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Innovation Adoption as a Vehicle for Operational Efficiency Enhancement in the Legal Service Management

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INNOVATION ADOPTION AS A VEHICLE FOR OPERATIONAL  
EFFICIENCY ENHANCEMENT IN THE LEGAL SERVICE  
MANAGEMENT

KALLIOPI MICHALAKOPOULOU

A Thesis submitted to the University of Huddersfield in partial fulfilment of the  
requirements for the degree of Doctor of Philosophy

May 2020

## Abstract

Law firms face difficulties when trying to adapt to the rapidly changing technology and increasing customer expectations. Since the deregulation of the profession in countries such as the USA and the UK most law firms have been under constant pressures to reconsider the future of their service provisions and redefine their business model. The law sector is heterogeneous, inefficient, overcomplicated, conservative and far from maximising potential but remains one of the most critical backbones of the global economy that has been severely understudied.

The existing scarce literature has yet to develop a theoretical and empirical understanding of the barriers hindering innovation adoption, which is a driver for positive change, and how legal services could overcome them in order to stay competitive in this dynamic environment. The purpose of the Thesis is to fill in this important research gap, employing a two-phase mixed-method study consisting of in-depth interviews and a quantitative survey with legal professionals. This process enabled the author to identify and examine in-depth and breadth their working experiences and informed attitudes about how legal firms operate today.

The qualitative data collection consists of 53 semi-structured interviews that were conducted with legal professionals in seven countries to explore their day-to-day operational challenges and identify the barriers that hinder and the opportunities that promote innovation adoption in the legal sector. A data intensive thematic analysis identifies six key themes. The six themes that emerged from the thematic analysis are: *human factor and culture*, *client and market*, *technology*, *organisational transitions*, *legal processes*, and *education*. These are key areas for legal firms that reflecting and affecting their capacity to innovate and improve their operational efficiency.

A quantitative survey completed by 106 legal professionals working in 19 countries, explored further these key areas using descriptive statistics and regression analysis modelling. This part of the work focused particularly on elements referring to *human factors and process change*, *technology* and *knowledge transfer* as these were identified as factors associated with solutions that could advance legal business growth.

The Thesis contributes to the state of art by: i) contextualising each of the themes outlined herein with an emphasis on describing their diverse underpinning dimensions; ii) developing an evidence-based conceptual framework that critically assesses legal innovation uptake barriers and opportunities for efficiency enhancement; and iii) advancing the theoretical and empirical understanding of law service operations demonstrating the rationale for legal firms to invest in technology, multidisciplinary education and training for their human capital, and to adopt leaner, hybrid and more client-driven management approaches.

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I am grateful to all the legal professionals' participants of my project that I interviewed and took part in my survey for sharing with me their views on the challenges they were facing in their law firms. Without their participation this work could not have been realised.

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During her three year PhD studies she participated in three international and national conferences. She submitted two journal publications articles in one as leading author and in the second one as a contributing author. She acts as a reviewer for the EURAM and EUROMA Conference proceedings.

Last but not least, she attended a national Law Summit in London 2018 for the project's data collection purposes where she met and discussed with legal experts from different countries. She also was an active member in a 'Legal Hackathon' workshop led from her initial supervisory team where she organised and recruited legal professionals around Yorkshire and produced a report with the concluding remarks of the workshop.

Finally, she teaches Operations and Project Management principles in undergraduate and postgraduate students in Huddersfield Business School and she is also involved in their supervision and assessment.

## List of Publications

- Nikitas, A., Michalakopoulou, K., Tchouamou Njoya, E. and Karampatzakis, D. (2020). Artificial Intelligence, Transport and the Smart City: Definitions and Dimensions of a New Mobility Era. *Sustainability*, 12(7), p. 2789.
- Michalakopoulou, K., Bamford, D., Reid, I. and Nikitas, A. (under review). Barriers and Opportunities to Innovation for Legal Service Firms: A Thematic Analysis-Based Contextualisation. Submitted November 2019. *Production Planning & Control*.
- Michalakopoulou, K., Reid, I., Bamford, D. and Nikitas, A. (2019). Operations Innovation Adoption in the Legal Services. In: *EurOMA 2019, 17<sup>th</sup> -19<sup>th</sup> June 2019*, Hanken School of Economics and Aalto University Business School in Helsinki, Finland.
- Michalakopoulou, K. (2018). Lean Thinking in the Legal Sector. In: *Huddersfield Business School Research Conference 10<sup>th</sup> -12<sup>th</sup> January 2018*, Huddersfield Business School, UK.
- Reid, I., Bamford, D. and Michalakopoulou, K. (2018). Acknowledging the Voice of the Customer: The Service Value of Legal Services. In: *29<sup>th</sup> POMS Annual Conference*, Houston, USA.
- Michalakopoulou, K., Reid, I. and Bamford, D. (2017). Arcs of Integration for Professional Service Operations Management: A Literature Review. In: *BAM 2017, 5<sup>th</sup> -7<sup>th</sup> September 2017*, University of Warwick, UK.

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## List of Abbreviations

<b>ABS</b>	Alternative Business Structures
<b>AI</b>	Artificial Intelligence
<b>CEO</b>	Chief Executive Officer
<b>HR</b>	Human Resources
<b>HRM</b>	Human Resource Management
<b>ICT</b>	Information and Communication Technology
<b>IT</b>	Internet Technology
<b>KPIs</b>	Key Performance Indicators
<b>L</b>	Likert Scale
<b>M&amp;A</b>	Mergers and Acquisitions
<b>MGI</b>	McKinsey Global Institute
<b>OM</b>	Operations Management
<b>ONS</b>	Office for National Statistics
<b>PBV</b>	Practice Based View
<b>PhD</b>	Doctor of Philosophy
<b>PSFs</b>	Professional Service Firms
<b>PSO</b>	Professional Service Operations
<b>PSOM</b>	Professional Service Operations Management
<b>QUAL</b>	Qualitative Research
<b>QUANT</b>	Quantitative Research
<b>R</b>	Researcher
<b>R&amp;D</b>	Research and Development
<b>RBV</b>	Resource Based View
<b>RQ</b>	Research Question
<b>SD</b>	Standard Deviation ( $\sigma$ )
<b>SMEs</b>	Small and Medium Enterprises

## Chapter 1. Introduction

Chapter 1 introduces the focus of the project and the rationale behind this. It starts by providing a brief overview of the importance and challenges of professional service firms (PSFs). This is followed by a detailed overview of the legal sector and by introducing the value of innovation and operations management uptake as tools that could allow legal service providers to improve productivity and efficiency. The Chapter identifies some of the key research gaps that this work aims to address, sets the aim and the explicit research objectives of the study and finally, introduces the structure of the Thesis.

### 1.1. Professional service firms- justifying the research problem

The service sector is of high socio-economic value and financial growth for the worldwide economy and customer demand for services is continuously rising (Javalgi and Steven White, 2002). Globalisation, information technology and borderless trade have been the drivers of growing service offerings and various scholars have long emphasised the knowledge-dependent field for GDP growth and employment rates (Wirtz, 2000).

Professional service firms (PSFs) are businesses that mainly provide intangible services through their knowledge to clients (Heirati et al., 2019) and whose outputs are encoded with complex knowledge (Blindenbach-Driessen, 2018). These are for example the legal, accounting and management consulting firms that their human resources are difficult to imitate by other competitor firms and their services cannot easily be evaluated from customers (Muzio and Kirkpatrick, 2011). PSFs have high intellectual value-added capabilities and require high investments in technology and knowledge transfer to stay innovative (D'Antone and Bonomi Santos, 2016).

However, according to Bello et al. (2016) PSFs face challenges in their capacity to innovate due to firstly, financial reasons that are restricting their ability to pay high wages to their employees and secondly, to external markets and online vendors offering professional services with alternative fee schemes. Also, PSFs need to establish high engagement with their clients and this may downgrade their efficiency in terms of time and resources (Brandon-Jones et al., 2016).

Nätti, Ulkuniemi and Pekkarinen (2017) argued that PSFs should intensify their efforts on optimising their operations and increasing their strategies for innovation adoption for efficiency and productivity enhancement, if they want to thrive long-term. The sector of professional services needs to be transformed focusing on exploring ways that will enable PSFs to use

innovation adoption as a generator of increased efficiency and not as disruptive, costly and unnecessary process that demands inefficient use of resources. PSFs need to adjust effectively their working practices to meet the current competitive workplace requirements and technological developments. One possible way to do this is by managing their expert human capital resources abilities to develop innovative services for better performance (Bello et al., 2016).

Following Brandon-Jones et al. (2016) and Lewis and Brown (2012) reasoning, in order to explore and identify the barriers and opportunities for innovation adoption and operational efficiency enhancement there is a need to narrow down the research into a specific services sector for an in-depth study of the managerial challenges and operational characteristics. The legal services sector is an ideal setting considering the complexity of their operations, their strict operating business model and the rapid entrance of technology in a rather conservative workforce.

There is limited application of operations management research on how the legal services sector respond to the challenges they face in comparison with other service industries like the management consulting (e.g. Heirati et al., 2019) and tourism hospitality (e.g. Georgiadis and Pitelis, 2012).

#### 1.1.1. Background on the legal sector

Law firms face difficulties when managing their business model and trying to adapt to the rapidly changing technology and customer expectations (Giannakis et al., 2018). Most of them operating across the UK have suffered since the recession and the entrance of external players that hit the corporate finance and property contracts (Financial Times, 2017) as their operations are complex and exposed to higher levels of external uncertainty. Ribstein (2010) argues that Big Law (i.e. the largest law firms generating high revenues) is suffering from the decline of the general economy and from the overall demand for service lawyers. Similarly, law firms around the world are under constant pressures to reconsider the future of legal services due to a number of challenges that are further explored in the present study.

For instance, the deregulation of the legal sector following the entrance of the alternative business structures (ABS) in countries like the UK and Australia (Garoupa, 2014) and the demise of legal aid have been the forces driving many legal firms on the verge of bankruptcy or to productivity declines (Susskind, 2017). Legal firms also undergo pressures due to the

constant entrants of online based legal suppliers promising faster and more cost-effective legal services (Gottschalk, 2002).

ABS specifically are defined under three categories, i) *“a business which allows non-lawyers to have a higher degree of ownership or managerial interest of the business, ii) a business structure permitting passive investment in the ABS and iii) a firm offering non-legal as well as legal services practices”* (Reardon, 2016, p.309). The deregulation of the legal profession introduced a hybrid management alternative; this is the choice where lawyers and non-lawyers share the management and control of legal businesses which provide reserved legal services to the public (The Law Society, 2018a).

Likewise, institutional changes with one major example for the UK and the European Union being Brexit and its potential consequences, may create barriers preventing mostly large legal firms from expansion opportunities and pushing other firms to make fundamental changes in their business approach. Many UK firms for instance are changing their recruitment practices due to uncertainty in the qualifications of a lawyer and the overall regulations that might come into force (Hellwig, 2017) while lawyers themselves see the need to qualify as solicitors beyond the UK market especially if they want to work for (or have an open door to) international law firms.

Brexit is considered a threat to the legal profession as its uncertainty is discouraging firms to grow and take decisions. For instance, legal experts expect that there will be a significant profit decrease of £3.5bn for law firms in the long-term as Brexit consequences are about to occur (Financial Times, 2019). Also, the increasing expectations of the clients towards legal professionals and the competitive market indicate a need for change in the legal market landscape.

Despite its increasing problems that reduce the legal sector's capacity to maximise its potential, the law industry remains a very vivid business arena that continues to grow. It is anticipated based on the Office for National Statistics (ONS) that even more young graduates will look for a job in the UK's legal sector and this number will continue to rise for the 2020 (ONS, 2019). According to the statistical data of the Law Society's (2018b) reports an estimated of 321,000 people are employed in legal services in the UK for the year 2018 and it might be a moderate decrease for the year 2019. The legal sector has grown by 3.3 percent per year over the last 10 years, compared to a real growth in the UK economy and it is expected to rise at a 2.7 percent for 2019 (The Law Society, 2018b). The UK accounts for around 10 percent of the global

market for legal services, second only to the US (The City UK, 2016). It is also the largest market in Europe, accounting for around a fifth of its legal services fee revenue. In other words, although Brexit might be discouraging for law firms to invest and create strategies to grow, this will not have a substantial effect on the lawyers' demand.

This increasing demand in legal services and law professionals is a universal trend and not only UK-based. For instance, according to Wang (2000) large law firms in the USA have increased dramatically in size and hold a significantly bigger market share than what they did in the near past; the total number of active lawyers in the USA at the beginning of 2019 was 1.352.027, up from 1.180.386 in 2009, according to the ABA's National Lawyer Population Survey (ABA, 2019).

The legal industry despite its problems still makes a vital contribution to the worldwide economy (Hellwig, 2017), with the USA and the UK legal sectors leading a dynamic global market with total annual revenues (as per 2018) of £330 billion and £24 billion (as per 2017) respectively (Legal Cheek, 2018; The Law Society, 2020) that despite their problems remain competitive and have the capacity, if led and managed in a more efficient way, to prosper further. This contribution is even greater when the very important benefits legal professionals provide for socio-economic prosperity are taken into account such as completing business and commercial transactions, resolving disputes, facilitating investment and innovation and advising people every day on issues which affect their lives (The Law Society, 2016).

A way for legal service providers to enhance their sometimes problematic productivity and efficiency is by taking actions for revitalising their business philosophy that can optimise legal business procedures, which nowadays may be somewhat dysfunctional, repetitive or unorthodox. The professional service sector, and the law industry in particular, is characterised by a high knowledge intensity, a high professionalised workforce and a low capital intensity (Von Nordenflycht, 2010). This means that innovation implementation and more specifically aspects of innovation like operations management thinking and knowledge transfer from other professional disciplines can be a way forward for improving the sector and optimising its operations and offerings.

## 1.2. Introducing the concept of innovation

Innovation as a concept can have multiple meanings across different industries. Slack, Brandon-Jones and Johnston (2016, p.110) argued that innovation of a product or service is about anything new and unique happening to the company. Rothaermel (2015, p.199) describes innovation as “*the successful introduction of a new product, process, or business model that can lead to a powerful driver for competitive processes*”. More specifically, from an operations management perspective, innovation is about the transformation of a new idea into practice for the means of creating value for the customer (Rice, 2017; Rogers, 2010).

In professional services, innovation occurs when there is a process change or an improvement to the end user’s experience (Lusch and Nambisan, 2015; Fitzsimmons and Fitzsimmons, 2000). This is defined as service innovation since the parties involved in this process are called the *service providers* and the *service customers* (Lusch and Nambisan, 2015; Fitzsimmons and Fitzsimmons, 2000).

Innovation has become a central issue in the business agenda of companies, and in many cases, it is recognised as the cornerstone for organisational survival and growth (Matopoulos and Vlachopoulou, 2008); actually valuing existing and balancing among new continuous innovations is critical success factors for firms’ survival and business growth (Biemans, 2018). Similarly, firms by adapting to the new technological advancements and changing practices on how they manage their resources could have a competitive advantage over others. From an economic perspective this is line with Guo, Pérez-Castrillo and Toldrà-Simats (2019) who argued that financial consultants opt USA public firms to invest to innovative practices as a long-term strategy for prosperity.

The importance of Operations Management academic research on innovation adoption in PSFs has been highlighted by many scholars (e.g. Metters and Marucheck, 2007; Lusch and Nambisan, 2015; Oke, 2007; Tsinopoulos, Sousa and Yan, 2018), still services are considered passive and slow adopters of innovations like technology compared to the manufacturing sector (Gallouj and Savona, 2010). One reason for that emphasised by Djellal and Gallouj (2009) might be the difficulty to measure the inputs and outputs in the service industry compared to the more straightforward manufacturing production sector (Gallouj and Savona, 2009). Nevertheless, even if innovation adoption is not as frequent or robust as it is in other sectors, service innovation according to Lusch and Nambisan (2015) is substantially growing in different disciplines like marketing (Oliveira and Von Hippel, 2011) and economics (Gallouj



and Savona, 2009) with the operations field following slowly (Fitzsimmons and Fitzsimmons, 2000; Metters and Marucheck, 2007; Oke, 2007). Despite its importance though, there is limited research on the impact of service innovation to organisational performance in the services sectors (Durst, Mention and Poutanen, 2015).

This study considers service innovation for the specific context of legal professional services, as a process change or institutional transformation of the legal services sector by better utilisation of resources that could help addressing a variety of challenges that legal professionals face nowadays and are identified herein. There are a few examples in the literature (e.g. Desyllas et al., 2018; Moore and Haji, 2017; Roper, Love and Bourke, 2016) where scholars explored the role or drivers of innovation in legal services but as a whole law is a severely under-researched industry (Segal-Horn and Dean, 2007). More specifically, there is a scarcity of operations management research that has specifically focused on identifying how the legal service sector embraces innovation (Metters and Marucheck, 2007; (Roper, Love and Bourke, 2016; Desyllas et al., 2018) and to what extent this is appreciated by and influences the working lives of legal professionals. There is no thorough record of the opportunities and challenges legal firms and their professionals face when trying to increase their overall efficiency and productivity and adapt to a paradigm change that goes beyond the traditional boundaries that have defined the law profession for decades now.

### 1.3. Introducing operational and innovation management in law business

Developing a culture of innovation is now perceived as central to achievement in the business climate of the 21<sup>st</sup> century. This is because the increased recognition of an innovative culture, is the best insurance an organisation can have of (relative) longevity in an environment of fast-moving markets in today's knowledge-driven economy (Hildago and Albors, 2008). Establishing bridges between knowledge and the marketplace and putting in place the right environment for innovation are essential to build competitiveness and superior customer value (D'Alvano and Hildago, 2012). Some of the key principles that the management of service firms, and law service firms in particular, should entail for maximising potential relate to the facts that: i) new types of services are more complex because they integrate more technologies (Liikanen, 2003), ii) management should encompass a multidisciplinary approach (Maskell, 1999), iii) new skills are required for embracing innovation (Christensen, 1997), iv) there is a need for mixing technical and relational tools (Chiesa et al., 1996) and v) the market and customer expectations are growing and becoming more challenging and diverse. Operations,

leadership and human resources management are all key dimensions for innovation uptake (Lengrand and Chartrie, 1999) and this Thesis will focus on the severely understudied OM element that has been scarcely part of legal firms' strategical approach to competitive advantage and growth generation.

One of the key operational tools that can be part of innovation management packages capable of enhancing performance in law service delivery relates to Lean thinking. Lean thinking is a philosophy originated in the Japanese manufacturing industry that is applied for planning and controlling operations (Parry and Turner, 2006). Companies that embraced its principles enjoyed significant improvements in both productivity and management efficiency since they succeed in minimising waste of materials, time and effort (Drew, McCallum and Roggenhofer, 2016; Vlachos, 2015). By applying Lean thinking, organisations can achieve a competitive advantage by reducing the production cost of their goods/services without compromising the quality of their products (Bamford et al., 2015). In other words, Lean thinking provides a way to stipulate value-creating activities and perform them in the most effective way (Womack and Jones, 2015). This project considers Lean and other operational tools as innovative interventions that if tailored to the firm's needs can lead to long-term sustainability (Orji and Liu, 2018) and performance improvement.

A number of Lean thinking applications were implemented in the healthcare industry (e.g. Bamford et al., 2015; Holden, 2011; Kim et al., 2007), in manufacturing (e.g. Hines, Holweg and Rich, 2004) and also in the public sector (e.g. Hines, Martins and Beale, 2008). Although the commercial legal sector is one of the many services sectors that might benefit from a Lean thinking approach (Hines, Martins and Beale, 2008) there is limited research applying Lean tools in the legal industry.

Although operation and innovation management tools can be a path to business improvement, firms are reluctant acknowledging their benefits to process optimisation, product/service quality and improved customer services (Alagaraja and Egan, 2013; Alagaraja, 2014). The legal sector's traditional way of operating does not allow new entrants of technological and management thinking strategies to occur (Susskind, 2017). However, to successfully implement a different management approach, it is essential to first identify the challenges that firms face and evaluate the barriers that hinder its application.

Since law is a sector about professional service delivery, the human element is of vital importance for the prosperity of every legal firm. This is because knowledge as a capital,

internal human resource handling and legal professional-customer interpersonal relationships are critical factors for gaining a competitive advantage (Torres, Ferraz and Santos-Rodrigues, 2018). Similarly, the human element is the source of competitiveness for service firms (Pelucha, Kveton and Potluka, 2019) but also contributes to economic growth and regional development (Hanushek, 2013). Nonetheless, most scholars do not often take into account the human element and its successful integration within operations and innovation management (Hines, Holweg and Rich, 2004). Therefore, this absence of particular focus can be considered as another knowledge gap in the literature; in other words, there is a lack of behavioural studies considering the human aspect in the legal service provision despite the fact that this is critical for an industry-based sector. In other words, although management scholars have long emphasised the role of human factor effectiveness within the OM research, due to the difficulties to codify it, there is a limited application of operational and human-behavioural dynamics (Bendoly, Donohue and Schultz, 2006). This research will explore whether techniques like flexible working, incentivisation, and training can help legal professionals and therefore their firms to innovate more.

#### 1.4. Aim and objectives

This project intends to develop a thorough empirical and theoretical understanding of the challenges and opportunities underpinning the legal sector's ability to innovate and increase its productivity and efficiency. This is delivered through a systematic analysis of the legal professional's insights reflecting and affecting their individual working experience but more importantly the barriers and enablers defining their legal firm's capacity to adopt and adapt to change. This is followed by evidence-based recommendations about how to improve the legal service provision, how to make more efficient legal firm operations and how to boost up the legal sector as a whole. More specifically the research aim of the present study is:

- ***To understand the opportunities and challenges that legal firms face in adopting service innovation as a pathway for enhancing their operational efficiencies and productivity.***

In particular, the researcher examines the views of the legal service network (lawyers, barristers and, legal project and innovation managers) and how innovation can be a leverage for Legal Professional Service Firms' (PSFs) performance improvement and productivity enhancement. This could happen by: firstly, exploring the operational challenges that legal professionals face daily and identifying opportunities for innovation adoption; secondly, examining the barriers

that legal professionals face on adopting innovation and ways to minimise them; and finally, providing recommendations for law firms' managers that could allow them to provide better service innovation.

Thus, the explicit objectives of this study are:

- 1) To identify and interpret the key operational challenges and opportunities of the legal sector.***
- 2) To examine what law professionals experience daily in their workplace arenas and identify the existing level of innovation within law firms.***
- 3) To propose evidence-based solutions that can enable efficient delivery of services and improve innovation adoption by law firms and individual legal professionals.***

By fulfilling these requirements the study is able to inform knowledge transfer and the decision-making underpinning business performance in the sector and provide evidence that innovative approaches such as the effective management of the human factor and Lean thinking can work as a benchmark within the legal sector.

## **1.5. Research questions**

This section presents the research questions that guide the researcher on filling the gaps identified in section 1.

***RQ1) What are the key operational challenges and opportunities of the legal sector today?***

***RQ2) What are the perceived barriers and opportunities that influence innovation adoption in law firms?***

***RQ3) How can law firms improve innovation adoption, so as to enhance their operational efficiency and the productivity of legal professionals?***

## **1.6. Contributions to theory and practice**

Through a *theory borrowing* and *blending* approach (Oswick, Fleming and Hanlon, 2011) using principles of operational management and applied social research methods this study attempts to generate a revelatory *multiple lenses* contribution (per Nicholson et al., 2018) that has a twin objective. It seeks to develop an in-depth understanding of: i) the existing level of

innovation within the legal service sector and what legal professionals experience daily in their workplace arenas; ii) the challenges and opportunities that may prevent or enable efficient delivery of services and innovation adoption by law firms and individual legal professionals, and the iii) managers implications for service innovation in legal service firms.

This study follows a problematization strategy as described by Alvesson and Sandberg (2011) and Sandberg and Alvesson (2011) that challenges assumptions (as per Nicholson et al., 2018) within the professional service operations management (PSOM) field. The key assumption that this project challenges is whether law firms lack innovation; this will be evaluated and ‘measured’ through collecting and analysing legal professionals’ views, experiences and insights. Also, based on a mixed methods analysis this study explores and proposes innovative ways that law firms could adapt to enhance their performance and productivity efficiency.

All in all, according to Corley and Gioia’s (2011) contributions’ matrix (see Table 1.1) this research develops a theoretical framework that contributes revelatory both in a scientific and practical way to the professional services sector. The project aims to fill a gap in the literature by applying OM thinking for innovation adoption in legal firms and add value by forming a managers’ guide to follow for continuous service innovation.

*Table 1. 1: Contributions’ matrix to knowledge*

<b>Originality</b>	<b>Revelatory</b>	4 ➤ Identifying the barriers and opportunities for innovation adoption based on legal professionals’ insights. ➤ Managerial implications for service innovation in legal services.	1 ➤ Filling a literature review gap about innovation adoption for small-medium and large law firms.
	<b>Incremental</b>	3	2 ➤ Existing level of innovation within legal services based on different firm sizes. ➤ Applying OM thinking in the legal sector.
		<b>Practically useful</b>	<b>Scientifically useful</b>
<b>Utility</b>			

*(adapted from: Corley and Gioia, 2011)*

Hence, this Thesis creates a basis for establishing a meaningful and timely roadmap looking to identify and interpret on the one hand, the key operational challenges of the legal sector and barriers that legal professionals face and on the other hand, innovation opportunities for the sector and its practicing lawyers that will lead to a competitive advantage. This work also highlights possible solutions to the problems that may deprive law sector from enjoying prosperity and optimal productivity. Overall, research on the legal sector's improvement can contribute significantly not only for the empowerment of the legal firms *per se*, but for the country's overall financial prosperity and for the next lawyer and legal professional generations.

*Methodological contributions:*

After reviewing the literature review proved that there are very limited applications of a multi-method approach exploring the concept of innovation adoption in the legal sector. The reasons might lie to the fact that professional services such as the legal industry services due to their confidential nature are difficult to access; thus, conducting research might be difficult. The legal sector has been characterised as a complex one with no definite operational structures and measures of efficiency. The legal firms operate under strict regulatory bodies and the entrance of innovative approaches have to be examined thoroughly in advance.

For these reasons, the difficulties for innovation adoption and the challenges that legal professionals face in their work routine had to been assessed from different angles. Most scholars' research on the law sector is limited to a mono-method approach or to a selected group of firms to produce results. For instance, Faulconbridge and Muzio (2008) conducted forty interviews with lawyers (partners) in selected big law firms in the UK about the globalisation concept. However, this study contributes by conducting interviews with legal professionals employed in a variety of sizes of legal firms worldwide, followed by a survey, to provide a holistic and a (more) generalisable view of the challenges and opportunities for service innovation. Therefore, for the means of answering the research questions the researcher employed methodological pluralism; there is no prior OM study looking at legal firms that employed a mix-method approach in exploring innovation practices reflecting and affecting business efficiency.

## 1.7. Thesis structure

An overview of the structure of the Thesis (see Figure 1.1) follows below summarising what every Chapter is set to contribute to the study.

### *Chapter 2: Literature Review*

Literature review is presented using lenses relating to PSOM and resource based view (RBV) with elements of practice based view (PBV) theories. This Chapter provides a more detailed description of the law sector and its operations, innovation and its different meanings across the workplace, and operations management tools and techniques. This three bodies of literature aim to review existing research on the field and pinpoint the research gaps that this study means to address. Finally, Chapter 2 aims to build up the rationale behind the research and how the aim and objectives of it will be fulfilled.

### *Chapter 3: Research Methodology*

The third Chapter provides an in-depth understanding of the research methodology. It specifies the data collections and analyses that took place for this project. More specifically, the Chapter describes the selected philosophical paradigm followed by arguments supporting the suitability of the selected mixed methods approach. Furthermore, the research design and the steps undertaken for each data collection and analysis are systematically clarified. In particular, the qualitative and the quantitative part of the study and their explicit contributions to filling in the research gaps identified by the study are defined. Finally, the integration and complementarity of the two phases are demonstrated and discussed.

### *Chapter 4: Qualitative Research*

Chapter 4 introduces the qualitative analysis of the study. It specifically provides a presentation of the interview guide devised and employed for the data collection and the selected method of analysis. More specifically, it thoroughly analyses step-by-step the profile of the participants, the thematic analysis and discusses the themes extracted from the interviewees' responses. To conclude, it summarises the key points of the first data collection and the linkage with the quantitative phase of the study.

### *Chapter 5: Quantitative Research*

Likewise, the survey content and how it is related with the study's research questions follows in Chapter 5. The questionnaire consists of three bodies, *the human factor and process change*, *the technology innovation and the innovation via knowledge transfer*, each with specific statements using a 5-point Likert scale. The profile of the respondents and a taxonomy of their

views on innovation adoption are analysed using descriptive statistics. The key variables and the statistically significant relationships are pointed out followed by an ordinal regression model.

#### *Chapter 6: Discussion*

The Discussion is the most important part of the Thesis, providing the reader with ‘a big picture’ narrative and empirical evidences that address the research questions. A synthesis of the key mixed methods results, and a reflection of the theoretical underpinning help the author develop an in-depth understanding of the factors that reflect and affect innovation adoption in legal services. The researcher also introduces a model for managerial implications that law firms can follow for service innovation enhancement.

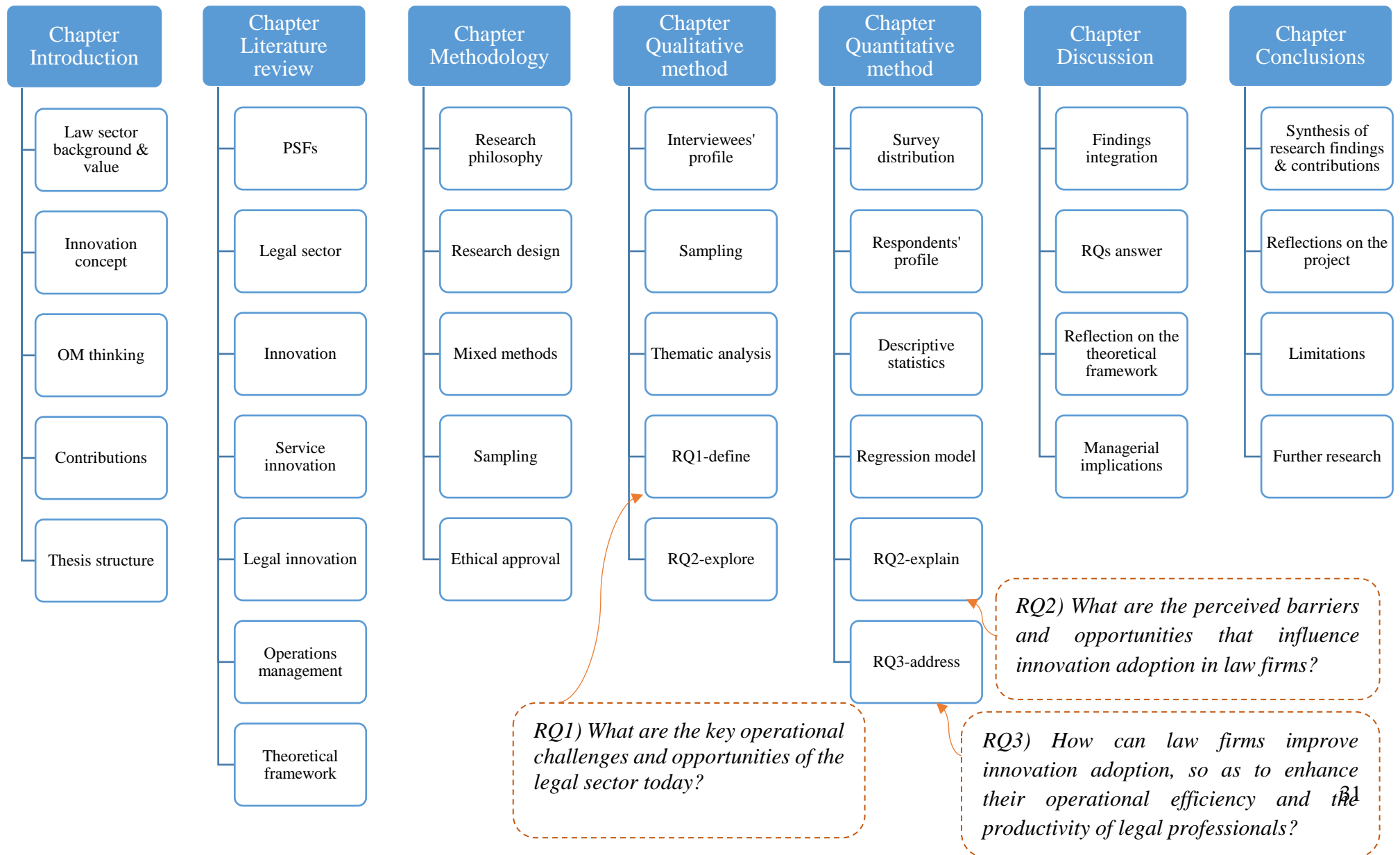
#### *Chapter 7: Conclusions*

This Chapter finalises by offering the study’s key lessons on how to approach innovation adoption and operational efficiency enhancement in the notoriously conservative legal service industry. The study’s contributions in theory, in practice and in the society are pointed out. The researcher’s reflections on the project and future research are also stated at end of the Chapter.

Overall, the next section starts by presenting a critical summary of previous studies of relevance. This is followed by a detailed description of the methodology and data analyses employed. From the qualitative part, a thematic analysis is presented that identifies the key dimensions of the challenges experienced today by law professionals reflecting and affecting innovation adoption in the legal service sector. Themes and subthemes are analysed in detail with the use of raw extracts from the participants’ interviews. The responses from the distributed questionnaire are statistically analysed and synthesised with the qualitative findings. Finally, the project provides a discussion section that integrates the key messages of the study and relevant recommendations for legal professionals and operational managers working with legal or similar professional service firms looking to incorporate more innovation in their current and future practice.



Figure 1. 1: Thesis structure



## Chapter 2. Literature Review

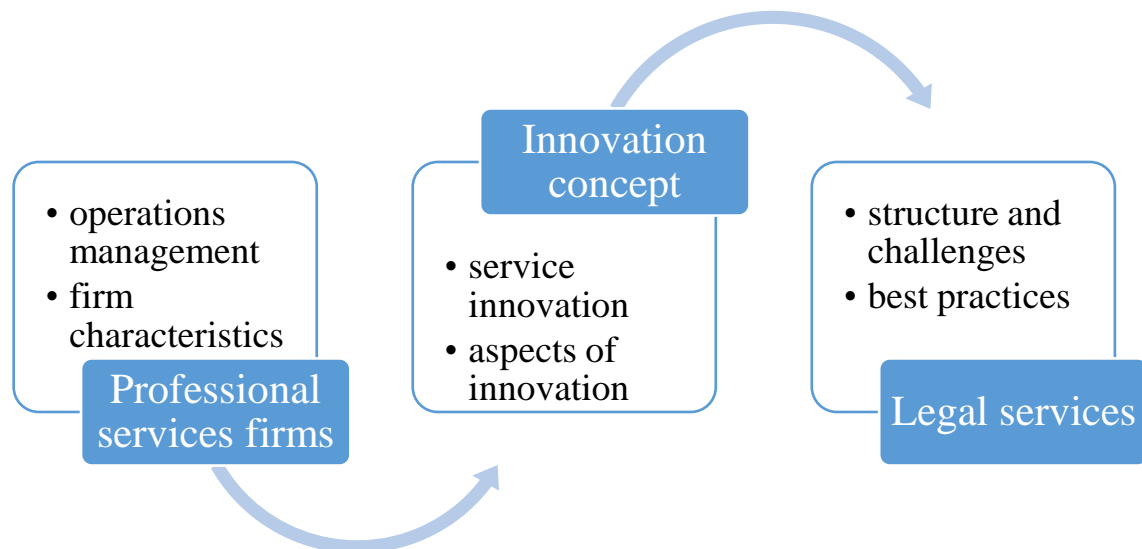
### 2.1. Introduction

This Chapter reviews the existing literature on themes relevant to the topic being investigated. This is often the first step that scholars take in order to identify any gaps and/or interesting aspects on their research but also to challenge existing theories and propose new ones. As Tranfield, Denyer and Smart (2003) argued a literature review is the key step for researchers to inform with evidences, policies and practices any discipline. Fink (2005, p.3) defined literature review as “*a systematic, explicit, and reproducible design for identifying, evaluating, and interpreting the existing body of recorded documents*”.

The structure of the literature review themes is presented in Figure 2.1. The three main pillars of the literature review Chapter are *Innovation*, the *Professional Service Firms* and the *Legal Sector*. The coverage of Professional Service Firms (PSFs) discusses their characteristics and highlighting among others operation management and human resource management approaches that inspired the present study in theoretical and empirical level. Obviously, the focus is concentrated on the *Legal Sector* but since the literature there is so scarce some lessons from PSFs are adopted. *Innovation* is the phenomenon being investigated within the legal services. Particularly, the Innovation section provides a synthesis of definitions across different sectors and how differently each sector approaches this diverse and multidimensional concept that is adopted herein as a source of continuous competitive advantage and performance/efficiency enhancer. Furthermore, there is a focus on which aspects of innovation are being employed from PSFs and their importance for creating a competitive advantage. The application of those aspects is being reviewed for the legal sector's efficiency which is the core sector of the study.

The resource based view (RBV) with elements of practice based view (PBV) are the core theories adopted to provide the lens for the research topic investigation. Also the stakeholder theory and elements of the diffusion of innovation theory underpin the study. Finally, the researcher conducts the literature review from a service operations management perspective. Ultimately, the review highlights the lack of empirical research on innovation adoption in the legal sector and the absence of a conceptual framework that can guide legal service management on innovation and efficiency enhancement. This Thesis will try to address these knowledge gaps its next Chapters.

Figure 2. 1: A synopsis of the literature review



## 2.2. Operations strategy and management

According to Slack and Lewis (2017, p.24) operations strategy is defined as “*the set of decisions that shape the capabilities of any operation’s type and their contribution to overall strategy, through the reconciliation of market requirements with operations resources.*” In other words, Slack, Brandon-Jones and Johnston (2016, p.76) argued that “*operations are the resources that create the products and/or services*”. In particular, operations strategy deals with the decision-making on how to implement those. Operations management will be presented in the next section.

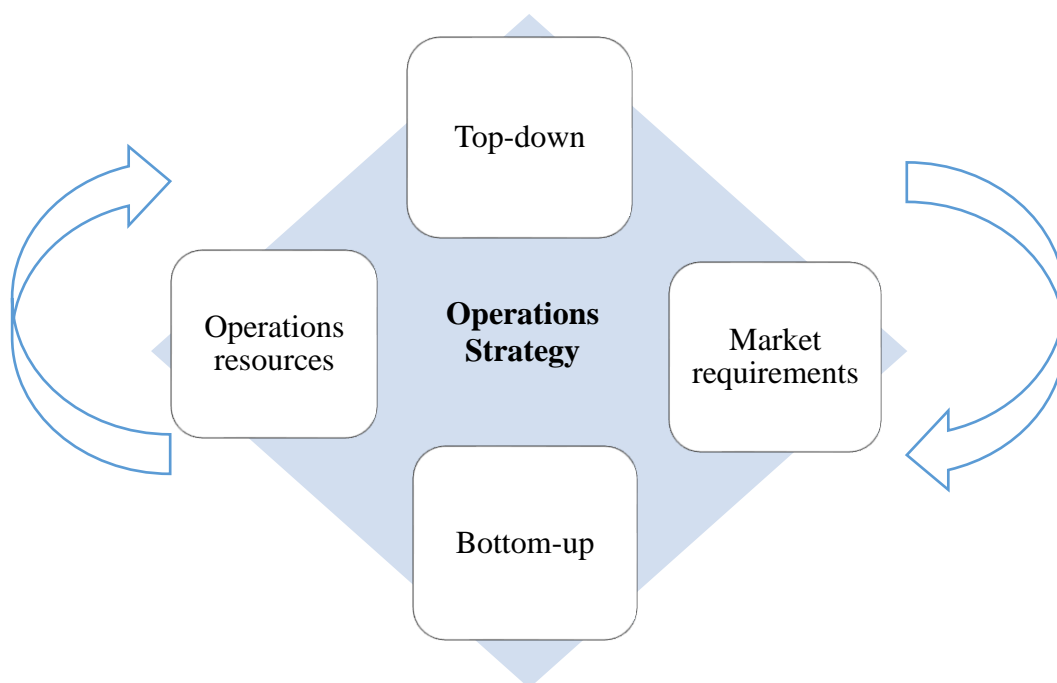
Operations strategy entails four perspectives that scholars agree on; their sum provide a holistic overview of the business function. These are illustrated in Figure 2.2 below. This study investigates ways that legal firms embrace change; hence it tries to develop an understanding of how their business and operations strategy affect the decision-making and the influence of the market forces on the law firms’ operating model.

More specifically, the ‘*top-down*’ approach deals with the firm’s corporate, business and functional objectives. For instance, the business’s decisions on a global level such as internationalisation or growth objectives and the resource allocation for performance and productivity improvement. Businesses set their vision and mission and also their position in the market. On the other hand, a ‘*bottom-up*’ perspective deals with the day-to-day operations of the business and the workforce experience. The top-down with the bottom-up direction are mutually inter-connected, as the actions of the one can influence the outcome of the other. The market expectations and clients’ needs have to be taken into account when firms are developing their operations strategy, as these can drive

change but also indicate the client expectations. Finally, the operations resources are those who build the firms' strengths to support the strategy and compete in the market. These are under Slack, Brandon-Jones and Johnston (2016) the core assets and capabilities of a business and linked with the Resource Based View of the firm.

Therefore, the firms' stakeholders play an important role to the implementation of the operations strategy. The strategic directions, the motivation and leadership of employees and the overall project management of the business plan are factors for successful strategy implementation (Slack, Brandon-Jones and Johnston, 2016).

*Figure 2. 2: Operations strategy factors*



*(adopted from Slack and Lewis, 2017, p.11)*

Companies by linking their operations strategy with their business development model can achieve a long-term success (Slack and Lewis, 2017). This is because implementing an innovative operations management strategy can differentiate each type of company over their competitors.

## ***Operations Management***

Operations management is the field associated with the management of an organisation's processes, performance, capacity planning, technology transfer, quality assurance and supply chain that, if applied appropriately, will result to continuous improvement (Harvey, Heineke and Lewis, 2016). '*Operations should implement, support and drive strategy*' (Slack, Brandon-Jones and Johnston, 2016, p.77). The basic principles of operations managers are to design, plan and control, and improve the firm's processes. Operations management is the usage of resources for the means of creating outputs that create value for the customer. Inputs are considered the materials, information, knowledge/people and technology and outputs are the products and/or services to the market. This study aims to explore through the legal professionals' views how the better utilisation of legal firms' resources and modernisation of their processes can lead to efficiency and innovation enhancement.

Within the operations management field, Business Process Management (BPM) is the art and science of overseeing how work is performed in an organisation to ensure consistent outcomes and to take advantage of improvement opportunities. In this context, the term *improvement* may take different meanings depending on the objectives of the organisation. Typical examples of improvement include reducing costs, reducing execution times and error rates. Improvement initiatives may be one-off, but also be continuous. Importantly, BPM is not about improving the way individual activities are performed. It is rather about managing entire chains of events, activities and decisions that ultimately add value to the organisation and its customers. These *chains of events, activities and decisions* are called *processes* (Dumas et al., 2013). This study is focusing on how legal professionals manage the everyday legal processes/ transactions (including the human element) within their law firms and explore the challenges they face and opportunities for their improvement.

### **2.3. Theoretical underpinnings**

According to Webster and Watson (2002) via a literature review building, authors can reach two objectives. Firstly, authors review a plethora of research streams and relevant theories on a mature topic seeking to extend a theoretical and a conceptual framework. Secondly, scholars aim to address an issue by reviewing the literature and the assorted theories of a specific theme for the means of developing a new theory and a conceptual model.

The aim of this literature review is to strengthen the theoretical framework being adopted and create a conceptual model that describes how law firms' strategies can relate to innovation enhancement. This framework will be then explored and improved through the primary analysis of the Thesis. It

should be noted that the RBV theory with elements of PBV viewed under a stakeholder theory lens are the main concepts adopted for examining the Thesis's underpinning research phenomena.

### 2.3.1. Stakeholder theory

When a change within a business environment is needed, the observations and views of the company's stakeholders have to be taken into account. In particular, for a firm's performance improvement all the stakeholders should have the same objectives. Stakeholders are not only the people that are taking the decisions but also the people that they are going to be affected by them (Jensen, 2001). Stakeholders are defined as the *“organisations, groups, and individuals that can affect or are affected by a firm's actions”* (Rothaermel, 2015, p.11).

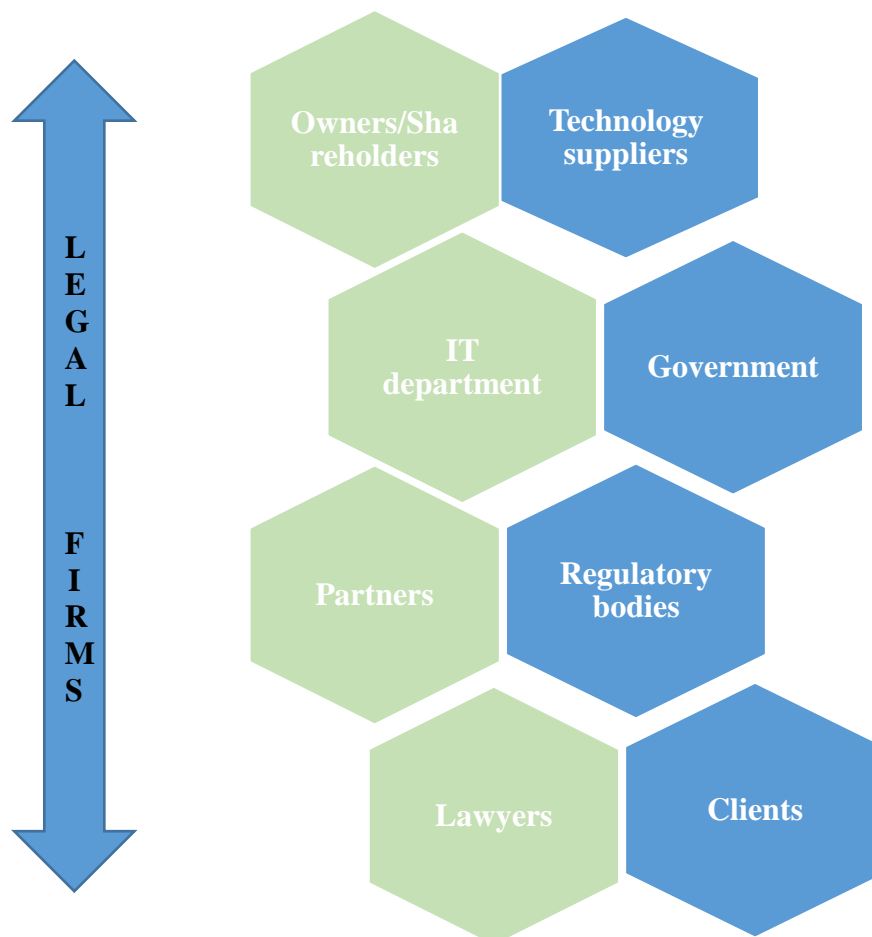
Stakeholder theory distinguish stakeholders as *internal* and *external* ones. Internal stakeholders are those who have a direct relationship within the company and provide the services. For example, these are the shareholders, the employees and the board members of the company (Van Niekerk and Getz, 2016). External stakeholders are those who are receiving the output of the company and can influence how the company operates. These can be the customers, suppliers, alliance partners, creditors, unions, communities, media, and the government (Rothaermel, 2015).

For the legal service sector, the stakeholder theory is illustrated in Figure 2.3 below. More specifically, the employees i.e. the partners, the lawyers at all levels in the hierarchical model and the IT department are considered the most valuable internal stakeholders within a legal firm. Furthermore, the owners and the shareholders of the legal firm are those who are the decision makers and the strategy developers. Externally, the regulatory bodies and the government are the institutions influencing the business model under the legal firms operate and their policies. Last but not least, the clients are the key external stakeholders that legal firms deliver value through their services. Finally, the IT suppliers are providing law firms the merchandise i.e. templates and documents to run their business. All these stakeholders are interconnected as changes in their 'behaviour' are directly or indirectly affecting the legal firms' performance.

Businesses have to manage their relationships with their stakeholders and be pro-active in order to sustain their competitive advantage. This can be achieved through the development and implementation of the company's business and operation strategies that all stakeholders have to adhere to. The effective management of stakeholders' internal and external relationships can have a number of advantages to the firms. In particular, internal stakeholders who take active role into the decision-making of the business develop a sense of belonging into the firm and cooperate to achieve

the business strategy. Additionally, by maintaining constant relationships with the external stakeholders like the suppliers, firms can act proactively to any inconvenience into the service delivery (Rothaermel, 2015). Ultimately, firms that are continuously communicating with their customers, can be adaptable to their expectations and to external demand, thus building a strong reputation and trust (Parmar et al., 2010). For this study, the data collection methods explored solely legal professionals' perspectives (i.e. concentrated only to the internal stakeholders' insights). The views of the customers and the other external stakeholders on the innovation adoption within law firms can be a potential future research.

*Figure 2. 3: Law firms' stakeholder identification*



### 2.3.2. Theory blending: RBV with elements of PBV

Competitive advantage is defined as the “*superior performance relative to other competitors in the same industry or the industry average*” (Rothaermel, 2015, p.5). Saloner, Shepard and Podolny (2001, p.39) explained that “*most forms of competitive advantage mean either that a firm can produce some service or product that its customers value more than those produced by competitors or that it can produce its service or product at a lower cost than its competitors*”.

Theoretical concepts can help authors understand the world around them. Walker et al. (2015, p.1183) argued that theories can “*serve a function beyond description, in that they allow us to predict the nature of relationships between phenomena*”. Operations management (OM) scholars adopt and advance theories from other disciplines such as from the human resource management, organisational and marketing field to explore the phenomenon they investigated. Scholars argue that this dearth of theory in OM lies on the fact that OM studies are mostly practical and applied researches and there are not recognised theories within this discipline (Walker, 2015; Özdamar and Ertem 2015; Behl and Dutta, 2019).

The resource-based view (RBV) theory is among the most popular theories (Hitt, Xu and Carnes, 2016; Bello et al., 2016) that has been mostly applied between the years 1988 and 2013 in the OM field; the discipline that this study is referring to. According to the review of Walker et al. (2015) from the 525 articles that employed a theoretical framework in their studies, 52 of them followed the RBV approach. Alternatively, the agency theory (Parker et al., 2018) and the resource dependency theory (Matopoulos, Barros and van der Vorst, 2015) are common theoretical frameworks employed by operations management scholars.

Agency theory stems from an economic view of risk-sharing (Eisenhardt, 1989), which occurs between two parties, principals and agents (Bendickson et al., 2016). Scholars employ agency theory to investigate an organisational problem between a principal-agent problem (principal-agent research) and governance mechanisms. On the other hand, resource dependency theory focuses on the key resources of the company and their interface between the organisation and the natural environment (Matopoulos, Barros and van der Vorst, 2015).

This project focuses on the firm’s human resources, their knowledge and working experience and explores how firms can create a competitive advantage through the management of them. It also examines the key determinants behind innovation adoption. Last but not least, transaction cost theory



examines ways of minimising costs having service/ goods transactions as the unit of analysis (Dagdeviren and Robertson, 2016). For example, Schmidt and Wagner (2019) explored Blockchain transaction costs from a supply chain perspective focusing on governance structures and exogenous parameters. Nonetheless, as the project herein does not examine solely cost and law firms' tangible outputs measurement this theory was not prioritised. All in all, agency, resource dependency or transaction cost theories could not provide the appropriate lens to address the research questions of the study.

As illustrated in Figure 2.4. below the researcher conducted a literature review search in the Scopus database using the keywords 'professional services', 'services', 'professional service firms' and 'theory' between the years 2014 and 2020. The search resulted in 768 documents for review. The researcher read all the abstracts of the papers shortlisted by the Scopus search engine and identified the most popular organisational theories scholars use in the service sector. Namely, these were the RBV, agency, resource dependency and transaction cost (economics) theory.

Based on that, the researcher conducted four different searches for each of these theories and concluded with a number of articles for review. Secondly, for each search, articles were evaluated based on the specific theory they used and their discussion on the services sector. The most appropriate of them were used for the present content analysis.

Overall, the Scopus database search was limited to business and management studies, journal peer-reviewed articles written in the English language between the years 2014 and 2020. Last but not least, there were several studies that employed a combination of organisational theories combining RBV, social exchange theory or transaction cost economics and others (e.g. Kingshott, Sharma and Chung, 2018; Harmon, Scotti and Kessler, 2018) to address their research gap. These were not reviewed separately and not included in the numbers in Figure 2.4. Selected citations of the journal papers reviewed and the most adopted organisational theories in the services sector are depicted in Table 2.1.

Figure 2. 4: Keywords search on organisational theories (2014-2020)

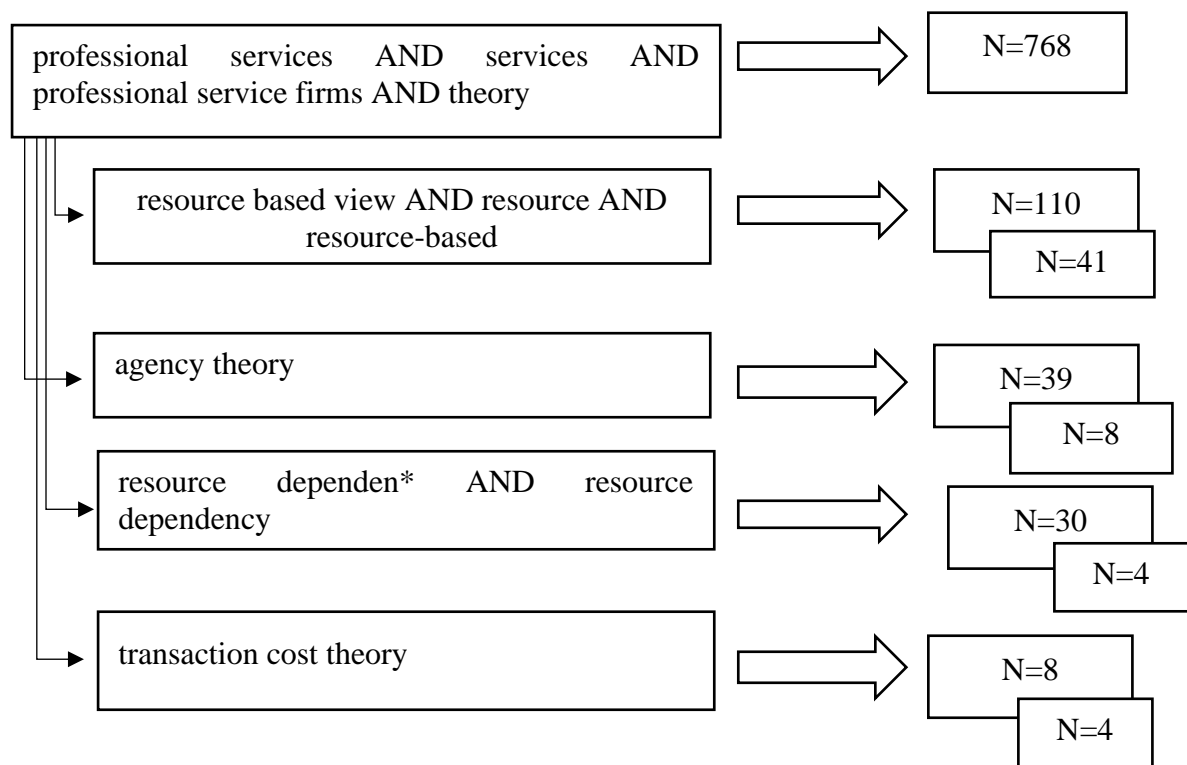


Table 2. 1: Selected citations on organisational theories in the service sector (2014-2020)

Resource-based view theory	Agency theory	Resource dependency theory	Transaction cost (economics) theory	Combination of theories
Hudnurkar, Ambekar & Bhattacharya (2019)	Lander et al. (2019)	Nolan & Garavan (2019)	Wang et al. (2020)	Kingshott, Sharma & Chung (2018)
Munjal, Requejo & Kundu (2019)	Gubler (2019)	Gustafsson, Swart & Kinnie (2017)	King & Clarkson (2019); (2015)	Harmon, Scotti & Kessler (2018)
Van Poucke et al. (2019)	Tuominen & Lehtonen (2018)	Miller (2017)	Kistruck et al. (2015)	

Fu et al. (2017)	Pickering (2017); (2015)			
Lim, Wang & Lee (2017)				
Bello et al. (2016)				
Dahlberg (2016)				
Fu (2015)				

### **Resource-based view with elements of practice-based view theory**

This study adopts RBV, at its core, acknowledging the importance of resources in the legal service sector and the need for these knowledge intensive organisations to look primary within their premises to find sources of competitive advantage. According to Wernerfelt (1995) firms need to base their strategy on their strengths in order to stay competitive in the workplace arenas. Firms who follow the RBV approach can build on their strategies by realising that tomorrow's strengths are likely to be developed from today's strengths (Lockett and Wright, 2005). PSFs, as knowledge intensive businesses, by giving emphasis to their most valuable assets (i.e. their people) can achieve a competitive edge over their competitors. This is in line with Rajan and Zingales's (1998) view that the ownership of non-human assets is no longer the primary source of power; it is the firm's ability to optimise its operations enabling its employees to work in an efficient way.

In general, Barney (1991; 2001) categorised resources in three categories. Firstly, there are all the physical assets; namely, the plant, equipment, land, raw materials, inventory and firm capabilities. Secondly, there are the organisational processes, the information and knowledge and finally, the human capital including training, intelligence and experience. These resources are valuable, unique, and difficult to imitate can provide the basis for firms' competitive advantages (Amit and Schoemaker, 1993; Barney and Wright, 1998). Expanding Barney's (1991) theory, scholars (e.g. Fu, 2013) highlighted the social capital as a channel that can lead to innovation adoption and productivity improvement. In summary, Fu (2013) argued that social capital is in a sense rooted to the collaboration among the co-workers in a firm (Chuang, Chen and Chuang, 2013). This is evident to professional services as in most of the clients' cases staff have to work in a team. This collaboration process can therefore improve efficiency (Fu, 2013). Social capital and the link to innovation are analysed in section 2.7.1.

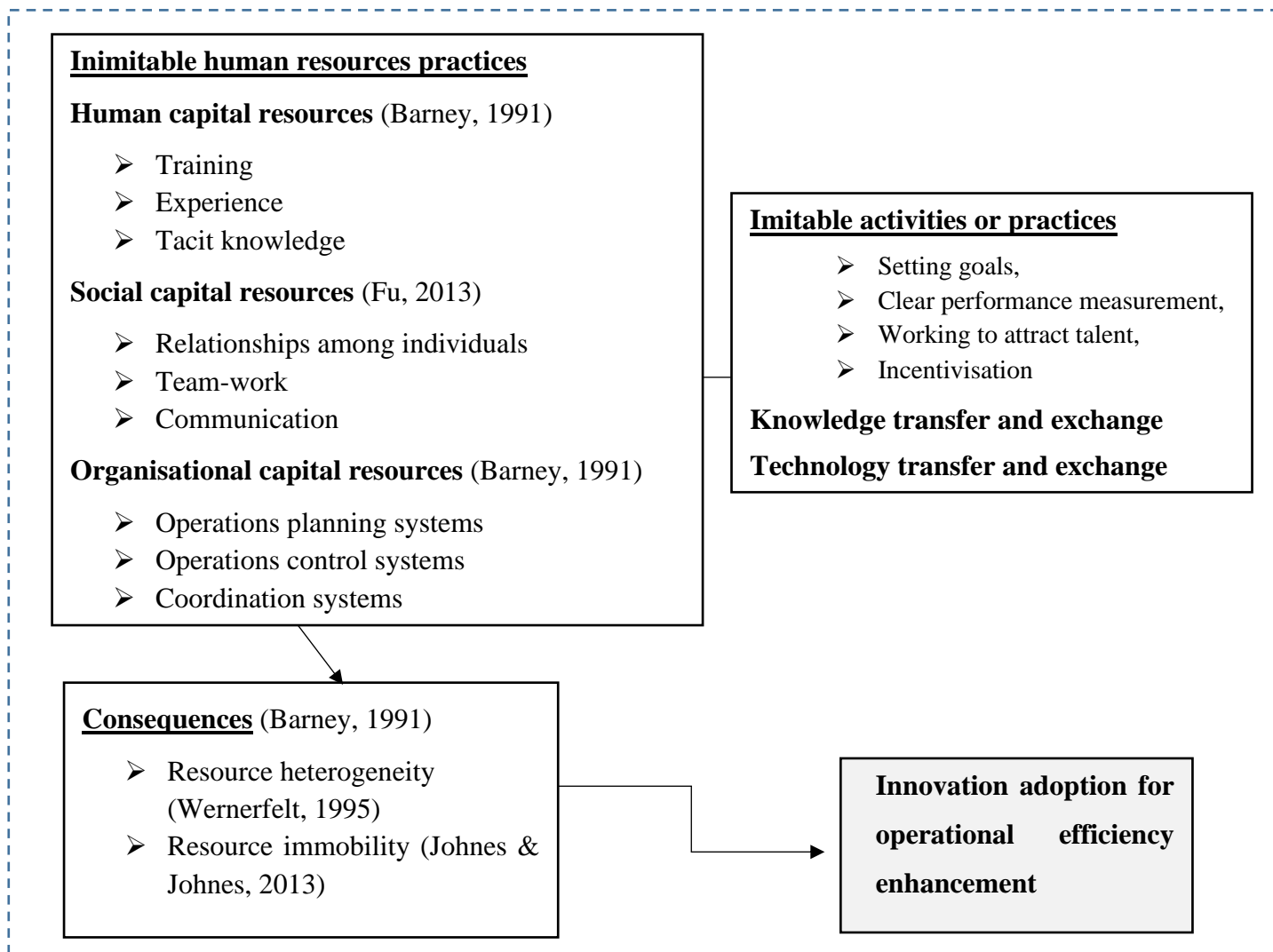
According to Barney's (2001) theory four characteristics are providing the inter-firm heterogeneity of resources and factor immobility: *value, rarity, imperfect imitability and non-substitutability* (Barney, 1991; Truss, Mankin and Kelliher, 2012). 'Value' relates to a firm's ability to isolate threats and focus on maximising their resources to create value (Barney, 1991, p.99). 'Rarity' indicates that the resources should not be easily acquired by every firm. 'Imperfectly imitability' indicates that the resources cannot be easily imitated by other competitors. 'Non-substitutability' implies that the resources of a firm should not be easily substitutable by other firms.

Therefore, for this Thesis according to Figure 2.5, the author adopts the term 'resources' as: the activities that people (senior managers) are responsible to manage and control; the operations within the legal firms; but also the people (solicitors, barristers, partners, legal administrators) that they are employed within them. The researcher supports that the tacit knowledge that lies among these resources is the key asset for a firm's competitive advantage and it can be transferred through team-work, organisational processes and communication. Figure 2.5 below presents a synthesis of a firm's human capital, social capital and organisational capital resources that through their effective utilisation can lead to innovation adoption and to a better operational and financial performance (Fu, 2013).

Practice-based view (PBV) theory, is also supplementing the theoretical underpinning of the present work. PBV considers practice as an activity or set of activities that a variety of firms might execute which focuses on imitable activities or practices amenable to transfer across firms (Bromiley and Rau, 2014). Acknowledging the particularity of the legal sector and identifying how much it falls behind other industries in terms of its operational management fundamentals helped the researcher to recognise the need for knowledge and technology transfer from other disciplines and the uptake of common firm practices; thus the theoretical construct of the Thesis embraces elements of PBV.

Based on this theory blending approach, the author supports the view that law firms can use better their most valuable resources and transferable best practice in order to gain a competitive advantage towards their competitors. Enabling their human resources to be more productive, innovative and open to knowledge transfer can play a central role in the effective management of an organisational change (Watson, 2015).

Figure 2. 5: Sustainable competitive advantage – theoretical underpinning



This study acknowledges that a firm's activities are all interconnected and thus, there should be all taken into account when trying to achieve continuous improvement. For this reason, the author argues that the effective management of employees, through motivation and training, the innovative thinking and mission of the firm, knowledge and technology transfer and exchange with the optimisation of the service processes could result in creating a competitive strategy leading to long-term efficiency.

As a whole, a critical parameter of professional service law firms is the knowledge, networks, skills and performance that are embedded in legal professionals' knowledge bases, skills, and experiences (Beaverstock, 2004; Beaverstock, Taylor and Smith, 1999). Significant changes in technology, client sophistication and a general resistance to change have brought the tenuous viability and effectiveness

of the traditional law firm business model in need of a paradigmatic shift (Moore and Haji, 2017). Operational issues concerning system, technology and human resource management and knowledge transformation are critical for legal service delivery (Segal-Horn and Dean, 2007) and the author hypothesises that these underpin the process of accomplishing this shift. The tools currently used by the law sector to manage knowledge, however, are fragmented and rudimentary at best; thus law firms could benefit from the development and use of knowledge management tools in activities underpinned by task, structure, technology and human capital elements (Giannakis et al., 2018; Reid, Bamford and Michalakopoulou, 2018).

The proposed theoretical framework in association with the study's objectives guided the formation of the interview guide and the survey questions for the data collections and are presented in the next Chapters. More specifically, to address the research problem the interview guide and the survey questions were formulated according to RBV and PBV through exploring the inimitable and imitable human resources activities (see Figure 2.5) employed in law firms based on the legal professionals' working experience. For example, in the interview guide there were questions on the human and social capital and organisational resources. For the human and social capital, the researcher asked questions regarding the utilisation of resources, the training opportunities for the employees, the internal and external communication and the teamwork among the co-workers and how their tacit knowledge was utilised based on their working experience. Last but not least, the sub-section on 'legal process related' questions in the interview guide intended to identify how the organisational capital resources were designed, managed and controlled based on operations management thinking like the Lean philosophy. According to Tortorella et al. (2019) Lean performance activities can contribute to the foundation of the organisational way of thinking and acting for process improvements within firms.

The survey content was informed from the qualitative analysis and designed to address the imitable parameters of the theoretical framework, meaning the human resources activities, the technology and the knowledge transfer practices employed by the law firms. The characteristics of Lean philosophy were embedded in the interview and survey questions. The research collection mechanisms are analysed in Chapters 3, 4 and 5 respectively.

## 2.4. Underpinning strategic concepts

### 2.4.1. Forces for change

Michael Porter in 1980, presented the five forces model for guiding businesses to stay competitive in the workplace. Through this model he focused at five specific factors that can help determining the strengths and weaknesses of a business and also whether or not the business can be profitable, based on other businesses in the industry (Porter, 1980; 1985). Scholars are rethinking and reinventing these five forces (see e.g. Grundy, 2006). For instance, under Karagiannopoulos, Georgopoulos and Nikolopoulos (2005) these are the market-industry rules, threat of new entrants, substitution threat, suppliers' power, and buyers' power.

Nguyen, Newby and Macaulay (2015) supported that one of the driving forces for change on technology adoption in smaller firms are clients' pressures. This is line with Cole's (2004) management theory arguing that change in an organisation has to go through various phases to achieve efficiency and effectiveness. Basic areas that affect change are culture and the mission of the firm, stakeholder decision-making and relationships, total quality management and employees' personal satisfaction (Cole, 2004). This model gave inspiration for creating a law-business specific model presented in Figure 6.1 in Chapter 6; this is a thematic map that illustrates a synthesis of the drivers that can push transformation in law firms.

### 2.4.2. Efficiency in the service sector

As this Thesis is closely associated with 'efficiency' and to a lesser degree with the term 'effectiveness' as long-term goals for law firms, it is essential to define them. Efficiency and effectiveness are two interrelated terms that are used for determining a firm's operational and financial performance. *Efficiency*, is about '*doing things right*' contrary to the *effectiveness* which is about '*doing the right things*' (Johnes, Portela and Thanassoulis, 2017). By improving efficiency, a business can maximise outputs from given inputs, or minimise inputs from given outputs and thereby lessen its costs and hence, improve its competitiveness. Tsionas et al. (2017) agreed that service inefficiencies are leading to low customer satisfaction in the service industry.

Enhancing efficiency and understanding efficiency metrics play an important role for service firms' prosperity and continuous performance improvement (Prashar and Antony, 2018). However, the legal sector has still yet to maximise its potential. For instance, Wang (2000) reported that efficiency in large law firms in the USA ran at 17.8 percent less than what would have been necessary to maximise

productivity potential. The author further concluded that employees ranging from the partners to the paralegals have a direct impact to the firm's performance and overall efficiency.

Efficiency can have somewhat different meanings across sectors like accounting, manufacturing, education and law firms but in essence is about making the best possible use of resources. Following Von Nordenflycht's (2010) taxonomy on PSFs, the legal service sector can, to some degree, take lessons and draw conclusions from research referring to the field of higher education. Both law and higher education services refer to classic PSFs with characteristics of high knowledge intensity, with a professionalised workforce and low to medium capital intensity. Since similar extended research does not exist for the law sector this work will define how scholars can strive for efficiency based on quality measures adopting an efficiency instrument similar to those used in higher education research.

According to Johnes, Portela and Thanassoulis (2017) efficiency in higher education can be measured based on the test results of the students when the lowest resource is employed. Thus, for the legal service sector, efficiency can be achieved through the observation of the legal firms' outputs or through the overall performance of the business. These are the completed clients' cases and the billing hours lawyers spend on them that both run at the lowest level of resource. The present PhD study however, lacking access to this type of datasets, is not set out to measure efficiency *per se* but to understand innovation adoption as a tool aimed towards efficiency enhancement (though minimising resources or maximising outputs) as this is experienced by legal professionals in their respective firms. Efficiency variations evolve from inter-firm differences in resources such as technology, employee experience or knowledge.

Moreover, efficiency is often also assessed through *quality* measurements rather than *quantity* – thus maximising quality outputs rather than simply maximising outputs. This is evident in the PSOM discipline as it can be difficult to distinguish among which inputs and outputs are the most appropriate to define efficiencies in service organisations (Demirbag et al., 2015). Also, Tsionas et al. (2017) agreed that statistical models cannot reflect the desirable intangible and endogenous outputs (changes in HR management/ mission) as it could for the manufacturing sector or service organisations with definite outputs.

Scholars measure efficiency in services using various physical and financial descriptors. For example, for the airline industry customer satisfaction and number of complaints received (Tsionas et al. 2017), number of partners, staffing and deal incentives at law firms (Chatain and Meyer-Doyle,



2017) or activity indicators (e.g. the amount of care provided) (Hafidz, Ensor and Tubeuf, 2018) and financial outputs (e.g. health facilities revenue) in healthcare (Hadji et al., 2014).

Epstein and McFarlan (2011) measured efficiency in professional organisations based on a metric of *inputs, outputs, outcomes and impacts*. Specifically, forms of inputs can be new information, people and raw materials as well as a different mission or a new strategy adopted by the firm. Similarly, Jayaram and Xu (2016) stated employee capability and job-related training as determinants for quality and efficiency improvement in service firms.

Outputs can be categorised as tangible or intangible products/services (Bamford and Forrester, 2010) depending on the external environmental changes. Last but not least, the outcomes can take the form of any behavioural change to the firms' individuals while impact is any benefit to the firm's inner-culture and to the overall society.

This Thesis aims to support that long-term efficiency for the legal services can be achieved through faster processes, better human resources allocation, low operating costs and concentration on the value-added activities. Thus, the effective use of human, organisational and technological resources can lead to innovation improvements that can be used as a tool for achieving efficiency and increasing overall profit. This assumption is explored through the data collections and their analyses.

## 2.5. Professional service operations management

Professional Service Operations (PSO) is the field associated with the study of PSFs from an operations management perspective. Lewis and Brown (2012, p.1) defined PSO as *“the type of services with high levels of customer contact, high service customisation and flexible processes with low capital”*. PSO is considered as a knowledge intensive field, which refers to the value creation that largely results from the knowledge of and decisions made by the service personnel (Von Nordenflycht, 2010; Harvey, Heineke and Lewis, 2016).

Professional service operations management (PSOM) is a *“distinct environment for managing operations”* (Goodale et al., 2008, p.670) that includes also the management of professionals, the processes of professional services and the relationship with the customers. Schmenner (2004) describes PSOM as labour intensive, differentiating between the levels of customisation and the degree of service variation within the service offerings and the actual process design.

As Johnston, Clark and Shulver (2012) stated the Service Operations Management field deals with the activities and processes that operations managers are responsible for; thus it can be implied that PSOM is about *how* to manage these processes within the context of PSFs. Such activities include the planning and design of processes, the allocation of resources, the implementation of the processes and their continuous control. Also, the management of the relationship with the customer is a characteristic of PSO managers. Managing effectively and efficiently the functions of professional services could be achieved by various operational tools and techniques but Lean thinking philosophy may be one of the prime ones. This is presented in section 2.7.3.

An introduction on the PSFs, their meaning and their distinctive characteristics is presented next and it is essential for guiding the reader about the focus of the Thesis and through the next Chapters.

### 2.5.1. Professional service firms

#### ***Business firms***

Firms, in all business frontiers, have two key generic goals that are highly correlated to each other: they must satisfy their customers' needs and to create profit. Businesses ought to develop efficient and effective business models that would allow them to thrive into the highly competitive workplace of today. For instance, the adoption of technological advancements is often part of a business model that can result in innovation. However, a new business model itself can also drive (or generate) innovation (Teece, 2010).

Nonetheless, for companies to support their business strategy and long-term planning as a means of achieving sustainability and financial prosperity, it is essential to have operations in place for the design, development and control of its processes (Slack, Brandon-Jones and Johnston, 2016). Sustaining a competitive advantage in the market is about building flexible operations and relationships with suppliers and customers.

Adding to this, Gratton and Truss (2003) through their observation research acknowledged that successful businesses pay attention to their intangible assets, their people and to their processes for ensuring that the firm's strategy is sustained over time. The next section presents the importance of operations strategy and the reasons that operations management is essential to drive innovation in a business.

All in all, scholars pointed out the importance of a robust business strategy that can drive change in three functions within a business. Firstly, at an organisational level, these are the hierarchy levels and workflows between them. Secondly, from a technological viewpoint meaning the equipment, information technologies, and the interaction and other forms of communication. Lastly, via the management of human factors that includes activities referring to: the education, the training, the motivation and the reward system of the firm (Dumas et al., 2013).

### ***Professional service firms***

Gottschalk (2007) and Sheehan (2006) defined Professional Service Firms (PSFs) as knowledge-intensive businesses that provide services through their knowledge to clients. PSFs differ from other service businesses mainly because they are characterised by high levels of product complexity and product customisation (Guzak and Rasheed, 2014). For example, PSFs like legal, accounting and management consulting businesses are characterised by high knowledge intensity, thus, they are difficult to imitate and their services cannot easily be evaluated from customers (Muzio and Kirkpatrick, 2011).

In general, operations management research initially focused on taxonomies to understand service characteristics (Damali et al., 2016). Von Nordenflycht's (2010) taxonomy captured these service criteria among a range of PSFs and categorised them in four categories. According to Bryson, Rubalcaba and Ström (2012), Von Nordenflycht (2010, p. 670) has developed a new conceptual framework based on the identification of three sources of distinctiveness that are fundamental to the activities of knowledge-intensive firms: knowledge intensity, low capital intensity and a professionalised workforce. More specifically, based on this framework there are four types of PSFs. Firstly, the Classic PSFs (e.g. law and accounting firms), characterised by a high knowledge intensity, a professionalised workforce, and low capital intensity, secondly, the Professional Campuses (e.g. hospitals), characterised by a high knowledge intensity, a professionalised workforce, and high capital intensity, thirdly, the Neo-PSFs (e.g. management consultants), characterised by a high knowledge intensity and a low capital intensity and finally, the Technology developers (e.g. R&D firms, biotechs) characterised by a high knowledge intensity and a high capital intensity (Von Nordenflycht, 2010; Michalakopoulou, Reid and Bamford, 2017).

Other scholars (see Amara, Landry and Doloreux, 2009; Anand, Gardner and Morris, 2007; Muller and Doloreux, 2009; Roth and Menor, 2003; Chichkanov, Miles and Belousova, 2019) use the term Knowledge-Intensive Business Services (KIBS) to describe “*enterprises whose primary value-added*

*activities consist of the accumulation, creation, or dissemination of knowledge for the purpose of developing a customised service/ product solution to satisfy the client's needs"* (Bettencourt et al., 2002, pp. 100-101).

Last but not least, Harvey, Heineke and Lewis (2016) outlined professional services firstly, by levels of customer contact (i.e., lots of face-to-face interaction, meetings, consultations, etc.) and consequent delivery specifications (i.e. every condition, case, problem is different) and secondly, by operational processes that emerge as a consequence of professionals making judgments about both ends (what constitutes an adequate/appropriate outcome) and means (the content and sequence of process steps) that are essentially fluid/flexible in character (Michalakopoulou, Reid and Bamford, 2017). Evidence from the literature suggests that all professional operations are presumed to exhibit certain characteristics (Brandon-Jones et al., 2016) encompassing high levels of customer engagement, extensive customisation, knowledge intensity, and low levels of capital intensity (Sampson and Froehle, 2006). Similarly, the well-educated, professional workforce and the knowledge-intensive, high-skill services that PSFs deliver (e.g. Greenwood et al., 2005; Altinay et al., 2007) are their profound characteristics (Michalakopoulou, Reid and Bamford, 2017). Finally, services differ from manufacturing firms on the following key aspects the *intangibility, simultaneity, perishability, heterogeneity, and customer contact* (Metters and Maruchek, 2007, p.201).

### 2.5.2. The legal sector

This study following Von Nordenflycht's (2010) taxonomy is adopting the term Classic firm for the legal services which is the core area being investigated. Legal professionals can be defined as knowledge workers; they are professionals who gained their knowledge through education (explicit) and through their working experience (tacit) (Gottschalk, 2002, p.79). Thus, the legal sector is characterised by high knowledge intensity, with a high professionalised workforce and low capital investment. It is widely believed that PSFs are mostly relying on "*corporate and managerial modes of operation*" that are "*less distinctive from for-profit business corporations*" (Hinings, 2005, p.414/419). In addition, Cooper and Robson (2006) argued that on the PSFs such as law firms the professional control from the professional bodies such as the Solicitors Regulations Authority is significant and it can be said that they are running as standardised *managed professional businesses*.

Additionally, since the workplace is becoming more and more competitive, businesses that sell services have to improve their performance in order to gain a competitive advantage (Davies, Brady and Hobday, 2006; Sawhney, Balasubramanian and Krishnan, 2004). For instance, one way would

be for large law firms to reduce their operating costs of their legal services in order to better their operational efficiency (Faulconbridge and Muzio, 2008) and increase profit.

#### 2.5.2.1. The structure of the legal system and significant changes

Due to the global economic crisis of 2008 and the prolonged economic recession which followed, the legal profession was significantly undervalued (McMorrow, 2016). Large law firms face unprecedented stress; many have dissolved, gone bankrupt or significantly downsized their activities in recent years, because of the global competition but also due to the rise of in-house counsel (Ribstein, 2010).

Reports show a significant decrease in numbers of law students in the USA (Bronner, 2013; Olson and Segal, 2014), as their future career may not be as promising as it was in the past. Law scholars have pointed out two primary forces driving these changes: firstly, the unceasingly decreasing knowledge barriers facilitated by the deregulation of the profession have allowed people with less or no legal training (e.g. paralegals or accountants) to do the work once completed by lawyers. Secondly, the legal knowledge embedded in computer programs has decreased the need for human workers (Campbell, Charlesworth and Malone, 2012; MGI, 2017). Although there are important changes in PSFs, the field of operations management has yet to develop models that capture them. For instance, the new entrants of technological novelties, changes in the professional operations management field and the adaptation of professional services to different market segments (Lawrence, Zhang and Heineke, 2016).

During the last decade, there have been important changes to the legal profession around the world. For example, the Legal Services Act in 2007 in the UK and the deregulation in countries such as the USA and Australia were the driving forces for establishing an '*open door*' policy to the profession that resulted in a highly competitive legal market. In summary, this law supported the fact that non-lawyers would be able to create and be shareholders to a law firm and provide legal services to the public. These changes include:

- *the establishment of legal disciplinary practices (LDPs)*, which are firms providing exclusively legal services but involving different kinds of lawyers, and up to 25 percent of non-lawyers;
- the entrance of *alternative business structures (ABS) or Tesco Law in the UK*, which allow external ownership of legal businesses and multi-disciplinary practices (providing legal and other services), and

- the *decrease in legal aid funding* from the government which resulted in a decrease on commercial work of legal aid firms.

ABS specifically are defined under three categories, i) “*a business which allows non-lawyers to have a higher degree of ownership or managerial interest of the business*, ii) *a business structure permitting passive investment in the ABS* and iii) *a firm offering non-legal as well as legal services practices* (Reardon, 2016, p.309). The deregulation of the legal profession allowed much wider choice in how lawyers and non-lawyers can share the management and control of businesses which provide reserved legal services to the public (The Law Society, 2018a).

To conclude, the aforementioned changes led legal firms to opt for adopting different means to increase productivity and efficiency (Evans and Price, 2017). However, there is limited knowledge regarding which of and how these innovative initiatives have been successfully implemented.

## 2.6. Innovation

### 2.6.1. Definitions of innovation

In the highly competitive and demanding environment of the workplace arenas, businesses strive for exploring innovative ideas and adopting strategies that would bring them in the forefront over their competitors. Innovation management has been an ongoing debate for organisations since the entrance of communication and automation technologies in the market.

In the business context, scholars approach *innovation* differently based on the discipline they are referring to. For example, Slack, Brandon-Jones and Johnston (2016, p.110) argued that innovation of a product or service is about anything *new* and *unique* happening to a company. Additionally, Rothaermel (2015) describes innovation as “*the successful introduction of a new product, a new process, or a business model that can lead to competitive processes*”. More specifically, from an operations management perspective innovation is about the transformation of a new idea into practice for the means of creating value for the customer.

Similarly, Rogers (2003, p.137) defines innovation as “*an idea, practice or an object that an individual or individuals are about to adopt*”. Others, defined innovation as the process of incorporating the valuable tangible and intangible resources of a firm to create value. For instance, resources such as technology/ communication technology and knowledge are considered as innovative inputs elements (Fouad, Tourabi and Lakhnati, 2018) to create innovative outputs (i.e.

products and/or services). Others, (Gallouj and Savona, 2010, p.153) separated service outputs as something intangible such as *a process, a sequence of operations, a formula, a protocol or a problem solution*. However, Gallouj and Savona (2010) argued that in the service industry is difficult to predefine inputs and outputs as they are not clearly measured compared to the production sector.

Furthermore, Battisti and Stoneman's (2010, p.202) research that focused on correlations among innovations occurring into a business, categorised them into two categories; the innovations reflecting the organisational, non-technological areas of the business (marketing, organisation, management and strategic innovations) and secondly, the ones about traditional/technological actions (machinery, process and product innovations).

Scarbrough, Robertson and Swan (2015) discussed the term '*management innovation*' and how bundles of innovations are being implemented across departments are influencing organisations. A definition of management innovation is "*the generation and implementation of new management practices, processes, structures and techniques that contribute to the organisations' strategic goals*" (Birkinshaw, Hamel and Mol, 2008; Vaccaro et al., 2012). Birkinshaw, Hamel and Mol (2008) however clarified that under the word *new*, is meant a novel perspective or way of acting for the organisation, rather than solely new entrance to the world.

Tsinopoulos, Sousa and Yan (2018) highlighted the importance of '*open innovation*' that firms have to leverage on, for achieving product and service improvements. This refers to businesses creating and sustaining contacts externally with suppliers, university partnerships and competitive parties (Laursen and Salter, 2014), but also internally enhancing the R&D of the firm and the training of the employees. In other words, the organisational learning and the extant knowledge management of employees' in professional services can result into high level knowledge creation, creativity and innovation (Lowenberger, Keet and Anderson, 2017). Similarly, Chesbrough and Crowther (2006) supported that business leaders have to opt for a more *open* business working model, essential to generate new ideas and form external relationships. They believe that prosperous ideas cannot always be generated from the firm's members and be supported only internally; instead there is sometimes a need to adopt outsourcing creating an *outbound open innovation* (Chesbrough and Crowther, 2006).

Taking the above into consideration, innovation as a concept can imply different meanings across different sectors. In a broader sense, innovation can refer to either on a new product development or to a service modernisation. It is considering *change* as the key parameter that can lead to a competitive advantage.

On the one hand, for the manufacturing sector, Fouad, Tourabi and Lakhnati (2018) argued that innovation occurs through the process of a new product development that can result into a firm's financial prosperity. On the other hand, for the professional service sector, that this study focuses, the term '*service innovation*' can explicitly refer to the transformation of knowledge into services (Love, Roper and Bryson, 2011).

Others refer to service innovation as the willingness of the employees of a service firm to accept new or improved technological advancements in their day-to-day work (Rice, 2017; Rogers, 2003; 2010). This Thesis acknowledges that individuals have to embrace change within their service firm and modernisation of processes as the core elements of innovation implementation. This is further developed in the next sections.

### 2.6.2. Service innovation for the professional service firms

Innovation for the professional service sector is considered to be the adoption of an idea, a technological tool or a new service (Rice, 2017). Greenhalgh et al. (2008, p.1) refers to innovation within service organisations as "*a novel set of behaviours, routines and ways of working, which are directed at improving service outcomes, administrative efficiency, cost-effectiveness, or user experience, and are implemented by means of planned and coordinated actions.*" Furthermore, Lusch and Nambisan (2015, p.161) defined service innovation as "*the rebundling of diverse resources that create novel resources that are beneficial (i.e., value experiencing) to some actors in a given context; this almost always involves a network of actors, including the beneficiary which is the client*".

Given the importance of innovation implementation, scholars try to develop an understanding of the drivers (e.g. Becheikh, Landry and Amara, 2006) and the factors for its success. For instance, researchers argued that an organisation's level of innovation is substantially influenced not only by the size of the company, but also by the firm's network (Chesbrough, 2007; Dahlander and Gann, 2010). More specifically, the latter happens through the firms' employees interactions with consumers (Von Hippel, 2005), and by the degree to which the firm is able to internalise and harvest external knowledge (i.e. absorptive capacity) (Jansen, Van Den Bosch and Volberda, 2005; Duran et al., 2016).

Randhawa et al. (2017) referred to types of *open innovation* as a form of knowledge creation and exploration among external firms' networks. Specifically, they defined three types of open innovation, the *inbound*, *outbound* and the *coupled* innovation. Through these forms, firms can transfer and create knowledge among their internal and external networks. This Thesis adopts the



combinatorial approach of open innovation where firms can incentalise their own knowledge but also share and welcome external flow of knowledge (West and Bogers, 2014).

Similarly, Tsinopoulos, Sousa and Yan (2018, p.27) refer to open innovation as “*the engagement with external parties for supporting an organisation’s innovative ability for process change and development of process technology*”. In other words, this argument is referring to the collaboration among co-workers with external parties for promoting and exploring ideas and existing decisions on innovation adoption. Similarly, Schøtt and Jensen (2016) agreed that firms who engage with external networking and value institutional support can enhance their product/service innovations. However, there is a need for sociality/openness (Laursen and Salter, 2014) communication and knowledge exchange among professionals and considering the introvert nature of the legal profession this might be difficult to achieve. However, strategies for open innovation are explored through the study’s data collection and analysis phases.

All in all, the service sector lacks innovation adoption contrary to the manufacturing sector (Battisti and Stoneman, 2010), however the reasons behind it are yet to be explored. Managers might be the key factor influencing this lack of innovation. For instance, Fu et al. (2015) claimed that senior managers need to effectively adopt and implement innovation-based human resource management (HRM) practices to encourage and support employees’ creative thinking and innovative practices. However, this notion is explored in the next Chapters.

### 2.6.3. Service innovation in the legal sector

Love, Roper and Bryson (2011, p.1439) defined *service* as the “*heterogeneous collection of activities that includes business, professional services and consumer services*”. Additionally, *service* is the “*combination of the service delivery and the experiences received by the customer*” (Johnston, Clark and Shulver, 2012, pp.15-17). Others (Roper, Love and Bourke, 2016; Desyllas et al., 2018, p.770) focusing on innovation in the legal sector stated that innovation is considered when firms employ ‘*a process change*’ or specifically “*improved services or new improved ways of delivering legal services*”.

Technology adoption is considered as a key innovation element for the legal services that can benefit them by enabling them to build a competitive advantage. More and more firms who opt for adopting the newest technologies and products are having a leverage within today’s highly competitive market (Zaefarian et al., 2017). Although there is a vast selection of technological tools that can help lawyers and other legal professionals to optimise their work, most law firms seem to be rather resistant to

innovative ways of working. The reasons behind this occurrence have not been yet explored systematically by the literature and will be investigated through the primary data research presented in this Thesis.

The culture of the firm and the management of the human factor play an important role for the adoption of new technological tools and techniques (Bello et al., 2016). The human element is considered as an additional factor that needs to be taken into consideration for the decision-making, the design and the implementation of operations and innovative approaches within an organisation. Managers should pay particular attention to nurture social capital as a pathway to realise the true value of technology implementation (Wu, Liu and Chin, 2018). This is line with Chichkanov, Miles and Belousova's (2019) research that studied innovation in 519 Russian KIBS providers. They argued that the human factor has a significant influence on the diffusion of technological innovations. Overall, for the legal professionals, it is argued that the term innovation emphasises their continuous journey of adaptation, evolution and improvement (DeStefano, 2018).

#### 2.6.4. Changes, challenges and practices responding to them

This section reviews papers regarding the changes and the challenges that PSFs face today with an emphasis on the legal sector and how the law firms responded to them.

Due to the rapid changes in the global landscape, businesses worldwide aim at adopting new business models to stay competitive in the workplace. For instance, financial motives based on their key performance indicators (KPIs) were seen as a successful strategy for a firm's performance improvement to hospitality and tourism industry (Grynko et al., 2018). Legal services focus on finding ways to respond to the changes in their field through various ways. Evans and Price (2017) pointed out that one way was by adopting alternative pricing schemes for being attractive to their clients.

Social media is among the innovative activities that firms utilise to attract customers and advertise their products and services. PSFs use social media as a means for promotion and marketing of their services. It is argued that legal firms in the UK assign about 1.6 percent of their turnover for branding and promotion activities and ABS legal firms around 2.3 percent respectively (Roper, Love and Bourke, 2016).

However, although firms appear to adapt to the challenges they face, they seem to ignore the management of their intangible assets (Evans and Price, 2017). This is crucial for knowledge intensive businesses and thus, to the legal industry due to the high knowledge intensity of the sector.

Research on Australian law firms indicated that the effective management of personnel can have a positive influence on their social capital that can implicitly affect and add value to the professional to client relationships (Suseno and Pinnington, 2018).

There is a limited number of empirical studies on the existing literature where law firms undertook initiatives to improve their services. Adding to this, there is a lack of operations management applications into the legal sector.

## 2.7. Aspects of innovation

The human factor and the social capital, i.e. the successful management of employees and the collaboration among team members respectively, are crucial channels for transfer of innovation into the service sector.

On the one hand, organisations' stakeholders have to take into account the human parameter in the decision making and in the service process design. On the other hand, technological tools and Software entrances can significantly affect the way legal services are delivered and managers should follow with the new changes on processes. These elements are considered the key innovative parameters for the service sector that can boost its performance. These aspects are analysed in the sections below.

### 2.7.1. Human resources

As the phenomenon of globalisation, the rapid development of technology and the competition all rise, the enhancement of operational and performance efficiency is a key factor for organisations' survival (Kolus, Wells and Neumann, 2018). Scholars argue that this can be achieved through the management of intangible assets, as these resources are rare and imitable from other businesses (Onyema, 2014). Studies indicate that investments in firm's intellectual capital result into value creation and productivity growth (OECD, 2007). Similarly, high-skilled human capital is a crucial element for innovation processes (Fonseca, de Faria and Lima, 2019).

The majority of the literature that corresponds to this topic is divided between behavioural operations and human factor studies. Both consider that the effective management of the human element is the core function that can be a source of leverage for any organisation.

*Behavioural operations* was the term firstly used in research papers emphasising the need for research models to incorporate behavioural factors along with operational processes and performance

measures (Bendoly, Donohue and Schultz, 2006; Bendoly et al., 2010). A search by the author of this Thesis conducted through Scopus using ‘Behavioural/Behavioral Operations’ as the main keyword identified a total number of 615 journal papers among the years 1965-2017. However, a significant number of these papers did not have a meaningful relevance on behavioural theory that applies to the Operations Management field. There was an increase in research papers (total 252 journal papers) among the years 2006-2017 in a variety of disciplines across the UK and the USA. In particular, in the year 2013 there were the most publications (42) on behavioural operations and dramatically less in the year 2017 (six). The significant decrease in behavioural operations publications may be due to a change in the term to human/social capital and human factor. There is evidence that scholars use these terms to outline the importance of human resources in the operations management disciplines (Grosse, Glock and Neumann, 2017). The most cited documents were on the following journals: Production and Operations Management (POM), Journal of Operations Management (JOM), Management Science and International Journal of Operations and Production Management (IJOPM). All in all, the Behavioural Operations area identifies human and social capital as the most important resources for optimising the operations within a firm.

On the one hand, according to Boudreau et al. (2003) Operations Management (OM) modelling often tends to simplify the human factor by the following behavioural assumptions. These include the implicit assumptions that people i) do not play the basic role in the phenomena being investigated, ii) are deterministic in their actions, iii) are predictable, iv) are independent of others, v) are not part of the product, vi) are emotionless, and vii) are observable (Bendoly, Donohue and Schultz, 2006). On the other hand, there is a growing body on human capital importance in organisations; market value relies more on intangible resources rather than on tangibles (Mayo, 2000; Kamasak, 2017).

Another aspect on the human factor studies (see Village et al., 2015; Neumann and Dul, 2010) is the focus on how to link the HRM with the OM interface in order to maximise the strengths of the operations management discipline. As knowledge, experience and decision making of individuals are an essential input to complete an operation and difficult to be replicated like technological tools, improving the management of people and their skills could eventually lead to competitive operational processes and efficiency (Kolus, Wells and Neumann, 2018; Onyema, 2014). This is in line with Neumann and Dul (2010) supporting that the application of human factor knowledge can improve not only the human well-being but also the operations system performance as a whole.

#### 2.7.1.1. Human capital

Firstly, it is essential to provide definitions of the adopted terms. *Human capital* is the tacit knowledge of the individual (Wright and McMahan, 2011) that is developed through the education, training and working experience within professional services (Hitt et al., 2001) and cannot be transferred. These resources can also be described as *soft* (Panayides et al., 2009), as they are mostly about people's knowledge, training and inherent skills rather than referring to numerical assets.

Scholars adopted various terms when they referred to the human factor. For example, Evans and Price (2012, pp. 178-179) adopted the term '*information assets*' for "*all the codified data and unstructured information in documents and records as well as the people's knowledge*".

Studies refer to the human factor also as '*ergonomics*'. Thus, these terms can be defined as "*the scientific discipline concerned with the understanding of interactions among humans and other elements of a system [...] in order to optimise human well-being and overall system performance*" (IEA, 2013; Karwowski, 2001). Dul et al. (2012) refers to human factors as a discipline that can utilise people skills and have a significant impact on product and service systems. Evans and Price (2017) argued that the ability of professional services to manage its human and social factors can give them the competitive edge into the dynamic working environment.

This study adopted the view that the tacit knowledge that resides within the people working in the legal services, it is hard to imitate and its effective management, can be a leverage for the legal firms' reputation and profit increase. This is line with Grynko et al. (2018) who suggested that motivation through the financial KPIs of the 'intellectual human labour' can lead to financial success in the business.

However, Hitt et al.'s (2001) research on hundred large law firms pointed out that leveraging on human capital can have a positive effect on PSFs' performance but can also impose some costs. On the one hand, HRM creates efficiencies and helps to build tacit knowledge within the firm. However, there is an increase in the monitoring of employees to ensure quality outcomes. Thus, there are general management costs, incurred owing on assigning tasks, coordinating activities and evaluating employees.

#### 2.7.1.2. Social capital

Innovation adoption can be transferred through the human, social and the organisational capital, as these principles were described in section 2.3.2. In summary, *social capital* refers to the

communication and collaboration among individuals in a firm (Chuang, Chen and Chuang, 2013; Truss and Gill, 2009) and primarily is about the team-work among them. Social capital is a form of open innovation that can lead to better ideas creation and to self-motivation and skills enhancement. For this reason, the management of the social capital for knowledge-intensive businesses plays an important role for their improvement and growth.

More specifically, the culture and the leadership of a firm can motivate the employees to adopt new innovative approaches that could simplify or modernise their working practices. For instance, for the legal sector, during most legal transactions such as in M&A there is a need of a team of lawyers to accomplish the deal. This team-work is referring to the *“respectable relationships between team members that can result into a knowledge exchange and sharing process and therefore improve efficiency”* (Fu, 2013, p.241). The effective management of employees and the leadership can encourage team-work and collaboration among the co-workers within a firm and new ideas can be generated that can lead to innovation (Greenhalgh et al., 2008, p.1).

The relationship and the engagement with external parties is also a sub-category of social capital that can result to innovation (Laursen, Leone and Torrisi, 2010). External parties are considered partnerships with universities, engagement with competitor legal firms and other knowledge transfer and exchange workshops that lawyers and legal professionals may attend. Social capital also refers to the professional to client relationship, through which employees can develop their knowledge/expertise and their experience. Suárez-Barraza and Ramis-Pujol (2010) argued that human practices like team working, employee training and communication are among the key principles for effective organisational performance.

Managers should opt for strategies like knowledge retention to develop both their human and social capital virtues (Suseno and Pinnington, 2018). For example, according to Broschak (2004) law firms should plan beforehand on retaining their social capital, as people that may decide to change firm, could possibly have their teams following them and consequently their firm's clients too.

Overall, as the law sector is characterised by high knowledge intensity (Von Nordenflycht, 2010), the rational of the present Thesis is to explore how the better utilisation of the human resources in association with the entrance of new technological tools could improve the legal services' operational performance. As knowledge acquisition and the level of people's skills are steadily rising, employees with multidisciplinary skills that embrace technological advancements in their work routine can be a leverage for law firms. More specifically, the inherent culture of each organisation to effectively

manage and train its employees to acquire skills is crucial as employees can contribute to the firm's strategy and pursue its goals. According to Hopp (2004, p. 5) "*the understanding of a firm's internal operations does not require a human motivation theory and a material flow theory but requires a means of describing the interaction between these two*".

All in all, the author acknowledges that the human factor is an important parameter for this research investigation. The study, thus, is set to develop answers on how the effective management of human factors and the employees' willingness to adopt change can assist to innovation and operational efficiency enhancement within legal service firms and what is the level of the two today.

### 2.7.2. Technological innovation

Innovation is in the majority of instances strongly associated with the technological innovation (Rogers, 2010). A typical definition of *technology* under Rogers (2003, p.13) is a "*well-designed instrumental action aiming to reduce uncertainty in a cause-effect relationship*."

Technology consists of multiple components. The most common one is the *Hardware* and the *Software*. More specifically, the Hardware entails all the materialistic components while the Software includes the information. Bamford and Forrester (2010, p.69) added the *Humanware* which refers to people and their knowledge about new entrances relying on the engagement and the training of the employees to adopt them. Nemoto, Gondim and Vasconcellos (2010) defined technological innovation into two categories: the principal, secondary or accessory. Principal innovation occurs when there is an actual product development or process change. While secondary or accessory innovation means an alteration to the principal innovation introduction during the experimental stages. The technology as a factor, according to Wu and Chiu (2015) consists of actions that simplify the communication with partners, result to faster business processes, improve customer services and enhance organisational capabilities to nurture new IT innovations.

A series of technological developments to assist in the legal service delivery are already implemented in the majority of the law firms. From the beginning of the communication technologies such as *Email* that still is recognised as the most important entry to lawyers' everyday work, to the recent developments such as Blockchain, these can have game-changing powers for firms. Roozbeh et al. (2018) agreed that *the Cloud* which is a popular development in the legal services, continues to be an emerging field that accelerates digital transformation and innovation in professional services. There are continuous debates on the usage of *Artificial Intelligence* (AI) in legal services and the role of the

lawyer within an AI-based paradigm. Large law firms are already taking the next step in technology evolution considering *Blockchain* as a powerful apparatus for improvement.

Although there are a range of technological tools and techniques that law firms can adopt and adapt to their needs, the legal sector is characterised by running traditionally comparing to other professional services such as the consultancy industry (Pinnington and Morris, 2003; Kipping and Kirkpatrick, 2013). On the one hand, due to the imbalances of technological investments among SMEs and large law firms and on opportunities for innovation, there are still firms that have not yet captured those IT advancements.

On the other hand, bespoke legal services are often one of the reasons lawyers argue legal transactions cannot be automated. Susskind (2008, p.29) defined bespoke, as “*services traditionally, hand-crafted, one-to-one consultative professional services, highly customised to a person’s needs*”. However, operations management scholars argue that new technology adoption could be meaningful to most legal service transactions (Stevenson and Wagoner, 2015), as it can minimise the time and effort of the lawyer and lead to innovation. This relationship is further explored in this Thesis through the quantitative instrument.

#### 2.7.2.1. Stating the current state of the entrance of technology into the legal sector

As aforementioned, technology is developing fast, bringing game-changing innovations and new modes of working effectively and efficiently. Scholars argue that AI and Information and Communication Systems are the new technological entrants in PSFs that can lead to successful operations (Wang, 2008; Greenleaf, Mowbray and Chung, 2018). Studies on PSFs’ operations stated professions like the legal one, are undergoing unrepresented changes due to the globalisation, new policies and legislations and new opportunities offered by technology (Faulconbridge and Muzio, 2008).

However, managers have to choose among the vast majority of technological tools that should suit to a company’s starting point and objectives. Generally, authors suggest that businesses such as law firms that have issues with document management systems may benefited from the integration of databases, the generation of next-best-action and other types of advanced analyses (Van Bommel, Edelman and Ungerman, 2014). Similarly, Wu (2015) agreed that the improvement of the Information and Communication Technology (ICT) allows firms to reduce both the costs of acquiring and communicating knowledge. For example, many consultancy firms use computer-mediated knowledge systems and digitised databases; thus, knowledge becomes much easier to extract, to code



and to transfer. Furthermore, the adoption of an IT system that suits the firms' needs *per se* enable business organisations to develop and maintain competency, improve their performance, and ensure that their competitive advantage is retained (Moghavvemi and Akma Mohd Salleh, 2014). ICT is already being developed in fields like journalism to perform skills similar to employees (McGinnis and Pearce, 2019). Intelligent machines can work, unlike humans, ceaselessly both in terms of performance and cost. 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 the long-term (Michalakopoulou, Reid and Bamford, 2017).

#### 2.7.2.2. Artificial Intelligence

New smart tools and techniques are in the forefront within the workplace arenas that can optimise everyday work-related activities. Legal technology experts warn about the financial risks associated with the lack of technological change and they recommend the adoption of AI and integrated technological Software like customer relationships management (CRM) and data analytics (McQuown, 2018). Under Lodder and Oskamp (2006) AI with the direction of Information Technology is employed in legal services to perform tasks without the use of human intelligence. Nonetheless, it is argued that few businesses have adopted fully the digital transformations, as they may lack knowledge about how to successfully integrate them or do not follow the professionals' expectations (Oskamp and Lauritsen, 2002). AI is one of the core technologies that legal professionals often debate about (i.e. can AI be an optimisation saviour or an unprecedented employment disruptor?).

#### 2.7.3. Lean thinking in professional service operations management

In the manufacturing sector, Lean as a renowned operations management tool has its history to the Japanese Toyota production system (TPS) in car manufacturing under the leadership of Taiichi Ohno during the 1950s (Mazzocato et al., 2010). The Lean concept is strongly interrelated with the Just in Time (JIT) philosophy (Ivanov, Tsipoulanis and Schönberger, 2017) and the Kanban '*pull and push*' system (Hines, Holweg and Rich, 2004) aiming to the elimination of wastage and to the continuous productivity growth within a business.

Adding to this, Lean philosophy lays emphasis on total system efficiency, continuous improvement, value-added activities and respect for the people that work in an organisation (Standard and Davis, 2000). Taking all the above into consideration, this Thesis follows the definition that '*Lean thinking in professional services can be synthesised as a philosophical way of thinking and acting which aims on continuous process improvement by identifying wastages that hinder the value stream flow*'. Lean

also highlights the value of the customer voice and satisfaction that most operations management tools often did not pay attention to.

The Lean philosophy for this study is adopted as potentially being one of the most efficient innovative strategies for improving the legal services and encourage their employees to embrace it to achieve a competitive advantage over others. Womack and Jones (2015) pointed out that Lean thinking applications can provide an environment of putting less human effort, less equipment, less time and less space to work, but at the same time coming closer to meet the demand of the customer. For these reasons, Lean can be considered as an innovation-led technique that can drive long-term sustainability (Orji and Liu, 2018).

Lean thinking has been implemented successfully as a management tool worldwide in sectors such as healthcare (Mazzocato et al., 2010; Brandao de Souza, 2009; Parkhi, 2019) and manufacturing (Tezel, Koskela and Aziz, 2018), for the means of creating efficiency within a firm and manage productivity growth (Michalakopoulou, Reid and Bamford, 2017). Some specific Lean solutions such as the service-dominant logic, however, have been widely applied in other areas such as marketing and public transport promoting service-focused and customer-oriented operations (Lin, Pekkarinen and Ma, 2015; Garza-Reyes et al., 2016; Antony, Rodgers and Cudney, 2017). Evidence of applying Lean thinking in the legal sector is still scarce. Suárez-Barraza and Ramis-Pujol (2010) for instance, linked operations management tools like the Lean-Kaizen technique with human resources practises in a business to achieve performance improvements. Moreover, Pantouvakis and Karakasnaki (2018) highlighted the significance for organisations to be agile and manage their processes at best by responding to environmental changes.

Typically, scholars who adopted Lean thinking have mostly been guided by the five principles presented by Womack and Jones (2015). These are based on the quote “*less is more*” and presented in Table 2.2 below.

Table 2. 2: The principles of Lean thinking

Elimination of waste ( <i>muda</i> <sup>1</sup> )
Identification of the value stream
The achievement of flow through the process
Let the customer pull <sup>2</sup> value
Continuous pursuit of perfection

(adapted from: Womack and Jones, 2015)

To achieve these principles, it is common for scholars to combine various operations management techniques such as Just-in-Time (JIT), the Theory of Constraints (TOC), and Total Quality Management (TQM) (de Jesus Pacheco et al., 2018).

Lean can be approached differently from scholars depending on the sector and on what they would like to achieve. More specifically, according to Slack, Brandon-Jones and Johnston (2016, p.500) Lean is defined based on the three following different categories:

- *as a philosophy on how to run operations within a business; it combines three key principles, the employee involvement within the operations design, the drive to eliminate wastages and strategies for continuous improvement.*
- *as a method of planning and controlling operations within a business; how materials, information and customers flow within the business using a 'pull' control system.*
- *as a set of tools that can improve businesses' operational performance; employing Lean techniques to reduce waste.*

In other words, companies willing to embrace Lean can follow the above three perspectives.

As aforementioned, Lean methodology has been broadly adopted in a variety of sectors however with ambiguous results (Rodgers et al., 2019; Radnor, Holweg and Waring, 2012). On the one hand, the need for process' re-crafting and efficiency is evident in the healthcare sector but on the other hand, there is resistance from the personnel in the adoption of Lean tools (Isack et al., 2018; Zhou, 2016).

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<sup>1</sup> *Muda* is a Japanese word that is often adopted in research papers indicating the waste within a firm.

<sup>2</sup> *Pull* implies that there should not be operations-service or products outputs until there is a customer demand (Womack and Jones, 2015).

Findings from a Lean application in government activities and specifically in HM Revenue and Customs (HMRC) concluded that there was no focus on the human element as there were evidence of de-motivation and lack of support for employees (Radnor, 2010). In particular, it was identified that Lean requires a more structured process that allows to clearly identify ‘error’/ bottlenecks. Adding to this, team-work was enhanced among employees resulting in fair competition amongst them (Procter and Radnor, 2017). However, there was argued that working in a process led to inflexibility and demotivation (Radnor and Johnston, 2013).

Zhou (2016) identified that 94 percent of the participants working in SMEs in the USA were proponents of Lean application as a way of reducing costs, waste reduction and continuous improvement. Similarly, the same author agreed that Lean tools had an impact on productivity and efficiency growth in these SMEs, but obstacles for its adoption were also identified. For instance, the poor management from the top, funding issues and employees’ resistance were amongst the most frequent problems (Zhou, 2016, p.15).

On the other hand, scholars (e.g. Radnor and Johnston, 2013; Tsironis and Psychogios, 2016) realised the usefulness and practicality of combining operations management tools for maximising their strengths and minimising their weaknesses. Table 2.3 below illustrates selected OM tools associated with Lean thinking that have been mostly employed by a plethora of firms in a variety of fields for continuous performance improvement purposes.

*Table 2. 3: Lean thinking tools*

Lean thinking tools	Total Quality Management (TQM)
	Six Sigma
	Benchmarking
	Quality Function Deployment (QFD)
	Kaizen
	Flow & Process Mapping

*(adapted from: Bamford et al., 2015)*

For instance, Lean and Six Sigma techniques have been employed as a methodology for managing professional services’ performance. In particular, Antony, Rodgers and Cudney (2017) emphasised the role of Lean Six Sigma in policing services for optimising inefficiencies and maintaining quality.

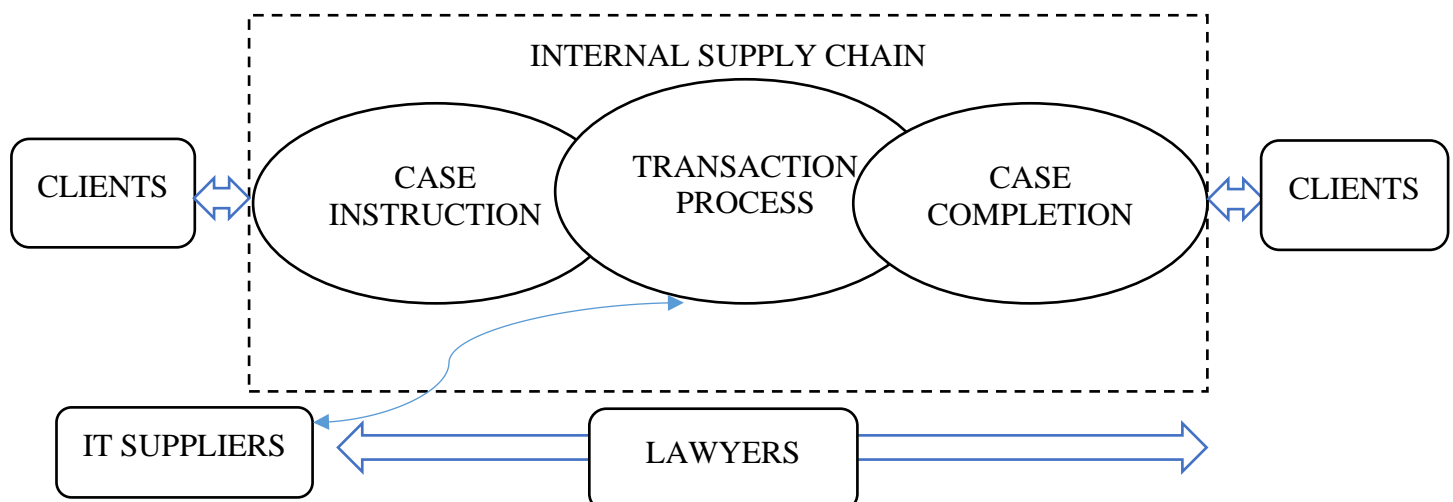
### 2.7.3.1. Lean thinking orientation in the legal services

For a successful implementation of Lean tools, the nature of the field should be taken into account. In particular, the heterogeneous nature of the legal sector, the traditional way that it operates, the regulatory bodies that have an impact on its services and also, the different roles (not only as customers) that citizens may have, are all characteristics that need to be evaluated when choosing optimisation tools (Suárez-Barraza and Ramis-Pujol, 2010).

The legal sector is characterised by complex and time-consuming legal processes, such as due diligence, M&A deals, claim handling and others. Most of these legal services are considered to be a series of repeatable, describable steps that run in a traditional (and conservative) way from representatives of law in each client's transaction. Most legal firms appoint excessive resources like a team of lawyers to deal with an M&A process when it is not always necessary. This often results in an extensive procedure, difficulties with the communication among the parties being involved in the transaction and deviation from focus.

A synopsis of a law firm's supply chain adapted from Hines, Martins and Beale (2008) is depicted in Figure 2.6 below. Firstly, the client instructs a case to a law firm. The law firm appoints a team of lawyers or a lawyer expert in the clients' case to deal with it. In the meantime, IT materials such as templates and letters and finance support are available to the legal team to prepare the case. Lawyer and client interaction is being built throughout the transaction process through the monitoring of the case's progress and the fee billing. Ultimately, at the final stage the client is being informed on the case outcome and the case is completed.

*Figure 2. 6: Law firms' supply chain*



Lean thinking is a well-established path to higher quality, improved operational performance, increased timeliness and greater respect for the people who provide the services. Thus, it can (perhaps) better legal processes and result in rigorous corporate legal transactions and to a competitive advantage over their competitors in the workplace. However, Susskind (2017) acknowledges that it is not the Leaner machine that could potentially reduce back office operations such as technology, marketing and human resources but the cost of lawyering itself needs to be reduced. For example, the junior lawyers undertake documenting, litigation, due diligence, administrative process-based activities that a computer can potentially do.

#### 2.7.3.2. Waste management

The most important element of Lean philosophy is the waste management. In other words, firms that embrace Lean tools have to minimise or eliminate the activities that do not add value to the business (Buckley et al., 2017); thus, the activities that can be considered waste. Process re-presentation or process mapping is one of the most efficient ways of clearly identifying unnecessary tasks and tackling challenging situations. The common seven wastes of the manufacturing sector (see Table 2.4) have been introduced by Womack and Jones (1997) and OM scholars are reproducing them by adapting them in the sector they investigate (Michalakopoulou, 2018).

*Table 2. 4: The seven wastes of manufacturing*

Overproduction
Inventory
Over-processing
Motion
Defects
Waiting
Transportation

*(adopted from: Hirano, 2016)*

The present research project nonetheless focuses to fill in a gap in the existing literature by identifying inefficiencies in the service processes through semi-structured interviews and a quantitative survey with representatives of the legal profession and propose solutions for their effective and efficient management from an operations management perspective. Table 2.5 below illustrates the legal service sector's wastes according to the understanding of the researcher, as there is not an explicit representation of them in the existing literature. Further these assumptions are explored through the data analyses.

Table 2. 5: The seven wastes of the legal sector

Overproduction
Defects
Transfer
Over-processing
Pre-processing
Waiting
Movement

Activities that require an investment and can benefit the company and the client are adding-value tasks. Investment can be described as the time, energy and effort spent, the resources utilisation and also the opportunity that the company is taking. Hence,

$Value = Benefit - Investment$  and

$Investment = Time + Energy + Effort + Resources + Opportunity$  (Grant, 2014).

More specifically, *overproduction* for the legal sector can characterised when two or more lawyers work in the same case. *Defects* in the legal services occur when lawyers do not provide a complete answer to the client's case or a document/ letter has been filled and there are errors. Furthermore, *transfer* is when a lawyer requires a response to a clause that it is not fully completed yet from another member. *Over-processing* occurs when for instance lawyers have two or more solid cases for a client's issue and they are searching for a third one without checking for similarities with previous cases to avoid repetition. In contrast, *pre-processing* can be any unnecessary work being operated like drafting a contract before the terms of the deal have been finalised. Also, *waiting* for something to be signed off in a traditional way, is not better than sending an email to request for it. Finally, *movement* indicates any physical motion of people. For instance, the *transportation* of lawyers when they have to deal with a number of M&A deals in parallel in different countries can be a waste.

In addition to the aforementioned wastes, scholars have long emphasised the lack of appreciating the importance of the human element within the OM research and this can be classified as an eighth category of waste. More specifically, the eight waste can be defined as "*the underutilisation of people and in particular their ideas and their creative input for improving the processes and practices*" (Womack and Jones, 1997). Radnor and Johnston (2013) emphasised the importance of the potential in the *untapped* human element. For example, operations managers in order to ensure the flow of an M&A process have to also secure the effective communication and team-work among the other

functions participating in that process. These are the human resources, the banking team and also the financial analysts.

#### 2.7.4. Agility

Agility as an operations performance measure considers flexibility and speed as the key performance indicators within an organisation. For the service sector the agility of a business to respond to customer expectations and market requirements can lead them to a competitive advantage. However, this study is focusing on how innovation adoption can lead to efficient operations and not how agile or flexible are legal firms to respond to market changes and other external factors. So, agility is not considered *per se* but is acknowledged as a possible parameter for the reader to have the complete bigger picture.

### 2.8. Diffusion of innovations

#### 2.8.1. The innovation process

Although the adoption of innovative activities can significantly benefit company's performance and give to firms a competitive edge in the workplace, the adoption of them is the most challenging factor that managers do face. According to the existing literature, innovation as a phenomenon goes through different stages until it is integrated in a firm's culture and environment. It is argued that the ***process*** to adopt an innovative approach begins when a firm identifies the need for research and development (R&D) and/or a problem that needs to be solved (Rogers, 2010).

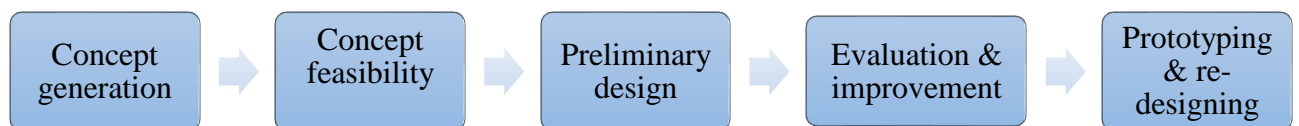
Greenhalgh et al. (2008, p.1) distinguished the innovation process to three main phases. Namely, the "diffusion (a passive phenomenon of social influence), the dissemination (active and planned efforts to persuade target groups to adopt an innovation) and the implementation (active and planned efforts to mainstream innovation)".

One important point to consider is that the adoption of innovative activities such as technology and/or new product/service developments are strongly interrelated with the innovations occurring within each of the business functions. These are innovations in the management structures of the business, marketing strategies and the organisational culture (Stoneman, 2018). This is line with Battisti and Stoneman's (2010) view that joint adoption of clusters of innovations in parts of the business can result into firms' better productivity and, operational and financial performance improvement. Also, through the introduction of combinations of innovative activities into the firm, the marginal payoff of them and the employees' willingness for adoption are increased.



Slack, Brandon-Jones and Johnston (2016, p.134) highlighted the stages of an innovation adoption of a product or service. More specifically, they outlined the innovation process in five stages as depicted in Figure 2.7 below; firstly, a firm starts by capturing an idea or a concept, then the firm has to check the concept's feasibility and do the preliminary design. Last but not least, there is the evaluation and the improvement of the initial idea and finally, the prototyping and the re-designing it. Similarly, Rogers (2010) one of the forefathers of the diffusion of innovations in healthcare industry illustrated six steps in the innovation uptake process occurring within a business; beginning with the problem or idea identification, the diffusion of innovation and ending with the possible consequences to the business after the innovation launch.

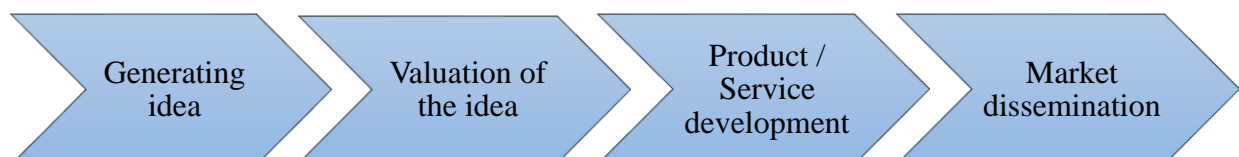
*Figure 2. 7: Stages of service/product innovation*



*(adopted from: Slack, Brandon-Jones and Johnston, 2016)*

Overall, there is not a *one-size-fits-all* approach in terms of how companies run procedures for innovation including the decision-making and the project management activities. Most of the times, the stages presented can happen differently depending on the nature of the business and the innovation being implemented. Nevertheless, Salerno et al. (2015) studied 132 innovative projects across 72 firms and identified the similarities on how firms approached innovation and concluded with a series of four basic phases that are presented in Figure 2.8. Taking the above into consideration, Figure 2.8 illustrates the innovation process that is summarised into a four-step approach that is followed from the majority of businesses.

*Figure 2. 8: The innovation process*



*(adapted from: Salerno et al., 2015)*

For both manufacturing and service sectors, innovation could be achieved either internally with R&D activities or externally by building the relationships with the firm's suppliers and customers. For the manufacturing sector a collaboration with research institutes and in-house R&D can benefit a new product development while for the service sector the engagement with clients and suppliers can positively influence the pursue of innovation (Love, Roper and Bryson, 2011). This is line with Anand, Gardner and Morris (2007) who argued that innovation can be an outcome of the interaction and team-work among the colleagues in knowledge-intensive businesses.

Overall, the initiatives for innovation are highly interconnected with the firm's competitive strategy and organisational culture (Anand, Gardner and Morris, 2007). However, there is a distinction of the strategies that firms have to develop for adopting innovation between the manufacturing sector, i.e. product related and the *pure* service sector. Tsinoopoulos, Sousa and Yan (2018) identified that profit motives and the need for legitimacy towards external stakeholders are strong factors that drive the service sector for process innovation.

All in all, there is no wide range of literature on how service firms create value from innovation (Desyllas et al., 2018). Thus, this study through primary data collection and analysis methods identified the factors that hinder innovation adoption by law firms but also opportunities for its successful implementation into the legal services sector.

### 2.8.2. The innovation adoption lifecycle

In the sections above, the researcher synthesised the key scholar's definitions on innovation and described what innovation is for the manufacturing and service industries. Additionally, aspects of innovations and their benefits to the organisations were analysed. For the adoption of those innovative elements, businesses have to undergo a multi-level process and integrate their leadership functions to boost adoption from employees. The process of innovation with the different stages that organisations undergo is presented in section 2.8 above. This sub-section describes the innovation adoption lifecycle and the adopters over time.

For each new innovative activity, there is a cumulative S-shaped curve presenting the rate of adoption over time (Rogers, 2003, p.257). This is a typical illustration of a diffusion process occurring when a firm integrates a new approach for the company's employees or a process change. Similarly, Greenhalgh et al. (2008) stated that the curvilinear diagram follows the same pattern when there is a diffusion of ideas within an organisation. Following that, there is evidence that most innovations adoptions such as the communication and interactive technologies are having a slow adoption rate

from users (Rogers, 2010). The human factor and leadership approach play important roles for the successful implementation of the diffusion of innovations. Rogers (2010) categorised the prospective adopters of innovation into five dimensions as described below. These are:

- *The innovators*: they so called venturesome; they seek to build external relationships to generate innovative ideas.
- *The early adopters*: individuals who critically evaluate innovative entries and act as role models to the rest of the adopter categories.
- *The early majority*: individuals who although sceptical at first, they tend to adopt new innovations.
- *The late majority*: individuals hesitant at first to adopt an innovation but finally adopting it due to peer pressure to do so.
- *The laggards*: individuals who are resistant to change and their working practices are running in more traditional ways.

## 2.9. Literature review themes, selected references and conceptual framework

This section presents a synthesis of the literature review themes based on selected author references that were particularly relevant to the topic under investigation. It also introduces the conceptual framework that contextualises how the literature review themes and the theories are interconnected and how these define the direction of the Thesis.

Figure 2. 9: Literature review themes

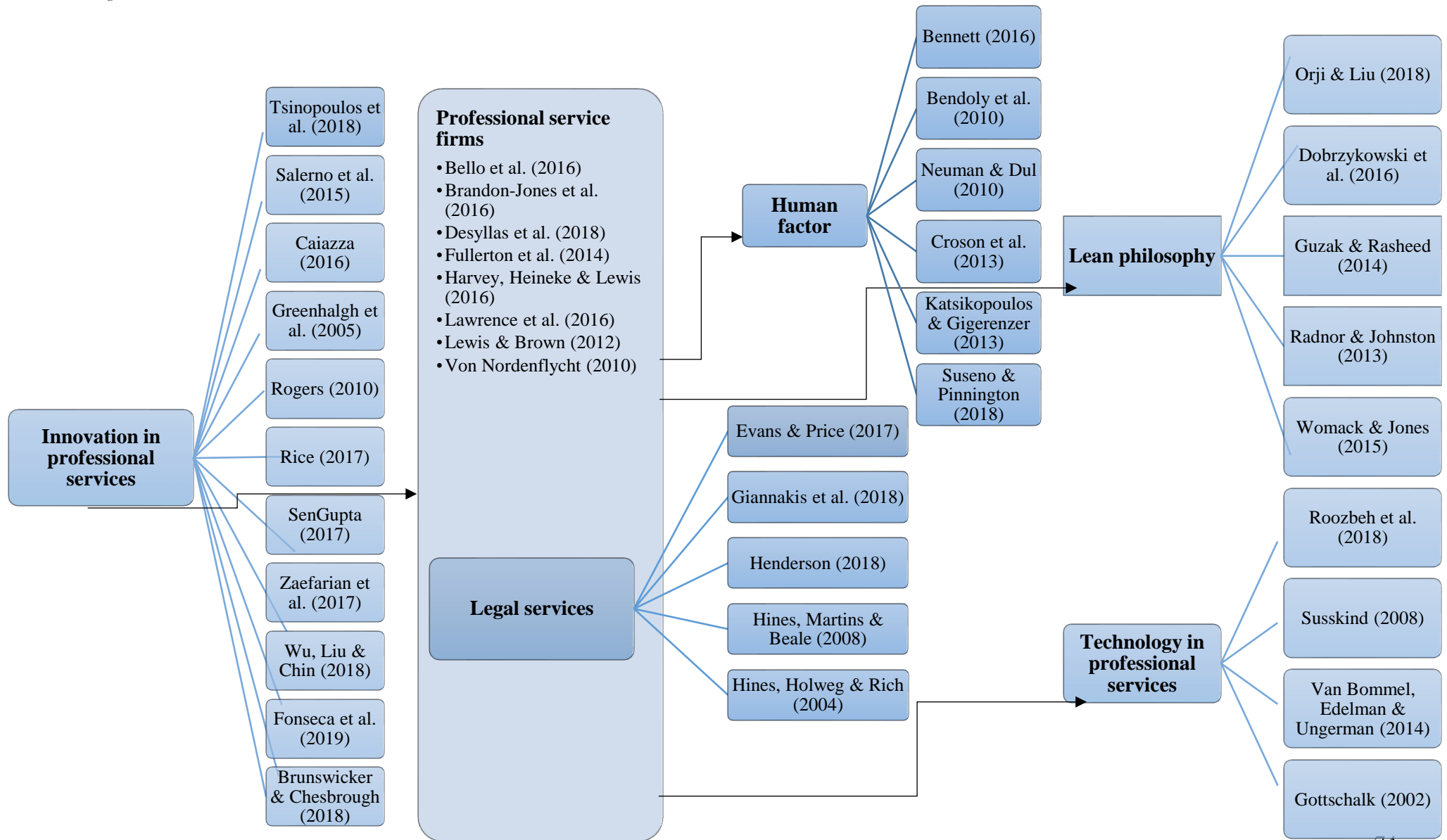


Table 2. 6: Literature review selected citations

Author/Date/Title	Sector	Methodology	Sample	Country	Overview
<b>Human capital &amp; operations</b>					
Hitt et al. (2001)/ <i>Direct and Moderating Effects of Human Capital on Strategy and Performance in Professional Service Firms</i>	Legal sector	Quant; Total revenue for 100 large law firms from <i>The American Lawyer</i> for 1987-1991. Survey with partners lawyers.	252 observations, included data on 93 firms.	USA	The importance of human capital for firm performance.
Boudreau et al. (2003)/ <i>On the Interface Between Operations and HRM</i>	OM/HRM	Conceptual paper; Improving an OM model using HRM theories.	-	USA	A new era of OM/HRM integration. OM models could provide insight into where to look for the “pivot points” that may be affected by talent. HRM could offer insights into what factors affect development of the appropriate talent and the extent to which satisfaction among workers affects retention and performance.
Neumann & Dul (2010)/ <i>Human factors: spanning the gap between OM and HRM</i>	Manufacturing sector	Conceptual paper.	Systematic Literature Review of 45 empirical studies, the RBV of the firm.	-	The application of human factor in OM design can support improvement in both employee well-being and system performance in a number of manufacturing domains.
Mantel, Tatikonda & Liao (2006)/ <i>A behavioural study of supply manager decision-making: Factors influencing make versus buy evaluation</i>	SCM in purchasing field	QUANT-Mail-survey based experiment (novel in OM) in Institute for Supply Management (ISM).	121 MBA students.	Online worldwide Institute for Supply Management (ISM)	Insourcing or outsourcing. Management can ensure a more rational make-buy decision if they understand the biases that influence the decision and point these biases out to the decision maker.

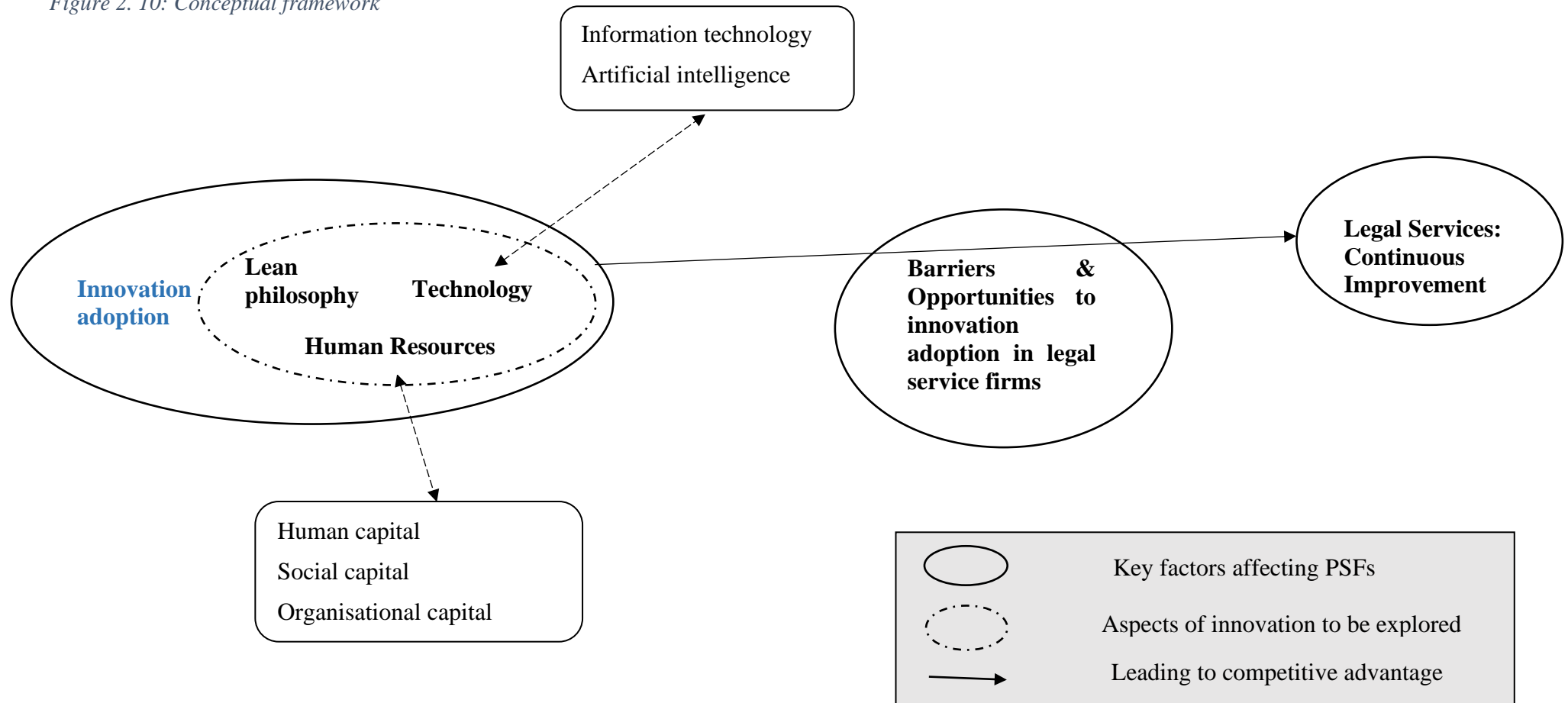
Legal services					
Rolfe & Anderson (2003)/ <i>A firm choice: law firms' preferences in the recruitment of trainee solicitors</i>	Law firms	Case study.	19 interviews and 20 days of observations with court lawyers.	UK	The recruitment practices of a cross-section of firms, including some of the largest recruiters. Change the practices of law firms that have targeted old universities.
Welsh (2017)/ <i>The Effects of Changes to Legal Aid on Lawyers' Professional Identity and Behaviour in Summary Criminal Cases: A Case Study</i>	Legal sector	Case study.	Interviews with 19 advocates.	UK	Legal aid effect on court lawyers, fixed fees contrary to hourly rate. Fixed fees provide incentives to work less thoroughly for a case, as a payment by hourly rate. Another point was that, lawyers in fixed fee cases should pay attention to details, but standardized, hurried case management clearly has the potential to place defendants at significant risk of inadequate access to justice in the proceedings as evidential or legal points may not be identified or pursued.
Giannakis et al. (2018)/ <i>The design and delivery of modular legal services: implications for supply chain strategy</i>	Legal services	Multiple case studies.	Case studies in 10 law firms.	UK	Legal services are currently over-customised, offering significant opportunities for the application of modularity across their supply chains. Legal services that require medium to low level of customisation (mass transactions or standard contracts) can be decomposed into standard components.

Lean thinking in professional services					
Wu (2015)/ <i>Organizational structure and product choice in knowledge-intensive firms</i>	Professional service firms	Model creation.	Conceptual.	-	The use of ICT in knowledge-intensive firms allow for a more efficient management of skilled labour.
Teo, Reed & Ly (2014)/ <i>Human resource involvement in developing intellectual capital</i>	Professional services	HR practices and Firm performance. Quantitative analysis.	165 Australian professional service firms, database.	Australia	HR add value to PSFs.
Sahin (2011)/ <i>Managing professional service firms: role of managerial abilities</i>	Professional services/ (advertising industry)	In advertising area; the role of management in PSFs to create competitiveness.	Six case studies.	Turkey	Since service firms are mainly knowledge-intensive and producing high cost of professional specialisation, managers of these firms have to focus on developing their human resources quality, especially to increase their key managers' competence.
Ulkuniemi & Pekkarinen (2011)/ <i>Creating value for the business service buyer through modularity</i>	Professional services (Consulting industry)	Qualitative study.	Interviews with senior managers in a company.	Finland	Service modularity in PSFs; a modular service offering can help customers by increasing the visibility of the service offering.
Radnor, Hollweg & Waring (2012)/ <i>Lean in healthcare: The unfilled promise?</i>	Healthcare sector	Qual (interviews) Case study.	8 case studies in the public sector	Scotland	Themes from the analysis; barriers of lean adoption and lean implementation suggestions.
Zhou (2016)/ <i>Lean principles, practices, and impacts: a study on SMEs</i>	SMEs	Quant; survey distribution to practitioners and academics.	Factors and drivers for Lean implementation. Challenges for Lean adoption.	USA	Most manufacturing SMEs employed the 5S OM tool over Six Sigma; Six Sigma requires a high degree of expertise, knowledge and organisation collaboration that it is evident mostly in PSFs.

Innovation in professional services					
Chichkanov, Miles & Belousova (2019)/ <i>Drivers for innovation in KIBS: evidence from Russia</i>	Professional services	Survey and online database.	519 KIBS enterprises from Russia.	Russia	Human capital increases the implementation of technological innovation, while the link between standardisation and technological innovations is non-linear.
Fonseca, de Faria & Lima (2019)/ <i>Human capital and innovation: the importance of the optimal organizational task structure</i>	Services	Quant; European Community Innovation Survey data.	6000 Portuguese firms' data.	Portugal	Optimal innovation performance takes place when firms balance their degree of abstractism.
Tsinopoulos , Sousa & Yan (2018)/ <i>Process innovation: open innovation and the moderating role of the motivation to achieve legitimacy</i>	Industry	Quant; Data from the European Community Innovation Survey administered by the U.K. government.	R&D managers N=7.645.	UK	Engagement with open innovation will increase the likelihood of introducing new processes and that the motivation to achieve legitimacy will affect this relationship.
Orji & Liu (2018)/ <i>A dynamic perspective on the key drivers of innovation-led lean approaches to achieve sustainability in manufacturing supply chain</i>	Manufacturing sector	Survey in two manufacturing firms.	30 participants (over 20 years of experience)	China	Investigated the dynamics of the key drivers of innovation led lean approaches and their influence on sustainable performance over a long time in the manufacturing supply chain.
Brunswick & Chesbrough (2018)/ <i>The adoption of open innovation in large firms: practices, measures, and risks</i>	Industry	A survey in large firms.	Senior executives at 2.445 large, market-listed firms	Europe, Canada and the USA	More than 50 percent of the firms are adopting open innovation as a strategy. Those that abandoned it referred to management structures reasons or no perceived benefits.



Figure 2. 10: Conceptual framework



## 2.10. Conclusions

Chapter 2 synthesised the frontiers of the Thesis by: i) presenting the professional service sector's characteristics, ii) describing legal service firms, iii) exploring the concept of innovation and iv) discussing how aspects of innovation can enhance legal services' competitiveness. The Literature Review Chapter also contextualises these important aspects of innovation and their role to the businesses, by categorising them under the value of the human resources, the technological innovation and the use of operations management tools.

All in all, where the legal profession operates in a way not as effective, robust or technologically informed as it should, problems should not be ignored. The motivation of employees, the forces for change and the firm's strategy for improvement are crucial factors for new innovations adoption (Tsinopoulos, Sousa and Yan, 2018). Chichkanov, Miles and Belousova's (2019) argued that the human factor has a significant influence on the diffusion of technological innovations, while the link between standardisation and technological innovations is non-linear.

Innovative organisations should be learning organisations and they support the knowledge generation/creation and exchange between their members and external parties when needed (Greenhalgh et al., 2008, p.75). Individual learning, one-to-one training on new technological tools and support in idea developments are some of the ways that can lead to innovation. Thus, the aim of this study is to explore how synergies among innovative approaches such as Lean and technology practices can be integrated and operationalised within law firms to lead to a competitive advantage in the workplace.

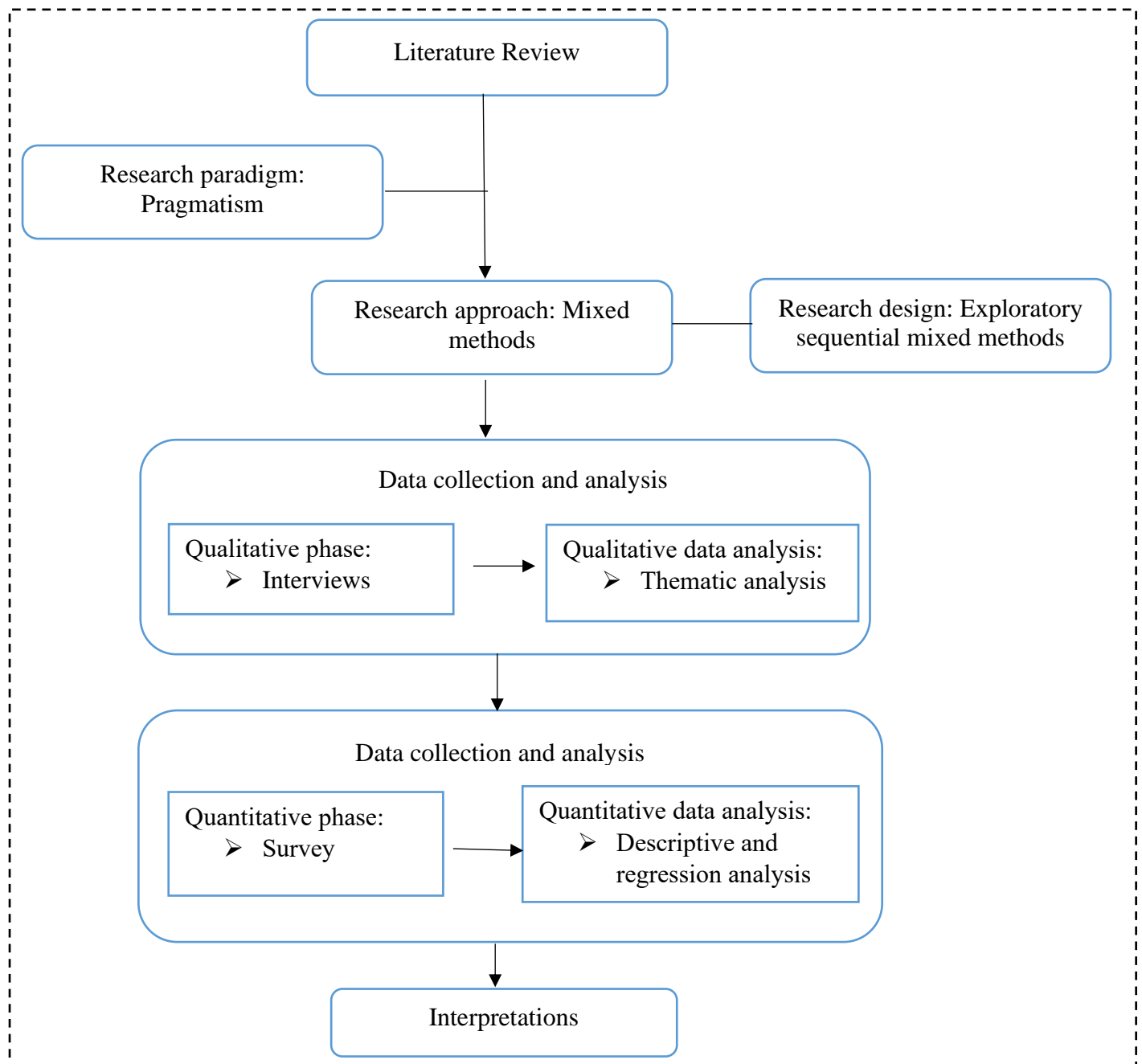
Lean thinking is argued as potentially being one of the most efficient strategies for improving the legal sector services (Womack and Jones, 2015) and employees who are willing to embrace it have a competitive advantage over others. However, Hines, Holweg and Rich (2004, p. 998) argued that Lean production system is "*de-humanising and exploitative*". Hence, managers should opt for strategies on applying Lean thinking not only from a mechanistic perspective, but also ways to promote respect and encouragement for the human resources. This can lead to long-term efficiency and profitability within a firm.

## Chapter 3. Research Methodology

### 3.1. Introduction

Chapter 3 presents the research philosophy of the study, the methodological approach employed to collect the primary data, the data collection instruments and the data analysis methods. In addition, this Chapter includes the sampling strategy and considerations on the access to data referring to ethics. The research strategy structure that this project followed is depicted in Figure 3.1 below.

*Figure 3. 1: Research strategy structure*



### 3.1.1. Research method purpose

As described in the Introduction and Literature Review Chapters of this Thesis, the legal service sector is the research area being investigated. The legal sector has been characterised as a complex one with no definite operational structures and measures of efficiency. The legal firms operate under strict regulatory bodies and the entrance of innovative approaches has to be examined thoroughly in advance. For these reasons, the challenges and opportunities of innovation adoption through examining systematically the legal professionals' valuable insights had to be assessed from different angles allowing the delivery of results that had both breadth and depth. Hence, to address the research questions the researcher employed methodological pluralism; *“the adoption of more than one research methods for building a comprehensive picture of social life”* (Chapman and McNeill, 2005, p.22).

The study's research questions that are addressed through this mixed-methods approach are:

*RQ1) What are the key operational challenges and opportunities of the legal sector today?*

*RQ2) What are the perceived barriers and opportunities that influence innovation adoption in law firms?*

*RQ3) How can law firms improve innovation adoption, so as to enhance their operational efficiency and the productivity of legal professionals?*

### 3.2. Research philosophy

Historically, philosophy goes back in centuries where Greek philosophers, Aristoteles, Socrates and Plato to name a few, debated about the view of the world, the presence of truth and how knowledge can be justified. On the one hand, there is Socrates and Plato who supported that there is a singular truth of reality (quantitative approach) while the Sophists such as Protagoras and Gorgias argued on multiple or relative truths (qualitative research). Aristotle's view is somewhere in-between these extremes with a more balanced approach that would be linked to mixed-methods research (Johnson, Onwuegbuzie and Turner, 2007). Approaching this from the social sciences perspective, scholars often question these different philosophical views, the positivism, the social constructionism and the pragmatism and their associated research methodologies, the qualitative, quantitative and mixed methods. This section is discussing the philosophical, ontological and epistemological dimensions of research

and how philosophies are linked with research methods. Also, the study's adopted philosophical and research paradigm is presented. Paradigm is defined under Kuhn (1962) as "*the progress of scientific discoveries in practice.*"

It is essential to implicitly or explicitly adopt a compatible philosophy to underpin the methodological approach; as Saunders and Lewis (2012) noted this philosophical choice should govern (or at the very least match) the research methods selected. In the business context, research philosophy is defined as the system of beliefs and assumptions on the development of knowledge (Saunders, Lewis and Thornhill, 2016). These assumptions are developed under three categories. Firstly, the *epistemological* assumptions, dealing with human knowledge, the *ontological* assumptions where realities confront the research under investigation and finally, the *axiological* assumptions meaning the extent that the researcher's values affect the research process *per se* (Saunders, Lewis and Thornhill, 2016) and the nature of ethics within this process (Mertens, 2007). These values are interlinked with human beings and affect the way researchers see the world and interpret the phenomena within (Johnson and Onwuegbuzie, 2004). The sections below synthesise the ontology and epistemology defining the research and the study's adopted research philosophy that influenced how the author explored the study's phenomenon. Axiological values are also interpreted within the philosophical approach of this research study.

### 3.2.1. Ontology

According to Biddle and Schafft (2015) ontology deals with the nature of reality and how humans perceive this reality. Reality is identified differently depending on the philosophical paradigm that drives the research study. For instance, positivists, the one extreme on the philosophical landscape, see reality as abstract, 'real' and apprehensible. On the other hand, interpretivists and social constructionists, believe the world to be constructed under multiple realities. The ontological considerations of the present study refer to pragmatism.

### 3.2.2. Epistemology

Epistemology is the relationship between the knower and what is known; how humans know what this is (Biddle and Schafft, 2015). It is defined as "*the significant (albeit incremental) progression and advancement of knowledge towards the truth*" (Gay and Weaver, 2011, pp.24-32). Bell, Bryman and Harley (2018) considered epistemology as the act of searching for the knowledge in a field of research and how the world can be studied under ethical principles in

the social sciences. The epistemological considerations of the present study refer to pragmatism.

### 3.2.3. Pragmatism

Pragmatists argued that there are different ways of perceiving reality and one single point of view cannot provide the entire picture (Kelemen and Rumens, 2008). Epistemological and ontological assumptions are not clearly stated in the sense of a pragmatism approach. There are philosophical debates on whether paradigms and their assumptions can be mixed as in pragmatism when conducting mixed methods research. This is because each philosophical paradigm that influences the researchers' view on reality and knowledge linked with specific research methods has solid boundaries that cannot be mixed with other (Johnson and Onwuegbuzie, 2004). For this reason, philosophers established *pragmatism* as an answer to traditional stances and to guide research that lay in-between of the extreme paradigms, those of positivism and social constructionism. Pragmatists continuously seek the knowledge and the reality through a combination of research methods; thus, rather than emphasising how mono-methods perceive the ontological and epistemological inquiries of the nature and the reality, they seek to inform existing knowledge and explore diverse understandings on the phenomena (Johnson and Onwuegbuzie, 2004; Biddle and Schafft, 2015).

The researcher adopted *pragmatism* as the philosophical paradigm, believing that under a pragmatic worldview she could obtain data that would allow her to describe usable actions to solve real-life issues of significant diversity and complexity. Forefathers of pragmatism, Dewey, Peirce and James supported that researchers have to employ more than one method to come to practical conclusions regarding the phenomenon being investigated (Creswell and Creswell, 2017).

According to Feilzer (2010) and, Johnson, Onwuegbuzie and Turner (2007) the approach most commonly associated with mixed methods research (Teddlie and Tashakkori, 2009, p.7), although clearly not the only one, is pragmatism. Others, present pragmatism, more strictly and exclusively, as mixed methods natural philosophical partner (Johnson and Onwuegbuzie, 2004). This is because pragmatism offers an alternative (more versatile and flexible) worldview to those of positivism/post-positivism and constructivism and focuses on the problem to be researched and the consequences of the research (Creswell and Plano Clark, 2007, p.26; Miller and Fredericks, 2006).

Therefore, as aforementioned this study from a philosophical perspective adopts pragmatism. Pragmatism as a research paradigm can utilise both quantitative and qualitative research methods but also has the ability to exploit the inherent duality of the data analysed. Thus, pragmatism can support the combination of different research methods, supported by an abductive perspective in relation with the adopted theories for the means of producing useful and practical knowledge (Feilzer, 2010). Similarly, the researcher explores the phenomenon of innovation adoption in legal services under what works at the time of the investigation aiming to collect a mix of qualitative and quantitative data to understand this problem in line with what Creswell and Creswell (2017) suggested. This pragmatism-oriented study aims to endorse practical theory, by developing an evidenced-based theoretical framework that informs effective practice; praxis through understanding real-world phenomena in legal businesses and their practical consequences (Hoshmand, 2003).

Other alternatives could have been either positivism or social constructionism. Social constructionism is the claim that human knowledge is the result of the society's interpretation of the world around people and perhaps is more suitable for a purely qualitative approach. At the same time, researchers who embrace the positivistic approach are collecting 'hard' data in order to explore the relationship between concepts and realise patterns and regularities (Hughes and Sharrock, 2016). However, since this study collects and analyses both numerical data and 'soft' data, gaining both breadth and depth, these philosophical frameworks were not prioritised. Johnson, Onwuegbuzie and Turner (2007) analysed these philosophical stances and positioned the multi-method research in-between. They argued that mixed methods research paradigm is positioned between the extremes of Greek philosophers Plato (quantitative research) and the Sophists (qualitative research), with mixed research attempting to bridge the gaps of these viewpoints while seeking a workable middle solution for many (research) problems of interest.

There is a growing literature on mixed methods where researchers incorporate pragmatism as their philosophical vehicle to address their studies' research questions (Biddle and Schafft, 2015). Pragmatism as philosophical paradigm can be ideal for integrating multiple perspectives and different approaches as it can provide epistemological justification and logic through the mixture of research methods (Johnson, Onwuegbuzie and Turner, 2007; Onwuegbuzie, Gerber and Schamroth, 2017). According to Guba and Lincoln (1994) and Brewer and Hunter (2006) *"mixed methods paradigms can bridge epistemological, ontological and axiological*

*differences between qualitative and quantitative methods in a way to that leads to real knowledge arisen from empirical research.”*

### 3.3. Mixed methods outline

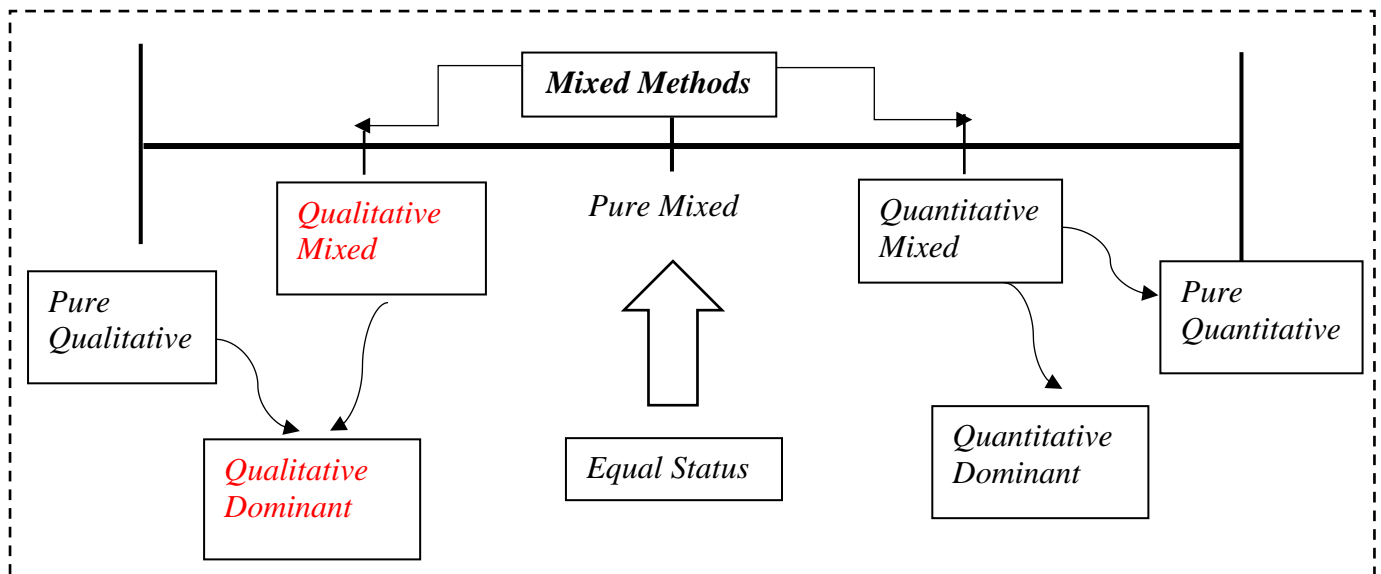
Mixed methods research paradigm is a “*synthesis of ideas from qualitative and quantitative research*” (Johnson, Onwuegbuzie and Turner, 2007, p.113). Scholars who adopt mixed method studies can simultaneously increase the likelihood that their research will make a meaningful contribution to the literature (Abowitz and Toole, 2010).

#### 3.3.1. Types of mixed methods research

Most scholars adopt mixed methods differently depending on their research topic. Figure 3.2 presents the three major research paradigms of mixed methods research; qualitative dominant, equal use of mixed methods and quantitative dominant. According to Johnson, Onwuegbuzie and Turner (2007, p.124), a qualitative dominant approach is mostly employed by researchers leaning towards a more qualitative approach, but they also argue that the quantitative element can add significantly to the research findings. On the other hand, supporters of the quantitative dominant approach rely more to statistical data but recognise that the addition of qualitative data can elaborate and provide depth to the findings. The researcher of this Thesis adopted a mixed method research using both qualitative and quantitative research methods to provide a holistic, in-depth and (more) generalisable view of the challenges and opportunities for service innovation. The approach was more qualitative dominant because of the robustness of the interview research phase as this depicted by the exceptionally high sample size; the survey in contrast although systematically conducted and analysed due to limited response rate has a more complementary nature. Figure 3.2 below illustrates the structure and the weighting of this Thesis mixed methods approach.



Figure 3. 2: Mixed methods approach



(adopted from: Johnson, Onwuegbuzie and Turner, 2007, p.124)

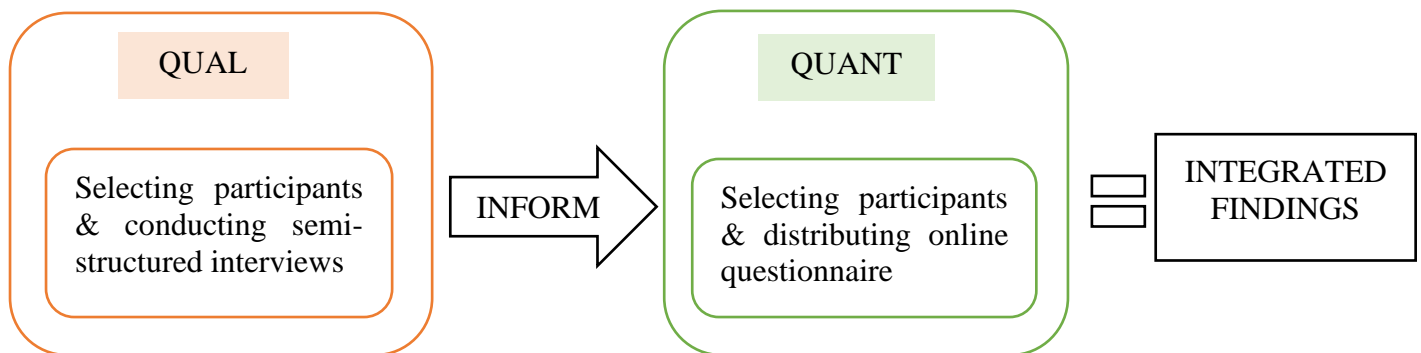
This study employed firstly a qualitative approach which followed by a quantitative one in line with Palinkas et al. (2015) who argued that in mixed method research this is a common practice. This is because qualitative data can explore and provide an in-depth understanding of the research area under investigation while quantitative methods can test or provide more evidence about the existing findings (Teddle and Tashakkori, 2009) resulting in scientifically validated research (Sale, Lohfeld and Brazil, 2002). Hence, a mixed methods study was employed to address the research questions of the project.

### 3.4. Research design

Bryman and Bell (2015, p.647), and Bell, Bryman and Harley (2018) synthesised Creswell and Plano Clark's (2011) six mixed methods designs into four mixed methods types. In particular, these types are i) the convergent parallel design, ii) the exploratory sequential design, iii) the explanatory sequential design and finally, iv) the embedded design. In summary, authors employ mixed methods type one i), by beginning in parallel the collection of qualitative and quantitative data for the means of combining both information together. In the second type ii) qualitative data collection and analysis comes first to inform direction of the quantitative data method. More specifically, this design has a more exploratory character aiming to collect enough information for the phenomenon being investigated in order to set-up a more effective

follow-up quantitative research that increases the generalisability of the results. Contrary to this, in the third type iii) the collection and analysis of quantitative data comes before a second in-depth qualitative research phase. This type of research has an explanatory role; thus, the qualitative method aims to elaborate the statistical data. In the final type iv) the researcher selects a primary data collection method, either a qualitative or quantitative method where although there is a parallel exchange of information among the two, the latter method enriches the former (Bryman and Bell, 2015, p.647; Bell, Bryman and Harley, 2018). Taking the above into consideration, this project adopted *an exploratory sequential design*, as depicted in Figure 3.3 below.

*Figure 3. 3: The exploratory sequential design*

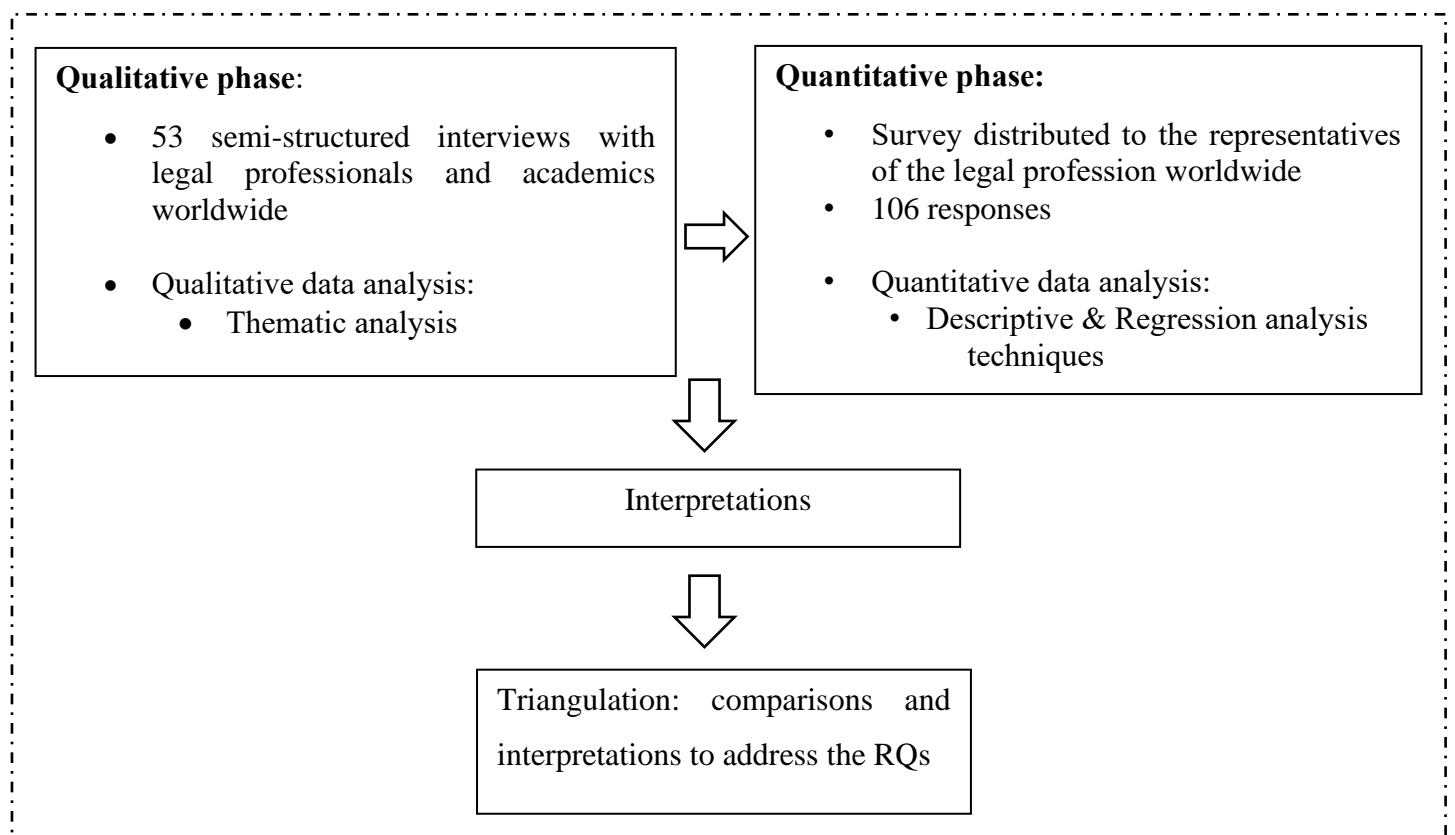


According to Figure 3.4, the qualitative phase refers to 53 interviews, conducted to develop an in-depth understanding of the views and experiences of the legal professionals that participated in this study. This phase aimed at the identification of the challenges that legal professionals face working in the legal sector and the exploration of opportunities for efficiency improvement through innovation uptake. Hence, this phase contributed to the fulfilment of the first two objectives (and RQ1/RQ2) of the research project. The findings from the qualitative research method in association with the literature review guided the researcher accordingly to shape the quantitative part of the study and identify the variables that needed to be examined through the questionnaire. This is a typical process of the exploratory sequential mixed methods; the first phase aims to explore the respondents' perspectives in more detail and inform the quantitative phase that has a more explanatory character due to its capacity to produce generalisable results (Creswell and Creswell, 2017).

The survey variables are directly guided by the qualitative themes. The survey was looking to propose solutions for innovation adoption and provide future recommendations for the legal

sector's continuous improvement. The findings from the qualitative analysis answer the RQ3 and therefore fulfil the last objective of the research study. Each data collection phase is analysed separately in the following Chapters. Overall, the combination of the employed data collection methods intended to address the aim of the study which is *'to develop an understanding of how innovative approaches could lead to improvements of the legal sector's efficiency'*.

Figure 3. 4: The mixed methods research design



### 3.4.1. The research approach

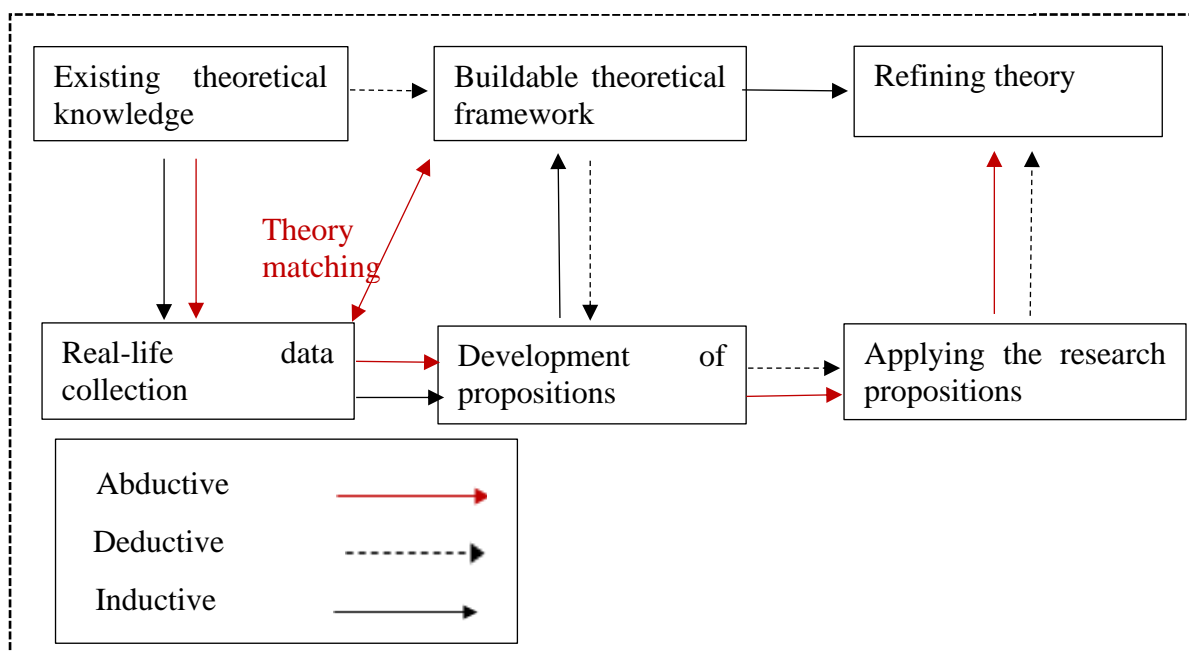
In mixed methods research the author aims to either generate theory and/or to test an existing theoretical framework (Creswell and Creswell, 2017). Under theory here is defined *“the set of concepts and statements of relationships that comprise an integrated framework, essential to explain or predict phenomena”* (Strauss and Corbin, 1998, p.15).

In this project, the author adopted multi-data collection methods using abductive reasoning (as depicted in Figure 3.5 below) to explore innovation adoption into the legal service sector for

the means of developing a conceptual framework that could guide legal firms to improved operational efficiency and productivity enhancement. Abductive reasoning occurs in the interpretation process when the theory is confronted with the empirical world continuously throughout the research process (Dubois and Gadde, 2002; Feilzer, 2010; Morgan, 2007). Dubois and Gadde (2002) argued that this happens through a systematic combining process, aiming to refine the existing theory based on the study's empirical datasets and inform both the theoretical framework and the research findings.

Other research methods are associated with either an inductive or deductive approach. For instance, a case study research is among the most popular methodologies for operations management scholars. Qualitative case studies scholars often connect theory inductively when analysing the research findings for the means of producing theory by exploring complex phenomena (Yin, 2009). In comparison, in quantitative research methods where a deductive reasoning occurs, there is a pre-established theory testing approach instead (Ashby, Leat and Hudson-Smith, 2012) that adds value to the area for investigation. Figure 3.5 below illustrates the three different research strategies and the role of the theory in the data analysis process. The present Thesis approach is highlighted in red.

*Figure 3. 5: The research approach*



*(adapted from: Spens and Kovacs, 2006)*

### 3.4.2. Challenges of mixed methodology and strategies to overcome them

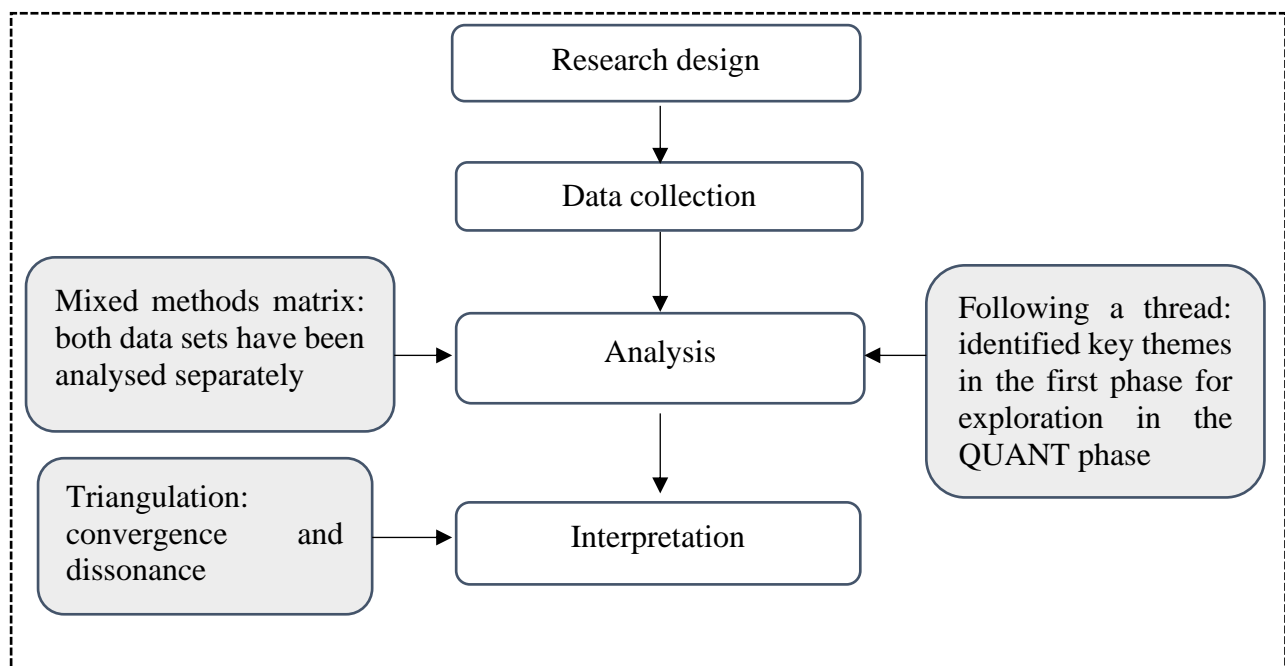
The key challenge for a successful methodology in mixed methods research is the ‘*embedding*’ process (Almalki, 2016). That means that the adopted research data collection mechanisms have to support a knowledge transfer and knowledge generation rather than a summary of the research findings.

#### 3.4.2.1. Techniques for data integration in mixed methods research

O’Cathain, Murphy and Nicholl (2010) introduced three techniques in the process of mixed methods research for successful data integration. These are i) the mixed methods matrix, ii) the following a thread and iii) the triangulation technique (Figure 3.6).

Overall, these techniques are in line with the study’s adopted paradigm considering that these would work in the context of a pragmatic or subtle realist stance adopted by mixed methods researchers. More specifically, as presented in Figure 3.6 the researcher analysed both data sets separately with the qualitative analysis informing the quantitative design. This resulted in two sets of research findings that were triangulated in the interpretation phase. Following a thread occurs in the analysis phase where scholars identify a key theme in the first data collection and following it for further exploration to the rest of the data analysis.

Figure 3. 6: Techniques for data integration in mixed methods research



(adapted from: O’Cathain, Murphy and Nicholl, 2010, p.2)

#### 3.4.2.2. Triangulation

Scholars employ triangulation in different phases during the research process. For example, according to Creswell and Plano Clark (2007), triangulation occurs when the researcher collects complementary data to support the first phase of the research collection using different data sources. As discussed in section 3.4., the researcher of this Thesis adopted exploratory sequential mixed methods, gathering information from different sources (i.e. law firms' balance sheets, online reports) to support the qualitative study, to inform the second phase of the quantitative approach (Almalki, 2016). The researcher employed a triangulation technique at the integration point to interpret the Thesis research findings.

At this point, one form that scholars employ is called convergent triangulation, which is based on *“the idea that knowledge develops by obtaining convergence in substantive findings across a diverse set of methodologies”* (Turner, Cardinal and Burton, 2017, p.244). On the other hand, holistic triangulation combines convergent and divergence for knowledge creation (Denzin, 2012). Under O'Cathain, Murphy and Nicholl (2010) triangulation in mixed methods research occurs primarily in the interpretation phase (Figure 3.6.) by combining two or more sets of the research datasets to form a complete picture of the phenomenon under investigation.

For this project, the author adopted triangulation of convergence and dissonance (Farmer et al., 2006) in the interpretation stage as seen in Figure 3.6 above to develop the research findings. The qualitative findings from the semi-structured interviews were combined with the survey data analysis to inform each other (convergence) or where necessary to contradict the existing statements (dissonance) for the means of addressing the research questions being investigated. The Discussion Chapter is where the analysis interpretation that combines the key findings of both research phases is presented.

Overall, scholars have to comply with specific criteria based on their research method approach to achieve quality. More specifically, there are different criteria for the evaluation of the qualitative and the quantitative phase. These are presented in more detail in the following sections. All in all, a multi-method approach can ensure validity to the research through the triangulation technique, as it can minimise the weaknesses of selecting a mono-method and at the same time increase each adopted method's strengths (Menon and Cowger, 2010, p.612).

### 3.5. Sampling and access to the data

Legal professionals that at some point of their career had experienced working in a legal firm around the world were the participants taking part in both phases of the study. Participants have been working in legal firms of various sizes; the size of the legal firms discussed herein is ranging from small (<100 employees), medium (>250 employees) to large (>500 employees) and very large (>1000 employees). This indication of the firms' sizes was adopted from OECD (2005), the SRA website (SRA, 2018) as the regulatory institution for legal firms in the UK and from the European Commission's report for Enterprises and the Industry (European Commission, 2016).

The sample consists mainly of respondents working in legal firms in European countries, the UK and rest of the world. The reason for this, is that the legal sector operates under a similar regulatory framework for the above countries with minor differences in their Law systems. As this study explores the way the legal firms operate in terms of the processes and their services towards their clients from an operations management perspective and not from a legal point of view, the country factor was not an issue. Therefore, participants' responses were valid when they fulfilled the following criteria: i) working in SRA or OSRI or ABS regulated legal firm and ii) being either qualified solicitors/ attorneys, barristers or trainee solicitors. The unit of analysis is the individual legal professional; since the participants of the study in either of the data collection phases were not the official representatives of their legal firms. However, legal professionals were asked to answer the questions from their experience working within a specific law firm and not on a personal basis *per se* so that their results could be to a degree more broadly generalisable and reflect more generic firm insights. The respondents always had to specify the firm size, the country this operated and the years they were employed in the firm so that there is a correlation between the individual and the firm.

The participants for both data collection mechanisms were primarily identified through personal contacts within the University of Huddersfield's Law School and also through the Law Society's webpage. Also, primary sources of contact were various groups of legal professionals in social media like LinkedIn and Facebook. The researcher mapped the desired group of people whose experiences and profession fitted into the study's aim, with the intention to employ more participants through the network of these people. The researcher contacted the people showing the intention to participate in any of the two stages of the research via e-mail, social media message or by telephone.

Snowball technique was used for both research approaches for identifying more participants for the study. Snowball sampling as network type sampling can be useful for approaching members that are difficult to be contacted to be proposed from similar participants (Thompson, and Collins, 2002; Cohen and Arieli, 2011; Noronha, D'Cruz and Kuruvilla, 2016). Furthermore, this process gave the researcher the opportunity to connect faster with participants willing to take part in the PhD research (Farthing, 2015). That resulted into forming and interviewing 53 legal professionals and collecting 106 survey responses. Each sampling strategy is analysed in the sections below. However, snowball sampling as a non-probability method (Taherdoost, 2016) can have limitations in terms of generalisations (Marcus et al., 2017) since the sample is not considered to be representative of a population (Sharma, 2017). Thus, the researcher to avoid the bias of selecting only from a specific pool of people, adopted in parallel a random sampling technique (Petersen and Valdez, 2005). That means the survey was advertised on social media and distributed on law firms around the UK and worldwide to reach participants from a wider pool. This is line with the study of Petersen and Valdez (2005) that provides evidence that random sampling, when used with sound procedures and commitment, can produce valid research results.

### 3.6. Ethical considerations

The data required for this research did not have a sensitive character for the participants. The results were fully anonymised for confidentiality reasons (i.e. even the direct quotes presented in the following Chapter are associated with pseudonyms and not the real names of the participants). The data collected were stored in the University of Huddersfield's secure drive for researchers and to the researcher's encrypted password protected memory stick. The project's data collection and storage complied with the 1998 Data Protection Act and only the researcher has access to the data.

More specifically, for the qualitative part of the study, the interviewees were informed about the interview process in advance via email containing an information letter and a consent form (Appendix A) on the potential risks associated with taking part in the research study. The consent form was signed and returned to the researcher from the study participants. The quantitative data collection contained information about the survey stating that the procedure would be voluntarily, anonymous and confidential. For both phases, the questions were tested through discussing (and piloting) the interview guide and the questionnaire with legal professionals and legal academics from the University of Huddersfield's Law School. The



feedback from the pilot phases allowed the researcher to review the questions and amend where necessary.

Through the consent and information forms the researcher informed the participants their right to withdraw from the interview phase at any time without needing to provide a reason for this. For the survey phase, the participants informed through the email invitation that they had the right to withdraw during their attempt to complete the survey.

Overall, the researcher designed the questionnaire and the interviews so as not to provoke strong feelings beyond those encountered in normal life. As a whole, the research follows the University of Huddersfield's Code of Practice of Research. The relevant forms were emailed to the Ethics Committee of Huddersfield's Business School and were approved (Appendix C).

### 3.7. The qualitative phase

This study, due to the scarcity of research in the field, has primarily an exploratory character and thus adopted firstly a qualitative research approach (Nemoto, Gondim and Vasconcellos, 2010). Qualitative research is crucial for strengthening the empirical base of operations management by enhancing existing insights and discover new organisational phenomena (Soltani et al., 2014). More specifically, the qualitative phase (Figure 3.7) consists of a series of 53 semi-structured in-depth interviews with legal professionals working in legal firms across seven countries. This sampling choice was decided so that this study has the potential, to some extent at least, to provide results more easily generalisable to a wider context. Specific county selection was not a pre-requisite, as this study aims to explore the operations of legal services and not their legal systems that are quite different, *per se*.

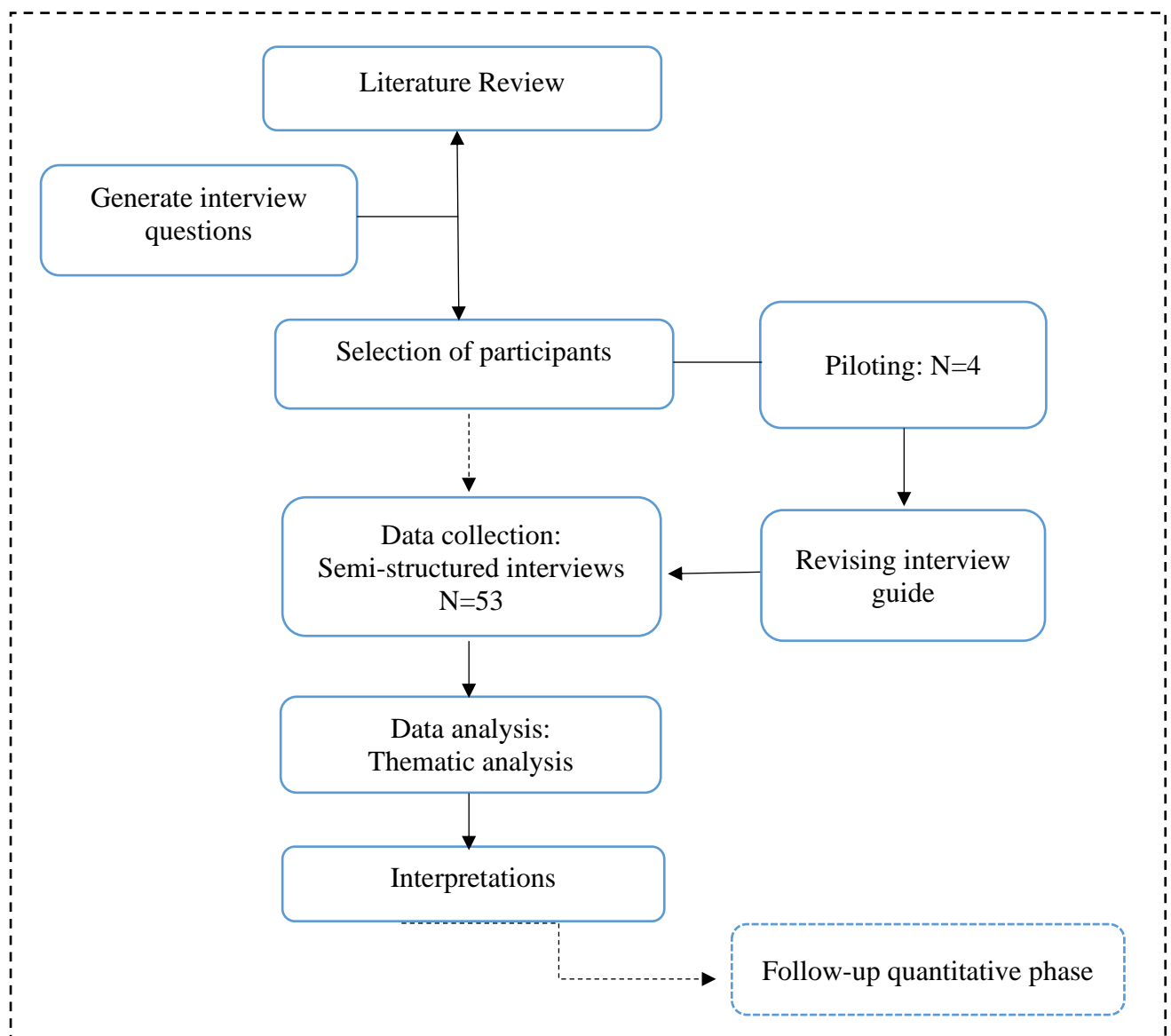
Individual interviewing can be used as a self-contained method of collecting ethnographically rich and dependable data (Bernard, 2011). It allows the researcher to gather answers to an unknown phenomenon and identify precisely the causes to the topic under investigation and develop concepts to generate hypotheses. There is a formal research procedure or protocol to follow in comparison to the unstructured interviews method; thus, achieving consistency in the participants' answers. The semi-structured nature of this study's interviews provided a layer of flexibility that allows for discovery or elaboration of information that is important to participants but may not have been previously thought of as pertinent by the research team (Gill et al., 2008).

The interviews for consistency reasons were based on an interview guide including sections referring to the management of the human factor, the fast-developing technology, the efficiency of legal processes and the transfer of knowledge. The exploration of the operational efficiency in the legal service delivery was achieved through keywords following the definition of Lean philosophy. Lean is defined for this project as ways to plan, design and control the legal processes/transactions through wastages elimination, reducing repetition, optimising human effort and better utilisation of resources (Slack, Brandon-Jones and Johnston (2016), as in section 2.7.3.). In the interview guide (see Appendix 9.1.), this refers to the questions in the sub-section ‘Legal process-related’.

Overall, the researcher still had the flexibility to manage the flow of the interviews by asking more questions when more details were necessary or remove questions from the interview guide depending on the interviewee’s responses (Bell, Bryman and Harley, 2018). Thus, spontaneous follow-up questions designed to help the interviewees make clearer and more vivid their views were occasionally and per case used to enrich the content and quality of the material collected.

Focus groups, which could have been a potential alternative due to their capacity to allow the observation of a large amount of interaction in a limited period of time (Guest et al., 2017), were not prioritised for privacy and confidentiality reasons. For instance, the participants may not be willing to air their views publicly or be too shy to do so (Easterby-Smith, Thorpe and Jackson, 2015) and most of them would like to keep their views between them and the researcher. Also, focus groups were not an optimal due to the interviewees’ time constraints that would not allow them to find a common place and time to meet with other law professionals to conduct the interview. Besides, the international focus of the study meant that many of the participants had to be remotely interviewed via Skype that according to Lo Iacono et al. (2016) has proven to be a time efficient and financially affordable instrument for increasing the variety of the study samples.

Figure 3. 7: Qualitative research design



### 3.7.1. Piloting

Pilot tests are essential prior to actual data collection for the prevention of any flaws in the design of the questions and the implementation of the entire process to the target sample (Cooper and Schindler, 2014). Firstly, the researcher conducted four pilot semi-structured interviews with representatives of the legal profession for testing the interview guide and revise it where necessary. The researcher initially approached the academics of the University of Huddersfield's Law School for an interview. This had as a result the completion of three interviews with academics who also had extensive working experience in law firms in the UK. The pilot interviews took place in their academics' offices in the University of Huddersfield.

The piloting phase included also one telephone interview with an associate solicitor working in a niche legal firm in Manchester in the UK. The interviews lasted around 45 minutes each with the longest interview lasting one hour. They were recorded using an audio recorder and transcribed in NVivo11.

The researcher after a thorough evaluation of the pilot phase, updated the interview guide where necessary (see Appendix A). More specifically, the ‘Legal process-related’ questions in the interview guide were focused on gathering information on whether operations management thinking tools and techniques like Lean thinking were implemented in the law firm. Because Lean is not a term that all legal professionals are accustomed to, it was not used in the interview guide. Instead of that, the questions were formulated to reflect Lean philosophy characteristics including the waste elimination, human resources utilisation and effort optimisation. This is because legal professionals were more likely to respond meaningfully to questions related to the key characteristics of Lean and explicitly describe operations management activities employed in their law firms rather than responding to one question that could create ambiguity because of the terminology. Nevertheless, the author defined Lean thinking at the beginning of each interview (i.e. Lean thinking is *‘a philosophical way of thinking and acting which aims at continuous process improvement by identifying wastages that hinder the value stream flow’*). Finally, the author proceeded with the actual participants’ invitation phase contacting legal professionals worldwide via email, social media and telephone.

### 3.7.2. Sampling

The study followed a snowball sampling where the first participants were selected based on their employment profile (Bell, Bryman and Harley, 2018). Then, these people were asked to nominate others fitting the same criteria (i.e. colleagues). This approach was selected as legal specialists are a difficult sample to reach; these referrals significantly increased the study’s response rate.

The sample size consists of 53 interviewees, which is very rich for qualitative standards. The researcher noted several repetitions among the interviewees’ answers during the coding after a point signifying that saturation had occurred; this prompted the researcher to stop the recruitment process. Saturation in the sample was evident when the patterns of the interviewees’ responses were similar and complement a theme/sub-theme rather than identifying a new sub-theme (Saunders et al., 2018). More specifically, there were not emergent codes to add to the existing coding. Most points mentioned from the majority of the participants

in all the interview questions were adequate for the thematic analysis and to address the research questions. In addition, the extracted codes/themes represent adequately the elements of the theoretical model leading to ‘informational redundancy’ (Sandelowski, 2008, p.875). Hence, further data collection and/or analysis were unnecessary. This is in line with Morse (2015b, p.587) who stated that saturation is “*the most frequent guarantee of qualitative rigour offered by qualitative scholars*” and has to be attained in relation with the theoretical framework of the study.

A corresponding table of the study’s participants for the qualitative data collection phase is presented in Table 3.1 below. Among the respondents there is a variety of legal specialists working within the legal sector. More specifically, the respondents were law company partners, associate solicitors, attorneys/lawyers, trainee solicitors, legal IT experts, in-house lawyers, barristers and legal administrators, academics and law students that had completed an internship. Some of the interviewees had served in multiple roles over the span of their respective careers. For instance, 12 of the interviewees although employed in academia were qualified but not practicing solicitors. This twin professional background potentially adds value to the research as these interviewees could identify in a broader way the challenges of the legal sector and its capacity to innovate since they have faced these themselves in their previous role but currently have the distance and neutrality of an academic. In addition, this adds value to the research as these particular interviewees could identify the challenges that they were facing in their previous role and the reasons that made them decide to exchange their career in legal practice for an academic one.

In Table 3.1, the first column presents the nickname of the participants given from the researcher to ensure anonymity. The second column reports the current role of the respondents at the time they were interviewed with the exception of the academics for whom both their previous practitioner role and their academic post are provided. The role of the interviewees is crucial for the data analysis as the opinion of those that are in the decision-making process (i.e. internal stakeholders) and those that are lower in the hierarchy can provide different arguments reflecting and affecting the innovation theme of the study.

Adding to this, their expertise is also important to be considered as the process or transaction to solve a client case in each legal area runs differently. The years of working employment play an important role to the validity of the data, as each respondent’s perspective of the legal sector’s operating scheme is important and there was a possibility that people with longer

professional lifespan could have different views from early-career professionals. Last but not least, the size of the firm is a key factor reported in Table 3.1, as the ability of the firms to invest in innovation and their operating business model is relative to the size of the firm.

In Table 3.1, where the term ‘private firm’ is listed in the column reports the size of the participant’s firm and refers to the participants that are in-house lawyers in various businesses. Overall, the firms’ sizes and the impact that may have on innovation adoption are analysed in the findings of Chapter 4 and Chapter 5. Ultimately, although the legal systems around the world are not taken into consideration for this study, the country of a legal firm may have some effect on the law firms’ operating model. All in all, most of the law firms had established headquarters in the UK and the USA.

The participants were contacted in three phases. Firstly, an email or a direct message on their social media were sent to them for inviting them to participate in the interview. Secondly, a gentle reminder was sent to arrange a convenient day and time for them to conduct the interview and lastly, a final notification was sent to arrange either a telephone, video call or face-to-face interview. Due to the country and the time limitation of some legal professionals, the interviews were conducted through various media. The ones around the Huddersfield region were conducted face-to-face in a room booked from the researcher in the Huddersfield University or in the participants’ legal firm office and the rest via a telephone or Skype call.

*Table 3. 1: Interviewees' profile*

<b>Nickname</b>		<b>Role</b>	<b>Expertise</b>	<b>Years of working experience</b>	<b>Size of firm</b>	<b>Country</b>
<b>1</b>	P.K.	Associate Solicitor	Property Solicitor	10	Small	UK (WALES)
<b>2</b>	T.R.	Trainee Solicitor	Crime	2	SME	UK
<b>3</b>	B.B.	Barrister & Academic	Employment Law & Self-employed	20	SME	UK
<b>4</b>	P.C.	Solicitor & Academic	Property Solicitor	10	SME	UK
<b>5</b>	T.A.	Trainee Solicitor	Paralegal & Part-time Student	2	SME	UK
<b>6</b>	A.C.	Solicitor & Academic	Managerial role	6	SME	UK
<b>7</b>	F.E.	Lawyer/ Attorney	Family Lawyer	8	SME	USA
<b>8</b>	O.E.	Managing Director/ Shareholder	Family Solicitor	20	SME	UK
<b>9</b>	O.R.	Owner of a Legal Firm	Immigration Solicitor	25	SME	UK
<b>10</b>	T.M.	Trainee Solicitor	Immigration Solicitor	3	SME	UK
<b>11</b>	B.R.	Lawyer & Owner of a Legal Firm	Barrister	20+	SME	UK
<b>12</b>	F.C.	Associate Solicitor	Family Solicitor	10	SME	UK
<b>13</b>	L.L.	Associate Solicitor & Council Member	Financial Transactional Solicitor	3	SME	UK
<b>14</b>	I.Y.	Solicitor	Immigration & Family Solicitor	6	SME	UK

<b>15</b>	E.G.	Lawyer & Owner of Legal Firm	Banking & Finance Lawyer	10	SME	UK & GREECE
<b>16</b>	I.R.	Lawyer	Barrister & Legal Coordinator	6	SME	ITALY
<b>17</b>	I.O.	Lawyer	Immigration & Asylum Solicitor	5	SME	UK
<b>18</b>	P.MO.	Solicitor	Property & Tax Solicitor	10	SME	UK (IRELAND)
<b>19</b>	A.P.	Solicitor & Academic	Civil, Commercial Litigation & Corporate Law	10	SME & Large	UK
<b>20</b>	A.J.	Solicitor & Academic	Company & Business Law	4	SME & Large	UK
<b>21</b>	T.AD.	Trainee Solicitor	Commercial Litigation & Insolvency Solicitor	2	SME (niche)	UK
<b>22</b>	F.N.	Solicitor & Academic	Family Law	8	SME & Large	UK
<b>23</b>	E.K.	Solicitor	Employment & Litigation Solicitor	6	SME	UK
<b>24</b>	PM.N.	Legal Project Manager	Corporate Law	6	Large	UK
<b>25</b>	A.A.	Solicitor & Academic	Property Law	15	Large	UK
<b>26</b>	PM.K.	Legal Project Manager	Corporate Law	17	Large	UK
<b>27</b>	P.V.	Partner	Property Solicitor	14	Large	UK
<b>28</b>	T.R.	Trainee Solicitor	Litigation & Personal Injury Solicitor	3	Large	UK
<b>29</b>	A.PC.	Solicitor & Academic	Company & Corporate Law	15	Large	UK



<b>30</b>	AD.J.	Legal Administrator	Administration	6	Large	UK
<b>31</b>	A.E.	Solicitor & Academic	Conveyancing Law	10	Large	UK
<b>32</b>	C.M.	Solicitor	Conveyancing & Legal Executive Solicitor	7	Large	UK
<b>33</b>	P.D.	Partner/ Head	Financial Solicitor	14	Large	UK
<b>34</b>	I.G.	Associate Solicitor	Corporate Solicitor & In-house Lawyer	10+	Large & Very Large	UK & RUSSIA
<b>35</b>	G.C.	Lawyer	Corporate Lawyer	3	Very Large	GERMANY & UK
<b>36</b>	G.U.	Partner/ Head	Corporate Lawyer	27	Very Large	GERMANY
<b>37</b>	G.S.	Lawyer	Corporate Lawyer	2	Very Large	GERMANY
<b>38</b>	G.R.	Associate Lawyer	Employment Lawyer	2	Very Large	GERMANY
<b>39</b>	G.J.	Lawyer	Corporate Lawyer	3	Very Large	GERMANY
<b>40</b>	T.D.	Chief Information Officer	Technology Officer	24	Very Large	UK
<b>41</b>	G.M.	Associate Lawyer	Corporate Lawyer	4	Very Large	GERMANY
<b>42</b>	PM.C.	Solicitor/ Legal Project Manager	Corporate Legal Project Manager	6	Very Large	UK & SOUTH AFRICA
<b>43</b>	K.A.	Solicitor & Head of Knowledge and Learning	Corporate Solicitor	17	Very Large	UK & SOUTH AFRICA
<b>44</b>	J.F.	Legal Director for Services	Technology & Operational Officer	30	Private Legal IT Firm	USA

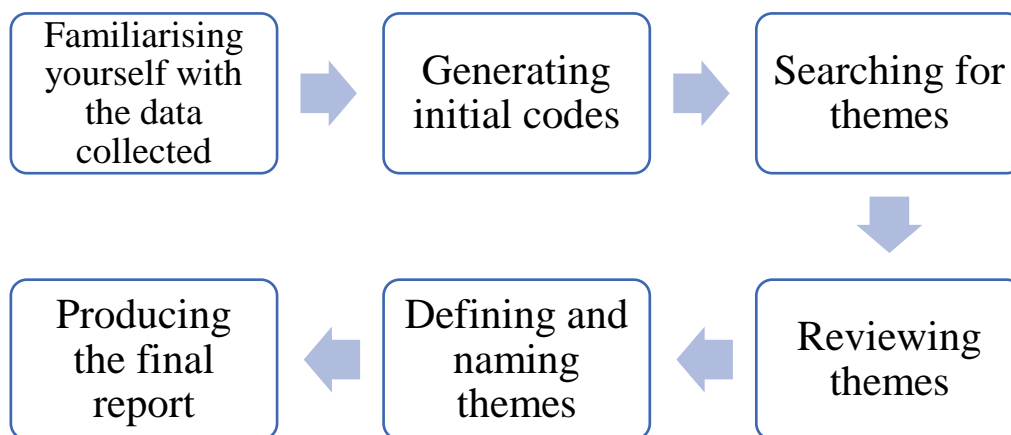
<b>45</b>	A.M.	Barrister & Academic	Criminal Law	10+	Private Organisation	UK
<b>46</b>	I.M.	In-house Lawyer	Corporate & Commercial Lawyer	10+	Private Organisation	UK & USA
<b>47</b>	I.E.	In-house Lawyer	Corporate & Commercial Solicitor	10	Private Organisation	UK
<b>48</b>	I.E.G.	In-house Lawyer	Commercial & Litigation Lawyer	14	Private Organisation	UK & GREECE
<b>49</b>	O.Y.	Solicitor & Owner of Online Platform	Commercial Contracts Solicitor	14+	Private Sector	UK
<b>50</b>	A.G.	Academic	Law Tutor	18	University Sector	UK
<b>51</b>	LS.AN.	Trainee solicitor	Law Graduate	4	University Sector & SMEs	UK
<b>52</b>	LS.D.	Barrister & Academic (Head of Law School)	Law Tutor & Criminal & Civil Law	20	University Sector & Chambers	UK
<b>53</b>	A.D.	Barrister & Academic	Commercial Law	9	University Sector & Chambers	UK

### 3.7.3. Thematic analysis

Thematic analysis is the qualitative analytical tool adopted by the researcher for analysing the rich material collected by the 53 interviews. Through the thematic analysis the researcher “*identified, organised, analysed and finally reports the finding patterns-the themes*” in the data corpus (Braun and Clarke, 2006, p.4). Apart from that, this method allowed for a comprehensive interpretation of the data collected from different approaches (Boyatzis, 1998). It is a common fact that thematic analysis is the most widely adopted method among other qualitative data analysis methods like grounded theory or content theory. The researcher following a thematic analysis has an active role in the process by exploring the interviewees’ insights and views on the topic, identifying patterns in their responses that address the research questions of the present study. Scholars via a grounded theory approach seek to identify useful and reasonable theory within the phenomena investigated (McLeod, 2001), thematic analysis is not constrained to theory development but to prove or expand the study’s theoretical framework (i.e. RBV with PBV theory).

A synopsis of the steps undertaken in the qualitative phase of the study is presented in Figure 3.8.

Figure 3. 8: Thematic analysis framework



(adopted from: Clarke and Braun, 2013)

A *theme* captures something important about the data in relation to the research questions (Braun et al., 2019). Solely the re-occurrence of patterns in the interview data it is not a definite indication of a theme (Vaismoradi et al., 2016). A theme is considered “*a series of comparable*

*meanings implicitly extracted from the researcher at an interpretative level from the interviewees' responses*" (Braun and Clarke, 2006; Vaismoradi et al., 2016; Graneheim and Lundman, 2004). Each theme often has sub-themes as sub-categories provide a comprehensive view of the data and uncovers a pattern in the participants' answers. The particular style of thematic analysis that this work adopts is in line with the work presented in Nikitas (2010), Nikitas, Avineri and Parkhurst (2018) and Nikitas, Wang and Knamiller (2019) since it prioritises a rich exploration of the raw data *per se* over analyst-deduced summaries of quotes which is a more quantitative approach. The qualitative analysis process is described in section 4.2.

To conclude, the thematic map informed the design of the explanatory part of the study, the quantitative (i.e. the survey). The qualitative part is exploring theory, while the quantitative one is employed to validate the qualitative findings and provide concrete answers of statistical significance to the study's research targets.

#### 3.7.4. Validity in qualitative research

It is essential in research to always reach for validity in the research findings for the means of ensuring their accuracy, credibility (Creswell and Creswell, 2017) and their rigorousness (Morse et al., 2002). *Validity* has to be achieved in a multiphase level, namely from the researcher, the participants of the study and confirmed by the reader (Creswell and Miller, 2000). Scholars point out several techniques that a researcher can employ (Yin, 2014; Noble and Smith, 2015; Silverman, 2016) for achieving validity or as also referred as *credibility* (i.e. internal validity) (Morse, 2015a). For instance, Creswell and Creswell (2017, pp.200-201) presented eight of them that the more authors employ, the better. Triangulation is one of the most popular techniques, secondly the member/participant checking strategy, and the clarification of bias avoidance are also mentioned. Similarly, an in-depth methodological description of the findings' integration phase and the time devoted to gather the data are providing credibility to the data.

As aforementioned in section 3.4.2., the author of this Thesis employed primarily a *triangulation* strategy to reach thoroughness of the research findings at the integration and interpretation phase. In association to this, the author spent three years, which constitutes a *prolonged time strategy*, discussing with many legal professionals on the study's inquiry allowing her to gain an extensive knowledge of the phenomenon being investigated. This includes a 12 months period on approaching the study's participants to conduct the interviews

and exchanging views afterwards with them in the form of conferences and workshops attended by the researcher. Additionally, the researcher followed the *participant checking* strategy (Creswell and Creswell, 2017); meaning that the study's findings were discussed with the researcher's external advisor who is a chief information officer in a large law firm in the UK with 24 years of experience on law firms and technological innovation.

*Reliability* or *dependability* in qualitative research is another dimension that researchers should aim for. The combination of a multi-method approach could play an important role to this (Morse, 2015a). Creswell and Creswell (2017) suggested a level of consistency in the data gathered for analysis through the repetitive process of re-examining the respondents' answers and concluding with a final thematic map. This practice was followed by the author of this Thesis, for ensuring dependability; this is analysed in-depth in the qualitative analysis in Chapter 4.

Last but not least, Noble and Smith (2015) acknowledged the difficulties that researchers often face to ensure validity and generalisability of qualitative research results, contrary to quantitative hypothesis testing. Scholars refer to this as *transferability* (i.e. external validity) in qualitative research and it is mostly a criterion in case study research following a replication logic (Creswell and Creswell, 2017; Yin, 2014). Nonetheless, more strategies to achieve credibility and trustworthiness in qualitative research are summarised in the literature (see e.g. Morse, 2015a; Noble and Smith, 2015; Creswell and Creswell, 2017). Triangulation again is supported to be one of the most reliable strategies for ensuring the dimensions of validity and thus, and this is the approach that the present study followed.

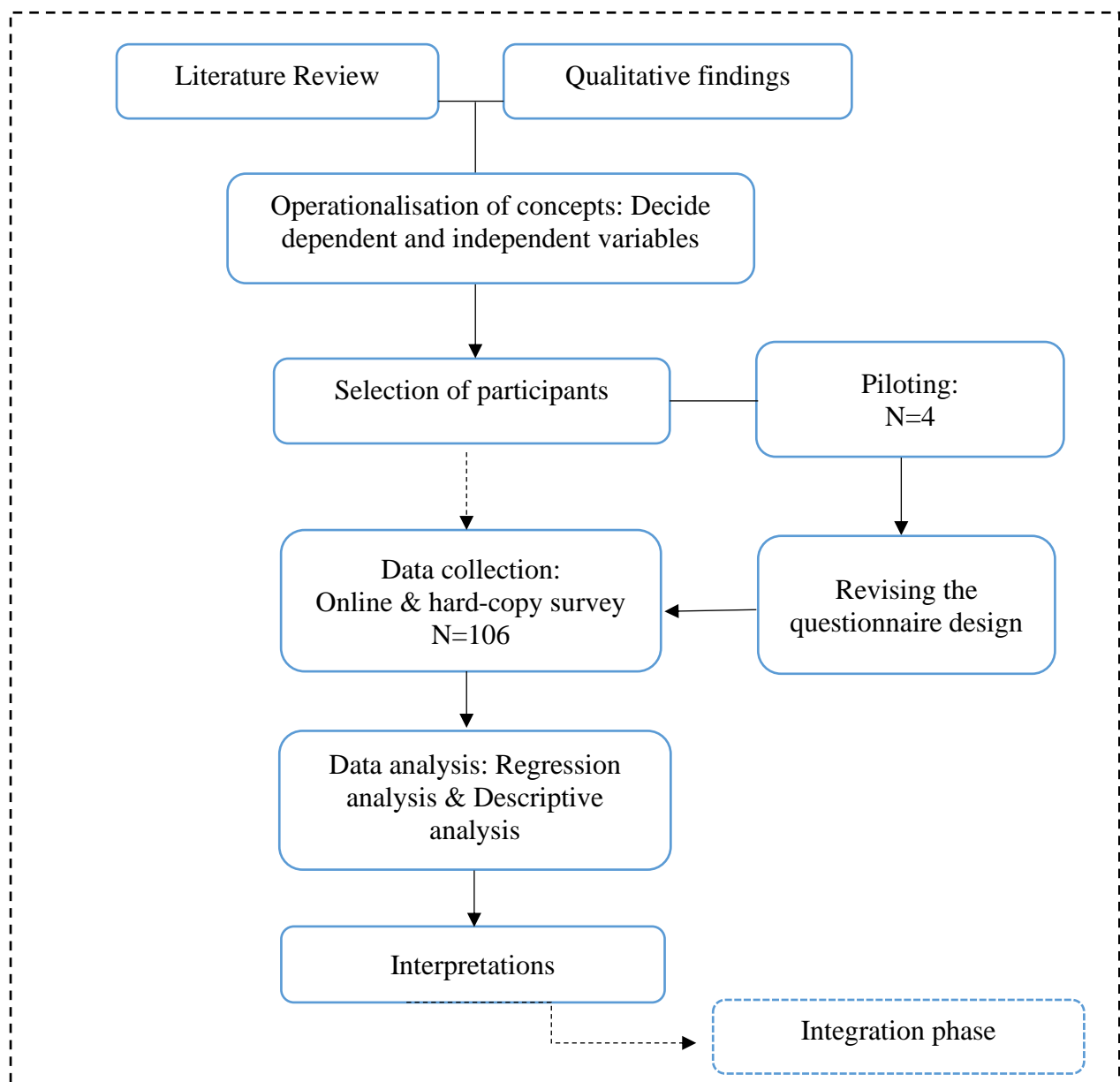
### 3.8. Survey instrument

Questionnaires are a useful and time-efficient tool for collecting quantitative data using a number of sources. A questionnaire (or a survey) can cater for larger sample sizes and produce generalisable results (Harris and Brown, 2010). Questionnaires often encompass numerical and statistical data by testing hypothesis in a deductive reasoning (Watson, 2015) for the means of theory testing. Opponents of quantitative research argue that solely statistical methods cannot explain the social world and cannot be independent from the human factor (Bell, Bryman and Harley, 2019).

In a mixed methods exploratory sequential research, the survey element has a more explanatory character (Plano Clark et al., 2015) that complements the study. The quantitative part of the

study is conducted second, after the exploratory qualitative study, as depicted in Figure 3.9. In this phase, the researcher designed the questionnaire based on the thematic map that was generated by the qualitative phase. The survey was then distributed following similar (but perhaps more intensive) sampling strategy like the one used in qualitative phase. The goal was to examine the barriers and opportunities of innovation adoption and which aspects of innovation are considered valuable for law firms' competitiveness. This final part of the study aimed to create an evidence-based framework that could guide legal firms on innovation adoption and operational enhancement (as the study's RQ3) and by providing more generalisable results (Creswell and Plano Clark, 2011).

*Figure 3. 9: Research design in quantitative research*



## *Survey design*

According to scholars (Easterby-Smith, Thorpe and Jackson, 2015; Bell, Bryman and Harley, 2019) there is a variety of survey and questions types in quantitative research. For instance, these are the self-completion postal or web-based questionnaires and the structure interview-based surveys. The author of this Thesis gathered the quantitative data by distributing a self-completion online survey. Self-completion web-based questionnaires in contrast to interview based surveys can be an asset to quantitative research as it can minimise bias and the respondents may feel more confident answering the questions in their own time and space (Brace, 2018). Additionally, comparing it to the postal questionnaires, running an online survey via a Software, allows the researcher to monitor the number of people attempting to fill in the questionnaire and improve one's distribution practices. Also, it can be time-efficient, as the researcher can distribute a larger amount simultaneously to the sample population in comparison to interview-based questionnaires where a specific time suiting the participants should be allocated to conduct them.

Hence, the researcher followed an online based survey, designed and distributed it via Qualtrics Software, which is the University of Huddersfield's most popular online survey service provider. That helped her to achieve consistency in participants' answers as it was designed to 'force' people to answer all the questions to record their responses, contrary to postal questionnaires (Easterby-Smith, Thorpe and Jackson, 2015). Nonetheless, Vicente and Reis (2010) argued that web-based survey can lead to lower response rate, as it cannot cover the less technology literate population. All in all, the collection phase lasted three months, from November 2018 until the end of January in 2019. The researcher acknowledged the difficulties with survey collecting responses and the time constrains in the data collection process, hence after a period of no-response collection, she de-activated the survey link.

In terms of the question types, the hypotheses were formed in a statement format using a horizontal 5-point Likert scale. Closed questions give the advantage to the researcher to easily process the answers using a standardised numerical format (i.e. ordinal format). Additionally, the researcher designed the questions carefully avoiding biased-prone answers (Easterby-Smith, Thorpe and Jackson, 2015). The response format of the 5-point Likert scale ranged from strongly agree to strongly disagree with a neutral (neither agree/nor disagree) option. Likert scales are a useful tool as they can guide participants that may misunderstood the statement to choose a response from the scale available (Bell, Bryman and Harley, 2019).

## ***Survey content***

The survey, in general was designed to minimise errors that may sometimes occur in the data collection phase. A brief introduction on the research topic in the beginning of the survey aimed to clarify firstly the goal of the study and also, specify the meaning of the adopted term ‘innovation’ to the participants. The survey included four questions on the respondent’s background. Similar to the qualitative phase, the respondents had to fill in questions about their professional role and expertise, the years of their working experience, the size of their firm and the country of their employment. The years of their working experience were important in terms of how generations approach innovation while their role provides information about them being in a decision-making position to influence the entrance of innovation within their law firm or about being legal staff with less responsibilities that may yet handle smaller hand-on innovation tasks. Finally, the size of the law firm was required to identify the level of the company in relation to competition and its ability to invest on innovation and the country of employment for geographical reasons (i.e. to test whether different geographies bring different problems and opportunities perhaps).

These questions were essential before proceeding with the main part of the survey, to ensure that the respondents met the criteria and fit the target sample; thus, these questions were designed to reduce sampling misrepresentation and provide a basis for important statistical analyses.

The main structure of the questionnaire was organised in three sections to cover the key themes identified from the qualitative phase and help in answering the study’s research questions with a primary focus on RQ3. More specifically, the first section outlines nine statements based on ‘*the human factor and the process innovation*’ theme. Through the nine statements, the researcher aimed to gather information about the importance that the management and leadership have on employees and their impact on innovation adoption. The second section refers to ‘*the technological innovation*’. Technological advancements are entering fast the professional service sector and the firms that adopted them have a competitive edge over those that have not yet invested in them. Through these nine statements, the researcher explored the views of legal experts on the technology penetration and on the current practices being adopted by legal firms on technology management systems and operations management practices. The third section focuses on the ‘*innovation via knowledge transfer*’ theme, which is essential in order to identify activities that can lead to innovation. The seven questions of this particular



sub-section meant to identify the role that education plays in the development of the law graduates' skills and the importance of 'open' innovation (i.e. social capital) to innovation enhancement.

As aforementioned in section 2.3.2., following the adopted theoretical framework of the Thesis, human capital management, technology transfer and knowledge transfer and exchange are the activities that will enhance innovation and productivity in service firms. In relation to the key themes identified from the qualitative analysis (see Figure 4.2) the survey questions were formed to explore the existing level of innovation and identify the factors behind a lack of innovation in legal services.

At the end of the questionnaire the respondents were given the opportunity to share any further comments on innovation adoption that they might had reflecting or affecting legal firm innovation adoption. This is standard practice in survey building. These comments could have added a qualitative dimension to the survey analysis but unfortunately only five respondents added usable responses; thus, these comments are not part of the analysis presented in Chapter 5. Finally, the researcher provided her academic email address in case of any questions and had a box asking respondents, willing to participate voluntarily in a future study, to provide their e-mail. The final survey guide is included in the Appendices (see Appendix B).

## ***Variables***

The aim of the survey was to gather information on the lack of innovation (dependent variable) within legal firms, while the factors that suggest the reasons/causes about this are the independent variables and have a more explanatory character. The ordinal regression and cross-tabulations among these correlations provide answers to the study's research inquiries. Hence, according to Table 3.2 from Aday and Cornelius (2006), the survey design of this study is analytical.

*Table 3. 2: Survey type*

<b>Descriptive</b>	<b>Analytical</b>
Describes	Explains
Is more exploratory	Is more explanatory
Provides characteristics of group	Analyses why group has characteristics
Focuses on what?	Focuses on why?

*(adopted from: Aday and Cornelius, 2006, p.36)*

### 3.8.1. Piloting

Pilot testing is an essential step to minimise design and implementation errors in research. Similarly, to the qualitative phase, a pilot survey instrument was shared and discussed with three legal academics from Huddersfield's University Law School and a legal practitioner with extensive experience in the legal sector. This resulted in re-designing parts of the questionnaire and re-phrasing some questions for more clarity; academic jargon was minimised and the language was more accessible and meaningful for the legal professionals taking part in the data collection. The time that participants had to allocate to complete the questionnaire was also tested. This process allowed the elimination of some questions and the minimisation of the time needed for filling in completely the survey. Similarly, as in qualitative phase the exploration of whether legal professionals utilise Lean philosophy in the legal service delivery was considered using explanatory statements (i.e. too much paperwork, too bespoke to me automated, ways to reduce time, cost and paperwork in legal services) throughout the survey.

### 3.8.2. Sampling

The quantitative data collection intended to gather information that would help answering questions arising from the qualitative findings that were generated by the thematic analysis. The survey distribution followed the same practice as in the qualitative phase. Snowball sampling was employed to increase the response rate. Snowball sampling can decrease the chances to sample error contrary to the non-probability one, as the researcher distributed the questionnaire to an initial target group complying with the data collection criteria. However, the sample was restricted to legal professionals working in the legal sector in their current role, as questions were precise on the law firms and their practices on innovation.

More specifically, the researcher created a contact list including a selection of the interviewees and legal experts identified in the qualitative phase but also used social media such as LinkedIn. She emailed the survey link in three phases to the target group. Firstly, an email or social media direct message was sent to the possible respondents to invite them to participate in the study by completing the survey. Secondly, a gentle reminder was sent to prompt them to follow the survey link attached and complete the questionnaire and lastly, a final notification was sent regarding the importance of participating in the study. Additionally, the researcher posted the survey link in the social media publicly and also prompted legal experts to forward/ share it in their LinkedIn and Twitter profiles. That significantly increased the survey response rate. Finally, the survey was handed out in a 'Legal Hackathon' workshop that the researcher with

her supervisory team organised. On the whole, 214 people attempted to fill in the questionnaire following the survey link. However, the final sample consists of 106 valid responses, where 18 responses were collected through the ‘Legal Hackathon’ workshop. The profile of the survey respondents is presented in the respective Table in the survey analysis Chapter 5.

### 3.8.3. Validity in quantitative research

Achieving rigorousness in quantitative research is as important as in qualitative research, however it can be measured in a more systematic and straightforward way through statistical tests. Scholars point out various measurement criteria for that. For instance, *face, concurrent, predictive and convergent validity* are some of them (Bell, Bryman and Harley, 2019). Similarly, others summarise the key steps to validity, as *content validity, predictive and construct validity* (Creswell and Creswell, 2017).

*Reliability* is the second key dimension that researchers have to address in quantitative research, as the chosen measure has to also be reliable (Bell, Bryman and Harley, 2019). Cronbach’s alpha ( $\alpha$ ) is the test associated with *internal reliability* and the most important criterion used to demonstrate acceptable scores (Creswell and Creswell, 2017). More specifically, Cronbach’s alpha ( $\alpha$ ) value ranges between 0 and 1, with values above .6, .7 and .9 being an indication of an acceptable reliability test (Taber, 2018). The study’s Cronbach’s alpha ( $\alpha$ ) measurements are depicted in Chapter 5.

### 3.8.4. Regression analysis

Quantitative analysis was performed using SPSS Software for regression analysis techniques. For the means of statistical analysis, the researcher coded the variables in form of numbers. Numbers in this Thesis is the representation of real world concepts and phenomena under investigation (Lee and Peters, 2016).

Ordinal regression analysis was employed to test the relation between the dependent variable and selected covariates. Furthermore, the model fitting statistics, the accuracy of the classification results, and the validity of the model assumption, including the test of parallel lines significance, were fundamentally assessed for selecting the best groups of variables in the model (Chen and John Jr., 2004). The process of the selection of the set of variables and the regression model values are analysed in Chapter 5. The analysis also contains descriptive statistics and cross-tabulations between variables of significance.

### 3.9. Conclusions

The almost *tabula rasa* state of the empirically based knowledge on legal service operations management, gave the present study its exploratory character. By combining the flexibility of qualitative design with the rigour of quantitative approaches, the adopted order allows for an effective exploration of an emerging topic, while it subsequently secures standardisation and measurement of the obtained information.

The researcher argues that by choosing one method alone would have limited the research's value (Feilzer, 2010). This is because the legal sector is a complex one; thus, 'hard data' cannot solely provide an in-depth explanation of its operational challenges. In addition, the lawyers' anecdotal stories and industry insights, recorded by the qualitative part of the work, significantly contribute to fulfil the research aim of the present Thesis.

## Chapter 4. Qualitative Phase

### 4.1. Introduction

The raw data of the semi-structured interviews were systematically analysed through the means of a data-driven thematic analysis. The approach employed was inspired by the generic guidelines of Braun and Clarke's (2006) six-step thematic analysis framework involving: *i) getting familiar with the data through transcription; ii) generating initial codes; iii) searching for themes; iv) reviewing themes; v) defining and naming themes; and vi) producing the final written output.* Thematic analysis is a powerful analytical tool with which the researchers can “*identify, organise, analyse and report the finding patterns*” in the data corpus (Braun and Clarke, 2006, p.4). Throughout the analysis, the researchers ensured that the extraction and interpretation of findings were based on the raw data rather than on their own impressions to reduce bias and increase the representativeness and rigour of the study (Nikitas, Avineri and Parkhurst, 2019; Nikitas, Wang, and Knamiller, 2019). The project's qualitative results were organised, managed and analysed using NVivo11.

The researcher for the means of the qualitative analysis, followed Braun and Clarke's (2016) methodology guide and adopted their six-step phase model as presented in sub-section 3.7.3. This systematic approach was employed to ensure the validity and reliability of the extracted themes that are summarised and analysed in the next section. By following this guide, the researcher was guided by abductive reasoning, going back and forth to the collected data set, finding relevant patterns in order to select the most represented codes that answer the research questions. Thus, the analysis is not solely theory-driven, as it is the norm of a deductive approach rather it is *data-driven*. That means that the researcher focuses on providing an in-depth explanation of the themes mostly linked to the research aim and not an overall representation of the findings *per se*.

All in all, the synthesis of codes is *extracted to form the themes* analysed and illustrated in the next section. It is important to note that a theme is a notion that refers to a collection of respondents' quotes for a specific topic that are of significant value to the research and not on quantifiable measures (Braun et al., 2019).

As aforementioned, the researcher transcribed 53 interview audios and collated them using the NVivo11 Software. Although, transcription of the data by the researcher herself, it is considered a time-consuming and lengthy act, at the same time it can provide early insightful interpretations and acquaintance of the data overall (Bird, 2005). This recursive process of

reading the transcripts throughout the thematic analysis, can result into connecting the codes with more than one theme. For this reason, a preliminary analysis was conducted, to combine, separate and discard where necessary, as a means of constructing the final thematic map (see Figure 4.2).

## 4.2. Thematic analysis process

This section presents a synthesis of the raw data extracted from the 53 semi-structured interviews with legal professionals in seven countries around the world. The researcher ensured the quality of the data collected by asking specific questions based on the interview guide designed to explore the challenges and opportunities for innovation adoption as those portrayed by the legal professionals (see interview guide Appendix A). Although, the researcher led the discussion following the specifics of the interview guide, she asked additional questions when necessary as a means of clarifying the interviewees' positions and allowing them to reach more in-depth insights. This helped to balance the flow of the conversation and ensure its quality.

The interview transcripts were coded in NVivo11 (see Appendix 9.1.3.) following the patterns of the interviewees' responses. The coding protocol as depicted in Appendix 9.1.3. presents the frequencies (i.e. references) of each code as evident in the interviewees' transcripts (i.e. files) that led to the sub-theme formation.

Given the explicit focus of the study on the challenges and opportunities for innovation adoption in the legal services context, and the structure of the interview guide, the data-driven thematic analysis process was conducted to identify themes within these two broad categories, in line with Brooks, Gherhes and Vorley (2019). The interview data were analysed following an abductive reasoning going back and forth within these two categories, categorising, coding, comparing with existing themes or forming a holistic new theme (Boeije, 2002).

The preliminary analysis mind-map (Figure 4.1) represents the candidate themes and sub-themes arisen from the thematic analysis. In particular, seven key themes and several sub-themes were identified and clustered providing a sense of the research findings breadth and depth. It is evident from this stage that the themes spanned among different areas into the legal profession, however most of them are strongly interrelated with each other.

After the review of the seven candidate themes and the number of codes extracted from the 53 transcripts, the researcher went forward with six themes due to the lack of enough supporting

material for all seven themes to be independent. The final thematic map is demonstrated in Figure 4.2 below.

Overall, the majority of the participants suggested that there are many problems which are mostly arising from the legal profession's heterogeneous and complicated nature and that there is a need for improvement. Furthermore, it is evident from the conversations with the legal professionals that although *technology* is playing an important role to the legal profession, its entrance to the profession is slow for a number of reasons that are presented below.

*Management* is argued to be a key factor to most of the issues identified from the interviews that mainly leads to a lack of innovation and creativeness within the legal firms. All in all, *change* has to be implemented in the still *traditional* way of running legal firms that it is mostly focused on solving problems using 'recipes' from the past rather than employing state-of-the-art solutions. This *resistance to change* is often routed in the *culture* in the old generation lawyers while *technology* and *competition* seem to be the driving forces emphasising the need for transformation.

However, another element of this Thesis, besides the problems and opportunities for innovation adoption and competitive growth identification, is to provide and recommend solutions from an operational management perspective for efficient and effective legal processes. The qualitative findings from the data collection guided the researcher's thinking into another aspect of the legal industry that plays an important role in creating legal professionals, the *education*. More specifically, to solve an existing culture issue, someone has to begin identifying the cause of the problem first. Education is strongly associated with the innovative thinking and acting into the legal sector. Willingness for technology adoption and the effective management of employees can result into efficient legal processes and thus, to a competitive advantage into the legal market workplace. Nonetheless, this is further analysed into the sections below.

After a thorough mapping process, the researcher decided that the qualitative study is underpinned by six key core themes: *human factor and culture*, *client and market*, *technology*, *organisational transitions*, *legal processes*, and *education*. These themes reflect legal firms' capacity to innovate and their potential to improve their service provision and each of them has diverse and distinctive dimensions that are identified throughout the text as sub-themes. The final thematic map is demonstrated in Figure 4.2 below. Overall, all of the study's participants provided unique and substantial information to the research questions being investigated.

Figure 4. 1: Preliminary thematic analysis map

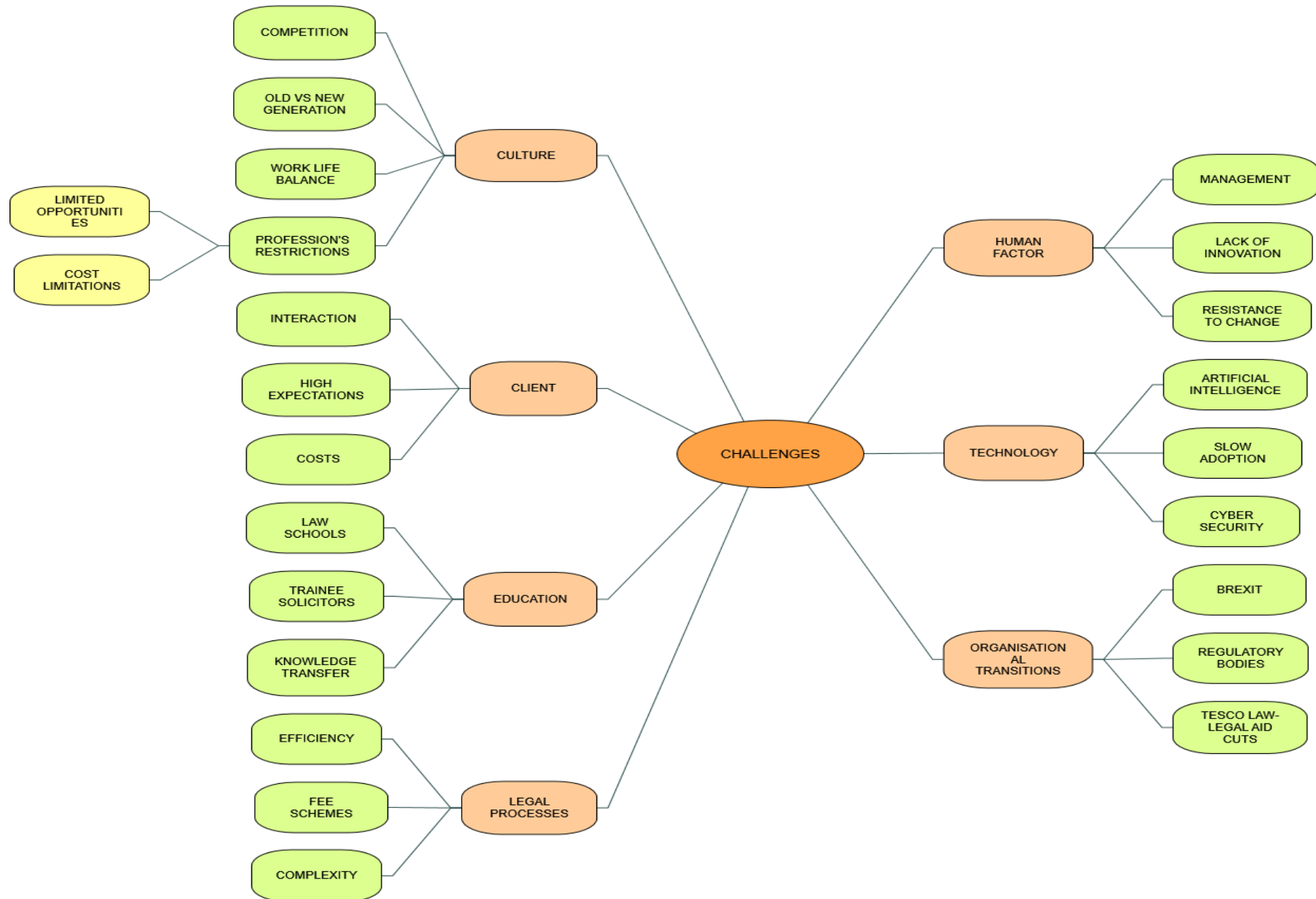
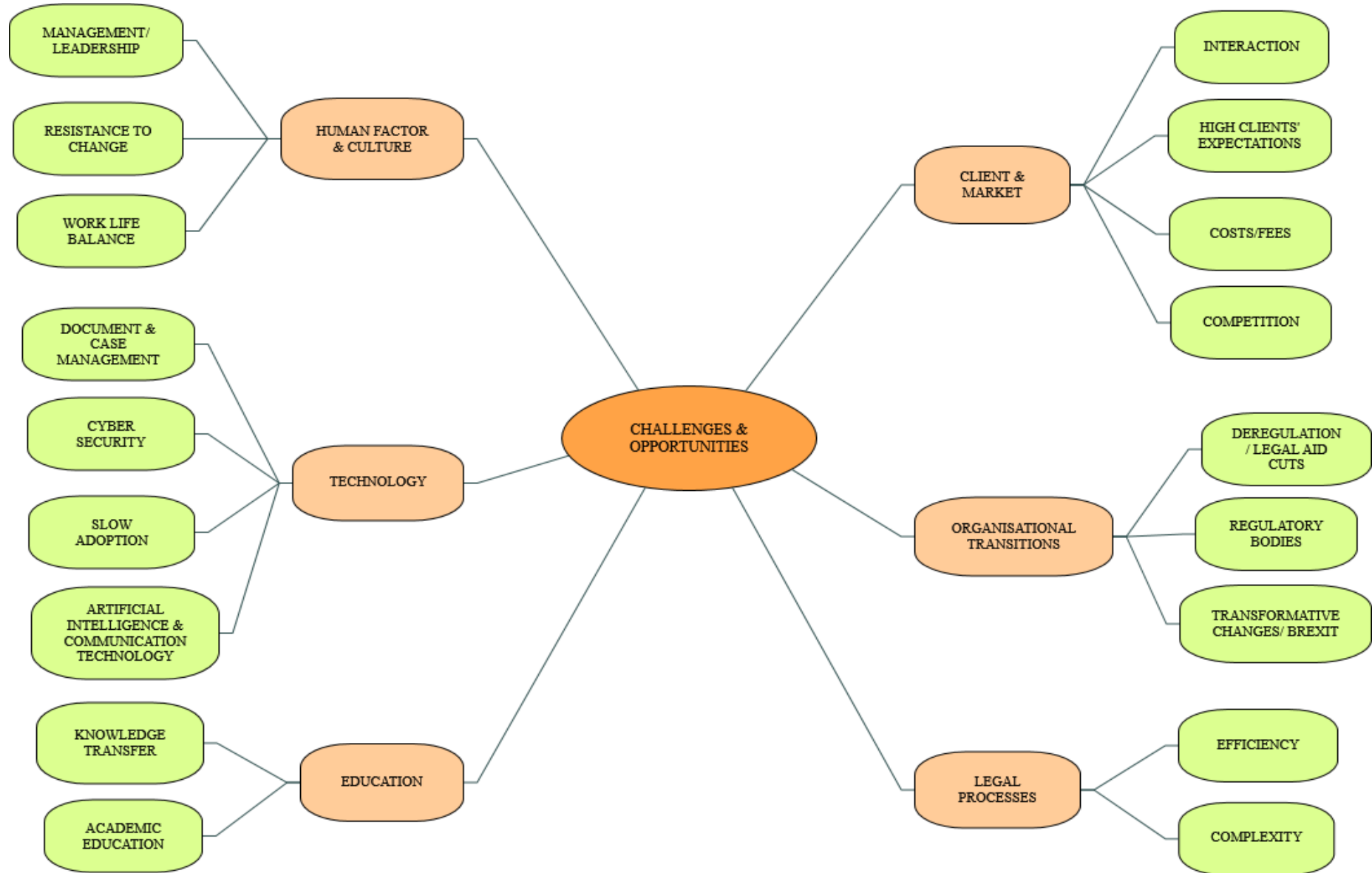




Figure 4. 2: Thematic analysis map



### 4.3. Theme One: Human factor and Culture

The first theme is the human factor and culture and discusses working environment and professional convention issues. Three distinctive sub-themes emerged all of them unique enough to be distinguished as separate considerations but relative enough to be part of a single umbrella theme reflecting and affecting the human and cultural element. These were namely: *the culture of the legal sector, the management and leadership of the human factor, work-life balance and resistance to change.*

#### 4.3.1. Culture of the legal sector

The legal profession has a distinctive and archetypal *culture* that someone can find it difficult to easily integrate within. Most interviewees supported that if the legal profession needs transformation, this needs to start with a cultural and attitudinal change first. *“The profession is running historical; the recruitment criteria are often similar as those were in the past rather than adapted to the today’s requirements, because they (senior managers) want to recruit and work with people like them (A.D. -53)”*.

The legal profession is highly culture dependent and changes are very difficult to occur. People often recognise that graduate students from high class universities have often more opportunities to secure a training contract with a law firm when compared with those graduating from less esteemed universities. In other words, interviewees complained about *profession’s restrictions* depending on the lawyer’s academic studies background. *“An Oxford or Cambridge graduate could more easily find a scholarship in a legal firm in comparison to conventional college students”* (A.D. -53). The legal profession’s culture is still narrow minded even today and status biased. People from various backgrounds could miss chances in the legal industry even if their skills and qualifications are excellent. *“It is very hard for somebody who has not been to Oxford or Cambridge universities to get an apprenticeship or a training contract”* (B.R. -11), which is often the key criterion for law graduates to be qualified as a solicitor/ barrister and start their career.

Another point was the conservative culture that law firms operate in comparison to other professions like the academic one. Although most law firms embrace the new technological advancements and keep up with the new trends, the leaders’ traditional and outdated thinking keep legal employees in the past.

For instance, there is a strict dress code that employees have to follow and lack of flexibility in the working routine that do not allow lawyers develop their creative and innovative thinking. *“I still believe that all law firms run in an old-fashioned way that some of the lawyers and the bankers still see in the profession. It still looks, from a culture point of view, a little bit of disconnected between what we have achieved to increase efficiency and what people (managerial bodies) require from you every day: to be shaved and wear your tie and maybe often waste one or two hours of your time preparing yourself and commuting. That does not make sense to me. You (leaders) want employees to send emails and information as quickly as possible and on the other hand you still impose people to waste their time on silly things. I believe there is no reason for everyone to come with a tie suit, even come in the office every single day if they leave very far away. So that old-fashioned style of professionalism is just a little bit of annoying given the general fast developing and technologically informed environment that we all are living and grow up right now (P.D. -33)”*.

#### 4.3.2. Management and leadership

The majority of the participants highlighted that the internal environment of the law firm affects significantly the way employees are managed, trained and progress in their careers. For instance, the warmer and supported employees felt in their working environment, the better their performance at reaching the firm’s goals seems to be.

Team-work and communication among co-workers are also principles of effective management and leadership in the firm. The participating lawyers respond as satisfied with their working environment, also expressed that they were effectively communicating with their upper managers and solving their arising matters within the firm. Also, by feeling the sense of belonging in a team, they were more willing to act and work hard to achieve the goal of their community.

The poor and inadequate management of employees can often be a critical problem. The people in charge for managing and leading employees is a key parameter in any process or innovation adoption initiative. For instance, being managed solely by lawyers, was not seen as a precondition for success but as a possible barrier. Respondent A.P. -19 believes that *“lawyers are not qualified enough for being responsible for the human resource management, but only for legal matters”*. This can result to a lack of leadership within the firm.

Legal professionals often debate about the role of management within a law firm. Since the ABS regulations entrance, non-lawyers such as accountants or/and business managers are

allowed to create their own legal firm and be shareholders together with lawyers. This has resulted to both advantages and disadvantages in terms of the employees' management. Supporters of the hybrid management approach argued that senior managers from different backgrounds can have a better understanding of the employees' and projects' needs. For instance, being managed solely by lawyers, respondent A.P. -19 believes that *"lawyers are not qualified enough for the human resource management, but only for legal matters"*. Additionally, in most SMEs there is not a separate Human Resources (HR) department and therefore *"partners are the ones responsible to ensure that solicitors and the administration staff are being kept up to date with the changes in their specific law area"* (AD.J. -30). However, most of the times, partners cannot devote time and are not qualified experts of monitoring the training of each employee.

Nonetheless, opponents of the hybrid management style believe that non-lawyers owners cannot fully understand them, resulting in frustration and misinterpretations amongst them. *"I have worked with people who are not lawyers and yet they are running law firms. It is absolutely atrocious"* (C.M. -32). Respondent A.A. -25, had a similar but more modest point to make *"I know some firms in town that are managed quite hands-on by non-legally qualified managers and I think that causes a little bit of friction sometimes. I am not sure if that works very well"*.

All in all, a common practice in large law firms that have the resources to employ and train staff for the employees' management and training, they recruit special teams of professional support lawyers<sup>3</sup> or legal project managers that are responsible for building the knowledge and training within the firm. *"In our firm we have professional support lawyers and their job is rather than fee earning, to do the knowledge development for the teams in their practice area"* (L.L. -13). *"We train all our lawyers internally on legal project management to make sure they can manage the matters as effectively as possible"* (PM.C. -42).

### ***Team-work and communication***

As aforementioned, managers need to create an environment for team-work and communication among themselves as senior managers but also among the employees of the

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<sup>3</sup> The term 'professional support lawyers' refers to the lawyers being recruited for the means of supporting the knowledge and training of the lawyers within a law firm.

firm. All of the participating legal professionals agreed to the fact that communication and group-work play an important role for their motivation and creativity.

In medium to large law firms a client's case<sup>4</sup> can be shared and solved by more than one lawyer within the firm. That means, the exchange of information among the members handling the case is essential. However, lawyers are used to work as individuals, protecting their client's information and feeling that in this way they provide the best service to their clients. Participant I.O. -17 having experience working in a large law firm argued that *"the more people dealing with a case, the more time it is needed to complete it. As a result, the case is not completed quickly rather it is a slow process with too many people involved. In contrast to a small firm, that I am working now, I am dealing with the case from the beginning to the end; only me. I think that it is better for the client as well, as it is a personalised service, where the client speaks with only one solicitor not with one hundred of them. The solicitor knows the client's whole case from the beginning to the end."*

Despite this 'attitude' that sees the downsides of 'sharing and communicating', there are still few employees that value the principles of team-work, as they can minimise their workload since a problem shared, can be easier solved. However, these individuals still recognise issues regarding the development of effective channels of communication and workload sharing that can promote innovation and efficiency enhancement.

A corporate lawyer working in a large law firm argued that although employees are keen on communicating and collaborating, they cannot find the time or the ground to build this. Most of the times, they are working simultaneously with different group of lawyers around the world and there is not enough time to build professional relationships. *"You have issues on big transactions where you have to share with global teams your information, but it is not very effective, I think. It has to be more training on how to have a better communication amongst us"* (G.S. -37).

Moreover, participant I.E.G. -48 as an in-house lawyer to a private organisation stated that there is a management issue where the cases are not assigned accordingly to the appropriate team experts. *"There are two different teams to address a client's issue and you have this case assigned to a specific team. Then another matter arises that it is a speciality of another team."*

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<sup>4</sup> Case refers to a client's legal matter assigned to a lawyer from the law firm's senior manager/partner to be resolved.

*I think there is some room for improvement in work overlaps and work allocation; who will do what and to find who is the most expert so as to save time and money. I mean for instance, there is a litigation case and this case is assigned to the partner of a team that they do not have this particular knowledge to tackle it whereas I and my team have. How will they learn that they have this case that is a speciality of another team? As a result, they can save time researching on the topic and deal with another issue for which they are knowledgeable. Similarly, you get assigned another issue to be resolved and how will you know what each person's specialisation is, so as to share this information and to assign them a part of your work to save time from your workload?"*

R: *"Is someone responsible for facilitating this communication?"*

I.E.G. -48: *"No, it would have been really useful for someone to have a look at these issues, specialising in what, who is doing what, and getting in touch with people. I think there should be some rules in a handbook about internal communication, how to facilitate or how seriously you take into consideration these exchange of internal information".*

Communication issues are different for sole practitioners<sup>5</sup>. *"I am particularly working as a lone practitioner; I have no-one to seek knowledge from and if I talk to a lawyer about anything, they tend to be very selfish with their time and they are also very self-centred with sharing knowledge. They do not want me to know more than I know, they do not want me to be better than them, that is the sense and the feeling you get. "No, I have worked hard for this knowledge, I am not going to tell you, I am not going to share it with you". It is a very, very selfish industry"* (O.Y. -49).

### 4.3.3. Work-life balance

The recession of 2008, the entrance of new technological developments and the highly competitive market drive law firms on recruiting more fee earner employees to increase efficiency, profit and defy the value of the employee's personal life. Heavy workloads, strict deadlines and long working hours are common to most professional service firms. The legal profession is perhaps the strictest amongst them. Providing for a good work-life balance is a factor that the legal sector finds it difficult to achieve.

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<sup>5</sup> Sole practitioner is a lawyer who owns and runs one's law firm alone.

*“Managers at the end of the day are trying to cut down costs by recruiting more paralegals. That might affect efficiency in the future negatively, because you are not giving an overall training to your more junior lawyers, they are just being used like factory workers, like fee earners” (A.A. -25).*

According to many respondents, no matter the size of the law firm they were working, the legal profession is associated with a frustrating lack of personal life. As the competition increases, managers focus on maximising profits forgetting about their employees’ well-being. This is one main reason that pushes legal professionals to decide a career change, moving from legal firms to being in-house lawyers, becoming self-employed or entering academia. *“I think work-life balance is an issue that major firms have to face. For this reason, many people just quit from their legal firm and become academics, as they can be more flexible and manage their time better. Even though they have still to work hard in academia, they believe that they will have the opportunity to be autonomous and flexible by managing their everyday workload something that most legal firms do not offer” (I.EG. -48).*

Many interviewees acknowledged that they could not plan their daily schedule. Pre-scheduled appointments are not necessarily the norm nowadays. Lawyers need to have long and high billable hours in their timetable, in order to be recognised as productive employees. *“You have to cope with long working hours and prepared to be very flexible on your day-to-day programme. A client can call you at 6pm and you have to be available to work for him/her” (G.S. -37). “You need to be able and willing to dedicate part of your private life to the firm” (F.E. -7).*

Additionally, there are not pre-scheduled appointments in the legal sector. The law firms follow customer demand by recruiting more lawyers where there is a need for big transactions or paralegals to help with the high volume of document review and management. The structures are similar in a global context, something being supported from lawyers interviewed for the means of this research in Germany and in the USA.

*“You never know, when you go in the office in the morning if you will end up leaving at 6pm or 11pm at night” (G.R. -38) and “you need to be able and willing to dedicate part of your private life to the firm” (F.E. -7). “Long hours, like senselessly long hours, is ‘normal’. I have worked at firms in the past where I have started at 5am and finished at 6-7pm five days a week” (C.M. -32). “When you see a phone call you experience anxiety. When I was working in a big firm I honestly, I did not know what it was, I thought I was having a heart attack but I started*

*experiencing anxiety and panic attacks. I never had one in my life before, I am a pretty laid back easy going person and I do not like to stress myself out because life is too short you know, there is nothing worth keeping you up at nights. But I use to have sleepless nights, I use to wake up routinely, going into the office at 5am in the morning was not that difficult because I could not sleep anyway but some mornings I used to go in and I used to see the amount of work that I had to do. Turn your computer on, see the fifty emails that had come in overnight and I honestly had shortness of breath, quickening of the heartbeat and just felt like absolute crap. I went to the doctors and they said that I am are experiencing anxiety attacks” (C.M. -32).*

Taking the above into consideration, there is the belief that recruiting more paralegals or trainee solicitors can be an efficient way of minimising the senior employees’/ partners’ workload. Nevertheless, interviewees argue that this might not be so helpful from an operations management perspective at the end. *“I am still in the office, yes we have a heavy workload. You cannot manage it and at the end you do not have a personal life. I need more people to help me, maybe paralegals. But paralegals do sometimes errors, and if I have to supervise a paralegal, I tend to do double the work at the end” (I.O. -17).*

*“Although a client has to instruct a solicitor, at the end if there are too many clients the firm has to recruit more employees to deal with all the cases. It is a paradox. If I have too many cases I cannot do these alone, so I have to give some of them to a paralegal and then the miscommunication with the client begins. If you do not give these to paralegals, you cannot take more cases” (I.O. -17).*

From a different aspect, it is a fact that most of the times women are the ones mostly struggling to balance their family with their working life and often there is a lack of support from their senior managers. Respondent A.E. -31 argued *“the responsible managers of the law firms should allow women to be more flexible”* by for example, having the option to work from home some days during the week or being part-time employees. Adding to this, respondent A.E.-31 continued by stating that *“female part-time employees often have less chances of promotion in contrast to those being full-time.”* The diverse management among male and female employees can increase the gender pay gap in the workplace and minimise the skills of employees.

Last but not least, more and more lawyers move into the in-house departments to support legal matters of private organisations. In-house lawyers are working along with a legal team collaborating with the IT, financial and accounting department of the company. The biggest and main difference is that they only have one client and it is their employer. They do not have



the pressure of continuously attracting new clients and they do not work under billable hour conditions. *“You have to do whatever it takes to complete even a case assigned to you at the last minute, whereas as in-house lawyer you do not get that very frequently at all. It does happen occasionally, but the work-life balance is much better!”* (I.M. -46); thus, they choose to work as in-house lawyers rather than in a big law firm.

Work-life balance is an ongoing issue that legal managers need to work on providing more innovative solutions like flexible working hours, additional appraisal schemes or working from home to help their employees manage their time effectively. Training sessions on stress and routine management could also be a suitable innovative practice.

#### 4.3.4. Resistance to change

The sub-theme resistance to change refers to the legal professionals’ unwillingness to adopt change. This is a diverse phenomenon that is central to this work directly affecting innovation adoption. The legal profession has been for years attached to a culture that in some cases is severely outdated. Most interviewees supported that if there is to be change, the profession has to go through a cultural transformation. *“The profession is running historical; the recruitment criteria are often similar as those were in the past rather than adapted to today’s requirements, because they (senior managers) want to recruit and work with people like them”* (A.D. -53).

Most respondents regardless of their position or the size of their firm, argued that change is slow and often linked negatively to both the management structures and to the employees’ culture. *“Change is quite slow. The law firms might not have the capacity to focus on the change that needs to happen as much as they would like to”* (PM.C. -42).

Lawyers typically are reluctant to adhere to new processes and technological tools. This is particularly relevant for older generation professionals (10 years or more years of working experience) as they already learnt to follow specific procedures, systems and guidelines. *“There is a resistance of adopting new things”* (P.MO.-18) and *“the industry is a bit traditional, maybe not in line with the development of technology”* (I.M. -46).

Another respondent with long experience at leadership roles argued that although most law firms are embracing innovative technological tools to keep up with new trends, their outdated thinking keeps legal employees in the past. *“I still believe that all law firms run in an old-fashioned style that fits the way lawyers and bankers still see the profession. You want employees to send emails and information as quickly as possible but you still impose on people*

*to waste their time on silly things. I believe there is no reason for everyone to come with a suit and a tie or even come in the office every single day. That old-fashioned style of professionalism is annoying, given the generally fast developing and technologically informed environment that we all are living in right now” (P.D. -33).*

Employing legal project managers is the latest trend that many large law firms start to integrate into their culture to tackle such issues. A chief information technology officer in a large law firm while discussing about one’s efforts to persuade lawyers around the world to adopt new technological tools for improving their document management and minimise their workload pointed out the reasons why this is difficult. *“Lawyers are individualistic, they are resistant to change, they are very good at arguing against standardisation, they are good at arguing against consistency; lawyers believe that they are unique, and they deserve unique solutions” (T.D. -40).*

*“Lawyers do not easily communicate; the younger generations understand more the need of using technology and working as a team. There are partners or associates that they are very reluctant on using us and they think that they know how to handle things properly” (PM.N. -24).* However, a few project managers comprehended a timid change in some partners’ behaviour within the law firms they are working by acknowledging and having as requirement in their contract a legal project manager’s input.

Ultimately, resistance to change from law professionals is frequent and rooted in the legal industry’s traditional and long-standing conventions. However, new business structures of law firms and pressures from a highly competitive market should remind them the need for continuous development and eventually transformation.

A legal engineer with a lawyer background, participating in this present study, was optimistic that they can influence their lawyer colleagues as they speak the same language. Specifically, legal project manager PM.N. -24 employed by a British large law firm claimed that *“it is the main challenge of our work and the fact that I am a lawyer assists because the lawyers appreciate the fact that I understand what they are doing. We are talking about an industry with very competent and clever people, which is very difficult to convince them but at the same time they are not willing to change, they are very reluctant to change the way they operate, the way they work. So it is very difficult to convince them. You have to be very careful on how you are providing the instructions, to show them on daily basis that any tool that they are using*

*initially maybe is difficult but as soon as they get used to using it, this will assist them directly in their day-to-day life and in their day-to-day workload” (PM.N. -24).*

Taking the above into consideration, it can be said that innovation and the effective management of human resources by *“having a tree of employees looking after the legal personnel”* (A.C. -6) are recognised as essential factors for a firm’s economic prosperity.

Overall, law firms depend on various suppliers and vendors of online platforms for providing them with legal advices, bespoke templates and technology solutions. However, changing to better, more expensive and sometimes ‘more difficult to learn’ technologies is again proving the professional body’s resistance to change. This is summarised very vividly in the quote: *“Lawyers are not paying too much for servers and premises, they want to change in theory but not paying much for Software that they will end up not using much”* (J.F. -44).

#### 4.4. Theme Two: Market and Client

Legal firms, despite their unique characteristics, are still service-provision businesses and need to operate in a very competitive and dynamic market; firms that do not appreciate the need to fully address their client requirements and expectations are not set for success. Four distinctive sub-themes are presented in section 4.4. all parts of a bigger theme that negotiates the market and client dimension of the legal business sector. These were namely: competition, high clients’ expectations, interaction between law professionals and clients, and cost/fees considerations.

##### 4.4.1. Competition

Competition was referred from all the interviewees as the major reason for staff redundancies and change of direction in their careers. Specifically, participant A.A. -25 due to the recession and the risk of being fired, took the opportunity to join the academic sector. *“I was sort of forced out by the fact that there was the recession and commercial property was drying up. We were going to lose people, so I had the opportunity of joining a university, before I get redundant”* (A.A. -25).

Moreover, due to the competitive environment and the need to satisfy the customer, lawyers have to work relentlessly to meet their deadlines and achieve a good deal for their firm. *“You can be instructed cases at the last minute, and clients can say that they need it by tomorrow. Then you know that is a challenge and you cannot say no, as it is a competitive market and I*

*need to keep my billable hours up. I have to please my employers, my firm, my partners and then the clients” (I.M. -46).*

Another consequence of competition in the legal market, is that law firms are hesitant to invest in human resources by recruiting more experienced legal personnel as they used to do in the past. Respondent I.M. -41 supported that law firms are in a period of reducing rather than increasing their personnel for the means of decreasing their costs. *“Some firms have made redundancies and cost cutting for trying to optimise their operations”*. As a result, study’s participant O.Y. -49 could not find a suitable position in the regional area that she was living as a lawyer consultant, and she decided to be self-employed. *“I could not find a job in a law firm here, as there are only about six law firms and they are very traditional, very old fashioned and they did not even know what a consultant was. So I started as freelancer senior lawyer where for twenty hours I got paid seventy pounds” (O.Y. -49).*

Sole practitioners are also the ones hit by the recession, the entrance of the ABS and the competition. Law practitioners operating in small towns find it hard to increase their profits under the current state of affairs that the legal market is operating. As a result, they turn their business in a two-type shop by selling both legal and other services. For instance, respondent A.G. -50 argued that *“sole practitioners cannot rely on the law practice alone, so they try to be innovative in some way by being simultaneously travel agents and booking holidays or operating as a mini market shop”*.

The role of the lawyer and the recruitment criteria were also re-formed under the new standards that competition was bringing ahead. Fixed term or part-time contracts were introduced as a response to competition where law firms were hiring lawyers on demand. Law firms try to loosen up their costs by recruiting people in fixed term contracts. *“It is a lot of fixed time work as people are not sure whether they can employ someone in the long term. And they have a lot of build-up work and they would take one lawyer for a year. A lot of the jobs advertised are fixed term contracts, twelve months. That is one of the ways that firms build in flexibility. They are not sure about how the volume of the work is going to continue. I do not know whether there are managers that are legally qualified, assessing things like these” (A.A. -25).*

Overall, this is a blow to the lawyers’ status quo and a marginalisation of the profession that provides evidence that competition can be brutal.

There is a limited number of potential clients and the big legal players in the industry are already established into the legal market, therefore there are limited opportunities for the new law firms to enter this competitive environment. *“The market is very segmented so I think what is happening here in the London city is that somehow different law firms make various decisions as to which market to go for, and so there are different segments that international firms that have decided to go for the bigger clients the bigger transactions and they do not deal with mid cap and then the other ones are still doing mid cap transactions. Lastly, there are the smaller firms which are doing rather small transactions”* (P.D. -33). Hence, this means that SMEs need to master on a specific aspect in the legal industry that large law firms are not keen on focusing on.

On a different front now, on the one hand, senior partners and managers have to take conscious decisions and invest in technology as IT is one area that will give them a leading edge, as there are pressures for greater efficiencies in an environment of change and market flux.

On the other hand, mergers of small firms with large and very large law firms, is also the only solution for sole practitioners or small firms that they have to fight for a position in the market. According to the names and the background of most law firms in the market, there are mergers from previously by a small number of shareholders owned firms. These partnerships are the ones that rule in the global legal landscape. *“Small firms either had to merge with a firm like ours (large law firm) that has a stronger position in the market, or they just ceased to exist”* (AD.J. -30). *“But I do think that solicitors law firms would be in the risk of merging, maybe with other types of professions”* (B.R. -11).

Taking the above into consideration, it seems that lawyers’ value has weakened, and in association with the high customer demand, law firms conduct their work faster and at a reduced cost something that in service operations can create quality issues (Ni et al., 2013). Communication technology can, in theory, support this need since lawyers cannot spend the same amount of time and resources communicating face-to-face with one client as was happening in the past. On the contrary, they have to cater for and attract new clients, devoting less time and perhaps compromising on quality.

#### 4.4.2. Clients high expectations

Another sub-theme refers to *clients' high expectations*. As clients are the driving force for profitability, lawyers must respond and satisfy their needs, which can be difficult as legal services according to Schuetz and Kolisch (2012) face resource capacity issues. Respondent PM.K. -26, working as a lawyer before and as a legal project management in a large law firm now, suggested that nowadays clients are more aware of the legal service processes and anticipate a better service. *"Clients have growing expectations which are beyond receiving a good legal service; they now want it in a way which works for them when in the past the legal transaction, would run on their behalf without being visible to them"* (PM.K. -26). Law firms seem to have responded to this crisis, by hiring more project managers to assist with their operation processes. *"We have noticed that the legal project manager department has grown, because clients want us"* (PM.N. -24).

Moreover, technology has also helped forming this very demanding client-oriented market. On the one hand, clients expect fast responses from their lawyers on their matters and on the other hand, faster processes result in more cases assigned to lawyers to complete. *"In terms of practice, clients are the biggest problem - they have unrealistic expectations. They expect to be able to email you at any time and you have to respond back as soon as possible"* (T.M. -10).

However, A.C. -6 supported that *"it is better to empower the clients to understand their situation and advise them accordingly to deal with their problem and not just represent them"*. This can also enhance the interaction in certain ways. For example, P.K. -1 pointed out that *"due to the fact that cases are managed and solved through online programmes, clients are not supposed to meet their lawyers"*, and therefore, they have to be knowledgeable of their legal matters, before they address them to a lawyer. That is true, but disruptive, as supported from the legal firm owner J.F. -44, *"most people that visit a lawyer already have researched on Google many of their questions beforehand. So, disruption is another issue, because IT is developing fast"*.

Law firms seem to respond to this crisis, by hiring more legal project managers to assist with the processes. *"We have noticed that the legal project manager department has grown, because clients want us"* (PM.N. -24).

Overall, *“there is almost a shift so instead of the law firms taking the mic now it could potentially completely turn and the customers taking the mic, de-valuing our worth as lawyers. But if we can stay somewhere in the middle then that would be the best”* (B.R. -11).

#### 4.4.3. Interaction with the clients

Clients are playing an important role to law firms’ prosperity and it is a factor that can drive change. The value of their clientele plays a huge role for the interviewees, so they dedicate time and effort to address the interaction that their clients need despite the scarcity of resources. *“We are interacting with our clients mostly via email or Skype, or on the telephone. However, we are mostly focusing on whatever method is available and it is convenient to the client”* (O.E. -8).

Many of the participants, however, argued that the entrance of new technological advancements has resulted in a lack of interaction between them and their clients. For example, P.K. -1 argued that *“lack of communication is a massive complain to firms”*. Similarly, T.R. -2 stated that *“customers want to see their lawyer face-to-face and not just uploading documents online”*.

Lawyers are supporters of face-to-face interaction with the client, as it can lead on solving problems faster and avoid misunderstandings. Telephone is in many occasions the preferred communication medium with clients. For now, lawyers seem to be reluctant in adopting innovative means of communicating, like Skype and similar platforms, as they argue most of the times these do not work properly. A partner in a large law firm in Germany with a 27-years of experience argued that although some firms have heavily invested in technology communication, many prefer doing long mergers and acquisitions (M&A) transactions via telephone. *“Most of our communication with clients is via email and phonecalls. We can have an eight-hour telephone conference when we do M&A. Clients also think it works easier and faster”* (G.U. -36).

Additionally, communication is not running smoothly with problems arising often due to the clients’ lack of understanding of the lawyer’s role. *“Clients sometimes cannot understand what it is going on and this has to do with the fact that they are not experts, they are not lawyers and we have to explain to them the situation in the simplest way possible”* (I.E. -47). Besides, *“you can have difficult clients; they do not understand that their case on immigration might be a*

*difficult and time consuming process. We have professionals to follow a procedure and most of the times it is not us that delay, but the Home Office*” (I.Y. -14).

Another major problem that many legal professionals agreed was that people with the availability of technology and online advice platforms can read in advance an indicative solution of their legal case and as a result, they expect from their lawyer to act respectively. However, legal processes are not as simple as it may seem, leading to misunderstandings between customers and lawyers. *“A lot of clients come to us expecting to tell them something particular. They already have it in their head that this is what I need; they see it as a service, but it is not always so easy”* (A.G. -50). Similarly, *“we as solicitors have sometimes to be psychologists as well and try to explain to clients that things cannot always happen as they want. It is difficult when you have many clients”* (I.O. -17). Technology can thus be also a challenge; this will be analysed as a main theme in sub-section 4.5.

Overall, lawyers support that clients are not straightforward in the first place to ease the transaction and avoid possible misunderstandings. *“Communication with clients could be improved, with the clients letting us know what they actually want in the first place and not late after we have worked on their case and then ask them if that is what they wanted and they say no”* (G.S. -37).

#### 4.4.4. Costs/fees of legal services

Last but not least, the cost of legal services such as the high working fees of lawyers is most of the times the key factor that people are complaining about. According to A.P. -19 *“there is the cost to access to legal services and the cost of legal service per se”* that clients have to consider. More and more people *“do not have money really to pay right now especially for personal problems”* (LS.AN. -51). Clients are feeling insecure by the hourly fee billing scheme. *“This time recording and time charging may act in a counterproductive way for some clients that they cannot afford legal services here in the UK”* (I.EG. -48). *“Clients are always pissing and whinging about the fees, they expect lawyers to do their work for free”* (T.M. -10).

Consequently, clients demand for fee transparency and process monitoring. *“Customers want greater visibility of the service and the progress of the activity, so they want to see fee reporting, progress reporting, they like to be involved in the different phases and being able to get updates, so they can update their board or whatever it might be. And again, that is something*



*closeness to the matter which the clients previously did not necessary desire. So that would be visibility” (PM.K. -26).*

At the same time, as people demand for more fee transparency, they have the ability to strike a harder bargain in terms of fees. *“Well clients would say that if a firm will not take the case at the price that they want it, another firm like DLA Piper will probably do it” (A.A. -25).* But legal professionals argued that even with fee transparency clients will not necessarily understand the price- quality correlation. *“Almost everybody can do anything online now. But the client will look for the cheapest because they do not understand good quality from bad quality and so there is a lot of convincing people out there who lie about their qualifications and knowledge and that is dangerous” (O.Y. -49).* Similarly, *“cost is an important issue. Clients do not pay much for the advice. You have to be prepared to put into the AI, automated review programmes, so that you do not do a due diligence with the lawyers but let machines do it and then a lawyer to review it. And that is a real challenge. You have to satisfy your client and on the other hand you have to be cheap to doing so. That is the biggest challenge I face” (G.S. -37).*

But there are lawyers that acknowledge the fact that often legal services are not reasonable priced. *“In the law firms especially in the big law firms, the fees that they charge the clients are so high, that the clients generally do not outsource you know smaller matters, day-to-day smaller contracts or disputes, anything that it is relatively low value, because of the cost” (I.M. -46).* Respondent A.E. -41 argued that *“in conveyancing the fees are expensive and people do not want to pay them.” “Clients become more aware of the fees they spent on lawyers. It is harder to go forward with high fees which our firm charges” (G.C. -35).*

Similarly, A. C. -6 argued that *“solicitors are trying now to do things on a fixed fee basis as opposed to an hourly fee basis”.* This can help to attract more customers by defining the cost of the transaction beforehand.

An alternative fee scheme that SMEs adopt in response to competition is the contingency fees. *“I think one of the ways they are trying to address this, is by going down the route of contingency fee, i.e. ‘no win no fee’ meaning that lawyers are not going to charge the client unless they win the case” (A.G. -50).* *“We have adopted the fixed fee scheme. I think that is more effective as the client knows from the start the price and agrees with this price. If we implement an hourly fee billing and do the invoice at the end, they complain about the number*

*of hours that the lawyer has spent on their case. It is not transparent; they cannot know the price and there are problems later” (I.O. -17).*

However, the fee arrangements are not applicable to long and complicated transactions like M&A. As G.U. -36 pointed out *“fees are another challenge. Most of the clients want a fixed fee. Again that is an excellent approach. You know what does an M&A deal cost? An M&A can cost 50,000 Euro and can cost 250,000 Euro, depending on how complex it is. But for these make-life-easy people they want a fixed price-wise fee. And of course they get a fixed price on some players in particular in the investments banks but this is a much more standardised product. How long it takes and how often I have to turn around an agreement that depends a lot on how smooth the communication among the parties is. Clients do not want to see that, and they want to basically push us down to a fixed fee approach. It is like you go to a butcher shop and you say I like to have meat for a barbecue and the butcher will ask you what kind of meat, pork or beef or lamb, and you say I do not really know, and the butcher asks you how many people are coming then, and you say maybe its two maybe its four or maybe I will bring my entire family and then the butcher gets annoyed. This is how clients behave”.*

All in all, as there are not formal guidelines from the regulatory bodies, the SRA and the Law Societies or from the government on how law firms should charge for their services, more and more SMEs and large firms adopt an alternative fee arrangement scheme to attract as many customers and increase their reputation in the workplace arenas. Others argue that hourly fee billing might not be an option in the future. *“The majority of the work that we do is still done on an hourly basis, but at the beginning of the transaction we will give an estimate and we will continue to keep an eye on that estimate which is based on assumptions. If at any stage it looks as we are going to breach or overrun on the fee estimate then we will give the client a very early warning obviously before it happens so that they can have a word internally to see what is going wrong on their side. So even though we still charge by an hourly rate which I know is a very unpopular way of doing it nowadays, it is always done on the backdrop of having a fee estimate that we all have in mind and if we are going to go over that then there is a lot of communication so that people are aware of that, so nothing should come as a shock” (L.L. -13).*

Another factor that drives legal service fees down is the competition that the continuous entrance of new law firms creates. Online platforms and websites offer legal advice to clients with a competitive price, forcing law firms to decrease their fees or compromise with

alternative fee arrangements. *“I was doing a market research the other day and I saw a couple of websites that advertise conveyancing for £400 which is basically nothing compared to the number of hours you are putting into conveyancing”* (T.A. -5).

At the end, the legal profession is driving clients on an autonomous path either by solving their legal matters like a family divorce online or by representing themselves in the future in court trials to avoid high costs. F. N. -17 supported that *“in employment tribunal, people that are practising employment law, they will advise people on how to represent themselves in the court so they will not need a solicitor”*.

This is an additional risk for the legal profession’s employment rates and lawyer’s value.

#### 4.5. Theme Three: Technology

Technology is developing rapidly in the professional services sector, bringing ahead new systems and programmes questioning to either assisting or replacing the human factor. From reviewing documents and analysing data to provide online legal advice to customers, AI is transforming legal operations, changing the existing standards and working benchmarks of lawyers. The participating legal professionals supported that IT improves significantly their working life, by allowing them on focusing on productive tasks and on giving legal advice to their clients and not on administration time-consuming tasks. For instance, O.E. -8 owner of a medium-sized law firm utilises her resources effectively to invest on IT systems. *“The role of IT is essential for the legal service delivery. At the moment I am looking at our Case Management System (CMS), the Software that we have in order to see how we can streamline that, so that we can become more efficient in the way we are delivering legal services from having standard documentation and letters and workflows that can reduce the time that a solicitor needs to spend on a case. This can also reduce the administrative time that we need to prepare the documentation, developing workflows by using AI, so that will automatically create some of the standard documentation on a case that we need. AI will automatically send out the right documentation or the right letters or diaries or key dates or do any of the things that we need to do as lawyers automatically within the CMS. With the view that the lawyers concentrate their time on a case being the legal advisors rather than spending lots of time doing things that actually the lawyers do not need to do. That will make us more competitive from a price perspective for our clients, because we can be more competitive into the market and also drives up our profitability as a business”* (O.E. -8).

However, many interviewees argued that although technological tools like AI and communication technology will potentially help the legal profession through innovating document and case management systems, (and also by enabling internal and external interaction) they can also impose security risks. Thus, technology is a key thematic area underpinned by sub-themes referring to: document and case management, cybersecurity and AI and communication technology.

#### 4.5.1. Document and case management

##### ***Paperwork vs e-documents***

Online documents and templates are a necessity in the legal service delivery, but lawyers still debate about the electronic document solutions and prefer working with paper/ hard copies instead. This is often the case for the older generation lawyers; these legal professionals were more likely to argue that technology is overrated and ‘simple more conventional approaches work better’. “*Word documents are the ones most commonly used during legal services and you cannot really improve a Word document*” (A.A. -25). “*Technology has really taken over the ‘discovery process’ and has in a sense expedited how quickly information can be exchanged. It has certainly made things easier but at the same time, when documents are so easily and freely exchanged electronically, I think people are not focusing as much to the details. If you do not have the documents in your hands to review and analyse them, I think you are doing your client a huge disservice. For me, doing divorce work, I analyse bank statements and tax returns and financial documents to discover what kind of marital assets exists. If I quickly review those documents on the computer, I may miss something that I would not necessarily miss if the documents were in my hands. So to me needs to be a better balance and still understand the importance of paper copies*” (F.E. -7). Interviewee A.D. -53 had a similar view on document handling; “*I suppose there are always subtle ways to get an electronic signature but then you have to open your laptop, you have to find the document, you have still got the same challenges. I am not convinced that in terms of document management that technology would really make a massive difference but it is great to have a back-up, it is great to have a back-up copy of something and that is useful. But in terms of document management I like to have papers to read and to work with.*”

The legal profession is mostly operated from lawyers with extensive experience (i.e. the older generation of lawyers) that tend to be the ones hindering innovation and technology adoption by feeling secure in the old system. “*I think the older solicitors and fee earners are perhaps*

*not as confident with the IT and the new systems as the younger ones and they probably rely more on their assistants” (AD.J. -30). “There is still, secretarial support for some old School lawyers, who like to do the thinking and do the technical work, but they are not very good with the technology and the typing” (T.M. -10). “Some judges are still very old-fashioned they want everything printed but the majority of cases now are digital” (B.R. -11).*

Proponents of technology believe that hard-copies are a waste of resources and an unsustainable option and feel frustrated when they have to deal with a large amount of paper files. *“You need to copy it or scan it; it depends of what you need to do. We are trying to do everything online at the moment but some of our senior solicitors prefer to have it in paper and that is frustrating” (T.AL. -5). “Not all lawyers are competent to use technology into their legal areas of expertise. I think that law firms are not taking for granted that lawyers know how to use Excel” (PM.N. -24).*

Another point was that different people in law areas require different solutions and most of the times the same document policies do not apply to all law areas. There is not a one size fits all technology solution in professional services. For example, C.M. -32, working in the area of residential conveyancing argued that *“the process of buying a house is more paper-based than it was 20 years before”. “Senior lawyers understand that technology can help, but unfortunately at the same time with law it is difficult because sometimes the jurisdiction requires like five hard copies with a signature, it is not helping the technology side in the profession. Because for instance, when you are dealing with a mortgage, I have been said to send a fax, I do not have a fax, why should I have a fax in 2018. So, I had to look for a place who they had a fax, because I was not in the office, so that slows down things probably. There is on the one hand the advancement of technology but on the other hand people are still out of fashion, in some protocol which does not allow technology to take present and actually develop a more efficient way of working” (T.A. -5).*

### ***Efficiency through technology adoption***

Efficiency can be measured based on costs, time and resources. Technology adoption can be a way to minimise costs, optimise personnel’s time and achieve a better utilisation of resources. Respondent F.E. -7 argued that *“law firms in the USA are already utilising technology transfer by providing IT tools to their staff to do the work themselves such as the billing, because of the expensive costs that financial services have”.*

Nonetheless, achieving efficiency through time optimisation is not always a priority for lawyers. Respondent P.D. -33 emphasised that although technology can reduce his time and steps on a transaction, it often increases his workload. *“Thirty or forty years ago, lawyers were drafting an agreement and they used to send it over by post. The post delivered it a week after and people were commenting, and they were sending the comments again back; that lasted another week. Basically, now lawyers can comment and draft documents and email them in the same day, emailing them in the morning and the afternoon they might receive the comments back, jump on a call, discuss them and round the case up. It is much more efficient, however it creates more stress obviously”* (P.D. -33), as you can quickly respond via email and proceed to another customer’s case.

Computer scientists and legal IT experts debate with lawyers on the effectiveness and practicality of technology to the legal profession *per se*. Lawyers do not wish for more technology adoption as it is evident to them that these systems are running slow or they are not designed appropriately for the legal profession, as there are a range of law areas and each of them requires different IT solutions. *“Skype is not safe, all that technology that other people use is not safe. You cannot use it, as you are not sure that it will run properly. We do M&A through telephone lines to be quite honest”* (G.U. -36). *“Skype it is not very good and effective to communicate with the client. Because I was going to say, ‘pardon what you said’, it will not work. You need some certain immediacy and to sit next to the person during a negotiation process. If those technologies now available, be improved in the future, it may become more effective to utilise them. But up to now, I do not think screen-based meetings have worked very well”* (A.A. -25).

*“Technology is much more efficient than it used to be. But I think technology is also largely overrated. I mean technology can help and make a firm more efficient, automate templates like legal precedents (legal documents). In the end, unless you are in repetitive, brain dead parts of the legal profession, legal technology is overrated. I am in a global large firm that technology is far advanced here and to be honest we are not being paid for that. We are at the top-end of the transaction market, of course infrastructure works well, document systems and knowledge transfer are all top of the line. But honestly that is a drop in the bucket. That will not change the world”* (G.U. -36). Lawyers believed that *“most case management systems are running slow”* (F.C. -12) and *“many legal firms are not adopting the new technological tools fast”* (P.MO. -18).

#### 4.5.2. Cybersecurity

Legal professionals strongly believed that although technological tools can help the legal profession in the document and case management, it can also impose security risks. Cybersecurity was a key concern for all legal professionals as they are dealing with clients' confidential information and large amounts of money. For example, an interviewee said that *"with technology in place there is a risk of hacking and security issues"* (A.PC. -29). The lawyers' concerns about cybersecurity and its destructive effects have increased after the 2017 cyber-attack to a global law firm operating in the UK and strict regulations are now in place. Similarly, O.E. -8 shareholder of a medium-sized law firm was concerned about saving documents online. *"When we store documents, we have to think how we store documents in a secure way in case we are broken into. So digital and practical security is a very big issue for law firms"* (O.E. -8).

This study's analysis identified that older generation lawyers (more than 10 years of legal experience) are much more hesitant than newer generation lawyers (less than 10 years of legal experience) with the risks associated with technology adoption. They feel more comfortable without it and there is no need to change to something that is not secure enough. *"The use of technology exposes law firms to risk that they were not used to address regarding information security and hacking"* (A.C. -6). *"I think there is a legitimate fear of security. A lot of cases are very sensitive so law firms are afraid that details of their cases may leak or they may get lost. If you lose essential correspondence, you are in big trouble"* (P.MO. -18).

Others thought that technology can come with a risk but law firms looking to emerge must be brave and invest in innovative systems to have a competitive advantage in the workplace arenas. *"The problem with technology is that it leads law firms to potential vulnerability to be exploited for fraud purposes. But then again as the world gets more competitive and the pressures for efficiencies get greater, they have to look at the way successful firms stay ahead of the curve. My firm thrives because it has adapted to change better and it has been better financially and technologically managed than other firms"* (AD.J. -30).

#### ***Training on technological tools***

One of the ways with which law firms try to tackle the technology and cybersecurity issues is by recruiting legal engineers for facilitating efficient processes and train the law personnel respectively. Training on the new IT developments may be the answer to the lawyers being afraid to use technological advancements to support their legal work. Some of the respondents

employed in senior legal positions argued that training could potentially tackle the resistance to technology adoption. *“Technology for me has been really helpful. I mean I am not an IT freak, so at first it may seem a little bit difficult, but it is not eventually. You get used to that (technology) but since I have trained and learnt how to use these new facilities, it is much better”* (I.EG. -48). Training is thus a key to technology adoption.

Alternatively, some law firms for the means of cybersecurity choose to outsource their IT systems for additional security. *“We actually have a third party IT company that basically does it all; looks after, maintains and improves our IT systems. We now have written cybersecurity policies and procedures in place on what we are expected to do when there is an issue”* (AD.J. -30).

#### 4.5.3. Artificial intelligence and communication technology

Technological advancements like artificial intelligence can have a significant impact upon the law profession, questioning the role of the lawyer. More specifically, A.P. -19 stated that *“AI becoming more and more powerful, and in the future computers will solve legal problems. So, what solicitors are going to add and what they can do differently?”*

Communication technology implications are equally important. Faster and easier communication with clients is the main improvement for the legal sector that is based on technology. As C.M. -32 stated *“technology enables the solicitor to operate with less physical contact with the client. The customer does not need to cover any distance to come to the office; instead they can just upload a case online to the system. Technology can also assist in the administration of a case”*. Similarly, T.AD. -21 argued that *“emails make our life easier. Communication technology helps a lot”*.

Marketing communication and social media as a step towards innovation play an important role for law firms to continuously attract clients as they have to develop a robust online presence for the today’s Internet/technology savvy customers. *“A new challenge is staying relevant and having an online presence in the face of websites, Facebook and all other social media platforms. This is a new powerful path for interaction and communication. I think there is a balance to be made between maintaining ‘traditional’ reputation and word of mouth while also competing with newer ways of building a reputation”* (F.E. -7).

At the same time, there are lawyers still questioning the role of technology in the interaction with clients, arguing that at the end it delays the completion of a case rather than accelerates it.



R: *Can you not communicate with your client and team members through online platforms?*

A.A. -25: *“You can, is it efficient? That is the question. It is probably more efficient for me to go down to London and get everybody round the table and agree everything in three hours but of course that is three times 12 people, rather than having endless calls and endless emails trying to reach the same thing. Sometimes it is just better to physically meet so”.*

Likewise, not everybody is satisfied with the way that online communication operates. Some lawyer-to-client relationships need physical contact to build trust. For example, family law cases are those that are most sensitive in context, as clients need encouragement during their legal processes. Lawyers believe communication technology can harm family law cases rather than assist to solve them efficiently. According to T.M. -10 *“most people rely on technological systems too much, ignoring the face-to-face contact with the customer”*. Likewise, *“if you are a sole practitioner and you are doing Wills, is about building professional relationships with your clients and you cannot do that with certain clients over the Internet, you have to meet with them face-to-face”* (A.C. -6). T.R. -28 believed that *“the human nature of being into discussions and arguments, all of that sort of things it will completely missed, being over a video link for a trial”*. *“Physical presence is necessary and you have to meet your partners in person or once or twice per year or more”* (I.E.G. -40). *“I think face-to-face interaction it is important but maybe I am old-fashioned. I think if you are running physically is better, as a discussion via Skype it would not be very good. Because you need some certain immediacy. If you going to negotiate efficiently you need to be sitting next to the person”* (A.A. -25).

To conclude, although technology has an impact on employment and to the client-professional relationship, the legal profession will continue to evolve and the volume of legal work will exponentially increase. The present Thesis based on the findings concluded that the adoption of AI is an integral part in the legal service delivery, minimising lawyers' time on administration tasks and maximising the pace allowing them to develop their skills and strengths on legal advising and negotiating with their customers and their colleagues.

#### 4.6. Theme Four: Organisational transitions

The fourth theme refers to the political and organisational transitions. As legal multinational companies operate under strict regulations and laws in the UK and worldwide, a change on them, such as Brexit or deregulation and decrease from government funding, could have a

considerable impact to their operations in various ways. The regulatory bodies can also define the way the sector operates and usually are rather inflexible.

#### 4.6.1. Transformative changes (Brexit)

One notable example that emerged from the UK interviewees reflecting and affecting this theme was Brexit and its aftermath. The British legal professionals of this study argued that it is still unknown what law firms will have to do to comply with the new regulations. *“It is still uncertain what will happen with the Brexit. I believe that people are scared, law firms are trying to move their head offices in Ireland, a lot of solicitors are trying to qualify in Ireland to keep being a European lawyer”* (T.A. -5). Greek in-house lawyer I.E.G. -48 does not know yet what will happen with her working status. *“Brexit has shaken our field, even in the NGOs, because nobody knows something on that. I mean we are many people that we are not UK citizens, so we do not know what will happen with that, what we will have to do, what arrangements, so I guess the same goes for other firms that they have employed non-UK citizens. What will be the changes in terms of the qualifications or the transfer schemes? For example, I mean I can work here in the UK and use my legal identity from Greece as a Greek Lawyer because of the European Laws there is recognition of qualifications and skills. So, I do not know what will happen when the Brexit occurs, if it occurs eventually”*.

In addition, people are anxious, as they do not really know what it will happen, and managers do not invest on new innovations as there is the risk of not being fully adopted from the employees or successfully implemented under potential changes in the regulations. Hence, the strategy is more conservative rather than innovative at the moment.

On the other hand, Brexit for the short-term has created opportunities for most law firms as it has increased their profit margins. Immigration law is an area positively affected by Brexit. People are feeling uncertain of the consequences of Brexit, they are more likely to seek advice from a lawyer.

Respondent F.C. -12 argued that due to Brexit there will be a need *“for re-writing some laws or maintenance of in-family law.”* Respondent I.O. -17 raised a similar view that *“firms responsible for immigration procedures would have a lot work to do”*. Brexit referendum will increase immigration asylum cases of European citizens. *“In the past the EU citizens, post-Brexit they were not interested to apply for a residency permit. Our clients were 98 percent non-European citizens, from the USA or India etc. Now with Brexit we have more clients from*

*EU countries. In the long-term if Brexit affects the economy, for sure it will affect the immigration, as well. So, Brexit is good in the short-term as we have more clients as immigration lawyers not as general lawyers but if the economy will be affected then the legal sector will be affected as well, as people may not immigrate to the UK” (I.O. -17). Similarly, “I think Brexit will generate a huge amount of legal work, but I do not think Brexit is a very good idea at all” (LS.D. -52). “I worked for a big law firm in Yorkshire and they made quite a lot out of Brexit advising on the constitutional aspects. They create blogs on Brexit, make announcements on its potential implications and it is an ongoing industry at the moment. In a positive way I suppose in the short-term” (A.A. -25).*

Moreover, Brexit and its consequences will not differ dramatically regardless the size of the law firm and the area of legal expertise. On the one hand, bigger law firms operate in a global landscape, being agile to internal and external changes. C.M. -42 argued that *“in terms of employment law for instance, it really depends on the company. Companies that are based in the EU they will have to register their offices in the UK to the point that they will have to register new businesses in the UK”*. This is because large law firms employ and work with different nationalities, they will have to balance or operate under solely European or British law. However, they will have to still impose the new rules and think of entering new markets in the post-Brexit era. *“Post-Brexit I think for larger firms will make significant investments in Dublin because Dublin would be the only English speaking country in the European Union, and it will in my opinion be a very important bridge between the UK and Europe. I think there would be quite a lot of legal work happening through Dublin post-Brexit” (T.D. -40).*

Sole practitioners and SMEs will be affected differently than larger law firms. *“The likelihood of Brexit having an impact on maybe sole practitioners will be much different and maybe much less then it would be on someone like DLA Piper. Commercial firms are working within European clients, will have an impact upon them. So, I really think depends on what area of law the firm someone is working.” (T.M. -10).*

Finally, Brexit will play an important role in the decision of students coming into the UK for studying. There is a high demand of law students willing to pursue their degrees from a British university. However, European students might re-think their options. B.R. -11 expressed her real-life example of the possible consequences of Brexit on the academic education sector. *“My first year during my part-time master course before the vote of the referendum I was in classes where they would be 15 to 20 students and 16 percent of those students would be European*

*students. This year in my classes there are five or six students and are all English. I think people are being put off, as they might wonder whether a degree from England would be so useful in the end. Would it still be a qualifying a degree? Would it still have recognition under the universities? Therefore, I think there is an impact on people coming here to study.”*

#### 4.6.2. Deregulation and the decrease in legal aid funding

The introduction of new regulations with some examples for the UK context being, the Tesco law, the decrease in legal aid funding and the deregulation of 2007, have considerably increased the competition within the legal profession.

More specifically, the decrease in legal aid funding was a big challenge for the UK legal sector as it reformed the way many law firms and legal aid lawyers were operating. Many lawyers dealing with clients in criminal and family law lost their job, as customers did not have the help from the state to fund their cases. Others tried to adapt to the new regulatory formations by changing their area of expertise or simply by being among the few that remained in the legal aid sector. Overall, as A.P. -19 pointed out *“the reduction and the withdrawal of the legal aid, and in particular the criminal legal aid are important challenges”*. Furthermore, T.M. -10 supported that *“it is extremely difficult to get by with the legal aid salary. And because funding is limited and legal aid has decreased since 2013, law firms are made severe cuts. They do not invest much as they used to, to make things easier for their employees, in terms of IT and infrastructure”*.

Moreover, in the researcher’s question on whom has actually been benefited from the decrease in the legal aid funding, the answer from the respondents having experience in this field was none. For instance, barrister and academic LS.D. -52 stated that *“the greatest challenge seems to be appearing is the fall in the legal aid and the general reductions in legal aid work, that caused a significant issue, because there was not enough money and even if you did get some legal aid work you would not get very much for it - that was a big challenge”*. B.B. -3 working as a barrister for 20 years in SMEs shared the same view. *“Crime and family lawyers in terms of fees and what they can charge their clients have been affected significantly from legal aid cuts. It really is a mess”* (B.B. -3). Furthermore, *“I think the issue with legal aid reduction is that there are people who have been practicing in a certain way and who have only for example practiced criminal law for 20 or 40 years (mostly funded by legal aid). As the work decreased people were not earning as much money as they used to and that obviously hits confidence within the sector, people’s morale for trials and there is a general reluctance to take certain*

work” (A.D. -53). At this point several barristers and legal aid lawyers decided to join the higher education academy.

#### 4.6.3. The regulatory bodies

The regulatory bodies and the government are the institutions responsible for the above organisational transitions that have an impact on the legal profession. Regulatory authorities like the Solicitors Regulation Authority (SRA) and the Law Societies are forming the legal models that legal firms are permitted to use.

Law firms operate in an environment that every change can affect their ability to innovate. When there is a need for change, it is not only the lawyers that have to adapt but also the overall system, and that is difficult. *“I think it needs a culture shift but because the legal profession is not just lawyers, is the regulatory bodies, it is the SRA, it is the Barr Council, it is the courts, it is the universities Law Schools, it is hard ”* (A.D. -53).

Based on the participants’ responses, the model under which law firms operate is not aligned harmoniously with the solicitor’s standards. Lawyers wish for more freedom in the legal service delivery and less paperwork. The partnership model of law firms, the lawyers’ indemnity insurance, the paper files archives and the lawyer fines are some of their concerns.

*“It is a very challenging environment. The people I work with are at the top of the game, they are extremely sophisticated, extremely broad in their outlook. And it is horrible that we have still to do time-sheets for the billing. The other thing that it is annoying is that your own time does not matter. It is always the client or the other party who determines your day. I also found it extremely difficult, that the law is being made more and more complex by people who vote in stupid politicians elections who made bad law. They do not actually look whether the law fits; there are so many layers of law”* (G.U. -36).

In addition, the partnership model seems to affect the way lawyers decide and act on their work. Restrictive work models often lead to de-motivation of employees and lack of innovation. *“The big issue is the deterioration of prices; the service levels are going up while the price levels are going down. We are the only legal profession left in capitalism, that actually has personal liability. The accountants, the bankers do not have it, even the managers do not have it, because they own a limited liability. Then, our unit is too small contrary to the Big Four, we do not have market power to impose our own working practises on others ”* (G.U. -36).

Hence, lawyers feel that their needs are not being understood and they wish for a more 'suited to their needs' type of profession that will give them the freedom to decide on how to handle a whole transaction but also more support and work-life balance. *"I think it would be better relaxing laws to an extent, relaxing the code of conduct, which is the SRA's role, to give lawyers more freedom to compete in the industry just as much as in other professional services"* (O.Y. -49). *"The SRA, the regulator is putting so much more pressure on you and there is so much more risk. A lawyer I knew made a mistake, the regulator got involved and this poor guy lost everything, he was declared bankrupt because he had to pay all the fines, he lost his house, lost his wife. It was just such a tragic story and it was for a mistake that somebody unregulated made. As it is legally accepted by the SRA that the client can fine you, the SRA can ruin your life"* (C.M. -32). *"It is just totally unfair. Where is the justice in that, a lawyer is held accountable because he is not an accountant; it is just ludicrous. I mean the regulator is a different kettle of fish all together, they are unsupportive. I mean you have got three regulators for legal practices you have got the SRA, the CLC (the Council for Licensed Conveyancers) and the CILEX (Chartered Institute for Legal Executives). Each of them is wildly different. The Law Society is useless; once upon a time they were a big help, they used to be the regulator and then they just became crap and now it is part of 'an Old Boys Club' you go in there and they are all English White Men who are too busy talking about how good each other is to actually do a useful job. However, The CLC is by far the best, they support you, they help you set up and if you make a mistake or if you need help with something because you have got a little bit out of your depth you can give them a call and if they cannot help you over the phone they will send somebody to your office to help you"* (C.M. -32).

Furthermore, the regulatory bodies require from lawyers to save all the printed documents of each client's file as evidence in request. This is a time-consuming and unsustainable process. *"It is not just the change that needs to be done in legal firms, but also change in the legal system. If this requirement to bring hard copies is removed for example by the CPR (Civil Procedure Rules) which is the signal procedural regulation in the UK, the lawyer will be able to save more time during the day to day work"* (I.EG. -48). *"Of course, we have hard copies, as we have to do the client's file based on chronological order. We should have this archive as it is required from the SRA body, when the case will be solved, it will go to a store in order to be destroyed after six years. This is the regulation. And every year we go under inspection from the SRA. We have a Software where we have the files at a reference number with all the details saved but we printed it as well. We monitor the client's fees or the deadlines"* (I.Y. -14).

Similarly, “everything is now sent by email, but occasionally you have to send formal letters or notices by post. In most contracts you have what it called notice provisions, so it says like any notices to be given as follows, and it says some processes to be followed, notice can be like by post, fax like the next working day or 10 days earlier. But most of those notice provisions are not allowed to be given by email. So that it is something that is a problem. If you see these contracts 80 percent do not permit notice by email. So you have to send it both ways email and post” (I.M. -46).

Regulations are also restricting lawyers’ retirement process. “When a partner wishes to retire it needs to pay for a run off cover, usually run off cover is like an insurance, it costs three times the insurance that they were paying on the law firm, so basically the majority of lawyers in high street law firms they work until they die basically. Basically, if you want to close your firm you need to pay this insurance which is usually really high. And we are talking here about medium law high street firms and they cannot afford to pay this amount because it is three times up the insurance they have per year. This is a major challenge especially when you are working with these firms and you are a partner and you left alone, because if the partner has died in the past five years his run off cover would be really high” (T.A. -5).

Another point that came up was that many lawyers due to the high competition seek for a second-paid job as self-employed; providing legal advice outside their law firm status. “It has been discussed in the Law Society about letting lawyers carry out unreserved activities without putting it through a firm and being able to work for a firm at the same time. You were not able to do that before” (O.Y.-49). This is an indication of some positive responsiveness to the times.

Organisational transitions and their impacts cannot be easily absorbed even when innovation adoption within law firms thrives. In this case innovative policy reform and responsiveness can be the apparatus for navigating successfully through big changes.

#### 4.7. Theme Five: Legal processes

Legal processes refer to the transactions that lawyers are following from the beginning of a client’s instructed case until its completion. The level of complexity of these legal procedures differs from client to client, but also from one law area to another. For this reason, there is no pre-written processes of how a case should be handled and run, and most of the times it lies down to the lawyer’s experience. Hence, managers struggle to define efficiency and to take



measures tackling the potential bottlenecks. Legal process is a theme defined therefore by efficiency, complexity and fee schemes considerations.

#### 4.7.1. Efficiency

Many senior lawyers responding on how efficient their area of work is, argued that the legal sector is running effectively enough after the email entrance and automation could not be applied in a professional service environment. *“We improved significantly. We used to physically post the documents, now we do everything electronically. I do not think you can get much more efficient than that”* (A.A. -25). *“Legal services cannot be automated. Because if I am negotiating a lease of a large building, a part of building in London, the landlord would be using a big London firm such as Clifford Chance LLP or Allan & Overy LLP and generally speaking I would be against somebody of these firms. So they would send me a lease which would be an Allan & Overy LLP lease and I would have to amend it painstakingly to get it to the correct format for my client and negotiate it and that work requires a lot of expertise. So I think it takes a lot of time and expertise to complete this transaction whereas a computer cannot do. I am not sure whether doing everything over the computer is necessarily always more efficient, it might not be”* (A.A. -25).

There were many others though pointing out that there is room for improved operational efficiency. However, most of them do not know how this can be achieved, when considering the diverse and heterogeneous nature of the legal context and the unsuitability of most technological tools. *“The legal processes today are extremely inefficient! For example, there is much waiting for court hearings. The courts are overwhelmed and understaffed resulting in cases taking years to run their course”* (F.E. -7).

Additionally, the majority of the interviewees agreed that most transactions are highly complicated and time-consuming procedures, but there are various reasons for that. More specifically, experienced corporate lawyer G.U. -36 argued that M&A transactions are not resource effective<sup>6</sup> enough, but one of the main reasons is the client’s behaviour. *“Clients are the ones that do not provide all the documents from the start, procrastinating and delaying the*

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<sup>6</sup> Resource-effective means that there is not a lot of waiting time, re-working of documents, documents repetition, unnecessary staff involved, transportation costs overseas and many clients’ cases running parallel.



process” (G.U. -36). Additionally, “M&A transactions could run more effective if lawyers get their deliveries from their clients in an effective way as well. People are always focusing on the law firms for change. We can improve on staffing, on IT, and be more concentrated. Actually, when you have a team and the client does not specify his/her case from the start, you cannot be effective because they are the ones delaying the process and wasting your time” (G.U. -36).

Another aspect pointed out from a trainee solicitor in the area of conveyancing was that inefficiency is also linked to the unexpected third party’s involvement. “Conveyancing is really time wasting because sometimes you need to go to inquiries that are really long. More specifically, the process it is ‘do a task and wait’. You need to wait for a client, you need to wait for the other solicitor, you need to wait for the estate agent or from the landlord and if another organisation is involved. Basically, as a lawyer you are doing your task, that would be send a draft contract to the other solicitor. At that point you wait from the other solicitor to check it and to amend it, to agree on that, then you wait for the client to send back the form. Unfortunately, there are a lot of parties involved (T.A. -5).” Thus, efficiency can also be achieved through better utilisation of resources, because the more parties are involved in a transaction, the less straightforward it will possibly be. Corporate lawyer G.S. -37 agreed by stating that “we are efficient in that matter, because only one person/lawyer has to review the document and then presented it to the partner for review”.

## ***Repetition***

Another reason behind the inefficiency of legal processes is repetition. Although there is a lot of repetition into the legal sector in the form of documents, communications and processes, most lawyers still believe that each case is unique and they develop new templates each time. “There is no repetition of documents. Every day is a new day and every case is different. Especially on litigation” (T.AD. -21). “Anything new as long as generally it is not being sent to the court, it is drafted from scratch. But most of the documents follow a similar format, even the content you are writing, and the kind of styling are most of the times same. Only the name of the parties is different. Usually there is a standard template, but everybody has his/her kind of own way to do things” (T.AD. -21). Although this approach can reduce potential errors, it can also be extremely time-consuming.

On the other hand, based on the findings more and more legal professionals acknowledge the need for more efficiency. Family lawyer and owner of a SME O.E. -8 believed that in family law there is a lot of duplication of documents and technology could significantly assist to that. *“Family law area needs more technology adoption. There will be always a need for IT in everything that anybody does, there will always be things that you can use technology for repetition. What we do now in family law, there is a lot of repetition”*.

### ***Process mapping***

At the same time though, as competition increases, law firms have to opt for efficiency measures to increase profit and improve performance. For instance, process mapping and the use of AI are common. Some of the law areas such as insurance claims, personal injury and conveyancing can be characterised as more efficient in comparison to complicated procedures such M&As and commercial real estate. Thus, the researcher argues that the more standardised/automated a legal process is, the more efficient in terms of time, cost and resources it can be. Two former lawyers working as legal project managers agree to that. *“I think that the best way for law firms to handle the cost is by ensuring that the processes are handled efficiently, not by recruiting less people or lower level staff”* (PM. N. -24). *“We would take the learning from one matter that we have done and bring it across to other matters. This will result to run processes more efficiently”* (PM. K. -26). Similarly, *“we will work either with our internal team or with our clients directly to map the legal processes we are involved and the specific type of matters and through that mapping exercise we can then identify opportunities for efficiency improvements”* (PM.C. -42).

Taking the above into consideration, processes coordination and their effective management are essential parts of business success. However, law firms typically acknowledge that in order to achieve efficiency and increase profit, they have to innovate by decreasing operative costs and automating procedures. Sometimes though, they opt for outsourcing their non-core activities or having franchise offices to low-cost countries to reduce handling costs. *“It was more cost-effective for our law firm to have the offices abroad in South Africa and because our legal systems are fairly similar it was an easy support system to put in place”* (PM.C. -42). *“Some firms do outsource non-legal work to cheap working staff in third world countries. For example, document templates and IT are managed from India”* (I.G. -34). Adding to the above, *“British firms have started years ago by de-localising some back-office activities. For instance, there are law firms in London, I can think of a major law firm, which has established an office*

*in the periphery of the UK like Birmingham or Manchester, and the back office- the secretarial support and employees working for the payees, located in these less expensive places” (A.PC. -19).*

#### 4.7.2. Complexity

The complexity of legal processes is a key challenge adversely affecting efficiency and innovation in legal firms. Efficiency is strongly associated with the complex nature of each legal transaction. For instance, long transactions like M&A require teams of lawyers to secure the deal; that means more resource allocation is needed for the client’s legal case completion. For instance, *“the average time delivery for our corporate transactions takes three to four months and it is complex. It is quite a long process and cannot become any shorter” (P.D. - 33). “It is indeed very important that such processes have considerable and efficient co-ordination, and this is really evident where the costs can explode because if you have for instance ten jurisdictions and ten offices and the lawyers will have to do due diligence for different companies. It is getting cost intensive and it is why it is really important to have a core team which in advance decides what it covers in due diligence, what it is the framework and what can be done centrally and what has to be done by the local teams” (G.M. -41).*

Therefore, one way to support the effectiveness of such procedures and avoid unnecessary steps would be by *“keeping the same teams unchanged for the whole duration of the transaction” (G.M. -41)*, because lawyers will have to invest lots of their time and additional resources on sharing information and important details to the new members.

*“On the transactions I face a lot of difficulties. When we are doing a highly structured and quite complicated case, we encounter a lot of problems such as tax and legal problems and lots of deadlines. So it can be tough and I have to face it mostly on a daily basis, even more when our business is coming to its peak” (P.D. -33).*

As the competition in the workplace arenas rises and the clients demand for more cost-efficiency, law firms response to this crisis by minimising the tasks their legal personnel are responsible for and let the clients be in charge of completing the less challenging parts of their cases. For instance, *“if the courts' system wants people to represent themselves because the legal aid funding is limited, processes need to be simpler definitely” (F.N. -22).*

### 4.7.3. Fee schemes

*Fee structures (pricing)* is a continuous debate among law firms and clients. According to the literature review, there are a variety of fee schemes that law firms can choose to operate under. Most of the times, law firms do not have a specific charging policy, as it depends on the client's preference.

*"I think pricing completely depends on the area of work you are doing. On a transactional basis I think the hourly rates might, maybe I am biased because that is what I do, and it might be a bit more favourable to go with the hourly rates because there are so many variables in a transaction"* (L.L. -13).

Most of the times complicated processes like M&A transactions cannot be priced in advance. For instance, on the question about whether an M&A transaction could be a fixed fee option, G.U. -36 argued that this could be challenging as *"an M&A can cost from 50,000 Euro to 250,000 Euro, depending on how complex and long the transaction is"*. Thus, it is difficult to pre-define it. *"But customers want a fixed price-wise fee, as they cannot understand the complicated nature of these transactions. And of course, they get a fixed price on some players in the investment banks, but this is a much more standardised product. How long it takes and how often I have to turn around an agreement that depends a lot on how uncomplicated the two parties are. They do not want to see this, and they want to basically to push us down to a fixed fee approach"* (G.U. -36). *"More and more often lawyers agree to transactions with a fixed fee and not an hourly fee rate which has led to a decrease in the revenues of the law firms"* (I.G. -34).

This approach related to the high expectations of the clients and their difficulty to acknowledge how the legal profession operates. *"If I cannot price a transaction, it cannot be often as efficient. For example, clients asked you to do a due diligence exercise, you often not told whether it takes four people or eight or twenty. You do not know whether the contract parts are all the same, whether they are downloadable, because often we cannot download them, and then they say how much will it costs. Well, honestly, I cannot price it. And that is a big discussion that we are having, and it is increasingly unhelpful and annoying"* (G.U. -36).

Based on the findings, the pricing scheme depends on the law firm's strategies that managers choose to adopt. For instance, legal project manager PM.C. -42 shared that they try to satisfy the client by adopting a combination of fee arrangements. *"We have a bit of both, so the fixed fee we usually do for matters where the scope is very clear, more on a certain document basis*

*like for a contract. The rest of the time it is based on an hourly rate but often also kept at a certain amount but more and more we are moving towards to a more fixed fee” (PM.C. -42).*

Smaller firms often follow the changes in the workplace towards being attractive and price competitive for their clients. *“We have a fixed fee. I think that is more effective as the client knows from the start the price and agrees with the price. If we implement an hourly fee and do the invoice at the end, the clients complain about the number of hours the lawyer has spent. It is not transparent; the client do not know the price and there can be problems later” (I.O. -17).*

R: *“But do different cases require different amount of lawyer’s effort?”*

I.O.-17: *“Yes, and unfortunately the price is the same regardless the effort spent”.*

Furthermore, lawyers employed in large law firms do not devote their time to deal with the billing procedures as the finance department is responsible for that. *“I cannot answer to your question about fees because it is not me dealing with that. I know we have a programme and I just insert my hours and then the bill. I do not know any specifics as I am not involved further on that” (G.C. -35).*

To sum up, due to the competition in association with the inefficiency of the complicated legal transactions, firms tend to shape their own fee schemes and how to decrease their overhead costs to have a leverage. Technology, specifically online template services tend to be the most common and affordable route for law firms. *“Lawyers can purchase a template between £5 and £120, and then they tailor it to their needs, upload it and submit it online. Then the document is checked-up by online service, that means a senior lawyer will check all for them and make any amendments that they have requested, and they do that for a fixed price” (O.Y. -49).*

#### 4.8. Theme Six: Education

This section is divided in two parts. On the one hand, the ‘education’ theme refers to the academic education and the skills that students obtain from Law Schools and on the other hand, to the ‘knowledge transfer and exchange’ among the university law lecturers and the industry law practitioners.

#### 4.8.1. Academic education

Academic education is the first important hurdle law students have to overcome to enter the legal sector. Law Schools provide the fundamentals of law to students equipping them for their future careers. However, junior lawyers graduating from their courses, have to apply and complete traineeships at law firms and practise the profession. Many of them find it very difficult to secure a trainee contract. *“Law is a difficult route because the investment in education to become a solicitor is huge, so all this input has to worth it”* (T.A. -5).

Trainee solicitors that participated in the study highlighted the challenges that they faced after graduating from their legal course. A trainee solicitor, who is a part-time student in an MSc programme and a paralegal at a small firm believes that undergraduate studies provide a theoretical basic knowledge not aligned with the sector advancements. *“In my undergraduate degree in England I was taught the basics, but if you are just learning things by heart you are going to forget about them when you go for work. While if you do those two in parallel (studying and professional practice) things stick in your mind and you never forget”* (T.A. -5).

Similarly, LS.AN. -51 as a law undergraduate student, she volunteered to practise her legal skills in her town’s council. *“The university modules are not preparing you for the actual practice. For this reason, every time there are opportunities advertised for law students on practising, I apply. I had the chance to take last year this vocation scheme with my town’s council”* (LS.AN. -51).

R: *“Was it useful?”*

LS.AN. -51: *“Yes it was very helpful for me to realise how you have to behave in the office but also in the court. It gave me a broad experience of the two sides of being a solicitor. So that was one of the most interesting experiences I had”*.

Another point raised from a property lawyer was that his education was not adequate to enter the legal sector. *“In property law, the training that you get, in the Land law module at the university as an undergraduate student tends to be quite badly taught because it is a complex area of law and without the context of practice, and a lot of academics never practised, without that context it does not make a lot of sense. I mean a lot of what I learnt at the university made more sense when I started practising it but that is good assuming that you get a job straight out of university and your knowledge retention is good enough that you know you have that opportunity”* (C.M. -32). *“The LLP (university course) I did not even find that useful. It was*

*just a box ticking exercise” (O.Y. -49). “The law degree is a boring dry subject, irrelevant and it is very hard to pursue a law degree” (B.R. -11).*

Last but not least, *“in Law School here in Britain, you are being taught almost only theory and I could not understand how it was relevant to real life. Why are you teaching us all of that, how it is connected to real life? (I.M. -46).*

In comparison to that, trainee solicitors agreed on the usefulness of the practical part of their master course, as they could experience real-life situations and the working culture of the legal profession, being better prepared for their future careers. *“At Law School the undergraduate programme is not really too useful. Because you are being taught to learn the law without actually applying it in fact. In the LPC (legal practice course) that I am studying now is much more practical. You are learning a lot, because at the end of the day, when you are in practice you have access to resources and is good to know how to use them” (T.R. -28).*

Another respondent working in the USA emphasised the lack of skills of trainee solicitors entering law firms. *“There are a lot of newer attorneys that do not necessarily have the experience and skills to enter the sector but are tech-savvy. Junior lawyers in the USA learn the ‘rule’ of procedure in School but they cannot learn how to effectively practice, maintain ethical standards and other practices without the real-world observation and practice, I see a huge gap in what is being taught in the classroom and what is happening in the real world” (F.E. -7).* This means that academic institutions do not necessarily equip their law students with the required state-of-the-art skills as of now.

Apart from the academic skills, trainee solicitors shared their views also on their employment opportunities after pursuing an academic degree. Most of them pointed out the difficulties they face to secure a trainee contract with a legal firm and the minimal amount of wages they earned in comparison with the number of working hours. *“I did 40 weeks of work experience, lots of different firms, just to take a contract really. I think getting in the sector is the hardest bit of an early career lawyer” (T.R. -28).* Furthermore, another opinion from a trainee solicitor was that *“securing a trainee contract was very difficult. Because of the competition, as far as I understand, I read in a research paper that people who graduated with the LPC course, only a fourth of them found a training contract within one year from graduation, and that happened the same to me. It took me, three years to secure a training contract, I tried to work as a paralegal first in other law firms as well, in order to gain the experience and to secure the training, which is different with another jurisdictions” (T.M. -10).*

Law firms' managers are not willing to pay more to recruit a trainee lawyer, instead they can employ a paralegal to do the same work.

R: *"Are trainee solicitors recruited from universities?"*

A.A. -25: *"Yes, they are but not as many in numbers as they were before. Because if you want to train a trainee, it will cost you £25.000 per trainee per year, and you are investing probably other costs in the trainee as well. But a paralegal you just pay them what you pay them. They are cheaper."* Likewise, *"firms are not recruiting trainee solicitors anymore. A trainee solicitor would have to learn all about the firm and have to have what it is called a sit in each department over the course of two years, they get to see everything for what the firm does and they ended up joining a department and keep moving up to do more work each year and be given more and more responsibility. Whereas the paralegal they do not move"* (A.A. -25). They can be seasonal or with a limited monthly contract. And *"whether if these paralegals that are being employed have those skills probably do not. It is interesting because they probably do not have these skills"* (A.A. -25).

Moreover, trainee solicitors or paralegals do have limited opportunities for progression, as the tasks that are responsible to fulfil are of trivial significance, offering them less chances to secure a permanent position. As stated, *"I was just doing tasks, small tasks related to what the senior solicitors were working on. It would have been impossible for me to solve something in two weeks as most tasks were like disconnected"* (LS.AN. -51).

In addition, trainee solicitors are feeling disadvantageous for the work they are undertaking as part of their trainee contract. Although the Law Society institution recommends a minimum amount of wage for trainee solicitors, most law firms in their way to stay competitive in the workplace, they are offering less money to trainee solicitors, knowing that they are recruited for a two year period. *"It is really common, being paid below the recommendation of the Law Society, especially within the legal aid firms. It is £2500 something like that. But the issue is that these are only recommendations. It is not obligatory so the law firms are not obliged to a minimum amount of payment"* (T.M. -10).

Taking the above into consideration, lawyers participated in the study agreed that Law School education and the legal system do not support law graduates to secure a trainee contract and start their careers in the legal profession fully equipped and with confidence. *"I do not think that students should be able to do the LPC course without having a training contract already."*



*I think it is unfair, because they are expected to pay £9000 plus for a course where they are not necessarily going to get a training contract for sure” (P.K. -1).*

#### 4.8.2. Knowledge transfer

When it comes to knowledge transfer the legal system should function as a meeting place for law practitioners and law academics. Their respective knowledge, experience and opinion exchange could be key assets in this demanding professional service environment and facilitators for innovation. The majority of the respondents believed in the value of knowledge transfer, but they acknowledge that it is not common among them. The reasons about it were firstly due to the confidentiality of the profession and secondly due to vast differences of the work they are undertaking in their everyday life.

On the one hand, legal practitioners believe that the communication between them and law academics is difficult; usually they do not understand each other. They argue that *“there is the feeling almost a reluctance to engage with them [academics] on the ground”* (G.U. -36). They also think interaction is very limited *“I was thinking about the relationship between the two parties... it is close to zero”* (I.M. -46) and *“there is not a lot of cross-over between the practice and academia which is a bit surprising”* (P.MO. -18). Similarly, *“academics tend in early days to approach practitioners for things like competitions, careers days and careers advice. Nowadays, they just ask you about, whether you have an ongoing case or if you have worked on a case to help them with examples for teaching them to their students about”* (C.M. -32).

Legal professionals also pointed out that the academic to lawyer relationship has not been developed much because academics are rarely informed for current aspects that legal professionals are dealing with rather than with theoretical knowledge. *“Sometimes we have to contact academics. I mean if we do not know we have to ask somebody who knows. But from my experience I do not need so much input from universities actually for my field in corporate law”* (G.S. -37). *“I am a little disappointed by the contribution of the academic community to the profession personally. Because again there is a humongous disconnect, it is very rare to find academic personnel to understand the practical aspects of what we are doing. And what we are doing here on daily basis compare to what you read in the books the differences are very wide. So it means that it is not even satisfactory, because you are looking at the book to find an answer and you cannot find an answer for practical questions. It is still good to have academics repeating the big principles but once you learn those principles then for the rest we are alone here”* (P.D. -33).

*“I do not think we will contact academics, like it has to be a very, very specific and very important legal matter to address that finally an academic expert has to give an opinion because we are lawyers. We can do the research and we can find this information but we have to pay of course to have access to this academic information and that is another issue. The cost of accessing academic information so you have all these legal journals and it may be really, really expensive to have annual subscriptions and for an organisation like ours, we are a small organisation with limited funding” (I.EG. -48).*

In general, *“lawyers have as an approach that academic people do not have a good exposure into the commercial aspect of things and they mostly understand the theoretical background of what they are providing” (PM.N. -24). “I honestly think that the knowledge transfer goes from the practitioners to the scholars because academics have no idea how things work in the industry” (I.G. -34).*

*“I do not think there is a lot of contact among the law firms and the academics directly, I think any sort of links between academia and practice comes through a transfer of knowledge of other mediums. So through text books, through journals and online websites. I have not even seen any collaboration or communication direct between academics and practicing lawyers. I have been doing this job now for six years and I am an expert within my firm and how my firms operate I am not an expert in how data storage and management can be better utilised by law firms. You know they need to perhaps go out and start speaking to legal academics but also logistical academics as well about how they can best find efficiencies in the way that they do things, particularly when it comes to document creation and storage and so forth because traditionally you did a matter, it created these documents, the originals were kept by the solicitor and the client got the copy. And then they were just kept and that was the end of the story, so what we have got now it is like vast full storage rooms and that is costly” (AD.J. -30).*

On the other hand, interviewees working in the legal education stated that universities tend to hire people with practical experience that can bridge the communication gap; these interviewees also see more the potential for synergies between the two groups. *“People in our university department are professionally qualified anyway and they have still their practice certificates. But it is always good to talk and I do not think people talk enough and the reason is the lack of time. All in all, I have had practitioners ring me up and ask for my academic opinion, and also the opposite having people ask for my opinion as a practitioner” (LS.D. -52).* Additionally, some respondents were optimistic with the exchange of ideas and on building

synergies with academia. *“I think knowledge transfer would be useful because people who are practicing do not really have the time to read basic things and work through things”* (O.Y. -49).

Last but not least, most large law firms have their own in-house know-how teams to help with clients’ cases where there is a need for more information on specific law areas. *“Every department in our firm has a know-how team which takes care of knowledge transfer and exchange. Therefore, the information is bundled. However, the process is not entirely transparent to me and I believe much more could be shared with the academic community”* (G.C. -35). However, not all firms like SMEs can invest in additional resources; thus, forming partnerships with universities can develop lawyers’ knowledge and ideas. *“The challenge for me is to bring all the knowledge that I have got from the big law firm where I was working and apply it to the smaller firm now as an owner, outsourcing where it is needed the expert advice and help from Law Schools”* (O.E. -8).

External social activities like conferences and seminars attendance can lead to knowledge transfer and innovation adoption. Legal professionals argued that they have opportunities to attend conferences and online seminars, but they are not valuable source of information. The workshops run through basic topics that lack in-depth. *“There are seminars, but there are not useful. They are mostly useful for networking and not to actually discover something new that will help you on your work”* (I.M. -46). *“I do not think there is going to be the seminar useful, but actually they are so scripted that the speaker does not know anything outside off the script. I tried to speak to the person presenting and they were uncomfortable to try to answer me, even though they were a hundred percent on the subject. They just kind of know what they know enough to deliver the seminar and no more, even though the knowledge is quite stripped”* (O.Y. -49).

Practising lawyers and law academics agreed to the value of attending academic classes or part-time practicing, respectively. It can maximise the knowledge and keep up to date with any changes in the legal field and minimise the time and effort professionals have to spend on reading a complicated case. For instance, immigration lawyer I.O. -17 argued that help from academics from other disciplines are really important. *“I will definitely ask the opinion of an academic and mostly about court cases from an expert. For example, I had a case from a Greek woman that her mother was from India but India in the past was a British colony. So she wanted to be a British citizen and I told her an expert opinion and specifically, a historian academic*

*opinion could help us with the trial. Because as a solicitor I do not know history in-depth. An academic could help” (I.O. -17).*

*“It used to tell me when I was a trainee that the academic and practice legal fields are two different worlds where each one requires its own skills and has its own rules. My academic background despite this, allowed me to solve cases with quality as doing your research you can pay attention to details. There should be a combination. But in the UK the solicitors perceive academics as something totally different. But academic opinion could unlock some difficult cases and help with case solving” (I.Y. -14).*

One platform for synergies that most Law Schools offer is the ‘legal advice clinics’ which is a medium of knowledge transfer that can be a leverage to both academics, students and professionals. *“The legal advice clinic is supervised by practitioners, professional lawyers whose skills are being shared and acquired by students; students who do have placements in law firms” (A.A. -25).*

Finally, *“I think you cannot really do one without the other. You cannot practice unless you know what is going on out at an academic level and I think that my academic friends will agree that you cannot teach without knowing what is happening on at the ground and so I am always trying to keep relationships with academics. For example, we offer services to local universities and Law Schools around us. A lot of Law Schools around us they run pro-bono free legal advice clinics by the students” (L.L. -13).*

#### 4.9. Conclusions

The qualitative phase enhanced the researcher’s understanding on the existing level of innovation adoption within legal services and emphasised the barriers and opportunities that influence innovation adoption through the lens of legal professionals reporting their daily working experiences and attitudes reflecting and affecting the key topic of the study. The data-driven thematic analysis synthesised the legal professionals’ views on the challenges they are experiencing within their law firms around the world and opportunities for the legal service delivery improvement. The six themes that emerged from the thematic analysis are: *human factor and culture, client and market, technology, organisational transitions, legal processes, and education*. These are key areas for legal firms characterising their capacity and willingness to innovate and thus, improve their operational efficiency.

## Chapter 5. Survey data analysis

### 5.1. Introduction

This Chapter illustrates the analysis of the quantitative data collection phase of this Thesis. This phase was an essential part of the mixed methods approach to answer the research questions of this study. This phase has an exploratory character aiming to enhance the motivations and barriers behind innovation adoption within legal firms and propose innovative solutions that could improve the service offerings and operational effectiveness of the legal sector. All in all, this phase lasted for three months. The raw data were all saved in an electronic format in the Qualtrics Software under the 1999 Data Protection Act and protected under the University of Huddersfield's Code of Research.

The questionnaire is divided in four main sections. Firstly, the background of the participants regarding their years of working experience, their country of employment and the size of the firm that they were employed provided important information on exploring the level of innovation adoption. The next sub-section explored the current state of innovation adoption in law firms related to *human factor and process change* (nine questions). The third part consisted of nine questions on the challenges and means of *technological innovation*. Last but not least the fourth part was referring to arguments on the level of legal and business and management skills towards academic Law School education and opportunities for *innovation adoption through knowledge transfer* (seven questions).

Legal professionals had to fill in the survey's statements based on their perceptions of the importance, the current and future state of innovation adoption within the law firm they are employed. For instance, they had to respond to how their law firms deal with the management of employees, the technological advancements and whether their law firms implement policies to manage their operations (document management, flexible working practices) in the service delivery.

The number of people attempted to complete the study's questionnaire following the survey link was 214. After a thorough review of the recorded responses, the final sample was comprised of 106 valid responses. It is essential to mention that for response bias avoidance the researcher monitored weekly the participants' answers based on a wave analysis technique so as to determine any fluctuations in their views on the statements (Creswell and Creswell,

2017). This process allows to include those that did not answer in full the survey in the total sample. However, it is essential to mention that the partial responses were minor and evident only in the last two sections of the survey. The researcher coded these responses as zero in the SPSS to eliminate any potential ‘missing’ data for the statistical analysis. Hence, the profile of the participants categorised under firm size is presented in Table 5.1 below.

Table 5. 1: Survey participants' profile

<b><i>Role and Expertise</i></b>	<b><i>Years of Working Experience</i></b>	<b><i>Size of Firm</i></b>	<b><i>Country of Employment</i></b>
Solicitor advocate in criminal law	7	Small	UK
Solicitor in criminal law	3	Small	UK
Litigator, personal injury	7	Small	UK
Family solicitor	8	Small	UK
Solicitor, notary public	26	Small	UK
Managing director	23	Small	UK
Associate solicitor in property	10	Small	UK
Trainee solicitor	2	Small	UK
Solicitor in immigration, civil and family law	11	Small	UK
Operations & HR manager	2	Small	UK
Project manager	1	Small	France
Lawyer construction law	2	Small	Switzerland
Chief executive officer	8	Small	UK
Licensed conveyancer and legal executive in property law (wills, probate)	7	Small	England
Barrister	10	Small	UK
Lawyer	30	Small	USA
Organisational development and strategy	26	Small	UK
Finance lawyer	30	Small	New Zealand
Lawyer, criminal law	5	Small	Greece
IT project manager	7	Small	UK
Commercial litigator	15	Small	UK
Director and property solicitor	15	Small	UK
Director of the legal service clinic and senior law lecturer	20	Small	UK
Software developer	3	Small	UK

Solicitor/senior defence manager	13	Small	UK
Practice manager	12	Small	UK
Defence business partner, general defence litigation	9	Small	UK
Software developer-IT case management	5	Small	UK
Business development IT	4	Small	UK
Partner-commercial	21	Small	UK
PhD researcher, law	10	Small	Russia, Italy, Netherlands
Lawyer - public law	8	Small	Greece
Law student LLM, labour law	11	Small	Greece
Solicitor - corporate, commercial and employment	5	Small	England
Lawyer - insurance law	2	Small	Greece, Belgium, Austria
PhD researcher	4	Small	UK
Lawyer in corporate, banking and finance law	4	Small	Greece
Lawyer in banking and civil lawyer	8	Small	Pakistan
Lawyer in banking and property	15	Small	Greece
Lawyer	22	Small	Greece
Senior legal executive, law enforcement	8	Small	India
Solicitor in commercial law	14	Small	England
Law student	4	Small	Greece, UK
Legal assistant	3	Small	Belarus
Lawyer in privacy	5	Small	Belgium
CEO of a law firm and principal family lawyer	5	Small	Australia
Chief legal engineer	13	Small	UK
Independent consultant	29	Small	Australia
Managing partner in employment/sports law	20	Medium	UK
Senior associate probate lawyer	13	Medium	UK
Associate solicitor	10	Medium	UK
Law student LLB (hons)	22	Medium	England



Banking solicitor	5	Medium	England
Solicitor in residential conveyancing	20	Medium	England
Solicitor, compliance and litigation	22	Medium	UK
Senior lecturer in family law	15	Medium	UK
Operations manager	1	Medium	UK
Office administrator, operations and leadership	25	Medium	USA
Trainee solicitor in conveyancing	2	Medium	UK
Principal consultant for innovation	5	Medium	UK
Partner-litigation and compliance	27	Medium	UK
Manager	5	Medium	Saudi Arabia
Lawyer and innovation officer	9	Medium	Italy
Solicitor and IT director	9	Medium	UK
Director of service innovation	3	Medium	Channel Islands
Legal manager	7	Medium	UK
Senior law lecturer- evaluative decision-making tech and innovation regulation	25	Medium	UK
Partner- employment law	13	Medium	UK
Trainee solicitor	3	Medium	UK
Trainee solicitor in commercial property	2	Medium	UK
Corporate legal consultant	4	Medium	Netherlands
Law student	2	Medium	UK
Legal intern	2	Medium	UK
Lawyer natural resources, infrastructure	3	Large	Russia
Lead project manager - legal IT	18	Large	UK
Transaction lawyer in corporate law/ M&A	4	Large	Germany
IT director	9	Large	UK
Chief information officer	26	Large	USA
Senior transaction lawyer in corporate M&A	5	Large	Germany
Business services and innovation director	25	Large	UK

Principal consultant - data and predictive analytics	8	Large	UK
Head of technical services - technology	12	Large	UK
Compliance officer legal compliance	35	Large	UK
Rechtsanwalt- Associate corporate lawyer	3	Large	Germany
Partner - professional indemnity insurance law	28	Large	UK
Legal service improvement manager	13	Large	South Africa
Data scientist	1	Large	UK
Knowledge manager and lawyer	19	Large	Australia
Senior manager	10	Large	USA
Assistant director of finance	17	Large	UK
Associate, commercial insurance	7	Large	UK
Research and development manager	5	Large	UK
Director of IT service delivery	5	Large	UK
Legal technologist-corporate law	1	Large	UK
Legal consultant/business it	20	Large	UK
Business services and innovation director	25	Large	UK
Innovation manager	11	Large	UK
Lawyer in disclosure/discovery	36	Large	UK
Assistant director	16	Large	Switzerland
Head of legal service design and delivery	22	Large	UK
Head of innovation and legal technology	8	Large	UK
partner, real estate	18	Large	UK
Corporate lawyer	2	Large	Russia
Corporate lawyer	3	Large	Russia
Head of legal project management	5	Large	UK
Managing director in R&D	17	Large	UK

### 5.1.1. Data coding

For the means of the statistical analysis, the majority of the survey questions (see questionnaire in Appendix B) and the participants' responses were grouped and transformed into a numerical format to fit the SPSS Software, as presented in the tables and figures in the following sections. However, question one in the 'respondents' background' section was not re-coded to a new variable. This is because question one in the questionnaire refers to the profession and title of expertise of the participants, and due to the variety of jobs role recorded, it is presented in a qualitative descriptive format.

As aforementioned, the participants responded to the hypotheses following a 5-point Likert scale from strongly agree to strongly disagree. These values were coded in SPSS and are presented in the statistical analysis in the form of numbers. Particularly, the 5-point Likert scale varied from strongly agree coded as number 5, to strongly disagree coded as number 1. The number 3 indicates a neutral position of the respondent to the statement. As Allen and Seaman (2007) agreed researchers should normally include at least five response categories within a questionnaire. Participants are questioned to define their perceptions towards each statement on the survey by choosing among a number/grade of the Likert scale respectively (Göb, McCollin and Ramalhoto, 2007) for the means of comparability.

The key factor in this study is innovation adoption within the law firms and thus, the key question that this study aims to answer is whether *law firms lack innovation* (dependent variable) and the reasons and barriers behind it.

The results are grouped and presented according to the three thematic parts in which the questionnaire was organised: the respondents' profile characteristics, their views on innovation adoption towards management practices, their views on technological innovation and their attitudes towards innovation through knowledge transfer.

### 5.1.2. Common bias avoidance

As described in the methodology Chapter the author triangulated the results for data validity; thus the use of a mixed methods approach. The author protected respondent anonymity employed the 5-point Likert scale for consistency reasons, decreased item ambiguity via pilot testing, and gathered survey data about innovation adoption by using a variety of recruiting channels such as

Linked In, Hackathon workshops and Law School email lists. This is in line with best practice approaches for survey analysis (e.g. Podsakoff et al., 2003; Villena et al., 2018).

## 5.2. Cross-tabulations

This section presents the distribution of each variable in descriptive statistics for the means of providing an overview of where the participants' responses sit on the 5-point Likert scale. In particular, the mean ( $\mu$ ) and the standard deviation ( $\sigma$ /SD), the minimum and maximum of the recorded responses are calculated to depict some useful information and variations within the variables to understand the phenomenon under investigation. Commonly, a low standard deviation ( $SD > 1$ ) indicates that the data points tend to be closest to the set, while a high standard deviation ( $SD < 1$ ) indicates that the data points are spread out over a wider range of values (Dodge, 2003). For variables based on a nominal scale, chi-square tests are appropriate (Easterby-Smith, Thorpe and Jackson, 2015) to test the significance of the survey results.

It is essential to correlate the survey's variables for the means of reaching to conclusions on the innovation concept within the legal firms. For this part of the inferential statistics, the 5-point Likert scale were reorganised and recoded to two scales. This is in line with Allen and Seaman (2007) who argued that a 5-point Likert scale should be the basic measurement criterion in a questionnaire and then for the means of analysis the responses can be collapsed into condensed categories for adjacent scales. Combining Likert scales into indexes adds values and variability to the data (Joshi et al, 2015). However, it should be acknowledged that given an individual's score on the scale on the neutral grade, it is not possible to determine whether the individual is favourable or unfavourable with respect to the attitude domain (Komorita, 1963). On the other hand, grouping for this analysis is viable as taken into consideration that the statements are interrelated in the survey's sections around topics and at the same time provide independent information (Joshi et al, 2015). In this case, Gravetter and Wallnau (2012, p. 736) suggested running a single-sample *t* test to determine whether the mean optimism level is significantly different from the neutral. According to the descriptive statistics presented in Appendix B 9.2.2 and to the frequencies statistics illustrated in Chapter 5 the majority of the variables' mean is closer to 4 which represents the agree Likert scale. Except from two variables which the mean is closer to 3 Likert scale.

The  $L$  refers to the Likert scale points. Thus, based on the descriptive statistics if:

$$\sum (L1 + L2) \leq L3 \text{ and/or } \leq \sum (L4 + L5), \text{ then } \sum (L1+L2) = L3.$$

Thus,  $L1 + L2 + L3 = L0$  and  $L4 + L5 = L1$

*If the sum of participants' responses who strongly disagree ( $L1$ ) and disagree ( $L2$ ) are equal or less the sum of the participants' responses who remain neutral ( $L3$ ), then the first two categories are collapsed to the third category and forming the  $L0$  group representing the disagree responses. Additionally, if the sum of  $L1$ ,  $L2$  and  $L3$  are less than the sum of  $L4$  and  $L5$  then the first three categories fall into the  $L0$  group.*

This approach was adopted to enable the author to have bigger groups that would allow for meaningful testing; many categories in a small sample create inefficiencies (i.e. many cells would have a count of less than five, making any test unreliable). More specifically, the 'disagree' scale encompasses points 'strongly disagree, disagree and neutral' and, the 'agree' scale includes the 'agree and strongly agree' responses. It is evident from the descriptive statistics presented in the section above, that the majority of the participants' responses ranged between the 'agree' and the 'neural' point. As the 'disagree' group tends to be significantly lower in numbers than the 'agree' group, the researcher added the 'neutral' option in the former set to form two groups for the cross-tabulations and the ordinal regression model in line with previous published regression studies (Crane et al., 2016; Jeong and Lee, 2016; Nikitas, 2018).

Thus, for  $L1$ ,  $L2$  and  $L3 = 0$  (disagree Likert scale) and for  $L4$  and  $L5 = 1$  (agree Likert scale).

### 5.3. Profile of the survey respondents

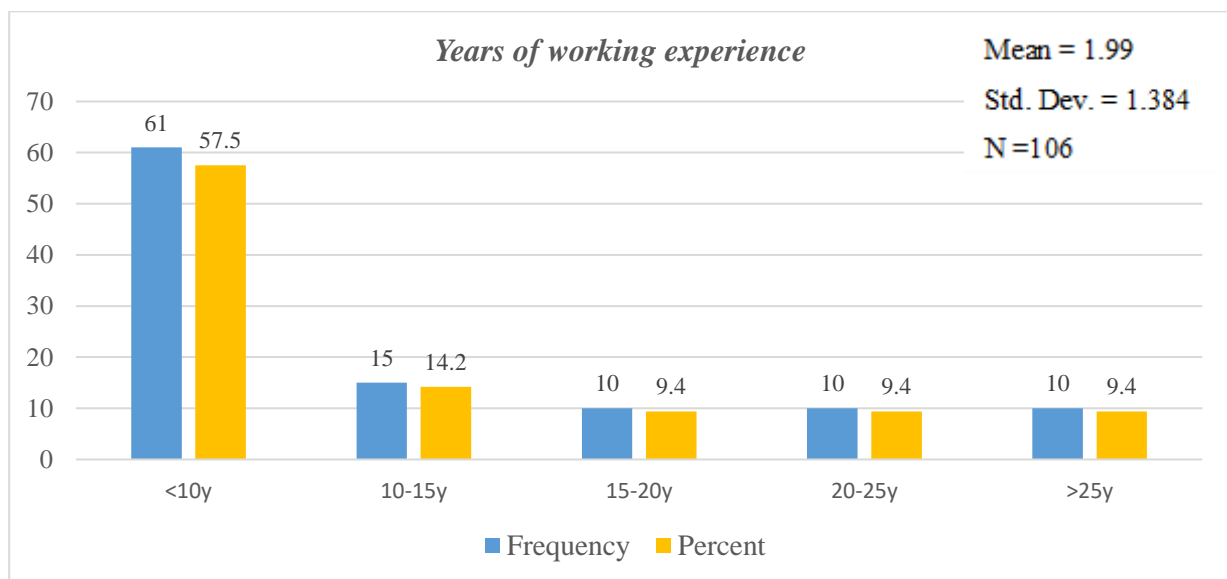
The profile of the respondents is depicted based on the years of their working experience in a legal firm and the size of the firm. These two factors play a key role in the hypotheses testing, as according to the qualitative findings, there is a gap among the views of the new generation versus the old generation lawyers on innovation adoption. Additionally, it is worth comparing the views in relation to the profession of each legal professional, as hierarchy and power culture is of significance within the legal firms. As evident in the profile of the respondents in Table 5.1, the participants' role ranges from partners, chief information technologists to legal trainees, where

there are also differences in their legal activities. In terms of the size of the firm, the qualitative data analysis presented a lack of funding and support in SMEs in comparison to large law firms where investment in training and technological advancements occurs in a wider scale. Hence, the views of the participants can shed light on the challenges and drivers on innovation adoption. At first glance, the country of the employment does not considerably affect the overall data, and it seems that the legal professionals share the same views on innovation adoption regardless of the country they are located.

### 5.3.1. Years of working experience

Firstly, the number of years was grouped into five categories, as presented in Figure 5.1 below. The first category includes legal professionals who have worked for less than 10 years in the legal sector. This is the most frequent entry accounting for 57.5 percent of the sample with 61 people having worked for less than 10 years in total. The second category ranged from more than 10 years but less than 15 years of employment. As illustrated in Figure 5.1, this is the second largest group where 15 out of 106 respondents fit in this category by 14.2 percent. The third set of legal professionals (9.4 percent) were grouped between 15 and 20 years of working experience, while the same percentage was also evident in the last two categories. Namely, the last three categories were equally distributed by 9.4 percent of the total sample. According to the data, the participants' experience in years ranged from 1 to 36 years with a mean of 1.99 and a standard deviation (SD) of 1.384.

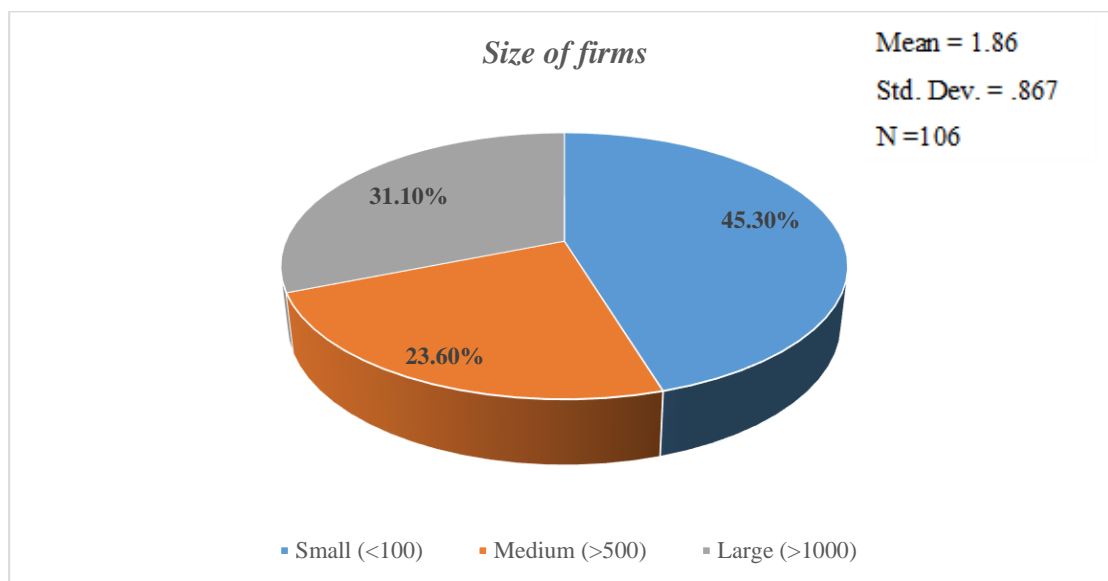
Figure 5. 1: Years of working experience



### 5.3.2. Size of firms

The pie chart (Figure 5.2) illustrates the frequencies statistics based on the firm size the participants are employed in. As presented in the pie chart below, approximately 45.3 percent of the respondents are employed in small legal firms where large legal firms are second, with around 31.1 percent of the total sample. Medium-sized legal firms accounted for 23.58 percent of the total sample.

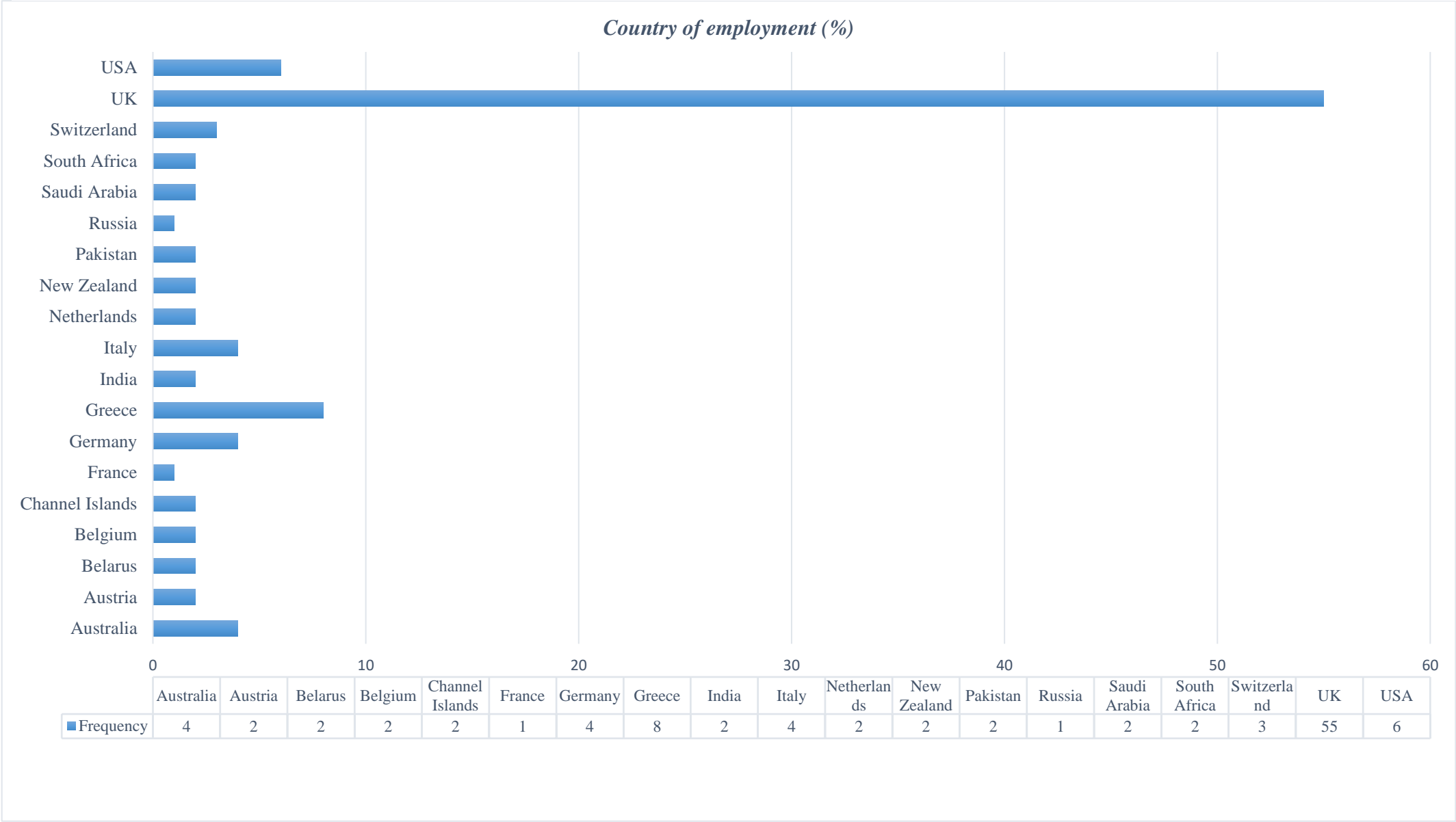
Figure 5. 2: Size of firms



### 5.3.3. Country of employment

As presented in Figure 5.3 below, legal professionals are employed in 13 different countries around the world. A few respondents provided more than one country that they were employed in the past as this is presented in section 5.1. However, the researcher chose the current country of their employment for the statistical analysis. Apart from that, these countries were summarised into four main categories, UK, USA, Europe and the rest of the world (i.e. coded from number 1 to 4 accordingly). The majority of the participants (72) are employed in the UK legal industry and represent 67.9 percent of the total sample. European countries (excluding UK) were the second most frequent answer with 16 percent of the total sample. Finally, the fewer entries were recorded in the USA region with 3.8 percent. As the focus of research was primarily the UK legal service industry, due to the researcher's host institution, being the largest market in Europe in fee revenue (Walters, 2018) with a value of £38.53bn and employing around 281,866 lawyers in the year of 2017, this can 'justify' the high percentage of the participants in the relevant country groups. .

Figure 5. 3: Country of employment





## 5.4. Descriptive statistics

This section presents the descriptive statistics from the survey data for each variable of the questionnaire grouped under the three main themes of the study, the human factor and process change, the technology transfer and the innovation via knowledge transfer. This section illustrates the average of the participants' responses per theme and the specific frequencies of each statement.

### 5.4.1. Human factor and process change

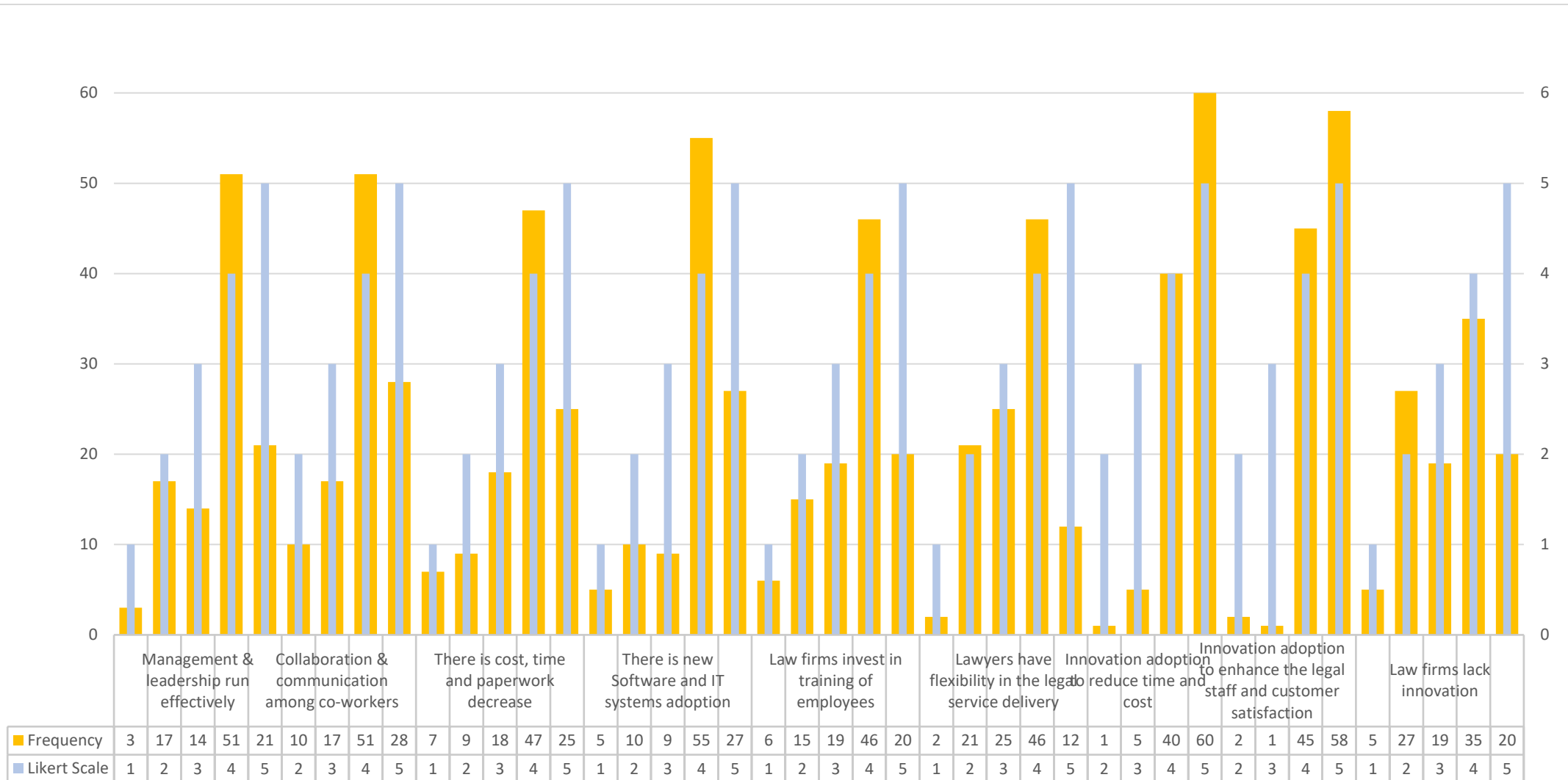
This sub-section discusses the nine variables (see Table 5.2) on *the human factor and the process change within the law firms* theme. The full sample of 106 participants answered this survey section choosing from the 5-point Likert scale that related more closely to their level of acceptance with the given statement. The average response for the majority of the variables was marginally positive with the highest positive response (mean=4.50) referring to the variable about 'the entrance of innovation for the sector's improvement and people's satisfaction'.

Table 5. 2: Human factor and process change variables

Section One	N	Minimum	Maximum	Mean	SD
1. The management & leadership of employees run effectively	106	1	5	3.66	1.059
2. There is collaboration & communication among co-workers	106	2	5	3.92	0.896
3. There is cost, time and paperwork decrease	106	1	5	3.70	1.123
4. There is new Software and IT systems adoption	106	1	5	3.84	1.061
5. Law firms invest in training of employees	106	1	5	3.56	1.122
6. There is flexibility in the legal service delivery	106	1	5	3.42	0.995
7. Innovation adoption to reduce time and cost	106	2	5	<b>4.50</b>	0.636
8. Innovation adoption to enhance the legal staff and customer satisfaction	106	2	5	<b>4.50</b>	0.621
9. Law firms lack innovation	106	1	5	<b>3.36</b>	1.189

The chart (Figure 5.4) illustrates the frequencies based on the 5-point Likert scale of the first set of variables in the questionnaire's section one.

Figure 5. 4: Human factor and process change frequencies



A higher percentage (i.e. 67.9) of the legal experts agreed or strongly agreed that ‘the leadership and management of employees (e.g. motivating, appraisal, support and communication) are running effectively in their law firm’. In comparison with a low 18.8 who disagree or strongly disagreed with that statement. A moderate percentage of 13.2 was neutral. There is a high percentage of the respondents at 74.5 percent who agree or strongly agree regarding the variable ‘there is a need for better collaboration and communication among the co-workers within their law firms’. Only 9.4 percent of the participants were positive with the current situation of team-work in their employment company.

In terms of whether their ‘law firm adopts ways to reduce time, cost and paperwork in the legal service delivery’, 67.9 percent of the respondents were satisfied with the situation while a slight percentage of 15.1 were not. However, a moderate percentage of 17 people neither agreed nor disagreed with that statement. The ability to invest on resources to minimise operational waste varies among legal firms and depends on numerous factors such as their size and their business and operations strategy.

Following the fourth variable as in Table 5.3, only a minor 14.1 percentage of the respondents argued that there is not ‘adoption of new Software and IT systems’, while 77.4 percent argued that there is, while only nine people remain neutral to this notion. Through cross-tabulations between the years of employment ( $\chi^2 = 5.735$ ,  $df=4$ ,  $p>0.05$ ) and the size of the legal firm ( $\chi^2 = 1.624$ ,  $df=2$ ,  $p>0.05$ ) (Table 5.4).

*Table 5. 3: New Software and IT systems adoption \* Years of working experience*

<i>There is new Software and IT systems adoption * Years of working experience</i>							
		Years of work					Total
		<10y	10-15y	15-20y	20-25y	>25y	
New Software and IT systems	1	4	0	0	0	1	5
	2	7	0	1	0	2	10
	3	6	0	1	2	0	9
	4	31	8	6	6	4	55
	5	13	7	2	2	3	27
Total		61	15	10	10	10	106

Table 5. 4: New Software and IT systems adoption \* Size of firm

There is new Software and IT systems adoption * Size of firm					
		Firm size			Total
		Small	Medium	Large	
New Software and IT systems	1	3	2	0	5
	2	5	2	3	10
	3	5	2	2	9
	4	22	16	17	55
	5	13	3	11	27
Total		48	25	33	106

According to the section's frequencies graph (Figure 5.4), the responses on whether 'legal firms invest in training their employees to adopt new technologies and new processes' are highly varied. The most common answer by 43.4 percent was on agree (with 18.9 percent on strongly agree) while the second-highest response by 17.9 percent was the neutral of neither agree nor disagree. Only 19.9 percent of the respondents disagree or strongly disagreed with the fact that 'there is an investment in training of employees' regarding innovation.

Overall, 54.5 percent of the lawyers were responded as being flexible enough on how they are delivering legal services to their customers. Contrary to 45.3 percent of them arguing that there is not flexibility in the legal service delivery. The latter tend to be newer generation lawyers having 10 years or less experience into the legal sector. The association of the number of years of employment and the argument of lawyers' flexibility on the legal service delivery (Table 5.5) below is statistically significant ( $\chi^2 = 10.029$ ,  $df = 4$ ,  $p < 0.05$ ). However, the numbers seem to not deviate meaningfully from each other.

Table 5. 5: Flexibility in the legal service delivery \* Years of working experience

Flexibility in the legal service delivery * Years of working experience							
		Years of working experience					Total
		<10y	10-15y	15-20y	20-25y	>25y	
Flexibility in the legal service delivery	0	31	7	4	0	6	48
	1	30	8	6	10	4	58
Total		61	15	10	10	10	106

In terms of the variables 'Innovation adoption to reduce time and cost' and 'Innovation adoption to enhance legal staff and customer satisfaction', the Figure 5.4 illustrates that the majority of

legal professionals strongly agree or agree with the fact that innovation adoption is vital for both these factors for legal firms' performance improvement. Almost all of them (94.4 percent) agreed that innovation could significantly decrease the time and the cost of legal services and also (97.2 percent) can enhance both the legal staff and the clients' satisfaction.

Overall, according to Figure 5.4 the majority of the participating legal experts (51.9 percent) were positive towards the fact that 'law firms lack innovation', while 30.2 percent of them disagreed with that. Nearly 18 percent were neutral to this statement.

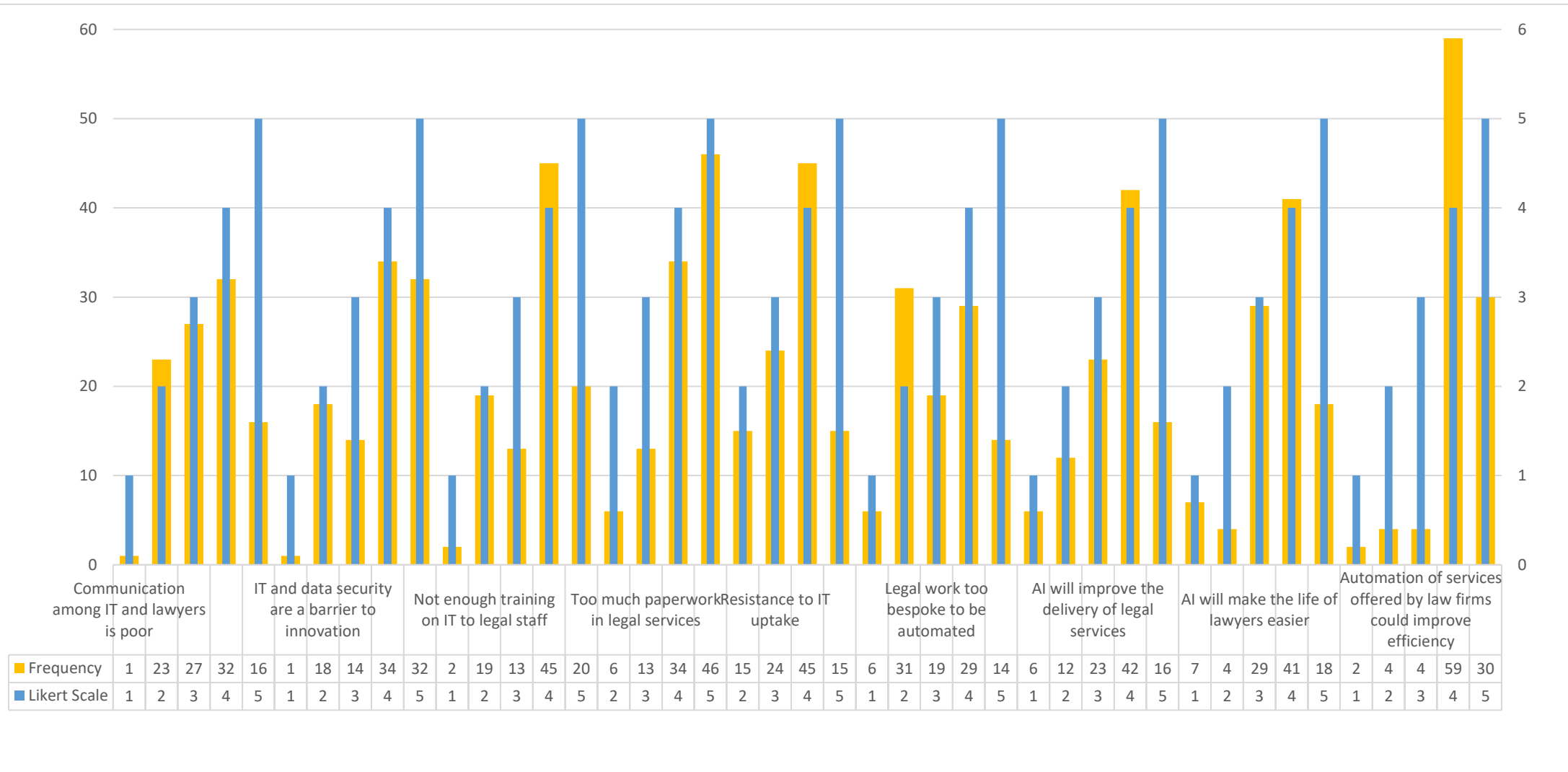
#### 5.4.2. Technology transfer

This sub-section synthesises the participants' responses to *the technology transfer* theme. The total participants account for 99 of the total sample. According to Table 5.6 below, the average response for the majority of the variables was significantly positive to the need of technological innovation within the legal sector with the highest response (mean=4.21) referring to the variable that the legal firms' operations are document-heavy.

Table 5. 6: Technology transfer variables

Section two	N	Minimum	Maximum	Mean	SD
Communication among IT and lawyers is poor	99	1	5	3.39	1.048
IT and data security are barriers to innovation	99	1	5	3.79	1.118
Not enough training on IT to law staff	99	1	5	3.63	1.075
Too much paperwork	99	2	5	<b>4.21</b>	0.895
Resistance to IT uptake	99	2	5	3.61	0.924
Legal work too bespoke to be automated	99	1	5	3.14	1.187
AI will improve the legal service delivery	99	1	5	3.51	1.091
AI will make lawyers' life easier	99	1	5	3.60	1.059
Automation of services offered by law firms could improve efficiency	99	1	5	4.12	0.824

Figure 5. 5: Technology transfer frequencies



On whether communication among technical experts and legal professionals is running effectively, the respondents answered negatively. In particular, 45.3 percent of them agree or strongly agree that there is poor communication between these groups while a trivial 22.6 percent opposed to it. Nonetheless, there was a moderate percentage of 25.5 participants who responded neutrally to this relationship.

The majority of the participants (62.3 percent) believe that technology and data security can be a hurdle to innovation implementation within the legal sector. However, there are others (39.2 percent) who believe that these factors are not a threat to innovation adoption, and other issues might affecting it.

*Table 5. 7: Not enough training on IT to law staff \* Size of firm*

<b><i>Not enough training on IT to law staff * Size of firm</i></b>					
		Size of firm			Total
		Small	Medium	Large	
Not enough training on IT to law staff	0	9	7	18	34
	1	35	17	13	65
Total		44	24	31	99

According to Table 5.7, a 5.7 percent of legal professionals believe that there is not adequate training on new technological tools and systems such as document management and fee monitoring schemes available to them. In association with the size of the firm, it can be indicated that SMEs are mostly those who do not invest in training their employees on new technological systems, comparing to the largest law firms ( $\chi^2 = 11.785$ ,  $df = 2$ ,  $p < 0.05$ ).

The majority of the legal experts (75.5 percent) answered affirmative to the fact that legal services are too hard-document intensive whereas a minor percentage of 5.7 lawyers disagreed with that. There is ‘resistance to technology uptake’ by people working in the legal sector that was supported from 42.5 percent of the respondents and 14.2 percent who strongly agreed with it. However, a marginally 14.2 percent disagreed that legal personnel are hesitant to technology adoption.

Table 5. 8: Legal work too bespoke to be automated \* Size of firm

<b>Legal work too bespoke to be automated * Size of firm</b>					
		Size of firm			Total
		Small	Medium	Large	
Legal work too bespoke to be automated	0	22	11	23	56
	1	22	13	8	43
Total		44	24	31	99

Legal experts (34.9 percent) believe that legal work is too customised to the clients' needs to be automated in comparison to other professional services such as management consulting. However, 40.6 percent of them agree with that statement. Still there is a 19.9 percent of legal experts who remained neutral on this. There is a statistically significant relationship between the hypothesis that legal work is too bespoke to be automated with the size of the legal firm ( $\chi^2=5.818$ ,  $df=2$ ,  $p<0.05$ ). It can be argued that lawyers employed in large law firms believe that automation and technological advancements can be easily implemented, contrary to others working in SMEs. However, there is still a 17.9 percent of them employed in small legal firms that are still neutral on whether automation can improve the legal service delivery, due to the complicated processes and the high customers' needs.

Table 5. 9: AI will make the life of lawyers easier \* Size of firm

<b>AI will make the life of lawyers easier * Size of firm</b>					
		Size of firm			Total
		Small	Medium	Large	
AI will make lawyers' life easier	0	22	11	7	40
	1	22	13	24	59
Total		44	24	31	99

The majority of the respondents strongly supported that AI and automation could both improve the service provision but also the working life of the legal professionals. There is a pattern with the respondents employed in small legal firms who do not feel confident whether AI and technology entrance could significantly improve the working life of a legal professional in comparison the to the group of lawyers recruited in large law firms ( $\chi^2=6.066$ ,  $df=2$ ,  $p<0.05$ ).



### 5.4.3. Innovation via knowledge transfer

This sub-section presents the frequencies and descriptive analyses of the seven variables reflecting the survey theme *innovation via knowledge transfer in the legal sector*. Ninety-five valid responses were referring to this theme; all of them using a 5-point Likert scale. The results of this section are diverse and indicate significant differences in the way respondents interpret the importance of education, training and innovation promotion partnerships. Two of the seven statements tested, specifically those referring to how Law School education and legal firms' training support business and technology skill-enhancing were not evaluated positively by the respondents; in fact, their mean value for acceptance were both negative (mean=2.33; 2.86 respectively).

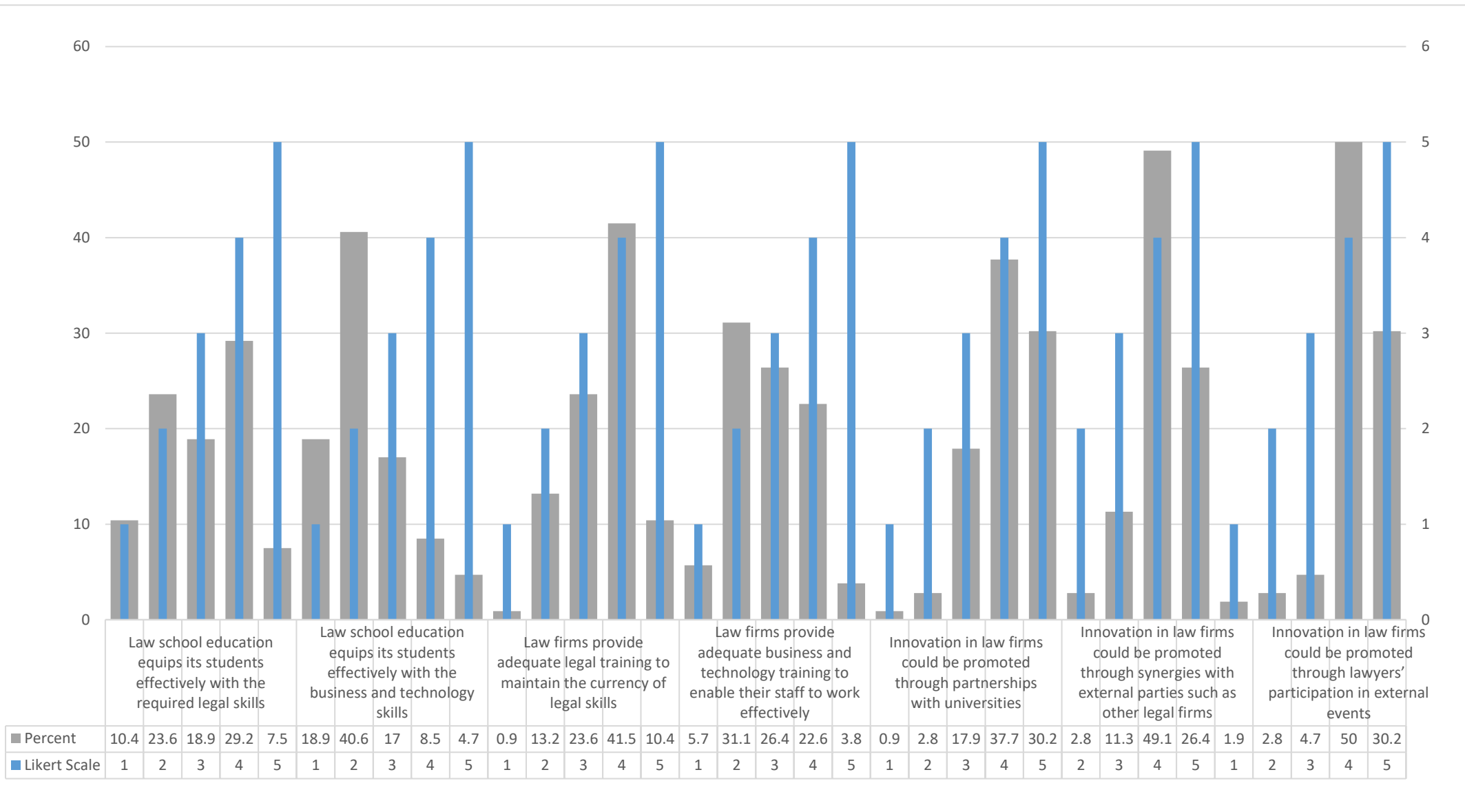
The statement referring to the potential of the Law School education to equip their students with the required legal skills when entering the legal sector had a mean response equal to 3.00 meaning that the sample was on average neutral. In reality, there were two almost equally populated groups expressing agreement and disagreement with the statement (thus the biggest SD=1.185 for this section's results). The similarly-minded statement regarding the capacity of legal firms to provide adequate legal training to maintain the prevalence of the legal employees' legal skills was evaluated slightly more positive (mean=3.53 and a low SD=0.921) but still closer to neutral. Although there is a moderate number of respondents (36.7 percent) who agree that law graduates have adequate legal skills when they enter the legal sector, the average response (mean=3.00) tend to be partially neutral while those that disagree accounted for a 37.9 percent.

On the contrary, the statements on the promotion of innovation adoption through knowledge transfer activities were significantly towards the agree Likert scale with mean values exceeding 4.00 and low SD (see Table 5.10 below). This indicates that legal professionals recognise that current university education and legal firms' internal training practices need improvement. Activities and synergies reflecting and affecting innovation adoption, on the other hand, are highly valued and should be actively promoted.

Table 5. 10: Innovation via knowledge transfer variables

Section three	N	Minimum	Maximum	Mean	SD
Law School education equips its students effectively with the required legal skills	95	1	5	3.00	1.185
Law School education equips its students effectively with the business and technology skills	95	1	5	<b>2.33</b>	1.076
Law firms provide adequate legal training to maintain the currency of legal skills	95	1	5	3.53	0.921
Law firms provide adequate business and technology training to enable their staff to work effectively	95	1	5	2.86	1.006
Innovation in law firms could be promoted through partnerships with universities	95	1	5	4.04	0.874
Innovation in law firms could be promoted through synergies with external parties such as other legal firms	95	2	5	4.11	0.736
Innovation in law firms could be promoted through lawyers' participation in external events	95	1	5	<b>4.16</b>	0.829

Figure 5. 6: Innovation via knowledge transfer frequencies



In total, 59.5 percent of the respondents disagreed with the notion that Law Schools provide adequate business and technology skills to law students essential for their future working career in a legal firm.

*Table 5. 11: Law School education equips its students effectively with the business and technology skills \* Working experience*

<b><i>Law School education equips its students effectively with the business and technology skills * Working experience</i></b>				
		Working experience		Total
		<10y	>10y	
Law School education equips its students effectively with business and technology skills	0	43	38	81
	1	13	1	14
Total		56	39	95

There is a statistically significant relationship between years of working experience and the perception of whether Law School education equips their students effectively with business and technology skills. Although both generations of lawyers regardless of the years of their working experience in the sector primarily argue that the Law School education does not equip their graduate students adequately with the business and technology skills required for the legal firms' environment, the more experienced legal professionals are significantly more likely to disagree with that statement ( $\chi^2=7.802$ ,  $df=1$ ,  $p<0.05$ ). This may be due to the fact that when this older generation of lawyers was academically nurtured technology was not as widespread as it is today. Contrary to this, there is no statistically significant difference when associating the working experience of the legal personnel to the perception about education and training on the legal skills' development.

Taking into consideration what the above Tables reveal, it can be stated that legal professionals agree that they have some support on maintaining the currency of their legal skills, but there is no training on developing business and management skills to thrive in today's demanding and multidisciplinary working environment.

There is a statistically significant relationship between the size of the legal firm and the perception that innovation in law firms could be promoted effectively through partnerships with universities. Although the respondents employed in SMEs and those employed by large law firms on average agree that innovation in law firms could be promoted through partnerships with

universities, those coming from large law firms are significantly more likely to disagree with the tested statement ( $\chi^2 = 6.303$ ,  $df = 1$ ,  $p < 0.01$ ).

Table 5. 12: Innovation in law firms could be promoted through partnerships with universities \* Size of Firm

<b>Innovation in law firms could be promoted through partnerships with universities * Size of Firm</b>				
		Size of Firm		Total
		SMEs	Large	
Innovation in law firms could be promoted through partnerships with universities	0	21	2	23
	1	46	26	72
Total		67	28	95

All in all, the majority of legal professionals irrespective of size of the firm reacted positively to the statements suggesting that innovation could be promoted through various means of social activities such as external events, partnerships with universities and synergies with other legal firms. There are no statistically significant differences between the groups working in SMEs and large law firms in relation to the rest innovation adoption statements.

### 5.5. Investigation of the ‘law firms lack innovation’ factor

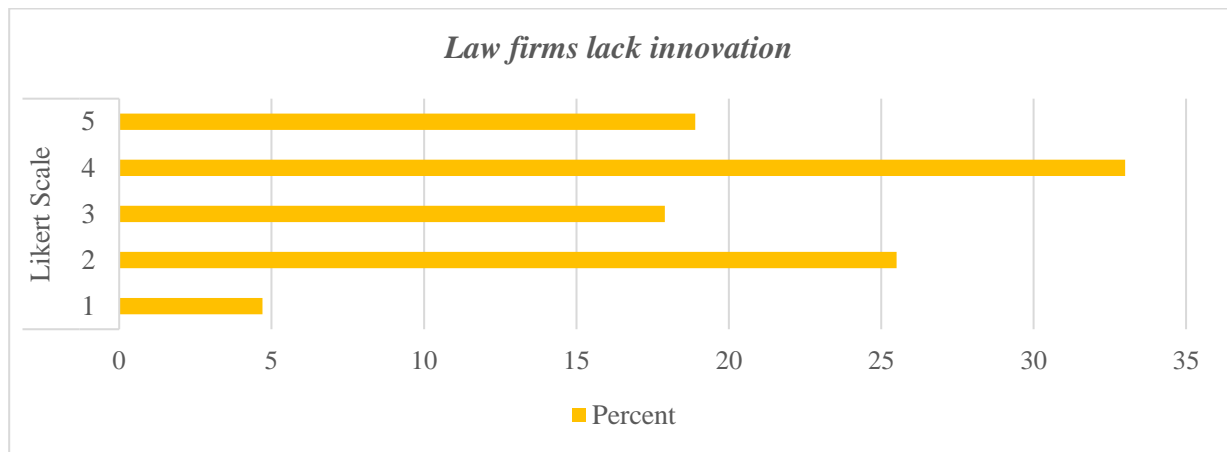
The section 5.5 presents the cross-tabulations of the dependent variable ‘*law firms lack innovation*’ with each of the independent variables following the structure of the questionnaire of the four sections respectively [i.e. i) the background of employees, ii) the human factor and process change, iii) innovation via technology transfer and iv) innovation via knowledge transfer]. For this part of the inferential statistics, again the 5-point Likert scale was recoded into two scales. Thus, for  $L1$ ,  $L2$  and  $L3 = 0$  referring to *disagree* and for  $L4$  and  $L5 = 1$  referring to *agree*.

### ***Respondents’ views on the ‘lack of innovation in law firms’***

As developing a thorough understanding of innovation adoption is the most critical determinant in answering the specific research questions of this project, this part of the analysis will describe its causal relationships with all the other parameters reflecting and affecting the survey items.

Any missing answers/data in the sample would decrease the statistical analysis value. However, the complete sample of 106, thoroughly answered this question; thus, there was no failure in the collected data that would prevent this analysis.

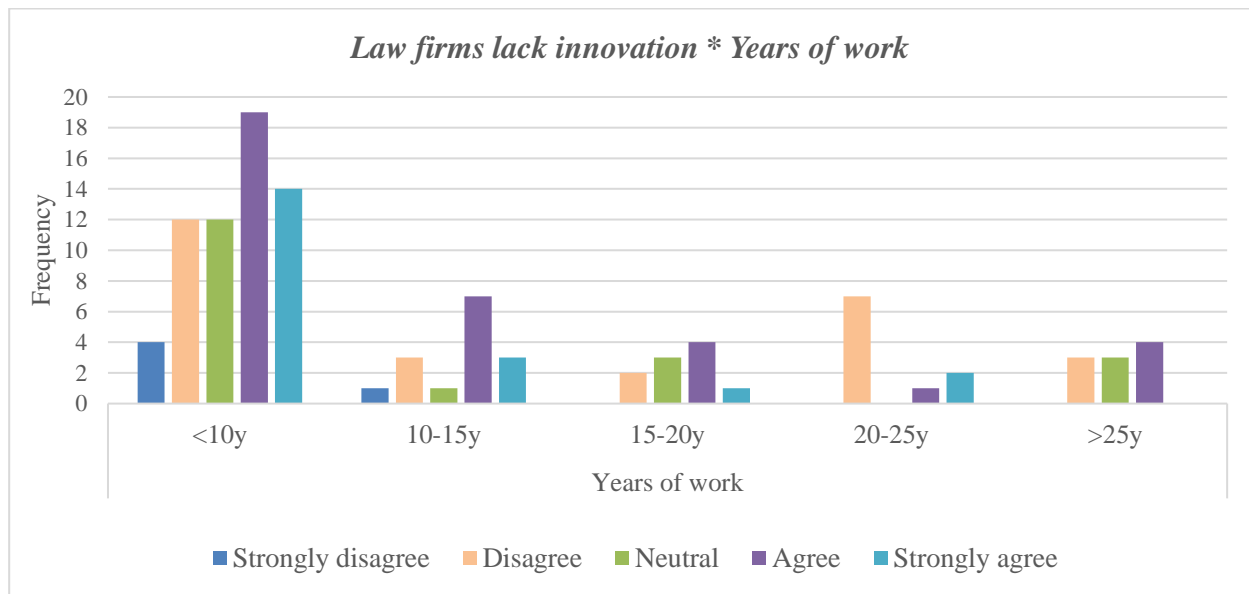
Figure 5. 7: Law firms lack innovation frequencies



For the variable ‘law firms lack innovation’ legal professionals’ responses are marginally positive with a mean of 3.36 to the fact that legal firms lack innovation on the whole (Figure 5.7). However, there is a moderate variation in the responses with a SD around 1.189. More specifically, 51.9 percent of the legal experts agreed or strongly agreed with the statement while 30.2 percent of them disagreed or strongly disagreed and a 17.9 percent were neutral. It is essential to compare these percentages with the years of working experience and the size of firms of these legal professionals.

The following sub-section illustrates the impact that the years of working experience of employees and the size of their firm has on their views on the lack of innovation. According to Figure 5.8, the legal professionals with 15 years or less working experience in the sector stated that the sector lacks innovation towards to their more experienced colleagues (i.e. more than 15 years of working experience). A substantial 56.5 percent of the newer generation lawyers believed that innovation is not well-rooted in the legal sector, with only 26.3 percent were contrary to this notion. In comparison, only 40 percent of lawyers with 15 years or more experience accepted the notion that law firms lack innovation; 40 percent was the percentage of those that disagreed with this statement.

Figure 5. 8: Law firms lack innovation \* Years of work



The size of the legal firm also plays an essential role in innovation implementation. Figure 5.9 illustrates that lawyers working in smaller legal firms are more likely to accept that there is a lack of innovation than those employed in larger legal firms. The difficulties in accessing innovation and the lack of support from the regulatory institutions might be the main reasons for that. These findings are statistically significant for the two merged lack of innovation categories ( $\chi^2=8.008$ ,  $df=2$ ,  $p<0.05$ ).

Figure 5. 9: Law firms lack innovation \* Size of firm

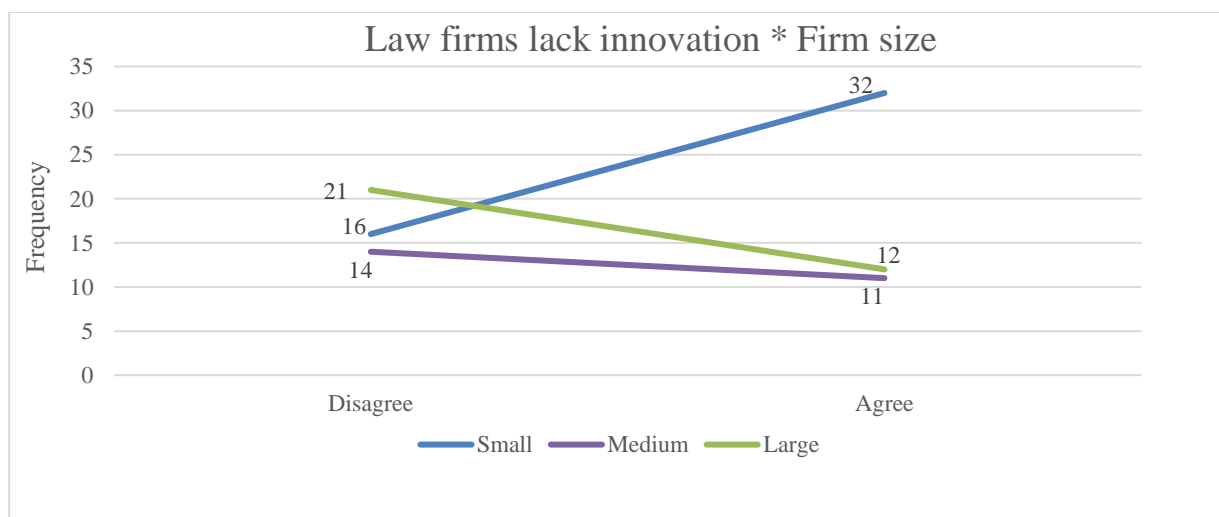
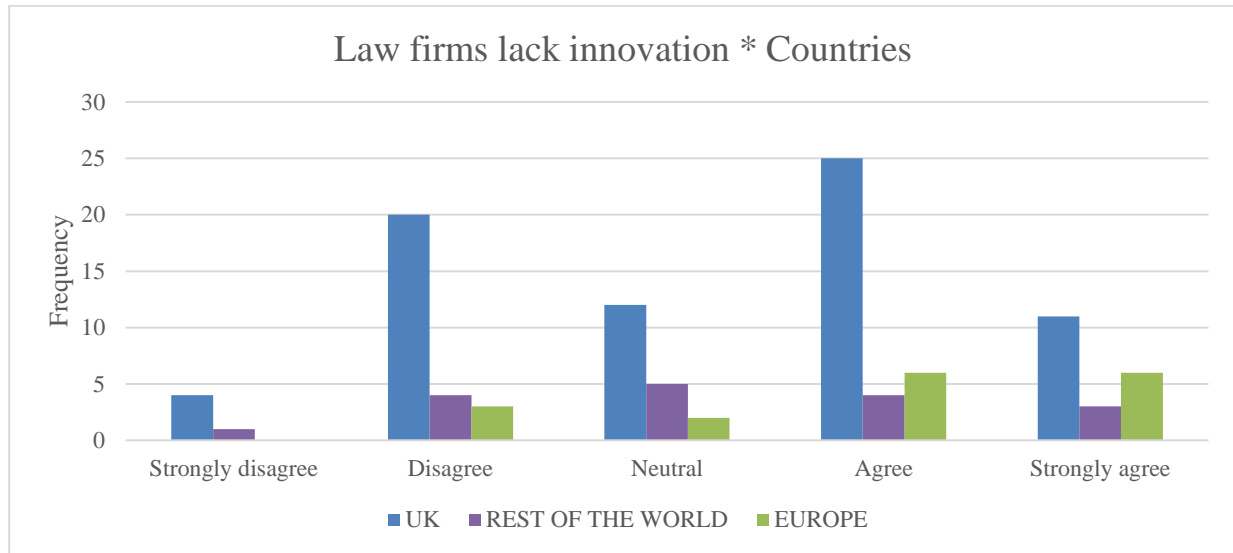


Figure 5.10 presents the views of the survey participants on innovation across their employment location. Overall, 55 of them agree or strongly agree that there is a lack of innovation in the sector in comparison to the 32 disagree or strongly disagree with the statement. Only 19 of the

participants were neutral to the notion. The law firms' location seems not to play a significant role in the decision making of the survey respondents on whether legal firms lack innovation or not. This concludes to accept the hypothesis of this study that the legal sector operates similarly across the globe ( $\chi^2=3.265$ ,  $df=2$ ,  $p>0.05$ ).

Figure 5. 10: Law firms lack innovation \* Countries



### 5.5.1. Human factor and process change

The effective management of employees (i.e. leadership, motivation and appraisal) within the legal firms is hypothesised that it has an impact on innovation implementation. From the 106 respondents, those that agree that the management of employees plays an important role also agree with the lack of innovation in the legal sector and similarly for the opponents' group. Those that believe that there is effective management and leadership of employees within their legal firm disagree with the lack of innovation statement. However, this is an indication ( $\chi^2=0.965$ ,  $df=1$ ,  $p>0.05$ ), as there are maybe other factors affecting this relationship such as the investment in resources like technology. These are further explored in Chapter 6.

There is a statistically significant relationship between the statement on the importance of collaboration and the communication among the co-workers in a legal firm and the perception of whether law firms lack innovation ( $\chi^2=7.189$ ,  $df=1$ ,  $p<0.05$ ). Thus, it can be argued that 70 percent of the respondents who feel that they are communicating and collaborating with their colleagues in their legal firm, also do not agree with the absence of innovation.



Table 5. 13: Law firms lack innovation \* Human factor & process change variables

Law firms lack innovation		<b>Management factor</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	14	37
	<b>1</b>	20	35
		<b>Need for better collaboration/communication</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	19	32
	<b>1</b>	8	47
		<b>Cost, time and paperwork decrease</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	11	40
	<b>1</b>	23	32
		<b>New Software and IT systems adoption</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	9	42
	<b>1</b>	15	40
		<b>Invest in training of employees to adopt innovation</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	14	37
	<b>1</b>	26	29
		<b>Flexibility in the service delivery</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	22	29
	<b>1</b>	26	29
		<b>Innovation to reduce time and cost</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	4	47
	<b>1</b>	2	53
		<b>Innovation to enhance the legal staff and customer satisfaction</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	1	50
	<b>1</b>	2	53

Additionally, the respondents who believe that their firms have not adopted ways to reduce cost, time and paperwork in the delivery of legal services, they are more likely to acknowledge that there is lack of innovation ( $\chi^2= 4.980$ ,  $df=1$ ,  $p<0.05$ ). Therefore, it can be argued that innovation can reflect and be affected by cost, time and paperwork optimisation activities. On the contrary, there is no statistically significant relationship between the level of innovation adoption and the entrance of new Software and legal technological systems within a law firm ( $\chi^2=1.400$ ,  $df=1$ ,  $p>0.05$ ). That may imply that law firms have to invest more on training and motivating their

employees to adopt those new technological tools and Software for successful innovation implementation.

From the findings, referring to the cross-tabulations regarding the variables ‘law firms have to invest in training of employees to adopt innovation’ and ‘law firms lack innovation’ is apparent that 56 percent of the legal respondents whose firms have invested in training their employees for adopting innovation (e.g. new IT and improved processes) believe that there is no lack of innovation ( $\chi^2= 4.425$ ,  $df=1$ ,  $p<0.05$ ). Hence, the investment on IT and new Software followed by training of employees can lead to a lesser perception of the lack of innovation in the legal sector.

The notion of flexibility in legal service delivery cannot be explicitly linked to the innovation concept. Taken into consideration the statements on whether innovation notion can optimise time and cost in legal services but also enhance legal staff and customer satisfaction, they strongly agreed.

### 5.5.2. Technology transfer

Section two illustrates the cross-tabulations among the *law firms lack innovation* factor and the variables on the sub-section *innovation via technology transfer* in the survey.

Table 5. 14: Law firms lack innovation \* Technology transfer variables

Law firms lack innovation		<b>Communication among IT and lawyers is poor</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	33	17
	<b>1</b>	18	31
		<b>IT and data security are barriers to innovation</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	25	25
	<b>1</b>	8	41
		<b>Not enough training on IT to legal staff</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	27	23
	<b>1</b>	7	42
		<b>Too much paperwork</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	16	34
	<b>1</b>	3	46
		<b>Resistance to IT uptake</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	25	25
	<b>1</b>	14	35
		<b>Legal work too bespoke to be automated</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	31	19
	<b>1</b>	25	24
		<b>AI will improve the legal service delivery</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	20	30
	<b>1</b>	21	28
		<b>AI will make lawyers life easier</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	18	32
	<b>1</b>	22	27
		<b>Automation of services offered by law firms could improve efficiency</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	2	48
	<b>1</b>	8	41

The 64.7 percent of the legal professionals who disagreed with the statement that ‘there is poor communication among the lawyers and the IT professionals’, also consider that there is innovation in their firm. There is a statistically significant relationship between these two factors ( $\chi^2= 8.486$ ,  $df=1$ ,  $p<0.05$ ).

Identifying the relationship between the variable indicating ‘whether legal professional viewed technology and data security issues as a distinctive barrier to innovation adoption and their perceptions about lack of innovation within legal firms’ is also a key theme for the present study. The respondents recognising that IT and data security threats could be a barrier to innovation promotion were twice as many as those who did not recognise this as a problem. From the people believing that law firms lack innovation the vast majority (62.1 percent) also believed that ‘IT and data security hinders innovation’ while those that suggested law firms do not lack innovation were distributed in an even way between those recognising this possible negative dimension of IT and those that did not ( $\chi^2=12.628$ ,  $df =1$ ,  $p<0.05$ ).

Thus, it can be hypothesised that people who experience a lack of innovation in the legal sector are very likely to assign some of this to IT dysfunctions and problems and cybersecurity threats. Further descriptive analysis tests focusing on the significance of the IT and data security factor as a barrier to innovation reveal through cross-tabulations that legal professionals employed in SMEs and new generation legal professionals (i.e. people having working experience for less than 10 years in the legal sector) are more likely to recognise that IT and data security issues as potential barriers for innovation. These two relationships were both of statistical significance ( $\chi^2=2.841$ ,  $df =1$ ,  $p<0.1$ ;  $\chi^2=3.518$ ,  $df =1$ ,  $p<0.1$ ).

For the ‘not enough training on IT to legal staff’ variable, 35.3 percent of the legal respondents who disagreed that there is enough training on IT tools and systems (e.g. document management, fee monitoring) offered to them by their legal firm, also believe that there is lack of innovation ( $\chi^2= 17.310$ ,  $df=1$ ,  $p<0.05$ ). Hence, investment in IT and new Software training can lead to lesser perception of the lack of innovation in the legal sector. Similarly, 42.5 percent of the legal respondents who believe that there is too much paperwork in the legal operations, also believe that there is lack of innovation ( $\chi^2= 10.686$ ,  $df=1$ ,  $p<0.05$ ). Therefore, it can be argued that legal firms by adopting ways to reduce paperwork in legal service delivery can drive innovation implementation.

Taken the cross-tabulations between the variables referring to technology uptake into consideration, the majority of the legal respondents (41.6 percent) believe that there is resistance on the adoption of new technological tools that it is strongly related to the lack of innovation notion into the legal sector ( $\chi^2= 4.760$ ,  $df=1$ ,  $p<0.05$ ).

Similarly, according to Table 5.14, the legal professionals' responses were closer to the fact that the entrance of AI can improve the lawyers' working life and result to innovation. However, this is an indication, as the legal service delivery and the professional working life are influenced by various factors.

All in all, a high percentage of the legal professionals were significantly positive to the fact that the adoption and training on new technological tools, the entrance of AI and the automation of a variety of legal transactions could improve the working conditions of the lawyers and the service delivery. Nonetheless, this is an indication of the findings, as legal firms' overall improvement is influenced by various parameters. However, there is a statistically significant relationship that automation of legal services offered by law firms could improve efficiency and lead to innovation ( $\chi^2= 4.141$ ,  $df=1$ ,  $p<0.05$ ).

### 5.5.3. Innovation via knowledge transfer

This section is a synthesis of the cross-tabulations among the ‘*law firms lack innovation*’ variable and the factors concerning the *innovation through knowledge transfer* sub-section in the survey. Table 5.15 summarises the perceptions of legal professionals on the effectiveness of the Law Schools’ education to the law students. The majority of the study’s participants responded negatively to the statements that Law School education equips its students effectively with the required legal, business and technology skills for their future legal careers. They also agreed with the fact that this can have an impact on innovation adoption in the legal sector.

Table 5. 15: *Law firms lack innovation* \* *Law School education*

Law firms lack innovation		Law School education equips its students effectively with the required legal skills	
		0	1
	0	28	19
	1	28	20
		Law School education equips its students effectively with the required legal, business and technology skills	
		0	1
	0	42	5
	1	39	9

Contrary to the group of variables on the education factor in Table 5.16 below, the legal professionals by 60 percent agreed that there is training from their legal firms to maintain their legal skills and that it is related to innovation ( $\chi^2=5.790$ ,  $df=1$ ,  $p<0.05$ ). However, they supported that there is not adequate training from their legal firms to develop their business and technology skills, and this might be the reason for the lack of innovation perception (Table 5.16).

Table 5. 16: *Law firms lack innovation* \* *Legal staff skills*

Law firms lack innovation		Law firms provide adequate legal training to maintain the currency of legal skills	
		0	1
	0	14	33
	1	26	22
		Law firms provide adequate business and technology training to enable their staff to work effectively	
		0	1
	0	31	16
	1	36	12

To conclude, Table 5.17 below on the promotion of the innovation notion depicts that almost all the legal experts' respondents view partnerships with universities, social events and cooperation with other legal firms as a way that can considerably boost innovation, as they indicate that the legal sector lacks innovation.

Table 5. 17: Law firms lack innovation \* Innovation promotion

Law firms lack innovation		<b>Innovation in law firms could be promoted through partnerships with universities</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	12	35
	<b>1</b>	11	37
		<b>Innovation in law firms could be promoted through synergies with external parties such as other legal firms</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	8	39
	<b>1</b>	7	41
		<b>Innovation in law firms could be promoted through lawyers' participation in external events</b>	
		<b>0</b>	<b>1</b>
	<b>0</b>	6	41
	<b>1</b>	4	44

## 5.6. Reliability testing

It is essential to conduct a reliability test using Cronbach's alpha ( $\alpha$ ) values to measure internal and external variables' reliability. The correlation coefficient value varies between 0 and is closer to 1; meaning that there is better consistency within the calculated values (Bryman and Cramer, 2011). Besides, Bryman and Cramer (2011) argued that if the value of alpha is above 0.8 or substantially above 0.7, then the number of dimensions have consistency and internal reliability. Nonetheless, if the alpha is lower than 0.6, this might indicate a low consistency within the specific variables.

Table 5. 18: Reliability testing

Factors	Variables	Measurement Likert scale	Cronbach's $\alpha$
Human factor: exploring innovation	<ul style="list-style-type: none"> <li>➤ The leadership and management of employees are running effectively in your law firm.</li> <li>➤ Your law firm invests in training its employees to adopt innovation.</li> <li>➤ Lawyers have flexibility in the legal service delivery.</li> <li>➤ Need for better collaboration and communication among employees.</li> <li>➤ Your law firms adopt ways to decrease cost, time and paperwork.</li> <li>➤ New Software and IT systems are adopted by your legal firm.</li> <li>➤ Innovation to reduce time and cost in the legal services.</li> <li>➤ Innovation to enhance the legal staff and customer satisfaction.</li> </ul>	1–5	$\alpha=.471$
Barriers to innovation through new technology adoption	<ul style="list-style-type: none"> <li>➤ Law firms lack innovation.</li> <li>➤ Communication among IT and lawyers is poor.</li> <li>➤ IT and data security threats are barriers to innovation.</li> <li>➤ Not enough training on new IT to law staff.</li> <li>➤ Too much paperwork.</li> <li>➤ Resistance to IT uptake.</li> <li>➤ Legal work is too bespoke to be automated.</li> </ul>	1–5	$\alpha=.641$
Innovation through technology transfer	<ul style="list-style-type: none"> <li>➤ AI will improve the legal service delivery.</li> <li>➤ AI will make lawyers' working life easier.</li> <li>➤ Automation of services offered by law firms could improve efficiency.</li> </ul>	1–5	$\alpha=.706$



Innovation through knowledge transfer	<ul style="list-style-type: none"> <li>➤ Innovation in law firms could be promoted through partnerships with universities.</li> <li>➤ Innovation in law firms could be promoted through synergies with external parties such as other legal firms.</li> <li>➤ Innovation in law firms could be promoted through lawyers' participation in external events.</li> </ul>	1–5	$\alpha=.772$
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### 5.7. Multivariate analysis: Ordinal regression analysis

The above sections in Chapter 5 illustrate the average tendency on responses from the survey participants for each variable of the questionnaire and also, benchmark each of them with the notion of the lack of innovation within the legal sector. In this section, multivariate analysis is developed to test the strength of the relationships between the dependent variable (lack of innovation) and a series of explanatory independent variables.

Quantitative models define quantitative and causal relationships between the variables and are superior from descriptive statistics approaches (Bertrand and Fransoo, 2002). This regression model is thus the necessary next step in the present statistical analysis because it has the ability to explain how variable relate to each other not in isolation but combined together, how strong each relationship is, how much of the variation in the dependent variable is explained by the model and even explain how a minor change in a particular type of input, effect on the output.

More specifically, the regression model provided herein was constructed to explore and examine the relationship between the lack of innovation in the legal sector factor and the independent variables concerning the human factor, technology adoption and the knowledge transfer. Additionally, the ordinal regression model includes other important parameters, such as the working experience of the legal professionals and the size of the firm to predict future trends and values. Various models were tested, using a combination of independent variables, but only the best fit, a model referring to statistically significant results, is presented. The model fitting statistics, the accuracy of the classification results, and the validity of the model assumption, including the test of parallel lines significance, were fundamentally assessed for selecting the best groups of variables in the model (Chen and John Jr., 2004). The country of employment was not included at the final stage of the model, as there was no evidence of a statistically significant relationship with the selected dependent variables. Also, the test of normality (i.e. Kolmogorov-Smirnov test) is not a prerequisite in the ordinal regression models (Lumley et al., 2002).

Two dependent variable categories were used for the model because of the small size of the strongly disagree and disagree groups (Nikitas, 2018); thus the binary model presented in Table 5.21. The first variable category refers to 51 respondents that strongly disagreed, disagreed or were neutral to the lack of innovation in law firms while the second refers to 55 respondents strongly agreeing or agreeing with that notion.

### 5.7.1. Correlations analysis

The Pearson correlations analysis, presented in Table 5.19 below, constructed to determine the relationships between each of the independent variables and the dependent variable. The more variables are combined, the stronger the Pearson correlation (Cooper and Schindler, 2014). Here the variables selected are the ones included in the multilinear ordinal regression analysis that are producing statistically significant results. Hence, the correlation matrix (Table 5.19) depicts that the nine dependent variables and independent variables have, in most cases, a defining relationship.

The closest  $r$  is to 0, the weaker the relationship between the variables is. If  $r$  is positive, it means that as one variable gets larger, the other gets larger. An  $r$  of .5 means 25 percent of the variation is related ( $.5 \text{ squared} = .25$ ). The variable ‘not enough training on IT systems to law staff’ ( $r = 0.418, r^2=0.175$ ), ‘IT and data security threats are barriers to innovation’ ( $r = 0.357, r^2=0.127$ ) and ‘too much paperwork in legal operations’ ( $r = 0.329, r^2=0.108$ ) have a positive and moderate relationship with the ‘law firms lack innovation’ acceptance. The variable ‘there is a need for better collaboration and communication among the co-workers in law firms’ ( $r = 0.260, r^2=0.068$ ) has a small positive ‘law firms lack innovation’ acceptance strength while the ‘size of firms’ variable effect is small and negative ( $r = -0.209, r^2=0.044$ ). Finally, ‘innovation in law firms could be promoted through partnerships with universities’ and ‘years of working experience’ have very minor positive and minor effects (almost equal to zero) on ‘law firms lack innovation’ acceptance strength with ( $r = 0.072, r^2=0.005$ ) and ( $r = -0.052, r^2=0.003$ ).

Table 5. 19: Correlations analysis

		Need for better collaboration & communication among co-workers in law firms	Invest in employees' training	Law firms lack innovation	IT and data security threats are barriers to innovation	Not enough training available on IT systems to law staff	Too much paperwork in legal operations	Innovation in law firms could be promoted through partnerships with universities	Working experience	Size of firms
Need for better collaboration & communication among co-workers in law firms	Pearson Correlation	-								
Invest in employees' training	Pearson Correlation	-.142	-							
Law firms lack innovation	Pearson Correlation	.260**	-.204*	-						
IT and data security threats are barriers to innovation	Pearson Correlation	.200*	.089	.357**	-					
Not enough training available on IT systems to law staff	Pearson Correlation	.335**	-.237*	.418**	.256*	-				
Too much paperwork in legal operations	Pearson Correlation	.203*	-.262**	.329**	.145	.242*	-			
Innovation in law firms could be promoted through partnerships with universities	Pearson Correlation	.137	.094	.072	.136	-.019	.108	-		
Working experience	Pearson Correlation	-.067	.275**	-.052	-.189	-.169	.149	.007	-	
Size of firms	Pearson Correlation	-.075	.019	-.209*	-.169	-.337**	-.113	.071	.123	-

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

### 5.7.2. Ordinal regression model

Overall, ordinal regression is adopted to measure tendencies among the variables using the SPSS Software and to generate models to express the effect of these values. Contrary to the linear regression analysis, there is no continuous relationship among the predictor variables and the outcome (Lee and Peters, 2016). For the means of applying linear regression, the data should comply with two main factors: firstly, there is a linear relationship between the variables and the outcome and secondly there is not a multi-collinearity between one or more predictor variables. Thus, this approach due the complexity of the factors and relationships involved was ruled out.

Ordinal regression was employed since it is an appropriate generic model for the empirical analysis of any ordered, categorical dependent variable (i.e. lack of innovation) and suitable for analysing primary data, never before exploited, without the need for hypothesis mapping (Nikitas, 2018).

The regression model presented in Table 5.21 below consists of measures and values essential for the interpretation of the survey instrument. The eight variables chosen for the regression model are depicted in Table 5.20 where their values are indicated as *disagree*=0 and *agree*=1. This is in line with Murad et al. (2003) that collapsing categories in small sample group with sparse cell counts to improve asymptotic approximations used for testing hypotheses. Murad et al. (2003) run a test with grouping and they concluded that the point estimates remain almost unchanged whereas the condense interval becomes wider and the *p* value tends to increase. With small frequencies in certain categories, it was tempting to collapse these categories with adjacent ones, as is often done in chi-squared contingency table analysis.

Table 5. 20: Variables in the Ordinal regression model

Variables in the Ordinal regression model	Likert scale	Number	Marginal percentage
Law firms lack innovation	0	47	49.5%
	1	48	50.5%
Need for better collaboration and communication among the co-workers in law firms	0	22	23.2%
	1	73	76.8%
Invest in training of employees	0	35	36.8%
	1	60	63.2%
IT and data security threats are barriers to innovation	0	30	31.6%
	1	65	68.4%
Not enough training available on IT systems to law staff	0	31	32.6%
	1	64	67.4%
Too much paperwork in the legal operations	0	17	17.9%
	1	78	82.1%
Innovation in law firms could be promoted through partnerships with universities	0	23	24.2%
	1	72	75.8%
Working experience	<10y	56	58.9%
	>10y	39	41.1%
Size of firms	SMEs	67	70.5%
	Large	28	29.5%
Valid		95	100.0%
Missing		11	
Total		106	

Table 5. 21: Ordinal regression model

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	Law firms lack innovation = 0 <sup>7</sup>	3.866	1.696	5.200	1	<b>.023</b>	.543	7.189
Location	Need for better collaboration and communication among the co-workers in law firms	1.051	.656	2.563	1	.109	-.236	2.338
	Invest in training of employees	-0.691	.602	1.318	1	.251	-1.871	.489
	IT and data security threats are barriers to innovation	1.678	.610	7.562	1	<b>.006</b>	.482	2.874
	Not enough training on IT systems to law staff	1.319	.605	4.754	1	<b>.029</b>	.133	2.505
	Too much paperwork in legal operations	1.502	.771	3.789	1	<b>.052</b>	-.010	3.014
	Innovation in law firms could be promoted through partnerships with universities	-.209	.637	.108	1	.743	-1.457	1.040
	Working experience	.476	.591	.650	1	.420	-.682	1.634
	Size of firms	-.301	.600	.251	1	.616	-1.477	.875
N=106, Model chi-square = 49.486; p<0.01, -2log likelihood = 103.214, Nagelkerke Pseudo R <sup>2</sup> = 0.389								

<sup>7</sup> For the ordinal regression model the 0 represents the participants' answers of strongly disagree, disagree and neutral.

For the ordinal regression model the 1 represents the participants' answers of strongly agree and agree.

Threshold parameter is the base category tested for the set of chosen independent variables. These intervals express the dependent variables for each of the tables. Thresholds with overlapping confidence intervals indicate that they are difficult to separate. Location parameters with negative values indicate that the presence (or larger values) of that parameter increases the likelihood of smaller values of the response.

The 'law firms lack innovation' statement tends to be significantly associated with the three of the eight explanatory variables where  $p < 0.05$  and  $p < 0.01$  (see Table 5.21). These three statistically significant explanatory variables exhibited positive regression coefficients, indicating that legal professionals who agreed with these statements were likely to agree with the notion that there is lack of innovation within legal services.

The variable 'IT and data security threats are barriers to innovation' has the higher reported estimate which means that the odds of legal experts who agree that 'IT and data security threats are barriers to innovation' to recognise that law firms lack innovation were 1.678 higher than those who opposed this statement.

The variable 'too much paperwork in legal operations' has a reported estimate of 1.502 which means that the odds of legal experts who agree that there is too much paperwork in legal operations to recognise that law firms lack innovation were 1.502 higher than those who opposed this statement. The variable on the fact that 'there is not enough training on IT systems to law staff' was statistically significant with people 1.678 higher acknowledging the fact that there is a lack of innovation in legal services.

The 'working experience' variable (i.e. the years of employment) and the 'size of firms' do not explicitly play an important role as it can be seen from the model. The reported estimates regarding working experience and the size of firms were not statistically significant. The odds of respondents acknowledging that 'there is a need for better collaboration and communication among the co-workers in a law firm to consider that 'there is lack of innovation in the law sector' was 1.051 higher than those people who believe communication is reasonable, but it seems that this factor impacts on the level of innovation in a law firm in cross-tabulations ( $\chi^2 = 7.189$ ,  $df=1$ ,  $p < 0.05$ ) but not when associated with other variables (in the model the relation is not statistically significant  $p=0.109$ ). The odds of people thinking that 'IT and data security

threats are barriers to innovation' tend to perceive that 'law firms lack innovation' were 1.678 times higher than those not perceiving that as a problem.

The 'automation could improve efficiency' variable was also tested in the model but was not included as it was interfering with the results giving a non-statistically significant  $p$  value. That may indicate that legal professionals believe that automation solely could not lead to efficiency in relation with the challenges they face. Similarly, those that disagree with the notion whether 'innovation could be promoted with law firms' external partnerships with universities', agree that there is a lack of innovation but this relationship should be further tested (the regression model indicates a non-statistically significant result).

In terms of the Goodness-of-fit model statistic, the Pearson's chi-square, ( $\chi^2 = 49.486$ ,  $df = 45$  and  $p > 0.05$ ) for the complete model indicated that the observed data were consistent with the estimated values in the fitted model. The larger the Nagelkerke figure, the better the model represents the interaction among the eight selected variables. Here the Pseudo R-Square statistic ( $R^2$ ) value of Nagelkerke (0.389) depicts that there is a good representation of the variables in the regression model analysis.

The test of parallel lines depicts the model adequacy. The null hypothesis stated that the corresponding regression coefficients were equal across all levels of the outcome variable. The alternative hypothesis stated that the corresponding regression coefficients were different across all levels of the outcome variable. The chi-square test result ( $\chi^2 = 0$ ,  $df = 0$ ,  $p < 0.01$ ) indicated that there was no significant difference for the corresponding regression coefficients across the response categories.



## 5.8. Conclusions

By analysing the responses of the survey participants, the statistical analysis provided evidence that there are differences in the way legal experts view innovation depending on their years of working experience in the legal sector. More specifically, the researcher identified that the younger generation (i.e. those having less than 10 years of working experience) were the individuals who consider that the legal sector lacks innovation when compared to the older generation lawyers (i.e. those having above 10 and 15 years of working experience). The country of employment did not play a catalytic role on the legal experts' views on innovation adoption. For instance, the legal experts employed in European, the USA and the Australian big law firms were sharing similar opinions towards the benefits of technological innovation.

On the other hand, the older generation was more sympathetic or neutral with innovation through technology transfer and associated it with 'the entrance of new Software and systems.' However, a stronger relationship was identified among the size of the legal firm where the survey participants are employed in relation to the innovation adoption notion. More specifically, the researcher found that legal professionals employed in SMEs were more likely to think that their firms lack innovation towards when compared with those working in large law firms around the world. The size of the law firm appeared to have an effect on how innovation was adopted in terms of the availability of resources and funding limitations. That is in line with the view that most legal specialists based in SMEs declare that innovation in law firms could be promoted through partnerships with universities. This knowledge exchange could be beneficial for both sides. For instance, it can provide practical knowledge to the academic side and firms' capability to combine and transform knowledge to new products and services that can increase firm revenue and drive sales growth (Collins and Smith, 2006).

## Chapter 6. Discussion

### 6.1. Introduction

This Chapter provides a synthesis of the evidence delivered by the two primary data analyses presented in Chapter 4 and 5. The rationale behind the selection of a mix-method study having both qualitative and quantitative dimensions was to investigate using multiple lenses the operational challenges and opportunities within legal firms in-depth and breadth. The rationale for the present Chapter is to bring these two complementary pieces of work together and create a single holistic narrative that will allow the author to develop recommendations for a sector that is considered the backbone of modern society broadly. This synthesis also incorporates and is supported by relevant findings from an extensive post-analysis literature review.

The legal sector has been characterised in the Thesis' previous Chapters, as a complex one with no definite operational structures and measures of efficiency. The legal firms operate under a strict regulatory framework in a very competitive environment that pushes continuously for cost reductions, more billable hours and higher profits. Most legal professionals are conservative and thus reluctant to new technology uptake, organisational change and process modernisation. Many of them experience operational inefficiencies in the communication, leadership and management aspects of their business. Innovation adoption, because of its transformative business growth potentially needs to be examined thoroughly as a new pathway for improvement. This is why this study is set to create a new layer of theoretical and empirical understanding of the opportunities and challenges reflecting and affecting legal service innovation adoption by recording and analysing the issues that legal professionals experience in their workplace that could be revealing for the overall company's business 'behaviour'.

The Discussion Chapter is organised in a way that is corresponding to and specifically addressing one-by-one the research questions of the project as presented in Chapter 1 and below:

*RQ1) What are the key operational challenges and opportunities of the legal sector today?*

*RQ2) What are the perceived barriers and opportunities that influence innovation adoption in law firms?*

*RQ3) How can law firms improve innovation adoption, so as to enhance their operational efficiency and the productivity of legal professionals?*

### 6.1.1. Forces for change

Michael E. Porter's (1979) five forces model which focuses on five specific factors helping businesses reach their competitive edge has been a starting point and an inspiration for this exploration. More specifically, as presented in the Literature Review Chapter Porter's model determined the strengths and weaknesses of a business and also whether or not a commercial organisation can be profitable when compared with other businesses in the industry. Figure 6.1 below illustrates the internal and external forces that can be drivers for change for and within law firms. More specifically, the framework presented in Figure 6.1 adapts Porter's theoretical model in a way that fits the special needs of law businesses for innovation adoption becoming a simple and quite accurate reporting mechanism that categorises some of the key results of the Thesis in internal and external forces.

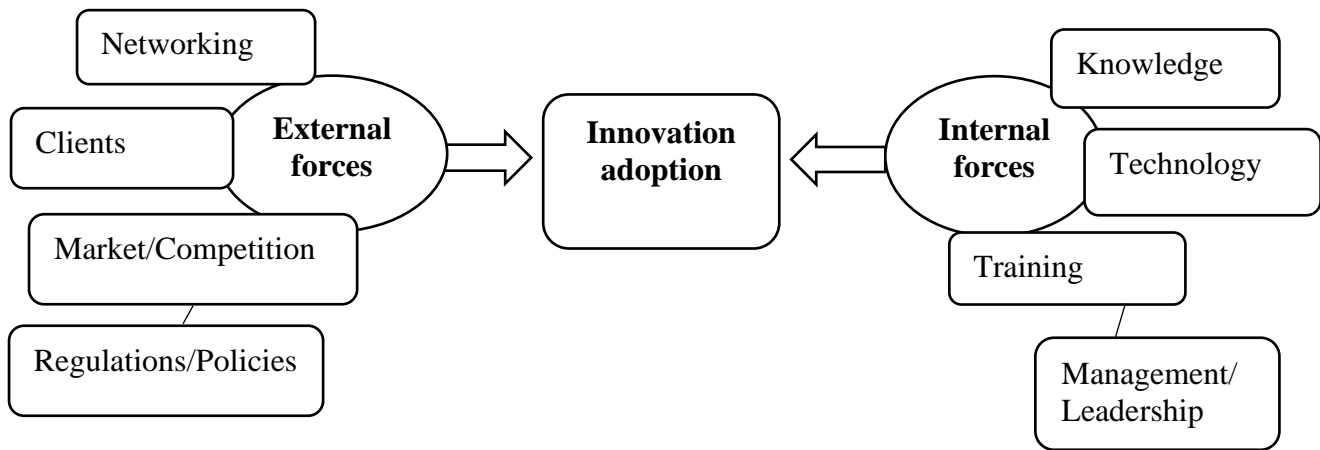
The most important factor amongst the external forces is the clients' growing expectations. Nguyen, Newby and Macaulay (2015) research on information technology in SMEs argued that clients' pressures can force change. According to the study's thematic analysis, respondents were constantly referring to their clients' increased needs and high expectations; clients have more complex requirements, demand better interaction and more rapid timelines in the delivery of the requested services. There are even those clients that due to access to online information, come more prepared in the meetings to the extent that disrupt legal services offered. All in all, clients want from their legal representatives not to simply complete their case successfully, but they expect quicker, more flexible, visible and cost-effective services.

In addition, the market pressures and the highly competitive workplace can be the driving forces imposing on law firms cost limitations and changes in their strategies. For instance, developing a cost leadership and differentiation strategy can lead to much more efficient operations and increased productivity (Yoo, Lemak and Choi, 2006). Last but not least, the government and the regulatory bodies like the SRA, are the institutions responsible for managing and controlling the business models of law firms. Every change that should be implemented in the legal industry has to be approved from these bodies making change in general and innovation adoption in particular a more difficult scenario.

The internal forces might vary depending on the size of the law firm; however, this basic model depicts the ones identified through the data collections. The investments in new or improved technology like AI and in operation management tools are the internal forces that can boost firms' performance to continue to thrive. The continuous training of employees to stay updated

with the changes in the environment but also their training on acquiring a multi-disciplinary skillset can be the leverage over their competitors.

*Figure 6. 1: Driving forces for change*



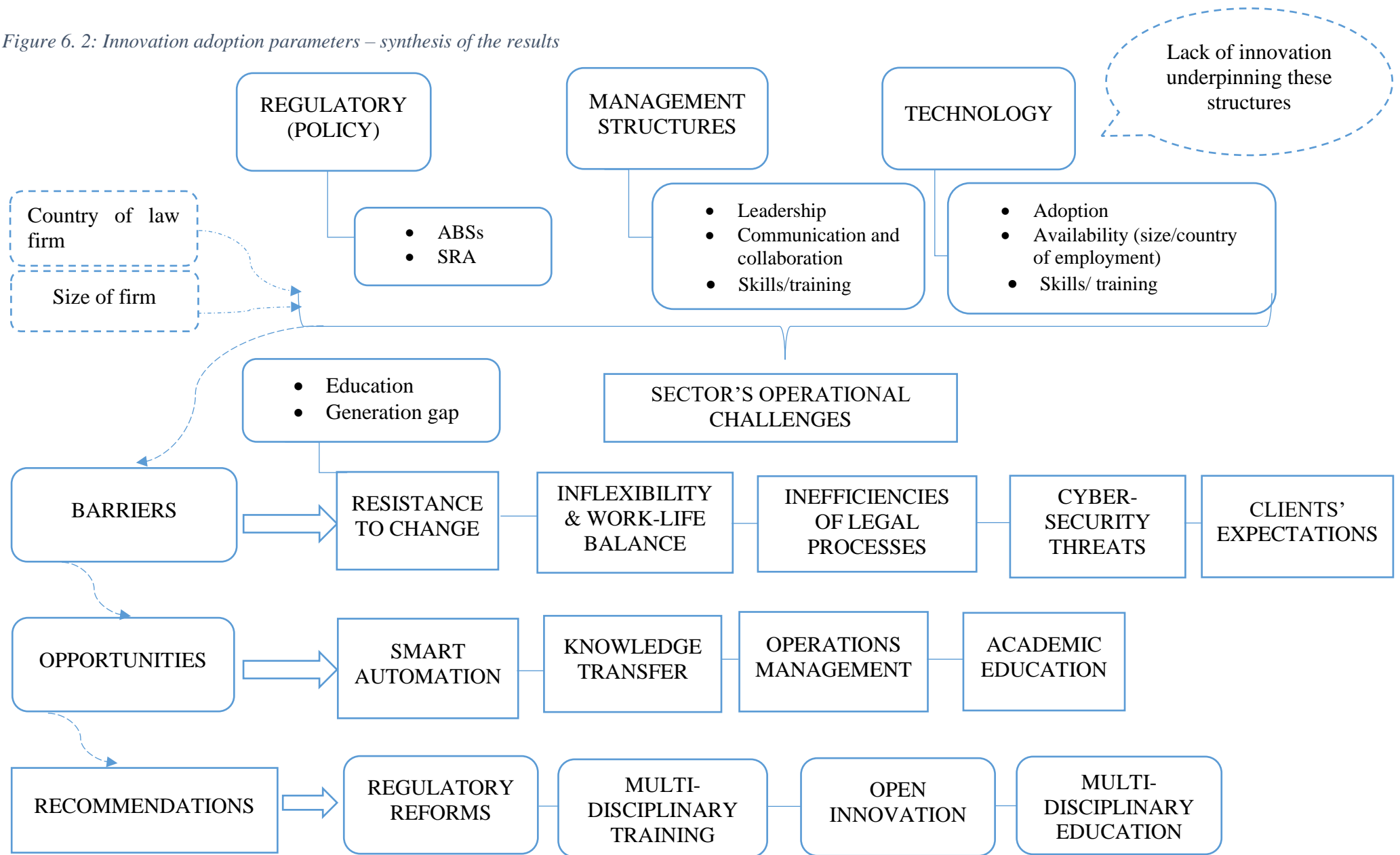
*(adapted from: Nguyen, Newby and Macaulay, 2015)*

### 6.1.2. Synthesis of the results

Figure 6.2 is an entirely new synthesis of evidence, mapping, contextualising and taxonomising in a holistic, systematic and critical way the evidence generated by the two primary data analyses through the lens of a post-analysis literature review. The key findings of the Thesis are embedded in an interpretation framework, inspired and guided by the author's theoretical narrative that blended RBV and PBV in a way that suits the unique characteristics and tendencies of the law sector and also by the initial 'forces for change model' as this was adapted by Porter's initial model. It is a thematic contextualisation map revealing in some depth the different dimensions of the insights expressed by the legal professional participating in both phases of the present study and how these are interrelated. Figure 6.2 showcases in a snapshot the legal professional views reflecting and affecting the operational challenges of their day-to-day work, the enablers and barriers of innovation adoption in law firms and its consequences for the legal industry and some of the key recommendations for policy-makers and law business providers looking to adopt innovation tailored to their particular line of work. This map represents a holistic framework identifying, categorising and taxonomising the key findings of the primary data analyses and will serve as the basis of this Chapter and the point of reference for the remaining of its sections. Each of the next sections therefore will discuss the parameters outlined in Figure 6.2 in detail.

Barriers to innovation are defined by: organisational transitions and regulatory restrictions, resistance to change and work-life balance problems, insufficient education and training provision, communication and interaction inefficiencies, fee structures, increasing client and industry expectations, the complexity and limited efficiency of legal processes and technology adoption problems including cyberthreat-phobia and lethargic engagement with modern tools. Opportunities for establishing clearer pathways to innovation relate predominantly to knowledge transfer and exchange initiatives and structures, technology adoption enhancement, improvements in Law School education, continuous interdisciplinary skill training that incorporates IT and management perspectives, improved management of human resources and more effective (or even hybrid) leadership. This thematic map could be used by legal firms as a guidance tool that will allow them first to appreciate its many dimensions, directions and expressions and then adopt more effective innovation.

Figure 6. 2: Innovation adoption parameters – synthesis of the results



### 6.1.3. Background: factors affecting innovation adoption

#### 6.1.3.1. Country of the law firm

The country of employment of the legal professionals appeared to not directly affect their opinions on innovation adoption as a whole. The participants of this study were mostly from the UK legal industry but also the USA, South Africa, Australia, Russia, and the remaining from European countries such as from Germany, Greece and Italy.

In terms of the implementation of innovations, SenGupta (2017) argued that the North American legal sector seems to act ‘conservatively’ contrary to the USA business field and the European legal sector. However, reports showed that the UK is widely regarded as a slow adopter of innovation contrary to other countries like the USA (OECD, 2013) where changes inspired by innovation are already evident.

Based on the Thesis results, the challenges reported from the majority of the respondents were similar across countries. Some of the most concerning issues reported were referring to the document policies (i.e. too much paperwork) and the time-consuming legal processes but also to the entrance of the ABS structures (Wiseman, 2015). Scholars’ research on law firms’ issues around the world (e.g. Hitt et al., 2001; Hines et al., 2008; MacDonagh, 2014) identified primarily similar challenges. This is in line with Campbell, Charlesworth and Malone (2012) research on Australian law firms presenting evidence that the structure of the legal profession in Australia is similar to the UK model, and it is being influenced by the United States (Hughes, 2001); this means that similarities between the systems are inevitable so analysing them jointly is indeed a meaningful and timely research design approach.

#### 6.1.3.2. Size of the law firm

The size of the firm (i.e. the number of employees employed as per the period of 2018 to 2019) as evident from the findings is a factor influencing innovation adoption. More specifically, the size of the law firm where the participating legal professionals are employed, based on both the qualitative and the quantitative analyses, has a direct relationship with the level of innovation being adopted by the law firm. Based on the survey’s participants profile, the higher percentage of the legal respondents (45.3 percent) were employed in small enterprises, 23.6 percent of them in medium enterprises, while the rest of them (31.1 percent) to big law firms with high annual revenues. Thus, there was a relatively balanced number of participants representing all the different sizes of legal firms; no legal firm size is particularly under-represented.

Small and medium sized firms are considered as key contributors to a country's economic growth around the world and being as a source of high employment rates when compared to large mature businesses (OECD, 2013). SMEs are defined by a number of factors and criteria, such as size, the number of employees, sales volume, worth of assets, ownership through innovation and technology (Rahman, 2001). Under the European Commission the category of micro, small and medium-sized enterprises (SMEs) are enterprises which employ fewer than 250 persons and have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million (European Commission, 2019). Additionally, small firms can act as suppliers of goods and services to larger organisations (Singh, Garg and Deshmukh, 2008). This is the case often for the legal industry where online-based law firms are supplying legal organisations with documents, advice or case management systems.

The size and type of law firm play a significant role in the investment in innovation. The lawyers who participated in this project working in smaller legal firms are more likely to accept that there is a lack of innovation than those employed in larger legal firms. The difficulties in accessing innovation in SMEs and the lack of support from the regulatory institutions might be the main reasons for that. Innovation is expensive (Chesbrough, 2007) and more so for SMEs where R&D resources and business model flexibility are more limited; Singh Garg and Deshmukh (2008) supported that SMEs often lack the required resources and the capability to innovate. Nevertheless, Duran et al. (2016) when examining family-run small law firms found that although smaller firms are argued to be less innovative, by deploying their resources in an efficient way can potentially create both innovation input and innovation output.

As a whole, the partnership model of most law firms (irrespective of their size *per se*) differs from other types of organisations, by their governance, ownership, legal liability, staffing and operations. It is argued that these firms most of the times do not receive the same level of resources as other industrial corporations (Pennings and Wezel, 2007).

Nguyen, Newby and Macaulay (2015) supported that one of the driving forces for change on technology adoption in smaller firms are clients' pressures. Specifically, they argued that the managers should have ties with five areas within the business: the structures of the firm itself, internal and external IT resources, supplier relations and customers.

Technology adoption in SMEs is running slow and the failure rates are high (Nguyen, Newby and Macaulay, 2015). Most of the times the cost of early adoption and the lack of resources to apply operations management tools and more technology in SMEs (Saad et al., 2006) are



common barriers. Villena et al. (2018) argued that bigger firms with higher numbers of employees might have better performance efficiency and overall stability than smaller firms. This is reflected to the fact that managers could be better informed about the future plans of the firm, thus feeling more secure for new innovations when lower-level employees, who are not part in the decision-making on the new adoptions, may be unaware of innovation interventions running in their firm (Villena et al., 2018). This is in line with the primary findings where those who were closer or satisfied with the management structures and the leadership role within their law firm were more likely to agree that there is no lack of innovation.

## 6.2. What are the key operational challenges of the legal sector today?

The first research question that this study's findings provide evidence for is '*what are the main operational challenges of the legal sector today*'. The term 'operational challenges' refers to the legal sector as a whole and for the means of the present study is synonymous to the key issues affecting the industry, the law firms' business model, the legal service suppliers and their external network in a broader sense. To avoid confusion 'the barriers affecting the adoption of innovation' refer primarily to the legal firm level. It is a term looking to explore specifically the law professionals' daily struggles when dealing with a client's transaction from the beginning of its instruction until its completion that could have been perhaps to a degree unless if innovation was an integral ingredient of this 'delivery of service process'. There are however very highly interrelated with the broader and 'big narrative' operational challenges that meant to capture more generic problems that run for every legal firm and the sector as a whole.

The operational challenges were investigated mainly through the qualitative phase of this study; a data driven thematic analysis of 53 semi-structured interviews with legal professionals employed in seven countries worldwide and supported by the quantitative findings. The background of the legal professionals at the time of the interviews and survey launch varied from industry experts to academic lecturers as systematically reported in the relevant analyses Chapters. Nonetheless, all of them had a significant experience in dealing with the challenges of the legal industry; this makes all the answers collected and analysed meaningful but allows the study to have a more diverse and multidimensional sample.

Even though there is literature on the challenges that professionals are facing (Stumpf, Doh and Clark, 2002) where reflect key operational problems that define the individual firms and their respective sectors as a whole, there is still a scarcity of research specifically looking into

the realm of legal services. The key parameters extracted from the data analyses that served as a thematic umbrella to the operational challenges mentioned from the legal professionals reflect issues about the regulatory framework and business models guiding legal service provision, the management of the human factor, the level of adoption (or uptake resistance) of new or improved technology. These challenges are of structural nature.

### 6.2.1. Regulatory institutions and changes

It is a common fact that law firms in most countries around the world are strictly regulated by various institutions and are running like ‘standardised business services’ (Cooper and Robson, 2006). Flood (2011) argued about the relationship that regulations have on global law firms in the UK and transnationally, concluding that the majority of law firms around the world run under similar principles. Furthermore, he presented the SRA policies on law firms; the SRA inspects the law firms regularly by conducting a risk assessment on the law firm’s operations but also to the required supplied documents and information (p.518).

The International Bar Association (IBA) guide law firms’ legislations and jurisdictions of approximately 158 countries around the world (IBA, 2016). For the law firms operating in England and Wales, the government and the SRA lead their business model and their recruitment practices. Legal professionals argue that these practices often minimize their flexibility on the way they handle a client’s transaction (Raaijmakers et al., 2014) but also restrict their ability to provide affordable services (Semple, 2013). Blind (2012) argues that stringent regulatory framework conditions may negatively influence innovation activities and business performance.

Since the deregulation of 2007 (also called Tesco Law), more and more ABS firms were created all of them offering legal services under a different management model to the conventional professional partnership archetype. ABS specifically are defined under three categories, i) “*a business which allows non-lawyers to have a higher degree of ownership or managerial interest of the business*”, ii) “*a business structure permitting passive investment in the ABS*” and iii) “*a firm offering non-legal as well as legal services practices*” (Reardon, 2016, p.309).

McMorrow (2016) stated that ABS firms offer services to a wider range of customers by incorporating better the technological developments and also downsizing the concerns associated with the traditional way of thinking and acting in conventional law firms. In

association with this, Roper et al. (2015, p.8) supported that the ABS business model has a positive effect on innovation, as ABS firms are 15 percent more likely to engage in strategic and organisational innovation.

The present research found that organisations with an ABS status offer lawyers more flexibility. They provide flexible working hours and even the option of working from home some days per week. In comparison, solicitors in traditional law firms typically have very long working hours in their offices so that they can be considered highly productive employees; the more billable hours they have and the later they leave the office, the more productive they appear to be in their managers' eyes. In these more traditional law businesses concepts such as part-time workload models and/or flexible working is still out of the question (Thornton, 2016b). The barrier that hinders flexibility is often the conventional and conservative culture of law firms that are defined by heavy workloads, high targets of 'billable hours' and long working hours (Campbell, Charlesworth and Malone, 2012).

One notable example that emerged from the British participants reflecting and affecting the law firms' operations was the decision of the UK to leave the European Union; Brexit and its aftermath were highlighted as a potentially decisive paradigm-shifting disruptor that will create new unprecedented layers of uncertainty. As legal multinational companies operate under strict regulations and laws in the UK, a change on them, such as Brexit, could have a considerable impact on their operations in various ways. The British legal professionals of this study argued that it is still unknown what law firms will have to do to comply with the new regulations. This is in line with Hellwig (2017) who argued that post-Brexit specific measures are not known, and it will be up to each European country member whether and how they will collaborate with non-EU/ UK lawyers. Thus, Brexit will have consequences not only for the law firms at the business level *per se* but also for the lawyer as an individual. British participants when discussing Brexit during the interview phase suggested that some of their colleagues had initiated the process to pursue an Irish solicitor qualification so that they will comply with EU regulations even after this happens. This is also true for large law firms that have the capacity to invest in a franchise office in an EU country in order to operate under EU regulations as well, as commented also by Hellwig (2017).

On the other hand, Brexit for the short-term at least, has created opportunities for some law firms as it has increased their profit margins. Immigration law is an area positively affected by

Brexit. People feeling uncertain of the consequences of Brexit, have proven to be according to this Thesis' anecdotal evidence more likely to seek advice from a lawyer.

All in all, the regulatory bodies and the government are the institutions responsible for the organisational transitions and the way law firms operate. In this case innovative policy reform and responsiveness can be the apparatus for navigating successfully through significant changes. When there is a need for change, it is not only the lawyers that have to be adapted to but also the overall system, and that is challenging. This is in line with Davis et al. (2019) who agreed that changes are often constrained under long and intense regulations.

### 6.2.2. Management structures

Most of the times, the management of employees by senior lawyers or partners having solely a law background may create operational problems referring to the inefficient use of human resources. Lawyers with little business management knowledge and leadership skills despite their robust understanding of law matters may not be well equipped to maximise the potential of their employees and thus, create a competitive advantage for their respective firms. Scholars have pointed out that professional service managers should implement innovation based HRM practices that can support employees' creative thinking and ideas regeneration (Fu et al., 2015).

It can be hypothesised, based on the findings of the present research, that the hybrid management model consisting of lawyers and managers with technological skills or background in operations or innovation management can motivate employees to a more innovative way of working and provide them with training essential on pursuing multi-disciplinary assets. As Joseph Schumpeter argued in 2008 "*all economic and social progress depends on new ideas*" (Croitoru, 2012).

The two important and distinctive shapes and forms of human capital management refer to communication and collaboration and leadership. Communication has a critical role for the business performance, atmosphere, relationships, process adaptation and coordination (Olkkonen et al., 2000) while collaboration, a key for innovation, should be the norm for services firms, and especially for knowledge-intensive business services firms, which rely heavily on technical or professional knowledge to solve their clients problems (Miozzo et al., 2016). On the other hand, leadership is about the ability of a leader to inspire staff to take on critical and necessary activities for the benefit of the firm or even broaden and elevate the

interest of their employees and generate awareness and acceptance of the purpose and the mission of the group (Bass, 1990).

### ***Communication and collaboration***

Miller and Lee (2001) also identified that collaboration among managers in the decision-making process allow for ideas creation. This Thesis takes it a step further by supporting that the involvement of the employees in this process and communication amongst them could create a sense of belonging, thus better financial and operational performance within a firm. This work proposes that employees should be interacting with customers and involved in the flow of work so that they can have a better view of the actions needed to be taken (Farooq, Farooq and Reynaud, 2019; Georgiadis and Pitelis, 2014). This can be of more importance for service firms like law firms, as employees' tacit knowledge and reputation are these values to attract clients. From the findings, the majority of the interviewees by 74.5 percent employed in medium to large law firms agreed that there is a need for better interprofessional collaboration and communication among them and their colleagues within their law firms.

For law firms the exchange of information and advice suggestions on clients' cases between the members handling are usually not common due to confidentiality issues. Lawyers are used to work mostly alone, protecting their client's information and feeling that in this way they provide the best service to their clients. On the one hand, the bigger the firm, the higher is its reputation and as a result, the more in numbers are the customers that the law firms have to deal with. On the other hand, employees in larger law firms value the principles of team-work, as they can minimise their workload since a problem shared, it can be easier solved. In general, this is true for Barratt (2004) who argued that collaboration and communication among people in a firm could increase resilience and reduce risk and can also be a form of time-efficiency through information sharing (Scholten and Schilder, 2015).

Nonetheless, another issue raised from the interviewed lawyers working in large law firms was that although employees are keen on communicating and collaborating, they cannot find the time or the way to embrace it. Furthermore, they have to continuously work with different teams for the decision-making on a transaction, thus not allowing them to develop long-term relationships with specific groups. Hence, communication and collaboration should be founded by continuous training on how to support the team-work environment and team-learning (Miller and Lee, 2001) for both managers and employees.

## ***Leadership***

The key for professional services to answer the highly increasing competition, to survive the turbulent legal industry's environment and to address the rapidly emerging and diversified clients' expectations could be the effective management of employees. Leaders' attitudes and beliefs can influence employees within a firm on how they approach innovation (Chen, Li and Leung, 2016); thus impacting to the firms' performance.

This is in line with scholars arguing that managers by unlocking the potential of all different levels of their employees can shift from a traditionally operating business to an innovative one (Madjar, Oldham and Pratt, 2002). Consistent with the findings of Jaiswal and Dhar (2015) transformational leaders can create a climate for innovation adoption for their employees and encourage their self-effectiveness and creativity.

Adding to this, from the data triangulation, it was indicated that lawyers who agreed with the statement that their firm does not lack innovation, also were favourable with the notion that the management of employees runs effectively within their firm. For example, they felt supportive from their superiors and in way a sense of belonging to the firm's team; thus satisfied with the level of innovation implemented. Likewise, Howell and Shamir (2005) found out that employees who had a personalised relationship with their managers, were more likely to demonstrate obedience and deference, resulting in creative and better performance. It can be concluded that personnel creativity is influenced by the inherent culture (Jaiswal and Dhar, 2015) and the management practices of a firm and by the social context around them that could be underpinned by the brand of leadership a firm has instituted.

Scholars argue about different styles of leadership that can be successful in influencing inherent innovation. For instance, entrepreneurial leadership (Freeman and Siegfried, 2015), transformational leadership (Jaiswal and Dhar, 2015) or knowledge-oriented style (Donate and de Pablo, 2015). Bagheri (2017) confirmed that business leaders should incorporate for instance an entrepreneurial leadership with other styles to promote innovation on SMEs.

Taking the above into consideration consistent with the Thesis findings, the author suggests that a hybrid management style can create new layers of leverage and competitiveness for legal firms. As also suggested by Pedersen (2016) hybrid leaders should act as interactive, situational, dynamic and continuous improving individuals rather than as 'immobile'. So the

legal firm leaders of tomorrow should not only understand law specifics but how to run a business and how to interact positively with their teams.

Each firm culture is unique, and leaders should perform accordingly to their employees' needs and the strategy of the business. Managers who pursue multi-disciplinary skills can stimulate innovation and cater to their employees' training to perform well on a variety of tasks and not only on advising a client *per se*. This can reduce document repetition, optimise employees' time and resources for legal firms.

### 6.2.3. Technology

Technology is developing fast bringing new modes of working and new challenges for those that they have to implement it. Businesses have to adapt new technologies on their services for their leverage (Wu and Chiu, 2015) since these provide an excellent opportunity for companies wishing to facilitate, improve, and even transform their business processes (Matopoulos, Vlachopoulou and Manthou, 2009). However, the legal profession is one of those disciplines that run slow in embracing and integrating technological innovations when compared to other more innovation-oriented industries like for instance the medical sector (Susskind and Susskind, 2015).

More specifically, technology, ranging from simple emails and data storage/management to teleconferencing and AI-based operations, was viewed as a potential source of problems and as a tool that despite its merits could create more distance between service providers and clients. Lawyers seem to be conservative when it comes to the adoption of a new or improved technology (Lodder and Oskamp, 2006). Cybersecurity threats were highlighted as a possible pitfall for law firms and there were some underlying concerns for people with low digital literacy; there were underpinning reasons for dismissing technological innovation. Caiazza (2016) argued that key barriers to innovation diffusion are primarily the users' capability to adopt technology and government taxes. Many legal professionals viewed technology and data security issues as a distinctive barrier to innovation adoption that did not allow them to implement ways to standardise processes or even reduce documents stored for confidentiality reasons.

At the same time technology was considered by many legal professionals as a huge enabler that modernised, simplified and made more flexible communication and interaction norms and

channels internally and externally. The entrance of technology to a range of industries is proven to provide autonomous ways of working (Thornton, 2016a), as virtual data rooms and video calls can offer faster and easier communication. Martin and Omrani (2015) based on the European Working Condition Survey argued that Internet use and ICT uptake is positively related to employees' job satisfaction and extra effort. Similarly, social media can be used for client development, networking, disseminating information, and building awareness of the firm and its practices. According to Smith, Blazovich and Smith (2015) the more with social media platforms a firm engages, which is a form of innovative communication, the higher the firm's ranking among prestigious law firms can be.

It was apparent, from both the data analyses, that there is a dichotomy between professionals that were part of today's somewhat conservative industry model and the new generation of legal employees that seem more prepared to adapt to a more technology-infused paradigm. On the one hand, the more experienced legal professionals who are established members in the current service provision paradigm and in average seem to be more reluctant to technological uptake and change as a whole. Still however there are quite a few exceptions to this rule especially from those that actively tried to engage with technology adoption efforts. On the other hand, there are less established legal professionals who are more open-minded to technological tools and they see it as a natural progression that is not intimidating or taming but necessary and beneficial. Some of the lawyers with long experience in legal practice actually 'labelled' this new generation of lawyers as tech-savvy people that might however be weaker in their law fundamentals. Nevertheless, their openness, their familiarity with technology outside the legal environment and their willingness to adopt innovative technological tools make them perhaps the group that is more likely to get on board to this type of innovation and promote it actively. If these people are persuaded that a new technology-infused approach is the only way forward they can help in safeguarding and expanding any transformation procedure.

The Thesis also suggests that technology is in most cases an apparatus for law firms that can create new layers of efficiency by minimising replication of work and by standardising procedures involving some degree of repetition. Ways of increasing awareness regarding the benefits of technology could also be critical for more and better technology adoption. Adding to this, studies connected technology adoption with the job satisfaction levels of the employees



in a firm (Morris and Venkatesh, 2000). Most of the survey participants (i.e. 64.7 percent to be precise) who argued that the communication among lawyers and IT personnel in their law firm is running effectively, were more likely to agree that there is no lack of innovation in their law firm. This finding is also supported by the qualitative findings of the Thesis.

### 6.3. What are the perceived barriers that influence innovation adoption in law firms?

It is a common belief that although innovation is being adopted fast in the workplace arenas around the world, the legal sector's response to this practice is rather slow and insufficient to this date. Susskind (2010) pointed out that *"it is often hard to tell a room full of millionaires that they might have their business model wrong"*. Most of the times legal professionals employed higher in the hierarchal model within a legal firm, find it difficult to acknowledge that law firms' culture and legal processes need a transformational change. They might see transformational change a challenge that potentially generates more risks than benefits.

#### 6.3.1. Resistance to change

It is a fact that innovation must be accepted to be adopted (Wheeler, 2008) and that the users play an essential role in this (Wu and Chiu, 2015). There is a variety of barriers that can result in a lack of innovation in businesses. For instance, the regulations, the age, the educational level (Tey and Brindal, 2012) and the experience of the adopter could be some of them. Nonetheless, there is conflicting research whether age and experience impact on innovations adoption (Long, Blok and Coninx, 2016).

By integrating the primary research phases of this project, seconded by the findings from the literature review, there are distinctive characteristics in the way lawyers based on the years of their working experience in the legal sector perceive innovation. This study concludes that there are two fundamental differences reflecting and affecting the years of working experience of the legal employees interviewed and surveyed. Firstly, the attitudes of the people who work for ten years or less in the legal industry regardless of their employment role varies from those employed for more than ten years in terms of how they approach innovation as a concept.

Newer generation lawyers or millennials are born to a more technologically driven world, get used to embracing various technological advancements in their everyday life. Thus, they feel more flexible adopting newer technologies or even they find them as a necessity in their

working routine. Furthermore, they seemed to recognise the usefulness of technology both in the processes' efficiency and towards client interaction. Newer generation lawyers tend to be more familiar with the use of technological tools available within their law firms while older generation lawyers felt overwhelmed with the fast-developing technology.

Similarly, lawyers employed for more than ten years in the legal industry find it challenging to attach to the continuously changing technologies and they were hesitant to change as a whole. For instance, although they recognised that the entrance of communication via email with the clients improved their work significantly, they still believed that document posting is a necessity for originality and confidentiality issues. They were the ones most likely to raise cybersecurity threats and the potential of technology to create unnecessary distance between the service supplier and the customer. This is an older generation of law professionals.

A generation can be defined as an *“identifiable group that shares birth years, age location, and significant life events at critical developmental stages”* (Kupperschmidt, 2000, p.66). The terms *newer* and *older* generation are also evident in the literature on other disciplines such as supply chain, human resources and political research on differences between these parties on the importance of work commitment and career development (e.g. Scholten and Schilder, 2015; Putnam, 2000, p.36; Robinson and Jackson, 2001; Valcour and Tolbert, 2003).

Taking the above into consideration, this study adopted the terms *'newer generation lawyers'* for the legal employees working for 10 years or less in the legal industry and *'older generation lawyers'* for those working for more than 10 years respectively. Often older generation lawyers can be partners or directors in legal firms and newer generation lawyers could be trainee lawyers or practising solicitors. Partners in the traditional law firm model are often those who are higher in the business hierarchy and they manage and guide teams of junior lawyers together with the equity partners (Susskind, 2008). According to the findings, the resistance to change were also connected with the people responsible for the management of employees. Faulconbridge and Muzio (2018) supported that often the leadership or partners in law firms were hesitant and prevented the emergence of an entirely coherent and systematic approach to management.

All in all, based primarily on the interviews that allowed for a more in-depth explanation and richer content but also to the survey where a question regarding the working experience length was specifically employed, it seems that many legal professionals, especially those with more

than 10 years of experience, felt overwhelmed from the rapid need of technology adoption in the sector; for them resistance to change is more natural and innovation adoption is therefore a more complicated process. Older generations, in general, tend to be less open to technology interventions, especially in the absence of a ‘helping hand’ (Sochor and Nikitas, 2016). In comparison lawyers with less than 10 years of experience such as trainee lawyers are used to a more technology-led routine that made their professional life easier and make them possibly the group of law professionals that is more likely to be early innovation adopters. So innovative approaches, especially those that are technology-centric, could first target them and they can then propagate the message of ‘change’ to their colleagues.

Furthermore, from the quantitative findings, it can be argued that the attitudes of the older generation lawyers to the indicators of innovation adoption within law firms are somewhat different from the attitudes of younger generation lawyers. This was again evident from the qualitative study where legal experts responded differently in the questions about whether for instance more technology adoption will assist with efficient legal services.

However, there were a few older generation lawyers who have worked for more than 20 years in the legal industry who strongly appreciated the usage of technology and automation speeding legal processes and client-lawyer interaction and prompting their co-workers towards this. Those group of lawyers held senior positions related to innovation within legal firms; they were information technology and innovation directors but also head partners and managing directors. It can be assumed that senior law professionals working for more than 20 years in the sector holding a managerial role were more prone to embracing technological advancements rather than their colleagues solely working on legal services. So interaction and engagement with multidisciplinary initiatives referring to management, operations and ICT tend to help older generation lawyers to see in different respect the pathway to changing to a more technology-oriented legal service delivery paradigm.

The generation gap is evident to other parts of the working routine. Scholars (e.g. Singh and Gupta, 2015) considered that different generations react differently to professional and team commitment. Again, newer generation lawyers seemed more accustomed and willing to work as team-players; interaction provides them with social motivation and gatherings with their co-workers allow them to feel the sense of belonging in the firm. This was for them an enabler for opting to fulfil the legal firm’s goals. Whereas older generation lawyers felt that working

individually is required when dealing with confidential documents of clients' cases and that the legal profession is not ideal when it comes to exchanging legal advice/ information with your co-workers.

Von Nordenflycht (2010; 2015) in his taxonomy for professional services categorised the legal sector and the healthcare industry as two having similar characteristics. Thus, the challenges that healthcare professionals are facing can be related to the legal ones in some degree at least. For instance, Walsh, Kittler and Mahal (2018, p.1129) identified three themes of healthcare personnel being hesitant to adopt innovation. These were, their attitude to maintain their professionalism towards new changes, their traditionalism and also protecting boundaries through professionalism, autonomy and control.

Resistance to change and ability to innovate should not be linked however only to technology. In many cases it is a lot more than that as it has been described in the two Analyses Chapters and as it will be covered later in this Discussion Chapter. Human resource management and education are both significant innovation facilitators that could help to address resistance of unwillingness to change by innovating. This research highlighted, that there were concerns about the educational training that grooms lawyers today; it was deemed tech-savvy but not fitting the actual real-world demands of the legal profession practice. Linking Law School education with practice and vice versa may be a way forward; knowledge transfer synergies between the two is another form of innovation that is particularly suitable for the legal sector. A disproportional 75 percent of those who disagreed with the survey statement referring to whether law firms invest in training of employees to adopt an innovation (e.g. new and/or improved IT, newly designed processes), were lawyers with less than 10 years of experience in the sector.

It can be assumed that the new generation lawyers consider that the training required to proceed with innovation adoption is not adequate for the standards of the today's workplace, and it is a structural and institutional piece of evidence that in practice, law firms do not address resistance to change through the use of educational tools. This is line with Ruggeri et al. (2018) research on technology adoption of self-driving vehicles in the UK; they concluded that older participants were more likely to be late adopters of the technology than younger participants.

### 6.3.2. Inflexibility and work-life balance

Time-poverty is becoming a new emerging and threatening norm in the legal service delivery world. Only a fraction of the participants of this dual study seemed to enjoy a work-life balance that is optimum and not ultimately dictated by increasing demand for more personal time sacrifices in the name of competition and firm survival. The majority of the research participants wished for a more flexible way of working and better work-life balance. Reaching an optimal *work-life balance* was important for legal professionals but many of them felt they could not achieve it; work for many interfered and restrained non-professional life. Heavy workloads, strict deadlines and long working hours combined with minimal training make some legal professionals to see themselves as factory workers.

According to the majority of the respondents, no matter the size of the law firm they were working with, the legal profession is associated with a frustrating lack of personal life. As the competition increases, managers focus on maximising profits forgetting about their employees' well-being. Many interviewees acknowledged that they could not pro-actively plan their daily schedule. Pre-scheduled appointments are not necessarily the norm nowadays. Lawyers need to have long and high billable hours in their timetable, to be viewed as productive employees. Thornton (2016a) agreed by questioning how employees in corporate law firms can achieve a *good* life when the legal industry has been transformed in such a way, aiming only for higher profits. This is one main reason that pushes legal professionals to decide a career change, moving from legal firms to being in-house lawyers, becoming self-employed or entering academia. Most of the participants interviewed argued that they had to cope with long working hours and have to be prepared to be very flexible in their day-to-day programme. A phone call with a client should be prioritised at any point of the day even very late on the day and the client has to receive an excellent level of service. An increasing body of emails have to be answered promptly and they should include more information than ever before because the client expectations have grown a lot.

Flexible hours systems and family-friendly practices to promote the work-life balance enable employees to have a more balanced lifestyle, even if these practices are currently enjoyed by only small proportions of the labour force (White et al., 2003). However these are not universally appreciated, by all the participants of this study; few of them see these approaches as a possible cause of disruption for the legal industry. More specifically, the narrative 'that a need for flexible working, tele-working or part-time working' is a tool for legal professionals

that could perhaps allow them to be more productive, efficient but also happy is not embraced by some older generation lawyers. They argued that there is a danger in this by commenting that flexible working systems cannot be effective neither innovative as the primary role of the lawyer is to work closely with the clients and be accessible at any time in the office for them.

Flexibility and satisfactory work-life balance however affects the capacity of the legal professionals to invest their limited time and their scarce resources in processes, training, educational activities that would allow them to innovate more and do so in more effective and systematic ways. Time availability has been found to be reflecting and affecting with the ability of individual employees and groups to pursue innovations that support efforts to achieve short- and long-term organisational goals (Duane Ireland, Kuratko and Morris, 2006). Offering flexible working makes good business sense when innovation is indeed an entrepreneurial goal for the organisation helping to attract and retain the best staff; that is why some of Britain's most innovative and successful SMEs are adopting it (James, 2014). So innovation cannot always survive and thrive in a context defined by extremely high intensity, working inflexibility and traditional full-time office-based regimes.

All in all, work-life balance is an ongoing issue that legal managers have to deal with, and they should propose innovative alternative solutions like flexible working hours, additional appraisal schemes or working from home to help their employees manage their time effectively. Training sessions on stress, routine management and socialising (Mezrani, 2014) could also be a suitable innovative practice.

### 6.3.3. Cybersecurity threats

The fear that increased liability of Software might reduce innovation rates is not unfounded, but the strength of this effect is still somewhat unknown (Bauer and Van Eaton, 2009) especially for industries, less tech-centric like the legal one. Identifying the relationship between the perception of legal professionals referring to IT problems' and data security threats' potential capacity to act as distinctive barriers to innovation adoption and their perceptions about lack of innovation within legal firms is one of the topics negotiated in the present study. From the survey results, those participating lawyers who recognised that IT and data security threats could be barriers to innovation promotion were in significantly twice in number to those who did not interpret them as a problem. Also, the majority of the participants by 62.1 percent that did not consider that law firms lack innovation, similarly believed that IT and data security risks hinder innovation.

Thus, it can be argued that people who experience a lack of innovation in the legal sector are very likely to assign some of this to IT dysfunctions and problems and cybersecurity threats. Further descriptive analysis tests focusing on the significance of the IT and data security factor as barriers to innovation revealed that legal professionals employed in SMEs and new generation legal professionals (i.e. people having experience less than 10 years in the legal sector) are more likely to recognise that IT and data security issues could be barriers for innovation. These two relationships were both statistically significant. Based on that result it can be argued that, even for the segments more open to technology uptake, the security of the clients' data is prioritised over the entrance of new technological tools that can lead to innovation.

Businesses need to invest in building cybersecurity skills across all levels of the workforce and leadership (Adams and Makramalla, 2015) so law firms need to make a serious investment to enable their employees to feel comfortable against cyber threats. Increasing the law sector's preparedness to deal with cyberattacks via voluntary and mandatory regulations (Hiller and Russell, 2013) and more importantly via custom tailored digital training for lawyers and the hiring and utilisation of special IT and project management personnel could alleviate technophobia and reduce reluctance of technology adoption even for the older generation of lawyers. However, this transition process could be slow and resource-intensive; changes as such do not happen overnight.

#### 6.3.4. Clients' expectations

Among the challenges that lawyers argued they are facing are the constantly changing clients' needs and expectations. More and more clients, often millennials, who are more comfortable with technology, are searching beforehand for online solutions and advice on their issues. Cutler (2015) argued that this often happens due to a lack of trust towards the service professional, as they are already informed in their own way from various sources on the Internet.

Several stakeholders have suggested that consumers' limited knowledge and awareness of legal services are a key barrier to optimal service delivery (LSB, 2016). This is evident from the interviewees who argued that their clients regularly do not understand how the legal sector works and the procedures lawyers have to follow, resulting in pressures and misunderstandings among them. The Federation of Small Businesses' (FSB) report stated that the knowledge gap

between legal service suppliers and customers could be a significant factor that the legal sector has to overcome (Parlour, 2016).

Furthermore, from the Thesis qualitative analysis of the clients' expectations theme a key barrier that was recognised as being of problematic nature is the interaction and communication among customers and lawyers. Cunningham (2013) stated that 70 percent of clients of big law firms questioned about their experiences with legal services agreed that poor communication and information provision regarding their case were their biggest complains.

Many of the legal professionals claimed that the entrance of new technological advancements has resulted in a lack of interaction between them and their clients. In particular, lawyers employed for more than 10 years in the legal industry had a similar view supporting that client-lawyer communication worked in the past successfully and face-to-face interaction cannot be effectively replaced taken into account the confidentiality issues and the client's desire for in-person meetings. Lawyers are supporters of face-to-face interaction with the client, as it can help to solve problems faster and to avoid misunderstandings. Telephone is in many occasions the preferred communication medium with clients. For now, lawyers seem to be reluctant in adopting innovative means of communicating, like Skype and similar platforms, as they argue most of the times these do not work effectively. Nevertheless, recent research in service providers in general argues that videoconferencing technologies have qualities (i.e. affordances) that may lead to changes in the way meetings are organised and accomplished and could lead to less business-related travel and leaner processes (Julsrud, Hjorthol and Denstadli, 2012). Lawyers in a hierarchal role in big law firms confirmed that although some firms have heavily invested in technology communication, many of them prefer dealing with long M&A transactions via telephone.

On the other hand, Hazelwood (2014) found that most lawyers prefer electronic communication, however there is still debates on how these comply with the ethical standards committees and law students are not prone to the security risks online communication can expose them.

Considering the above, the Thesis argues that face-to-face meetings should always complement less personalised and more digital-oriented communication channels; these face-to-face meetings can be reduced, to save time and valuable resources spent unnecessarily in some cases, but never completely substituted because of their valuable trust-building and physical interaction value.



### 6.3.5. Inefficiencies of legal processes

Due to the increasing competition in the professional service sector from the entrances of new businesses offering easier and more cost-effective services to the customer, organisations have to continuously opt to achieve both efficiency and innovation (Sanders Jones and Linderman, 2014).

For the legal sector, the paperwork and the high complexity are considered the most typical inefficiencies of the legal processes. Legal processes refer to the transactions that lawyers are following from the beginning of a client's instructed case until its completion. Based on the theory of process management and performance, Becker (2004) characterised processes as routines. Routines are *"the series of tasks and interactions that professionals undergo repeatedly"* (Sanders Jones and Linderman, 2014, p.337) to complete a customer enquiry.

Paperwork has been a major driver of inefficiency in business processes since it creates a new layer of bureaucracy (Omid and Khoshtinat, 2016). On the one hand, Civelek et al. (2017) agreed that the complexity and multi-layered nature of some processes in professional services like in financial and banking industry often prevent companies of embracing new electronic documentation exchange; sticking to paperwork is 'simpler'. The corporate law experts participating in this study thought paperwork as a key problem that disrupts innovation uptake. The majority of them mostly employed in large legal firms, confirmed that the industry is paperwork-dominated and self-reported frustration about legal services being too hard-document intensive. Many of the respondents believed that the automation of long transactions like M&A should be fully implemented.

On the other hand, legal restrictions and regulatory institutions require lawyers to store clients' paper files and confidential documents for regular inspection. Many legal professionals perceive this as a necessity to law firms' operating rules; so paperwork cannot be avoided especially in a climate that cybersecurity is still considered fragile and electronic document storage and exchange more vulnerable to confidentiality breaches.

Last but not least, although a shift to paperless transactions can significantly decrease the processing time and allow customers to track the process of their case in real time (Civelek et al., 2017), lawyers are still hesitant to change and feel more secure to operate within the traditional and less accessible system. The participants of the study argued that online communication through uploading documents may put sensitive data to bigger risk and there is always a need for having a back-up copy available.

The complexity of legal processes is a key challenge adversely affecting efficiency and innovation in legal firms. Efficiency is strongly associated with the complex nature of each legal transaction. For instance, long transactions like M&A require different teams of lawyers to secure the deal; that means more resource allocation is needed for the client's legal case completion.

The level of complexity of these legal procedures differs from client to client, but also from one law area to another. Some of the law areas such as insurance claims, personal injury and conveyancing can be characterised as more efficient in comparison to complicated areas dealing with M&A and commercial real estate among others. Sanders Jones and Linderman (2014) argued that process management and process design is positively related to efficiency performance. However, there are no pre-written processes of how a case should be handled and run, and most of the times it lies down to the lawyer's experience. Hence, managers seem to struggle to define efficiency and to take measures tackling the potential bottlenecks.

More specifically, a critical issue pointed out from the majority of the participating legal experts was the administrative work they had to undergo for every client's case. The bureaucracy and the document-heavy nature of the legal profession were seen as barriers for innovation.

Additionally, lawyers supported that due to the distinctive nature of the legal profession reflecting its association with confidentiality and money laundering matters, technology cannot be more embedded in the legal transactions. Willcocks, Lacity and Craig (2017) expressed similar views about senior managers' hesitation on the automation applications. In particular, they interviewed HR specialists in the consultancy industry about the digitalisation of procedures such as robotic process automation (RPA) and the advantages that can offer to both employees and clients. The common answer from consultants about a win-win situation of smart technologies was that *"sounds too good to be true"* and *"there is too much confusion on new technologies in the market"* (Willcocks, Lacity and Craig, 2017, p.19).

Taking the above into consideration it seems that the inefficiency of legal processes is a product sometimes generated by lack of funding and resources for investments and resistance to change by some professionals.

At the same time though, as competition increases, law firms have to opt for efficiency measures to increase profit and improve performance. For instance, process mapping and the

use of AI are common for creating shortcuts in procedures with some degree of repetition and should be actively promoted. Although there is a lot of repetition into the legal sector in the form of documents, communications and processes, most lawyers still believe that each case is unique and develop new templates each time. Although this approach can reduce potential errors, it can also be extremely time-consuming. Thus, the author argues that the more standardised/automated a legal process is, the more efficient in terms of time, cost and resources it can be. Aroles and McLean (2016) argue that standard routines can be seen as a solution to problems of inefficiency within organisations, especially when associated with images of stability, repeatability and standardisation; they can bring a sense of order where there is disorder, and stability in the face of change.

Efficiency is also defined in very practical terms from legal professionals who stated that efficiency is equivalent to *“only one person having to review a document and then present it to the partner”*. Thus, the more parties involved, the less straightforward a transaction can be. So unnecessary allocation of tasks dealing with something already performed by some other legal firm employee should be avoided.

So repetition could also be a form of inefficiency for the legal processes. Processes coordination and their effective management are essential parts of business success. Legal project managers participating in this project agree with that by stating that more and more large law firms’ managers nowadays acknowledge the benefits of process mapping and coordination of long transactions, thus employing legal project managers or legal engineers to assist their lawyers work under more systematic approaches that avoid unneeded repetition.

## 6.4. Opportunities for service innovation

This section presents the opportunities for innovation within the legal service management structures and operations. This is developed from a critical synthesis of the key findings derived by the two data analysis phases and a post-analysis literature review on the matter.

### 6.4.1. Knowledge transfer

Law firms around the world and particularly in Europe face difficulties to manage their operations due to their current state-of-affairs when dealing with issues referring to strict regulations, high customer expectations and the entrance of technological advancements. It is a fact that managing these issues by implementing strategies in the continuously changing

environment is difficult for many to comprehend, but essential for survival (Muir, Douglas and Meehan, 2004).

A strategic approach that could benefit law firms in the long-term is the knowledge transfer from industry and university partners. Although scholars (e.g. Laursen and Salter, 2014; Howells, Ramlogan and Cheng, 2012; Ankrah and Omar, 2015; Cosh and Hughes, 2010) have captured the importance of the learning transfer among academia and industry, still this relationship is not settled. More specifically, Lee and Miozzo (2019) argued that collaboration among universities and knowledge-intensive firms is an asset for innovation. Universities can be the source of an explicit financial benefit to businesses as they can act as a source of knowledge, technology transfer and licencing (Howells, Ramlogan and Cheng, 2012). Digitisation is argued to better the connection among the academic community with industry and the rest of the society (Friesike and Fecher, 2016). One common and resource-efficient way to facilitate communication and knowledge exchange is via published work and open guest lectures or seminars. For instance, since many study participants highlighted the lack of knowledge transfer between the legal industry and universities establishing synergies between legal service firms and Law Schools could be a less radical starting point for transformation reflecting and affecting the knowledge capacity and collective skillsets of the collaborating organisations.

Knowledge transfer partnerships, a form of innovation that can lead to new ideas creation and creativity promotion, could be a helpful and not particularly expensive lifeline for law firms in need of external support. Randhawa et al. (2017) referred to outbound *open innovation* as a form of knowledge creation and exploration among external firms' networks. Tsinopoulos, Sousa and Yan (2018) agreed with the importance of open innovation that firms have to leverage on, for achieving product and service improvements. This refers to businesses creating and sustaining contacts externally with suppliers, university partnerships and competitive parties (Laursen and Salter, 2014).

Furthermore, Ankrah and Omar (2015) identified six categories where firms can benefit from partnerships with universities. Among others, they recognised legitimacy as an important factor; businesses can raise their reputation in the marketplace by collaborating with or even recruiting trainee solicitors from an academic institution (Siegel, Waldman and Link, 2003).

However, this study indicates that legal professionals employed mostly in the UK and Europe, believed that the interaction between these two parties is limited; practice and academia are

worlds apart and practitioners have not established norms and channels of communication with academics. Although the majority of the interviewees and respondents of the Thesis could recognise the benefits of this engagement, they acknowledged that in real life synergies as such were very rare or even non-existent. Howells, Ramlogan and Cheng (2012) argued similarly about the difficulties of forming a relationship among these two parties, and recommended universities acting as a mentor rather than as a partner to service firms. Cosh and Hughes (2010) research on the UK and the USA businesses' relationships with universities argue that these are rather weak and unfocused. More specifically, only 16.4 percent of the considered innovator firms in the UK acknowledged higher education institutions as a source of knowledge in comparison to a 35.6 percent of the USA ones. This type of difference was not evident in the results of the present study; knowledge partnerships between legal firms and universities were very scarce in all the countries that took part in this research study.

On the negative side, knowledge transfer in the form of continuous exchange of ideas and information with external parties from the same or similar industry can impose service firms to risk where they would have to claim their intellectual assets (Miozzo et al., 2016). For this reason, the engagement with academic institutions may be looked at even more positively, as practices for law firms' efficiency and innovation in the industry are not in their strategic objectives/priorities. This type of collaboration initiatives thus provides limited risks. However, since inter-sectoral knowledge transfer is sometimes critical for the survival and prosperity of a legal firm practitioners have to employ best practice strategies to absorb this external knowledge and expose themselves in as little risk as possible. Krylova, Vera and Crossan (2016) suggested improvisation techniques such as storytelling or shared mental models that in association with their employees' tacit knowledge could be hard to imitate and thus, be more competitive over their competitors.

Knowledge transfer from the university to the industry is an important strategic option. In fact, academic research drives business by providing new scientific discoveries and advanced technologies that accelerate innovation. Saguy and Sirotinskaya (2016) suggested that such partnerships can be a reliable option and a vast opportunity mostly for SMEs that they experience unique challenges due to the high competition on the market, their limited ability to invest on resources and to sustain external players. Also, scholars' findings confirmed that universities and research institutes are essential sources of information and knowledge exchange for professional services and that through this collaboration firms are closer to adopt an innovation (Teixeira and Santos, 2016; Santos, 2019).

Another form of knowledge transfer is customer-focused innovation. Duran et al. (2016) argued that the success of innovation adoption within a law firm is strongly associated with the firm's interaction with its clients but also by its ability to externalise knowledge. Although external collaboration with clients can be a form of innovation, Miozzo et al. (2016) suggested that this can expose firms to risk about the ownership of law firms' knowledge assets or ideas. However, this is not an agenda that has been specifically explored by the Thesis; it may be a future research initiative by the author.

ICT and AI represent a pair of techno-oriented interventions that law firms should incrementally embrace in the increasingly data-intensive legal workplace. In order to achieve that, legal service firms need to employ professionals educated and trained to help them introduce this to their law employees. So knowledge exchange for a legal firm can also be related to bringing in knowledge suppliers that could allow legal firms to establish a multidisciplinary knowledge capital that fits the standards of a new era in service delivery that is characterised more and more by digitisation and automation.

Another extrinsic approach for growing a firm ability to grow and compete, that more and more enterprises choose, refers to *outsourcing*. Many professional service firms select to *outsource* some of their activities in countries with lower wages to survive the highly competitive workplace (Stumpf, Doh and Clark, 2002) or having franchise offices to low-cost countries to reduce handling costs. For instance, many firms like legal services are outsourcing their core Information Technology activities to third parties (Dhar, 2012) to reduce extra investments and costs on resource allocation and Software developments. Legal process and IT outsourcing to external vendors is a common practice for legal services as it has cost and operational efficiencies benefits (Noronha, D'Cruz and Kuruvilla, 2016). Teo and Bhattacharjee (2014) interrelate outsourcing as a form of knowledge transfer and utilisation between vendors and client firms. However, knowledge and cultural barriers and lack of knowledge acquisitions mechanisms can often hinder this process as typically vendors from developing countries are different from the host firm's geographical location (Al-Salti and Hackney, 2011). Additionally, it may result in a lack of monitoring and controlling the IT practices (Legg and Bell, 2018) from the senior management teams.

On the other hand, *Cloud* computing take this line of practice a step further and allows firms to manage and adjust their own projects with less hidden costs and customised solutions (Dhar, 2012); this therefore could be a more reliable and flexible option for law firms.

Knowledge exchange in all its forms is a key process that promotes innovation, helps the formation of key synergies and reduces technical, human resource and skill-related problems.

#### 6.4.2. Education

Innovation should be looked at as a concept synonymous to knowledge transformation that means to create process change and businesses improvement and although it can be reflecting technology uptake is a lot more than a techno-fix; one of its key dimensions should actually be education as this is a process of facilitating learning and attaining knowledge, skills, values, beliefs, attitudes and habits.

Edwards (1993) back in the 90s acknowledged the growing distance between Law School education and legal profession in practice. In his article he argued that the legal education is focusing more on the theory of the Law *per se* whereas law firms' objectives are mainly profit driven. This is an under-researched area (Sinsheimer and Herring, 2016) that may be better explored through the contributions of the present Thesis that looked specifically among others on the legal professionals' views on the matter. This study supports that the skillset a law graduate pursues from academia to enter a large law firm is not always on par with the sector's real-life requirements; young graduates according to many of their more experienced peers seem not to be entirely suitable and ready to face the emerging and diversified challenges of today's legal workplace arenas.

More specifically, the educational context of Law School's modules that law students are taught lack multidisciplinary and diversity; topics of peripheral but increasing importance that refer to business and technology are not typically incorporated in the course of their studies. The law graduates' and legal trainees' that participated in the study stated that their training and education was not adequate to enter the legal sector and some of them had to take on a voluntarily post in a legal firm or institution to earn practical knowledge that would enable them to start in better terms their careers. This is in line with Campbell (2014, p.4) who argued that lawyers are unfamiliar with how to deal with financial documents and information technology and typically have no project management skills. Apparently, according to the present analysis, the average Law School curriculum is still an archaic model of conventional monolithic teaching and learning designed as Campbell (2014) supports primarily based on the delivery of lectures about legal documents that should be then memorised. This is an outdated and conservative educational approach.

According to this study, the age of the participants seems to interfere with their perceptions of whether Law School education equips its students effectively with business and technology skills. Although both generations of lawyers regardless of the years of their working experience in the sector argued that Law Schools do not equip law students effectively with the business and technology skills required for the legal firms' milieu, the more experienced legal professionals are significantly more likely to disagree with that statement. This may be due to the fact that when this older generation of lawyers was academically nurtured technology was not as widespread as it is today; thus they got from their academic education 'enough' in this respect. Contrary to this, there is no statistically significant difference when associating the working experience of the legal personnel to the perception about education and training on the legal skills' development. That means that law graduates today feel that they lack knowledge on business and technological skills and not on how to handle a client's legal case. This is an important finding especially when combined with the fact that these younger law professionals are already more familiar and knowledgeable in technology matters at least from their more experienced peers.

Sinsheimer and Herring (2016, p.64) argued that legal education still educates lawyers to "*think only as lawyers*" while they should practise for various reading and practical skills that now are studied in a very limited level. Similarly, based on the survey findings, selecting the statement about the development of the legal and business and technology skills of employees, legal professionals agree that there is support on maintaining the currency of their legal skills, but there is no training on developing business and management skills to thrive in the demanding working environment.

Education can play an important role in the willingness of lawyers for technology adoption (Hong and Songan, 2011). Lai and Hong's (2015) research on students' attitudes on whether they embrace technology found out that higher education should enhance better the quality of teaching and learning with respect to digital learning technologies. Likewise, Sjöberg (2019) argued that educational institutions have to rethink about implementing advanced legal IT courses, to help future lawyers on handling long and complicated transactions such as due diligence in M&A. For instance, designed courses' assessments on a range of competent skills that lawyers will need for their legal practicing career would be an academically reliable and cost-efficient option (Curcio, 2009). Education can prevent low digital literacy and boost confidence in technology uptake.



All in all, due to the rising competition and the entrance of paraprofessionals who provide fast and cost-effective legal services (Campbell, 2016), the role of the traditional lawyer has to be adapted closer to the changing needs of the society with smart investments. For instance, regulatory institutions such as the SRA and the Law Societies have to rethink the current educational context and invest in new pedagogical and multi-disciplinary training on managerial and technological skills.

### 6.4.3. Operations management

Operations management consists of the elements of process design, quality control, resource management and continuous improvement to achieve better performance and productivity. This Thesis supports that this is a critical part of innovation adoption and overall efficiency enhancement for professional services and should be tailored to each firm's needs *per se* something in line with Sutcliffe, Sitkin and Browning (2000). Although there are scholars arguing that innovation and efficiency are two means unrelated (Rosenzweig and Easton, 2010), this Thesis, by adopting an original theory blending approach merging RBV with ingredients of PBV, supports that innovation adoption via operations management tools, and technology and knowledge transfer can lead to efficiency enhancement.

Lean thinking in particular is a distinct operational management tool, successful in other sectors (Hines, Martins and Beale, 2008), that could enhance innovation and technology adoption (Zhou, 2016). It constitutes a well-established path to higher quality, improved operational performance, increased timeliness and greater respect for the people who provide the services (Bamford et al., 2015; Womack and Jones, 2015; Standard and Davis, 2000). Lean for legal services should be employed as a strategy that has to be embedded as a learning to organisations to achieve efficient processes and not only as an improvement tool that companies have to implement to reduce waste. Lean is a transformation that reflects a change in the whole business environment of an organisation affecting all the levels of leadership and employees and should be applied for the totality of the processes and operations that a firm runs (Melton, 2005). Therefore, it has to be approached as a journey for continuous productivity and performance improvement and not solely as a one-time event (Drew, McCallum and Roggenhofer, 2004). It can be said that for success it is essential for managers to employ the set of measures and tools that fits the firm's business and strategic plan (Buckley et al., 2017).

For professional services it can achieve better operational performance and efficient processes (Kolberg and Zühlke, 2015). However, despite many small-medium firms attempted to apply Lean, evidences indicate that there are high failure rates in these applications (Vlachos, 2015). Studies in healthcare have reported resistance to change from professionals as Lean initiatives are adopted because the changes are viewed as adding to their already heavy workload (Nelson-Peterson and Leppa, 2007). Vlachos (2015) classified the reasons for that in three categories: the leadership, the people and the business culture.

The majority of the legal professionals participating in the study when questioned about whether they believed that innovation adoption in the form of technology transfer and waste minimisation, can reduce time and cost and that can enhance the legal staff and customer satisfaction, agreed by 94.4 percent to the first assumption and by 97.2 percent to the latter respectively. Those that disagreed with the above notions were people employed for less than 10 years in small legal firms.

The combination of Lean with other innovative work practices that are founded on added flexibility, skill-creation, interdisciplinary training, collaboration and incentivisation initiatives that have been found to be positively related to employees' positive attitudes towards work conditions (Martin and Omrani, 2015) can formulate an innovation package with the capacity to improve legal processes and create competitive advantages. For instance, Alagaraja (2014) suggested that Lean implementations should be in accordance with human resource development practices.

However, Lean and other forms of more employee-centred innovation, as the ones described above, should not be applied in isolation or as a monoculture; they must be approached as a holistic philosophy of thinking and acting for continuous improvement and change in the whole business environment from the top, the management, the daily routine of employees, to the bottom, how the operations run, level (Melton, 2005). Innovation is a powerful concept that needs to be approached as a journey for continuous productivity and performance enhancement and not solely as a 'soulless' organisational process. This is in line with the key findings of Drew, McCallum and Roggenhofer (2016). Law providers should also recognise the pursuit of incremental innovations formally in their innovation strategies and define formal processes for implementing these types of innovation (Oke, 2007). Competitive advantage is a moving target

requiring firms to achieve a series of temporary competitive advantages (D'Aveni, Dagnino and Smith, 2010).

Overall, Lean implementation for legal services cannot solely lead to innovation. This is because on the one hand, the document-heavy work, the clients' expectations (emails, interaction) and the strict regulatory environment are forces that do not create an environment for people to exchange their ideas and develop creative thinking. Organisational learning, supportive culture and the business strategy can form open innovation. On the other hand, efficient processes by minimising waste of materials, effort and time cannot solely lead to innovation. Professional services rely mostly on the intangible aspect of the business which is the people's knowledge and reputation for attracting clients and giving legal advices. Therefore, the management of both aspects can lead to innovation creation and duration. The strategic, tactical, and operational alignment of inter-organisational actions can lead to the creation of innovative outputs, which are commonly characterised as being novel, valuable, and frequently introduced (Kim, Choi and Skilton, 2015).

All in all, Lean applications in association with IT entrance is a way to achieve effective and efficient management of resources much like Maguire (2016) and Ker et al. (2014) also support for disciplines outside the realm of legal service provision. However, this adoption should be supported by other operational tools. Lean should be packaged with training the employees in a multidisciplinary way, providing them with better access to resources and more incentives including flexible working opportunities. Changes should come strategically and incrementally altering step-by-step the culture of the firm so that a smoother transition can be achieved.

#### 6.4.4. Smart automation

Capturing value from technological innovation (Teece, 2010) can be a critical piece of the way forward for efficiency and effectiveness in legal services. One of the most dynamic technological interventions of our times reflects the rise of Artificial Intelligence (AI) and its ability to erase human error from complicated tasks by automating standardised procedures. AI ranging from mathematical programming and digitisation to Machine Learning and Big Data Analytics (Baryannis et al., 2019) is a medium that with its deep learning functions that model high-level data concepts through the use of architectures of multiple non-linear transformations (Nikitas et al., 2019) is ultimately employed as a tool which empowers the

lawyer to solve problems that otherwise could have been difficult and time-consuming to deal with. Automation for the legal services can be simply framed as *“the use of modern information and communication technology mainly without human intervention”* (Sjöberg, 2019, p.173).

Lawyers that have the ability to employ big data can simultaneously integrate statistical patterns, follow predictions and control outcomes to solve a client’s case faster (McMorrow, 2017). *“Law firms who identify the power of technology and data, have a leverage over their competitors”* (Stevenson and Wagoner, 2015, p.1337). McGinnis and Pearce (2014, p.3043) emphasised that although machine intelligence is important for services as it can provide quality and at the same time decrease the costs, it is not *“a one-time event that lawyers will have to accommodate.”*

The majority of the legal professionals interviewed or responding to the survey often failed to acknowledge the importance of standardisation or automation of parts of legal processes. They argued that each client and transaction are different and unique in terms of the documents they require to complete and the procedures they have to follow. On the other hand, those that were willing to adopt a more digital way of communicating with their customers and completing their law transactions faster and more time-efficiently, felt discouraged from the regulations and policies in place and from the high customers’ expectations. They argued that their customers when in need for professional legal services are more likely to be reluctant to deal with online communication and instead prefer the face-to-face contact with their advisor. This is line with Todd and Hill’s (2018) analysis on the banking industry, that clients including millennials, were more likely to choose the in-person interaction rather than other forms of digital communication like email. Similarly, the present Thesis findings argue that when lawyers are questioned about the entrance of technological innovation in their field of work, they reply that their first priority is what works for their clients. Su (2004) agreed by stating that customer satisfaction with technology adoption is one of the strategic tools to gain competitive advantage in the service industry; it is therefore one of the key factors of a firm’s prosperity and reputation (Hussain, Al Nasser and Hussain, 2015) and should be at the forefront of a firm’s strategy for success.

Taken into consideration the drive for a more technology-centred service delivery paradigm and the still very dominant expectation of clients for face-to-face engagement and the strong presence of the human factor, this study suggests that smart automation or semi-automation on early stages of a legal procedure can be a fast and efficient comprise for now. Too much of ‘a

good thing' like automation could not be in line with law professionals be comfortable with and what customers demand in a very challenging client-centric market. For instance, law firms can make small everyday changes peripheral and complementary to the legal service provision *per se* like installing an automated voice agent answering clients' calls. It can guide clients to a specific lawyer expert that is suitable to their matter. This can reduce the valuable and very expensive time that a lawyer has to deal with practicalities that could be addressed in a much more cost-efficient and productive way. An advancement as such could also result to something being potentially solved online without the input of a lawyer or at least to a more efficient allocation of tasks; the lawyer that is actually more suitable to deal with a task will be matched to address the client's issue.

This is in line with Schmitz et al. (2019, p.350) arguing that smart automation like robotic process automation (RPA), virtual assistants, chat bots, natural language processing (NLP), artificial intelligence (AI), and machine learning (ML) can both increase customer satisfaction but also the company's profits. Smart automation in association with process modernisation can act as a valuable option for the automation of complex and costly processes like those M&A legal transactions (Schmitz et al., 2019). Semi-automation is preferable for the professional service sector as following the RBV theory, people, their tacit knowledge and their experiences are those that provide the competitive edge for the company. Thus, semi-automation is about the standardisation of processes but with the availability of the helping hand of the lawyer.

## 6.5. Reflection of the theoretical stance

This section reflects on the developed theoretical and empirical understanding of the current status quo of the legal firms in terms of their ability and willingness to innovate. This allows the identification and in-depth description of service innovation approaches that can be successfully implemented in the legal services as a means of enabling them to create a competitive advantage. Since law firms offer primarily services (and not tangible products), any theory-building needs to take into account the nature of these services *per se*. For example, services are differentiated from goods in terms of archetypal characteristics as intangibility, inseparability, heterogeneity, and perishability (Vargo and Lusch, 2004).

OM research examined by Hitt, Xu and Carnes (2016) contributed to four main streams of research including supply chain management, operations strategy, performance management, and product/service innovation. Using this broader set of motivations acknowledged by OM

scholars (Pilkington and Meredith, 2009; Taylor and Taylor, 2009), found that RBV has been mostly adopted by scholars doing research in each of these four research streams.

Nonetheless, there are scholars (e.g. Bromiley and Rau, 2016; Bromiley and Fleming, 2002; Kraaijenbrink et al., 2010) critically arguing of the suitability of RBV theory in OM research on aspects of innovation. More specifically, Bromiley and Rau (2016, p.2) stated that RBV should be adopted as a perspective rather than solely as a theory for a number of reasons. For instance, competitive advantage and solutions implementation are the dependent variables, but scholars do not essentially measure these through their research and if they do recommend best practices that can be imitated then do not comply with the RBV terms.

However, PBV theory that is about knowledge transfer and usage of transferable best practices combined with RBV to support the theoretical stance of the study. According to Bromiley and Rau (2014) PBV allows firms to employ the set of techniques and tools that will explicitly have a positive benefit on their performance; those that help them create a practical knowledge capital would allow them to apply a systematic and competent reasoning in service delivery (Corradi, Gherardi and Verzelloni, 2010). Under performance is meant the “*imitable activities or practices, often in the public domain, amenable to transfer across firms*” (Bromiley and Rau, 2014, p.1249) where techniques can be the activities that the firms will decide to execute (Bromiley and Rau, 2014).

Therefore, as competitive advantage cannot be tangibly measured by this project *per se* and as the aim of this study is to recommend operations management solutions and transferable practices to law firms’ managers for efficient operations, the author adopted a combination of the RBV and PBV theoretical perspectives to explore innovation adoption practices within law firms. PBV due to its association with knowledge borrowing from other sectors could therefore help cementing this work’s theoretical underpinning by adding a few elements to a primarily RBV-centric theoretical framework (see Literature Review Chapter).

### 6.5.1. Key theoretical underpinning

The RBV remains a long-standing theory underpinning how firms survive under competition that has not been effectively challenged regarding its centrality to the field of operational research (Busby, 2019). This study adopted RBV, at its core, acknowledging the importance of resources in the legal service sector and the need for these knowledge intensive organisations to look primary within their premises to find sources of competitive advantage. Legal firms

can create competitive advantage by assembling resources that work together to build organisational capabilities (Huang et al., 2006).

At the same time, PBV, a theory that considers practice as an activity or set of activities that a variety of firms might execute, gives emphasis on imitable activities or practices amenable to transfer across firms (Bromiley and Rau, 2014). Acknowledging the particularity of the legal sector and identifying how much it falls behind other industries in terms of its operational management fundamentals during a pre-study made the researcher recognise its need for knowledge and technology transfer from other disciplines and the uptake of common firm practices. Thus, there is a blending of the predominant RBV framework with key PBV elements to cater for these sector ‘irregularities’ as presented in section 2.3.2 and Figure 2.5.

#### 6.5.2. Innovation diffusion curve and the theory behind it

According to Rogers (2003, p.295) it is common for firms or individuals that are in need for a change to most of the times end up adopting innovations last. The legal sector as illustrated in Figure 6.4, stands between the *take-off* phase and the *saturation point* as from the data findings the law sector currently lacks innovation and legal professionals are not always motivated or willing to adopt change. That means on the one hand, that innovation is not an entirely new phenomenon in the realm of professional legal services but as a matter of fact a few exemplary firms might have even already adopted automation and digitisation practices and are actively promoting a multidisciplinary organisational identity that goes beyond a monolithic commitment to pure law. On the other hand, though the vast majority of law firms, and the regulation authorities setting the benchmarks for improved legal practice, are still inclined to continue to live on with the conventions, traditions and inflexibilities of a glorious past that nevertheless does not match anymore the rapidly increasing and diversifying customer requirements and cannot generate advantages over more market-driven competition. It can be therefore securely assumed that the law sector has not yet achieved a saturation point of innovation adoption and this will not effectively happen if the challenges and barriers hindering it that have been thoroughly described in the previous sections of the Thesis are not adequately addressed.

## 6.6. Managerial implications– recommendations for innovation uptake

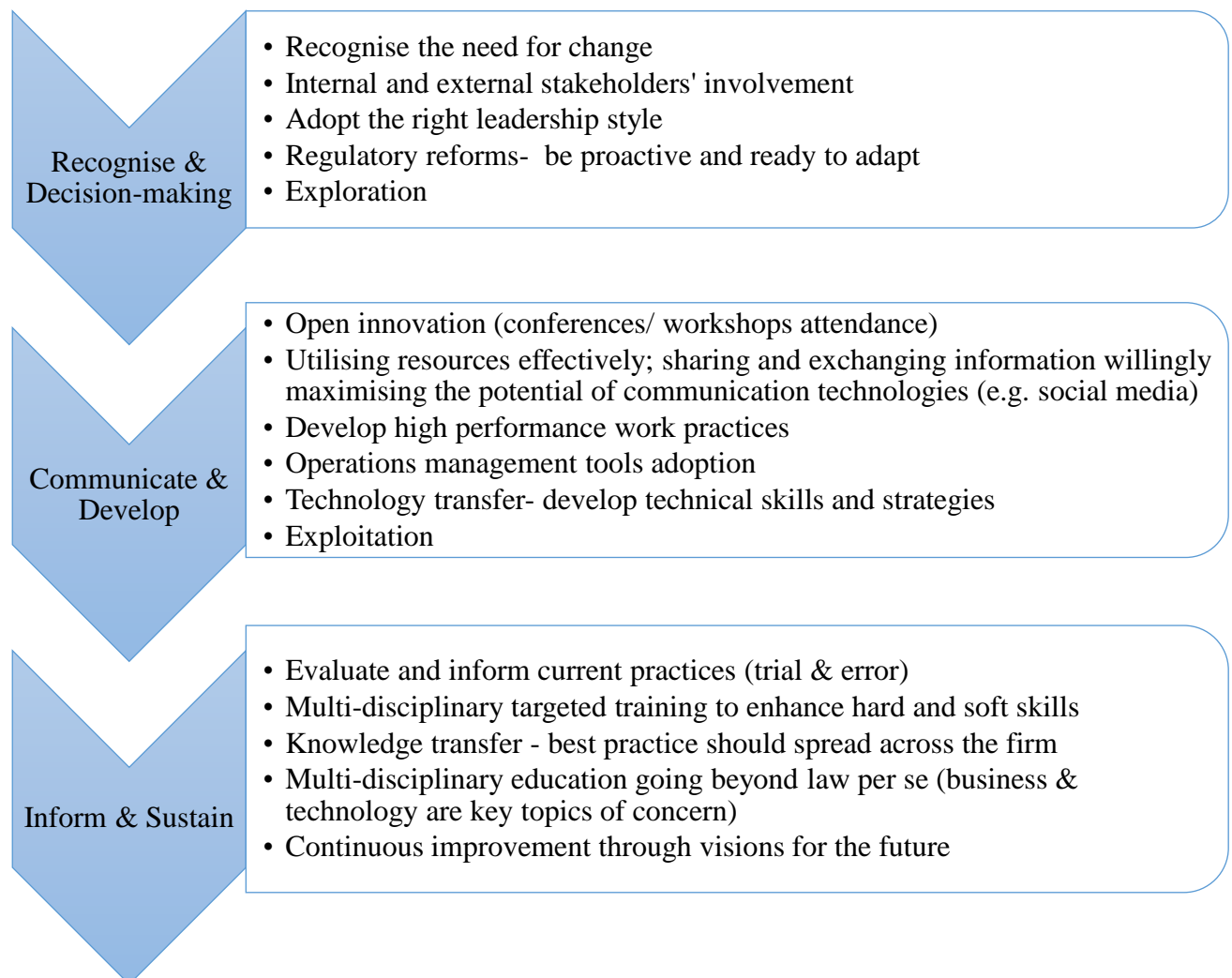
The quantitative phase of the study provided insights on innovation adoption by legal firms' professionals by addressing questions highlighted by the qualitative work. This helped in coming up with more precise recommendations for adopting innovation that are presented in this section. Drawing from examples identified and discussed in the existing literature, Timans et al. (2016) came up with three phases of how SMEs can successfully apply Lean Six Sigma. In particular, these are the phases of: '*recognise and prepare*', '*initialise and institutionalise*' and '*sustain*'. Evans and Price (2017) research on how law firms can overcome challenges related to competition and changes in the workplace environment due to information technology, presented four strategic solutions, of a more general business management character, that are summarised as: '*the adoption of new pricing models*', '*the further development of these models*', '*the adoption and improvement of new technology*' and '*the promotion of business solutions through continuous improvement*'.

The researcher proposes a strategic transformation guiding tool that legal firms can follow for service innovation enhancement. The framework illustrated in Figure 6.3 draws from the interventions presented in the '**Recommendations**' part in Figure 6.2 that have been extracted from a synthesis of the data analysed and a post-analysis literature review. The author divided them into the three different sections of the framework (Figure 6.3) and elaborated each of them with a series of dimensions that are analysed below.

In general, the stakeholders of the law firms as a first step have to recognise and identify the challenges their employees face. Secondly, they have to develop short- and long-term strategies and in parallel, collaborate with external partners for ideas creation. Last but not least, it is desirable to implement operations management techniques that can result in efficient operations and wastage reductions. Finally, they should continuously and systematically evaluate and sustain their progress by informing and sporadically reinforcing their current practices. This is line with Cole's (2004) management theory arguing that change in an organisation has to go through various phases to achieve efficiency and effectiveness that could lead eventually to productivity enhancement. Basic areas that affect change within a firm are the culture and the mission of the firm, the stakeholder decision-making and relationships, total quality management and employees' personal satisfaction (Cole, 2004); these are all topics that have been highlighted and thoroughly discussed in the present Thesis.



Figure 6. 3: Three steps transition framework for service innovation enhancement



### *Recognise and Decision-making*

Liu and Leitner (2012) presented two phases that successful organisations should achieve for innovation and efficiency; the **exploration** and **exploitation** phases. The first, that is part of this theme, refers to the discovery of the businesses' inner capabilities and strengths whereas the second one, that is part of the 'communicate and develop' step, is about exploiting every source of innovation for continuous improvement. Similarly, Mazzocato et al. (2010) argued that services' management teams should be involved across departments and have an overall view of decisions on long-term improvements. However, employees should be also part of this decision-making process of innovations adoption practices as their views could potentially reduce risks of new implementations and increase their willingness and ability to change.

The **leadership style** for the successful completion of the first phase is important. Leaders can influence employees' job engagement and satisfaction (Park et al., 2017); employees that have a sense of belonging in a team, flexibility in the delivery of their work and empowerment are better motivated to adopt new innovations. This has a direct impact on a firm's productivity and performance metrics.

**Legislation factors** (i.e. bureaucracy) are most of the times restricting firms the flexibility to modernise their practices and adopt new innovations in an easier and faster manner. Following the European Commission report regulations affect business at all stages of the innovation process, from R&D to commercialisation (Pelkmans and Renda, 2014, p.17). Therefore, the government and the regulatory institutions should simplify their practices (e.g. reducing compliance fees, minimising the time of procedures) and encourage particularly smaller firms through funding opportunities to invest in new innovations. At the same time, they should incentivise and implement guidelines for junior lawyers' early stages in the workplace. This is in line with the Thesis theoretical underpinning of Porter's model explaining that regulations are one of the external forces affecting innovation adoption; thus, the innovation-inducing factors should overshadow the innovation-constraining ones.

#### *Communicate and Develop*

Fu et al. (2015) agree that organisations have to invest to their people while Combs et al. (2006) agreed by stating that firms that implement **high-performance work practices** such as incentive compensation, performance appraisal and internal promotion policies can have better performance than companies that do not.

**Open innovation** in the form of university knowledge transfer partnerships and conferences/summits attendance is critical for businesses' reputation and innovation adoption (Chesbrough and Brunswicker, 2014; Brunswicker and Chesbrough, 2018). Through this firms can test existing practices, *exploit* external knowledge from their communication partners, develop new ideas and strengthen their internal tacit knowledge. However, legal firms have to overcome the barrier of information sharing and the risk of data confidentiality; this can be achieved through creating formal partnerships with higher education institutions and by participating in selective outside innovation summits/ practices.

Another way of innovative activities for PSFs is the use of **social media** as a means for the promotion and marketing of their services. It is argued that legal firms in the UK assign 1.6

percent of their turnover for branding and promotion activities and ABS legal firms a 2.3 percent (Roper, Love and Bourke, 2016).

**Technology transfer** for the legal services is an apparatus that could create new layers of efficiency by minimising replication of work and standardising procedures involving some degree of repetition. This is in line with Santa, Hyland and Ferrer's (2014) key result suggesting that technology innovation is well correlated with operational effectiveness. Ways of increasing awareness regarding the benefits of technology could also be critical for technology adoption.

In association with the above, **operations management tools** and techniques tailored to each law firms' needs could improve the service offerings and increase efficiency. For instance, Lean thinking is a distinct operational management tool, successful in other sectors (Hines, Martins and Beale, 2008), that could enhance both innovation and technology adoption (Zhou, 2016).

### *Inform and Sustain*

It is triangulated by the Thesis findings that the involvement of employees in the decision-making and training on the new technologies could lead to their successful implementation. George (2015) agreed that one of the most frequent reason employees state when they decide to resign was the poor relationship with their head of department. The most critical asset in knowledge-intensive firms, their employees' voice, can lead to workforce commitment (Miller and Lee, 2001) and improvements in following the managers' decisions and the company's strategy. This approach can lead to improvements reflecting and affecting all three spheres of organisational sustainability namely economy, environment and society (Farooq, Farooq and Reynaud, 2019).

The effective utilisation of the human factor in service firms is the best and easiest sometimes route to improved competitiveness. Although training and seminars are available from law firms to their employees, the participating legal professionals taking part in this study argued that are not tailored to their needs, thus not providing them with knowledge or ideas to expand their skills. This is in line with Pelucha, Kveton and Potluka (2019) suggesting that shareholders who recognise that targeted to their needs training of both the senior managers and employees could benefit their law firms in many ways. A balanced mix of

soft/interpersonal and hard/technical skills that comes from **multidisciplinary training** (Hendarman and Cantner, 2018) should be provided internally. **Multidisciplinary education** while legal professionals study in Law Schools (or elsewhere) is another crucial pillar for improved innovation adoption and productivity enhancement that is currently somewhat lagging; this Thesis specifies the lack of multidisciplinary as an area of opportunity and informs educator providers and legal businesses about the need to invest on it. Law professionals need to be nurtured in a way that will allow them to develop an understanding of project management and technology but at the same time academic studies may need to have a more empirical dimension too making the best out of internship opportunities. **Trial and error** is an essential task of the evaluate phase, as managers can assess and identify the best performing strategies and mitigate future risks (Villena et al., 2018).

### 6.7. Innovation adoption framework

This section presents an evidence-based innovation adoption framework that critically assesses legal innovation uptake barriers and opportunities from the legal professionals' viewpoints. This is the original contribution of the Thesis and the key output of the mixed methods study. More specifically, Figure 6.4 combines the key findings of the dual research study, that have been aligned according to the theoretical underpinning of this work that blends RBV with PBV ingredients with the Diffusion of innovations concept.

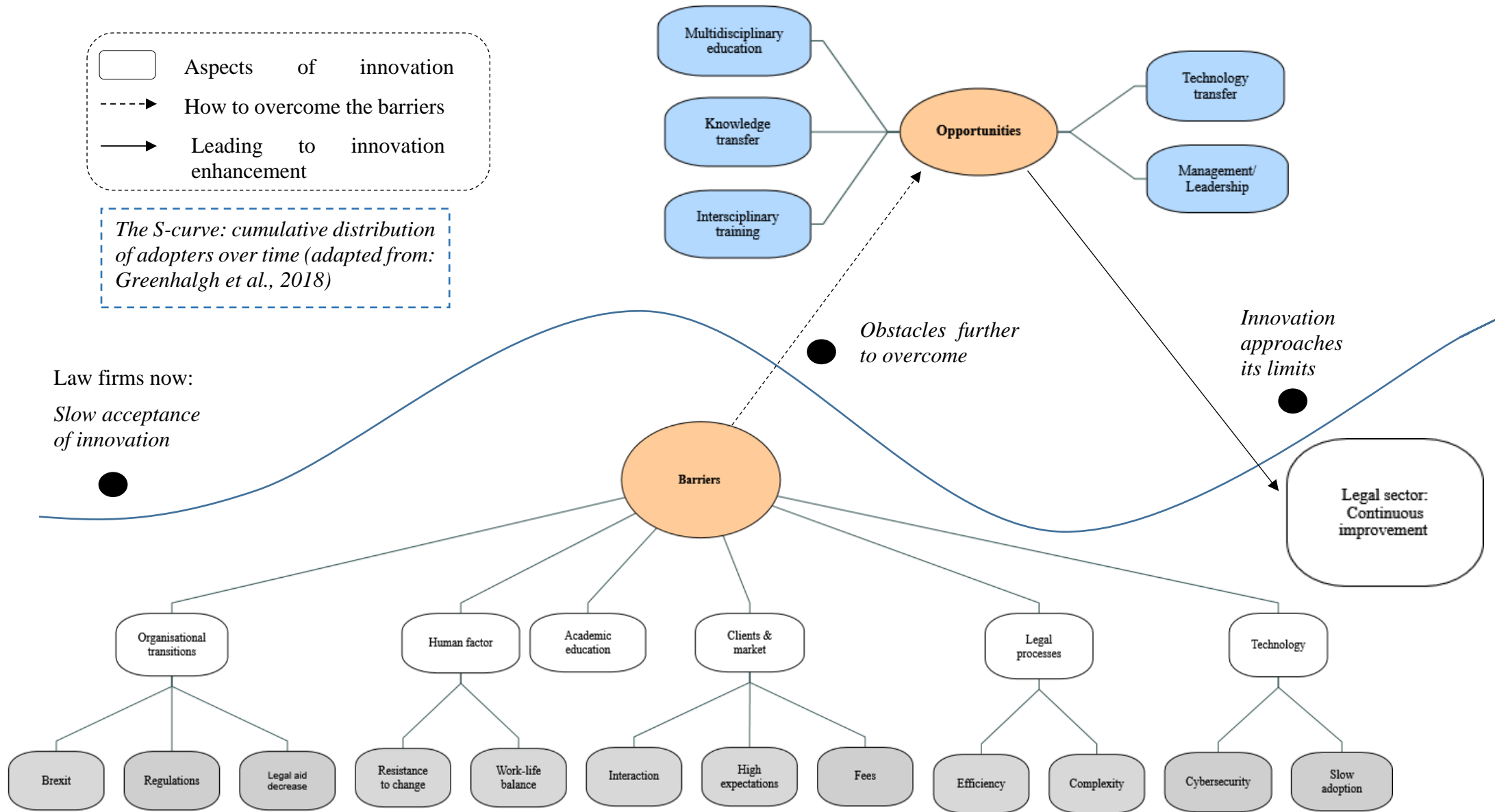
***This is the most important framework of the Thesis since it blends in a holistic way a critical synthesis of the key results with the theory underpinning the study to create a mapping tool that visualises the critical relationships between the themes reflecting and affecting innovation adoption.***

Based on the research findings the researcher identified the existing level of innovation in law firms and the rate that legal professionals adopt new innovations. Following Rice's (2017) theory of innovation, legal services are at an early stage comparing to other services sectors and there is slow acceptance of new innovations. The diffusion of innovation process illustrates that an innovation (an idea, product, technology, process, or service) is adopted (usually in a S-curve form, from rejection through adoption, saturation, and reinvention), through a series of stages, influenced by interpersonal (such as an opinion leader or change agent), mass, and digital communication and networks, over time (at different rates), through a social system

(from local to international), with a wide variety of consequences (positive and negative, intended and unintended, short-term, and long-term) (Rice, 2017, p.532).

All in all, the synthesis framework (Figure 6.2) that is based on interpretation of the primary data analyses is combined with the early conceptual framework (Figure 2.10), the theoretical model (Figure 2.5) and innovation diffusion theory to produce the study innovation framework illustrated in Figure 6.4. This framework clearly identifies the barriers that hinder innovation and the opportunities that legal professionals/managers could employ to enhance operational efficiency in their service delivery. By doing so, law firms could advance in the diffusion of innovation S curve and have a leverage towards their competitors.

Figure 6. 4: Innovation adoption framework



## 6.8. Conclusions

Taking the above into consideration, the innovation adoption framework (Figure 6.4) is the first ever thematic guide that identifies and taxonomises the barriers and opportunities characterising a legal firm's capacity and potential to innovate as a means of improving its productivity. The most likely early adopters of innovation, provided that their Law School education improves in the areas identified herein, are the people with fewer years of experience (<10) in the legal practice. This is because of to their higher likelihood to be equipped with technology-centric skills and desire to engage with technology and due to being less affected by the law industry's long-established conventions. These people can then propagate the message of change to others that need to 'see change in action in order to adopt it'.

Barriers to innovation are defined by: organisational transitions and regulatory restrictions, resistance to change and work-life balance problems, insufficient education and training provision, communication and interaction inefficiencies, fee structures, increasing client and industry expectations, the complexity and limited efficiency of legal processes and technology adoption problems including cyberthreat-phobia and lethargic engagement with modern tools.

Opportunities for establishing clearer pathways to innovation relate predominantly to: knowledge transfer and exchange initiatives and structures, technology adoption enhancement, improvements in Law School education, continuous interdisciplinary skill training that incorporates IT and management perspectives, improved management of human resources and more effective (or even hybrid) leadership. This thematic guide could be used by legal firms as a guidance tool that will allow them to first appreciate its many dimensions, directions and expressions and then adopt more effectively innovation.

## Chapter 7. Conclusions

### 7.1. Introduction

Chapter 7 is a synthesis of selected critical evidence designed to highlight the key messages and the unique contributions for theory, for practice and for the society that the present PhD Thesis offers. More specifically, it looks into revisiting innovation adoption barriers and opportunities as described by legal professionals' insights. The section recognises and contextualises the important roles of technology, education, training, multidisciplinary, knowledge transfer synergies, style of leadership, management and communication strategy choice-making, client expectations, cost-effectiveness, regulatory structures and organisational transitions. The need and the means to create a new improved operational and human resource management approach that will try to interpret and address the ever increasing complexities and inefficiencies that have been correlated for too long with a convention-minded law sector are provided in a synoptic way that connects all the dots of the multidimensional legal service industry. Furthermore, the section provides a reflection on the project and its limitations discussing how this could have been improved if the knowledge obtain by this academic journey was present in the initiation of the study. Future research agenda directions are also provided identifying the need for more research in a rather, at least from managerial point of view, significantly understudied area that is so critical for socio-economic development.

### 7.2. Key messages of the Thesis in a glance

The project herein discussed innovation within the legal sector as a possible pathway for maximising productivity potential. Fifty-three semi-structured interviews were conducted with law professionals from seven countries capturing their day-to-day work experiences and identifying the barriers that hinder and the opportunities that support innovation adoption in legal firms today. A data-intensive thematic analysis uncovers six core themes: *human factor and culture, client and market, technology, organisational transitions, legal processes, and education*. Key parameters regarding innovation through *human process modernisation, technology and knowledge transfer* were explored through the statistical analysis, employing descriptive and ordinal regression approaches, of a quantitative questionnaire with 106 responses.

Overall, the project outlined the challenges that the legal professionals are facing in their highly competitive, conservative-bound and ever-changing working environment. Based on the



respondents' answers, there is a broad acceptance that the operational model that the legal firms nowadays follow, is not always appropriately suited to the customer-driven standards of an increasingly dynamic market. Lawyers and other legal service professionals wish for more freedom, flexibility, communication and better work-life balance but at the same time, some of them, are resistant to change and show inability or unwillingness to shift to a different service provision paradigm defined by ICT, AI and cost reduction considerations. The study's interviewees identified the need for operational improvements within their legal firms' structures and culture, nonetheless.

The legal service sector currently lacks innovation despite the fact that this is recognised as a potentially decisive key to improved efficiencies; a key that is not necessarily synonymous to technology since it has other critical and distinct dimensions, often under-discussed (or simply over-shadowed) in this techno-fixated era, referring among others to education, training and communication. Poor management of employees, lack of interdisciplinary skills, education and training, communication inefficiencies, mistrust of technology and the inherent 'traditionally conservative' culture of the law sector emerged as key challenges to increased productivity and responsiveness to change for law firms.

Change is underway in the legal profession and is being felt acutely by lawyers in every strata of the occupation (Riordan and Osterman, 2016) so responsiveness and adaptability to change needs to be promoted and nurtured in law firms. With a plethora of innovative technology instruments, education and training initiatives, institutional reform opportunities and advanced operations management techniques already in place, but seldom utilised thus far, the author makes the case that legal services can become more efficient. Six diverse themes underpin this study namely: *human factor and culture*, *client and market*, *technology*, *organisational transitions*, *legal processes*, and *education*. In addition, there are factors that may determine the innovation adoption rate; these are among others the *size of the firm*, the *working experience of employees*, and the financial situation of the *country* in line with studies such as Abdu and Jibir (2018). These aspects were explored in association with the lack of innovation parameter through the quantitative study, concluding that legal experts depending on their working experience in the sector and their academic education background perceive innovation (and the level of its adoption) differently.

For instance, from the interviews, it seems that many legal professionals, especially those with more than 10 years of experience, felt overwhelmed from the rapid need of technology adoption in the sector; for them resistance to change is more natural and innovation adoption is therefore a more complicated process. Older generations, in general, tend to be less open to technology interventions, especially in the absence of a ‘helping hand’ (Sochor and Nikitas, 2016). In comparison lawyers with less than 10 years of experience such as trainee lawyers were used to a more technology-led routine that made their professional life easier and make them possibly the group of law professionals that is more likely to be early innovation adopters. So innovative approaches could first target them and they can then propagate the message of ‘change’ to their colleagues. There were however concerns about the educational training that grooms lawyers today; it was deemed tech-savvy but not fitting the actual real world demands of the legal profession practice. Linking Law School education with practice and vice versa may be a way forward; knowledge transfer synergies between the two is another form of innovation that is particularly suitable for the legal sector.

All the legal professionals that interviewed self-reported that they had to sacrifice personal time for their daily work duties and considered their industry as a particularly challenging one defined by slow change, complex organisational transitions, pay cuts, high customer expectations and legal process inefficiencies that could be somewhat cured by automated and standardised services. In some cases, lack of adequate management, leadership and communication were also identified as key efficiency and innovation adoption barriers when these should be decisive facilitators of good practice. Nurturing interdisciplinary skills even at the top managerial level that go well beyond legal matters (e.g. project management, ICT), outsourcing non-core components of the firms using the help of specialists and hybrid models of leadership may all lead to significant productivity improvements.

Innovation via technology transfer was an automatic point for reference when the term innovation was brought directly or indirectly to the participants’ attention. Technology, ranging from simple emails and data storage/management to teleconferencing and AI-based operations, was viewed as a potential source of problems and as a tool that despite its merits could create more distance between service providers and clients. Cybersecurity threats were highlighted as a possible pitfall for legal firms and there were some underlying concerns for people with low digital literacy. Increasing the law sector’s preparedness to deal with cyberattacks via voluntary and mandatory regulations (Hiller and Russell, 2013) and more importantly via custom tailored

digital training for lawyers and the hiring and utilisation of special IT and project management personnel could alleviate these concerns. However, this transition process could be slow and resource intensive. Face-to-face meetings should also complement less personalised and more remote communication channels; these meetings can be reduced but never completely substituted.

At the same time technology was considered by many as a huge enabler that modernised, simplified and made more flexible communication and interaction norms and channels internally and externally. This is in line with the study of Martin and Omrani (2015) based on European Working Condition Survey arguing that Internet use and ICT uptake is positively related to employees' job satisfaction and extra effort. It is also relevant with Taken Smith and Smith's (2019) key finding suggesting that the more social media platforms a firm uses, which is a form of innovative communication, the higher its ranking among prestigious law firms is, since social media can be used for client development, networking, disseminating information, and building awareness of the firm and its practices. The author also found that technology was in some cases an apparatus that could create new layers of efficiency by minimising replication of work and standardising procedures involving some degree of repetition. Ways of increasing awareness regarding the benefits of technology could be also critical for technology adoption.

The present study reports that in many cases where the legal profession operates in a way that is not effective, robust or technologically informed, problems should not be ignored; problems should be solved. Change matters and cannot be discounted in a world looking to transform and innovate with paradigm-shifting near-realities like industry 4.0 taking a centre role in growth strategy agendas. The legal sector is of tactical importance and needs to follow this flow because it is a service provision industry with immense socio-economic impact in today's world. Thus it cannot be dictated by resistance to change and unwillingness to innovate. Law and lawyers shape culture (Friedman, 2017) and this process requires adaptability to change and capacity to innovate. This study means to inform and even facilitate this non-negotiable requirement for transition.

All in all, innovation should be looked at as a concept synonymous to knowledge transformation that means to create process change and businesses improvement; it can be reflecting technology uptake but is a lot more than that. Innovation adoption should be incremental, strategic and may start not necessarily from technology but from education,

management and communication interventions. For instance, since many participants highlighted the lack of knowledge transfer between the legal industry and universities establishing synergies between them could be a less radical starting point for transformation. Knowledge transfer partnerships, a form of innovation that can lead to new ideas creation and creativity promotion, could be a helpful and not particularly expensive lifeline for law firms in need of external support. Tsinoopoulos et al. (2018) agreed with the importance of *open innovation* that firms have to leverage on, for achieving product and service improvements. This refers to businesses creating and sustaining contacts externally with suppliers, university partnerships and competitive parties (Laursen and Salter, 2014). AI is a challenge that law firms should incrementally embrace, and they need to employ professionals trained to help them introduce this to their employees.

Lean thinking is a distinct operational management tool, successful in other sectors (Hines et al., 2008), that could enhance innovation and technology adoption (Zhou, 2016). It constitutes a well-established path to higher quality, improved operational performance, increased timeliness and greater respect for the people who provide the services (Bamford et al., 2015; Womack and Jones, 2015). If combined with other innovative work practices that are founded on added flexibility, skill-creation, interdisciplinary training, collaboration and incentivisation initiatives that have been found to be positively related to employees' positive attitudes towards work conditions (Martin and Omrani, 2015) they can formulate an innovation package that can improve legal processes and create competitive advantages. However, Lean and other forms of innovation should not be applied in isolation or as a monoculture; they must be approached as a holistic philosophy of thinking and acting for continuous improvement and change in the whole business environment from the top, the management, the daily routine of employees, to the bottom, how the operations run, level (Melton, 2005). Innovation needs to be approached as a journey for continuous productivity and performance enhancement and not solely as an organisational process in line with Drew (2006). Law providers must also recognise the pursuit of incremental innovations formally in their innovation strategies and define formal processes for implementing these types of innovation (Oke, 2007).

Finding better pathways to innovation adoption, investing more on technology training and use and creating custom tailored Lean thinking approaches fitting the heterogeneous nature of the law sector are keys for the future prosperity of the industry. Governments and the regulatory bodies as policy makers play an important role in the innovation process. They need to adopt a

view of innovation that is broader than R&D and drive value creation that provide supporting structures for innovation creation (OECD, 2013). Hence they have to catalyse processes and policies that could encourage firms to adopt innovation easier. Policy and business reforms can encourage innovation by increasing the involvement of the independent sector in service delivery, partnerships via a hybrid model can lead to innovation (Turner, Lourenço and Allen, 2016).

### 7.3. Key Contributions

This Thesis achieved the following key contributions:

- developed an evidence-based and theory-infused innovation adoption framework (presented in Figure 6.4) that critically assesses legal innovation uptake barriers and opportunities based on legal professionals' insights as these were captured from two research phases;
- contributed to theory by linking the RBV with elements of the PBV, proving the importance that the effective management of employees have for the service firms' performance improvement and productivity growth. Thus, advancing the theoretical and empirical understanding of law service operations demonstrating the rationale for legal firms to invest in technology (internally and externally), multidisciplinary education and training, knowledge transfer partnerships and to adopt leaner, hybrid and more client-driven management approaches.

Additionally, the following peripheral contributions also improved substantially the theoretical and empirical understanding reflecting and affecting legal service firms innovation as a tool for enhanced productivity and efficiency by:

- highlighting and addressing the lack of empirical research on the diverse issues the employees experience when working in the professional services sector (Dobrzykowski, McFadden and Vonderembse, 2016; Zhang et al., 2016) in general and the legal sector in particular (Segal-Horn and Dean, 2007; Susskind, 2017; Lewis and Brown, 2012);

- describing a transition framework that will support a sector that is a cornerstone for modern societies nowadays and attributes disproportionately (more than its size) to global economic growth and prosperity;
- adopting a multi-method approach of semi-structured interviews and a follow-up survey that adds to the existing academic literature, that on the one hand contextualises each of six critical themes and their diverse underpinning dimensions; but on the other hand advances the state of the art when it comes to the use of mixed methods in a severely understudied sector that usually is examined either solely in quantitative or qualitative terms (Prashar and Antony, 2018);
- providing a thematic framework with specific recommendations for practitioners/managers that can adapt to their firms and guide them for better innovation adoption that also prioritises groups more likely to be early adopters in the diffusion of innovation process (i.e. people with less than 10 year experience in practice);
- identifying that the working experience of employees can work as an identifier reflecting and affecting the innovation adoption rate within legal firms;
- distinguishing that the size of the law firm as a factor affects the level of innovation, as lack of funding and government support to invest in new technology adoption are preventing SMEs to meet their clients' expectations and their competitors in this dynamic environment;
- underlining that the strict legislation from the regulatory institutions such as the SRA restrict the flexibility of the lawyers in the service delivery, thus, resulting into increased paperwork and operational inefficiencies;
- emphasising the usefulness of open innovation for law firms; knowledge transfer through partnership with higher academic institutions being the key strategic option for law firms' long-term efficiency and innovation creation enhancement;
- proposing that operational management tools (like Lean thinking) and approaches referring to incentivisation, flexible working, hybrid management/leadership, could increase operational efficiency and effectiveness by providing support to the law professional as an individual, who is the most important asset to service firms, and to the service firm as a whole;
- contributing in the academic education activities by concluding that the education (Law Schools) that grooms lawyers today does not provide the required multi-disciplinary skills for graduate law students to equip them for their careers in the highly competitive environment of law firms.

#### 7.4. Reflections and project limitations

Irrespective of the contributions identified, this study holds its own limitations. The author overall managed to address the complexities of the project through piloting the data collection instruments prior to their launch. In cases, informal discussions with legal professionals were used prior to the data collections to make sure that the questions were set to the right standard and are indeed representative of the challenges and opportunities underpinning the sector and legal service delivery. Due to the heterogeneous and overcomplicated nature of the legal sector as a service industry that is quite different from the other industries such as the accounting and consultancy, this approach was particularly helpful but could have created a small extra layer of bias; the people who helped piloting this process probably defined somewhat, at least for the interviews which consisted the first stage of the study, the data collection agenda.. Thus, a replication of the study with the use of other contact persons having different codes, values, priorities, insights, for the piloting process, would have probably resulted in slightly different data collections instruments (i.e. interview guide and to some extent survey) and thus perhaps slightly differentiated results.

The study was limited on exploring the level of innovation adoption within law firms and identifying opportunities for its enhancement based on legal professionals' views employed in nineteen different countries around the world. Focusing on a specific country was not applicable, as it would have limited the data sample size and would not have the multiplicity of different views. Perhaps access to more countries could have added more to the study.

At this stage, the study offers limited evidence on the diffusion of specific innovations for example on adoption of new technologies in the participants' law firms. A longer time horizon would be required to actually observe their adoption patterns from legal professionals across the law services. Similarly, the present study did not provide evidence on how different innovations adoption might affect customers; similar point has been identified as a potential research limitation by Snyder et al. (2016).

Another theme around the content of the questionnaire that it should have been discussed was the questions covering the background of the participants. The gender and the income of the legal professionals were not prioritised as it would not have provided meaningful evidence on the lack of innovation factor. Also, as the aim of the researcher was to design the questionnaire on exploring the parameters on the innovation adoption factor, additional sub-questions to the

theme on *Technology transfer* might have elaborated the respondents' results. Therefore, the survey design may have been useful to include more questions asking the legal experts about specific innovations and real-life examples from their law firm per se.

It was evident that the legal sector is a difficult field to get access to; this was not fully realised by the author before the initiation of the study. Legal professionals and lawyers in particular have been found notoriously difficult with the exception of the study's very giving participants, to take part in the study and allocate enough time for making the data collection process more effective. This discipline-specific approach to participation has restricted the sample size of this Thesis when it comes to questionnaire completion. The small sample size in the survey instrument might reflect issues of generalisability. Recruitment incentives could have perhaps increased response rates but were deemed not to be particularly applicable for legal professional who are usually highly paid employees to whom time is more expensive than any typical PhD-level prize draw or financial incentivisation.

However, the qualitative part of the study was the primary research method and was very successful; 53 interviews is a robust sample for any qualitative work. Similar studies (see e.g. Faulconbridge and Muzio, 2008) conducted a mono-method study based on interviews (no. 40) with legal professionals in selected big law firms in the UK due to the same barrier. This PhD Thesis goes beyond that and contributes by conducting and analysing interviews from a wider pool of sizes of legal firms around the UK and the world; thus providing a more holistic and representative overview of legal professionals as a whole, on innovation adoption.

## 7.5. Future research

Potential research could be a longitudinal case study explicitly exploring the diffusion of specific innovations for example of new technologies in law firms. Alternatively, an interesting research would be to concentrate this work only to a specific law firms and explore the level of innovation adopted and best practice opportunities.

This study's data collection did not limit the participant characteristics on their working experience or their expertise. Future research could research the barriers and opportunities of innovation enhancement specifically by interviewing people that have a direct impact in the decision-making for new implementations in the company. This would provide meaningful results on what hinder the entrance innovations from a senior managerial role.



The present study reported evidence on the impact regulatory bodies have on law firms. Thus, scholars could explore the views of the SRA as one of the leading institutions for the legal sector, by providing insights on what the policy makers think on technological innovation in relation to the cyber-security threat factor could maybe improve the managers' implications and recommendations part for better and faster innovation implementation.

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## 9. Appendices

### 9.1. Appendix A: Interview guide

#### **Interview Guide**

##### **Introduction:**

- Welcome. Thank you very much for participating in my research. Please describe as fully as possible your answers using when possible real-life examples.  
Note that the information is confidential and anonymised, guided under the University of Huddersfield's Code of Practice for Ethics in Research. This information is solely for academic research purposes and I will be the only one accessing these materials.

##### **General Questions:**

1. Could you please tell me about your role as a lawyer/academic/law professional? How many years you are/were working in this role?
2. What are your experiences working in a legal firm? Any problems that you have faced?
3. What are some of the main challenges/issues that the legal firms are facing? (e.g. recession, traditional processes, Brexit, legal aid, etc.).
4. How legal firms have tried to address these challenges?
5. Do you think that these efforts have been effective thus far? Do you feel that there should be a different approach?
6. Where do you think lie the opportunities for addressing these challenges and improving the legal services/ processes in general?

##### **Legal process related:**

My PhD research focuses on understanding how to improve the legal service process<sup>8</sup> in terms of making the firm's operations more innovative and resource-effective.

7. How do you think the legal processes are today? Are they resource-effective enough (e.g. do you agree that there is a lot of waiting time, re-working of cases, repetition of cases, transportation costs overseas and many cases running parallel)?

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<sup>8</sup> Process is meant the assignment of a legal case from the beginning to the end of its completion.

8. How will you characterise a recent legal process that you have been involved? (e.g. long, short, too many or not enough people involved, poor or good quality, too much or less effort spend, costly or cost-effective etc).
9. Are the activities of a legal process guided by formal procedures or you develop new documents for each case?

### **Knowledge and Technology:**

10. Do you believe communication, team-working and the management such as training of employees play a vital role in a successful legal process? Why?
11. It is widely believed that technology transfer/ entrance plays also an important role for a firm's efficient performance. Do you believe that more technology adoption could have a significant input on the legal service sector? (e.g. faster communication among the parties, document management-confidentiality agreement.) Why?
12. What do you think about knowledge transfer/ exchange and the communication among legal academics and practitioners?

### **Conclusion:**

- Do you have anything to add regarding the topic that we did not cover?
- Could you please recommend any legal practitioners that I could contact for my research or could you please forward my interview questions to them?

Thank you very much for your help and participation to my research! Please do not hesitate to contact me for any questions on [Kalliopi.Michalakopoulou@hud.ac.uk](mailto:Kalliopi.Michalakopoulou@hud.ac.uk) or Tel.: 0044 7933128937

*Miss Kalliopi Michalakopoulou*  
*PhD Researcher, University of Huddersfield, UK*



### 9.1.1. Consent form



#### CONSENT FORM

**Title of Research Project: INNOVATION ADOPTION AS A VEHICLE FOR OPERATIONAL EFFICIENCY ENHANCEMENT IN THE LEGAL SERVICE MANAGEMENT**

It is important that you read, understand and sign the consent form. Your contribution to this research is entirely voluntary and you are not obliged in any way to participate, if you require any further details please contact your researcher.

I have been fully informed of the nature and aims of this study as outlined in the information sheet	<input type="checkbox"/>
I consent to taking part in this the study	<input type="checkbox"/>
I understand that I have the right to withdraw from the research without providing any reason	<input type="checkbox"/>
I give permission for my words to be quoted (by use of pseudonym)	<input type="checkbox"/>
I understand that the information collected will be in stored under secure conditions and saved on a K drive protected by Huddersfield University and a password-protected memory stick for a period of _5_ years at my personal computer.	<input type="checkbox"/>
I understand that no person other than the researcher will have access to the information provided	<input type="checkbox"/>
I understand that my identity will be protected by the use of pseudonym in the report and that no written information that could lead to my being identified will be included in any report	<input type="checkbox"/>

If you are satisfied that you understand the information and are happy to take part in this project please put a tick in the box aligned to each sentence and print and sign below.

Signature of Participant:	Signature of Researcher:
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

(one copy to be retained by Participant / one copy to be retained by Researcher)

### 9.1.2. Information form

#### **Research Project: INNOVATION ADOPTION AS A VEHICLE FOR OPERATIONAL EFFICIENCY ENHANCEMENT IN THE LEGAL SERVICE MANAGEMENT**

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##### **INFORMATION SHEET**

You are being invited to take part in a study about the challenges that the legal sector is facing as these are experienced from law professionals. Before you decide to take part it is important that you understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with me if you wish. Please do not hesitate to ask if there is anything that is not clear or if you would like more information.

##### **What is the study about?**

The explicit aim of this research is to develop a theoretical and empirical understanding of the challenges that the legal sector is facing and how Lean thinking with the use of human factor and the technology could benefit the legal sector by solving problems generated from its heterogeneous nature and operational inefficiencies.

##### **Why I have been approached?**

You have been identified either from The Law Society's website or from personal contacts and kindly asked to participate because of your experience working in the legal service sector.

##### **Do I have to take part?**

It is your decision whether or not you take part. If you decide to take part you will be asked to sign a consent form, and you will be free to withdraw at any time and without giving a reason.

##### **What will I need to do?**

If you agree to take part in the research you will be asked to participate in an interview. This should take no more than an hour of your time.

##### **Will my identity be disclosed?**

All information disclosed within the interview will be kept confidential and anonymised using a pseudonym, unless you indicate that you are at risk of serious harm and in that case you have the right not to participate in the interview.

##### **What will happen to the information?**

All information collected from you during this research will be kept secure on a K drive protected by Huddersfield University and a password-protected memory stick. Also, any identifying material, such as names will be removed in order to ensure anonymity and comply with the Data Protection Act 1998. It is anticipated that the research may, at some point, be published in a journal or report. However, should this happen, your anonymity will be ensured, although it may be necessary to use your words in the presentation of the findings and your permission for this is included in the consent form.

##### **Who can I contact for further information?**

If you require any further information about the research, please contact me on:

Name: Miss Kalliopi Michalakopoulou

E-mail: [Kalliopi.Michalakopoulou@hud.ac.uk](mailto:Kalliopi.Michalakopoulou@hud.ac.uk)

### 9.1.3. Coding themes (NVivo snapshot of the themes coding process)

Nodes			Search Project
Name	Files	References	
Challenges	2	10	
Human factor	0	0	
Lack of innovation	6	10	
Resistance to change	9	17	
Management of employees	18	66	
Clients	1	1	
Interaction	11	23	
Competition	12	34	
Costs	13	25	
High expectations	13	18	
Organisational transitions	1	1	
Recession	2	3	
Tesco Law-Legal aid cuts	9	15	
Government restrictions-Regulatory bodies	11	26	
Brexit	13	21	
Education	3	5	
Trainee solicitors	7	12	
Law Schools	11	34	
Knowledge transfer	20	36	
Legal Processes	5	7	
Complexity	11	17	
Fees	12	18	
Efficiency	26	74	
Culture	7	16	
Profession's restrictions	9	20	
Limited opportunities	5	9	
Costs-limitations	8	15	
Work-life balance	11	13	
Technology	28	83	
Old vs new generation	9	19	
Opportunities	8	14	
Legal Processes	1	3	
Business operating profession	5	10	
Education	5	6	
Change in the legal sector	11	22	

## 9.2. Appendix B: Questionnaire



### **Innovation Adoption as a Vehicle for Operational Efficiency Enhancement in the Legal Service Management**

#### **Introduction:**

This research aims to contribute to the improvement of the efficiency and productivity of law firms. This can be achieved through the collection and analysis of critical insights from legal professionals that will allow developing an understanding of the barriers and facilitators of innovation in law firms. Innovation refers to the transformation of knowledge into services, the effective management of employees and also the adoption of new/improved technological tools.

By completing this survey, you will help me fulfil this cause and complete my doctorate studies. All the process is anonymised and confidential. As a token of appreciation, my findings will be shared as soon as they are published, with those respondents interested to see them. If you have any questions please feel free to contact me on [Kalliopi.Michalakopoulou@hud.ac.uk](mailto:Kalliopi.Michalakopoulou@hud.ac.uk)

#### **Respondent Background:**

- Professional title and area of expertise:.....
- Years of working experience in the legal sector:.....
- Size of law firm (based on the people working in your firm): ☐ <100, ☐ >500, ☐ >1000

#### **Section 1- Human factor & Process Change (Please tick one box based on your own experience)**

	Strongly Agree	Agree	Neither Agree/Nor Disagree	Disagree	Strongly Disagree
The leadership and management of employees (e.g. motivating, appraisal, support, communication) are running effectively in your law firm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

There is a need for better collaboration and communication among the co-workers in your law firm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your law firm adopts ways to reduce time, cost and paperwork in legal services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your law firm adopts new Software and IT systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your law firm invests in training its employees to adopt innovation (e.g. IT, new processes).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lawyers have flexibility in the delivery of legal services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovation adoption is important for reducing time and cost of legal services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Innovation adoption is important for enhancing the legal staff and customer satisfaction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Law firms lack innovation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 2- Technology Transfer (Please tick one box based on your own experience)**

	Strongly Agree	Agree	Neither Agree/Nor Disagree	Disagree	Strongly Disagree
The communication and collaboration among law staff and IT staff are poor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IT and data security threats could be huge barriers in technology adoption in the legal sector.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is not enough training on IT tools and systems (e.g. document management, fee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

monitoring) available to legal staff.					
There is too much paperwork in legal operations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is significant resistance to technology uptake by people working in the legal sector.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Much legal work is still too bespoke to be automated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Artificial Intelligence will improve the delivery of legal services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Artificial Intelligence will make the life of a legal professional easier.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automation of services offered by law firms could improve efficiency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section 3- Innovation via knowledge transfer (Please tick one box based on your own experience)**

	Strongly Agree	Agree	Neither Agree/Nor Disagree	Disagree	Strongly Disagree
Law School education equips its students effectively with the legal skills they need to be a lawyer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Law School education equips its students effectively with the business and technology skills they need to be a lawyer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Law firms provide adequate legal training to maintain the currency of legal skills of their lawyers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Law firms provide adequate business and technology training to enable their staff to work effectively.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Innovation in law firms could be promoted through partnerships with universities.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Innovation in law firms could be promoted through synergies with external parties such as other legal firms.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Innovation in law firms could be promoted through lawyers' participation in external events like conferences/workshops.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Please provide further comments if you wish:**

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**Thank you! Please provide your email address if you are potentially willing to participate in a follow-up study and/or interested to receive the study's results.**

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### 9.2.1. Cross-tabulations for selected variables

<b>Law firms lack innovation * Years of working experience</b> ( $\chi^2= 3.931$ , df=4, p>0.05)							
		Years of work					Total
		<10y	10-15y	15-20y	20-25y	>25y	
Law firms lack innovation	0	28	5	5	7	6	51
	1	33	10	5	3	4	55
Total		61	15	10	10	10	106

<b>Law firms lack innovation * Firm size</b> ( $\chi^2= 8.008$ , df=2, p<0.05)					
		Firm size			Total
		Small	Medium	Large	
Law firms lack innovation	0	16	14	21	51
	1	32	11	12	55
Total		48	25	33	106

<b>Law firms lack innovation * Countries</b> ( $\chi^2= 3.265$ , df=2, p>0.05)					
		Countries			Total
		UK	REST OF THE WORLD	EUROPE	
Law firms lack innovation	0	36	10	5	51
	1	36	7	12	55
Total		72	17	17	106

<b>Law firms lack innovation * Innovation in law firms could be promoted through lawyers' participation in external events</b> ( $\chi^2= 0.482$ , df=1, p>0.05)				
		Innovation in law firms could be promoted through lawyers participation in external events		Total
		2	4	
Law firms lack innovation	0	6	41	47
	1	4	44	48
Total		10	85	95



### 9.2.2. Descriptive statistics for all the variables

	N	Minimum	Maximum	Mean	Std. Deviation
Management factor	106	1	5	3.66	1.059
Collaboration/communication	106	2	5	3.92	.896
Cost, time, paperwork decrease	106	1	5	3.70	1.123
New Software and systems	106	1	5	3.84	1.061
Invest in training of employees	106	1	5	3.56	1.122
Flexibility in the service delivery	106	1	5	3.42	.995
Innovation to reduce time and cost	106	2	5	4.50	.636
Innovation to enhance the legal staff and customer satisfaction	106	2	5	4.50	.621
Law firms lack innovation	106	1	5	3.36	1.189
Communication IT and lawyers is poor	99	1	5	3.39	1.048
IT and data security are barriers to innovation	99	1	5	3.79	1.118
Not enough training on IT to law staff	99	1	5	3.63	1.075
Too much paperwork	99	2	5	4.21	.895
Resistance to IT uptake	99	2	5	3.61	.924
Legal work too bespoke to be automated	99	1	5	3.14	1.187
AI will improve the legal service delivery	99	1	5	3.51	1.091
AI will make lawyers life easier	99	1	5	3.60	1.059
Automation of services offered by law firms could improve efficiency	99	1	5	4.12	.824
Law School education equips its students effectively with the required legal skills	95	1	5	3.00	1.185
Law School education equips its students effectively with the business and technology skills	95	1	5	2.33	1.076
Law firms provide adequate legal training to maintain the currency of legal skills	95	1	5	3.53	.921
Law firms provide adequate business and technology training to enable their staff to work effectively	95	1	5	2.86	1.006
Innovation in law firms could be promoted through partnerships with universities	95	1	5	4.04	.874
Innovation in law firms could be promoted through synergies with external parties such as other legal firms	95	2	5	4.11	.736
Innovation in law firms could be promoted through lawyers participation in external events	95	1	5	4.16	.829
Valid N	95				

### 9.3. Appendix C: PGR project ethical approval form

**THE UNIVERSITY OF HUDDERSFIELD**  
**Business School Research Ethics Committee**

**POSTGRADATE RESEARCH STUDENT ETHICAL REVIEW FORM**

Please complete and return via email to [alex.thompson@hud.ac.uk](mailto:alex.thompson@hud.ac.uk) along with the required documents (shown below).

**SECTION A: TO BE COMPLETED BY THE APPLICANT**

Before completing this section please refer to the Business School Research Ethics web pages which can be found under Resources on the Unilearn site (Ethics Policies and Procedures). Applicants should consult the appropriate ethical guidelines.

Please ensure that the statements in Section C are completed by the applicant (and supervisor for PGR students) prior to submission.

Researcher(s) details	Miss Kalliopi Michalakopoulou
Project title	Innovation adoption as a vehicle for operational efficiency enhancement in the legal service management
Award (where applicable)	
Supervisor details (where applicable)	Prof David Bamford
Project start date	January 2017

**SECTION B: PROJECT OUTLINE (TO BE COMPLETED IN FULL BY THE APPLICANT)**

<b>Issue</b>	<b>Please provide sufficient detail for your supervisor to assess strategies used to address ethical issues in the research proposal. Forms with insufficient detail will need to be resubmitted.</b>
<b>Aims and objectives of the study.</b> Please state the aims and objectives of the study.	The project aims to examine how Operations Management (OM) theory could strengthen the legal sector. The explicit aim of this research is to develop an understanding of how innovative approaches could lead to improvements of the legal sector's efficiency.
<b>Brief overview of research methodology</b> The methodology only needs to be explained in sufficient detail to show the approach used (e.g. survey) and explain the research methods to be used during the study.	The research is based on qualitative and quantitative data; semi- structured one to one interviews and a survey.
<b>Does your study require any permissions for study?</b> If so, please give details	No.
<b>Participants</b> Please outline who will participate in your research. Might any of the participants be considered 'vulnerable' (e.g. children)	Law tutors of the University of Huddersfield Business School in the UK. Also, legal practitioners working in legal firms worldwide and in the UK.
<b>Access to participants</b> Please give details about how participants will be identified and contacted.	The participants will be identified through personal contacts within the Business School as a PhD student and also through the Law Society's webpage and will be further contacted via e-mail and other social media like LinkedIn. Snowball sampling technique will be used to recruit more participants.

	For the survey instrument the participants will be contacted through social media, conferences and from the first data collection phase.
<b>How will your data be recorded and stored?</b>	The qualitative data will be audio recorded and transcribed from the researcher. Both data will be saved on a K drive protected by Huddersfield University and a password-protected memory stick.
<b>Informed consent.</b> Please explain how you will inform your participants about the study and whether they will be in a position to give informed consent.	The participants will be informed via email for the aim of the study. For the interviews I will provided them before the interview with a consent and an information sheet form.
<b>Right to withdraw</b> Please identify whether you are offering your participants a right to withdraw from the study and/or to withdraw their data from the study and how this will take place. If you are not offering a right to withdraw, please explain why.	The participants will be informed before the interview via email whether they are happy to take part providing them with the ethics forms documents. At that point, they will be also informed that they are free to decide whether it is worth to take part in the research study and able to withdraw from the study during or at the end of the interview phase without needing to provide a reason for this. The participants will be aware of this through the consent form.
<b>Confidentiality</b> Please outline the level of confidentiality you will offer respondents and how this will be respected. You should also outline about who will have access to the data and how it will be stored. (This information should be included on Information your information sheet.)	The data is confidential and only the researcher will have access. The data will be saved on a K drive protected by Huddersfield University and a password-protected memory stick.
<b>Anonymity</b> If you offer your participants anonymity, please indicate how this will be achieved.	I will change the names of the participants in my Thesis by using a pseudonym.
<b>Harm</b> Please outline your assessment of the extent to which your research might induce psychological stress, anxiety, cause harm or negative consequences for the participants (beyond the risks encountered in normal life). If more than minimal risk, you should outline what support there will be for participants. If you believe that that there is minimal likely harm, please articulate why you believe this to be so.	The research does not induce psychological stress, harm or negative consequences beyond the risks encountered in normal life.

**Retrospective applications.** If your application for Ethics approval is retrospective, please explain why this has arisen.

N/A

## SECTION C – SUMMARY OF ETHICAL ISSUES (TO BE COMPLETED BY THE APPLICANT)

Please give a summary of the ethical issues and any action that will be taken to address the issue(s).

N/A

## SECTION D – ADDITIONAL DOCUMENTS CHECKLIST (TO BE COMPLETED BY THE APPLICANT)

**Please supply copies of all relevant supporting documentation electronically. If this is not available electronically, please provide explanation and supply hard copy.**

I have included the following documents

Information sheet

Yes ☒

Not applicable ☐

Consent form	Yes <input checked="" type="checkbox"/>	Not applicable <input type="checkbox"/>
Letters	Yes <input type="checkbox"/>	Not applicable <input checked="" type="checkbox"/>
Questionnaire	Yes <input checked="" type="checkbox"/>	Not applicable <input type="checkbox"/>
Interview schedule	Yes <input checked="" type="checkbox"/>	Not applicable <input type="checkbox"/>

## SECTION E – STATEMENT BY APPLICANT

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I confirm that the information I have given in this form on ethical issues is correct. (Electronic confirmation is sufficient).

**and** (for PGR students only)

### **Affirmation by Supervisor (where applicable)**

I can confirm that, to the best of my understanding, the information presented by the applicant is correct and appropriate to allow an informed judgement on whether further ethical approval is required

Supervisor name/signature: *David Bamford*

Date: 06/11/2018

Name of applicant (electronic is acceptable): *Kalliopi Michalakopoulou*

Date 06/11/2018

**All documentation must be submitted electronically to the Business School Research Ethics Committee Administrator, Alex Thompson, at [alex.thompson@hud.ac.uk](mailto:alex.thompson@hud.ac.uk).**

**All proposals will be reviewed by two members of BSREC. If it is considered necessary to discuss the proposal with the full Committee, the applicant (and their supervisor if the applicant is a student) will be invited to attend the next Ethics Committee meeting.**

**If you have any queries relating to the completion of this form or any other queries relating to the Business School's Research Ethics Committee in consideration of this proposal, please do not hesitate to contact the Chair, Prof Eleanor Davies ([e.davies@hud.ac.uk](mailto:e.davies@hud.ac.uk)) ☎ [47] 2121 or the Administrator Alex Thomson ([alex.thompson@hud.ac.uk](mailto:alex.thompson@hud.ac.uk)) ☎ [47] 2529**