duguid distinguish, through following prescribed protocols, case handlers learn about practice rather than about becoming a practitioner. ⁴¹ The impact of this is a reduction in the need for expertise and a consequent loss of tacit knowledge over time that enables a downgrading of work to unqualified practitioners and a new supervisory role for lawyers.

All of these forms of standardisation standardise and automate processes involved in handling a claim. This stands in contrast to automated document generation which attempts to standardise the substance of the work being produced, by automatically producing the content of documents. Despite having potential to be disruptive to

³⁹ Interview 7

⁴¹ John Seely Brown and Paul Duguid, 'Knowledge and Organization: A Social-Practice Perspective' (2001) 12 Organization Science 198

³⁸ Interview 18

⁴⁰ Interview 1

legal practice, none of the reported examples have been extensive enough to have a disruptive impact. For example, very basic templates provided by case management systems that require considerable editing by the practitioner standardise the format, but do little by way of automating the content. These templates range from:

A standard letter headed paper which has a box for address and date but that's it other than that its blank and we just write our own letter;⁴²

To:

A kind of template letter [that is] very brief.⁴³

More sophisticated templates do more by way of automating the content, but those reported at interview still require some bespoke editing by the practitioner:

there are usually a few options of template to choose from you choose the one that's most relevant and then make alterations to tailor it to your specific needs.⁴⁴

As noted in Chapter 4, none of the case management systems reported at interview were capable of producing final drafts of documents and consequently they do not fully automate document generation. One might expect systems that operate separately from a case management system to work more effectively, as document generation is their sole function. However, these systems reportedly operate in a similar manner to those integrated within case management software. For example, OyezForms provides practitioners with templates of court documents that reportedly still require extensive manual editing. Thus, despite digitising standard form documents, it does not automate the generation of their content. Whilst future versions of this technology may develop to automate more of the content, it has to be acknowledged that where court documents are concerned, practitioners are somewhat limited by the courts. It was noted by all of the qualified lawyers at

⁴² Interview 3

⁴³ Interview 10

⁴⁴ Interview 4

interview that firms can only go so far in digitising their processes before they have to interact with the courts manually:

There are other drivers than expediency and technical developments when you're in the legal world and one of those is the rules of court.⁴⁵

One participant anecdotally reported that the current process referred to by the courts as 'digital filing' involves completing a form online before either printing it, or having it sent in the post, to be hand signed and delivered to the court. ⁴⁶ Although seemingly recanted in jest, it was clear that behind this anecdote was a genuine frustration and amazement that the courts are so seemingly behind the times. As they concluded, "this is not digital filing in the slightest". ⁴⁷ In March 2020, it was reported that HM Courts and Tribunals are "almost ready to replace paper processes" for personal injury claims involving **one claimant and one defendant only.** ⁴⁸ Despite predictions about the future of online courts, ⁴⁹ it is clear that, whilst the government has encouraged greater use of technology by lawyers, it has been less quick to implement changes within the courts who are still unable to accept digital filing for most cases. Although not the topic of this thesis, uptake of technology by the courts clearly bares some relevance to practitioners when evaluating their own use of LegalTech. The influence of the courts on practitioners' engagements with technology is an area for further research.

The example of document generation discussed in Chapter 4 that comes closest to full automation, is the production of standard letters to medical experts requesting medical evidence, for which "the vast majority [...] will be generated". However, these letters are reportedly standardised to such an extent that there is no real need for, or process of, editing each one beyond ensuring that the basic details are correct:

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⁴⁵ Interview 18

⁴⁶ Interview 1

⁴⁷ Interview 1

⁴⁸ John Hyde, 'Online PI Claims Service Almost Ready to Replace Paper Process' *The Law Society Gazette* (11th March 2020) https://www.lawgazette.co.uk/news/online-pi-claims-service-almost-ready-to-replace-paper-process/5103422.article [Accessed 13th March 2020]

⁴⁹ Richard Susskind, *Online Courts and the Future of Justice* (Oxford University Press 2019)

⁵⁰ Interview 11

they're just automatically generated and you just check through that it says what you want it to say and just print those off.⁵¹

Therefore, whilst final drafts of medical request letters can be produced automatically, the system only enters the relevant names, addresses and dates. Other similar examples raised at interview were reminder letters and text reminders for client appointments:

tasks like reminding the client of a medical or an appointment with you it will produce a letter which you send out and then a day before a text message will pop up for you to remind them.⁵²

As with medical request letters, these reminders contain specific, standard information that is not bespoke to each case and therefore requires no editing or deviation from the established content.⁵³ As Buchan et al note, "a significant amount of a personal injury solicitor's correspondence is repetitious".⁵⁴ Therefore, whilst these are examples of automated document generation, the extent to which a new document is generated each time is limited. It is consequently difficult to consider these strong examples of automation.

Finally, management data reportedly collected through the case management system neither automates nor digitises a legal process or substantive legal work, but does automate and digitise performance monitoring to assist in supervision and appraisal. This, along with other tools referred to above, has assisted in the supervision of junior practitioners and has facilitated a shift towards higher numbers of unqualified practitioners which is discussed further below.

The additional legal technologies reported at interview have had a similar effect to case management systems – they have standardised, digitised and, to a limited extent, automated legal tasks. Legal research tools have made a significant difference

⁵¹ Interview 10

⁵² Interview 7

⁵³ Interview 7

⁵⁴ Andrew Buchan, Jenny Kennedy and Eliot Woolf, *Personal Injury Practice* (Tottel Publishing 2008), p.6

to the footprint of legal offices, digitising legal research and replacing the need for physical law libraries and "law reports on shelves in reception". ⁵⁵ Although this has, for the most part, reportedly made legal research more efficient, one participant claimed that digitised legal research at present is "no more use than a traditional hard copy library". ⁵⁶ Aside from reemphasising this discrete issue with current search capabilities, ⁵⁷ this point also highlights that legal research tools have simply digitised content that was already, and remains, available in hard copy. Whilst this does alter the way in which practitioners perform legal research, it remains simply a more efficient method (the noted exception aside) of performing the same task. It does not change the role of the practitioner who is still required to know what they are searching for, to read and understand the search results and to make a judgment on how to use them. As with case management systems and document generation tools, legal research tools therefore fall wholly within the automation category, improving the efficiency of practitioners' daily work without fundamentally changing their role or the substance of the work being done.

The final legal technology reported, damage calculation tools, has potential to automate both the process and substance of handling a claim, by removing the need for practitioners to calculate damages and by producing a schedule of loss. However, as with automated document assembly, the extent to which this technology works reportedly varies. Some assist only by calculating specific sums for the practitioner to then develop a schedule of loss, 58 whilst others automatically develop the schedule of loss from data entered: "you just type dates in and it does all the calculations for you". 59 By doing so, the most sophisticated damage calculation tools are the only technology reported at interview to currently fully automate substantive legal work. However, even including the most simple, homemade tools, still fewer than half of the participants interviewed make use of one and even then, only for lengthy or

⁵⁵ Interview 14

⁵⁶ Interview 14

⁵⁷ See s.4.4.2

⁵⁸ Interview 1; interview 14

⁵⁹ Interview 1

complicated damage calculations. The impact of this one technology is, therefore, limited and so too, it seems, is the demand.

Overall, all of the legal technologies discussed at interview have assisted in the automation of legal tasks to some extent. With the exception of the most sophisticated damage calculation tools, none of the technologies referenced assist in substantive legal work or professional decision making. Rather, they all assist in automating processual and administrative tasks. This was not seen as a flaw or limitation by participants who, when asked what an ideal legal technology does, responded that it offers administrative support and makes lawyers' work more efficient:

It makes the work more efficient and takes on some of the process adminbased tasks technology can clear all of the process stuff to give the lawyer more time to think about the case.⁶⁰

Thus, the interviews indicate that the emphasis of LegalTech within the personal injury practices studied has been on automating legal processes without making substantive changes to legal work; and this has largely met practitioners' expectations.

Alongside this automation, there reportedly remains considerable room, and need, for bespoke legal work. As has already been noted, none of the systems currently used fully automate document drafting. Therefore, letter drafting still reportedly requires considerable bespoke work by practitioners. Letters of claim, which are the first formal communication sent to defendants, were highlighted as an example that requires considerable bespoke editing, although it was widely reported that "most letters are to some extent bespoke". Similarly, schedules of loss are regularly bespoke crafted using the Judicial College Guidelines to assist. Client contact, legal research and negotiating quantum were also highlighted as tasks that require some

⁶⁰ Interview 14

⁶¹ Interview 14

⁶² As Chapter 4 reports, damage calculation tools were not widely reported and even when used do not produce a fully automated schedule of loss for the user

element of bespoke handling by the practitioner. For example, managing clients' expectations, explaining legal issues to them and asking them the right questions were all skills which participants highlighted as necessary and applied on a case-by-case basis. Finding case materials, digesting and interpreting them were, likewise, reported as professional skills that practitioners utilise regularly, along with responding to defendant insurers and working through the "tactics" of negotiation. The application of these skills is not standardisable in the way that repetitious tasks are. Rather, they highlight that there remains an element of personal professional skill within multi-track personal injury work. As one participant commented:

There's a large element of litigating a case that requires a personal touch.⁶⁴

Beyond the 'personal touch', tasks like valuing injuries, negotiating quantum and even deciding on the viability of a case require professional judgements which none of the technologies reported at interview can replace:

It's one of those areas like many areas of law where professional judgment is a prerequisite. 65

This finding fits with Buchan, Kennedy and Woolf's claim that current technologies "do not remove the skill from litigation [...] it is the solicitor and not the computer who will have to make the careful analysis" of each case to reach professional judgments. Thus, whilst there has been standardisation and automation, bespoke work that requires professional skill and expertise remains. As one participant summarised:

There is already standardisation but the technology is nowhere near the level people are suggesting and has not reached the level of expertise that lawyers have.⁶⁷

⁶⁴ Interview 11

198

⁶³ Interview 12

⁶⁵ Interview 18

⁶⁶ Personal Injury Practice (n 54), p.3

⁶⁷ Interview 14

Although no disruption was reported, the interviews suggest that the distinction between automation and disruption is too binary to reflect reality. This point has already been raised conceptually, but analysis of technology in practice has shown that the simple automation of manual, administrative and quasi-administrative tasks has led to significant changes in the handling of cases, by enabling non-legally qualified staff to process claims from start to finish, under supervision.

Of the participants interviewed, seven were not qualified solicitors. All of these participants reported handling cases, under supervision, with a significant level of independence. One paralegal suggested that input from supervising lawyers is limited to whenever needed:

If we want a lawyer's input we can have it is always on hand to give advice [...] generally we're quite an independent team of paralegals.⁶⁸

Consequently, aside from structured supervision meetings, the input from supervisors on a day-to-day basis is decided by the paralegal and not the lawyer:

I have to think does the partner have to see this do I need to ask someone else about this or can we decide among ourselves what we should do.⁶⁹

This relationship means that they often progress cases relatively independently and with minimal input from their supervising lawyer:

I haven't spoken to a lawyer yet today and I don't think I did yesterday". 70

This was a shared experience across the interviews with paralegals and legal executives. The general message from them was that "I can progress a claim from start to finish".⁷¹ When asked whether they think that paralegals handling cases independently is appropriate, they all responded that is. However, this was caveated

70 Ibid

199

⁶⁸ Interview 3

⁶⁹ Ibid

⁷¹ Interview 2

by some that, even when handling a case to completion, there is still some supervision:

ultimately there has to be supervision from somewhere.⁷²

Solicitors who were questioned on this downplayed the role of paralegals, emphasising their role in supervising the work. They also emphasised that only lower value, less complicated claims would be handled from start to finish by a non-qualified practitioner. Consistent with existing research,⁷³ the reasons cited for this were the expertise required, the higher risk involved and the lesser need for efficiency in higher value cases. The distinction between low value and high value work is discussed further in Chapter 6, but the consideration when appointing practitioners to a case is succinctly captured by one participant:

The challenge is of getting the right level of practitioner dealing with it so we've got grades A to D solicitors and then paralegals who charge out at different rates [...] the concern is that they are just qualified enough it's about finding the most appropriately qualified at the cheapest price.⁷⁴

The view that practitioners, qualified or not, are appointed to a case based on a balancing of their qualification and their cost neatly summarises the tension between the need to reduce costs as a driver towards automation and the need to control quality. Hence, in the practices observed, we have seen varying levels of automation and the use of non-qualified staff under supervision as a compromise to satisfy the cost pressures whilst minimising the perceived risks associated with removing the qualified legal expert altogether.⁷⁵

The increased use of para-professional staff is not unique to civil justice. Non-qualified staff are reportedly "found operating successfully across a much broader

⁷² Interview 5

⁷³ Richard Lewis and Annette Morris, *A Socio-Legal Analysis of Personal Injury Claims in Three European Countries: England and Wales* (Unpublished Manuscript 2019)

⁷⁴ Interview 1

⁷⁵ This tension between efficiency and quality is discussed in depth in Chapter 6

range of human services", encouraged by decreasing budgets and supported by technology. Hithin criminal law paralegals have taken a similarly significant role handling cases within and without firms by, for example, obtaining police station accreditation to act as duty representatives. The balance between cost efficiency and qualification is echoed in criminal practice where cheaper paralegals are "increasingly being hired to carry out criminal defence work" due to cuts to criminal legal aid. Critics point to the risks of non-qualified criminal practitioners, citing "fears of an increase in miscarriages of justice". These fears are echoed in personal injury where the high intensity, low cost model that makes use of large teams of paralegals has been characterised as "factory-line" justice. None of the practices reported at interview fit this characterisation which, admittedly, has focused on the fast-track. What is clear, however, is that within the multi-track, paralegals are increasingly involved in resolving claims, supported by the sustaining technologies discussed in the previous chapter.

Whilst Susskind acknowledges that cheaper, unqualified staff may be employed in the automation phase, he suggests that they will only undertake rudimentary tasks.⁸¹ Susskind & Susskind also refer to this phenomena, but claim that para-professionals find their role where work is decomposed and constituent tasks are delegated to them.⁸² Furthermore, they argue that automation will not stimulate "a fundamental departure from the traditional ways of working".⁸³ The finding in this study, however, is that paralegals reportedly handle claims, that have not been decomposed, from start to finish. Moreover, although the extent to which this constitutes a fundamental

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⁷⁶ The future of the professions: how technology will transform the work of human experts (n 11), p.137

⁷⁷ Owen Bowcott, 'Criminal Lawyers Asked to Take a 4% Pay Cut as Legal Aid' *The Guardian* (15 October 2014)

⁷⁸ Ibid

⁷⁹ Ibid

⁸⁰ A Socio-Legal Analysis of Personal Injury Claims in Three European Countries: England and Wales (n 73); see also Nora Freeman-Engstrom, 'Run-of-the-Mill Justice' (2009) 22 The Georgetown Journal of Legal Ethics 1485

⁸¹ Tomorrow's Lawyers. An Introduction to Your Future (n 4), p.80

⁸² The future of the professions: how technology will transform the work of human experts (n 11), pp.124-125

⁸³ Ibid, p.111

departure from traditional methods is an objective point, it is clearly more than superficially transformative, especially given the independence they claim to have been afforded. Therefore, whilst the previous section concluded that the use of technology reported at interview is limited to automation, it appears that sustaining technologies have nonetheless significantly transformed the practices observed. Beyond shifting some work from bespoke to somewhat standardised, they have facilitated extensive use of non-qualified practitioners, which is a fundamental departure from traditional methods.⁸⁴ Hence, the distinction between automation and disruption (or even automation and innovation) in the current literature is too binary to reflect reality.

This transformative shift from bespoke work to something short of commoditisation and disruption has already been conceptualised within manufacturing by Braverman who refers to a shift from craft production to industrial production, driven by automation and the division of labour. Braverman argues that this shift comes about as organisations seek primarily to maximise profits by reducing labour costs. They, thus, make "work more routine and increas[e] management control" through supervision. Production is consequently deskilled as "the automation of processes places them under the control of management engineers and destroys the need for knowledge or training". Knowledge and skills, being retained by the supervising expert, are thus distributed on a "need to know basis" with the skilled craftsperson only being deployed when necessary. By distributing knowledge as a resource more effectively, "dividing the craft cheapens its individual parts" and reduces the overall cost of production. As noted in Chapter 1, the rapid development of technology means that service industries and the professional classes are no longer exempt from these technological trends. Brooks, researching the role of temporary advocates in

⁸⁴ The impact of this change on the status of the legal profession and professional is discussed in section 5

⁸⁵ Harry Braverman, *Labor and Monopoly Capital* (Monthly Review Press 1974)

⁸⁶ Robert Brooks, Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (Temple University Press 2012), p.3

⁸⁷ Labor and Monopoly Capital (n 85), p.223

⁸⁸ Ibid, p.82

⁸⁹ Ibid, p.80

US corporate firms, comments: "white-collar work also has been increasingly deskilled, intensified, and surveilled". 90 He notes that within the legal profession, technology can be "deployed by management to increase division of labor [sic] and to deskill some tasks"; and "as information technologies become more complex, they also become easier to use". 91 Thus, less qualified and less experienced workers, supported by technology, are able to perform tasks that previously required expert professional workers.

The interviews suggest that the delegation of work to unqualified and less experienced practitioners follows a similar pattern to that outlined by Braverman and Brooks. First, paralegals and legal executives are attractive to legal businesses because they represent the cheaper labour Braverman describes:

I am a less expensive version of an expensive lawyer and I can progress a claim from start to finish;92

I'm not expensive paralegals really are not expensive. 93

Second, as Brooks argues, technology has enabled this delegation by deskilling the work and enabling unqualified staff to carry it out:

I know that our paralegals who can run cases pretty independently from me wouldn't be able to do that without this technology.⁹⁴

One paralegal commented that technology not only enables non-legally qualified practitioners to handle cases, but it also helps to assure clients that they are sufficiently equipped to do so:

92 Interview 1

203

⁹⁰ Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (n 86), p.7

⁹¹ Ibid, p.5

⁹³ Interview 3

⁹⁴ Interview 4

I think [clients] would be more comfortable with a paralegal with the software than a paralegal without it and a paralegal who is at least supervised by a lawyer.⁹⁵

In addition, the division of labour can also be observed as different levels of practitioner perform different functions. For example, paralegals and legal executives are employed in the day-to-day handling of a case, whilst qualified solicitors (as well as handling their own cases) coordinate, supervise and maintain ultimate responsibility for the delegated work. This division of work between levels of practitioner is illustrated well in Table 4.2 and the surrounding discussion which demonstrates that practitioners consequently engage with case management systems in different ways. As has already been noted, the digitisation of case management and document storage in particular "makes it very easy for [lawyers] to supervise [their] team" as they can easily see everything that has been, and is still to be, done. 96 Brooks refers to this as a "virtual Panopticon" of management control where low-skilled workers are employed to use systems which enable managers to keep watch over their performance. 97 He claims that, as work is "deskilled, intensified and surveilled", power is shifted from worker-level to management-level and the work itself is downgraded. 98 The downgrading of professional work is best considered by Haug's deprofessionalisation thesis, discussed in s.5.5. However, also relevant here is the theory or proletarianization which suggests that "professionals will slowly lose autonomy, status, and reward as they are absorbed into large bureaucratic organizations".99 In particular, Derber's concept of 'technical proletarianization' which sees professionals lose control over the means of work (as opposed to 'ideological proletarianization' which sees them lose control over the ends) seems congruent with the observed trend of lawyers no longer handling claims, but

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⁹⁵ Interview 3

⁹⁶ Interview 7

⁹⁷ Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (n 86), pp.2-4; The panopticon is a prison building designed by Bentham in which every inmate could be observed covertly. IT was used as a metaphor by Foucault to describe the constant observation and manipulation of citizens in contemporary society. See Michael Foucault, Discipline and Punish: The Birth of the Prison (Pantheon Books 1977)

⁹⁸ Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (n 86), pp.6-7 ⁹⁹ Ibid, p.20

maintaining ultimate responsibility for their outcome.¹⁰⁰ This suggests that the supervision model, which has been driven by costs and facilitated by automation,¹⁰¹ affects not only the legal profession, but also the legal professional, who now has a primarily supervisory role.

This section has demonstrated that the limited uptake of technology reported at interview has automated inefficient legal processes but has not made changes to substantive legal work or professional decision making. Sustaining technologies have, therefore, helped to make work more efficient but have not removed the professional expert. This is due in part to the technologies used and in part to the perceived nature of multi-track work which reportedly requires a bespoke approach to varying degrees. The interviews, therefore, demonstrate that there is some automation but bespoke work remains within the practices observed. Whilst none of the technologies reported threaten to replace the legal professional or disrupt legal services, they nonetheless have displaced the professional and redeployed them to a new supervisory role. This is not to say, however, that lawyers are not challenged by automation. As s.5.5 discusses, automation within practice, along with a more egalitarian and technically equipped society, threatens to undermine the expertise and autonomy of the legal professional.

The importance of supervision should not be overlooked for two key reasons. First, the continued role of the lawyer demonstrates that Susskind overstates the impact of information technology on knowledge-based professions. Whilst they have not been replaced by technology as he predicts, their displacement to a supervisory and decreasingly 'hands on' role is, nonetheless, a significant transformation. This suggests that the binary distinction between automation and disruption does not reflect reality. Second, as the professional is still present, so too is their expertise. This is a point that qualified practitioners were particularly keen to emphasise as, for

¹⁰⁰ C Derber, 'The Proletarianization of the Professional: A Review Essay' in C Derber (ed), *Professionals and Workers: Mental Labor in Advanced Capitalism* (G K Hall 1983)

¹⁰¹ These drivers are explored in Chapter 6

them, supervision is essential to ensure that clients continue to receive quality advice that is expert led. 102

5.4 The Transformation of Personal Injury Practice by Ubiquitous Technologies

Having discussed the transformation of practice by LegalTech, this section considers the impact of ubiquitous technologies. For this study, these are defined as technologies which are widely used in society by lay people and lawyers alike. The interviews indicate little uptake of ubiquitous technologies, other than those found in any professional office: networked PCs, laptops, multi-line telephone systems, the occasional use of dictation software and telecommunications, including phone calls, text messages and emails. This section discusses the impact of practice-based uses of telecommunications. The internet and public use of telecommunications are discussed in s.5.5 as potential challenges to the legal profession and professional.

Whilst telephone calls were raised as an important tool, particularly at the early stages of a claim, the impact of telephones on practice was largely unreported by the participants. This is most likely because their introduction to legal offices predates all of the practitioners interviewed who, consequently, cannot comment on the impact they have had. Moreover, as the social use of telephones is something to which all of the participants will be accustomed, both landline and mobile telephones are arguably "mundane". They have consequently become "invisible" to the user and receive little attention despite being "pivotal in shaping everyday life". Nonetheless, participants did highlight text messaging as a new use of mobile phones

¹⁰² Chapter 6 explores the importance of maintaining standards through supervision and governance, which has been a key dynamic, encouraging automation where technology assists with performance monitoring and discouraging disruption where technology is perceived as a potential risk to standards

¹⁰³ See s.4.3

¹⁰⁴ Mike Michael, 'These Boots are Made for Walking..: Mundane Technology, the Body and Human-Environtment Relations' (2000) 6 Body and Society 107

¹⁰⁵ Ibid, p.108

that has transformed the ways in which they communicate with clients. One participant commented:

Clients want to text more [...] that didn't happen at all when I first started whereas now it's expected that you will have a work phone that you can text somebody on.¹⁰⁷

This indicates not only a change in behaviour, but a shift in client expectations:

I think there's an expectation that we don't just send out letters every now and then often if they contact us they want a response quickly whether that's by email or text.¹⁰⁸

The transformation from clients receiving written letters "every now and then" to expecting quick, digital responses is a significant change in the social relationship between the client and the professional. The client, now demanding more of the professional, is dictating the quantity, timing and format of communication. This was raised as a concern by one participant who believed that this was neither necessary, nor in the interest of practitioners' welfare:

I am reluctant to use mobile phones routinely as instant communication 24-7 isn't good for the individual solicitor's work-life balance and is unnecessary for the vast majority of time in P.I.¹⁰⁹

Their view that instant, 24-7 communication – what Susskind refers to as "relentless connectivity" ¹¹⁰ – is mostly unnecessary but nonetheless persists somewhat affirms the view that the relationship is now largely shaped by what the client expects and not what the professional deems necessary. One participant claimed that clients are increasingly demanding with respect to communications because, as use of information technology has increased, the pace of social and professional life has quickened:

¹⁰⁶ Interview 1; Interview 11; Interview 12; Interview 13; Interview 18

¹⁰⁷ Interview 12

¹⁰⁸ Interview 11

¹⁰⁹ Interview 14

¹¹⁰ The end of lawyers?: rethinking the nature of legal services (n 21), pp.105-108; See s.2.2.3

I think they're more demanding because it's a quicker world than it was even ten years ago. 111

The same pattern was reported with the use of email which, in combination with text messaging, has reportedly replaced letters as the dominant form of written communication between clients and practitioners:

most clients want email now and sometimes text letters are rarely sent now when compared to years ago the vast majority of communication will be via electronic text format.¹¹²

Again, the language of what "clients want" gives a strong indication of who is setting the terms of the relationship between the two parties. This indicates that the 21st Century legal professional is expected to be more amenable in their interactions with clients than the traditional view of deference to the professional suggests. Whilst one participant noted that the convenience of email is a mutual benefit:

clients and family members can contact you at a time that's convenient to them and you can reply at a time that's convenient to you;¹¹³

The majority view remained that use of email has been driven by clients who are increasingly demanding of practitioners' time.

The transformation by email has been considerable, converting daily "stacks of letters" 114 into much more manageable digital communication. 115 Despite contributing to an increasingly demanding clientele, it has consequently brought greater efficiency to the process of written communication, a key function of legal practitioners, and can, therefore, be described as a form of automation. However, despite being a more efficient, digitised method of communication, neither the process nor substance of what the practitioner actually does in writing correspondence has changed. Rather the platform on which they do this has been

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¹¹¹ Interview 11

¹¹² Interview 13

¹¹³ Interview 15

¹¹⁴ Interview 19

¹¹⁵ See Chapter four, section 4.2

digitised. Therefore, whilst the use of email is certainly closer to automation than disruption, neither label really sits well as a defining category.

In addition to the client-practitioner relationship, one participant noted that the use of email has impacted the social relationship between practitioners and judges. In just a decade, they claim, the perception of judges has gone from being 'God like' figures who would never accept an email from a lawyer, to being emailed regularly during the life of a case:

ten years ago you would never have emailed a judge and a judge would never have given you an email address it would just be seen as sacrilegious because judges were considered so important God like figures who had such revere and respect.¹¹⁶

Though tangential to this thesis, it seems, therefore, that the relaxation of deference from client to professional, appears to be mirrored somewhat in the relationship between lawyers and the judiciary.

Despite its significant impact on practice, none of the participants included emails in their first description of the technologies that they use. Only after being prompted did they include the use of email and telephones, which were referred to by one participant as "the absolute basic". This highlights two important points. First, that technologies can be both 'basic' and transformative (a dichotomy not captured by the automation-disruption distinction); and second, that both technologies have become mundane. Hedgecoe's distinction between ordinary and revolutionary technologies goes some way to reconciling these findings. In discussing pharmacogenetics, Hedgecoe distinguishes "revolutionary" and "ordinary" technologies as those that revolutionise the contexts in which they are applied and those that do not. Thus, using this dichotomy, email and telephones can be described as sustaining, revolutionary technologies within personal injury practice.

¹¹⁶ Interview 19

¹¹⁷ Interview 11

¹¹⁸ Adam Hedgecoe, *The Politics of Personalised Medicine: Pharmacogenetics in the Clinic* (Cambridge University Press 2004), p.7

Sustaining because they do not disrupt the legal market; and revolutionary due to their impact on the profession. Hedgecoe notes that revolutionary technologies can "become ordinary", particularly when they are incorporated into a context that is resistant to revolution. ¹¹⁹ In this sense, emails and telephone have become ordinary, to the point of being mundane, as they have become incorporated into practice.

As with the use of LegalTech, both text messages and email have digitised processual tasks, improving the efficiency of client communication. However, as noted, they do not change the process or substance of written communication. They are, at best, a weak form of automation. Despite this, and despite being ordinary and mundane in both a colloquial and technical sense, they begin to demonstrate a rebalancing of authority between professionals and their clients. It has, thus far, been demonstrated that clients' expectations are increasingly dictating the method, frequency and speed of communication from practitioners. Responding to what "clients want" presents a direct challenge to practitioners' autonomy to organise their own work and consequently challenges the status of the expert legal professional. Section 5.5 now looks at this issue from a wider perspective.

5.5 Technology as a Challenge to the Expert Legal Professional

The extent to which an occupation can be defined as a profession, or an individual as a professional, is contested. As such, sociologists have conceptualised professionalisation in various ways which broadly fit into two theoretical perspectives: functionalist, which explain the phenomenon of the professions through analysing their distinct function within society; and processual, which focus on the process through which professions obtain their status. The leading functionalist model, structural functionalism, posits a professional ideal in which the professions exist to the benefit of wider society which, in turn, respects and rewards

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¹¹⁹ Ibid, p.7

¹²⁰ Interview 13

¹²¹ R Skar, 'The Meaning of Autonomy in Nursing Practice' (2010) 19 Journal of Clinical Nursing 2226 ¹²² Eliot Freidson, *Profession of Medicine: A Study of the Sociology of Applied Knowledge* (University of Chicago Press 1988), p.31

the authority of the professional. Thus, great importance is placed on the mutually beneficial relationship, likened to a social contract, or "tacit concordat", 123 between the professional and the client; and, more widely, the profession and society. 124 The central justification for this model is that "it is in clients' interest that those who advise them are suitably trained and experienced". 125 This view is most notably challenged by market control theory, a processual approach which explains the professions' unique position by their ability to exert "control over the 'production of producers' [...] and 'production by producers'". 126 In short, it claims that the professions, as service occupations, assert market dominance by controlling the supply of professionals, in order to gain a monopoly over the service. The position of the professional is likewise privileged and respectable as conditions are laid down which limit professional membership. 127

Strong adherence to structural functionalism arguably over plays the collective orientation of the professions and risks an a-historical approach to the professions, ignoring the power struggles and political interests of different professional occupations during their early formation. Moreover, the idea of a social contract between the professions and society, where society's needs inexplicably harmonise with the professions' capabilities, is not only naïve, but ignores the historical lack of parity between the parties. Conversely, strong adherence to market control theory leads one to believe that the professions are inherently self-oriented and that practices "have developed essentially to serve the interests of service providers". Thus, where structural functionalism is naïve, market control theory presents a

¹²³ Alan A Paterson, 'Professionalism and the Legal Services Market' (1996) 3 Intrernational Journal of the Legal Profession , p.3

¹²⁴ Talcott Parsons, *Essays in Sociological Theory* (The Free Press 1964)

¹²⁵ Tomorrow's Lawyers. An Introduction to Your Future (n 4), p.6

¹²⁶ Sida Liu, 'Foreword' in R Dingwall and P Lewis (eds), *The Sociology of the Professions: Lawyers, Doctors and Others* (Macmillan Press 2014), xii

¹²⁷ Max Weber, cited in Richard O'Dair, Legal Ethics Texts and Materials (Butterworths 2001), p.72

¹²⁸ Terrence James Johnson, *Professions and Power* (Palgrave Macmillan 1972), pp.36-37

¹²⁹ Professionalism and the Legal Services Market (n 123), p.145

¹³⁰ Graeme Samuel, *Introducing Competition in the Public Delivery of Healthcare Services* (2000), in speech.

somewhat cynical account of the motivations of the professions which most professionals would "vigorously and sincerely dispute". 131

Accepting the "tension between service orientation and self-interest",¹³² this thesis adopts a nuanced approach. Above all, it recognises and addresses three central tenets or "traits"¹³³ which are widely agreed as typical of the professions: professional autonomy "to regulate themselves and act within their [own] spheres of competence",¹³⁴ expertise within a specialist field; and public confidence in the quality and competence of the professional.¹³⁵

There is already considerable academic commentary that discusses the extent to which these traits have been eroded in recent years, as theories of deprofesionalisation, reprofessionalisation and proletarianisation have emerged within the legal profession and the professions generally; and there are various sources to this alleged erosion. For example, O'Dair cites competition and deregulation as part of the political agenda of the 1980s and 1990s as a significant challenge to "every aspect of the work of the legal profession". This section focuses on the impact of technology on professional expertise and autonomy, which it

¹³¹ Legal Ethics Texts and Materials (n 127), p.78

¹³² Professionalism and the Legal Services Market (n 123)

¹³³ Trait theory is concerned with the common characteristics that the professions possess which distinguish them from all other occupations. Whilst useful as a descriptive approach for providing a non-exhaustive list of characteristics for reference, each list of traits is time and location specific and often "based on its author's view of the most salient characteristics of high-status professions"^{24a}. It treats the professions as an ideologically neutral phenomenon, ignoring the political and social nature of occupations, their power struggles and social influences and thus has limited theoretical application. It is used here merely to highlight those characteristics which are generally accepted as applicable to the professions, although it is acknowledged that these may well be culturally specific. *See generally*: Michael Eraut, *Developing Professional Knowledge and Competence* (Routledge Falmer 2003); Ernest Greenwood, 'Attributes of a Profession' (1957) 2 Social Work 45; G.K Gyarmati, *Notes for a Political Theory of the Professions*. IX World Congress of Sociology,

Uppsala, Sweden: ISA, 1978.

¹³⁴ Harold L. Wilensky, 'The Professionalization of Everyone?' (1964) 70 American Journal of Sociology 137, p.146

¹³⁵ Cabinet Office, *Unleashing Aspiration: The Final Report of the Panel on Fair Access to the Professions*, 2009); , 'Report of the Royal Commission on Legal Services' (London, HMSO, 1979) CMND 7648, 1:28; The future of the professions: how technology will transform the work of human experts (n 11); Jan Hewitt, Peter Thomas and John Wilson, *Professionalism in British Management: Bogus Claim or Reality?* (2007); The Benson Report

¹³⁶ Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (86) pp.18-21 ¹³⁷ Legal Ethics Texts and Materials (n 127), pp.66-67

considers most essential to the status of the professional and, potentially, the most challenged by technological advances.

5.5.1 Expertise

Studies into different theories of expertise are extensive, but largely outside the scope of this thesis. 138 Key to most, however, is the professions' ability to claim access to and control of a body of knowledge greater than that which is publicly known. In this sense, a profession must be able to claim a monopoly over a particular body of knowledge reserved only for its members. From a functionalist perspective, "unless [this] exists there is no information asymmetry to justify the regulatory bargain" between the professional and the client; ¹³⁹ and from a market control perspective, without a monopoly of knowledge, a profession cannot control the supply of its service and achieve social closure. 140 Expertise "is relative to the diffusion of knowledge, as symbolized by the general educational level among society as a whole". 141 Therefore, as society becomes more knowledgeable, so too must the professions in order "to keep several jumps ahead". 142 If the profession's specialist knowledge becomes ubiquitous, then "the concept of the profession as now formulated [will be] obsolete". 143 It has been argued that this discrepancy – referred to by Parsons as the 'competence gap'144 – is being "eroded by the rising education level of the population" coupled with increasing technical capabilities. 145 The

¹³⁸ Collins and Evans provide a concise summary of Expertise in Harry Collins and Robert Evans, *Rethinking Expertise* (University of Chicago Press 2007), pp.1-12

¹³⁹ Alan Paterson, *Lawyers and the Public Good. Democracy in Action?* (Cambrdge University Press 2012), p.34

¹⁴⁰ Market Control theory relies on the professions' ability to monopolise the supply of their service by closing off provider status (and therefore professional status) from lay people who are not admitted to a participation in the profession. *See Max Weber (ed), Economy and society: An outline of interpretive sociology. Edited by Guenther Roth and Claus Wittich (University of California Press 1978); and* Richard Abel, *The Making of the English Legal Profession 1800-1988* (Beard Books 1988), p.12

 $^{^{\}rm 141}$ Deprofessionalization: An Alternative Hypothesis for the Future (n 35), p.200

¹⁴² Ibid, p.200

¹⁴³ Marie R Haug, 'Computer Technoloy and the Obsolescence of the Concept of Profession' in M.R.Haug and J.Donfy (eds), *Work and Technology* (Sage 1977), p.226

¹⁴⁴ Essays in Sociological Theory (n 124)

¹⁴⁵ Robert A Rothman, 'Deprofessionalization: the case of law in America ' (1984) 11 Work and Occupations 183, p.189; *see also* Deprofessionalization: An Alternative Hypothesis for the Future (n 35);

digitisation of formal knowledge is consequently a threat to the knowledge monopoly of the professions as once "formal knowledge can be stored in a computer, it loses its esoteric character because anyone can retrieve it". This challenge to the professions is highlighted most notably in Haug's Deprofessionalization Hypothesis, which argues that:

"In a period when second graders are operating PCs in school, the time may be coming when the issue will not be who has the knowledge in her brain, but who knows the technique for extracting it from computer memory".¹⁴⁷

Although a simplification of her work, the essence of the hypothesis and the important question for this project are clear: *as information has become more accessible, how (if at all) has this affected the expert professional within personal injury practice?* This question, and the deprofessionalization theory itself, is not just concerned with an erosion of expertise in isolation. Rather, it is more widely concerned with "a loss to the professional occupations of their unique qualities", including professional autonomy.¹⁴⁸

Focusing on the medical profession, Haug argues there is compelling evidence that the willingness of patients to comply with professional medical advice in the industrialised Western World is lower than elsewhere. This has become increasingly apparent over time as demands for patient involvement in decision making related to their health have increased. As "the day of acceptance without questioning the advice, treatment [and] prescription" has seemingly passed, so too has the authority of practitioner over patients. It is argued that one reason for this

¹⁴⁶ Eliot Freidson, *Professionalism reborn. Theory, Prophecy and Policy* (Polity Press 2004), p.131

¹⁴⁷ Marie R Haug, 'A Re-Examination of the Hypothesis of Physician Deprofessionalization' (1988) 66(Suppl 2: The Changing Character of the Medical Profession) The Milbank Quarterly 48, p.51; and see generally Deprofessionalization: An Alternative Hypothesis for the Future (n 35)

¹⁴⁸Deprofessionalization: An Alternative Hypothesis for the Future, p.197

¹⁴⁹ A Re-Examination of the Hypothesis of Physician Deprofessionalization (n 147), p.51

¹⁵⁰ Marie R Haug and B Lavin, 'Practitioner or Patient – Who's in Charge? ' (1981) 22(3) Journal of Health and Social Behavior 212

¹⁵¹ Steiner 1987 referenced in A Re-Examination of the Hypothesis of Physician Deprofessionalization (n 147), p.52

"revolt against medical authority" ¹⁵² is the emergence of a "more educated and more egalitarian society". ¹⁵³

Following the publication of Haug's thesis, predictions about the application of deprofessionalisation within the legal profession have since been made. However, to date very little empirical research has been presented in support of these predictions in law, although this criticism is also made within the medical profession. Nonetheless, Rothman argues that "social, economic and political trends are undermining claims to autonomy and monopoly by previously well entrenched groups such as the legal profession". In particular, "members of the public have become more knowledgeable about their legal rights and the kinds of settlements to which they might be entitled" which presents a direct threat to the knowledge monopoly of the profession.

Participants reported that clients are better informed about legal issues and the work of lawyers:

certainly clients know more about what it is we do nowadays than when

I first started.¹⁵⁸

Empowered by technology, they are reportedly able to research the law and legal processes before making contact with a practitioner:

There is an ability for them to research some information themselves so they might be a bit more educated in terms of the questions they are asking or their understanding of the process when they first come to us.¹⁵⁹

¹⁵² E Shorter, *Bedside Manners: The Troubled History at the Bedside* (Cambridge University Press 1985), p.228

¹⁵³ Pellegrino, 1977. Referenced in A Re-Examination of the Hypothesis of Physician Deprofessionalization (n 147), p.52

¹⁵⁴ J Podgers, 'The Practice of Law: What Does the Future Hold?' (1980) 66 American Bar Association Journal 129, p.267

¹⁵⁵ M. A Elston, 'The Politics of Professional Power: Medicine ina Changing Health Service' in J Gabe, M Calnan and M Bury (eds), *The Sociology of the Health Service* (1991), pp.58-88

¹⁵⁶ Deprofessionalization: the case of law in America (n 145)

¹⁵⁷ Ibid, p.189

¹⁵⁸ Interview 15

¹⁵⁹ Interview 15

All of the participants recalled instances of clients researching their injuries prior to their first contact with them. However, this was generally not considered a bad thing. The majority noted that "whether they have done research or not clients come with questions". Having a better understanding of the law reportedly means that their questions are more focused and relevant:

there is more information out there that can give people I suppose it informs them of the sort of questions to ask which is a good thing. 161

In addition to online research, clients reportedly access information via news outlets and through conversation with others, which take place both online and in person:

we do get particularly clients reading or seeing things in the news and who will then google stuff for themselves; 162

A legal opinion is only a google search away or worse have a conversation at the pub and you'll likely have several opinions especially it seems in personal injury;¹⁶³

I've heard a number of clients say I've been speaking to so and so on this internet forum [...] it's not just research it's also the ease of contacting other people from around the world who have been through similar experiences which raise expectations.¹⁶⁴

These conversations are referred to as 'communities of experience' – informal exchanges in which "people share their past experience and help others to resolve similar problems". Whilst it is claimed that, aided by digital communication, they are "springing up across many professions", 166 earlier research suggests that it is not

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¹⁶⁰ Interview 14

¹⁶¹ Interview 12

¹⁶² Interview 12

¹⁶³ Interview 15

¹⁶⁴ Interview 11

 $^{^{165}}$ The future of the professions : how technology will transform the work of human experts (n 11), p.107

¹⁶⁶ Ibid, p.107

a new phenomenon. Research conducted in the USA suggests that even four decades ago clients "obtained casual and nonspecific second opinions" on their case from friends and acquaintances at social gatherings. 167 This study reported that "one third of the client sample report having believed, to some degree, the stories told by friends and relatives". 168 These kinds of interactions are, therefore, not new and whilst they are perhaps encouraged by the emergence of internet, they certainly predate mass internet use. However, whereas before they were limited to face-toface interactions, they now occur across "various platforms, typically online". 169 Within the medical sphere structured online communities of experience such as PatientsLikeMe and WebMD centralise and, to an extent, formalise these discussions. However, as yet there is no established equivalent within law.

Although communities of experience have arguably not changed significantly within the personal injury context since the 1970s, save that the interactions are increasingly taking place online, lay members of the public are undoubtedly better informed as a direct result of the internet. Although participants reported that this has improved the questions that clients ask, information found online also reportedly shapes clients' expectations, particularly with respect to the value of their injuries:

clients have much more information available instantly to them when you first take their case on they will have googled right leg amputation and found a case that settled for £2m and they think oh great I'm getting £2m. That's their demand then or their expectation. 170

The impact of this is less deference to the professional, in whom clients formerly placed much stricter reliance:

¹⁶⁹ The future of the professions: how technology will transform the work of human experts (n 11), p.107

¹⁶⁷ Douglas E Rosenthal, Lawyer and Client: Who's in Charge? (Russel Sage 1974), p.55

¹⁷⁰ Interview 11

when people weren't as internet savvy they'd be very much guided by you on these things.¹⁷¹

The potential threat to the professional is that they "are no longer needed for the bare purpose of the mass distribution of information" if that which constitutes "common knowledge" increases and expertise is made widely accessible. However, the interviews suggest that increased knowledge, whether from a community of experience or online research, has not posed a significant challenge to the legal profession as Haug's thesis suggests. First, it was reported that the information found and circulated among lay members of the public is rarely accurate:

I must say for the most part it's wrong I mean there might be some truth in it but very rarely [...] I am yet to speak to a client who has proposed something that has been completely correct from research that they've done themselves.¹⁷³

It was consequently noted that practitioners are not challenged by this information, but have a greater duty to explain their reasoning to clients, accommodating their questioning, whilst asserting their expertise:

you need to be as a lawyer more accommodating whilst at the same time standing your ground. 174

The language used here highlights that, whilst participants were adamant that their expertise is not undermined, there is, nonetheless, a struggle in which they must 'stand their ground'. This was widely reported as an exercise in managing clients' expectations:

every case is different so you can't base your expectations on what happened to someone else you have to sometimes reign your client in

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¹⁷¹ Interview 11

¹⁷² Larry Senger, 'Who Says We Know: On the New Politics of Knowledge'

https://www.edge.org/3rd culture/sanger07/sanger07 index.html> accessed 25th April 2019

¹⁷³ Interview 12

¹⁷⁴ Interview 11

reign their expectations in and manage their expectations. 175

Again, this most commonly related to expectations concerning the value of a client's claim:

I will get an email saying oh I've found that this person got this why aren't I getting that? Or clients say from what I've found I thought I was getting this.¹⁷⁶

Second, it was claimed that when clients bring their own information, it is not presented as a challenge to the professional's advice, but as a reasonable desire to know more:

it's not that they're saying I'm wrong, it's that they want to know why their case isn't that case so they're looking for more explanation than they would otherwise need.¹⁷⁷

As such, clients reportedly ask more questions about their case, which practitioners on the whole are willing to answer. As one participant commented:

It just means that they've got a question for you to answer and that's our job. 178

Although this was a shared view, one participant did describe the questioning by clients as a "challenge" to their professional advice:

I think people are more willing to ask now so for example more willing to challenge what you say [...] they'll ask the questions.¹⁷⁹

However, they continued in a similar vein as the majority, concluding that the

¹⁷⁶ Interview 12

¹⁷⁵ Interview 11

¹⁷⁷ Interview 11

¹⁷⁸ Interview 12

¹⁷⁹ Interview 10

questioning from clients is born out of a want to understand and this simply provokes the professional to offer further advice and explanation:

I think clients are more willing to question the advice because they want to know more rather than just say they'll let their lawyer deal with it for them.¹⁸⁰

The situation reported at interview is congruent with that found by Rosenthal in the USA in 1974. He concluded that "clients want their lawyers to reassure them and to recognise and help them deal with their concerns". They will "actively assert concerns and negotiate to have them made central" rather than simply accept the expertise of the professional as a given. As Rothman claims, "this kind of client behaviour represents a direct challenge to the authority of members of the legal profession". Despite Rosenthal's early finding, which predates mass internet access, and notwithstanding Rothman's claim, the message from participants in this study is clear: that online research and digital chat forums has increased the public access to information. This has increased the questioning of legal advice, which practitioners rebut in order to manage clients' expectations. However, this does not undermine their expertise, not least because the much of the information found is inaccurate or irrelevant. Consequently, clients are not as well informed by online information as they may believe:

People definitely know more about general legal issues nowadays or at least they think they know more 184

5.5.2 Autonomy

Traditional literature on the sociology of professions places significant emphasis on the self-governance of the professions, ¹⁸⁵ suggesting that occupational groups can

¹⁸¹ Lawyer and Client: Who's in Charge? (167), p.43

¹⁸³ Deprofessionalization: the case of law in America (n 145), p.190

¹⁸⁰ Interview 10

¹⁸² Ibid, p.51

¹⁸⁴ Interview 8

¹⁸⁵Eliot Freidson, *Professionalism Reborn: Theory, Prophecy and Policy* (Polity Press 1994) p.129

only claim to be professionalised once they have "authority and freedom to regulate themselves". 186 Wilensky refers to this as an "extraordinary autonomy" 187 which, he argues, is not achievable by all occupations. 188

Professional autonomy has a collective and an individual element. In the collective, it refers to the autonomy of the profession to admit and regulate its own members, thereby controlling the professional network. This authority is commonly managed by a governing body that has "powers of control or discipline over its members" and "set[s] out aspects of professional responsibility" against which members regulate their behaviour. They often set standard points of entry "dependent upon a period of theoretical and practical training" to test the credentials by which members are admitted. Thus, the profession "determines its own standards" for membership and autonomously regulates its members' conduct, admitting and ordering them by licence. Is a collective and individual element. In the collective, it refers to admit and regulate its members are admitted.

This autonomy was arguably undermined within the legal profession when the Alternative Business Structure came into being, thus allowing non-legally qualified investors to own and run legal businesses and removing lawyers' "unjustifiable monopoly" of legal service. Whilst Alternative Business Structures are overseen by the Solicitors Regulation Authority (SRA) which maintains authority for issuing licences, the new ownership rules are nonetheless a departure from the absolute autonomy which qualified solicitors and barristers have historically enjoyed. Although the feared stereotype of "Tesco Law" has not yet emerged, it is reported

¹⁸⁶ The Professionalization of Everyone? (n 134), p.146

¹⁸⁷ Ibid, p.146

¹⁸⁸ A Re-Examination of the Hypothesis of Physician Deprofessionalization, p.48

¹⁸⁹ Magnus Frostenson, 'Three forms of professional autonomy: deprofessionalisation of teachers in a new light' (2015) Nordic Journal of Studies in Educational Policy , p.21; Professionalism in British Management: Bogus Claim or Reality? (n 135)

¹⁹⁰ The Benson Report (n 135), p.30

¹⁹¹ Ibid

¹⁹² Professionalism in British Management: Bogus Claim or Reality? (n 135), p.6

¹⁹³ Ihid n 6

¹⁹⁴ Tomorrow's Lawyers. An Introduction to Your Future (n 4), p.6

¹⁹⁵ The creation of the Alternative Business Structure under the Legal Services Act 2007 is discussed further in Chapter 6

¹⁹⁶ BBC News, "Tesco Law' Allows Legal Services in Supermarkets' *BBC News* (<www.bbc.co.uk/news/uk-17538006> accessed 17th October 2020

that, within the first year, over 200 ABS licences were granted by the SRA, adding new competition to established practices. ¹⁹⁷ Whilst technology was not really a factor in the creation of the Alternative Business Structure, calls for the liberalization of legal practice came in large part from a desire for transparency on the part of service users, ¹⁹⁸ which created "pressure for change from those who represent consumer interests". ¹⁹⁹ Thus, this appears congruent with Haug's thesis which posits a general societal trend towards greater levels of education, itself driven by digitisation, which in turn calls for a dissemination of professional autonomy and greater transparency in professional decision making. ²⁰⁰

As well as the growth of new types of legal business, there is an equally significant internal challenge to the collective professional autonomy of lawyers. As discussed in s.5.3, legal work is delegated to non-legally qualified practitioners who do not meet the standard entry requirements of qualification. Although the encroachment of paraprofessionalisation was acknowledged by participants, as was the role of technology in encouraging this, none considered this problematic for the profession:

it's created more jobs for unqualified people. I don't think that's necessarily a bad thing [...] I work in a team where a lot of people aren't qualified so I don't think it has any sort of detrimental effect on our profession.²⁰¹

What the participants do not see is what Noordergraaf refers to as "fierce attacks on classic professions" by occupations seeking to professionalise their trade "by

¹⁹⁷ Chambers Student Newsletter, 'Alternative Business Structures (ABS) are a new type of legal entity brought into being by the 2007 Legal Services Act. What are they? And why do they matter?' 2014) <https://www.chambersstudent.co.uk/where-to-start/newsletter/alternative-business-structures accessed 25th December 2019

¹⁹⁸ Department for Constitutional Affairs, *Competition and Regulation in the Legal Services Market*, 2003), para.65; David Clementi, *Review of the Regulatory Framework for Legal Services in England and Wales. Final Report.*, 2004), p.1; Alternative Business Structures (ABS) are a new type of legal entity brought into being by the 2007 Legal Services Act. What are they? And why do they matter?17th April 2019

¹⁹⁹ Review of the Regulatory Framework for Legal Services in England and Wales. Final Report. (n 198), p.3

²⁰⁰ Marie Haug, 'The Deprofessionalization of Everyone?' (1975) 8 Sociological Focus 197 ²⁰¹ Interview 7

imitating classic, strong professions such as medicine and law".²⁰² In this vein, paralegals already have established governing bodies: the Institute of Paralegals which claims to "set standards" and "promot[e] professionalism";²⁰³ and the National Association of Licenced Paralegals which, since 2017, has run the national Paralegal Register.²⁰⁴ In 2019, the Chief Executive of the National Association of Licenced Paralegals published an opinion on the "rise of the paralegal" in which she claims that "paralegals are not only part of the legal sector, but they are arguably the main future of legal services".²⁰⁵ Hamilton continues that, in a future of further budgetary constraints "there will always be the need for human contact or interaction when it comes to legal problem solving and paralegals [not lawyers] are the answer" to providing it. ²⁰⁶ What is clear, therefore, is that whilst practicing lawyers appear not to see the threat of para-professionals entering the legal market, those with a vested interest in promoting this certainly see an opportunity.

At the individual level, professional autonomy refers to the autonomy of the professional to organise their work and make professional judgments based on their own expertise. From the above discussions, two challenges to this autonomy can be observed. First, the use of technology to guide practitioners through the process of a claim challenges their ability to organise and manage their daily work. The direct impact of this on professional lawyers is limited as none of the qualified practitioners reported following the workflows set for them. However, non-qualified practitioners reportedly do use the systems to guide their daily work to varying extents. Therefore, by determining and facilitating a standard process by which to resolve a claim, case management indirectly challenges legal professionals as non-qualified practitioners can now undertake work which they previously handled. Qualified lawyers now find themselves increasingly supervising, rather than directly handling, significant

²⁰² Mirko Noordegraaf, 'From 'Pure' to 'Hybrid' Professionalism' (2007) 39 Administration and Society 761, pp.761-762

²⁰³ The Institute of Paralegals, 'Homepage' https://theiop.org/ accessed 18 October 2020

²⁰⁴ The National Paralegal Register, 'Homepage' <www.nationalparalegalregister.uk> accessed 01 October 2020

²⁰⁵ Amanda Hamilton, 'The Rise of the Paralegal' (2019) 169 New Law Journal, p.17

²⁰⁶ Ibid. p.19

²⁰⁷ The Meaning of Autonomy in Nursing Practice (n 121)

amounts of legal work. Thus, the influx of paraprofessionals discussed above has indirectly impacted professional autonomy at the individual, as well as collective, level. This finding concurs with much of the commentary on deprofessionalization, that "lost professional autonomy at the general level more or less inevitably results in lost autonomy at the level of practice".²⁰⁸

Second, as clients are now reportedly beginning to dictate the terms of the professional-client relationship, they are encroaching on practitioners' autonomy to determine several aspects of their work. As has been noted, the increased demand for instantaneous communication means that practitioners are now spending more time responding to clients at a speed and on a platform that suits clients' expectations as opposed to practitioners' view of their needs. Similarly, participants reported having to reexplain their advice, managing clients' expectations whilst accommodating their desire to be more involved in decisions relating to their case.²⁰⁹ Whilst all of the participants claimed that this has not undermined their expertise, it has placed a greater burden on practitioners to explain their reasoning. Although "responding to clients' needs has always been a part of lawyers' work",²¹⁰ responding to increasingly demanding and increasingly questioning clients surely impinges on practitioners' ability to independently organise their daily work. Moreover, as clients "negotiate to have [their concerns] made central", they present a challenge to practitioners' autonomy in reaching their own professional judgments.

This demonstrates that the behaviours that challenge expertise similarly challenge the autonomy of the professional. Although the participants fail to recognise these challenges, the language of "what clients want" that came across strongly at interview demonstrates that practitioners are taking an increasingly responsive role. Part of the reason lawyers arguably fail to see the challenges to their professional status is that they have themselves "become part of large-scale organizational

²⁰⁸ Three forms of professional autonomy: deprofessionalisation of teachers in a new light (n 189), p.20

²⁰⁹ See s.5.5.1

²¹⁰ Interview 18

²¹¹ Interview 13

systems". 212 As "situated professionals" they "can no longer evade organizational and financial considerations that focus on costs, efficiency, value for money, consumer demands, and so forth". 213 They, consequently, accept the paraprofessionalisation of law and the public revolt against professional status as a part of 21st Century legal practice, to which they have become accustomed.

5.6 Conclusion

This chapter began by examining the models of transformation found within existing literature. Identifying the key flaws with existing theories, it produced an original harmonised model that makes clear the connections between disruption, commoditisation and externalisation. Using this original reconstruction to shape the subsequent discussion, it identifies four outputs reported at interview: automation, lawyers redeployed by non-lawyers using systems, commons and some bespoke work.

Section 5.3 discussed the transformation of practice by LegalTech. It concluded that the use of LegalTech has been overwhelmingly focused on automation, standardising and digitising tasks without making substantive changes to legal work. This suggests that the practices observed are somewhere in the automation phase with considerable bespoke work still being carried out. However, although none of the legal technologies used come close to disruption, technology has facilitated the delegation of work to non-qualified practitioners who, with the assistance of case management systems, are able to process claims from start to finish under supervision. This is a significant change in legal practice that marks the beginning of an encroachment on professional practice by paraprofessional workers. However, the strength of this shift is not captured by the automation-disruption dichotomy which consequently does not reflect reality.

²¹² From 'Pure' to 'Hybrid' Professionalism (n 202), p.764

²¹³ Ibid, p.772

Section 5.4 considered the transformative impact of ubiquitous technologies, concluding that, despite being mundane, the use of text messaging and email has increased the demands for communication between clients and practitioners. It notes that this relationship is increasingly dictated by clients' expectations, to which practitioners have responded. This presents a direct challenge to practitioners' authority and demonstrates a weakening of the deferential view of professionals. Section 5.5 explores this further, focusing on the challenge that the digitisation of knowledge presents to the expertise and autonomy of the legal profession and professional. It concludes that clients' use of technology to undertake independent research and to discuss their claim with others presents a challenge to the expertise of the professional. Whilst none of the participants observed this challenge, they all reported having to respond to client queries and manage clients' expectations on the basis of information sourced online. This also challenges the autonomy of the professional who is forced to spend time rebutting and addressing information that clients present. Professional autonomy is also challenged by the introduction of the Alternative Business Structure and the influx of paraprofessionals, both of which see non-qualified people operating within spaces that only qualified lawyers used to occupy.

These conclusions demonstrate that although the uptake and use of technology within the practices reported is limited, technology has already impacted the daily work of practitioners, the professional-client relationship and the status of the legal professional as an autonomous expert in law. Thus, sustaining technologies can have a revolutionary impact on society.

CHAPTER 6

Understanding the Uptake and Use of Technology to Date

6.1 Introduction

Having discussed the uptake, use and transformative impact of technology reported at interview, the current chapter turns to the drivers and tensions that shape its use. It begins with an analysis of Susskind's 'Three Drivers for Change' (the more-for-less challenge; the liberalization of legal services; and the development of Information Technology) which have been a core element of his predictions since 2013.¹ It concludes that they offer a deterministic account of the relationship between technology and society, which makes reductionist assumptions about the whole of legal practice on the basis of limited insight. Following the Social Construction of Technology perspective, it advocates further engagement with practitioners' perceptions of technology to uncover the active drivers and tensions towards automation within personal injury specifically.

Section 6.3 discusses the extent to which technology may be its own driver and concludes that, whilst there is some hype surrounding LegalTech, there is nothing to suggest that technology itself is a primary driver of automation. Section 6.4 discusses the financial driver towards technology, concluding that, whilst the 'more-for-less' challenge is not accurate within personal injury practice, there is a significant financial pressure on firms to process claims with greater efficiency. It argues that this pressure, having largely come from policy changes, is as political as it is economic. Being delivered as part of a wider package of reforms to civil justice, the context of the financial pressure on personal injury practice is consequently very different to that of the financial driver which Susskind exemplifies.

Section 6.5 explores the extent to which practitioners' perceptions shape their use of technology. It notes a tension between the perceived usefulness, and the perceived

¹ Richard Susskind, *Tomorrow's Lawyers. An Introduction to Your Future* (Oxford University Press 2013)

ease of use, of current technologies. Participants accept sustaining technologies as beneficial to their work, but reject disruptive technologies, contesting that they can adequately perform the work of a lawyer. However, their rejection is not based on cynical or self-serving grounds but on a genuine concern for the future quality of legal services. Section 6.6 explores this concern for quality, along with the significance of public trust. It makes clear the distinction between these, something which the current literature has not done, and concludes that, whilst the concern for quality has been a driver towards automation, it is a tension against disruption. Public trust is considered a further barrier to widescale disruption as clients reportedly cannot trust technology as they trust professionals.

The chapter therefore concludes that the financial pressure on firms to reduce costs has been the primary driver towards automation, followed by a concern for the quality of legal services. Conversely, the concern for quality and the perception of public trust are both tensions with respect to disruption.

6.2 'The Perfect Storm' - Susskind's Three Drivers for Change

According to Susskind's thesis, there are three profound drivers behind the uptake of technology within law:

- The 'more-for-less' challenge the pressure to produce greater quantities of work at reduced cost;
- 2. **the liberalization of legal services** the relaxation of rules governing ownership legal businesses; and
- 3. the development of information technology.²

Susskind argues that the more-for-less challenge "will, above all others, underpin and define the next decade of legal service".³ He asserts that all areas of law are impacted by budgetary constraints as clients "cannot afford legal services when delivered in

² Ibid, ³ Ibid

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² Ibid, p.4

the traditional way".⁴ Law firms and in-house legal departments reportedly struggle to manage restricted budgets, whilst many other business and consumers are forced to function without legal guidance due to the unaffordability of legal assistance.⁵ Thus, the legal profession is challenged to reduce the cost of its service. This challenge is complicated, Susskind argues, by an increasing amount of compliance and regulatory work which means that "[i]ndustry and commerce are becoming increasingly complex"⁶ and, consequently, the legal workload has increased.⁷ Hence, *more* work for *less* money.

The liberalization of legal services further challenges the traditional model of legal practice, creating increased competition from new forms of legal business. Historically, only qualified solicitors and barristers could provide legal services in England and Wales, but under new ownership rules, non-legally trained investors can own and run legal businesses. This change came about as the traditional model was criticised as an "unjustifiable monopoly" that is "restrictive and anticompetitive". The legal system was, thus, described as "insufficiently accountable or transparent". David Clementi, appointed to review the regulatory framework, questioned "whether the restrictive practices of the main legal professional bodies can still be justified, in particular those which prevent different types of lawyers working together on an equal footing". Highlighting the "pressure for change from those who represent consumer interests" and also from The Law Society, Clementi concluded that "considerable liberalization" was required. Thus, the 'Alternative

⁴ Ibid, p.4

⁵ Ibid, pp.4-5

⁶ Richard Susskind and Daniel Susskind, *The future of the professions : how technology will transform the work of human experts* (Oxford : Oxford University Press 2015), p.109

⁷ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.4

⁸ New ownership rules were brought about by the Legal Services Act 2007

⁹ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.6

¹⁰ Department for Constitutional Affairs, *Competition and Regulation in the Legal Services Market*, 2003), para.65

¹¹ David Clementi, Review of the Regulatory Framework for Legal Services in England and Wales. Final Report., 2004), p.3

¹² Ibid, p.3

¹³ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.6

Business Structure' was created, marking a shift away from the traditional model of providing legal services.

Susskind claims the Alternative Business Structure is of "profound significance" as investment opportunities into legal businesses make innovation within legal practice more likely.¹⁴ He argues the new ownership rules have brought about a "remarkable" and unprecedented entrepreneurial spirit in the legal market" as, for the first time, a previously closed off market has been opened to outside "investors, entrepreneurs, and High Street brands" who "are recognizing that the UK's £25 billion legal market is far from efficient and there are great opportunities". 15

According to Susskind, the response required to the more-for-less challenge, encouraged by this new entrepreneurial spirit, is found in the rapid development of information technology. He predicts that the work of lawyers will become increasingly influenced by, and reliant on, information technology as "systems and machines are becoming increasingly capable". 16 For Susskind, these drivers work in tandem to create "something of a perfect storm". 17 The more-for-less challenge requires greater efficiency; the development of information technology enables more efficient practices; and the liberalization of legal services creates the environment in which investment in technology is attractive. As a result, the widespread integration of new technologies across legal practice is inevitable.

Aside from the changes to ownership of legal businesses and the economic pressures of the market (particularly post-2008 economic downturn), the 'perfect storm' takes no account of the contexts in which technologies are to be adopted. It makes no reference to any social drivers or tensions that might shape the uptake of technology and fails to recognise the role of practitioners in accepting, rejecting and shaping the technologies in practice. Therefore, despite spending the majority of his career at the vanguard of commentary on technology and law, what Susskind offers is a

¹⁴ Ibid, p.57

¹⁵ Ibid, p.8

¹⁶ The future of the professions: how technology will transform the work of human experts (n 6),

¹⁷ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.14

reductionist account of the drivers towards technology that neglects the nuances and tensions of different practice areas. For this thesis in particular, there are three key issues:

First, as a general point, the relevance of the drivers to areas outside of commercial legal practice is unclear. Chapter 2 highlights that Susskind focuses primarily on examples from commercial legal contexts. Here, he extrapolates these to illustrate three drivers which, he claims, encourage disruption across the whole of legal practice. Thus, he refers to the uptake of technology generally, despite having only investigated the drivers within a limited context, and even then not exhaustively, as is common in deterministic accounts. 18 For example, the more-for-less challenge has reportedly come about as commercial clients demand greater efficiency from their legal teams, whilst at the same time compliance work has increased. Hence more work is required with less legal budget. However, within claimant personal injury law, clients are individuals who have neither a dedicated legal budget, nor compliance work to complete. They come to the law with a very different kind of legal problem. The context, therefore, is already demonstrably different to that which Susskind describes. This also affects the remaining two drivers. The liberalization of legal services relies heavily on the "entrepreneurial spirit" that Susskind claims is hitting the legal profession, however, this too is illustrated by examples which are confined to commercial legal work and, even then, only a limited few. 19 As Chapter 4 demonstrates, the development of technology within personal injury has also been less than the commercial contexts that Susskind references.²⁰

The focus on one area of legal practice and the reliance on a limited number of examples provides insufficient empirical analysis to demonstrate that Susskind's

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¹⁸ Mireille Hildebrandt, *Smart Technologies and the end(s) of Law* (Edward Elgar Publishing 2015), p.166

¹⁹ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.8

²⁰ s.6.3 discusses the extent to which the development of technology has consequently been a driver within personal injury

three drivers are active across the legal profession. Future predictions based on those drivers must, consequently, be taken with caution.²¹

Second, within Susskind's commentary the role of technology shifts dependent on the context of the discussion at hand. Therefore, reviewing his work holistically, there is little clarity on the extent to which technology is predicted to drive change within the profession. At times it is a pervasive driver²² that "lies at the core of most of the changes"23 and at other times a facilitator "enabl[ing] and encourag[ing] legal services to change". 24 This contradiction has already been discussed but must be reemphasised as it causes particular issues for the present discussion. Even within his recent work, which overwhelmingly treats technology as a driver for change, there are unexplained caveats and contradictions.²⁵ For example, when discussing online legal services, he claims that web-based advice services, online subscription tools and online dispute resolution "will be commonplace" and "will liberate the latent legal market". 26 Yet, within the same text he writes that only "some of these uses of online legal services will be 'disruptive'" with no indication of which or to what extent.²⁷ Moreover, despite increased emphasis on the impact of the development of technology, there is no discussion to justify, or even acknowledge, the seeming deviation from his earlier contributions. Given that the development of technology is now referred to as one of three core drivers for change, one might expect such an explanation. Nonetheless, setting aside a handful of caveats, ²⁸ Susskind appears to conclusively support the view that a "technology tidal wave" will be an unavoidable force for change in law.²⁹ This, however, remains problematic and leads to the third

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²¹ HowardGardner, *Revisiting the Arguments of Richard and Daniel Susskind* (2016) Available at: http://thegoodproject.org/revisiting-the-arguments-of-richard-and-daniel-susskind/ [last accessed 6th January 2020]

²² Tomorrow's Lawyers. An Introduction to Your Future (n 1), pp.11

 $^{^{23}}$ The future of the professions : how technology will transform the work of human experts (n 6), p.109

²⁴ Richard E. Susskind, *Transforming the law: essays on technology, justice, and the legal marketplace* (Oxford: Oxford University Press 2000), p.102

²⁵ Tomorrow's Lawyers. An Introduction to Your Future (n 1); The future of the professions: how technology will transform the work of human experts (n 6)

²⁶ Tomorrow's Lawyers. An Introduction to Your Future (n 1), pp.88-91

²⁷ Ibid, p.91

²⁸ See Chapter 2 for a discussion of the 'headline and caveat' approach in Susskind's commentary.

²⁹ Tomorrow's Lawyers. An Introduction to Your Future (n 1), pp.11

issue: that Susskind's approach demonstrates a reductionist way of observing technological developments and, thus, continues the deterministic thread that runs throughout the literature.

In presenting the development of technology as its own driver, Susskind treats LegalTech separately from the social context in which it is both developed and utilised. In so doing, he applies technology to the profession as a driver for change, making the tacit assumptions first, that it is technology that drives social change; and second, that technology is objectively developed and applied. These assumptions treat technology as an external influence over the social situation and take no account of the social, political and economic contexts on its development and uptake. As with the technological determinist account, this assumes that technologies are socially neutral objects, developed "either following science or of [their] own accord".30 They consequently 'work' because of their inherent technologically superior design. 31 Whilst the liberalization of legal services is arguably the beginning of a discussion, albeit limited, on the social context in which technology may be adopted, the relationship between these two drivers is not analysed other than by claiming that removing structural barriers will bring about an "entrepreneurial spirit" that was previously discouraged.³² Thus, as a whole, Susskind's 'perfect storm' relies on the reductionist assumption that, pressured by financial drivers, but backed by external investment, lawyers will adopt new technologies because they offer an inherently superior method of working to current practices. In this sense, the 'morefor-less challenge' is constructed as a social problem to which technology is the neutral, external solution. This approach emphasises the impact of financial and technical drivers and gives no account of the role of the professional in accepting, rejecting and shaping legal technologies. Thus, in line with the technological

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³⁰ Donald Mackenzie and Judy Wajcman, *The Social Shaping of Technology* (Open University Press 1999), p.5

³¹ David Croteau and William Hoynes, 'Media/Society: Industry, Images and Audiences', (Pine Forge Press 1997), p.266; The Social Shaping of Technology

³² Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.8

determinist approach, "society is transformed according to a technical, rather than a human, agenda". 33

Chapter 3 highlighted the Social Construction of Technology perspective as the theoretical framework to inform the method of this study. This approach explains the relationship between technology and society from a social constructivist perspective. Central to this is Pinch and Bijker's view that the success or failure of a technology comes down to how it is received by relevant social groups: "machines 'work' because they have been accepted by relevant social groups". It proposes an evolutionary, multi-directional model of technological advancement which operates via a process of "alternation variation and selection". Thus, society influences the direction of technological development as social groups reject, alter and ultimately accept different technologies. This direct contrasts to the technological determinist perspective which has been characterised as a "billiard ball" approach where "technology causes things to happen". The direct contrasts to the technology causes things to happen".

As the Social Construction of Technology encourages us to engage with the perceptions of technology from among the relevant social group, the drivers and tensions identified in this chapter draw heavily on the interview data, to build a more rigorous understanding of the specific drivers and the tensions within personal injury law. Despite its limitations, Susskind's hypothesis provides a useful starting point. Sections 6.3 and 6.4 therefore consider the development of technology and the more-for-less challenge (described here as the financial driver), respectively. Section 6.5 then explores practitioners' perceptions of the technologies with which they

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³³ Media/Society: Industry, Images and Audiences (n 31), p.267

³⁴ Wiebe E Bijker, Of Bicycles, Bakelites, and Bulbs (The MIT Press 1995), p.270

³⁵ Trevor J Pinch and Wiebe E Bijker, 'The Social Construction of Facts and Artefacts or How the Sociology of Sicence and the sociology of Technology might Benefit Each Other' (1984) 14 Social Studies of Science 399, p.411; Edward Constant II, 'The Social Locus of Technological Practice: Community, System, or Organization?' in W Bijker, T Hughes and T Pinch (eds), *The Social Construction of Technological Systems* (The MIT Press 1987)

³⁶ Claude Fischer, *America's Calling. A Social History of the Telephone to 1940* (University of California Press 1992), p.8

³⁷ Media/Society: Industry, Images and Audiences (n 31), p.266

engage, which leads into the final section on the importance of quality and trust in legal services.

6.3 Technology as its Own Driver

Although this thesis has rejected the deterministic perspective, it does not seek to claim that technology has no impact on society. "Technological constraints and opportunities simply weigh too heavily in the work of technological change to be pushed so far into the background". Rather, it acknowledges the significance of technological developments as part of the reciprocal dynamic between technology and society, including the potential for technology itself to act as a driver of change.

As discussed previously, much of the current literature suggests that technology "determines its own impact on society".³⁹ For the professions, this implies that technology "must have a great impact on the type and amount of work available".⁴⁰ Accordingly, Susskind predicts that the work of lawyers will become heavily influenced by, and increasingly reliant on, technology as systems become increasingly capable.⁴¹ Despite the inconsistencies already noted, he explicitly defines the development of technology as a driver for change that will transform the legal profession "more radically over the next two decades than [...] over the last two centuries".⁴² This is a view shared by other commentators:

"[B]usinesses of law are increasingly relying on new technologies to drive processes and efficiencies. This trend is only going to continue";⁴³

³⁸ Paul Adler, "Technological Determinism" in S Clegg (ed), *The International Encyclopedia of Organization Studies* (Sage 2006)

³⁹ Smart Technologies and the end(s) of Law (n 18), p.165

⁴⁰ Clive Jenkins and Barrie Sherman, *The Collapse of Work* (Eyre Methuen 1979), p.3

 $^{^{41}}$ The future of the professions : how technology will transform the work of human experts (n 6), p.159

⁴² Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.xiii

See also M Kowalski, Avoiding Extinction: Reimagining Legal Services for the 21st Century
(American Bar Association 2012)

⁴³ Chrissie Lightfoot, *Tomorrow's Naked Lawyer* (Ark Group 2015), p.105

"In just a decade, a day in the life of a leading lawyer will be transformed by legal technology". 44

Only three participants explicitly referenced technology as its own driver. The first particularly followed the deterministic view that, when technology is available, it will be used:

Drivers have been technology itself to an extent when technology is available and it works well then people are likely to use it.⁴⁵

Interestingly, they caveat their statement by referring only to technologies that 'work well'. However, they appear to assume a linear approach – that a technology works well, therefore it is used – in which reductionist assumptions remain. This view, in line with the deterministic approach, implies that a technology either works or does not and takes no account of the interpretive flexibility of different users. Nevertheless, whilst this participant may not have understood a technology as 'working' in the same way that a social constructionist might, they have acknowledged that not all technologies are inherently useful by virtue of their existence.

Another participant referred to the driving force of technology in determining people's behaviour, in this case expressing a desire for technology to drive practitioners towards paperless working:

Hopefully technology should drive people towards paperless offices at some point.⁴⁶

The third to reference technology as its own driver suggested that technologies are often adopted irrespective of whether they work, because of the hype surrounding them. Hence, they become successful by a self-fulfilling prophecy:

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⁴⁴ David Cowan, *Take a Glimpse of the Future* (Association of Corporate Counsel and LegalEx 2018), The Times Supplement, 27th November 2018. p.3

⁴⁵ Interview 13

⁴⁶ Interview 19

There's a self-fulfilling prophecy with a lot of technology because it exists the hype around new technologies means people go out and buy them and start using them.⁴⁷

Hype is often discussed with reference to Gartner's Technology Hype Cycle.⁴⁸ The cycle proposes that technologies go through 5 phases on their journey to mainstream adoption, during which time expectations of the technology peak and trough.⁴⁹ As Fig. 6.1 illustrates, during the initial development of a technology user expectations rise rapidly and peak at around the same time that suppliers proliferate the market. Shortly after, negative press begins as pitfalls are identified and user expectations fall. As second-generation products are developed alongside new user practices, expectations rise gradually, plateauing at a level around half that of the peak.

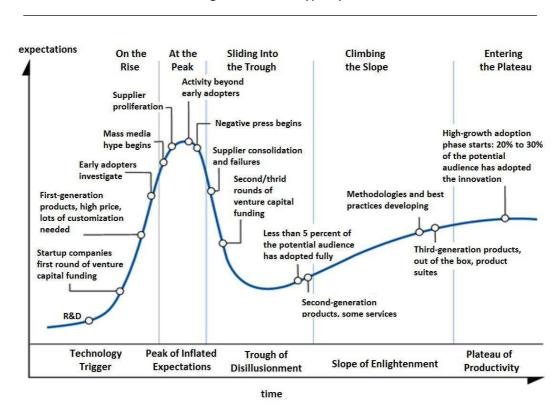


Fig. 6.1 Gartner Hype Cycle

¹⁷ Interview 14

⁴⁸ Gartner, *Gartner Hype Cycle: Interpreting Technology Hype* Available at: https://www.gartner.com/en/information-technology/research/hype-cycle [last accessed 7th January 2020]

⁴⁹ Jackie Fenn and Marcus Blosch, *Understanding Gartner's Hype Cycles* (2018) Available at: https://www.gartner.com/en/documents/3887767 [last accessed 7th January 2020]

Whilst the hype cycle has been heavily criticised,⁵⁰ it provides a compelling narrative structure that highlights the variability of expectations of technology over time. According to the cycle, user expectations are most accelerated during the early development and early adoption stage. It is at this most speculative stage when mass promotion of these technologies is high. During this period, Funk claims that there is a tendency for technology pundits "to extrapolate from one or two highly valued yet unprofitable start-ups to total disruptions of entire sectors" thereby overselling their ability and influence early on.⁵¹ This, coupled with technology companies' propensity to "overpromise and underdeliver",⁵² is considered a "major source of hype".⁵³ Consequently, users' expectations are heightened and subsequently not met. In line with this, the participant continued:

The problem is that the technology isn't always appropriate for the work and often isn't as well developed or as technically capable as the people selling it and the people reviewing it make out.⁵⁴

Undoubtedly, there has been some hype surrounding LegalTech, particularly the future possibilities for artificial intelligence in law. The specific sources of hype identified by Funk also appear to be present within the LegalTech community. As s.6.2 notes, technologies working in one area of law have been extrapolated by commentators to evidence future disruption of the entire legal sector. Moreover, technologies praised by commentators and 'oversold' by developers have already fallen short of expectations. For example, when IBM's Watson was put to use in medicine, it proved "no match for the messy reality" of the professional field, despite

⁵⁰ Michael Mullany, 8 Lessons from 20 Years of Hype Cycles (Icon Ventures 2016); Jorge Ardana, Cheap Shots at the Gartner Hype Curve (Catenary 2006) Available at: https://catenary.wordpress.com/2006/10/22/cheap-shots-at-the-gartner-hype-curve/ [last accessed 6th January 2020]

⁵¹ Jeffrey Funk, 'What's Behind Technological Hype?' (2019) XXXVI Issues in Science and Technology , p.38

⁵² Eliza Strickland, 'How IBM Watson Overpromised and Underdelivered on AI Health Care' *The Spectrum* (2nd April 2019) health-care [last accessed 7th January 2020]

⁵³ What's Behind Technological Hype? (n 51), p.38

⁵⁴ Interview 14

perfect operation under test conditions and considerable promise from developers.⁵⁵ In cancer care, Watson reportedly "isn't living up to the lofty expectations IBM created for it" after three years on the market.⁵⁶ Touted as the "new lawyer" of the future,⁵⁷ but with no reported success story yet, one must consider the potential for Watson to "overpromise and underdeliver" in law, as it has elsewhere.⁵⁸

However, whilst hype may be an active driver towards technology it is inescapable that none of the participants interviewed had access to the latest LegalTech that commentators exalt. This leads to three possible conclusions: that the development of technology and the hype that surrounds it is insufficient to encourage the uptake of technology alone; that practitioners' awareness of hype and fear of disappointment in fact detracts them from investing in new technologies; or that there are other active drivers and tensions at play. Of course, all three of these must be caveated with the conclusion of Chapter 4, that the development of technologies specifically for use in personal injury has itself been underwhelming. Nonetheless, some technologies were identified, but not reportedly used.

Whilst all three of the participants referenced above referred to technology as its own driver in different ways, they all share the tacit assumption that new technologies *will* be used with very little room for practitioner influence or resistance. From this assumption, the determinist conclusion is reached that, by virtue of its existence, technology will have a significant impact on legal work.⁵⁹ A further participant commented:

I can't honestly think of anything that won't be influenced [by technology] in some way it would be remarkable to think that there is something that

55 How IBM Watson Overpromised and Underdelivered on Al Health Care (n 52)

⁵⁶ STAT, 'IBM pitched its Watson supercomputer as a revolution in cancer care. It's nowhere close' 2017) https://www.statnews.com/2017/09/05/watson-ibm-cancer/ accessed 20 October 2020

⁵⁷ Ron Friedman, 'Meet Your New Lawyer, IBM Watson' *Prism Legal* (2014)

https://prismlegal.com/meet-new-lawyer-ibm-watson/ accessed 7^h October 2020

⁵⁸ IEEE Spectrum, 'How IBM Watson Overpromised and Underdelivered on Al Health Care' 2019)

https://spectrum.ieee.org/biomedical/diagnostics/how-ibm-watson-overpromised-and-underdelivered-on-ai-health-care accessed 20 October 2020

⁵⁹ The Collapse of Work (n 40), p.3

couldn't be improved by using all of the developments that are out there in the world to apply to the work that you do. 60

From a history of technology perspective, which treats "technological variation is the primary determinant" of human development, ⁶¹ this conclusion is persuasive. However, it does not account for the present situation in which the uptake of LegalTech has been demonstrably low, despite developments in the market and enthusiasm in the commentary. ⁶² The SCOT perspective encourages us to look beyond technological progress and consider the social group for which a technology is intended: in the present case, a profession that is described as "slow to adapt, change, and embrace new technologies". ⁶³ Across the board, participants highlighted this within their firms:

The speed at which technology has been adopted in the firm has been quite slow.⁶⁴

Despite the literature and the LegalTech market suggesting that other areas of law are further ahead, the majority of participants considered this a profession-wide problem:

the legal profession as a whole has been quite slow to use technology. 65

Notwithstanding the tensions discussed below, the general view of participants was that the slow rate of change within the legal profession is caused by the culture of legal practice:

I think some of it is just being stuck in our ways there are lots of jokes about lawyers being very slow to adapt you know accountants do it first

⁶⁰ Interview 18

⁶¹ Gerhard Lenski, *Power & Privilege* (University of North Carolina Press 1966), p.90; *see* also Lewis Morgan, Ancient Society (Transaction Publishers 2000); *Leslie White, The Evolution of Culture (:eft Coast Press 1959)*

⁶² See Chapter 4

⁶³ Tomorrow's Naked Lawyer (n 43), p.106

⁶⁴ Interview 13

⁶⁵ Interview 19

This view supports a widely held, though perhaps caricature, perception that "accounting and law firms find it so difficult to embrace innovation".67 Whether lawyers are 'stuck in their ways' or whether there are cultural reasons for the perceived resistance to change is only tangentially relevant to this thesis. However, there are two anecdotal insights that have already been highlighted in Chapter 4. First, one participant reported that their firm's subscription to a legal research tool had lapsed and they consequently couldn't easily find case law. Two further participants reported working without a case management system, despite stating that a system would improve the efficiency of their work. These examples indicate that technology is not considered a priority at these firms. When asked whether their firm had a strategic approach to technology, all participants confirmed that they do not. There appears, therefore, to be a lack of prioritising and strategic planning with respect to technology. Second, Chapter 4 also noted a lack of connectedness between fee earners, managers and technology personnel. Without a shared understanding of the firm's needs (which is itself likely impacted by the lack of strategy) and with no opportunities to discuss their technical requirements, it is hardly surprising that technical progress has been slow. One participant reported that the process of investing in new technology is slow as budgets need to be approved and cross-departmental discussions need to take place:

we are in the process of getting newer technology in, but it's just a slow process of getting budgets and IT departments all sorted.⁶⁸

The slow uptake of technology refutes the idea of a technology hype or, at least, a hype that leads to actual uptake. Furthermore, the acknowledgement by participants that the pace of change within their firms has been slow challenges the view that technology is the primary determinant of social development. Put simply, it cannot

⁶⁶ Interview 12

be that the development of technology alone determines human behaviour when the pace of technological development has seemingly outrun the pace of change, such that only a fraction of the technologies outlined in the literature are reportedly used in practice. Whilst the companies providing solutions for, and marketing their products towards, personal injury were found to be limited, low engagement with the technologies that are available demonstrates that the development and availability of technology alone is insufficient to encourage its uptake and use. This point is subtly made by the third extract referenced above, that "hopefully technology should drive people towards paperless offices at some point".69 The technology required to enable a paperless office already exists, yet the participant is only hopeful that it will eventually encourage this behavioural change. The deterministic view, on which the leading predictions for the future of LegalTech rely, consequently does not square with the empirical findings of this thesis.

Therefore, whilst the development of new technologies must have some bearing on the uptake and use of technology in practice (self-evidently, practitioners cannot use that which has not yet been developed), there is little to suggest that technical progress is itself a primary driver for change. Participants who have been in practice long enough noted a catalyst moment, when the impact of fixed costs in the fasttrack and proportionate costs in the multi-track began to be felt. As one participant summarised:

Slowly was probably the way until around 2013 for the simple reason that when fixed costs were introduced for low value work firms realised that the only way to make the work profitable was to use case management systems precedents workflows [...] this had a knock on effect for the multitrack because firms realised they could use the same systems for that work too where of course there was a downward pressure on costs due to proportionality.⁷⁰

⁶⁹ Interview 19 70 Interview 18

Even those who could not comment on practices pre-2013 reported that efficiency is the main purpose of the technologies used, to ensure that claims are resolved within cost and time restrictions. Section 6.4, therefore, explores the financial pressure on firms as a potential driver towards automation, before the impact of practitioners' perceptions is discussed.

6.4 Financial Driver

According to Susskind's thesis, the financial pressure on law firms to cut their costs, coupled with increasing compliance work, is the most significant driver in the uptake of technology in law. Participants to this study confirmed that the main purpose of using assisting technologies is to enable cases to be run more efficiently:

The main driver is efficiency;⁷¹

The key point to any technology that we're using has got to be to speed things up for us;⁷²

It's something that enables us to settle claims efficiently so that we can get the money to the client as quickly as possible and at as low a cost as possible.⁷³

On examining the pursuit of efficiency, it is clear that this driver is financially motivated:

costs is the main thing really;74

I think it's money it's costs it's fees and in particular the reduction in fees;⁷⁵

⁷² Interview 11

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⁷¹ Interview 1

⁷³ Interview 4

⁷⁴ Interview 7

⁷⁵ Interview 9

A firm that isn't investing in making the firm more efficient is never going to last the problem is where you already have a negative pressure on income some people still see it as a nice to have rather than a must have.⁷⁶

Therefore, the interviews overwhelmingly indicate that the need to reduce costs is a significant driver, with every participant interviewed citing it as the leading driver towards automation. However, whilst the need to reduce costs may be the primary driver, the more-for-less challenge is not wholly accurate for personal injury practice for two reasons.

First, the increased compliance work that Susskind cites (the 'more' of more-for-less) does not apply as he envisages. As highlighted throughout, Susskind focuses on commercial practice, where increasing compliance work is a genuine concern. However, the trend in personal injury law over the past two decades has been to make cases less complex and quicker to resolve, as part of the effort to embed efficiency drivers within civil justice generally. There has similarly been a drive away from litigation towards settlement, alternative dispute resolution and mediation, as well as a general discouragement from the claims process all together. Whilst the total number of personal injury claims is consistently rising, this can largely be attributed to claims for road traffic accidents, without which the total number of claims has remained consistent since the early 2000s. This, coupled with the government's simplification of the claims process to dispose of any "avoidable procedural waste" suggests that there is no significant increase in the amount, or complexity, of work required of personal injury practitioners. At the very least, there

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CP6/2011, p.6

⁷⁶ Interview 18

 $^{^{77}}$ The future of the professions : how technology will transform the work of human experts (n 6), p.109

⁷⁸ Annette Morris, 'Personal Injury Compensation and Civil Justice Paradigms' in R Halson and D Campbell (eds), *Research Handbook on Remedies in Private Law* (Edward Elgar Publishign Ltd 2019) ⁷⁹ Ministry of Justice, *Solving disputes in the county courts: creating a simpler, quicker and more proportionate system. A consultation on reforming civil justice in England and Wales, 2011) MoJ*

⁸⁰ Richard Lewis, 'Structural Factors Affecting the Number and Cost of Personal Injury Claims in the Tort System' in EQR Friel (ed), *Damages and Compensation Culture: comparative perspectives* (Hart 2016)

⁸¹ A Zuckerman, 'A Reform of Civil Procedure - Rationing Procedure Rather than Access to Justice' (1995) Journal of Law and Society, p.3

is no compelling empirical evidence to suggest that the increased workload highlighted in commercial fields applies to personal injury practice.

Second, whilst the need to reduce costs (the 'less' of more-for-less) is undoubtedly applicable to personal injury practice, the source of that need is entirely different. In the commercial work that Susskind exemplifies, the costs driver is market based and has been perpetuated by difficult economic conditions leading companies to reduce their legal spend: "in 2007, with the economic downturn and then crisis, came the start of the more-for-less challenge" which will "irreversibly change the way that lawyers work". **B However*, whilst personal injury lawyers work within a competitive market, the costs driver for them has not come from pervasive commercial pressures or market forces, but rather from policy changes in respect of recoverable costs. As one participant commented, "it's fees and in particular the reduction in fees" ** that have driven personal injury practices towards more efficient methods.

The problematisation of costs within civil justice has been "driven, in part, by a perception that they reflect inefficient practices". 85 As a result, the UK and other governments have combined procedural reform with budget restraints 86 as a means of "enhancing 'efficiency' in our processes, where efficient procedures are narrowly defined as those that are faster and cheaper". 87 Thus, the financial driver in this context is more accurately labelled a 'cost-and-delay' driver. Whilst the crux of it is financial, it is in fact the combination of a reduction in recoverable costs and procedural rationing to which practitioners have been pressed to respond:

I think the technology is being used as a reaction to the government's requirement for us to work within a stripped back procedure [...] we're

84 Interview 9

⁸² Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.77

⁸³ Ibid, p.5

⁸⁵ Annette Morris, 'Deconstructing Policy on Costs and the Compensation Culture ' in E Quil; and RJ Friel (eds), *Damages and Compensation Culture: Comparative Perspectives* (Hart 2016), p.143

⁸⁶ Elizabeth Thornberg, 'Reaping what we sow: anti-litigation rhetoric, limited budgets, and declining support for civil courts' (2011) Civil Justice Quarterly, p.82

⁸⁷ Colleen Hanycz, 'More Access to Less Justice: Efficiency, Proportionality and Costs in Canadian Civil Justice Reform' (2008) 27 Civil Justice Quarterly, p.102

trying to fit into relatively new methods of working that have largely been imposed on us by a desire to strip back civil procedure particularly in PI to reduce the financial costs of resolving claims and the time spent on them.⁸⁸

Fears of cost and delay within civil justice are longstanding, dating as far back as the Magna Carta in 1215.89 Throughout the 20th and 21st Centuries, the criticisms remained much the same: that the system is too slow, inefficient and costly to the public purse. These criticisms arguably reached a high in the 1990s when civil justice was proclaimed to be in a "state of crisis". 90 Successive reforms have sought to curb costs and create an efficient and accessible system of civil justice. However, by the 1990s, after two centuries of failed reforms, costs, delay and complexity seemed incurable symptoms of the system that had evolved. 91 On the backdrop of a perceived litigation explosion labelled the 'compensation culture'92 and "reinforced by politica [sic] seeking, reasonably, to control legal aid expenditure", 93 these fears led to "savage and co-ordinated"94 reforms, such that personal injury claims are now subject to a policy of fixed costs in the fast-track and proportionate costs in the multitrack. Although the principle of proportionality has been a feature of civil procedure for some years, it was the Woolf Reforms, which led to the establishment of the Civil Procedure Rules 1998, that made it a guiding principle. Whilst Woolf's "detailed rewriting of the rules"95 has been described as a "true revolution",96 affecting a

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⁸⁸ Interview 4

⁸⁹ John Sorabji, *English Civil Justice after the Woolf and Jackson Reforms : A Critical Analysis* (Cambridge University Press 2014), p.12

⁹⁰ Glasser, 'Solving the Litigation Crisis' (1994) 1 The Litigator, p.14

⁹¹ M Zander, 'Why Woolf's Reforms Should be Rejected' in AAS Zuckerman and R Cranston (eds), *Reform of Civil Procedure* (Oxford University Press 1995), cited in English Civil Justice after the Woolf and Jackson Reforms: A Critical Analysis, p.21

⁹² Hazel Genn, Judging Civil Justice (Cambridge University Press 2008), p.30

⁹³ Ibid, p.43

⁹⁴ Tony Arnold, 'Using Technology to Stay in the Personal Injury Market' (2016) 3 Journal of Personal Injury Law , p.189

⁹⁵ Paul Fenn, Nick Rickman and Dev Vencappa, 'The Impact of the Woolf Reforms on Costs and Delay' (Centre for Risk and Insurance Studies Discussion Paper Series), p.3. Available at https://nottingham.ac.uk/business/businesscentres/crbfs/documents/cris-reports/cris-paper-2009-1.pdf [last accessed 14th January 2020]

⁹⁶ English Civil Justice after the Woolf and Jackson Reforms: A Critical Analysis (n 89), p.24

"paradigm shift"⁹⁷ in civil justice, the reforms received significant criticism for not addressing the issue of costs sufficiently. In fact, it has been reported that average costs rose after the reforms came into force in 1999.⁹⁸ Thus, whilst broadly judged a success, costs are, for some, considered a "central failing" of Woolf's.⁹⁹ As a result, Lord Justice Jackson approached his subsequent review with an unprecedented vigour for the principle of proportionality, seeking to set it down as an overarching principle, secured by a stringent definition in the civil procedure rules.¹⁰⁰ It is now the case that "disproportionate costs should not be assumed to be recoverable just because they were necessarily incurred".¹⁰¹

In addition to stricter cost restrictions, both the Woolf and Jackson reforms sought to make civil litigation less adversarial and less complex. For example, they each granted management powers to the courts to require parties to observe strict case management, enforced by tighter budgetary control.¹⁰² Coming at a time of "heightened interest in the use of computers to improve the efficiency of legal practice", it was intended that the Woolf reforms would engender greater use of IT to assist with case management.¹⁰³ However, despite some practitioners reportedly adopting a "more 'IT minded' approach", generally developments in IT as a result of Woolf were not significant.¹⁰⁴ Whilst procedural rationing is, therefore, a part of this driver towards automation, it is the much stricter cost restrictions that came after the Jackson Review that have had the greater impact on practice. As one participant commented, the new costs rules give practitioners no choice but to adapt:

⁹⁷ C Falconer, Foreword to 2nd Civil Procedure Rules (HMSO 2005), p.vi

⁹⁸ A Reform of Civil Procedure - Rationing Procedure Rather than Access to Justice

⁹⁹ A Clarke, *The Woolf Reforms: A Singular Event or and Ongoing Process?* (speech delivered at The British Academy 2008), cited in Deconstructing Policy on Costs and the Compensation Culture (n 85), p.4

¹⁰⁰ CPR, s.43.3(5); See s.1.3

¹⁰¹ More Access to Less Justice: Efficiency, Proportionality and Costs in Canadian Civil Justice Reform (n 87), p.102; see also The Law Society, *A Summary of Rupert Jackson's Final Report* (The Law Society 2010), p.10

¹⁰² CPR, Part 3. In addition, the pre-action protocols pioneered by Woolf direct and focus the parties' conduct in the pre-litigation stage in order to encourage more effective communication and a greater chance of early settlement.

¹⁰³ Tamara Goriely, Richard Moorhead and Pamela Abram, *More Civil Justice? The impact of the Woolf reforms on pre-action behaviour*, 2002), p.320 ¹⁰⁴ Ibid, p.320

if we could carry on charging the sums of money for casework that we used to would we be looking to cut costs by using claims management software now? I don't know but under current rules we have no choice. 105

Driven largely by the government, the judiciary and the insurance lobby, these policies, aimed at reducing cost and delay without making substantive changes to tort law, effectively limit the amount of time and money that can be spent resolving a claim. ¹⁰⁶ Thus, practitioners are forced to process claims more quickly and more cheaply in order for their work to remain profitable; and this has been the root of the financial driver towards technology within personal injury:

If a firm is going to make a profit it's got to do it somehow and it's got to do it by the use of technology [...] it's got to be turned over very quickly. 107

The nuance of the financial driver within personal injury is significant as, coming from policy changes as opposed to market forces, it adds an inherently political dimension to the driver towards efficiency. Whilst civil justice reforms in England and Wales have been promoted as a costs reduction exercise that seeks to secure greater access to justice, ¹⁰⁸ they have two further socio-political ambitions: a rebalancing of power between claimants and defendants to "challenge one of the roots of the developing compensation culture"; ¹⁰⁹ and an attempted cultural shift where people "take more responsibility for addressing [conflicts] [them]selves". ¹¹⁰ Thus, over and above the economic demand for efficiency, the longstanding pressure for reform has been politically as well as financially motivated. ¹¹¹ This point was made by one participant:

¹⁰⁵ Interview 4

¹⁰⁶ Deconstructing Policy on Costs and the Compensation Culture (n 85), p.134

¹⁰⁷ Interview 19

¹⁰⁸ Solving disputes in the county courts: creating a simpler, quicker and more proportionate system. A consultation on reforming civil justice in England and Wales MoJ CP6/2011, p.4

¹⁰⁹ Ibid, p.6

¹¹⁰ Ibid, p.6

¹¹¹ Deconstructing Policy on Costs and the Compensation Culture (n 85)

The drive is political in nature I understand that there's a need to control legal costs but it seems to me it's targeted towards personal injury. 112

As Chapter 1 highlights, recent reforms to civil justice have taken place on the backdrop of a "jaundiced view" of the law, which has been particularly powerful within personal injury. One must not overlook the fact that the attempts by Woolf and Jackson to rebalance the power between claimants and defendants took place despite appreciable empirical research that refutes the existence of a compensation culture, both in the UK and the USA. Nonetheless, considerable media coverage, reinforced by policy makers seeking to control expenditure created a powerful discourse, referred to by Genn as an "anti-law story" that discredits personal injury practice, claiming that society is "in the grip of a litigation explosion". As noted by one participant, this made personal injury an easy target when seeking to cut expenditure:

there was a bad press of solicitors earning too much money from personal injury cases that don't help the general public because of this solicitors are an easy target to look at for blame and as a consequence their pockets were burnt. 116

This point has already been well made by Genn who argues that "in an environment of resource constraints", the "importance of civil justice has become obscured and the functioning of civil justice has been downgraded". The downgrading of civil justice and the harms of the perceived compensation culture to personal injury practice must not be mistaken as mere context. Rather, they are fundamental to the support that successive governments have shown for the principle of proportionality,

¹¹³ English Civil Justice after the Woolf and Jackson Reforms : A Critical Analysis (n 89), p.3. See s.1.2

¹¹² Interview 6

¹¹⁴ See generally Deconstructing Policy on Costs and the Compensation Culture (n 85); M Galanter, 'A World Without Trials' (2006) 7(1) Journal of Dispute Resolution 7; Judging Civil Justice; Ken Oliphant, Richard Lewis and Annette Morris, 'Tort Personal Injury Claims Statistics: Is There a Compensation Culture in the United Kingdom?' (2006) 14 Torts Law Journal 158 D.S Reda, 'The Cost-and-Delay Narrative in Civil Justice Reforms: its Fallacies and Functions' (2012) 19 Oregon Law Review 1085

¹¹⁵ Judging Civil Justice (n 92), p.32

¹¹⁶ Interview 9

¹¹⁷ Judging Civil Justice (n 92), pp.24-25

over and above the traditional policy aim of substantive justice. ¹¹⁸ The politics of recent reforms is, thus, a key part of the drive towards a cheaper, more efficient system of civil justice (the "race to the bottom" as one participant phrased it ¹¹⁹) which has primarily caused the automation reported in this study. This is markedly different from the liberalization of legal services in Susskind's thesis. ¹²⁰ Where liberalization is a passive driver that removes restrictions so that entrepreneurship may be encouraged, the socio-political driver described here is an active and conscious retrenchment of the state's ambition for civil justice, fueled by a political discourse of crisis "in which the virtuous and workable law of the 'good old days' has been usurped and corrupted". ¹²¹

As Genn notes, policy makers have "consciously transformed the discourse" to present the system as a "a gravy train for 'fat cat lawyers' who were greedily stuffing their pockets". She claims that "the main thrust of modern civil justice reform is about neither access nor justice. It is simply about diversion of disputants away from the courts [...] less law and the downgrading of civil justice". This has taken place within the wider context of a "modernisation agenda" of public services generally. Based on an "ideology of competition and market forces", this agenda has sought to professionalise and quasi-privatise areas of public service, reducing the role of the state in delivering public goods. 125

Despite being political in nature, it is inextricably linked with the economic desire to reduce spending. Fundamentally, the main impetus for the government has been to "ease the pressure" of the civil justice budget "at a time when criminal justice system costs have seen exponential growth". The implication for personal injury

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¹¹⁸ English Civil Justice after the Woolf and Jackson Reforms: A Critical Analysis (n 89), pp.2-4

¹¹⁹ Interview 10

¹²⁰ See s.6.2

¹²¹ A World Without Trials (114), p.20

¹²² Judging Civil Justice (n 92), p.44

¹²³ Ibid, p.69

¹²⁴ Dexter Whitfield, New Labour's Attack on Public Services (Spokesman Books 2006), p.5

¹²⁵ Ibid

¹²⁶ Hazel Genn, 'Why the Privatisation of Civil Justice is a Rule of Law Issue. 36th FA Mann Lecture' (Lincoln's Inn) available at http://www.laws.ucl.ac.uk/wp-content/uploads/2014/08/36th-F-A-Mann-Lecture-19.11.12-Professor-Hazel-Genn.pdf [last accessed 30th January 2019]

practitioners has consequently been a downward pressure on costs. Thus, whilst the more-for-less challenge is not wholly accurate to personal injury practice, the crux of the challenge – the need to be quicker and cheaper – is undoubtedly the primary driver towards automation reported at interview. However, it is demonstrably more complex than the more-for-less challenge purveys.

6.5 Perceptions of Technology

Whilst gaining an understanding of why individuals accept or reject certain technologies has historically proven challenging, studies suggest that users' perceptions of technology are significant contributors. Existing research in law characterises practitioners' perceptions of technology as negative, cynical and doubtful. However, Chapter 4 has already demonstrated that this is not the case with respect to technologies reported in this study. That discussion concluded that existing technologies are generally perceived as useful, despite system defects and user issues. The present discussion is concerned with the impact that participants' perceptions have on their use of legal technology and, thus, the effectiveness of the systems in practice.

The Technology Acceptance Model, illustrated below, is an adaptation of the Theory of Reasoned Action,¹²⁹ tailored specifically for the acceptance of IT systems.¹³⁰ Although developed outside the field of Science and Technology Studies, the crux of the model (that users' attitudes towards a technology influence their use of it) and its purpose (to "provide an explanation of the determinants of computer acceptance") are both congruent with the Social Construction of Technology

¹²⁷ Fred D Davis, Richard P Bagozzi and Paul R Warshaw, 'User Acceptance of Computer Technology: A Comparison of Two Theoretical Models ' (1989) 35 Management Science , p.982

¹²⁸ Richard E. Susskind, *The end of lawyers? : rethinking the nature of legal services* (Oxford : Oxford University Press 2010), p.274

¹²⁹ For an explanation of the Theory of Reasoned Action, see M Fishbein and I Ajzen, *JZEN, Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research* (Addison-Wesley 1975) ¹³⁰ FD Davis, 'A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results' 1986)

approach.¹³¹ As Fig.6.2 shows, the perception of a technology (divided into perceived usefulness and the perceived ease of use) is of primary relevance to the model, directly influencing users' attitudes towards technology, their intention to use a technology and, ultimately, their actual use.

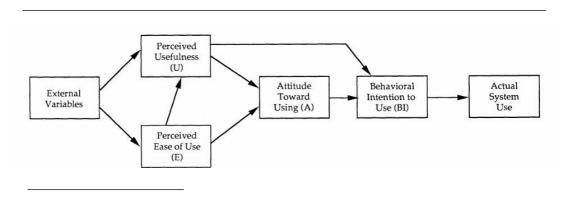


Fig. 6.2 Technology Acceptance Model

Davis FD, Bagozzi RP and Warshaw PR, User Acceptance of Computer Technology: A Comparison of Two Theoretical Models (1989) 35 *Management Science*

In testing the model, Davis, Bagozzi and Warshaw concluded that the perceived usefulness of a technology is a "major determinant of people's intentions to use computers" and the "perceived ease of use is a significant secondary determinant". These findings are supported in further research which suggests that "the most critical belief underlying an individual's attitude toward adopting a new technology in the workplace is her or his perceptions about [its] usefulness". 133

 $^{^{131}}$ User Acceptance of Computer Technology: A Comparison of Two Theoretical Models (n 127), p.985

¹³² Ibid, p.997; Davis et al tested the model using a word processing programme and 107 full-time MBA students.

¹³³ Michael Morris and Viswanath Venkatesh, 'Age Differences in Technology Adoption Decisions: Implications for a Changing Work Force' (2000) 53 Personnel Psychology 375, p.380 See also: K Mathieson, 'Predicting User Intentions: Comparing the Technology Acceptance Model with the Theory of Planned Behavior' (1991) 2 Information Systems Research 173; and S Taylor and PA Todd, 'Understanding Information Technology Usage: A Test of Competing Models' (1995) 6 Information Systems Research 144

Chapter 4 reported that, although the technologies discussed at interview were generally perceived positively, issues that affect their ease of use persist.¹³⁴ The interview data suggests that whether these issues are caused by poor system functionality or low user ability, they each have a similar impact on the user. By frustrating or disturbing progress with their work, they lead the practitioner to abandon the technology to some extent:

we won't use some of the functions that may be useful because it's going to take too much man power [sic] for a team of our size to sort out;¹³⁵

It puts in a number of irrelevant tasks you can't add your own tasks to it so I think as a whole it's not used. 136

Two broad themes emerge from s.4.5. First, that current technologies make a positive contribution to legal practice; but second, that they are not user friendly. This suggests that there is a tension between the perceived usefulness of the technologies reported and their perceived ease of use. The former encourages, whilst the latter discourages, practitioners to make use of LegalTech. This is an important finding as it implies that practitioners who appear to resist technology may be more open to it than previous commentary suggests. Where Susskind refers to these practitioners as "sceptics and doubters" the suggestion here is that they do in fact acknowledge the usefulness of LegalTech, but are nonetheless dissuaded from engaging with it fully because they find it difficult to use:

those sorts of things do in my experience tend to push people away from using its functionalities to its best purpose because they just lose patience with it. 138

The limited literature that explores users' responses to technical issues suggests that "frustration with technology is a major reason why people cannot use computers,

¹³⁴ See s.4.5.1

¹³⁵ Interview 6

¹³⁶ Interview 10

¹³⁷ The end of lawyers? : rethinking the nature of legal services (n 128), p.274

¹³⁸ Interview 6

hesitate to use computers, or avoid computers all together".¹³⁹ Keenan and Newton highlight that frustration with technology in the workplace is particularly high when technical issues interfere with "an individual's ability to carry out their day-to-day duties".¹⁴⁰ According to Spector, there are four common reactions to this: an emotional response; finding an alternative solution; aggression; and withdrawal.¹⁴¹ Chapter 4 has already noted that when faced with user issues, all participants reported finding their own adaptive solutions. These include work arounds with the system and work arounds without the system. Thus, whilst the technology is abandoned to some extent, none reported emotional or aggressive responses to technical difficulties, nor a withdrawal from the systems entirely.

Referring to Fig.6.2, this suggests that, despite the issues affecting their ease of use, the perceived usefulness of the technologies still makes them attractive to practitioners. Thus, the interview data supports the conclusion that the perceived usefulness of a technology is a major determinant, whilst the perceived ease of use is a secondary determinant, of people's intentions to use technology. In fine, participants in this study have evaluated the usefulness of technology against the perceived ease of use and concluded that the systems they currently have are worthwhile.

The interviews do, however, reveal some scepticism about future technologies, in particular the use of artificial intelligence in practice:

an artificial intelligent lawyer I think that's probably a bit pie in the sky [...] it's just not going to happen. 143

¹³⁹ Jonathan Lazar, Adam Jones and Ben Shneiderman, 'Workplace User Frustration with Computers: An Exploratory Investigation of the Causes and Severity' (2006) 25 Behaviour & Information Technology 239, p.242

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¹⁴⁰ A Keenan and T.J Newton, 'Frustration in organizations: Relationships to Role Stress, Climate, and Psychological Strain' (1984) 57 Journal of Occupational Psychology 57, referenced in Workplace User Frustration with Computers: An Exploratory Investigation of the Causes and Severity, p.241

¹⁴¹ P.E Spector, 'Organizational Frustration: a model and review of the literature' (1978) 31 Personnel Psychology 815

¹⁴² User Acceptance of Computer Technology: A Comparison of Two Theoretical Models (n 127), p.997

¹⁴³ Interview 4

Some of this scepticism related to a general disbelief in future technical capabilities:

I just don't think the technology will ever get there we've been hearing about it for years now and it hasn't yet;¹⁴⁴

I don't know how reliable these machines with their technology would be. 145

However, most relates specifically to the susceptibility of legal practice to disruption:

Lawyers are qualified to give legal advice and software can't do that; 146

It is intrinsically human work. 147

All of the sceptical comments, ultimately, return to the distinction between automation and innovation, as they relate only to the future use of technology to replace lawyers and not the use of technology to assist lawyers. Whilst only four of the participants strongly rejected the idea of disruption, none reported that they could foresee technology replacing lawyers outrightly. Two of the participants took what can be described as an agnostic view towards the idea of artificial intelligence replacing lawyers in the future. The first of these conceded that whilst it currently seems unlikely, they simply do not know what might be possible in the future:

I don't think that's on the cards at the moment [...] if computers grow exponentially that's a possibility in the future at the moment I'd say it may or may not happen¹⁴⁸

The second, less enthusiastically, reported that they do not think technology will replace lawyers, but that they are waiting to be proven wrong:

¹⁴⁵ Interview 5

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¹⁴⁴ Interview 8

¹⁴⁶ Interview 9

¹⁴⁷ Interview 11

¹⁴⁸ Interview 1

I haven't seen any proof of this yet I don't think it will I just can't see it I'm waiting for proof of this radical transformation. 149

This agnostic view is probably one that would resonate with most practitioners who, in reality, do not have a comprehensive understanding of current technical capabilities. The discussion in s.4.5.1 affirms this point and supports the view that, as practitioners lack an understanding of current technologies, they can scarcely be expected to predict where future capabilities might lead. It is, therefore, hardly surprising that the majority of the participants took a middle-ground position, predicting greater use of technology, including artificial intelligence, but not at the expense of replacing lawyers. The most enthusiastic of these predicted a future in which robotic lawyers work alongside human lawyers who supervise the work that is produced:

I envisage a situation arising whereby each lawyer has a robot that does the vast majority of the work but the lawyer has to be sufficiently adept to ensure that what is being produced is accurate.¹⁵⁰

The remaining participants held a similar view, that sophisticated technologies will likely have a greater role, but that the expert lawyer will remain:

Al probably will feature but you've got to have someone putting the information in and then you've got to have someone making judgements;¹⁵¹

All we can do as lawyers is leverage the technology to make the system as efficient as possible to get the best outcome for our clients. 152

150 Interview 13

¹⁴⁹ Interview 3

¹⁵¹ Interview 14

¹⁵² Interview 18

Many of these comments, which support greater automation but resist disruption, were based on the view that technology could replace lawyers, but should not. As one participant stated:

I think it's possible but I don't think it's a good idea. 153

The predominant reason for this was the reported relationship of trust between clients and professionals, which participants claim cannot be replicated by technology. This barrier to disruption is discussed in s.6.6.2, but it is worth noting here that practitioners naturally have biases when considering technology as a replacement for themselves. Therefore, whilst some of the rejection may be related to genuine doubts in the future applicability of technology, some may also be related to a status quo, 154 or self-protection bias 155 of lawyers. Although this study hasn't explored the dynamics of these biases, Chapter 4 has already noted that none of the participants showed a generally negative or antagonistic attitude towards technology. Whilst this doesn't exclude the possibility of bias, it goes some way to rebutting Susskind's view that practitioners reject technical change on the basis of cynicism and scepticism.

Although Susskind might still consider the participants in this study sceptical doubters, at interview they appeared to show a genuine concern for a future without lawyers. This concern was rooted in a firm belief that access to justice for claimants requires lawyers:

it would be very difficult to erase the role of the lawyer in society because everybody if you have a society based on the rule of law needs to have a route to getting redress if they think something has gone wrong for them and you need lawyers for that. 156

¹⁵³ Interview 19

¹⁵⁴ B Hofmann, 'Hofmann, B. Progress Bias Versus Status Quos Bias in the Ethics of Emerging Science and Technology' (2020) 34 Bioethics 252

¹⁵⁵ Cucina and Vasilopoulos, 'Personality-Based Job Analysis and the Self-Serving Bias' (2005) 20 Journal of Business and Psychology 275

¹⁵⁶ Interview 18

Relating this to Fig.6.2, the practitioners interviewed clearly do not perceive disruptive technologies as useful, as they reject the idea that technology can adequately perform the work that they do. ¹⁵⁷ Susskind refutes this, claiming that the legal profession is a means to distributing expertise and is not an end in itself. He claims that the end – lay persons having access to legal expertise – will eventually be achievable without the profession and that "protecting a craft for its own sake without regard for the outcomes it secures is an indulgence we cannot afford". ¹⁵⁸ However, inherent in his statement are two presumptions that need to be addressed.

First, it presumes that practitioners who reject disruptive technologies do so simply to preserve the *status quo*. This presumption is due in large part to the lack of engagement with practitioners' perceptions of technology which are, consequently, mischaracterised as irrational denial. As noted, the general perception towards automating technologies was positive, whilst the general perception towards disruptive technologies was, admittedly, sceptical. However, if one accepts, as this study does, that practitioners have a role in shaping the technologies that they use, then one must engage with the objections raised, even if scepticism or cynicism is partially to blame. Furthermore, if the primary concern is the continued quality of legal services, then understanding those objections should be a priority.

Second, it assumes that access to legal expertise is the only function or outcome of the profession that matters. Whilst this study does not contest that the lawyers are not an end in themselves, it does not accept that practitioners only make legal expertise available to lay people. As the majority of participants noted, practitioners guide clients, who are not legally trained, through their case, often during a difficult period:

if you've been injured for example and you need help then you need someone to guide you through a process. 159

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¹⁵⁷ The future of the professions : how technology will transform the work of human experts (n 6),

¹⁵⁸ Ibid, p.247

¹⁵⁹ Interview 18

It was regularly reported that the professional's role as a support to claimants is an important part of being a lawyer; and it is a combination of their experience with claimants and their proficiency as a lawyer that gives clients the reassurances they need and cannot get elsewhere.¹⁶⁰ Thus, for the practitioners interviewed, the prospect of disruption raises the serious issue of public trust:

I feel like everyone trusts the current system with lawyers and paralegals and I don't think they would trust an automated system [...] could we rely on it to do the work of a lawyer or a team of lawyers?¹⁶¹

The commentary to date, however, has conflated the issues of denial and trust as one irrational rejection of technology that precludes interaction with practitioners' perceptions. Section 6.6 explores this issue, separating it into a discussion of quality and of trust.

6.6 Quality and Trust

Section three of this chapter demonstrates that the issue of costs is a significant challenge for personal injury lawyers that has driven them towards automation. The primary focus of technologies reported has consequently been efficiency. However, as cost pressures encourage faster, cheaper turnover of files, this raises questions for the quality of the work that can be achieved. Whilst it is already established that substantive justice has rarely been achieved in tort, the "emergence of a more process-driven and less individuated system of compensation" brings concerns for the accuracy of case outcomes to the fore. It is difficult to comment in detail on the impact of reduced costs and rationed procedure on case accuracy due in part to the lack of data and in part to the multiple variables at play. Nonetheless, this study suggests that anxiety over the accuracy of case outcomes and the quality of service more generally is of foremost concern among practitioners. In relation to the uptake

¹⁶⁰ Interview 15

¹⁶¹ Interview 3

¹⁶² Personal Injury Compensation and Civil Justice Paradigms (n 78), p.66

¹⁶³ Ibid

and use of technology, this concern can be seen as both a driver and a tension: a driver, as automation ensures that the strive for greater efficiency does not affect quality; and a tension, as increasingly capable machines hold greater uncertainty. Thus, broadly speaking, the need for quality compliments some automation, but contends with disruption. Hence, as discussed in Chapter 5, one can observe denial and automation simultaneously.

Susskind and Susskind frame this denial of disruptive technologies as an issue of trust. Categorising all practitioners' objections under that banner, they claim that practitioners place a greater moral burden on technology than on themselves. 164 Pointing towards technologies that "already operate reliably and to a high level of user satisfaction", they consider the "trusted advisor" redundant, when "our primary need is only for a reliable outcome". 165 However, despite emphasising reliability as the primary need, they compare the trustworthiness of the legal profession against the reliability of legal technology when, in fact, the trustworthiness and reliability of each should be considered. As well as conflating trust and reliability in this way, they fail to adequately acknowledge their interdependence, as in lieu of knowing that a technology is reliable, practitioners and clients must trust that it is. Susskind and Susskind refer to this as 'quasi-trust' which has more to do with "confidence than fiduciary duty" and which, they predict, will replace the trust traditionally held for the professions. 166 Defining quasi-trust, they claim that clients "will want to be assured of, and so confident in, [providers'] reliability (competence and experience) and in their honesty". 167 However, this definition again conflates trust and reliability and, being wholly synonymous with accepted definitions of trust, is another example of clumsy terminology within the existing literature. 168

¹⁶⁴ The future of the professions: how technology will transform the work of human experts (n 6) pp.267-269

¹⁶⁵ Ibid, pp.236-237; *see also* David Maister, Charles Green and Robert Galford, *The Trusted Advisor* (Simon & Schuster 2002)

¹⁶⁶ The future of the professions : how technology will transform the work of human experts (n 6), p.238

¹⁶⁷ Ibid, p.238

¹⁶⁸ Oxford English Dictionary define 'trust' as a "firm belief in the reliability, truth, or ability of someone or something" and the Cambridge English Dictionary define it as "to believe that someone is good and honest and will not harm you, or that something is safe and reliable"

As such, this thesis departs from the existing terminology. Instead, it identifies two concerns which are at the core of the objections reported at interview: a concern for the quality of legal services; and a concern that the public trust in the profession cannot be replicated by technology.

6.6.1 Importance of Quality

As introduced above, the interviews suggest that concern for the accuracy of case outcomes and the quality of service is of foremost concern to practitioners. Consequently, case management systems, digital filing systems, standardised documents and other systems that are primarily used to reduce costs were also reported as vital to ensuring that the strive for efficiency does not result in a reduction in quality. Case management systems were considered particularly important to manage higher caseloads and maintain communication with a larger number of clients:

It's the only real way to manage if you've got a case load of say 175 files you need something to say to you you've not worked on this or you need to chase this and that's what your case management system does;¹⁶⁹

I have over 250 clients and I would not remember to call any of them if I wasn't prompted so I think just based on the volume although I would like to be less automated it works so you can't fault it.¹⁷⁰

In addition, where efficiency measures have led to greater use of non-qualified practitioners, case management systems were reportedly essential in enabling them to handle cases under supervision. Thus, LegalTech is employed to ensure that increased caseloads and increased use of non-qualified practitioners does not lead to poor performance. Hence, a key purpose consistently reported at interview, secondarily to efficiency, was quality control. Examples of quality control through technology varied depending on the extent to which, and ways in which, participants use their systems. However, every participant reported technology's role in

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¹⁶⁹ Interview 7

¹⁷⁰ Interview 2

controlling quality in some way, primarily through case management. As a general encapsulation, this can be summarised as using technology to process claims quicker, whilst minimizing the risk of error:

it speeds everything up so it's much more efficient than the work would be without it it also helps reduce error humans are fallible and the technology is less so;¹⁷¹

the key point to any technology that we're using has got to be to speed things up for us so that's number one number two is risk management. 172

For those directly handling cases, quality control meant avoiding errors, both substantive (errors in the outputs of the work) and procedural (errors in the processing of the claim). Substantive errors included missing key information in a medical report, valuing a claim incorrectly or getting clients' personal information wrong, whilst procedural errors were mostly connected to deadlines and timescales. The use of prompts, workflows and diary systems were the main functions that reportedly reduce the risk of procedural errors, by structuring the daily work of the practitioner and continuously providing them with the next task to complete:

if it's run properly from the start that system gives you triggers for what you need to do;173

it diaries things for you, tasks things on. 174

Despite the difficulties that practitioners reported with task lists and workflows, they were nonetheless highlighted as a quality control mechanism by ensuring that practitioners do not forget to complete tasks:

it will remind you to do it or will ask you when you want to be reminded and then you'll get the reminders every time you open the file to tell you

¹⁷¹ Interview 13

¹⁷² Interview 11

¹⁷³ Interview 9

¹⁷⁴ Interview 7

what needs doing and what needs chasing [...] it gives you prompts and prevents you from forgetting things.¹⁷⁵

Somewhat paradoxically to the frustrations discussed in s.4.5.1, one participant reported that the prompts tell them "exactly" when tasks need to be completed:

we use a claims management software and that tells us exactly when letters need to go out when clients need to be chased when deadlines are.¹⁷⁶

For them, the prompts are not only a useful reminder of their own deadlines, but also as a reminder to prompt clients who may need chasing. Being so convinced of their effectiveness, they continued that, by using the case management system, it is almost impossible for them to miss a task or deadline:

It's almost impossible for us to miss something because we're being told all the time what the next stage is when it's due. 177

This response resonates with the earlier extract from a paralegal who explicitly linked the need for prompts with the increased caseload for each practitioner. As they concluded:

I wouldn't remember to call all of [my clients] if I wasn't prompted [...] it works so you can't fault it.¹⁷⁸

Beyond ensuring that deadlines are met, case progression in general was highlighted as a difficulty caused by the nature of handling multiple cases, but alleviated by case management technology:

We are human and we've got other cases going on there's certain points that a claim will just be parked [...] where you've got a case management

176 Interview 4

¹⁷⁵ Interview 6

¹⁷⁷ Interview 4

¹⁷⁸ Interview 2

system saying this needs to be done chances are you will pick up the case and move it to the next step. 179

The time spent resolving a case was regularly reported by participants as a mark of the quality of service that clients receive. This is quite simply because:

Clients want to receive their compensation and close their case without delay. 180

Thus, prompts and workflows enable practitioners to maintain a quality service for clients by ensuring that cases do not sit untouched for too long.

Overall, procedural errors are in theory alleviated with relative ease as case management systems ensure that tasks are not missed, deadlines are met and cases are progressed. However, they do this by structuring practitioners' daily work, offering task lists and prompts within the workflow that the system predetermines. As s.4.5.1 discusses, the relevance of task lists and the rigidity of workflows were highlighted as perceived flaws of current systems. The extent to which they succeed in controlling quality is, therefore, limited, not least as the majority of participants reported not using them. This point is revisited below.

Substantive errors were considered intrinsically less easily alleviated by technology alone, as supervision by senior practitioners is reportedly an essential part of this. Nonetheless, as s.5.3 observes, technology has, in recent years, taken a significant role in facilitating the supervision of junior and non-qualified practitioners. Thus, as a tool to assist with their supervision, LegalTech helps to prevent substantive errors. Moreover, precedent letters, standard terms and conditions and automated document generation were all referenced as quality control mechanisms that assist in reducing substantive errors. The effectiveness of these technologies was only recognised at interview by junior case handlers or in reference to their work by their supervisors. For example, a paralegal working at a large regional firm commented

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¹⁷⁹ Interview 1

¹⁸⁰ Interview 6

that standard letters ensure that key information is not accidentally excluded. For this participant, the security this offers has additional benefit when responding to client queries:

I like the standardized letter because a lot of clients will say you didn't tell me this and I know that it's all in the letter that you have read and signed whereas if I was personally writing my own letters they would be different every time. ¹⁸¹

A senior partner at a large national firm which employs a significant number of junior and non-qualified practitioners reported that the purpose of standardised documents and digital templates is to:

make sure that people lower down aren't making silly mistakes [...] and making sure the documents are accurate.¹⁸²

This, again, highlights the perception that these technologies are for "junior people". 183

For supervisors, quality control was ensured by having effective oversight of work. Appropriate supervision is, for them, most essential for reducing errors and maintaining standards. Instant digital access to files was consequently considered a key function for supervisors who often supervise large teams. One participant went as far as to say that digital access to case files is essential for proper supervision:

I can access any of the documentation relating to the case via the system and this is essential to have proper supervision.¹⁸⁴

This participant also highlighted the reports that case management systems produce to give an indication of case progression and performance:

¹⁸¹ Interview 2

¹⁸² Interview 19

¹⁸³ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (n 103), p.49; *See* Chapter 4

¹⁸⁴ Interview 13

I also get a report each week that gives me all the information I need to supervise members of the team and monitor their work. 185

Their choice of word to "monitor" the work is somewhat telling. It affirms the view that junior members of the team work relatively independently from their supervisors who are on hand, but intervene only when necessary; and highlights that the technology enables supervisors to maintain standards, by monitoring the quality of the work. As a result, case management systems facilitate the delegating of work discussed in Chapter 5, by ensuring: that junior practitioners are equipped to do the work (satisfying the need for efficiency); and that senior practitioners are able monitor the work (satisfying the concern for quality).

For senior managers and partners, quality control is related to governance. In some ways similar to supervision, governance is reportedly concerned with ensuring that structures are in place to maintain the standard of work across the board. This is primarily achieved through standardisation:

it's first of all to make sure that the documents that are generated across the firm are all the same.¹⁸⁷

In particular, standardised documents assure senior management that all documents meet relevant regulations:

they are supposed to be the same to comply with things like SRA regulations [...] and that everything is from a perspective of risk management from the firm that risk is as low as possible;¹⁸⁸

part of it is I think risk management and making sure the documents are accurate to comply with all of our internal and external duties and regulation.¹⁸⁹

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¹⁸⁵ Interview 13

¹⁸⁶ See Chapter 5

¹⁸⁷ Interview 19

¹⁸⁸ Interview 17

¹⁸⁹ Interview 19

Similarly, workflows and prompts reportedly assist with "good governance" by ensuring compliance with the Civil Procedure Rules and timetables set by the courts. The avoidance of errors for senior managers and partners is intimately linked with avoiding negligence claims and reputational damage. Thus, where junior practitioners highlighted the impact missed deadlines might have on clients, senior managers and partners were primarily concerned with the potential impact on the firm:

looking at the bigger picture this helps with the risk of potential negligence claims. 191

This is unsurprising as senior management have ultimate responsibility for the wellbeing of the firm. As such, when they spoke of the benefit of automation, they referred not to its ability to improve the quality of day-to-day work, but its ability to help set and maintain standards at a broader level. Thus, the mechanisms designed, from the perspective of junior practitioners, to reduce daily errors are, for supervisors, about monitoring performance, case progression and case quality; and, for senior managers and partners, about standards, compliance and risk management. Overall, therefore, what can be observed is three levels of quality control, achieved by three different groups of users engaging, in different ways, with the same technology.

Of course, the effectiveness of these mechanisms is dependent on the extent to which practitioners actually use the systems. Whilst the functions that assist with supervision and governance were reportedly well used, the use of workflows and task lists by those directly handling claims was reportedly mixed. As Chapter 4 notes, none of the qualified solicitors and only three of the seven other practitioners reported making use of workflows and task lists. It is somewhat difficult to square this finding with the widely reported perception that workflows and task lists assist in controlling quality. It is possible that supervisors are unaware of the difficulties that case

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¹⁹⁰ Interview 13

¹⁹¹ Interview 11

handlers have with these functions. The reported lack of opportunities for practitioners to discuss their technical requirements makes this seem likely. 192 Therefore, workflows and task lists are, perhaps, assumed to be of use to junior practitioners when, in fact, the majority do not make use of them. A second dynamic at play here is, again, the distinction between high- and low-value cases. Automated document generation, prompts, task lists and workflows are reportedly unable to cope with the complexity of higher-value cases, which require a greater degree of flexibility. As one participant commented:

The financial value of the case is a very easy shorthand for identifying what is a complicated case that needs a degree of bespoke approach to it. 193

Therefore, as the value of a claim increases, the ability to standardise the approach to resolving it reportedly decreases. Thus, automation becomes more difficult and the systems used are consequently less effective:

It's difficult to design an IT system that doesn't have a rule or a workflow [...] if you don't have a workflow set of rules and things like that then it means the IT system just becomes burdensome and not workable. 194

Therefore, notwithstanding the issues reported in Chapter 4, these functions are considered useful for controlling quality, but for lower-value cases only.

The reported need for a bespoke approach to higher-value cases was not limited to workflows and task lists. Part of the added complication with higher-value cases is the calculation of damages which reportedly requires more information from the client and more input from the practitioner:

¹⁹² See s.4.5

¹⁹³ Interview 18

¹⁹⁴ Interview 18

To value injuries and complicated damages you need a personal element

I need to discuss with you how much it's affected your life whether you
required any care and assistance around the home;¹⁹⁵

although the system can produce a fielded click here particular of claim for us generally we have to go a little bit over and above due to the size of the claims we deal with they are fairly bespoke.¹⁹⁶

Whilst the aim of this project is not to compare high- and low-value work, it is clear that the perceived difficulty in programming successful and appropriate systems for use in more complicated cases is considered a barrier to further use of LegalTech in the multi-track. Susskind alludes to this issue by distinguishing between work that can be standardised and work that is "genuinely bespoke". Whilst he is of the view that most legal work is standardisable, the interviews in this study suggest otherwise. Although this thesis does not answer how much of personal injury work is standard and bespoke, from the participants' perspective all multi-track claims require some element of bespoke work. However, one must recognise the biases they are likely to have. One participant, a senior partner who on the whole took a pragmatic approach to the use of technology, gave a most candid evaluation:

The work is bespoke it's not as bespoke as people think it is and it's not as bespoke as lawyers claim it is but it still is bespoke work and requires thought.¹⁹⁹

Although dismissed by Susskind as cynical denial of technology, for those interviewed, the bespoke approach that practitioners take, to varying degrees on each case, is intimately linked with the quality of service that clients receive:

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¹⁹⁵ Interview 2

¹⁹⁶ Interview 6

¹⁹⁷ Tomorrow's Lawyers. An Introduction to Your Future (n 1), p.59

¹⁹⁸ See Chapter 3 for a discussion of participant bias

¹⁹⁹ Interview 14

I think the quality of advice that people are going to get in certain circumstances is going to suffer massively without the bespoke service people get from qualified and experienced lawyers rather than just pushing buttons and having a one size fits all approach.²⁰⁰

Thus, as with earlier examples, the doubt reported here appears to be based on genuine concern and not cynicism.

The trade-off between reducing costs through automation and controlling quality by maintaining professional input shifts depending on the value of the case, which influences both sides of the balance. On the costs side, the higher the value of the claim, the less incentive there is to reduce costs and the more able practitioners are to offer a bespoke service.²⁰¹ On the quality side, the higher the claim value, the greater the risk for the firm:

A personal injury claim is at whatever level quite complicated but once you get into the more serious work and all the complications a personal injury case duty breach causation and damages remain but the stakes are higher.²⁰²

Thus, there is a 'risk-reward' ratio to using LegalTech, which seeks to balance the financial imperative to reduce costs with the perceived ability to standardise tasks, much in the same way that, as reported in Chapter 5, practitioners are appointed on the basis of a trade-off between their capabilities and their cost:

it's about finding the most appropriately qualified at the cheapest price.²⁰³

The importance of the balance between efficiency and quality should not be overlooked. Participants regularly reported a fear that reduced costs and rationed

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²⁰⁰ Interview 19

²⁰¹ Richard Lewis and Annette Morris, A Socio-Legal Analysis of Personal Injury Claims in Three European Countries: England and Wales (Unpublished Manuscript 2019), pp.31-33

²⁰² Interview 18

²⁰³ Interview 1

procedures might affect the quality of case outcomes. The root cause of this has been the policy changes discussed in s.6.4, to which automation has been a remedial outcome. However, the interviews suggest that as technologies become increasingly capable and autonomous, practitioners' concerns for the quality of legal service and the risk to legal practice are compounded. Susskind includes these concerns in "the trust objection" which, as noted above, conflates the issue with public trust in technology and the professions. Whilst practitioners' trust in technology is an element of this fear, it relates back to their concern for the quality of legal service that can be achieved with greater reliance on technology and less input from lawyers:

I would never trust the machine to get it right without me at least checking [...] if a machine gets it wrong but I send it out anyway relying on what it's said I can't say sorry that's what the computer told me [...] there is a reputational issue there;²⁰⁴

is it flawless? Can we rely on it to do the work of a lawyer or team of lawyers?²⁰⁵

As the first of these extracts demonstrates, the reliability of disruptive technologies has potential to impact the reputation of the practitioner or firm relying on them. This is a significant barrier to the uptake of disruptive technologies as the senior managers who decide the methods and resources that their firm employs have, as discussed above, the reputational welfare of the firm as a primary concern. One participant commented:

I don't think that people who need to get on board with it for it to take off are going to be convinced that it's error proof. ²⁰⁶

In 2018, the House of Lords Select Committee on Artificial Intelligence recognised this concern, concluding that a lack of confidence in technology among practitioners who

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²⁰⁴ Interview 14

²⁰⁵ Interview 3

²⁰⁶ Interview 3

fear liability claims is a real barrier to the adoption of A.I assisted technologies.²⁰⁷ In particular, they considered that a framework to protect practitioners from liability claims where technology fails will be vital to allay objections and encourage uptake and use:

"the issue of liability needs to be addressed as soon as possible, in order to ensure that it is neither a barrier to widespread adoption, nor decided too late for the development of much of this technology". 208

This is something that several of the senior practitioners interviewed noted, not just in relation to artificial intelligence, but disruptive technologies in general:

unless there's some sort of indemnity in place to protect solicitors who are relying on that technology you're ultimately going to be on the hook if you miss something and you just say oh well I relied on what the computer said to me.²⁰⁹

Whilst such a mechanism might allay practitioners' personal worry, concerns for the quality of service for claimants will, nonetheless, remain largely unresolved. The extent to which this continues as a tension against greater use of technology will become more clear overtime and is noted, therefore in Chapter 7 as an area to which to return in the future.

6.6.2 The Trust Objection

Public trust in the legal profession was consistently reported as a key barrier to disruption as, put simply, the public reportedly cannot trust machine intelligence in the way that it trusts the legal profession. Different to the kind of trust discussed above, which is concerned with the reliability of technology in providing a quality service, the public trust discussed here is concerned with a direct comparison between the supposedly proven trustworthiness of lawyers and the unproven

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²⁰⁷ House of Lords Select Committee on A.I, *AI in the UK: Ready, Willing and Able?*, 2018), HL Paper 100

²⁰⁸ Ibid, para.308-311

²⁰⁹ Interview 6

trustworthiness of technology. As one participant commented, technology can be programmed well, but what really matters is how public perception of technology compares with public perception of the profession:

you may be able to programme a computer in a certain way but it's about the public perception would the public trust that in the same way that they trust $me^{2^{210}}$

Whether implicitly or explicitly, all of the participants revealed a belief that the public, on the whole, trusts the legal profession and would likely not trust a technology based alternative:

I feel like everyone trusts the current system with lawyers and paralegals and I don't think they would trust this system.²¹¹

Reasons offered for this were, as above, reliability:

The public relies on lawyers expertise for advice and I think there would always be a question over how reliable a system can be;²¹²

The perceived adaptability of lawyers compared with technology:

It's not going to know everything and I know you can teach it but there's always going to be something that would come up that it hasn't come across before we'd recognise that and think wait a minute let's look further would AI recognise it?²¹³

Ethics:

legal ethics are a big part of [public trust in lawyers] and you can't impose ethics or standards onto a computer;²¹⁴

²¹¹ Interview 3

²¹⁰ Interview 4

²¹² Interview 7

²¹³ Interview 3

²¹⁴ Interview 4

And the longstanding reputation of the legal profession:

the profession has built a reputation over decades and although its dipped at times it has maintained a strong reputation I think that comes down to the nature of the lawyer as a professional the rigorous training and the professional standards that we as individuals and as firms adhere to.²¹⁵

The arguments made subscribe strongly to the functionalist account of the professions and oppose the idea of disruption on the basis of the guarantees that professional status purportedly offers society. Namely: a trustworthy professional, a reliable service, applied expertise, high ethical standards and a concern for collective as well as individual reputation. As discussed in s.5.5, this view of the professions has traditionally underpinned the "tacit concordat" between professional and client that secures their trusted status.²¹⁶ The extent to which that relationship exists today is debatable as clients reportedly regularly challenge and question their advice on the basis of information read online or overheard. However, all of the participants who reported this emphasised clients' ultimate deference to their advice.²¹⁷ Thus, in their view, public trust in the legal profession remains high and is a key barrier to disruption in law. Susskind and Susskind challenge this view, claiming that there are two false assumptions behind it: first, that only the legal profession can deliver a trustworthy service; and second, that the profession itself is infallibly trustworthy.²¹⁸

Although participants consistently reported that the public trust in lawyers cannot be replaced, existing data suggests that trust in lawyers is not considerable. In 2017, Ipsos Mori reported that only 54% of respondents consider lawyers trustworthy.²¹⁹

²¹⁵ Interview 4

²¹⁶ Alan A Paterson, 'Professionalism and the Legal Services Market' (1996) 3 Intrernational Journal of the Legal Profession , p.3

²¹⁷ See s.5.5.1

 $^{^{218}}$ The future of the professions: how technology will transform the work of human experts (n 6), pp.233-235

²¹⁹ Ipsos Mori, *Veracity Index*, 2017) Available at: https://www.ipsos.com/sites/default/files/ct/news/documents/2017-11/trust-in-professions-veracity-index-2017-slides.pdf accessed 10th March 2020

Despite being an increase on previous years (52% in 2016²²⁰ and 51% in 2015²²¹), the 2017 survey still reports that 41% of respondents explicitly do not trust lawyers, with just 5% answering "don't know". 222 Therefore, whilst participants, perhaps naively, emphasised the public trust in their professional abilities, consumer surveys appear to tell another story. These figures, of course, need to be contextualised. In relation to other occupations, the legal profession sits about half way in order of trustworthiness, at 13 out of 24 occupations listed: a long way from nurses and doctors at 94% and 91%, but equally far off politicians and government ministers at 17% and 19% respectively. 223 Lawyers find themselves above charity chief executives and journalists who are reportedly trusted by just 50% and 27% of respondents respectively.²²⁴ This demonstrates that, whilst trust in the legal profession is low, this is broadly in line with a general public mistrust of service occupations. Bok argues that mistrust of lawyers is partially inevitable due to the authority that the professions have over society: "by virtue of the power they exert, professionals cannot avoid arousing a certain amount of cautious distrust". 225 However, she acknowledges a "common perception that too many lawyers violate basic moral principles when it suits their purposes". 226 This has been attributed, in part, to their duty towards, and confidentiality with, their client which, Bok suggests, can lead even the most trustworthy of lawyers towards "practices of manipulation and falsehood".227 Fiske and Dupree, on the other hand, suggest that the distrust of lawyers is caused by a resentment of the profession.²²⁸ They categorise law as an "envied profession" that reportedly has a high level of competence, which people

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https://www.ipsos.com/sites/default/files/migrations/en-uk/files/Assets/Docs/Polls/ipsos-moriveracity-index-2015-charts.pdf accessed 10th March 2020

²²⁰ Ipsos Mori, *Veracity Index*, 2016) referenced in Ipsos Mori and MumsNet, *Enough of Experts? Trust and the EU Referendum*, 2016) Available at: https://www.ipsos.com/sites/default/files/2017-04/Mumsnet-trust-report-FINAL.pdf accessed 10th March 2020

²²¹ Ipsos Mori, *Veracity Index*, 2015) Available at:

²²² Ipsos Mori, *Veracity Index Main Tables*, 2017), Table 1

²²³ Veracity Index (n 221219)

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²²⁵ Sissela Bok, 'Can Lawyers be Trusted?' (1990) 138 University of Pennsylvania Law Review 913, p.919 ²²⁶ Ibid. p.913

²²⁷ Ibid, p.924

²²⁸ Susan T Friske and Cydney Dupree, 'Gaining Trust as well as Respect in Communicating to Motivated Audiences About Science Topics' (2014) 11 Proceedings of the National Academy of Sciences 13593

admire, but a low level of "warmth", which they resent.²²⁹ Other research highlights the wealth of envied professions as a further cause of resentment that fuels distrust towards them.²³⁰ The jaundiced view of personal injury law already discussed presents personal injury lawyers as 'fat cats' who benefit from a "blame and claim" culture.²³¹ According to citizens advice, this image has contributed to an increase of litigants in person who consequently distrust lawyers.²³² Given the public nature of calls, particularly within the tabloid press, to "curb the fat cat lawyers",²³³ one can begin to see a case for resentment towards personal injury lawyers in the way that Fiske and Dupree, and Durante suggest. The purpose of this discussion is neither to prove nor disprove the perceived trustworthiness of lawyers; nor to identify conclusive causes for any distrust or envy. What it demonstrates, for the purposes of this thesis, is that the submissions of participants that lawyers are trusted is clearly an oversimplification.

The trustworthiness of the legal profession must also be contextualised in relation to the trustworthiness of technology. According to a 2019 YouGov poll which asked UK and US respondents about their trust in leading technology companies, the vast majority reported low levels of trust.²³⁴ Amazon, which faired best in the survey, was reportedly trusted by just 27% of respondents, whilst Facebook, Instagram and Dropbox were each trusted by less than 15% of respondents.²³⁵

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²²⁹ Ibid, p.13595. Other envied professions identified are chief executive officers, engineers and accountants.

²³⁰ F Durante et al, 'Nations' Income Inequalities Predicts Ambivalence in Stereotype Content: How Societies Mind the Gap' (2013) 52 British Journal of Social Psychology *cited in Gaining Trust as well as Respect in Communicating to Motivated Audiences About Science Topics* (n 228).

This submission appears to be supported by the 2017 Ipsos Mori data (n 219) that shows professional footballers as the third least trusted of the listed occupations, with a trust rating of just 26% - 28 percentage points below lawyers.

 $^{^{231}}$ K Williams, 'State of Fear: Britain's 'Compensation Culture' Reviewed' (2005) 25 Legal Studies , p.503

²³² Wright Hassal, 'According to Citizens Advice 'Fat cat' lawyer image creates more Litigants in Person ("LiP"). But is that really the reason?' 2016)

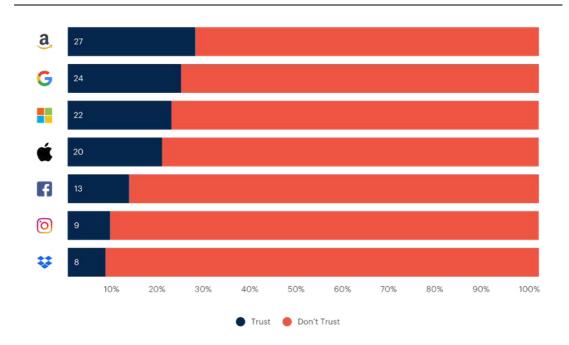
https://www.wrighthassall.co.uk/knowledge/blogs/2016/04/07/fat-cat-lawyers/ accessed 10th March 20201

²³³ Alison Little, 'Curb the Fat Cat Lawyer' *Express* (26th April 2007)

²³⁴ YouGov and Tresorit, *Trust in Tech Giants is Broken*, 2019) Available at: https://tresorit.com/blog/trust-in-tech-giants-is-broken/ accessed 10th March 2020

²³⁵ See Fig.6.3

Fig.6.3 "Trust in Tech Giants" 236



Overall, the survey reported that over 40% of respondents do not trust technology companies to lawfully manage their data and more than two thirds of respondents fear that their online data is at risk from hackers.²³⁷ It has to be acknowldged that this survey was carried out in the aftermath of millions of unencrypted Instagram passwords being exposed, which led to considerable concern for the security of digital information.²³⁸ At the same time, the influence of Cambridge Analytica and Facebook in the Brexit referendum was also under close scrutiny by the UK Parliament.²³⁹ Responses were, therefore, collected at a time of heightened sensitivities to digital data in the UK. Nonetheless, the survey still demonstrates that

²³⁶ Trust in Tech Giants is Broken (n 234)

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²³⁸ Davey Winder, 'Facebook Quietly Confirms Millions Of Unencrypted Instagram Passwords Exposed -- Change Yours Now' *Forbes*

^{(&}lt;a href="https://www.forbes.com/sites/daveywinder/2019/04/19/facebook-quietly-confirms-millions-of-unencrypted-instagram-passwords-exposed-change-yours-now/#750f01f74453">https://www.forbes.com/sites/daveywinder/2019/04/19/facebook-quietly-confirms-millions-of-unencrypted-instagram-passwords-exposed-change-yours-now/#750f01f74453 [accessed 10th March 2020]

²³⁹ BBC News, 'Facebook-Cambridge Analytica Scandal' 2018)

https://www.bbc.co.uk/news/topics/c81zyn0888lt/facebook-cambridge-analytica-scandal accessed 6th October 2020

"trust in many digital giants is definitely broken",²⁴⁰ not because of the reliability of the technology, but the trustworthiness of the companies that manage them – something that Susskind's dismissal of trust in favour of reliability when evaluating LegalTech fails to comprehend.

It likewise fails to address the fact that, in lieu of knowing how reliable a technology is, clients must trust that it is sufficiently reliable for them to use, much in the same way that they trust in the capabilities of professionals. However, underneath the trusted status that the professions theoretically have, professional liability acts as an insurance for clients when professional standards are not met. Thus, the measures in place to protect practitioners in the event of a negligence claim are equally beneficial to clients who may suffer a loss without a comparable legal framework for when machine intelligence goes wrong. Although this study has not engaged with claimants, it seems likely that the potential lack of recourse against legal advice given on the basis of faulty technology is a barrier to their acceptance of and engagement with systems. Hence, the House of Lords concluded that, in addition to discouraging use by practitioners, "unless a clear understanding of the legal liability framework is reached [...] it is foreseeable that both businesses and the wider public will not want to use Al-powered tools.²⁴¹

Without engaging directly with claimants, it is difficult to say with certainty how significant a barrier public trust in technology may be. This is a clear area for future academic attention. However, what is clear is that public trust is connected with, but separate from, the issue of quality and trust among practitioners. Together, they constitute a significant tension against the disruption of legal services by technology.

6.6.3 Conclusion

Although the data is only representative of a relatively small sample of participants, the interview analysis suggests that whilst the need for greater efficiency has been the key driver towards technology, the desire to control quality has been a significant

²⁴⁰ Trust in Tech Giants is Broken (n 234)

²⁴¹ AI in the UK: Ready, Willing and Able? (n 207), para.308

secondary factor. One participant, already referenced above, paraphrased this neatly:

the key point to any technology that we're using has got to be to speed things up for us so that's number one number two is risk management.²⁴²

To date, investment in technology has enabled firms to improve efficiency and control quality simultaneously, primarily using case management to achieve both aims. Thus, the two drivers have worked, to some extent, in tandem and the trade-off between efficiency and quality has found an equilibrium. Although the extent to which case management software achieves quality control at case level is limited by reportedly minimal standardisation within the multi-track, it was widely reported as vital to ensuring appropriate supervision and management oversight. Supervision in particular was considered essential to maintaining quality whilst employing non-qualified and newly qualified practitioners and undertaking high volumes of work. ²⁴³ In this sense, LegalTech has facilitated the shift towards a cheaper model of practice without risking a fall in the quality of work.

Focusing on quality has highlighted a key distinction between sustaining and disruptive technologies for which the existing literaure does not account. Whilst the concern for quality has acted as a driver towards automation, it is a tension with respect to disruption. As technologies become more sophisticated and more autonomous, the professional is further removed from the work. For practitioners, this raises serious questions about the reliability of the technology and the quality of the work that it can produce. Their rejection of disruptive technologies does not, therefore, appear to be based on cynicism, but on a genuine concern for the future quality of legal services.

Whilst practitioners' concerns centre on quality, trust in the reliability of technology is a contributory factor. However, trust is reportedly a more serious tension for the public who, the participants claim, cannot trust technology as they trust legal

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²⁴² Interview 11

²⁴³ See Chapter 5

professionals. Having not engaged with claimants directly, this chapter has not drawn a conclusion on the relative trustworthiness of lawyers and LegalTech. It has, however, demonstrated that neither public trust in the legal profession nor public trust in technology companies is high. Without a legal framework to protect both practitioners and claimants, the issue of legal liability when technology fails has potential to contribute to both the quality and trust tensions identified. Establishing a workable framework is a key barrier that policy makers will need to attend to before sophisiticated technologies can be considered and credible alternative to the legal professional.

6.7 Conclusion

This Chapter began by examining Susskind's 'Three Drivers for Change'. It concluded that his theory presents a reductionist account of the drivers towards technology, which extrapolates examples from commercial legal contexts to the whole of legal practice. Nonetheless, ss.6.3 and 6.4 respectively explored the development of information technology and the more-for-less challenge further. Section 6.3 concluded that, despite some hype around LegalTech, the development of technology alone has not been a driver towards automation within the practices observed. Section 6.4 noted that the crux fo the more-for-less challenge, the need to work quicker and more cheaply, has been a significant driver towards automation within the practices reported. However, the root of this driver is not an increase in compliance work or a free market economic pressure to to reduce costs. Rather, it has come from policy changes aimed at tackling the perceived crises of civil justice; namely cost, delay, inaccess to justice and a compensaition culture. The financial driver within personal injury has, consequently, been as socially and politically motivated as it has economically.

Section 6.5 discussed the significance of practitioners' perceptions of technology on their use of technology. It concluded that, whilst the technologies reported at interview were perceived as difficult to use, their perceived usefulness was sufficiently high that the overall perception is a positive one. This is a significant conclusion as it rebuts Susskind's view that practitioners resist technology because they cynically deny the benefits that it has to offer. Notwithstanding the user issues reorted in Chapter 4, it further concluded that practitioners' perceptions of technology has supported the automation of legal work. However, scepticism over the ability of technology to replace lawyers, and therefore the perceived usefulness of disruptive technologies, is a tension with respect to disruption. Nonetheles, this scepticism is not based on cynicism but on genuine concerns for the future quality of legal services. Section 6.6 discussed this issue, along with the issue of public trust, and concluded that practitioners' concern for quality has been a secondary driver towards automation. The use of case management systems in particular has enabled firms to reduce their costs without risking a fall in the quality of work. However, the importance of quality is clearly a tension with regards to disruptive technologies which participants reported cannot perform to the same standard as a lawyer, not least becase every multi-track personal injury claim requires some level of bespoke handling. Finally, it notes that public trust is considered a barrier to widescale disruption as clients cannot trust technology in the way that they trust legal professionals. It concludes that, whilst public trust in the legal profession is reportedly low, public trust in technology companies is equally so. Confidence, not only in the reliability of LegalTech but also in the trustworthiness of the companies that supply it, is consequently a tension that deserves further research. It is also an area that policy makers ought to review as, at present, there is little clarity on the issue of liability where legal technologies fail.

CHAPTER 7

Conclusion

In just a decade, a day in the life of a leading lawyer will be transformed by legal technology¹

7.1 Introduction

This thesis has explored the role of technology within claimant personal injury practice. The conclusion offered is that current investment in technology within the practices studied is limited to sustaining technologies that automate legal tasks without disrupting the legal services market. Nonetheless, these technologies have been transformative by standardising and automating legal tasks and facilitating the delegation of some legal work to non-qualified practitioners. In so doing, they have enabled practices to address the financial challenge set for them by policy makers, to process claims more quickly and cheaply.

This final chapter offers a summary of the conclusions drawn throughout the thesis. Section 7.3 tells the story of a multi-track personal injury claim. This story is a construct designed to represent a typical claim, as perceived and constructed by and for this study, based on the interview data and supplemented by desk-based research. Its purpose is to present, in a unique way, what this study tells us about the life of a multi-track personal injury claim and the uses of technology therein. Section 7.4 offers some final thoughts on the conclusions of this thesis, highlighting its contribution to the commentary within the field, before considering what this study

¹ David Cowan, *Take a Glimpse of the Future* (Association of Corporate Counsel and LegalEx 2018), The Times Supplement, 27th November 2018. p.3

means for the future of law and technology as both an area for study and a phenomenon of legal practice.

7.2 Summary of the Conclusions

This thesis began by noting that the commentary on law and technology to date has largely consisted of visionary predictions for the future. Accounts have been highly speculative and, following a deterministic view, have not considered the reciprocal influence between society and technology, nor sought to empirically demonstrate the predictions made. The introductory chapter noted that the few empirical insights offered are limited to examples from commercial legal fields, supplemented by a superficial study of macro trends. On this basis, this thesis has taken a different approach, gaining insight from Science and Technology Studies to conduct in-depth interviews with claimant personal injury practitioners. Thus, this thesis offers a unique approach to a topical area of research and fills both a conceptual and empirical gap within the current literature.

In justifying the focus of this thesis, the introductory chapter highlighted the context in which personal injury practitioners presently find themselves. After successive reforms aimed at curtailing the cost of civil justice, reducing delay and tackling the perceived compensation culture, practitioners are forced to operate within streamlined procedures and reduced costs. The brief history of law and technology demonstrates the political and socio-economic drivers behind these reforms and notes that technology, whilst not at the centre of reforms, has been a consistent feature. This thesis has therefore taken account of the political, social and economic contexts whilst exploring the role of technology within personal injury practice. It has done so by asking four research questions:

- What is the current uptake and use of technology within personal injury practice?
- How do practitioners perceive the technologies with which they interact?

- What changes have the use of technology engendered in practice?
- What drivers and tensions have shaped the uptake of technology within personal injury practice?

To address these questions, this thesis is influenced by the Social Construction of Technology perspective. It has contrasted the views of practitioners (as the relevant social group) and their accounts of the role of technology with the perspectives of those developing LegalTech. The current literature was organised into three phases, original to this thesis: early predictions of expert systems in law; legal practice in a digital information society; and LegalTech and the delivery of task based legal services. A chronological order for these phases demonstrated the development of the commentary over time from the 1980s to the present day, where predictions focus on the use of LegalTech to automate or disrupt legal tasks. Throughout the commentary discussed, three key flaws persist. First, the literature assumes a deterministic relationship between technology and society which leads existing accounts to the reductionist conclusion that, pressured by financial drivers, lawyers will adopt new technologies that offer an inherently superior method of practicing. Second, there is a lack of empiricism within existing literature which has led to a series of visionary predictions, unsupported by empirical evidence and often proven inaccurate over time; and third, practitioners' perceptions have been largely excluded from, or diminished by, the main commentaries. The literature is consequently inclined towards a high-tech view of the future of legal practice with little demonstration of how that future is reached. This thesis, thus, made the case for a new approach: an empirical inquiry informed by social science research methods, to capture practicing perspectives of legal technologies.

The method of collecting, recording and analysing practitioners' views is detailed in Chapter 3. This chapter is particularly important as it outlines a wholly new approach to studying the use of technology within legal practice, an important contribution of this thesis. Along with Chapter 2, it highlights key epistemological failings of the current literature and identifies the Social Construction of Technology perspective as an alternative to the deterministic approach that typifies existing literature. More

widely, it makes the case for borrowing methodological tools from within the Social Sciences to advance this research area and socio-legal studies generally.

Each of the research questions was explored in the three subsequent chapters. The first question on the current uptake and use of technology was addressed in Chapter 4. There, it was demonstrated that, whilst the LegalTech market has grown significantly in recent years, there remains a limited number of technologies specifically for personal injury practice. Despite this, five principle technologies for personal injury were identified: case management systems, document assembly tools, legal research tools, damage calculation tools and legal analysis tools. Reviewing the current uptake of technology by practitioners, it was argued that case management systems are the central technology within personal injury practice, building on previous research outcomes from Buchan et al and Goriely et al.² All but two of the participants interviewed had access to comparable case management systems, with these participants instead making use of three separate systems to undertake similar functions. The vast majority of participants also had access to at least one legal research tool, LawTel, Lexis Nexis and Westlaw being the most common. However, beyond this there was little uptake of technology reported at interview. It was, therefore, concluded that whilst more, though not all, practitioners now have digital access to legal resources, the technologies reported are not significantly different to the most sophisticated systems reported in 2002.³ Thus, whilst technical capabilities may have grown at an exponential rate and the LegalTech market on the whole has expanded, the uptake of new technologies within the personal injury firms studied has not followed a similar trajectory.

Although the uptake of case management systems was consistent across the interviews, uses varied. The interviews highlighted a general perception that senior practitioners use the technology less than junior practitioners. Potential reasons offered for this included a link between seniority and age, an unwillingness for senior

² Andrew Buchan, Jenny Kennedy and Eliot Woolf, *Personal Injury Practice* (Tottel Publishing 2008); Tamara Goriely, Richard Moorhead and Pamela Abram, *More Civil Justice? The impact of the Woolf reforms on pre-action behaviour*, 2002)

³ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (n 2), p.49

practitioners to adapt and, quite simply, that practitioners working at different levels undertake different day-to-day tasks. However, examining their uses at four levels of practitioner, it was concluded that, despite this perception, senior practitioners do use a case management system regularly, albeit in different ways to junior practitioners. Junior practitioners were more likely to use a case management system in a way that aids the substantive handling of a claim than senior practitioners who generally reported using a case management system to assist in the processual side of their role only.⁴ It was further concluded that the uses of case management systems have not significantly changed since 2002.⁵

Chapter 4 also explored the second research question concerning practitioners' perceptions of technology. The general message from the interviews was that, notwithstanding a number of user issues, including design flaws, software bugs and issues of user ability, the technologies currently used are perceived as useful. Case management systems were highlighted as making practitioners' daily work more time and cost efficient, however they were perceived as most beneficial for menial, though time-consuming, tasks which are characteristic of lower-value work. This finding is consistent with previous research that suggests there has been greater standardisation and automation for lower-value claims than higher. 6 Nonetheless, it was concluded that LegalTech has capacity to improve the efficiency of personal injury claims across the board. Specific issues most commonly related to software being insufficiently capable of dealing with nuances within a case; and at a broader level, all participants described their systems as generally unfriendly to the user. It was concluded that practitioners' positive perception of technology, in spite of these issues, starkly contrasts the characterisation of lawyers as cynical deniers of technology.

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⁴ Table 4.2 illustrates the uses of case management systems identified from the interview data at each of these practice levels: paralegal, legal executive, lawyer and manager/partner.

⁵ More Civil Justice? The impact of the Woolf reforms on pre-action behaviour, (n 2)

⁶ Richard Lewis and Annette Morris, *A Socio-Legal Analysis of Personal Injury Claims in Three European Countries: England and Wales* (Unpublished Manuscript 2019)

Chapter 5 addressed the third research question concerning the ways in which technology has transformed personal injury practice. Examining various models for transformation by technology, it rejected the idea that 'denial' is a discrete phase in the journey towards disruption and demonstrated that, where practitioners already make use of automating technologies, doubt and denial about future technologies remain. It likewise rejected the staged, linear model towards disruption and concluded that, whilst existing models offer an accessible starting point, none stands up to critical evaluation. It, therefore, proposed that automation and disruption are best considered processes and not stages, less so destinations, in which doubt and denial have a continuous role. On this basis, it combined the three models of 'disruption', 'commoditisation' and 'externalisation' to make sense of their relationship with each other. Using this original remodelling of the theoretical models to structure the discussion, four findings were identified: that technology has already transformed practices by automating legal tasks, by replacing lawyers with non-lawyers using systems and by public access to legal knowledge referred to as commons; and that some bespoke legal work remains.8

Discussing the transformation of practice by LegalTech and by ubiquitous technologies, it argued that, though limited to automation, both categories of technology have had a revolutionary impact on personal injury work. By facilitating the downgrading of legal work and the employment of non-qualified practitioners, LegalTech has shifted the work from a bespoke craft carried out by qualified lawyers to a somewhat standardised craft carried out by non-qualified personnel using systems, under supervision. Ubiquitous technologies have contributed to a more demanding clientele who increasingly dictate the terms of their relationship with practitioners. Chapter 5 concluded that these transformations challenge the concept of the expert legal professional. While none of the participants acknowledged this, increased use of paraprofessionals, frequent questioning of practitioners' advice by clients and the terms of the client-professional relationship being increasingly

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⁷ See Fig.5.4

⁸ See Section 5.2.1

dictated by 'what clients want' all demonstrate a challenge to professional autonomy and expertise at the collective and individual level.

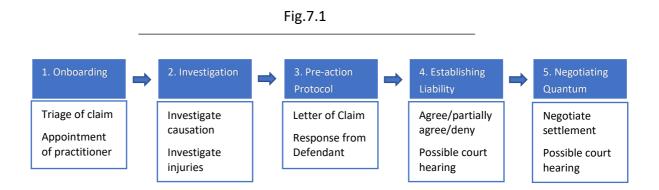
Chapter 6 addressed the final research question concerning the drivers and tensions that shape practitioners' engagements with technology. It is here that the deterministic approach referenced throughout the thesis is explored in greater depth, with specific reference to Susskind's three drivers for change. Rejecting the determinist approach and drawing heavily on the interview data, Chapter 6 concludes that the financial pressure on firms to reduce costs has been the primary driver towards automation in personal injury practice. However, this financial pressure has come from policy changes aimed at tackling the issues of cost and delay, and the perceived compensation culture. It is, therefore, as much socially and politically driven as it is economically – a point not captured by Susskind's more-for-less challenge. It further concludes that the importance of quality has been a secondary driver towards automation, ensuring that the strive for efficiency does not result in a reduction in quality. By assisting junior practitioners with case handling, qualified lawyers with supervision and senior managers with governance, case management has been a crucial tool for maintaining quality and standards across practice. However, the concern for quality was also observed as a tension with respect to disruption. Practitioners' rejection of disruptive technologies is consequently based on a genuine concern for the future quality of legal services should disruptive technologies come to replace lawyers. This concern is linked with issues of trust that practitioners and the public reportedly share. Though Susskind and Susskind reject trust as a valid objection, this thesis concludes that, without a legal framework to establish liability when sophisticated technologies fail, trust is a primary barrier to both professional and public acceptance of such systems.

7.3 The Role of Technology During the Life of a Multi-Track Claim

At interview, each participant was asked to tell the story of the life of a claim, highlighting any technologies that might be involved throughout. From the responses

given, the following 'typical' multi-track claim has been constructed as a method of retelling those stories in one. Its purpose, much like composite narratives used in ethnography, is to present, in a unique way, a snapshot of the current role of technology within multi-track personal injury practice and "reveal some typical patterns or dynamics found across multiple observations through one particularly vivid, unified tale".9 It is both an accurate and a creative narrative, drawing together multiple reports from across the data to construct a single story. 10 Hayes describes this in the socio-legal context as a method of "binding" strands together to offer "distinct insights into law at work" based on the everyday experiences, perceptions and interpretations of participants. 11

This study has identified five stages in the life of a multi-track claim into which the tasks involved in resolving a claim can be organised. These stages, illustrated in Fig. 7.1, are original to this thesis and have been developed to structure the following account.



1. Onboarding

The initial stage of any claim is 'onboarding', during which time the claim is triaged and an appropriate practitioner is appointed to handle the claim. Clients generally contact the firm by telephone or via a web page in order

⁹ Paula Jarzabkowski, Rebecca Bednarek and Kane K Le, 'Producing persuasive findings: Demystifying ethnographic textwork in strategy and organization research' (2014) 12 Strategic Organization 274, p.281

¹¹ Lydia Hayes, Stories of Care: A LAbour of Law (Palgrave 2017), pp.1-3

to discuss their injuries with an individual dedicated to onboarding. Where a webpage is used, this prompts a call-back when the information submitted is reiterated and expanded upon. The telephone is therefore the primary tool, supplemented by a website, at the point of first contact.

This initial conversation gathers sufficient information to 'triage' the claim towards the right department. In smaller firms this is done by a paralegal or legal secretary and in larger firms, customer relations personnel conduct the call, supported by a flowchart of standard questions. During the triaging, the claim will be identified as a fast-track or a multi-track claim and, once allocated to a track, is sent by email to the relevant team. The claim, indicatively valued at £25,000 to £45,000, is sent to the team manager, a senior solicitor who supervises a team of around 4 more junior solicitors. Each of these supervises an even larger team of paralegals and legal executives. With only brief information about the claim, the manager allocates the claim to an appropriate solicitor, considering the value of the case, risk involved and any complicating characteristics which may require some specific expertise. For example, there might be a solicitor who has experience of handling injuries caused abroad. The solicitor appointed now has (and will maintain) ultimate responsibility for the claim and may handle the case personally or delegate it to a legal executive or paralegal under their supervision.

2. Investigation

After a claim handler is appointed, further investigating will be required. First there is an investigation into the factual causes of the injury. The practitioner contacts the client via telephone to get a better understanding of their version of the incident. After this conversation, relevant notes are typed and emailed to the client for confirmation. The practitioner will very rarely meet the client at this stage, unless the claim is of significant value,

then the claimant might visit the office, or if the injury is medically related and ongoing, the practitioner might visit the client in hospital. If a client does not have access to email, the practitioner may use a proxy (a friend or family member) to communicate via email or, failing that, will send a letter by post for the client to approve and return. This is usually only an issue for elderly clients.

Once the client's version of the incident is confirmed, the practitioner enters this into the case management system as a word file, along with any documentary evidence that the claimant has sent. From this, the practitioner seeks to establish causation in fact, asking literally *how did the injury occur?* In the vast majority of cases, answering this question is sufficient to establish fault, as liability is usually only disputed on the basis of facts. Establishing causation in law is, therefore, rarely considered at this stage.

Having established the facts according to the claimant, the practitioner investigates the extent of the injuries sustained, paying particular attention to the connection between each injury and the alleged facts. If the injuries are considerable and ongoing, or if the connection between the incident and the injuries is not immediately obvious, then an expert medical report may be needed, requiring the claimant to attend a medical examination. Otherwise, hospital records, doctors' notes and photographs of the injuries will suffice. Expert medical reports are received by email as a word document directly from the medical expert, who is appointed by the case handler from a list of approved experts held at their firm. Photographs are received from the client usually by email or WhatsApp to the practitioner's work mobile phone. Copies of hospital records and doctors' notes are mostly received in hard copy by recorded delivery. They are occasionally received by email but are often too large to send as an attachment. The case handler, or a more junior paralegal assisting them, will scan these records so that a digital copy can be held on the case management system. Once this evidence is gathered, the practitioner reviews the case in full and comes to a judgement on the chances of success and potential risk to the firm. This involves days of reading through all of the evidence in order to prove their client's case. With this evidence, they are also in a better position to more accurately value the claim which is done following the Judicial College Guidelines. If there are special damages, these are most likely calculated manually using excel. The practitioner's assessment is run past their supervising solicitor who, despite having digital access to the case file through the case management system, they will most likely consult in a face-to-face meeting. For high value and complicated cases, a barrister may also be employed to give advice on the likely value of the claim. The case may be reallocated to another, more relevant, practitioner at this stage and some cases will be dropped by the firm all together, if their assessment concludes that the chance of failure and financial risk to the firm is too great. In such cases, the expenses accrued are written off, costing a large London based firm in excess of £4m annually.

3. Pre-action Protocol

Once the practitioner is satisfied that they have sufficient evidence, a letter of claim is sent to the defendant. This letter is based on a template provided by the case management system. The system automates the defendant's address, the case reference number, the date and the letter head for the solicitor with responsibility for the claim. There is some suggested text to structure the letter, however the case handler routinely deletes this and types their own letter, copying and pasting some text from letters that they have previously written. Once written, the letter is emailed to the supervising solicitor for approval and then posted to the defendant by recorded delivery. This is marked as complete on the case management system's task list.

This is a formal stage of the pre-action protocol dictated by the Civil Procedure Rules. After the letter of claim is sent, the defendant has 21 days to acknowledge receipt and, thereafter, a further three months to carry out their own investigation. These two dates are automatically inserted into the claimant practitioner's diary and the task list by the case management system when they notify it that the letter of claim has been sent. During this time the client will likely chase the practitioner by email and telephone two or three times for an update, despite having been told that the defendant has three months in which to respond. In some cases, they will send a text message to the practitioner's work mobile phone, having obtained this number form their email signature. The practitioner will generally respond by call, however, to discourage communication by text. The firm does not have a portal that enables clients to personally check the progress of their case, although they are aware that their case management system can do this and that it would save time wasted on unnecessary communication with clients.

4. Establishing liability

Once the defendant, or more often the defendant's insurer, has carried out their investigations, they can either accept, partially accept or deny liability. If liability is accepted, then they will move on to negotiating the value of the claim, known as quantum. If the defendant denies liability fully or partially, then they will negotiate liability with the claimant. This may be on the basis of facts which both parties will attempt to evidence, or on points of law. Precedent is important if points of law are disputed and the claimant practitioner will use a legal research tool (typically Westlaw, Lexis Nexis or LawTel) to access relevant precedents that support their case. The leading legal research tools frequently return multiple irrelevant results, especially if the search terms used are not precise. The experienced practitioner, knowing what they are looking for, will navigate this with ease. However, a

less experienced practitioner, or even an experienced practitioner working in an unfamiliar area, will find this more challenging. The practitioner therefore relies on Google to narrow their search terms before returning to the legal research tool.

If the parties cannot agree on the extent of the defendant's liability, then the claimants may seek to resolve the claim in at courts. Court documents are downloaded, signed and served by hand as there is not yet a system in place to do so digitally. HM Courts and Tribunals does have a digital service for completing the documentation, but this still needs to be printed, hand signed and delivered to the courts along with hard copies of all of the evidence from each side. Hearings take place physically, before one judge to establish the facts and decide liability. The case will most likely settle before court proceedings are initiated and may still settle at any time during a hearing.

5. Negotiating Quantum

Once liability is established, by judgment or agreement, the parties will negotiate a quantum. As with establishing liability, if the parties cannot agree a settlement on the value of the claim, the courts will decide an amount, guided by the Judicial College Guidelines and relevant precedent. Even if liability is accepted by the defendant, further medical evidence may be required at this stage in order to prove the extent of the injury and value of the damages. As with establishing liability, each party will rely on precedent sourced from a legal research tool in order to negotiate the value of the claim. At present, there is no claims valuation tool on the market that is endorsed by the courts, or the Law Society. Tools which some firms advertise on their website are only used at the onboarding stage as a marketing tool to attract clients. They are generally not trusted to give accurate valuations.

7.4 Contribution of this Thesis and Thoughts for the Future

Beyond the substantive conclusions offered, this thesis brings a wider contribution, not just to the study of law and technology but to socio-legal scholarship generally. For the former, it provides the beginnings of an empirically informed commentary on the role of technology within legal practice, which builds on existing literature to take a fast-moving area of legal scholarship beyond the theoretical and speculative. It paves the way for further empirical enquiry and opens more questions to explore as we set out to better understand the phenomena of LegalTech. For the latter, it makes its own contribution to the development of empirical methods within social-legal scholarship, by developing and applying a systematic method, influenced by the Social Sciences, to the study of civil justice.

This thesis has argued that there has been limited use of automating technologies within the practices studied. Although these technologies are a far cry from the disruptive technologies predicted, they have enabled a form of 'deskilling' within personal injury practice. However, high-value work has largely resisted automation and this thesis has noted three reasons for this: that this work is bespoke and requires a qualified legal expert; that the risk associated with deskilling this work is greater; and that there is less of a financial incentive for automation at this level. The extent to which this work is actually bespoke appears to be a point of contention between practitioners and LegalTech enthusiasts. This thesis has identified that some bespoke crafting remains in all of the work studied but the extent of this has not been examined in detail. As has already been noted, on participant candidly commented:

The work is bespoke it's not as bespoke as people think it is and it's not as bespoke as lawyers claim it is but it still is bespoke 12

Identifying where the line between genuinely bespoke and standard work lies is an inherently speculative and temporary task, as neither technology nor practice stands still. Identifying a fixed point is also going to be contested. However, the current situation of commentators claiming that most legal work is standardisable and

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¹² Interview 14

practitioners claiming that most legal work is bespoke is not sustainable. This area, therefore, requires further research, perhaps to be undertaken longitudinally, as technology develops and practicing perceptions shift.

Connected with the standard-bespoke dichotomy is the balance that needs to be struck between the cost and quality of legal work. As Chapter 6 concluded, technology is currently leveraged to reduce costs without lowering quality, but the effectiveness of this depends largely on the ability to standardise legal tasks. For lower-value multi-track work, participants reported using non-qualified practitioners, assisted by technology, under supervision to satisfy the need for efficiency and quality simultaneously. However, participants expressed reluctance for this model to extend up the costs ladder where the potential risk is greater and the incentive less urgent. This balance, therefore, also encompasses a 'risk-reward' calculation. Practitioners appear, for the time being, to have found an equilibrium that satisfies coast and quality at an acceptable risk. However, the question that seems pertinent, perhaps more so than trying to predict where future drivers might come from, is: how stable is that equilibrium?

On the quality side, as technology improves, will it assist in standardising more legal work? Will improvements reduce the risk involved in removing the legal expert further from the work? Or, will increasingly autonomous technologies increase the perception of risk and further the tension against disruption?

On the costs side, will there be further pressure on practitioners to reduce costs? Will technology eventually make the cost incentive to standardise higher-value work more worthwhile? Or will continued automation increase the efficiency savings over time and make disruption even less likely?

Despite the growing attention on the impact of technology in law, there has been very little discussion of the funding required to embed technologies into legal practices. It is surprising given that so much of the focus within recent commentary (and, as this study has shown, within practitioners' own thoughts) has been on the cost of providing legal services, that the cost-effectiveness of legal technologies has

not received more attention. Existing literature presents technology as the solution to practicing within tighter cost restrictions – a position that necessarily assumes that investment in technology is cost-effective. Whilst Chapter 6 demonstrated that for personal injury practice the limited uptake of automating technologies has been driven largely by the need to reduce costs, it should not be assumed that in all cases that investment is worthwhile. This is an area that existing literature has neglected and, given the significance of cost efficiency highlighted in this study, is an area that deserves attention.

The three dichotomies identified above (quality-efficiency; risk-reward; cost-benefit) are, of course, all socially situated. There are two contexts which stand out in this thesis that need to be examined alongside or separate to the above focus. First is the issue of public trust in technology. Whilst the risk-reward ratio is key for practitioners, successful use of sophisticated technology in law must have the confidence of the public who are, ultimately, the service users. Public perceptions of trust in LegalTech compared with legal professionals is, therefore, a big area of future research. Second is the use of technology by the courts. As identified in this thesis, practitioners' use of technology is somewhat influenced by their interactions with court systems. Therefore, future discussions on the use of technology by practitioners need to informed by the extent to which court processes influence practitioner methods and vice versa. As highlighted in Chapter 4, the experiences of practitioners utilising virtual hearings as a result of the Covid-19 lockdown this year have potential to uncover some interesting dynamics. As the online courts have been hotly discussed but with little progress made in recent years, recent experiences offer a time limited opportunity to identify some of the perceived threats and opportunities from the experience. It is, therefore, an immediate are for future research.

7.5 Final Thoughts

This thesis has already demonstrated the need for a new approach to the study of technology within the legal profession, which applies equally to the professions in general, and has led the way in doing this. Looking at the work that precedes it, it is clear that the speculative tone that has characterised the leading commentaries for the past four decades is not helpful. When we revisit these accounts, we can retrospectively see that very few of the predictions made by Susskind and others have materialised. Technology has become an increasingly important part of our work and social lives, but the seismic transformations predicted to irreversibly change legal practice and the role of the legal professional have not been seen in this study, nor empirically shown in any preceding it. This is not to discredit the crux of these arguments, that technology will have an increasingly important role to play within professional practice and the administration of justice over time, but rather to suggest that four decades of relatively poor speculation surely demonstrates that those who have approached the subject thus far have focused too heavily on the future at the expense of grounding predictions in an understanding of the present. How and why people actually interact with technology today demands our immediate attention, that we may empirically understand the phenomena of LegalTech in the present, before we begin to consider the future.

Although this thesis has spent some time critiquing existing literature for this, it is important that the literature is not ignored, as technological visions of the future are neither ephemeral nor irrelevant. Visions for the future shape expectations and drive both social and technical activities that determine the types of technologies available and in use. They can, thus, have a "major impact in creating particular trajectories [that] shape all subsequent activity". Within pharmacogenetics, Hedgecoe and Martin claim that visions:

"provide industry with ideas about how profits might be made, clinicians with a guide to how a new technique can be integrated into practice, patients with the hope of improved care, and regulators with a framework for governing an emerging technology".¹⁴

¹³ Adam Hedgecoe and Paul Martin, 'The Drugs Don't Work: Expectations and the Shaping of Pharmacogenetics' (2003) 33 Social Studies of Science 327, p.355

¹⁴ Ibid, p.355

These dynamics can be seen within the legal profession too. All of the participants in this study reported that the primary driver for investing in LegalTech has been time and cost efficiency, the two key factors affecting the profitability of claims. Case management systems have been deployed as a way of facilitating streamlined processes and integrating standardised practices. Practitioners perceive that this has potential to improve the speed at which clients' claims will be resolved, without sacrificing on the quality of service; and policy makers have incorporated technological promise within their own visions for the future during periods of reform.

Whilst this study has not examined the influence of visions, the influence of LegalTech's main visionary in the UK is easy to see. Susskind's role as IT advisor to the Lord Chief Justice and his involvement in several government inquiries, including the Woolf Review, puts him at the centre of government thinking on the present and future role of technology within practice. Moreover, the popularity of his work has given his visions considerable exposure. If, as Hedgecoe and Martin suggest, visions shape activity, then continued speculation is not just unhelpful, but has potential to be damaging for the future of legal services and of LegalTech. The prospect of four more decades of speculation is unthinkable if practitioners are to make the most of technological advancements.

Bibliography

Books

- Abel R, The Making of the English Legal Profession 1800-1988 (Beard Books 1988)
- Atkinson P, For Ethnography (Sage 2015)
- Atkinson P and Coffey A, 'Revisiting the Relationship Between Participant

 Observation and Interviewing' in Holstein J and Gubrium J (eds), Inside

 Interviewing: New Lenses, New Concerns (Sage 2004)
- Atkinson P and Hammersley M, Ethnography: Principles in Practice (Routledge 2007)
- Becker HS, 'How I Learned What a Crock Was' in Hertz I and Imber JB (eds), Studying Elites Using Qualitative Methods (Sage 1995)
- Bijker WE, Of Bicycles, Bakelites, and Bulbs (The MIT Press 1995)
- Bing J and Harvold T, Legal Decisions and Information Systems (Universitetsforlaget 1977)
- Blackman J, 'The Path of Big Data and the Law', Big Data, Big Challenges in Evidence-Based Policy Making (West Academic Press 2014)
- Braverman H, Labor and Monopoly Capital (Monthly Review Press 1974)
- Brewerton P and Millward L, Organizational Research Methods: A Guide for Students and Researchers (1st edn, Sage 2001)
- Brooks R, Cheaper by the Hour: Temporary Lawyers and the Deprofessionalization of the Law (Temple University Press 2012)
- Brown W, Undoing the Demos: Neoliberalism's Stealth Revolution (MIT Press 2015)
- Buchan A, Kennedy J and Woolf E, Personal Injury Practice (Tottel Publishing 2008)
- Bull C and Bason D, Law Firms in the Digital Age (Managing Partner 2013)

Capper P and Susskind R, Latent Damage Law the Expert System (Butterworths 1988)

Christensen C, The Innovator's Dilemma (Harvard Business School Press 1997)

Collins H and Evans R, Rethinking Expertise (University of Chicago Press 2007)

Cownie F and Bradney A, 'Socio-legal Studies a challenge to the doctrinal approach' in Watkins D and Burton M (eds), Research Methods in Law (Routledge 2017)

Crevier D, AI: The Tumultuous Search for Artificial Intelligence (Basic Books 1993)

Croteau D and Hoynes W, 'Media/Society: Industry, Images and Audiences', (Pine Forge Press 1997)

Edwards R and Holland J, What is Qualitative Interviewing? (Bloomsbury 2013)

Eraut M, Developing Professional Knowledge and Competence (Routledge Falmer 2003)

Fischer C, America's Calling. A Social History of the Telephone to 1940 (University of California Press 1992)

Fishbein M and Ajzen I, JZEN, Belief, Attitude, Intention and Behavior: An Introdluction to Theory and Research (Addison-Wesley 1975)

Foucault M, Discipline and Punish: The Birth of the Prison (Pantheon Books 1977)

Freidson E, Profession of Medicine: A Study of the Sociology of Applied Knowledge (University of Chicago Press 1988)

Freidson E, Professionalism Reborn: Theory, Prophecy and Policy (Polity Press 1994)

Freidson E, Professionalism reborn. Theory, Prophecy and Policy (Polity Press 2004)

Genn H, Judging Civil Justice (Cambridge University Press 2008)

Glaser BG and Strauss AL, The Discovery of Grounded Theory (Aldine 1967)

Gunther AB, Entrepreneurial Strategies of Professional Service Firms: An Analysis of Commercial Law Firm Spin-offs in Germany (Springer Gabler 2012)

Hammersley M, Methodology: Who Needs It? (1st edn, Sage 2011)

Hayes L, Stories of Care: A Labour of Law (Palgrave 2017)

Hedgecoe A, The Politics of Personalised Medicine: Pharmacogenetics in the Clinic (Cambridge University Press 2004)

Hildebrandt M, Smart Technologies and the end(s) of Law (Edward Elgar Publishing 2015)

Jenkins C and Sherman B, The Collapse of Work (Eyre Methuen 1979)

Johnson TJ, Professions and Power (Palgrave Macmillan 1972)

Katsh ME, Law in a Digital World (Oxford University Press 1995)

Kowalski M, Avoiding Extinction: Reimagining Legal Services for the 21st Century (American Bar Association 2012)

Krippendorff K, Content Analysis: an introduction to its methodology (SAGE 1980)

Lenski G, Power & Privilege (University of North Carolina Press 1966)

Lewis R and Morris A, A Socio-Legal Analysis of Personal Injury Claims in Three

European Countries: England and Wales (Unpublished Manuscript 2019)

Lightfoot C, Tomorrow's Naked Lawyer (Ark Group 2015)

Mackenzie D and Wajcman J, The Social Shaping of Technology (Open University Press 1999)

Maister D, Green C and Galford R, The Trusted Advisor (Simon & Schuster 2002)

Mason J, Qualitative Researching (2nd edn, Sage 2002)

Massey P and O'Hare P, Competition Law and Policy -in Ireland (Oak Tree Press 1996)

Minsky M, Computation: Finite and Infinite Machines (Prentice-Hall 1967)

Mital V and Johnson L, Advanced Information Systems for Lawyers (Chapman & Hall 1992)

Morgan L, Ancient Society (Transaction Publishers 2000)

Morris C and Murphy C, Getting a PhD in law (Hart Publishing 2011)

Murphie A and Potts J, Culture and Technology (Palgrave Macmillan 2003)

O'Dair R, Legal Ethics Texts and Materials (Butterworths 2001)

Ogburn F, Social Change with Respect to Nature and Original Culture (Viking 1922)

Parsons T, Essays in Sociological Theory (The Free Press 1964)

Paterson A, Lawyers and the Public Good. Democracy in Action? (Cambrdge University Press 2012)

Patton M, Qualitative Evaluation and Research Methods (Sage 2002)

Pinch TJ and Bujker WE, 'The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology might Benefit Each Other' in Bijker WE, Hughes TP and Pinch TJ (eds), The Social Construction of Technological Systems (The MIT Press 1984)

Popple J, A Pragmatic Legal Expert System (Dartmouth Publishing 1996)

Rosenthal DE, Lawyer and Client: Who's in Charge? (Russel Sage 1974)

Rubin HJ and Rubin I, Qualitative Interviewing: The Art of Hearing Data (3rd edn, SAGE 2012)

Shorter E, Bedside Manners: The Troubled History at the Bedside (Cambridge University Press 1985)

Silverman D, Doing qualitative research (Fourth edition. edn, London : SAGE Publications Ltd 2013)

Simon H, The Shape of Automation for Men and Management (Harper & Row 1965)

Sorabji J, English Civil Justice after the Woolf and Jackson Reforms: A Critical Analysis (Cambridge University Press 2014)

Susskind R, Expert Systems in Law: A Jurisprudential Inquiry (Clarendon Press 1987)

Susskind R, The Future of Law (Clarendon Press 1998)

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

Susskind R and Susskind D, The future of the professions: how technology will transform the work of human experts (Oxford: Oxford University Press 2015)

Susskind R, Transforming the law: essays on technology, justice, and the legal marketplace (Oxford : Oxford University Press 2000)

Susskind RE, The end of lawyers? rethinking the nature of legal services (Oxford : Oxford University Press 2010)

Susskind R, Online Courts and the Future of Justice (Oxford University Press 2019)

Twinning WL, General Jurisprudence: Understanding Law from a Global Perspective (Cambridge University Press 2009)

Wark M, The Virtual Republic (Allen & Unwin 1997)

Webster F, Theories of the Information Society (Routledge 2002)

White L, The Evolution of Culture (Left Coast Press 1959)

Whitfield D, New Labour's Attack on Public Services (Spokesman Books 2006)

Wiener N, Cybernetics: or the Control and Communication in the Animal and the Machine (MIT Press 1961)

Book Sections

- Adler P, "Technological Determinism" in Clegg S (ed), The International Encyclopaedia of Organization Studies (Sage 2006)
- Derber C, 'The Proletarianization of the Professional: A Review Essay' in Derber C

 (ed), Professionals and Workers: Mental Labor in Advanced Capitalism (G K

 Hall 1983)
- Elston MA, 'The Politics of Professional Power: Medicine in a Changing Health

 Service' in Gabe J, Calnan M and Bury M (eds), The Sociology of the Health

 Service (1991)
- Hammersley M and Gomm R, 'Assessing the radical critiques of interviews' in Hammersley M (ed), Questioning Qualitative Inquiry: Critical Essays (Sage 2008)
- Haug MR, 'Computer Technology and the Obsolescence of the Concept of
 Profession' in M.R.Haug and J.Donfy (eds), Work and Technology (Sage
 1977)
- Hunter C, 'Introduction: Themes, Challenges and Overcoming Barriers' in Hunter C

 (ed), Integrating Socio-Legal Studies into the Law Curriculum (Palgrave

 Macmillan 2012)
- Hutchinson T, 'Doctrinal Research: Researching the Jury' in Watkins D and Burton M (eds), Research Methods in Law (Routledge 2013)
- Keynes JM, 'Economic Possibilities for our Grandchildren' in Keynes JM (ed), Essays in Persuasion (W.W.Norton & Co. 1930)
- Liu S, 'Foreword' in Dingwall R and Lewis P (eds), The Sociology of the Professions:

 Lawyers, Doctors and Others (Macmillan Press 2014)
- Lewis R and Morris A, A Socio-Legal Analysis of Personal Injury Claims in Three

 European Countries: England and Wales (Unpublished Manuscript 2019)

- Morris A, 'Deconstructing Policy on Costs and the Compensation Culture ' in Quil; E and Friel RJ (eds), Damages and Compensation Culture: Comparative Perspectives (Hart 2016)
- II EC, 'The Social Locus of Technological Practice: Community, System, or Organization?' in Bijker W, Hughes T and Pinch T (eds), The Social Construction of Technological Systems (The MIT Press 1987)
- Irwin A and Wynne B, 'Introduction' in Irwin A and Wynne B (eds),

 Misunderstanding Science? The public reconstruction of science and
 technology (Cambridge University Press 2003)
- Lewis R, 'Structural Factors Affecting the Number and Cost of Personal Injury Claims in the Tort System' in Friel EQR (ed), Damages and Compensation Culture: comparative perspectives (Hart 2016)
- McKenzie D and Wajcman J, 'Introductory essay: the social shaping of technology' in McKenzie D and Wajcman J (eds), The Social Shaping of Technology (Open University Press 1999)
- Morris A, 'Deconstructing Policy on Costs and the Compensation Culture ' in Quil; E and Friel RJ (eds), Damages and Compensation Culture: Comparative Perspectives (Hart 2016)
- Morris A, 'Personal Injury Compensation and Civil Justice Paradigms' in Halson R and Campbell D (eds), Research Handbook on Remedies in Private Law (Edward Elgar Publishign Ltd 2019)
- Munro V, 'The master's tools? a feminist approach to legal and lay decision-making' in Watkins D and Burton M (eds), Research Methods in Law (Routledge 2017)
- Niblett B, 'Computer Science and Law: An Introductory Discussion' in Niblett B (ed),
 Computer Science and Law (Cambridge University Press 1979)
- Weber M (ed), Economy and society: An outline of interpretive sociology. Edited by Guenther Roth and Claus Wittich (University of California Press 1978)

- Webley L, 'Qualitative Approaches to Empirical Legal Research' in Cane P and Kritzer

 H (eds), The Oxford Handbook of Empirical Legal Research (Oxford University

 Press 2010)
- Wheeler S and Thomas PA, 'Socio-Legal Studies' in Hayton D (ed), Law's Futures (Hart Publishing 2000)
- Zander M, 'Why Woolf's Reforms Should be Rejected' in Zuckerman AAS and
 Cranston R (eds), Reform of Civil Procedure (Oxford University Press 1995)

Journal Articles

- Ali NA and others, 'The Personal Injury Claims Calculator (PICC) System' (2017) 7

 International Journal of Academic Research in Business and Social Sciences
- Ambrogi R, 'A Golden Age of LegalTech Start-Ups' (2017) 43 Law Practice
- Arnold T, 'Using Technology to Stay in the Personal Injury Market' (2016) 3 Journal of Personal Injury Law
- Atkinson P, 'Qualitative Research Unity and Diversity' (2005) 6 Forum: Qualitative Social Research
- Bausor D, 'Review of Susskind, R, The Future of Law: Facing the Challenges of Information Technology' (1999) 2(1) Digital Technology Law Journal
- Bing J, 'Let there be LITE: a brief history of legal information retrieval' (2010) 1

 European Journal of Law
- Bok S, 'Can Lawyers be Trusted?' (1990) 138 University of Pennsylvania Law Review 913
- Braun V and Clarke V, 'Using Thematic Analysis in Psychology' (2006) 3 Qualitative Research in Psychology
- Brown JS and Duguid P, 'Knowledge and Organization: A Social-Practice Perspective' (2001) 12 Organization Science 198
- Buchanan B and Headrick T, 'Some Speculation About Artificial Intelligence and Legal Reasoning' (1970) 23 Stanford Law Review 40
- Burnard P, 'A Method of Analysing Interview Transcripts in Qualitative Research' (1991) 11 Nurse Education Today
- Cannataci J, 'Law, Liability and Expert Systems' (1989) 3 AI & Society 169
- Christensen C, 'Disruptive Technologies Catching the Wave' (1995) Harvard Business
 Review

- Cucina and Vasilopoulos, 'Personality-Based Job Analysis and the Self-Serving Bias' (2005) 20 Journal of Business and Psychology 275
- Davidson PM, 'Is Verbatim Transcription of Interview Data Always Necessary?' (2006) 19 Applied Nursing Research
- Davis FD, Bagozzi RP and Warshaw PR, 'User Acceptance of Computer Technology: A Comparison of Two Theoretical Models ' (1989) 35 Management Science
- Dingwall R and Cloatre E, 'Vanishing Trials: An English Perspective' (2006) 2006(1)

 Journal of Dispute Resolution 51
- Duca LFD, Rule C and Rimpfel K, 'eBay's De Facto Low Value High Volume Resolution

 Process: Lessons and Best Practices for ODR Systems Designers' (2014) 6

 Arbitration Law Review 204
- Durante F, 'Nations' Income Inequalities Predicts Ambivalence in Stereotype

 Content: How Societies Mind the Gap' (2013) 52 British Journal of Social

 Psychology
- Elo S and others, 'Qualitative Content Analysis: A Focus on Trustworthiness ' (2014)

 4 Sage Open
- Freeman-Engstrom N, 'Run-of-the-Mill Justice' (2009) 22 The Georgetown Journal of Legal Ethics 1485
- Frey CB and Osborne MA, 'The Future of Employment: How Susceptible Are Jobs to Computerisation?' (2013) 114 Technological Forecasting and Social Change 254
- Friske ST and Dupree C, 'Gaining Trust as well as Respect in Communicating to

 Motivated Audiences About Science Topics' (2014) 11 Proceedings of the

 National Academy of Sciences 13593
- Frostenson M, 'Three forms of professional autonomy: deprofessionalisation of teachers in a new light' (2015) Nordic Journal of Studies in Educational Policy

- Funk J, 'What's Behind Technological Hype?' (2019) XXXVI Issues in Science and Technology
- Galanter M, 'A World Without Trials' (2006) 7(1) Journal of Dispute Resolution 7
- Gilbert C and Bower J, 'Disruptive Change: When Trying Harder Is Part of the Problem' (2002) Harvard Business Review
- Gill TG, 'Early Expert Systems: Where Are They Now?' (1995) 19 MIS Quarterly 51
- Glasser, 'Solving the Litigation Crisis' (1994) 1 The Litigator
- Greenwood E, 'Attributes of a Profession' (1957) 2 Social Work 45
- Gurney C, 'Lowering the Drawbridge: metaphor and analogy in the social construction of home ownership' (1999) 36 Urban Studies
- Hamilton A, 'The Rise of the Paralegal' (2019) 169 New Law Journal
- Hanycz C, 'More Access to Less Justice: Efficiency, Proportionality and Costs in Canadian Civil Justice Reform' (2008) 27 Civil Justice Quarterly
- Harrington WG, 'A Brief History of Computer-Assisted Legal Research' (1985) 77 Law Library Journal
- Haug MR, 'Deprofessionalization: An Alternative Hypothesis for the Future' (1972) 20(1) The Sociological Review
- Haug M, 'The Deprofessionalization of Everyone?' (1975) 8 Sociological Focus 197
- Haug MR and Lavin B, 'Practitioner or Patient Who's in Charge? ' (1981) 22(3)

 Journal of Health and Social Behavior 212
- Haug MR, 'A Re-Examination of the Hypothesis of Physician Deprofessionalization'
 (1988) 66(Suppl 2: The Changing Character of the Medical Profession) The
 Milbank Quarterly 48

- Hedgecoe A and Martin P, 'The Drugs Don't Work: Expectations and the Shaping of Pharmacogenetics' (2003) 33 Social Studies of Science 327
- Hewitt J, Thomas P and Wilson J, Professionalism in British Management: Bogus Claim or Reality? (2007) European Critical Accounting Studies
- Hofmann B, 'Hofmann, B. Progress Bias Versus Status Quos Bias in the Ethics of Emerging Science and Technology' (2020) 34 Bioethics 252
- Jarzabkowski P, Bednarek R and Le KK, 'Producing persuasive findings: Demystifying ethnographic textwork in strategy and organization research' (2014) 12

 Strategic Organization 274
- Kamalendu P and Campbell J, 'ASHSD-II: A Computational Model for Litigation Support' (1998) 15(3) Expert Systems
- Keenan A and Newton TJ, 'Frustration in organizations: Relationships to Role Stress,

 Climate, and Psychological Strain' (1984) 57 Journal of Occupational

 Psychology 57
- Lazar J, Jones A and Shneiderman B, 'Workplace User Frustration with Computers:

 An Exploratory Investigation of the Causes and Severity' (2006) 25 Behaviour

 & Information Technology 239
- Lilleker D, 'Interviewing the Political Elite: Navigating a Potential Minefield' (2003) 23(3) Doing Politics 207
- Mander HHJM, 'The Judith Report' (1993) International Journal of Law and Information Technology
- Mant J, 'Neoliberalism, Family Law and the Cost of Access to Justice' (2017) 39

 Journal of Social Welfare and Family Law 246
- Mathieson K, 'Predicting User Intentions: Comparing the Technology Acceptance

 Model with the Theory of Planned Behavior' (1991) 2 Information Systems

 Research 173

- Mehl L, 'Automation in the Legal World' (1958) Proceedings of a Symposium on Mechanisation of Thought Processes 755
- Michael M, 'These Boots are Made for Walking: Mundane Technology, the Body and Human-Environment Relations' (2000) 6 Body and Society 107
- Morris M and Venkatesh V, 'Age Differences in Technology Adoption Decisions:

 Implications for a Changing Work Force' (2000) 53 Personnel Psychology 375
- Morris ZS, 'The Truth about Interviewing Elites' (2009) 29(3) Politics 209
- Niblett B, 'Expert Systems for Lawyers' (1981) 29 Computers and Law
- Noordegraaf M, 'From 'Pure' to 'Hybrid' Professionalism' (2007) 39 Administration and Society 761
- Oliphant K, Lewis R and Morris A, 'Tort Personal Injury Claims Statistics: Is There a

 Compensation Culture in the United Kingdom?' (2006) 14 Torts Law Journal

 158
- Ostrander S, "SURELY YOU'RE NOT IN THIS JUST TO BE HELPFUL": Access, Rapport, and Interviews in Three Studies of Elites' (1993) 22 Journal of Contemporary Ethnography 7
- Pal K and Campbell JA, 'An Application of Rule-Based and Case-Based Reasoning within a Single Legal Knowledge-Based System' (1997) 4 The Data Base for Advances in Information System 28
- Paterson AA, 'Professionalism and the Legal Services Market' (1996) 3 International Journal of the Legal Profession
- Pasquale F, 'Automating the Professions: Utopian Pipe Dream or Dystopian Nightmare?' (2016) Los Angeles Review of Books
- Pearce R and McGinnis J, 'The Great Disruption: How Machine Intelligence Will

 Transform the Role of Lawyers in the Delivery of Legal Services' (2014) 82

 Fordham law review

- Pinch TJ and Bijker WE, 'The Social Construction of Facts and Artefacts or How the Sociology of Science and the sociology of Technology might Benefit Each Other' (1984) 14 Social Studies of Science 399
- Podgers J, 'The Practice of Law: What Does the Future Hold?' (1980) 66 American

 Bar Association Journal 129
- Reda DS, 'The Cost-and-Delay Narrative in Civil Justice Reforms: its Fallacies and Functions' (2012) 19 Oregon Law Review 1085
- Reeves C, 'A Difficult Negotiation: fieldwork relations with gatekeepers' (2010) 10

 Qualitative Research
- Remus D and Levy F, 'Can Robots Be Lawyers?' (2017) 30 The Georgetown Journal of Legal Ethics 501
- Rothman RA, 'Deprofessionalization: the case of law in America ' (1984) 11 Work and Occupations 183
- Schueffel P, 'Taming the Beast: A Scientific Definition of FinTech' (2017) 4 Journal of Innovation Management 32
- Skar R, 'The Meaning of Autonomy in Nursing Practice' (2010) 19 Journal of Clinical Nursing 2226
- Spector PE, 'Organizational Frustration: a model and review of the literature' (1978)
 31 Personnel Psychology 815
- Stephens N, 'Collecting Data from Elites and Ultra Elites: Telephone and Face-to-Face Interviews with Macroeconomists' (2007) 7 Qualitative Research
- Susskind R, 'Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning' (1986) 49 Modern Law Review 168
- Taylor S and Todd P, 'Understanding Information Technology Usage: A Test of Competing Models' (1995) 6 Information Systems Research 144
- Thornberg E, 'Reaping what we sow: anti-litigation rhetoric, limited budgets, and declining support for civil courts' (2011) Civil Justice Quarterly

- Toren N, 'Deprofessionalization and its Sources' (1975) 2 Sociology of Work and Occupations
- Tunney J, 'The Problematic Role of Lawyers in the Creativity and Innovation Process' (2000) 9 Creativity and Innovation Management
- Wilensky HL, 'The Professionalization of Everyone?' (1964) 70 American Journal of Sociology 137
- Williams K, 'State of Fear: Britain's 'Compensation Culture' Reviewed' (2005) 25

 Legal Studies
- Willick MS, 'Professional Malpractice and the Unauthorized Practice of Professions:

 Some Legal and Ethical Aspects of the Use of Computers as Decision-Aids'

 (1986) 12 Rutgers Computers and Technology Law Journal 1
- Zuckerman A, 'A Reform of Civil Procedure Rationing Procedure Rather than

 Access to Justice' (1995) Journal of Law and Society

Reports

Adler M, RECOGNISING THE PROBLEM: Socio-Legal Research Training in the UK (2007)

Lord Justice Briggs, Civil Courts Structure Review: Interim Report (2015)

Lord Justice Briggs, Civil Courts Structure Review: Final Report (2016)

Chamness-Long S and Ponce A, Measuring the Justice Gap: A People-Centred
Assessment of Unmet Justice Needs Around the World (2019)

Lord Chancellor's Department, Departmental Report March 2001 (HM Treasury 2001)

Department of Constitutional Affairs, Competition and Regulation in the Legal Services Market (2003)

Civil Justice Council, Online Dispute Resolution for Low Value Civil Claims (2015)

Clementi D, Review of the Regulatory Framework for Legal Services in England and Wales. Final Report (2004)

ESRC, Review of Socio-Legal Studies: Final Report (1994)

Falconer C, Foreword to 2nd Civil Procedure Rules, HMSO (2005)

Goriely T, Moorhead R and Abram P, More Civil Justice? The impact of the Woolf reforms on pre-action behaviour (2002)

House of Commons Debate 15 November 2010 vol.518 col.659 (Hansard 2010)

House of Lords A.I Select Committee, AI in the UK: Ready, Willing and Able? (2018)

Ipsos Mori, Veracity Index (2015)

Ipsos Mori, Veracity Index (2016)

Ipsos Mori, Veracity Index (2017)

Ipsos Mori and MumsNet, Enough of Experts? Trust and the EU Referendum, 2016)

Lord Justice Jackson, Review of Civil Litigation Costs: Preliminary Report. Volume
One (2009)

Lord Justice Jackson, Review of Civil Litigation Costs: Preliminary Report. Volume
Two (2009)

Lord Justice Jackson, Review of Civil Litigation Costs: Final Report (2010)

Judicial College Guidelines for the Assessment of General Damages in Personal Injury Cases, 15th ed, Oxford University Press (2019)

The Law Society, LawTech Adoption Research (2019)

The Law Society TL, The Future of Legal Services (2016)

Tracxn, Legal Tech Sector Landscape Report (2019)

Middleton, P. Report to the Lord Chancellor, HMSO (1997)

- Ministry of Justice, Solving disputes in the county courts: creating a simpler, quicker and more proportionate system. A consultation on reforming civil justice in England and Wales (2011)
- Ministry of Justice, Solving disputes in the county courts: creating a simpler, quicker and more proportionate system. A consultation on reforming civil justice in England and Wales. The Government Response (2012)
- Ministry of Justice, Civil Liability Act 2019: Reforming the Soft Tissue Injury ('whiplash') Claims Process Impact Assessment (2019)
- Organisation for Economic Co-operation and Development and Initiative OSJ, Legal Needs Surveys and Access to Justice (2018)
- Panel on Fair Access to the Professions, Unleashing Aspiration: The Final Report of the Panel on Fair Access to the Professions, Cabinet Office (2009)

Report of the Royal Commission on Legal Services, London, HMSO (1979)

The Law Society, A Summary of Rupert Jackson's Final Report (2010)

The Law Society, Capturing Technological Innovation in Legal Services (2017)

Technology and Construction Solicitors Association, TeCSA IT Protocol (2003)

Lord Woolf, Access to Justice - Interim Report (1995)

Lord Woolf, Access to Justice - Final Report (1996)

Wannell O, 'Access to Justice: A Documentary Analysis of Civil Law Policy in England and Wales' (Cardiff University 2015)

World Justice Project, Ground-breaking Study Reveals Unmet Legal Needs
Worldwide (Washington: 2019)

YouGov and Tresorit, Trust in Tech Giants is Broken (2019)

Newspaper Articles

- Ames J, 'Top Firms Play it Smart with Al' The Times (5 October 2017)
- Bowcott O, 'Criminal Lawyers Asked to Take a 4% Pay Cut as Legal Aid' The Guardian (15 October 2014)
- Bulkeley WM, 'Technology: Bright Outlook for Artificial Intelligence Yields to Slow Growth and Big Cutbacks' Wall Street Journal (5th July 1990)
- Burnett S, 'Legally AI Disruption in Legal Services and Beyond' Legal Futures (January 2017)
- Cowan D, 'Take a Glimpse of the Future' Legal Innovation (The Times Supplement)
 2018
- Croft J, 'Legal Firms Unleash Office Automatons' Financial Times (16 May 2016)
- Krugman P, 'Sympathy for the Luddites' The New York Times (New York 13th June 2013)
- Little A, 'Curb the Fat Cat Lawyer' Express (26th April 2007)
- Manglani M, 'Artificial Intelligence to Radically Transform the Role of Lawyers'

 Managing Partner (23 October 2015)
- Markoff J, 'Armies of Expensive Lawyers, Replaced by Cheaper Software' The New York Times (4 March 2011)
- Martin P, 'Learning the Law from Littleton to Laser Disks and Beyond' GNN Magazine (April 1994)

Online Resources

- Above the Law, 'ROSS Intelligence Offers A New Take on Legal Research' (29th May 2019) Available at: https://abovethelaw.com/2019/05/ross-intelligence-offers-a-new-take-on-legal-research/#:~:text=Using%20artificial%20intelligence%2C%20ROSS%20will,law%20opposing%20counsel%20is%20missing.&text=Traditional%20legal%20research%20tools%20have%20not%20evolved%20over%20the%20last%20decade.&text=ROSS%20then%20uses%20Al%20to,and%20find%20what%20you%20need accessed 05 August 2020
- Ahalt A, 'What You Should Know About Online Dispute Resolution' The Practical
 Litigator, Available at:
 https://www.virtualcourthouse.com/index.cfm/feature/1_7/what-youshould-know-about-online-dispute-resolution.cfm accessed 28 July 2019
- Ambrogi R, 'Upsetting The Applecart Of Legal Research' Available at:

 https://abovethelaw.com/2017/05/upsetting-the-applecart-of-legal-research/ accessed 20 June 2018
- Ardana J, Cheap Shots at the Gartner Hype Curve (Catenary 2006) Available at:

 https://catenary.wordpress.com/2006/10/22/cheap-shots-at-the-gartner-hype-curve/ accessed 20 September 2020
- Astin D, 'Navigation Without Lawyers: Access to Justice and the Online Court'

 Available at https://www.lag.org.uk/article/202069/-lsquo-navigationwithout-lawyers-rsquo---access-to-justice-and-the-online-court accessed 15

 August 2020
- Basul A, 'Investment in UK's Legaltech Sector Doubled Last Year' Available at:

 https://www.uktech.news/news/investment-in-uks-legaltech-sectordoubled-to-61m-last-year-20191016 accessed 16 December 2019

- BBC News, 'Facebook-Cambridge Analytica Scandal' Available at:

 https://www.bbc.co.uk/news/topics/c81zyn0888lt/facebook-cambridgeanalytica-scandal accessed 6th October 2020
- BBC News, "Tesco Law' Allows Legal Services in Supermarkets' Available at: www.bbc.co.uk/news/uk-17538006 Accessed 01 October 2020
- Blue J Legal, 'Homepage' Available at: https://www.bluejlegal.com/ accessed 9

 October 2019
- Bughin J, Manyika J and Woetzel J, Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation, 2017) Available at:

 https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages
 accessed 10 June 2020
- Caliguiri R, 'Why law and accounting firms struggle to innovate' The Globe and Mail (6th October 2015) Available at: https://www.theglobeandmail.com/report-on-business/small-business/sb-managing/why-law-and-accounting-firms-struggle-to-innovate/article26596063/ accessed 05 October 2020
- Caplen A, Access to Justice Day breakfast speech. (2014) Available at:

 http://www.lawsociety.org.uk/news/speeches/access-to-justice-day/
 accessed 10 October 2020
- Caseflow Acumen, 'Homepage' Available at:

 https://caseflowacumen.com/#what_is_Caseflow accessed 09 October 2019
- CB Insights, Top Healthcare A.I Trends to Watch (2018) Available at:

 https://www.cbinsights.com/research/report/ai-trends-healthcare/
 accessed 05 November 2019
- Chamber Student Newsletter, 'Alternative Business Structures (ABS) are a new type of legal entity brought into being by the 2007 Legal Services Act. What are they? And why do they matter?' (2014) Available at:

- https://www.chambersstudent.co.uk/where-tostart/newsletter/alternative-business-structures accessed 10 February 2019
- Clarke A, The Woolf Reforms: A Singular Event or and Ongoing Process? (speech delivered at The British Academy 2008) Available at:

 https://innertemplelibrary.wordpress.com/2008/12/11/the-woolf-reforms-a-singular-event-or-an-ongoing-process-speech-by-sir-anthony-clarke-master-of-the-rolls/ accessed 10 February 2019
- CloudForms, 'Laser Form Hub' Available at: www.hub.laserform.co.uk accessed 10 February 2020
- Corman J, 'Heard the one about the vicar, the postman and the mother-in-law?

 Remote court hearings in the age of Covid-19' Available at:

 https://www.linkedin.com/pulse/remote-court-hearings-human-face-law-jonathan-corman/ accessed 05 October 2020
- CourtNav, 'Homepage' Available at: http://courtnav.org.uk/ accessed 10 October 2019
- Davis F, 'A Technology Acceptance Model for Empirically Testing New End-User
 Information Systems: Theory and Results' (1986) Available at:
 https://www.researchgate.net/publication/35465050_A_Technology_Acceptance_Model_for_Empirically_Testing_New_End-User_Information_Systems
 accessed 20 April 2020
- DXC, 'Colossus Homepage' Available at:

 https://www.dxc.technology/p_and_c_general_insurance/offerings/26121/
 57637-colossus accessed 2 October 2020
- Epoq, 'Homepage' Available at: www.epoq.co.uk accessed 10 August 2020
- Exeter University, 'Strategies for Conducting Elite Interviews' Available at:

 https://ore.exeter.ac.uk/repository/bitstream/handle/10871/16200/Qualita
 tive%20Research.pdf?sequence=6 accessed 20 September 2019

- Feigenbaum EA, 'Expert Systems in the 1980s' (1980) Available at:

 https://stacks.stanford.edu/file/druid:vf069sz9374/vf069sz9374.pdf
 accessed 20 September 2019
- Fenn J and Blosch M, Understanding Gartner's Hype Cycles (2018) Available at: https://www.gartner.com/en/documents/3887767 accessed 10 October 2020
- Fenn P, Rickman N and Vencappa D, 'The Impact of the Woolf Reforms on Costs and Delay' (Centre for Risk and Insurance Studies Discussion Paper Series) available at:

 https://nottingham.ac.uk/business/businesscentres/crbfs/documents/crisreports/cris-paper-2009-1.pdf accessed 20 June 2019
- FinTech Global, '2018 is already a record year for global FinTech investment'

 Available at: https://fintech.global/2018-is-already-a-record-year-for-global-fintech-investment/ accessed 11 November 2019
- Friedman R, 'Meet Your New Lawyer, IBM Watson' Prism Legal (2014) Available at:

 https://prismlegal.com/meet-new-lawyer-ibm-watson/ accessed 10 June
 2019
- Gardner H, Revisiting the Arguments of Richard and Daniel Susskind (2016)

 Available at: http://thegoodproject.org/revisiting-the-arguments-of-richard-and-daniel-susskind/ accessed 20 July 2017
- Gartner, 'Gartner Hype Cycle: Interpreting Technology Hype' Available at:

 https://www.gartner.com/en/information-technology/research/hype-cycle
 accessed 30 July 2019
- Genn H, 'Why the Privatisation of Civil Justice is a Rule of Law Issue. 36th FA Mann
 Lecture' (Lincoln's Inn) Available at: https://www.ucl.ac.uk/judicialinstitute/sites/judicialinstitute/files/36th_f_a_mann_lecture_19.11.12_professor_hazel_genn.pdf
 accessed 10 June 2020

- Hassal W, 'According to Citizens Advice 'Fat cat' lawyer image creates more Litigants in Person. But is that really the reason?' Available at:

 https://www.wrighthassall.co.uk/knowledge/blogs/2016/04/07/fat-cat-lawyers/ accessed 10 March 2020
- Hilbert M, 'Digital Technology and Social Change' Available at:

 https://youtube.com/watch?v=xR4sQ3f6tW8&list=PLtjBSCvWCU3rNm46D3
 R85efM0hrzjuAlg
- Hyde J, 'Online PI Claims Service Almost Ready to Replace Paper Process' The Law Society Gazette (11th March 2020) Available at:

 https://www.lawgazette.co.uk/news/online-pi-claims-service-almost-ready-to-replace-paper-process/5103422.article accessed 10 August 2020
- IEEE Spectrum, 'How IBM Watson Overpromised and Underdelivered on AI Health
 Care' Available at: https://spectrum.ieee.org/biomedical/diagnostics/howibm-watson-overpromised-and-underdelivered-on-ai-health-care accessed
 20 October 2020
- The Institute of Paralegals, 'Homepage' Available at: https://theiop.org/ accessed 18

 October 2020
- Keane J, 'Can Technology Bring Lawyers into the 21st Century?' BBC News (16 February 2016) Available at: https://www.bbc.com/news/business-35459433 accessed 19 October 2020
- Kira Systems, 'Homepage' Available at: https://kirasystems.com/ accessed 09
 October 2019
- Law Geex, 'Legal Tech hits \$1 billion Investment as Lawyers Embrace Automation'
 (2018) Available at: https://blog.lawgeex.com/legaltech-hits-1-billioninvestment-as-lawyers-embrace-automation/ accessed 19 October 2020
- Law Trades, 'Home Page' Available at: https://www.lawtrades.com accessed 12

 March 2020

- Legal Zoom, 'Homepage (USA)' Available at: www.legalzoom.com accessed 10

 August 2020
- Legal Zoom, 'Homepage (UK)' Available at: www.legalzoom.co.uk accessed 10

 August 2020
- Lepore J, 'The Disruption Machine. What the gospel of innovation gets wrong.' The

 New Yorker Available at:

 https://www.newyorker.com/magazine/2014/06/23/the-disruptionmachine accessed 20 November 2019
- Lex Machina L, 'Homepage' Available at: https://lexmachina.com/ accessed 19
 September 2020
- Lex Machina, 'LexisNexis Acquires Premier Legal Analytics Provider Lex Machina' (23

 November 2015) Available at

 https://lexmachina.com/media/press/lexisnexis-acquires-lex-machina/
 accessed 19 October 2020
- Lippe P and Katz D, '10 Predictions About How IBM's Watson Will Impact the Legal
 Profession' ABA Journal (2019) Available at:

 http://www.abajournal.com/legalrebels/article/10_predictions_about_how
 ibms watson will impact accessed 10 August 2020
- Liti-gate, 'Homepage' Available at: https://www.litigate.ai/ accessed 11 October 2019
- Lohr S, 'A.I. is Doing Legal Work. But it Won't Replace Lawyers, Yet' The New York
 Times (19 March 2017) Available at:
 https://www.nytimes.com/2017/03/19/technology/lawyers-artificialintelligence.html accessed 20 September 2020
- Manjoo F, 'Will Robots Steal Your Job?' Slate (29 September 2011) Available at http://www.slate.com/articles/technology/robot_invasion/2011/09/will_ro bots steal your job.html?via=gdpr-consent accessed 20 October 2020

- Modus, 'Discover Modus' Available at: http://discovermodus.com/ accessed 10
 October 2020
- Mullany M, '8 Lessons from 20 Years of Hype Cycles' Available at:

 https://www.linkedin.com/pulse/8-lessons-from-20-years-hype-cycles-michael-mullany/ accessed 10 February 2020
- Narrative Science, 'Homepage' www.narrativescience.com accessed 15 August 2020
- The National Paralegal Register, 'Homepage' Available at:

 www.nationalparalegalregister.uk accessed 01 October 2020
- New Law Journal, Online court pilot begins amid warnings (2018) Available at:

 https://www.newlawjournal.co.uk/content/online-court-pilot-begins-amidwarnings accessed 10th January 2019
- Pivovarov V, '713% Growth: Legal Tech Set an Investment Record In 2018' Forbes

 (15 January 2019) Available at:

 https://www.forbes.com/sites/valentinpivovarov/2019/01/15/legaltechinve
 stment2018/#115707747c2b accessed 19 June 2019
- Quittance, 'Personal Injury Compensation Calculator 2019 Update' Available at:

 https://www.quittance.co.uk/personal-injury-compensation-claimscalculator accessed 8th October 2019
- Rocket Lawyer, 'Homepage' Available at: www.rocketlawyer.co.uk accessed 20
 October 2020
- Ross Intelligence, 'Homepage: AI Meets Legal Research' Available at: https://rossintelligence.com/ accessed 07 December 2018
- Ross Intelligence, 'Ross Intelligence Features Page' Available at:

 https://rossintelligence.com/features.html accessed 16 December 2019

- Samuel G, Introducing Competition in the Public Delivery of Healthcare Services

 (2000) Available at:

 https://documents.uow.edu.au/~bmartin/dissent/documents/health/samue

 l_spch.html accessed 19 October 2020
- Senger L, 'Who Says We Know: On the New Politics of Knowledge' Available at:

 https://www.edge.org/3rd_culture/sanger07/sanger07_index.html accessed

 25th April 2019
- Sills A, 'ROSS and Watson Tackle the Law' (2016) Available at:

 https://www.ibm.com/blogs/watson/2016/01/ross-and-watson-tackle-the-law/accessed 07 December 2018
- Stanford Center for Legal Informatics, 'CodeX Techindex' Available at:

 https://techindex.law.stanford.edu/ accessed 20th December 2018
- STAT, 'IBM pitched its Watson supercomputer as a revolution in cancer care. It's nowhere close' Available at:

 https://www.statnews.com/2017/09/05/watson-ibm-cancer/ accessed 20
 October 2020
- Strickland E, 'How IBM Watson Overpromised and Underdelivered on AI Health
 Care' The Spectrum (2nd April 2019) Available at:
 https://spectrum.ieee.org/biomedical/diagnostics/how-ibm-watsonoverpromised-and-underdelivered-on-ai-health-care accessed 20 August
 2020
- Susskind R, My Case for Online Courts, Legal Cheek (2019) Available at:

 https://www.legalcheek.com/2019/12/richard-susskind-my-case-for-online-courts/ accessed 20 October 2020
- Tabarrok A, Productivity and Unemployment. (2003) Available at:

 https://marginalrevolution.com/marginalrevolution/2003/12/productivity_a

 n.html accessed 19 March 2020

- Verisk, 'Homepage' Available at:

 https://www.verisk.com/insurance/products/manage-personal-injuryclaims-more-effectively/ accessed 2 October 2020
- Williams, 'Modus Raises \$10m for Data Driven Approach to E-Discovery' (2013)

 Available at: https://techcrunch.com/2013/06/11/modus-raises-10m-for-data-driven-approach-to-e-discovery/ accessed 20 September 2019
- Winder D, 'Facebook Quietly Confirms Millions of Unencrypted Instagram

 Passwords Exposed -- Change Yours Now', Forbes, Available at:

 https://www.forbes.com/sites/daveywinder/2019/04/19/facebook-quietlyconfirms-millions-of-unencrypted-instagram-passwords-exposed-changeyours-now/#750f01f74453 accessed 20 September 2020

APPENDIX 1

Letter of Engagement



{NAME} {ADDRESS}

Oliver Wannell
Law Building, Cardiff University
Museum Avenue
Cardiff
CF10 3AX

RE: Invitation to participate in the research project

Dear {NAME},

I am a PhD candidate at Cardiff University researching the role of technology in the resolution of personal injury claims. This research has a particular focus on how technology has and will transform the work of professionals within the legal sector.

I am conducting interviews as part of the research to develop an understanding of how technology is used and perceived by practising personal injury lawyers, legal executives and paralegals. There has already been some academic and professional commentary on this topic, but very little work has been done to capture the opinions of those working within the profession; and this is my reason for contacting you.

Should you or a representative or representatives from your firm be willing to participate in this study, I would visit them at a time convenient to you to conduct the interview(s). There is no compensation for participating in this study however, the participation of a representative or representatives from your firm would be a valuable addition to the research.

Participation is entirely voluntary and participants would be entitled to withdraw at any stage before, during or after the interview and for any reason. All of the interview data gathered at the interview will be confidential with any sensitive or attributable

comments redacted. Participants will also be able to view the interview transcripts before they are analysed and the research published. Any quotes used from the interviews will be anonymised but given generic attributions (e.g. paralegal working on non-portal road traffic accident claims).

My PhD is supervised by Annette Morris and Adam Hedgecoe. Annette is a Reader in Law at the Cardiff School of Law and Politics and is an experienced researcher in personal injury law. Adam is a Professor in the School of Social Sciences and specialises in the sociology of technology and qualitative research.

I have included a response card. Please use this to let me know if you are interested in providing representatives to take part in the research. Alternatively, please feel free to contact me via email if you have any queries.

Thank you for your time and consideration.

Yours sincerely,

Oliver Wannell

PhD Candidate

Cardiff University School of Law & Politics wannello@cardiff.ac.uk

Please complete this form and return in the pre-paid envelope provided

1.	I am interested in learning more about this study. Please contact me using the following information:	
	Name: Telephone(s):	
	Best time and day to call:	
2.	I am <u>not</u> interested in this study. Please do not contact me again ab	out this study.

APPENDIX 2

Participant Information Sheet



PARTICIPANT INFORMATION SHEET

The Role of Technology in the Resolution of Personal Injury Claims

Who is doing the research?

This research is being carried out by Oliver Wannell, a PhD candidate in the School of Law and Politics at Cardiff University. The PhD is funded through the Economic and Social Research Council, Wales Doctoral Training Partnership with contributions from Cardiff School of Law and Politics and Irwin Mitchell.

What is the purpose of the research?

In recent years policy makers have sought to make the civil justice system more efficient and, at the same time, less lucrative for both claimants and lawyers. This has been driven by a number of fears - that the cost of resolving cases is excessive; that the profitability of personal injury claims has encouraged a compensation culture fuelled by 'fat cat' lawyers; that access to justice is undermined by excessive costs and delay; that a litigious society is a less socially responsible one; and that the ambition of achieving a 'gold standard' individualised, substantive justice is too burdensome on the State.

As a result, pursuing a personal injury claim is now subject to a policy of proportionality. The pursuit of proportionate justice places a cap on the amount of time and money that can be spent resolving a claim and there is a fear that this impacts upon access to justice for claimants. While this presents an obvious challenge to civil justice, Professor Richard Susskind claims that it also offers an opportunity to lawyers who are willing to reinvent themselves. They can do this, he claims, by understanding and using modern technology within their daily practice.

The purpose of the project is to assess the claims that information technology will be a driving force behind a changing legal profession and to consider the future role of technology in the

resolution of personal injury claims.

Who is being invited to participate?

Participants include practising personal injury lawyers, paralegals and legal executives.

What is the type of information gathered during interviews?

The interviews are designed to capture the varied perceptions of technology from practising perspectives. This information will produce qualitative data to be analysed in order to

organise these views thematically.

What happens if a participant wishes to withdraw?

Participants can withdraw from the project at any time before, during or after the interview and for any reason. They will be given the opportunity to have their data excluded from the

analysis and, should this be the case, the data collected from them will be destroyed.

Confidentiality and privacy: what will happen to the data?

The interview will be recorded and transcribed. All interview transcripts will be anonymised and data that makes participants identifiable will be redacted. Participants will have the opportunity to view the transcripts, confirm them as accurate representations of the interview and remove parts that they are unhappy with before they are analysed and the data used. The transcripts will be stored on a Cardiff University registered computer and backed-up on a USB stick, which will be securely stored. All transcripts will be password protected. They will be held confidentially such that only the interviewer can trace the information back to the participant individually. All data will be stored in accordance with the Data Protection Act. Transcripts will be used for research purposes only. In publications and conference presentations leading from the research, quotes from the interviews will be anonymised but given a short generic attribution (e.g. paralegal working on non-portal road

traffic accident claims).

This project received ethical approval from the Cardiff School of Law and Politics Research Ethics Committee (SREC) on 12 December 2016 (Internal Reference: SREC/011216-12)

Contact Information:

Name: Oliver Wannell

Email Address: wannello@cardiff.ac.uk

Address: Law Building, Cardiff University, Museum Ave, Cardiff CF10 3AX

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Appendix 3

Consent Form



CONSENT FORM

TITLE OF RESEARCH: The Role of Technology in the Resolution of Personal Injury Claims

RESEARCHER: Oliver Wannell

CONTACT DETAILS: Cardiff School of Law and Politics

Cardiff University Law Building Museum Avenue Cardiff CF10 3AX

Email Address: wannello@cf.ac.uk

Involvement in Research

The information and insights you share will be recorded in this research. If you agree, interviews will be recorded via a digital recording devise. Data will be stored on a registered Cardiff University computer that will be password controlled, and will be used for research purposes only. You will only be identified in the research if you give consent for this to happen.

The researcher intends to present and publish the results from this research (on an anonymised basis) at academic conferences and in academic journals. The research is funded by the Economic and Social Research Council, with contributions from the Cardiff School of Law and Politics and Irwin Mitchell.

Please indicate whether you agree with the following statements, please initial box:

	Initials
I have read and understood all the information provided and have received adequate time to consider all the documentation.	
I have been given adequate opportunity to ask questions about the research.	
I am aware of, and consent to the written and/or digital recording of my discussion with the researcher.	
I consent to the information and opinions I provide being used in the research.	
Interviewee Declaration	
I consent to participate in the study conducted by Oliver Wannell, Cardiff Schoo Politics	l of Law and
Signature:	

Additional Contact Information			
Researcher's Supervisor	Annette Morris		
	Cardiff University		
	Law Building		

Date:

Print Name:

	Museum Avenue
	Cardiff CF10 3AX
Cardiff School of Law and Politics Research	This project received ethical approval from the Cardiff School of Law and Politics Research Ethics
Ethics Committee (SREC)	Committee (SREC) on 12/12/2016 (Internal Reference: SREC/011216-12).
	The Cardiff School of Law and Politics Research
	Ethics Committee (SREC) can be contacted at:
	School Research Officer
	Cardiff School of Law and Politics
	Cardiff University
	Law Building
	Museum Avenue
	Cardiff CF10 3AX
	Email: <u>LAWPL-Research@cardiff.ac.uk</u>

APPENDIX 4

i. Paralegal Interview Schedule

A. Introduction

My name is Oliver Wannell and I am a PhD student at the School of Law & Politics at Cardiff University.

This interview is one of several interviews I am carrying out as part of my PhD research and the purpose of these interviews is to gain a practicing perspective on the uses of technology within the resolution of personal injury claims.

Information that I receive from this interview will be stored safely and any quotes that I use or transcripts that I produce will be written anonymously such that comments you make won't be traceable back to you.

After the interview I will produce a transcript and you will be provided with an opportunity to view and confirm this before the work is published or made available to other readers.

This interview should last **45 minutes to an hour** and at this stage I just want to confirm, that you are still happy to be interviewed today.

To make it easier for the interview to flow and to save me having to take comprehensive notes, are you happy for this interview to be recorded?

B. Profile of Participant

- What types of claim do you handle?
 - At what level do you work?
 - Do separate teams work on different types of claim?

C. Current use of technology

2 Can you talk me through the process of a claim from start to finish, telling a story of the path that a claim follows and highlighting what technologies you use at each stage?

For each technology:

- What is the purpose of that technology?
 - is that the intended purpose or your interpretation of its purpose?
- How effective do you think it is?
- Does it work for you? i.e. does it do everything you would want it to?
 - if not, why not? Is it obstructive to your work?e.g. does it ever slow you down?
 - what would an alternative technology look like/do?

Probe:

 When a case does fall out of the portal, what's the process for taking it from the portal into the fast track?

- templates / standardised documents
- **3** When using claims management technology, how prescriptive is it in telling you what you're supposed to do and when you're supposed to do it?

Probe/follow up Qs

- Is the process that you follow when handling a claim completely dependent on the software that you use? Or is there room to step away from the procedure that it encourages?
- Does the software give you 'prompts' on the next stages of a claim?
- How do you feel about the technology you use? How do you feel about 'prompts'?
- Is there ever a time when you're essentially being told what to do and when by a computer?
 - How do you feel about that?
 - Do you think that is still a legitimate way to process a claim?
- 4 How much room or need is there for professional judgment when using claims management technology?

How does that compare to claims that remain within the portal or which fall within the multi-track?

5 Do you think using technology to resolve a claim affects the quality of the service provided to the client and/or the outcome of their claim?

Probe:

Impact on access to justice

D. Potential for greater use of technology

6 What stages of resolving a claim are currently not aided by technology?

Probe

- When investigating liability? sifting through medical files/accident reports/quantum of damages?
- Are these stages time consuming/costly?
- 7 Could any of these stages be supported by technology?

Probe

• If not – why not? Is the work that they are doing at these stages intrinsically 'human' work? i.e. does it require professional judgment?

ii. Lawyer Interview Schedule

A. Introduction

My name is Oliver Wannell and I am a PhD student at the School of Law & Politics at Cardiff University.

This interview is one of several interviews I am carrying out as part of my PhD research and the purpose of these interview is to gain a practicing perspective on the uses of technology within the resolution of personal injury claims.

Information that I receive from this interview will be stored safely and any quotes that I use or transcripts that I produce will be written anonymously such that comments you make won't be traceable back to you.

After the interview I will produce a transcript and **you will be provided with an opportunity to view and confirm** this before the work is published or made available to other readers.

This interview should last 45 minutes to an hour and at this stage I just want to confirm, that you are still happy to be interviewed today. To make it easier for the interview to flow and to save me having to take comprehensive notes, **are you happy for this interview to be recorded**?

B. Profile

1 The firm:

- Size of the firm
- Proportion of cases within the portal/fast track/multi track
- Where cases come from (CMCs) and how they tend to be funded
- Organisation of claims handling within the firm

2 The Participant:

- What types of claim do you handle?
- At what level do you work?
- Do you have any management or committee roles within the firm?

C. Current use of technology within claims handling

Can you talk me through the process of a claim from start to finish, telling a story of the path that claim follows and highlighting what technologies you use at each stage?

For each technology:

- What is the purpose of that technology?
 - is that the intended purpose or your interpretation of its purpose?
- How effective do you think it is in resolving claims?
- Does it work for you? i.e. does it do everything you would want it to?
 - if not, why not? Is it obstructive to your work?e.g. does it ever slow you down?
 - what would an alternative technology look like/do?

Probe:

• When a case does fall out of the portal, what's the process for taking it from the portal into the fast track?

templates / standardised documents

When using claims management technology, how prescriptive is it in telling you what you're supposed to do and when you're supposed to do it?

Probe/follow up Qs

- Is the process that you follow when handling a claim completely dependent on the software that you use? Or is there room to step away from the procedure that it encourages?
- Does the software give you 'prompts' on the next stages of a claim?
- How do you feel about the technology you use? How do you feel about 'prompts'?
- Is there ever a time when you're essentially being told what to do and when by a computer?
 - How do you feel about that? Do you think that is a legitimate way to process a claim?
- What makes a technology helpful or useful such that you would consider it a positive contribution to your work?

Probe:

- Efficiency?
 - Time efficiency?
 - Cost efficiency?
 - Ease of use particularly for unqualified/less experienced paralegal staff?
- 6 How much room or need is there for professional judgment when using claims management technology?

How does that compare to higher value multi track claims?

Probe:

- What does professional judgment mean to you?
 - Expert Knowledge

Is the work that you do when using assisting technology professional work?

What about low value fast track work that paralegals do?

Professional judgment/expert knowledge

What about portal claims?

So are paralegals professionals?

- In the same way that you are?
- 7 Do you think using technology to resolve a claim affects the quality of the service provided to the client and/or the outcome of their claim?

Probe:

• Impact on access to justice

D. Current use of technology in management

8 Do you use technology to manage/monitor staff and, if so, how?

Do you use is technology to manage/monitor caseloads and, if so, how?

Probe

• Data used to determine whether a case is taken on or not

E. Potential for greater use of technology

9 Thinking specifically about those cases in the fast track, what are the main challenges involved in handling these claims?

Probe:

- Are there associated challenges with these cases **specifically** as a result of being within the fast track but outside the portal?
- Cost/time/delay
- Are there specific stages in the process of handling these claims where the costs that you incur to progress the claim significantly rise?

Probe:

- Why at these stages?
- What kind of work is being done at these stages?
 Could any of these stages be supported by technology?

F. Newspaper Prompts

- 11 'Can Technology Bring Lawyers into 21st Century?' BBC Feb 2016.
- **12** 'Artificial Intelligence to Radically Transform the Role of Lawyers' MP Oct 2015.
- 13 'Armies of Expensive Lawyers, Replaced by Cheaper Software' New York Times March 2011.

G. Perceptions of technology

- How do you feel when seeing headlines that predict a much greater involvement of technology?
- Thinking about the stages that we discussed earlier that you said couldn't be replaced by technology, do any of these articles challenge your opinion?

Probe

- Have they changed their mind?
- Supposing that these areas that you say are currently not supported by technology were to be in the near or distant future, how would you feel about that?

Probe

- Expertise / human judgment
- What does it do for the profession?

iii. Senior Lawyer Interview Schedule

A. Introduction

My name is Oliver Wannell and I am a PhD student at the School of Law & Politics at Cardiff University.

This interview is one of several interviews I am carrying out as part of my PhD research and the purpose of these interview is to gain a practicing perspective on the uses of technology within the resolution of personal injury claims.

Information that I receive from this interview will be stored safely and any quotes that I use or transcripts that I produce will be written anonymously such that comments you make won't be traceable back to you.

After the interview I will produce a transcript and you will be provided with an opportunity to view and confirm this before the work is published or made available to other readers.

This interview should last 45 minutes to an hour and at this stage I just want to confirm, that you are still happy to be interviewed today. To make it easier for the interview to flow and to save me having to take comprehensive notes, **are you happy for this interview to be recorded**?

B. Profile

1 The firm:

- Size of the firm
- Proportion of cases within the portal/fast track/multi track
- Where cases come from (CMCs) and how they tend to be funded
- Organisation of claims handling within the firm

2 The Participant:

- What types of claim do you handle?
- At what level do you work?
- Do you have any management or committee roles within the firm?

C. Current use of technology within claims handling

Can you talk me through the process of a claim from start to finish, telling a story of the path that claim follows and highlighting what technologies you use at each stage?

For each technology:

- What is the purpose of that technology?
 - is that the intended purpose or your interpretation of its purpose?
- How effective do you think it is in resolving claims?
- Does it work for you? i.e. does it do everything you would want it to?
 - if not, why not? Is it obstructive to your work?e.g. does it ever slow you down?
 - what would an alternative technology look like/do?

Probe:

- Is their experience of technology typical within the firm compared to other departments? Or other PI Departments in other firms?
- 4 What makes a technology helpful or useful such that you would consider it a positive contribution to your work?

Probe:

- Cost/time Efficiency?
- Ease of use?
- Communicating with their team/staff?
- Advantages/disadvantages of this technology for them, their firm and their client?
- **5** Has technology had an impact on the way they interact with clients?

Probe:

- Technology that they use
- Technology that clients use
- **6** Do you use technology to manage/monitor staff and, if so, how?

Do you use is technology to manage/monitor caseloads and, if so, how?

Probe

• Data used to determine whether a case is taken on or not

How does low value fast track work that paralegals do compare to your work?

- Their use of tech
 - Professional judgment/expert knowledge

So are paralegals professionals?

- In the same way that you are?

D. Historical Perspective

7	Historically, how has the use of technology in personal injury changed?		
	Probe:		
	When has this taken place and why? (drivers for change)Changes in process or substance?		
8	How has your firm changed its practice as a result of integrating technology?		
	Probe:		
	 Changing staff (i.e. more paralegals)? Different recruitment criteria? New dept? How has it, perhaps, not changed – what has stayed the same? Strategy for investing in technology? 		
9	How have clients' expectations changed in recent years?		
	Probe		
	 As more information is publicly available, has this affected the client/lawyer relationship?> 		
	E. Potential for greater use of technology		
10	Which aspects of your role do you envisage being influenced by technology in the future and in what ways?		
	Probe:		
	 Whay are those areas not currently influenced by technology? (i.e. is the technology not there yet, or has the firm/sector simply not invested in it yet?) 		
11	Which areas of your role will not be influenced byu technology?		
	Probe:		
	• Why not?		
	 Intrinsically human work? Speciality of the person? 		
12	What do you think are the threats and opportunities for personal injury law as technology develops?		

Probe:

- Is investment in technology required for survival in the PI market?
- Access to justice for claimants?
- 13 What does the lawyer of the future look like?

Probe:

- Has this influenced the type of person their firm are already recruiting?
- What sort of qualities should they have?
- What sort of work will they do?

F. Newspaper Prompts

- 11 'Can Technology Bring Lawyers into 21st Century?' BBC Feb 2016.
- **12** 'Artificial Intelligence to Radically Transform the Role of Lawyers' MP Oct 2015.
- 13 'Armies of Expensive Lawyers, Replaced by Cheaper Software' New York Times March 2011.
- **14** How do you feel when seeing headlines that predict a much greater involvement of technology?

iv. Manager Interview Schedule

A. Introduction

My name is Oliver Wannell and I am a PhD student at the School of Law & Politics at Cardiff University.

This interview is one of several interviews I am carrying out as part of my PhD research and the purpose of these interviews is to gain a practicing perspective on the uses of technology within the resolution of personal injury claims.

Information that I receive from this interview will be stored safely and any quotes that I use or transcripts that I produce will be written anonymously such that comments you make won't be traceable back to you.

After the interview I will produce a transcript and you will be provided with an opportunity to view and confirm this before the work is published or made available to other readers.

This interview should last 45 minutes to an hour and at this stage I just want to confirm, that you are still happy to be interviewed today.

To make it easier for the interview to flow and to save me having to take comprehensive notes, are you happy for this interview to be recorded?

B. Profile

1 The firm:

- Size of the firm
- Proportion of cases within the portal/fast track/multi track
- Where cases come from / how they are funded
- Organisation of claims handling within the firm

2 The Participant:

What is your specific role within the firm?

C. Investment in technology

3 Does your firm have a strategy for investing in technologies?

Probe

- Is there a person or team specifically charged with this?
- To what extent has the firm invested in technology?
- When you're looking to invest in technology for your firm, what influences whether you do or do not buy a piece of technology?

Probe

- What criteria do you test a piece of technology against when considering it?
- What makes a technology successful or useful for your firm?
 - Time efficiency? / Cost efficiency? what do you consider 'efficient'?
 - Ease of use particularly for unqualified/less experienced paralegal staff?
- Do you think using technology to resolve a claim affects the quality of the service provided to the client and/or the outcome of their claim?

Probe:

- Does it improve or decrease the quality of service?
- Impact on access to justice

D. Use of Technology & Data

6 How is technology used to manage staff/monitor caseloads?

Probe

- Data collected to monitor performance
- Data used to determine whether a case is taken on or not
- **7** Do you use existing data to inform decisions on cases? e.g. whether or not you take a case on?

What sort of variables do you use when making that decision?

Probe:

data relating to % chance of success against reward (risk/reward ratio)

E. Potential for greater use of technology

- 8 Are you considering investing in more technology soon? If so, what technology and why?
- **9** What threats and opportunities do you think technology poses for the future of your firm?
- What do you think when you hear people like Richard Susskind saying that technology will eventually replace lawyers?
 - Do you think this will happen?
 - Why? / Why not?