

**Please cite the Published Version**

Reid, Iain  and Lindsay, Claire (2020) Tipping Points of Digitisation: The Case of Legal Services.  
In: BAM 2020, 02 September 2020 - 04 September 2020.

**Version:** Accepted Version

**Downloaded from:** <https://e-space.mmu.ac.uk/626551/>

**Usage rights:**  In Copyright

**Enquiries:**

If you have questions about this document, contact [openresearch@mmu.ac.uk](mailto:openresearch@mmu.ac.uk). Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

# **Tipping Points of Digitisation: The Case of Legal Services**

*Iain Reid* (Iain.Reid@mmu.ac.uk)

Manchester Metropolitan University, Manchester M15 6BH

Claire Lindsay

Heriot-Watt University School of Social Sciences, Edinburgh, EH144AS

**Track:** Operations, Logistics and Supply Chain Management

# **Tipping Points of Digitisation: The Case of Legal Services**

## **ABSTRACT**

This paper contributes to the literature by challenges the value proposition of digitalisation across three sectors of professional services namely: law, and accounting/finance services. Our study aims to reflect on the knowledge and application of new technologies, deliberating a case for improving the value proposition challenging the existing business models of legal services. The study makes a contribution through a reflection new technologies and business models, through the ‘arcs of integration’. An exploratory research design, embracing an abductive approach, was adopted to new technologies, perceived performance through 224 quantitative data responses. The findings identified the issues professional service firms face, particularly the scope of adoption new technologies and perceived value of digitisation. This research has created a model that impact of legal and financial services. It adds much needed value to the concepts of the value proposition and technology transfer.

Keywords: Professional Services, Technology, Legal and Financial Tech, Integration.

## **1. INTRODUCTION**

It has been widely acknowledged that legal firms have endured numerous pressures since deregulation (The Law Society, 2016). Firms also face increasing pressures from clients for higher quality at less cost and better value. In response to these pressures, the legal profession is exploring the multiple offerings from the world of technology and digitalisation (Hongdao et al, 2019). Of those available, the most popular technologies consist of document management; IP management; e-billing; and online resources for research and precedent s– many of which mainly benefit mass transactions and supporting repetitive processes (Giannaki, et al, 2018).

The UK’s legal services market is still in its infancy in terms of innovations in Legaltech (Wilkins and Ferrer, 2018). For example, start-up firms, seed investors, small business ventures and venture capital firms dominate the value of investment in this sector. However, the legal sector has been slow to market in respect of the perception of these new technologies, favouring slow, incremental adoption. Therefore, the profession is at a tipping point in terms of legaltech as new entrants are responding far quicker than the more traditional law firms, through more competitive legal fees and ‘no hassle’ standardised services.

## **2. LITERATURE REVIEW**

Legal services often being described as conservative, the UK legal services market was valued at £35.1bn. The total Gross Value Added of legal services to the economy is £25.7 billion. The legal sector has grown by 3.3 percent per year over the last 10 years, compared to real growth in the UK economy and as a whole 1.2 percent per year over the same period (The Law Society, 2016). Furthermore, in 2015-16, 23,855 UK

students and 33,010 overseas students applied for the UK's legal practice (LPC), which is the vocational stage of solicitor training of advancing their legal knowledge in practice (The Law Society, 2016). However, Legal services have often been perceived as a slow moving, incremental, and conservative profession (Sieh, 2010, DeBruyne and VanLeenhove, 2019) and empirical evidence suggests that a proportion of legal services are not actually driven by customer's needs (Harris and O'Malley, 2000; Garry, 2008). The legal sector is characterised as a high knowledge intensity, with a highly professionalised workforce and low capital intensity (Von Nordenflycht, 2010). Plus the benefits of legal technologies and traditional firms from both clients' and lawyers' viewpoints. (Hongdao et al, 2019).

The emerging arcs that refer to emerging trends in PSFs from technology perspective (Michalakopoulou, Reid, and Bamford, 2016) adoption of an appropriate IT system enables business organisations to develop and maintain competency, improve its performance, and ensure that their competitive advantage is retained (Moghavvemi and Salleh, 2014). ICT is developed in fields like journalism to perform skills similar to employees (McGinnis and Pearce, 2014). Intelligent machines can work ceaselessly, unlike humans, both in terms of performance and cost. However, as Brynjolfsson and McAfee (2012) suggested a 'combinatorial innovation' that combines efforts of the human and machine skills will most likely lead to innovative scalable process improvements. For example, the Legal Services Board (LSB) 2020 strategy focus on the following four criteria: 1) Informing policy on the opportunities and limitations of digital delivery as a solution to the access to justice challenge, given the need to reconcile affordability benefits with the reality that some key groups who are currently excluded from the justice system are not online; 2) Ensuring approved regulators are aware of emerging digital disadvantages and develop the skills to police the digital marketplace effectively and support consumers to use it safely; 3) Assisting with efforts to unlock the potential of Big Data while exploring the ethical and information governance issues it creates; 4) Engaging with national digital markets/exclusion initiatives. As part of planned ongoing thinking on modernisation of the wider regulatory framework.

The authors, therefore, believe that the research opportunity is related to a more 'robust' professional service actually means expanding beyond traditional service operations in areas Legal-tech (Skålen et al., 2015) moving towards a more Neo-PSFs where knowledge intensity is key but where technology developers focus on high capital intensity (Von Nordenflycht, 2010). For example, Oronsky and Chathoth, (2007) studied the impact of information technology on hotel operations, service management and transaction costs. The research argued that despite the many benefits IT brings to service operations, certain operations such as the customer-producer exchange mechanism in the hotel industry evolved at a much slower pace than expected.

In other words, digitization of the customer interface provides a way to specify value, to line up value-creating actions in the best sequence and perform them in the most effective way to managing the client (Hongdao et al., 2019). Researchers, such as Wu (2015), have argued that technological advancements can permit more efficient management of skilled labour in the knowledge-intensive firms; the improvement of Information and Communication Technology (ICT) allows firms to reduce both the costs of acquiring and communicating knowledge. The focus here is the provision new technologies such as: Cloud; Machine Learning; AI, Blockchain; Internet of Things; Bid Data Analytics, Cyber Physical Systems Argumented Reality (AR) and Virtual Reality (VR). Arguably, firms have always demanded cost-effective before any

investment, and with the advent of online services, they also wish them to be effortless for the user (Newton, 2017). They also seek value for money, are no longer accepting of being charged by the hour (which technology has facilitated) and expect greater price transparency (Maheshri and Winston, 2014; CMA, 2016). Although advancements in legal services are available to the paying customer, the client's evaluation often focuses on their interaction with the profession, as well as the attributes of the service they receive. This study will address the value proposition of new technologies in legal services. Specifically, the paper explores the customer interaction with legal activity, with sub questions asked in detail regarding the experience of customer resolution in respect to their legal issues.

To achieve this aim, this study addresses the question of how can a law firm 'pivot' as a traditional professional service firm (see, Lewis and Brown, 2012) through the advancement of digitalisation and whether legal technologies enable transaction process efficiently? This research presents a timely opportunity for determining specific research themes in the growth in industry 4.0 (Bibby and Dehe, 2019), and digitalization are increasingly appearing at the forefront of research agendas, and practical perspectives. Notwithstanding, the impact of society 5.0 given the pure service design of legal services.

### **3. METHODOLOGY**

In the development of a new technology through digitalisation (Spinder, 2019) and the scoping of how technology is challenging the existing business models, the research design was a critical factor. Our study is based on 'abductive' logic (Meyer and Lunnay, 2013), where the key objective is developing or refining theories and models, whilst combining insights from the data which lies outside the initial theoretical frame (Lonsdale et al, 2017). The data is based on a survey from Legal Services Board (LSB) in 2018 relating technology adoption, perceived perception and impact. An exploratory research design, embracing an abductive approach, was adopted to new technologies, perceived performance through 1,500 quantitative data responses. The survey was a follow up study from 2015 study reflecting on the adoption of legal technology solutions.

The survey was designed asked respondents address the impact of technology on the legal sector and to identify what this might mean for legal regulators in the UK and Wales. The data as available is only reported at grouped, rather than individual levels, which does restrict the analysis available, such as the adopted linear regression. However, it is still possible to use the data to draw pertinent inferences from it regarding the experience and satisfaction of legal services users. While this may not be wholly representative of the wider population, it remains the only large scale data set of its size; hence interrogating the data using statistical methods led to some interesting results which can be verified in further works where the quality of the sample can be improved.

### **4. FINDINGS**

This research presents a timely opportunity for determining specific research themes in the growth in service operations management research (Bamford et al, 2015), and professional services are increasingly appearing at the forefront of research agendas, and practical perspectives. More specifically, the entrance of game-changing technological innovations moving from the existing technology of document readers, machine learning and artificial intelligence within the Legal and Financial Services is

an emerging theme. Overall, it is argued that technological advancements such as Cloud and AI can permit more efficient management of skilled labour in the knowledge-intensive firms. The statistical analysis is based on: Investments; Adoption; Drivers for change; and impact of the current business model for future research. Disruptive change of the “conventional” legal market. The legal industry is experiencing a shift in delivery and business models, in turn leading to a developing the digitalisation of mass transactions and low-level clients unable to afford sophisticated legal disruptive change of the “conventional” service delivery moving to more paperless forms of representation. For example, figure 1 presents the level of technology adoption (Cross, 2018), however, a more in-depth analysis would be possible if the information on individual responses were available to researchers; this would potentially allow for useful modelling options.

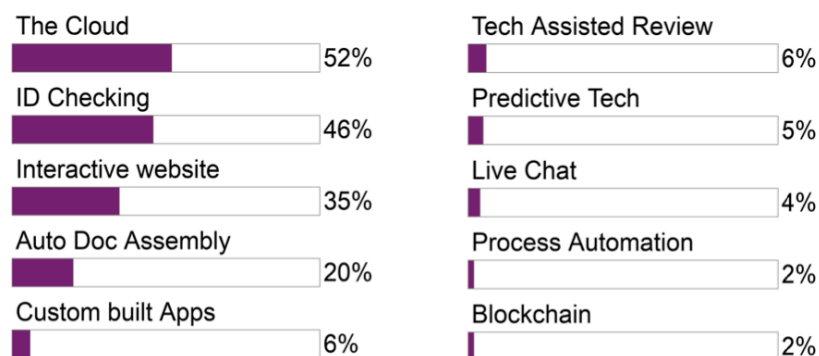


Figure 1 Technology Adoption (Adapted from Cross, 2018)

According to Wu (2015) the improvement of the Information and Communication Technology (ICT) allows firms to reduce both the costs of acquiring and communicating knowledge. For example, many consulting firms use computer-mediated knowledge systems and digitised databases; thus, knowledge becomes much easier to extract, to code and to transfer. In summary the initial findings highlighted the following key findings:

- 1) Through the sample there was a limited amount of service innovation since 2015 study
- 2) Larger law firms, unregulated, ABS - are highly innovative however, cultural barriers remain. For example, 75% believe they have a culture that supports new ideas, whilst 39% have put in place practical steps
- 3) Drivers of innovation stem from Government agencies (e.g. HMLR, LAA) as much as from new technology, and intensity of competition, and finally
- 4) Reforms to regulation have made significant progress in removing constraints to service development

Furthermore, the adoption of an appropriate new technology enables business organisations to develop and maintain competency, improve its performance, and ensure that their competitive advantage is retained (Moghavvemi and Salleh, 2014). Both Legal tech and Financial tech is already being developed in fields (Kumar, et al, 2018; Spinder, 2019). Intelligent machines can work, unlike humans, ceaselessly both in terms of performance and cost. However, as Brynjolfsson and McAfee (2012) suggested a ‘combinatorial innovation’ that combines efforts of the human and machine skills will most likely lead to innovative scalable process improvements.

## 5. CONCLUSIONS

Our research suggests the need for the fourth area, innovation, which according to the arguments put forward here, and by Skålén et al. (2015), is useful because firms that integrate novel approaches during service delivery can enhance it and further satisfy customers. In addition, given much of current innovation involves ‘digital’, the use of technology helps to improve both the efficiency and effectiveness of customer solutions, potentially providing original approaches to realising customer needs and the drive towards improving business model and how business models can create value, Amit and Zott, 2001).

These challenges have prompted law firms to reconsider their business models and the way they design and deliver their services and as a result, they can compete effectively in a rapidly changing and increasingly cost-focused environment (Susskind 2013; 2015). Furthermore, as accurate information becomes more easily available online, barriers to entry in established markets diminish. The changing social and technological trends have led to the growing dissatisfaction with the traditional ‘bill by the hour’ model (Giannakis et al, 2018). Furthermore, Giannakis et al, (2018) highlighted the importance of customisability is an important aspect of service solutions. Sharma, Lucier and Molloy (2003) suggest that customised solutions are those tailored to each customer. Generally, Lawrence et al. (2016) expressed the view of Schmenner (1986) that every knowledge-intensive service can be seen as highly customised. Von Nordenflycht (2010) argues that PSFs are highly customised and that they compromise on efficiency. Researchers, such as Guzak and Rasheed (2014) and Reid (2019) argue that PSFs like law and management consulting firms that offer standardised services are able to attain unconstrained growth in volume, while those firms that offer customised, complex services seem to be successful when they forego the option to grow .

## 6. REFERENCES

- Aarikka-Stenroos, L. & Jaakkola, E. (2012). Value co-creation in knowledge intensive business services: A dyadic perspective on the joint problem-solving process. *Industrial Marketing Management*, 41(1), pp.15-26.
- Amit, R., Zott, C., (2001) Value Creation in E-Business *Strat. Mgmt. J.*, 22 pp. 493–520
- Bibby, L. and Dehe, B. (2018) ‘Defining and assessing industry 4.0 maturity levels - case of the defence sector’, *Production Planning & Control*, 29(12), pp. 1030–1043.
- Brynjolfsson, E. and McAfee, A. (2012). Winning the Race with Ever-Smarter Machines. *MIT Sloan Management Review*, 53, pp. 53–60.
- CMA 2016. Legal services market study. Competition and Markets Authority.
- Cross R., (2018) Technology and Innovation in legal services – research overview, Legal Services Board presentation 29<sup>th</sup> November 2018 (accessed <https://www.legalservicesboard.org.uk/wp-content/media/Innovation-2018-LF-Inn-Conf-Final.pdf>)
- De Bruyne, J. and Vanleenhove, C. (2019) ‘Law 2.0 – Robots, social media and the traditional legal framework’. Available at: <https://search-ebscohost->

- com.liverpool.idm.oclc.org/login.aspx?direct=true&db=edsbas&AN=edsbas.F663B0CC&site=eds-live&scope=site (Accessed: 28 February 2020).
- Garry, T., (2008) "Affect and the role of corporate customer expertise within legal services", *Journal of Services Marketing*, 22 (4), pp.292-302
- Giannakis, M., Doran, D., Mee, D., Papadopoulos, T. & Dubey, R. 2018. The design and delivery of modular legal services: implications for supply chain strategy. *International Journal of Production Research*, 56, 6607-6627.
- Harvey, J., Heineke, J. & Lewis, M. 2016. Editorial for Journal of Operations Management special issue on "Professional Service Operations Management (PSOM)". *Journal of Operations Management*, 42(43), pp4-8.
- Harris, L., O'Malley, L. and Patterson, M. (2003), "Professional interaction: exploring the concept of attraction", *Marketing Theory*, 3(1), 9-36.
- Hongdao et al, (2019) "Legal Technologies in Action: The Future of the Legal Market in Light of Disruptive Innovations", *Sustainability* 2019, 11(4), 1015 pp1-19
- Hong, S-C. and Goo, Y.J. (2004), "A causal model of customer loyalty in professional service firms: an empirical study", *International Journal of Management*, 21(4) 531-40
- Legal Services Board 2014, Legal Services Consumer Panel, 2020  
[https://www.legalservicesconsumerpanel.org.uk/publications/policy\\_briefings/2020.pdf](https://www.legalservicesconsumerpanel.org.uk/publications/policy_briefings/2020.pdf)
- Lewis, M. A. & Brown, A. D. 2012. How different is professional service operations management, *Journal of Operations Management*, 30, pp1-11.
- Lonsdale, C, Sanderson, J, Hoque, K, & Kirkpatrick, I 2017, 'Knowing the price of everything? Exploring the impact of increased procurement professional involvement on management consultancy purchasing', *Industrial Marketing Management*, 65, 157-167
- Kumar, S., Mookerjee, V. and Shubham, A. (2018) 'Research in Operations Management and Information Systems Interface', *Production & Operations Management*, 27(11), pp. 1893–1905.
- McGinnis, J.O. and Pearce, R.G. (2014). The Great Disruption: How Machine Intelligence Will Transform the Role of Lawyers in the Delivery of Legal Services. *Fordham Law Review*, 82, p.3041.
- Meyer, S. B. and Lunnay, B. (no date) 'The application of abductive and retroductive inference for the design and analysis of theory-driven sociological research', *Sociological Research Online*, 18(1). doi: 10.5153/sro.2819.
- Michalakopoulou, K., Reid, I., Bamford, D., (2017) Arcs of integration for Professional Service Operations Management: a Literature Review In: BAM 2017 Conference, University of Warwick from the 5th - 7th September 2017. p1-7
- Moghavvemi, S. and Salleh, N.A.M. (2014). Malaysian Entrepreneurs' Propensity to Use IT Innovation. *Journal of Enterprise Information Management*, 27(2), pp.139-157.
- Newton, J. 2017. Law firms of the future will give clients an effortless experience. *ABA Journal*, 1-1.
- Oronsky, C. R. and Chathoth, P. K. (2007) 'An exploratory study examining information technology adoption and implementation in full-service restaurant firms', *International Journal of Hospitality Management*, 26(4), pp. 941–956.



- Qian Hongda, Sughra Bibi, Asif Khan, Lorenzo Ardito, Muhammad Bilawal Khaskheli. (2019) 'Legal Technologies in Action: The Future of the Legal Market in Light of Disruptive Innovations'. 11(4)pp 1015
- Wilkins, D. B. and Ferrer, M. J. E. (2018) 'The Integration of Law into Global Business Solutions: The Rise, Transformation, and Potential Future of the Big Four Accountancy Networks in the Global Legal Services Market', *Law And Social Inquiry-Journal Of The American Bar Foundation*, 43(3), pp. 981–1026.
- Sieh, Kaleb August (2018), Law 2.0: Intelligent Architecture for Transactional Law (August 13, 2010). Silicon Flatirons Center, 2010. Available at SSRN: <https://ssrn.com/abstract=2285528> or <http://dx.doi.org/10.2139/ssrn.2285528>
- Skålén, P., Gummerus, J., von Koskull, C., & Magnusson, P. R. (2015). Exploring value propositions and service innovation: A servicedominant logic study. *Journal of the Academy of Marketing Science*, 43(2), 137–1
- Spindler, G. (2019) 'Digitalization and Corporate Law – A View from Germany', *European Company & Financial Law Review*, 16(1/2), pp. 106–148.
- The future of legal services (2016) The Law Society (viewed 5th November 2019) <https://www.lawsociety.org.uk/news/documents/future-of-legal-services-pdf>
- Von Nordenflycht, A. (2010). What Is a Professional Service Firm? Toward a Theory and Taxonomy of Knowledge-Intensive Firms. *Academy of Management Review*, 35(1), pp.155-174.
- Wu, Y. (2015). Organizational Structure and Product Choice in Knowledge-Intensive Firms. *Management Science*, 61(8), pp. 1830-1848.