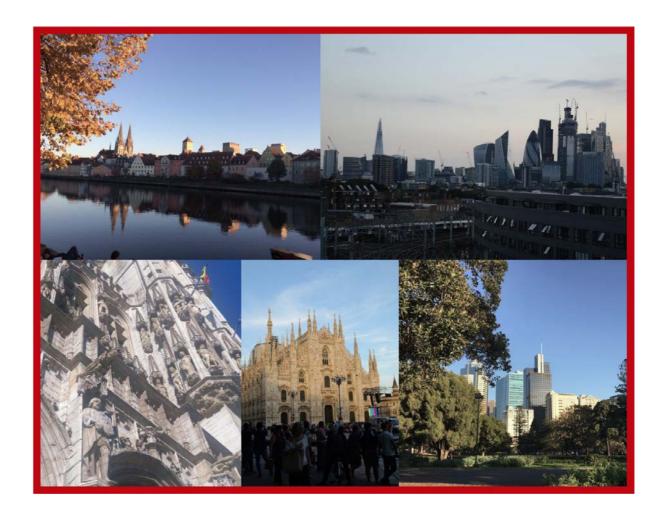


Technology: Implications on the Nature of Legal Practice and the Role of the International Legal Profession

Report of the Sheffield Project on the Internationalisation of the Legal Profession, 2018

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Overview

This report presents the results of the 2018 round of the Sheffield School of Law Project on the Internationalisation of the Legal Profession.

Now in its third year, the Project on the Internationalisation of the Legal Profession is a joint staff-student team research project exploring questions surrounding the relationship between globalisation and the legal profession. Each year a team of selected students conduct interviews within participating overseas offices of international law firms, during a placement period, collecting data in order to respond to a determined research question. The Project takes place while partaking students are on their exchange year, henceforth capitalising on the Sheffield School of Law extensive programme of student exchanges (60 partner universities in 30 countries) and allowing students to complement academic experience gained whilst abroad with practical exposure to the legal profession in the country they are visiting, or a country in the same region. Students disseminate the findings of their research through a written report and through a lecture to the second-year cohort of the Sheffield Law School. Participation by students in the Project allows for the development of several skills, including teamwork, engagement with the professional world and empirical research and drafting. The Project findings are intended to benefit law students and their understanding of the legal profession, as well as aid reflection and debate in academia and in the legal industry.

Previous rounds of the Project have explored questions on the meaning of internationalisation (2016, results available at www.sheffield.ac.uk/law/exchange/internationalisationlegalprofession), as well as the implications of emerging anti-globalisation trends, (2017, Project responses can be found at www.sheffield.ac.uk/law/exchange/internationalisationlegalprofession) each within the context of the international legal profession.

Building on previous years' findings, the 2018 research Project explores the implications of technological development on the personal and professional lives, career paths and education of international lawyers, as well as ramifications for the role and strategy of international firms. Five penultimate year LLB students at the University of Sheffield School of Law have been involved, collecting data across six jurisdictions, both overseas and at home. Research aimed to explore changes and potential developments in this facet of international legal practice.

The 2018 research topic was inspired by student acquaintance with digital platforms such as Peerpoint,¹ developing applications of AI through technologies such as Nakhoda² and models such as Fuse³ which facilitate the technological education of lawyers in firms. Scholarly literature furthered student-researchers' knowledge and enthusiasm to further explore the topic; notably, Arntz's article 'The Risk of Automation for jobs in OECD Countries: A Comparative analysis'⁴ influenced students in their pursuit of knowledge in this area. The article suggested that various tasks belonging to the typical portfolio of activities, which characterise the legal professional, such as

¹ Online Digital platform for self-directed consultants, piloted by Allen & Overy LLP, see http://www.allenovery.com/peerpoint/Pages/default.aspx

² Developed by Linklaters LLP, see https://www.linklaters.com/en/insights/online-services/nakhoda-our-flagship-technology-solution

³ A collaborative innovation space between lawyers, technologists and clients can explore and develop new technologies in response to changes and challenges in the international corporate world. See http://www.allenovery.com/advanceddelivery/fuse/Pages/default.aspx. Similar programmes are similarly established within other firms.

⁴ Arntz, M., T. Gregory and U. Zierahn (2016), "The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis", OECD Social, Employment and Migration Working Papers, No. 189, OECD Publishing, Paris. http://dx.doi.org/10.1787/5jlz9h56dvq7-en

drafting legal documents, may in future be automatised. This provoked curiosity among the student team as to whether equivalent views were present within global law firms. Their findings suggest that lawyers harboured less fear than might be expected, possibly as a result of the multiple assets of automatisation, transforming the quality and quantity of conducted by legal professionals. The potential threat to some traditional domains of legal practice was significantly less acutely feared among interviewees than expected.

RESEARCH QUESTIONS

The overarching research question addressed in the 2018 Project is:

"To what extent and in what ways has technology altered the nature of legal practice and the role of the international legal profession?"

There was an expectation that the Project would capture responses reflective of an intrinsic influence of technology in legal practice, be this through the use of artificial intelligence (AI), improvements in communication or growing possibilities for remote working. There was a general expectation, based on the 2017 Project findings that lawyers would consider potential displacement as a result of technological development. Student researchers fostered a desire to explore the influence of technology within a broad scope, across a variety of practice areas, legal roles and seniorities. Specific areas of law and practice were also to be explored. Various specific areas of research were prompted by current issues such as the promulgation of the GDPR, which sparked curiosity to discover potential concerns and implications of data security in legal practice. Former experience and personal interest provoked inquiries into the ramifications of increasingly available online legal advice⁵ as well as the potential intrusion of technology into the private lives of lawyers. These issues will be explored *inter alia* within the scope of this report.

Technology, within the scope of this report, is to be interpreted broadly. Student researchers conducted interviews interpreting "technology" to be a diverse collection of hardwares and softwares, which can be categorised principally in three classes. Basic technology, comprising of simple communicative, well-established technologies, such as email, mobile phones, laptops and calls, was analysed, principally as regards the relationship between lawyer and client, and the professional and private spheres of lawyers' lives. Innovative but established technology, characterised as abstract and more quickly-developing in nature, also featured in the Project analysis. Examples may include attempts to ensure the security of data or the construction of complex international frameworks by which to organise and access this data. A final class of technology cannot be overlooked. Emerging technology. This is a class of mind-boggling technologies, such as those encompassed within FinTech, RegTech and LegalTech including cryptocurrencies, blockchain technologies, the augmenting value and curiosity around sandboxes, or the development of digital contracts, which sign automatically and digitally upon the realisation of certain conditions. These technologies will not be explored in detail, but must be considered, especially in the light of the future lawyer and dynamics of the legal industry.

In order to capture how technology has affected the nature of legal practice, role of and impact on the international lawyer, researchers sought answers to the following four sub-questions. The questionnaire used by students in their research is available in the appendix of this report.

1) How has technology altered the nature of legal practice? Does it create cross-jurisdictional work or does it simply enable it?

The impact of technology on legal practice has been monumental, with the progressive automatisation of tasks and increasingly fluid cross-jurisdictional working. Automatisation has led to an undeniable evolution in the role of legal professionals, and whilst the pessimist among us suggests this limits the scope of individuals' work, the optimist perceives more refined and critical work for the lawyer, who is able to focus on the most demanding aspects of legal practice, leaving more mundane tasks to machines. More effective cross-border communication is facilitated with

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⁵ Through websites such as Talk2Solicitors.co.uk

delivery and receipt of information now more accurate and efficient than formerly. Multinational teams corroborate to deliver a unanimous and seamless advice for clients. A reduced need to meet in-person with clients, attributed to these technological developments, has a consequential effect on the client-lawyer relationship and possibly legal fees.

Within this sub question, the researchers aimed to understand what different technologies are involved in enhancing legal practice and how these technologies assist the day-to-day functioning of the global law firm. The researchers also sought to understand whether the impact of technology has a more pronounced effect in certain practice areas than others, in order to expedite understanding of how technology has affected law firms and lawyers, as well as how technology has altered the legal profession within the scope of the market.

2) How has technology altered the role of the international legal profession and the strategy of international law firms?

This sub-question aimed to investigate how technology affects the way international law firms implement business strategies or diversify provided client services, and how lawyers compete within the industry to attract clients. It examined the importance of remaining up-to-date with relevant technologies, and the best ways in which to attract clients to a firm. It explored whether technology gives client more opportunities to find the best lawyers online, as well as whether diversity has been broadened as a secondary impact of technological advances.

3) How has technology altered the personal and professional life of the international lawyer?

Beyond law firm operations and the broader role of the legal profession, technology has of course altered the life, both personal and professional, of individual lawyers. On the one hand technology allows remote work and reduces the need for business travel. On the other hand, it enables work around the clock and a certain blurring of the boundary between personal and professional life. It also alters the daily tasks of the lawyer. While junior lawyers a decade ago may have found themselves spending entire days in the storage room of a client's headquarters reviewing contracts, today's there are virtual data rooms at the very least, and intelligent software to process relevant information in the best case scenario. We want to understand how these shifts and changes affect the way lawyers see themselves as professionals, and the way they approach their work. We also want to understand what new tasks technological advances have brought about for lawyers, and relatedly what lawyers' tasks they have rendered obsolete. And we want to understand how lawyers' manage the boundary between personal and professional life in light of technological progress.

4) How has technology altered the educational path and training needs of the international lawyer?

In light of the possibilities opened up by technological progress and the resulting shift in the international lawyer's professional tasks and functions as considered under sub-question 3 above, there is likely to be a tangible change in the training and educational needs of international lawyers. What are these changes that technology drives in the academic and professional formation of the international lawyer? Have law school curricula and postgraduate training programmes sufficiently responded to relevant shifts?

KEY FINDINGS

Technology enables revolutionary change in practice. Al, digital contracts, developing communications technology and sophisticated filing systems assist lawyers, transforming daily tasks and facilitating a more seamless international client service.

Technological development is unlikely to threaten the 'human lawyer.' Interviewees expressed certainty that technology would not be able to replace certain human characteristics particularly human emotional intelligence and skills such as advanced communication, judgement and teamwork, at least in the near future.

The client-lawyer interface has become instantaneous and less formal. Formal correspondence between client and lawyer is, in many respects, diminishing and becoming slightly antiquated. Increasingly informal emails and a predominance of calls prevail over dated communications such as letters and formal emails.

Technology is a catalyst for changing client queries and firms' service provision. Within a developing market, technology modifies the nature of client queries, as well as the services lawyers, rather than machines, are providing. Some firms are increasingly investing in their own development of technologies, to utilise within the firm, and export out to clients.

Data security influences clients and drives competition between firms. Respondents considered how clients can rightly be cautious about trustworthy data protection for sensitive information. Accordingly, security is a key concern for clients. As a result, law firms are expected to make substantial contributions to invest in good security to protect the data they have. Firms may compete with one another for the best software to ensure data protection, in order for clients to be discouraged from 'shopping around', and create firm, transparent, and secure relations between client and lawyer.

Technology indirectly assists diversity. Changes to firm culture, predominantly as a result of remote working, have aided internal diversity in firms. In particular, this draws parents, and women to remain in practice, having increased flexibility as to their work/life balance.

Billing methods are changing, and will continue to change, with technological evolution. Technology may call for reinventions in the way firms bill clients, taking into account the impact of technology, liability, and quality of legal services, rather than the time taken and relevant seniority of the lawyer conducting work.

Technology blurs the boundary between personal and professional life. With remote, flexible working, a benefit and detriment of modern practice, lawyers increasingly find that work is portable and as such presents a number of concerns with regard to infiltration of work into personal life.

Traditional soft skills are as important as ever. An overwhelming number of responses suggested that skills in technology have not replaced the need for traditional soft skills. In particular, participants mentioned communication as an invaluable skill, determining it as one of the characteristics which make a 'good lawyer'.

A degree in technology does not necessarily make an individual a 'good lawyer.' Technical knowledge outside of the law, however, may be an asset to a lawyer's practice and a

willingness to learn technological skills is a positive attribute of a prospective, or current, lawyer.

METHODOLOGY OVERVIEW

The 2018 team collected data in six jurisdictions through placements of between one and five days in the local office of a participant law firm, with the exception of one London-based law firm. Lawyer and non-lawyer personnel were interviewed, in order to assess a diverse pool of participants, with the aim of establishing the effects of technology in firms across different areas of practice. The jurisdictions included: The United Kingdom (London), Belgium (Brussels), Switzerland (Zurich), Italy (Milan), Australia (Melbourne), and Germany (Munich). Participant law firms in these jurisdictions were invited to participate thanks to contacts of the Sheffield School of Law staff, and placements were dependent on the geographical location of the student researchers. Participation from law firms was on a completely voluntary basis, and researchers had to follow the University's Ethical Code of Conduct. Student researchers had to respect the privacy of participants and ensure that information provided in interviews was anonymised in the collection of personal data; in respect of this, the names of participants do not feature in this report.

Identification of research questions and preparation of questionnaires

Student researchers submitted an application form. Shortlisted applicants were requested to outline their proposed approach to their chosen research question in a presentation. The four sub-questions and the questionnaire used in interviewing participants were brainstormed through team-wide skype meetings between staff and students. Some student researchers decided to incorporate research questions they had created themselves, specifically directed to the firm in which they were going to do their placement. Following this, student researchers spent time in their allocated law firm gathering primary data for analysis. To ensure consistency, the frame of questions was the same across participant law firms and jurisdictions. The questionnaire used by researchers can be found in the Appendix of this report.

Data collection

Student researchers conducted their law firm placement within a four-week window, between May and June 2018. Altogether over 55 lawyers and trainee lawyers and 9 non-lawyer law firm staff were interviewed. The lawyer interviews included 35 associates and junior solicitors, and 18 senior lawyers ('Of Counsels,' Partners, Consultants, Legal Executives and Litigators). One paralegal was interviewed.

Data analysis

Student researchers were divided into two groups, each sub-group working on two sub-questions. Each sub-group extracted main themes, contrasting themes and unexpected responses from the data collected, highlighting the most appropriate and effective data to best answer to assigned questions. The findings from the data analysis have been presented in this final document.

Dissemination

The results of the research project are being disseminated both through this document, and through a lecture as part of the WiNS (Without it No Success) Skills and Values module at the University of Sheffield School of Law. The lecture, which will be led by the student researchers, is scheduled for October 2018 and is addressed to the second-year law students' cohort.

Structure of the Report

The remainder of this report presents the findings of each sub-question. For each sub-question the findings directly responding to the question are explained, and then other relevant but not directly responsive findings are considered.

Sub-Question One: How has technology altered the nature of legal practice?

Collected data suggested that technological development has an overarching effect on the nature of legal practice, diversifying both the expectations of clients as well as the work of lawyers. Interviewees expressed an optimistic view regarding the resilience of the human lawyer, alongside an appreciation for the value of technology. The emerging consensus was that a melange of technological and human competence delivers the most reliable, efficient and secure response to client demands. While overall the interviewees' sentiment regarding the role technology, present and future, plays in legal practice was positive, this sentiment was not unanimous, and a sense of concern, especially from non-lawyer participants, was evident.

"Seriously, we are now in the golden age, but the rate of technological progress has been alarming."

A Changing Nature: Technology Moulding the Market

The findings suggested that technology has played a pivotal role in diversifying work for lawyers, creating new areas of practice and broadening the scope of legal problems. As clients become increasingly dependent on technology, technological astuteness becomes an imperative for lawyers. Notably in London, services provided to clients are becoming increasingly digital, and advisory work on FinTech, LegalTech and RegTech is rapidly increasing. The identity of legal practice is evolving to be far more inclusive of technology, as firms progressively affiliate themselves with technological development and education, and law is tangibly impacted by emerging areas of law such as FinTech, as well as digitally-fuelled domains such as privacy, IP and new large-scale IPOs in emerging economies, which may not have been anticipated prior to the advent of technology. Developments in the current market often breed uncertainty. The fluctuation of cryptocurrencies as well as the ambiguity around intangible asset valuation, especially amongst tech-fuelled start-ups in the US public markets, create a dynamic and evolving market. It is into this turbulent environment that lawyers must deliver advice, and remain vigilant as to technological developments.

Everyday Developments for Lawyers in Practice

Our findings unequivocally exposed important every-day changes to the tasks of lawyers as a result of technology. Online databases, used throughout the education⁸ of lawyers, as well as daily during their work post-qualification, aid legal research. Technological development allowing for organised storage,⁹ access to and analysis of documents has hugely contributed to the efficiency with which lawyers can conduct tasks.¹⁰ Practice-area-specific changes in automatising procedure, be this in litigation,¹¹ or contractual drafting,¹² have hugely impacted the day-to-day life of lawyers. A move away from paper to data rooms¹³ has further enabled firms to break down barriers, working innovatively and collaboratively across departments.

Amid prospective hopes, the legal sector battles its passion for paper, conflicting with demands for a paperless service. Whilst most participants conveyed a contentment to access data online, reading

⁶ Partner, Melbourne

⁷ Associate, Zurich

⁸ Associate, Melbourne

⁹ Associate, Milan

¹⁰ IT leader, Zurich

¹¹ Associate, Milan

¹² Associate, London; Associate, Brussels

¹³ Special Counsel, Melbourne; Associate, Munich

substantial documents from a screen was received with less enthusiasm.¹⁴ More than simply preferable, at times hard-copy documents were perceived to be essential. For example it was submitted that a digital display of certain extracts of a document could not suffice to meet the threshold of an unbiased proof in court.¹⁵

Opportunities for remote working was also presented as a daily change in legal practice. This was increasingly an option in all participant firms, and was enforced in some offices across a practice area in order to help facilitate this change in mindset, and increase a familiarity with a remoteworking office dynamic. ¹⁶ Technological developments have led to a better integration of this new facet of work; telephones and emails being the primary source of communication between lawyers within the walls of the firm, makes for an easy transferability when lawyers choose to work away from the office environment. Increases in remote working prioritise quality of work above 'facetime' and contribute to the disintegration of traditional 'office hours' as well as promoting diversity. ¹⁷

Different Dynamics: Changes to the Client-Lawyer Relationship

Our research found that expectations on lawyers to be increasingly efficient¹⁸ and accurate¹⁹ were growing with client knowledge that technology makes vast amounts of literature and precedent accessible, as well as allowing for a much quicker analysis of documents. Communication consistently appeared as the most substantial change for the individual in practice; instantaneous communication creates a more intimate and informal relationship with clients²⁰ and erodes traditional conceptions of 'office hours.' If technology may have been initially intended to render more efficient and less laborious the process of communication, it has also created new expectations. The expectation that lawyers respond to and acknowledge clients quickly, was indicated as a burden generated by technology. ²¹ While the overall consensus was that the facilitation of remote working allowed for a culture change in law firms and potential for a different dynamic to work/life balance,²² there was little evidence of a unanimous conclusion as regards the effect technology has on improving the client-lawyer relationship.

"Technology has led to more short and snappy communication with clients, and much of it is more informal than the old letter days. In this sense, lawyers can be 'closer' to their clients than before technological developments."²³

The value of instantaneous communication was debated, and whilst many interviewees suggested that this led to a quicker service for clients, ²⁴ others expressed concerns that the rapidity of communication led to a lack of attention to detail ²⁵ and a "different way of giving advice." ²⁶ Some

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¹⁴ Associate, Milan

¹⁵ Associate, Milan

¹⁶ Associate, London

¹⁷ See Sub-Question Three for further details.

¹⁸ Practice Assistant, Melbourne; Associate, Zurich

¹⁹ Partner, Melbourne

²⁰ Practice Assistant, Melbourne

²¹ Associate, Melbourne; Associate, Zurich; Associate, Brussels

²² See Sub-Question Three for details

²³ Practice Assistant, Melbourne

²⁴ Associate, Brussels; Partner, London; Practice Assistant, Melbourne

²⁵ Managing Partner, Brussels

²⁶ Anon.

interviewees drew on the personal implications of this for lawyers, highlighting a "state of anxiety" associated with constantly being on call.²⁷

Advancements in communication and the value of cross-jurisdictional collaboration within firms were also queried by some lawyers: "...imagine setting up a conference call with Italy, London, Paris and New York, then coming to the end of it and we all say "well, what are we going to do then?" – it all takes a lot of time to organise everything!"". ²⁸

Law Firms: A Modern Supplier of Technology

Participants reiterated an ethic of 'customer as king' in the application of new technologies in firms. Technologies are regularly modified and updated in order to be compatible with client technology and security requirements. ²⁹ But a number of firms are going above and beyond this need, thinking and investing pre-emptively to develop their own technologies to use both internally and export to clients. ³⁰This emphasised a new possible facet to law firms, as suppliers of technological products and expertise. With the capacity to collaborate with a range of clients and other companies, lawyers are gaining ground in this market.

"The client wants you to have the tech to satisfy their needs." 31

New Profiles of Liability

The question of liability³² fed into a changing relationship between lawyer and client, man and machine predominantly in two ways. Firstly, the ability of a law firm to take liability for work conducted by a machine. Secondly, liability justifying clients sourcing legal professionals rather than conducting work themselves as a form of greater insurance, in spite of capable in-house legal teams and a technological ability.

In respect of covering the liability of work done by a machine, law firms face pressures to ensure they are sufficiently cautious in employing chosen technologies. The migration of documents to cloud-based systems raised cause for concern following recent high-profile cyber-attacks on sensitive data, held by firms, such as the DLA Piper attack in 2017, and the subsequent ransom demands at which that data was held. Law firms are responsible to ensure the protection of sensitive and private client data and must take precautionary steps to this end. A corollary of using technology, liability necessarily presents an issue. The instinctive response for many lawyers was that a human should verify the work completed by a machine, employing a spot-check technique. Insurance was highlighted as a fundamental necessity for firms and clients, as was the training of staff at the firm, whilst legislative changes and clarifications were highlighted as crucial in the near future. The distinction between mechanical fault and attributed human fault is becoming increasingly blurred and important to define within emerging areas of law as technology continues to progress. The example was given of driverless cars; mechanical fault being straightforward to insure, and yet "bad driving" (this being the attribution of a human characteristic to a robot) being

²⁹ Associate, Milan; Partner, Zurich

²⁷ Associate, Milan

²⁸ Anon.

³⁰ Various seniorities, London

³¹ Associate, Milan

³² Senior Associate, Zurich; Counsel, Zurich; Partner, Munich

³³ Partner, London

³⁴ Associate, Milan

³⁵ Partner, London

much harder to quantify. Consequently, this confuses the attribution of relevant liability. ³⁶ Logically, lawyers are one cog in a myriad of parties which have a role to play in clarifying these issues, and presently concern themselves principally with assessing the possible ramifications of choices they take, seeking out appropriate insurance policies and equipping staff with relevant training and awareness, especially of the dangers associated with security.

As regards the second limb, where liability is used to justify the work of a lawyer, this was not typically a concern for international corporate firms.³⁷ This was considered to be influential in some areas of law, but typically not among prestigious corporate firms. Clients typically sought out interviewees' firms because problems were unique and required expertise which in-house teams did not themselves feel sufficiently experienced or equipped to deal with, rather than for liability cover. At a lower level of complexity, and predominantly for individuals undertaking projects, the assurance of liability cover was preferable, even if substantively unnecessary.³⁸

A Comparative Approach: Overall Consensus

Many of these views, hopes and concerns were expressed across all participant offices, irrespective of location. The London-based firm was arguably most invested and involved in developing areas of law associated with FinTech, LegalTech and RegTech, as well as the most established as regards the production of technology within the firm. Other interviewees suggested that the countries in which they practiced typically lagged behind technologically³⁹ yet suggestions that technologically-fuelled developments were taking place in larger offices, often in London and New York, were implied. Typically, there was a division as regards seniority, with junior lawyers – with the exception of a few senior lawyers who had specific interest in technological development – generally more enamoured by the potential and typically more concerned as regards the risks posed by technology. A sense of dissatisfaction with the pace of change resonated across generations and jurisdictions. More senior lawyers typically felt that hopes regarding cryptocurrencies had long-since been fostered without fruition, ⁴⁰ and hoped for a higher-quality digital communication with clients. ⁴¹ Junior lawyers were generally incredibly optimistic about the potential AI has to remove administrative burden, and expressed hopes and concerns as regards the replacement of human work by technology.

³⁶ Partner, London

³⁷ Associate, London

³⁸ Associate, London; Partner, London

³⁹ Associate, Milan; Special Counsel, Melbourne

⁴⁰ Associate, Milan

⁴¹ Associate, Milan

Sub-Question Two: How has technology altered the role of the international legal profession and the strategy of international law firms?

Technology has had a significant impact on the way international law firms compete with each other for clients. Increasing digitalisation has meant firms have begun investing substantial funds into ensuring they have the most up-to-date technology, principally seen across two domains: communication and security. Many participants highlighted technology as a sensitive area for clients, a factor firms used to justify keeping ahead of other firms technologically.

Interviewees also discussed the effects of widespread information availability, enabling clients to 'self-diagnose' legal issues, irrespective of the accuracy online responses could provide, without consulting an expert. In spite of this, most participants perceived demand in legal services to have increased as a result of technology, suggesting that, in many cases, the internet was a tool helping the expansion of the international legal profession, rather than hindering it.

A New Model of Billing

"Digitalisation changes the business model of law firms: the traditional model is that law firms sell time, whereas now that the machines use less time the firms will need to move towards selling value; the value of the machine rather than the time spent- this is a big change." 42

A broad spectrum of views on billing methods were encapsulated within the research findings, with many interviewees remarking that an increasing use of advanced technology has possible ramifications on charges to clients. These views predominantly centred around the debate as to whether technology enabled a more accurate billing to clients, or necessitated a new model of billing. Some interviewees suggested that a time-based billing structure was incoherent and unreflective of work conducted in firms, failing to adequately adapt to the utilisation of both humans and technologies in producing legal advice. ⁴³ They also disagreed as to whether fees would increase ⁴⁴ or decrease. ⁴⁵

Interviewees who held that the current billing method was a viable and realistic model by which to charge clients typically felt that technology enabled cheaper service. ⁴⁶ The possibility for lawyers to more precisely log the amount of time spent on specific tasks removes discrepancies, assures accountability, and guarantees that clients are billed accurately for the time spent on specific tasks. ⁴⁷

Other interviewees held that technology has led to a change in the service provided to clients and submitted that billing should be reflective of this. Digital communication leading to reduced travel costs⁴⁸ and the digitalisation of administratively laborious domains⁴⁹ such as due diligence were cited as ways which allow for the delivery of a quicker service to clients. The current business model

⁴² Senior Partner, Munich

⁴³ Senior Partner, Munich

⁴⁴ Partner, Zurich

⁴⁵ Associate, Milan; Associate, Melbourne

⁴⁶ Associate, Milan; Associate, Melbourne

⁴⁷ Various seniorities, Brussels

⁴⁸ Associate, Zurich; Consultant, Brussels; Associate, Milan; Senior Partner, Munich

⁴⁹ Associate, Milan; Associate, Melbourne

of firms to sell time is not, submitted these interviewees, in keeping with this new method of supplying work, and could lead to subsequent profit loss for firms. ⁵⁰ Investment in technology is undeniably costly, and this facet of service provision must be viably incorporated into billing models, with some interviewees perceiving the future of firms to sell work based on its quality, rather than the time taken to produce such work. ⁵¹

Perceived changes to the role of the lawyer, increasingly as an advisor⁵² rather than an administrator, also fed into this changing valuation of the work completed by lawyers, with clients unwilling to pay for senior staff to undergo simple tasks.⁵³ The suggestion that clients may be able to do some aspects of legal work themselves as a result of technology was also cited as important in the establishment of appropriate billing models.⁵⁴

Attracting Clients Amid Changing Market Dynamics

"I think technology puts us all on an even playing field - smaller firms are at less of a disadvantage and bigger firms have no excuse to not do well." 55

When questioned on how they intend to compete with other firms at an international level, many interviewees cited technological investment as a priority. Competition in the international legal market is more varied than ever before, with even small firms able to gain a foothold and attract clients. Staying at the forefront of technological development is now essential to remain attractive to clients, with large firms expected to "incubate" new technologies, medium firms "scout and buy" new technology and smaller firms to keep up with technological developments. Adoption of new technology to remain competitive principally takes two forms for the leading international corporate firms: investing in ensuring efficient client service, be this within the scope of cross-border communication or AI to facilitate a cost-effective service, and ensuring state-of-the-art security measures are in place to protect sensitive private data.

Interviewees in Sydney and Zurich expressed the potential for smaller firms to flourish in a market so heavily assisted by technology. ⁵⁹ Reasons given for this predominantly focussed on the ease with which information can be accessed by lawyers, meaning that there is no excuse for firms to not to be aware of the current state of the law and able to advise on it. ⁶⁰

"Technology gives smaller firms a chance to compete, a level playing ground." 61

Most interviewees highlighted developments in communication and associated technology as one of the most important areas of technological development in legal practice. A range of technologies,

⁵⁰ Senior Partner, Munich

⁵¹ Senior Partner, Munich

⁵² Associate, Zurich

⁵³ Associate, Milan; Associate, Melbourne

⁵⁴ Partner, Zurich

⁵⁵ Partner, Melbourne

⁵⁶ Head of HR, Zurich

⁵⁷ Managing Partner, Zurich

⁵⁸ Trainee Solicitor, Brussels

⁵⁹ Partner, Melbourne; Head of HR, Zurich

⁶⁰ Partner, Melbourne

⁶¹ Head of HR, Zurich

including video and conference calling tools were perceived to be elementary and fundamental assets to all international law firms, to enable cross-border meetings between colleagues and clients with ease. Communicative technology must at least be compatible with client technology, ⁶² at best be a utilisation of new technologies which facilitate a much higher level of digital interaction. ⁶³

According to interviewees, specific technologies on which law firms call to attract clients range from self-assessment tools, used to allow current and potential clients to find out what advice they need, 64 to social media, 65 and appealing websites. Whilst these examples were cited, many interviewees admitted this was the consequence of market peer-pressure, and noted that if their firm was on social media, this was in order to keep up with other firms. 66 Social media was, however, cited as a "cheap" and "effective" platform from which to disseminate information, especially regarding the current projects and achievements of a firm. The majority of interviewees commented that LinkedIn is the preferred social media platform that law firms use to advertise themselves to potential clients, both domestic and international, as well as the platform they themselves, as lawyers, would use to exhibit their accolades.

On the other hand, many interviewees stressed that as a professional body, international law firms are more concerned with the appeal of their websites rather than their social media presence. This was particularly true in the case of the Swiss law firm participant, as Swiss law inhibits law firms from using social media for promotional marketing. ⁶⁸

"We do it [social media] because everyone does it, if we didn't we would be behind. It's about having the latest thing." 69

In an increasingly volatile and digitalised climate, security measures can be crucial to a firm's strategy in attracting clients. Global digitalisation means that not only authorised persons can access information from anywhere in the world, sophisticated hackers can too. Abundant stores of sensitive information, held by firms, need to be accessed across the globe in a new age of globalised legal advice, and yet this data needs to be adequately protected against possible cyberattacks, this being the hacking and holding at ransom of data. ⁷⁰

"The firm is constantly under cyber-attack from hackers, and lawyers need to realise that the best antivirus is a human – an education on how to preserve the data you have is crucial in the future."⁷¹

The rising use of social media has also contributed towards security issues 72 and one interviewee explained, for instance, how their firm has policies set in place to regulate what employees post on the internet. 73

⁶² Associate, Milan

⁶³ Associate, Milan; Associate, London

⁶⁴ Associate, Zurich

⁶⁵ Various Seniorities, Brussels

⁶⁶ Office Manager, Brussels

⁶⁷ Trainee Solicitor, Brussels

⁶⁸ Senior Associate, Zurich

⁶⁹ Office Manager, Brussels

⁷⁰ Associate, Milan

⁷¹ Associate, Milan

⁷² Associate, Milan

⁷³ Senior Associate, Brussels

Security can be a significant technological factor for a client in determining which law firm to trust with their details and henceforth becomes a major investment for law firms.⁷⁴ On the one hand there is an obligatory level of protection a firm needs to employ to safeguard client data. On the other hand there is a higher level of security, which firms can choose to adopt in order to attract more clients and retain a competitive edge in the market.⁷⁵ The implementation of measures to appease prominent clients' security needs, responding to client demands and consequently employing specific technologies, for example, requiring the installation of programmes and limiting access to information to a select number of people all demonstrate ways in which firms retain and attract clients in this area.⁷⁶

An Evolution in Market Demand

Technology has affected the role of international law firms, provoking an evolution in global demand for legal services. In some instances, this demand has risen as a result of new risks and complications which have sprung up from technological development, and associated regulations which are continually introduced to address these issues. For example, some interviewees mentioned the General Data Protection Regulation recently implemented to protect all European Union citizens' data privacy, a consequence of this digitalisation of data. There is a growing demand for law firms to help clients navigate the increasing sphere of technology-fuelled legislation and their relevant obligations under new regulations.

These effects on practice, as a result of technology, suggest a possible increase in the amount of cross-jurisdictional work sent to law firms, as clients, not only lawyers, see the effects of the changes technology brings to business.

Conversely, the rising use of the internet brings with it the potential for clients to be able to search for solutions to their legal questions online, without consulting a law firm, and thus threatening to decrease the demand for legal services.⁷⁸ Whilst some interviewees suggested that firms were used as a form of liability cover,⁷⁹ others insisted that irrespective of substantial advancements in access to information online, complex legal queries cannot be answered by a simple online search.⁸⁰

Interviewees in Milan,⁸¹ Melbourne,⁸² and London⁸³ highlighted developing areas of law, or emerging issues faced by clients as a result of technology, be this security-related, FinTech-focussed or navigating the implications of new legislation such as the GDPR. A Zurich interviewee highlighted the effects of the internationalisation of practice areas, requiring both new legislation and a new form of legal advice.⁸⁴

Interestingly there were no interviewees at any of the involved firms who believed the demand for legal services to have decreased, be that as a result of technology use or otherwise.

⁷⁴ Associate, Milan; IT Manager, Milan

⁷⁵ Associate, Milan

⁷⁶ IT Manager, Milan

⁷⁷ Associate, Zurich

⁷⁸ Consultant, Brussels

⁷⁹ Partner, Munich

⁸⁰ Associate, Milan; Associate, London

⁸¹ Associate, Milan

⁸² Associate, Melbourne

⁸³ Partner, London

⁸⁴ Internal Investigations, Zurich

Sub-Question Three: How has technology altered the personal and professional life of the international lawyer?

It is evident from the data collected that rapid technological advancement is, on the whole, at least a matter for consideration with regard to the overlap of the personal and professional lives of lawyers. Technology offers lawyers the capacity to work anywhere, with associated benefits and detriments to this model of remote working. On one hand, remote working may facilitate culture change and possibly enhance diversity in law firms, on the other, constant access to work at all times through technology is posing challenges, and disintegrating the distinction between personal and professional life.

"Work is 24/7, more demanding because of technology."85

Blurred Lines: The Effect of Technology on the Boundary Between Work and Home Life

There were two highly topical points raised on this issue amongst participant firms, these included the issue of whether technology is the main cause of the infiltration of work into home life, and the contested issue of whether this infiltration is helping or hindering lawyers in managing both their personal and professional lives.

Where technology was claimed to be the main cause of infiltration, some interviewees felt that technology has enabled work life to become too invasive and viewed the breach of the personal/private life boundary in a negative light because it contributes to the ever-increasing desire for immediacy within work, ⁸⁶ and the absence of proper downtime outside of the office.

"A 24-hour law firm or lawyer is definitely possible... there is already a blurring of work and home life."⁸⁷

With constant access to technology and the internet, it was a common threat that lawyers are under a lot of pressure from both colleagues and clients to respond to communication almost instantly, leading to a continuous work culture that is blurring the lines of personal/private life and allowing for no actual downtime. Many firms required lawyers to at least acknowledge client correspondence within 24 hours, meaning staff are spending an increasing amount of time incessantly thinking about and checking emails, both within and outside of 'working hours.' Interviewees noted this pressure can lead to an increased sense of anxiety of lawyers.⁸⁸

"I think it [technology] has made it [work/life balance] significantly worse and whilst it does allow you to work with more flexibility, at the same time, the culture of responding soon after an email comes in means that it is really intrusive and not very good for maintaining a work/life balance." 89

There was, however, the repeated argument across jurisdictions that whilst technology may be the cause of work infiltrating into home life, it is actually a positive development allowing for more

⁸⁹ Associate, Brussels.

⁸⁵ E-Discovery Non-Legal Staff, Zurich.

⁸⁶ Legal Executive, Melbourne

⁸⁷ Paralegal, Melbourne.

⁸⁸ Associate, Milan.

flexibility in where and when a lawyer can work, providing help in particular for working parents and women, increasing diversity in the law firm and leading to a more sustainable working culture. ⁹⁰

"It means you can never switch off which I don't think is a healthy thing." ⁹¹

Across the board, there was a distinct feeling of wanting to protect the health and happiness of lawyers at every level of practice, consequently increasing efficiency and the quality of work. Interviewees, on the whole, recognised that although technology is beneficial in many ways due to the facilitation of flexible working, there is a subtle underlying concern for how it affects each individual lawyer, in terms of personal expectations.

"We must be careful to maintain the home/work life distinction and not let work intrude too much into our home lives through advanced technology." "92

From a different perspective, there was an interesting argument that emerged which suggested that technology is neither the cause nor a facilitator of the infiltration of work into home life – it has simply changed the way in which lawyers work through shifting traditional working hours.

"Because of the speed that technology allows us to have, there is so much pressure imposed both by the firm and clients that we find ourselves forced to work wherever and whenever, in order to get things done." "93

It was also suggested by one interviewee that lawyers' own internal expectations are to blame for any increase in anxiety brought on by the need for urgency, and that technology merely facilitates these expectations. ⁹⁴ It was widely acknowledged that individual lawyers put personal pressure upon themselves to constantly check emails and communicate with other colleagues and clients, whilst urgency arises from one's own standards of what is an acceptable pace at which to work. The responsibility of individual lawyers to take precautionary measures to limit this intrusion into personal life was highlighted by several interviewees. ⁹⁵ It was noted by some participants that, in order to combat this issue, lawyers need to be mindful about what is genuinely urgent and learn to prioritise in order to be as efficient as possible. Some submitted that the onus is on the lawyer individually to make this call, and that the possibility of availability and instantaneous responses, does not mean a lawyer should choose to act in favour of these options.

The issue of professional and personal life represents a contentious and important issue within the legal profession. As technology continues to advance, can the human lawyer keep up with the demands of modern-day clients and constant streams of communication at an international level?

 $^{^{90}}$ Associate, Milan; Partner, London; Associate, Zurich.

⁹¹ Trainee Lawyer, Brussels.

⁹² Legal Executive, Melbourne.

⁹³ Associate, Melbourne.

⁹⁴ E-Discovery Non-Legal Staff, Zurich.

⁹⁵ Associate, Milan; Partner, London

The Emergence of 24-Hour Law Firms

Our research findings suggest that, from a certain perspective, law firms have become 24-hour businesses, technology being partially responsible for this.

"With smartphones and whatnot, that we have the capacity to work 24/7, and often we find ourselves doing just that." 96

There was a definite consensus amongst interviewees in all the participant firms that "we have this already" ⁹⁷ in a sense, with lawyers putting immense pressure on themselves to meet the urgency of more demanding clients, driven by the current climate. It was widely recognised that lawyers are now available at all times and that 24/7 working is the norm, rather than the exception, with consequent stress being a cause for concern. ⁹⁸

"Speed stresses people, perhaps a better question to ask is will there ever be a stop to the everincreasing availability?" "99

It was noted by interviewees in Melbourne and Brussels especially that client requests are often not as urgent as they seem; it is the 24/7 access to emails and the internet that are subconsciously enticing lawyers into having the capacity to work all day every day.

"Most of the time, things are not that urgent. There is the idea that if you saw an email and you didn't respond you will feel like you are shooting yourself in the foot because you feel like people would judge you." 100

An interviewee even suggested that by forcing themselves to work 24/7, lawyers are in fact damaging their own efficiency.

"You can be efficient within average working hours and knowing you can be reachable triggers behaviours that do not foster efficiency. In fact, it damages efficiency." 101

While some lawyers did feel that it is better to respond more quickly to a message, others believed this to be a detriment to lawyers' personal lives and the predominant cause of the infiltration of professional life into the personal life of the lawyer. Inversely, the opposite opinion was expressed – that 24-hour law firms will never be able to exist because in a literal sense, there are legal restrictions.

"Due to restrictions according to German law people are not allowed to work 24 hours." 102

Certain jurisdictions have laws that prohibit the emergence of a fully functional 24-hour law firm, with the health and wellbeing implications of unsuitably long, compulsory working hours being a major sticking point.

⁹⁶ Special Counsel, Melbourne

⁹⁷ Associate, Brussels

⁹⁸ Senior Partner, Munich

⁹⁹ Senior Partner, Munich

¹⁰⁰ Senior Associate, Brussels

¹⁰¹ Associate, Milan

¹⁰² Associate, Munich.

Technology: A Threat to Job Security

A widespread opinion amongst interviewees was that technological advances and artificial intelligence pose a threat to administrative and "lower level jobs," but responses varied. ¹⁰³ Some interviewees, particularly in participant European jurisdictions - with the exception of London - seemed to be of the opinion that AI does indeed pose a threat.

However, interviewees in Melbourne in particular were of the opinion that this loss of jobs was a price worth paying, because they would lead to increased efficiency in law firms. Less time wasted on mundane tasks means more time devoted to "pure law", especially for trainee lawyers and newly qualified members of staff. There was a more notable sense of optimism around the automation of administrative tasks in the Melbourne office, compared to the concern mostly expressed by the European participants.

"Automation of simple administrative tasks frees up more 'human hours' for lawyers to use." 105

Interviewees admitted that the application of technology to tasks such as due diligence ¹⁰⁶ could be drastically enhanced with technology, having potentially significant effects on the number of junior staff, namely trainees, taken on by firms. ¹⁰⁷ The capacity of technology to "save an inordinate amount of time" ¹⁰⁸ especially in document analysis and organisation, allows lawyers to undergo higher calibre advisory tasks. This is a prospect many of the interviewees approached with a sense of eager expectancy and enthusiasm.

"I think there will always be a role for human lawyers, no matter how sophisticated robots may get in the future. I do not foresee AI ever being able to match the level of human interaction offered to clients by lawyers. I think AI would only enhance a lawyer's human capabilities by taking care of the more mundane tasks." 109

Certain human skills were perceived as irreplaceable, for example the capacity to make accurate judgements, which is key to certain aspects of advisory work, and effective communication. Most interviewees suggested that this limb of legal work benefits from a sort of immunity from the threat of machine-replacement. The distinction between legal knowledge and the ability to apply the law was cited as a defining distinction between man and machine. In addition, the complexities of human interaction and communication were pointed to as deficiencies in technology, posing significant barriers to the way in which the latter can be used in a language-

¹⁰³ Associate, Brussels.

¹⁰⁴ Special Counsel, Melbourne.

¹⁰⁵ Paralegal, Melbourne.

An example cited in all jurisdictions, by a variety of seniorities.

¹⁰⁷ Senior Partner, Munich

¹⁰⁸ Partner, Zurich

¹⁰⁹ Paralegal, Melbourne

¹¹⁰ Partner, Zurich

¹¹¹ Counsel, Zurich

¹¹² Managing Partner, Zurich

¹¹³ Associate, London

based qualitative discipline such as law. Human emotional intelligence¹¹⁴ was also considered a hardly replaceable asset, in the sense that technology struggles to reproduce, within a legal team as well as within the client-lawyer relationship, the collaborative approach that emotional intelligence enables.

"Machines can do more menial jobs, but we will not be replaced." 115

There was a number of interviewees who expressed the opinion that technology will not pose a serious threat at all to human job roles in law firms. There was a distinct feeling of calm confidence, particularly amongst the less-experienced and newly qualified staff. Whilst technology can be used to assist the lawyer, there was a general consensus that it cannot replace the human lawyer in practice.

Technology Fuelling Diversity: A Secondary Impact

Whilst undeniably a secondary effect and circumstantial implication of technological development, many participants, particularly in the European jurisdictions, agreed that technology has had some indirect impact on increasing diversity within the legal profession.

"Diversity is facilitated by tech but not initiated by it." 116

As briefly alluded to already, the predominant group that has been been positively impacted by technology and the remote working that it enables for lawyers, are working parents. These individuals are increasingly able to tailor their work around family commitments and remain present within legal teams, as well as in the family home. This change in firm culture possibly allows for better retention rates and increasingly diverse firms in future.

There was a general feeling that meritocracy can no longer rely on a cellular family construct in which one parent chooses to work from home, a sentiment which has, and should continue to, enhance diversity and improve the working lifespan of male and female lawyers. The ability to balance work and home life has greatly increased with technological development, and firms are now moving to adapt their mindset and culture to reflect these possibilities.

"Especially for women. Sometimes you have to be more flexible, if you can work from wherever you are because you have kids, or other commitments technology is fundamental for that." 118

¹¹⁴ Associate, Brussels; Senior Associate, Brussels

 $^{^{115}}$ Associate, Brussels.

¹¹⁶ Senior Partner, Munich.

¹¹⁷ Partner, London

¹¹⁸ Associate, Milan.

Sub-Question Four: How has technology altered the educational path and training needs of the international lawyer?

As technology develops, its incorporation into education and the legal profession progresses, altering both in turn. This sub-question sought to see how technology has affected the education, careers and qualification routes of international lawyers. We found a range of different opinions, whether as a result of the effect of education in various jurisdictions, or mere differences in perspective among those interviewed.

The Impact of Technology in Education

Responses as to the effect of technology on one's education path, leading to a legal career, differed based on geographic location and age. Many responses indicated that interviewees believed their school education had not been affected by technology, some of whom noted that their formal education pre-dated modern technologies. Similarly, there were responses which reported that their education was not affected because interviewees were educated amid a wealth of current technologies, and therefore had known no different.

"I have always had technology in my education so I have nothing to compare it to, I cannot imagine what it would be like to be in education without technology." 121

University Examinations: A Minor Impact

Research from several jurisdictions allowed the exploration of jurisdictional differences in the incorporation of technology in formal education at university level. The responses reflected varying levels at which technology had infiltrated university examinations. For instance, whilst software-based examinations were cited by an interviewee who had undergone formal training in the USA, ¹²² Italian interviewees typically spent more time in class than online, or in the library than using online databases throughout university. ¹²³ This feeds into a broader issue of innovation and creativity in learning and teaching methods, which transcends the role of technology.

Soft Skills: The Concrete Foundations of a Lawyer's Skillset

Intrinsic to the education system and legal professional training are a range of traditional and soft skills which are taught and developed within these two phases of legal education. Our research sought to ascertain whether professionals believed these skills had been affected by technology. The most noted skills by interviewees were communication, legal research and tech literacy. The general conclusion amongst interviewees was that technology has not changed the importance of these skills but has had an impact on them.

As regards legal research, interviewees noted several effects of technology. Many responses discussed how the speed of researching had increased. One interviewee in particular commented on not only how research undertaken a decade ago would be completed significantly faster now, but

¹¹⁹ Personal Assistant, Brussels; Of Counsel, Brussels

¹²⁰ Trainee, Brussels

¹²¹ Trainee, Brussels

¹²² Associate, Milan

¹²³ Associate, Milan

also that currently there is the ability to find anything.¹²⁴ Another discussion reported how research has become more accurate due to the potential to access information more easily.¹²⁵

Views were not unanimous. For instance, one interviewee argued that traditional skills have become less important due to the availability of software that can generate documents and provide translations. 126

"[Technology] hasn't changed the need for other skills as a mere law degree was never sufficient. Dealing with computers was still around before, now they're just more intelligent and AI has more difficult algorithms." 127

The Debate Over Whether New Skills Are Necessary

The discussed effects on some of the traditional skills as a result of technology have highlighted the need for new skills. While technology may provide a wealth of resources such as easy access to databases and online platforms, it was noted that humans still have to make the right decision when discerning among different pieces of information. The need for human involvement shows the value lawyers add to legal practice; one interviewee noted in the context of litigation, that the complexity of legal practice renders humans essential. 129

Technological literacy emerged as an additional necessary skill in the current scope of legal work, a result of an entanglement of traditional and soft skills, as well as technology. Data showed a general expectation for lawyers to be technologically literate. This expectation covered understanding computers¹³⁰ to understanding legal databases.¹³¹ A basic understanding of technology was generally deemed to be essential,¹³² or at the very least an expectation of employers.¹³³ Debate ensued as concerns the value of technological literacy, with even the dubious admitting that technological proficiency was undeniably useful for lawyers.¹³⁴ Whilst responses were not unanimous, some interviewees expressed beliefs that technological literacy need in no way be developed for lawyers, or prospective lawyers.¹³⁵

Coding was not cited as an expectation, present or future, for lawyers, ¹³⁶ although increasing collaboration with technology specialists was anticipated as firms branch out to create and deliver more advanced technology platforms and models in client service. ¹³⁷

¹²⁴ IT Manager, Milan

¹²⁵ Associate, Melbourne

¹²⁶ Associate, Zurich

¹²⁷ Partner, Zurich

¹²⁸ E-Discovery staff, Zurich

¹²⁹ Associate, Milan

¹³⁰ Associate, Zurich

¹³¹ Counsel, Zurich

¹³² M&A Associate, Zurich; Associate, London

¹³³ Associate, Zurich

¹³⁴ Managing Partner, Brussels

¹³⁵ Trainee, Milan

¹³⁶ Associate, London

¹³⁷ Associate, London

The Path to Becoming an International Lawyer

Research sought to determine whether the path to becoming an international lawyer has been affected by technological developments. Most responses clearly stated that the path has not changed. Some argued that the internet has just emphasised the importance of the international experience in any route to qualification.

"Spending time abroad is still important. Both that and technology are needed, it's not one over the other." 138

Effect on the Training of Junior Lawyers

Linked to effect of technology on formal education, this question sought to understand whether there had been a similar effect on training and careers.

The responses that were collected indicate that automation is affecting the training of the next generation of lawyers. It was noted that junior lawyers used to gain experience through the repetition of certain basic legal tasks such as due diligence or building standard forms. As technology has allowed the automation of these tasks, some opportunities for junior lawyers are being lost subsequently. Whilst skills such as proof-reading and legal research remain eminent, the application of AI has removed a body of work from junior solicitors. Novel training needs arise as a result to fulfil a need for explicit internal training, ¹³⁹ though no indication of what this training may consist of was provided.

"As technology speeds up people need to be open to new ideas. But I don't see any fundamental change." 140

Whilst traditional skills may have to be developed by means other than repetition, new skills arise and are fostered in the trainee lawyer, as a result of technological development, with many firms, especially those based in London, having developed technological seats for trainees. ¹⁴¹ The aim of an additional technological focus in training is not necessarily to develop hard-skills as regards the engineering of technology. It is rather to encourage lawyers to use legal logic and innovation in their contributions to developing new technology in the industry, in cooperation with technological engineers. ¹⁴²

¹³⁸ Litigator, Zurich

¹³⁹ Managing Partner, Zurich

¹⁴⁰ Consultant, Brussels

¹⁴¹ Associate, London

¹⁴² Associate, London

Conclusion

This Report aimed to analyse the influence of technology on international legal practice. The research findings confirm that technology is an aide to lawyers, and that firms are increasingly taking the reins in shaping its development. Strategic implementation of technology, as well as the progressive development of technology inside of law firms, or in affiliation with technological specialists, is helping law firms design a service which maximises efficiency and precision. Effective models of practice which utilise the best facets of technology in order to enhance the skills and knowledge of human lawyers will need to be firmly established over coming years. A somewhat disappointingly slow development of AI, alongside a flourishing development of communicative technologies shapes the current landscape. With the aim of remaining competitive and yet secure in the market, law firms assess their next move carefully.

Whilst the core skills and role of lawyers appear to have changed very little in spite of technological influence, the environment in which legal practice operates is vastly different from that fifty, twenty, or even ten years ago, in many ways. The Report covers a range of implications for lawyers and firms, as a result of modern developments. But much remains to be seen. The future role of the lawyer will undoubtedly be shaped in part by the role technology can play in practice. In the midst of innovative and emerging technologies, it remains unclear how this will play out over the next ten to twenty years. The Report has not explored in depth the future of legal technology; we wait, optimistically and expectantly, for as-yet-unseen developments and the contributions they can make to practice for the next generation of international lawyers.

APPENDIX

Project Questionnaire

How has technology altered the nature of legal practice?

- 1. What significant changes have you seen during your time in legal practice as a result of technology?
- 2. What concerns does the firm have with regard to technological advances, if any?
- 3. Which practice areas have been most affected by the rise in the use of technology?
- 4. How is Al/digitalisation/social media specifically now used in daily practice (communications/drafting of contracts/interface between client and advisor)? To what extent and in what fields do you see these technologies replacing human competence?
- 5. How has technology affected/improved the service you provide for your clients confidentiality policy changes/enhanced communication/a faster service?
- 6. In terms of practice area, where are y/our firm investing with regard to technological trends?
- 7. How do you see the development of technology over the next ten years?
- 8. To what extent do clients' use of technology and technological advancements affect the nature of legal issues (e.g. IP cases, privacy law, competition law, assurance of respect of fundamental rights)? How does it change the demand for legal work, if at all?

How has technology altered the role of the international legal profession and the strategy of international law firms?

Role:

- 1. Has technology created more demand for legal work or diminished it? Are clients less likely to seek legal counsel because they can access applicable information online?
- 2. Can technology be said to have enhanced the quality of cross-jurisdictional work or merely created more of it?
- 3. How does technology affect the client-lawyer relationship?
- 4. To what extent (if at all) has technology impacted the business activity in firms located in more geographically/linguistically isolated countries?
- 5. To what extent has technology challenged the reputability of different sources of information (i.e. how are firms able to utilise modern technology and ensure security and transparency to clients in the face of issues such as "fake news"?)?
- 6. What purpose does social media serve in the international law firm apart from publicity? A. Can it be said to be an effective way to reach certain members of our society? If so, who and why?

Strategy:

- 1. In what ways does technology affect law firms' ability and strategy for competing globally?
- 2. How is technology changing the nature of expenses will billing hours and hourly rates significantly change as the nature of the work a lawyer conducts changes, with significant reductions in administrative work and increases in advisory roles?
- 3. Does the organisation of work in different jurisdictions play a role in the level of automatisation of tasks in the law firm or is it directly driven by competition?

How has technology altered the personal and professional life of the international lawyer?

- 1. To what extent has technology normalised cross-jurisdictional work? Has it changed the way lawyers approach cross-jurisdictional work?
- 2. To what extent are lawyers too reliant on technology?
- 3. Is technology the cause for the infiltration of work into the personal life of the lawyer or does technology just assist an already demanding career?

- 4. How might working hours be affected by technological developments?
 - a. Might there be an increase/decrease in working hours?
 - b. How is this changing the work/life balance?
 - c. Might this lead to competition in the emergence of "24 hour law firms"?
 - d. Might we see a decrease in billing hours alongside an increase in passive/unlogged time lawyers respond to calls/emails in a way previously not possible? Will technology lead to more unlogged time? How will this affect the lawyer's routine?
- 5. In your view, has technology made us more antisocial at work and in life?
- 6. How is technology helping to increase the diversity of lawyers in international law firms and the diversity of law firms around the world?
 - a. Will current and future technological advancement help improve the number of disabled lawyers?
 - b. Do you think that the increase in technology will consequently encourage the establishment of more law firms in more remote parts of the world or will these parts of the world be more disadvantaged?
- 7. Do you think technology is changing the need for a fixed working place for staff? How will the ability to work from home affect their work/life balance?
- 8. Might the increased use in technology lead to the creation of new jobs in the legal profession (for example someone who is solely in charge of supervising the application of due diligence software) or a decrease (reduction in admin staff)?

How has technology altered the educational path and training needs of the international lawyer?

- 1. We hear much talk about soft skills, how has technological development in the practice of law changed key skills a 21st century lawyer needs to be equipped with?
- 2. In what ways are traditional skills such as languages/legal research/legal writing going to be important in a technological world? What other skills (e.g. coding), if any, should be learned alongside a law degree?
- 3. In your opinion, is technology a paradox? We use technology to increase our knowledge and assist us with research but are we really more intelligent or are algorithms and AI smarter than us?
- 4. For how long will the international lawyer retain a higher level of perception, emotional intelligence, and creative manipulation with which AI cannot compete?
- 5. *To the older professionals*: How has technology affected your education and career? In what ways do you think it will affect those coming into the workforce?
- 6. To what extent do you think the path to becoming an international lawyer is changing with technology? (E.g. graduating with a technology related degree and studying law later as opposed to studying undergraduate law).