FROM THE EDITORS

This inaugural report was born of a common desire shared by SAL and the SMU School of Law to understand the phenomenon of legal technology and innovation – a phenomenon that has increasingly become the fixation of lawyers, technologists, regulators, and legal academics alike.

In conceptualising what the report should cover, it quickly became apparent that focusing only on legal technology (“legaltech”) was too narrow a scope. Innovation, as the economist Joseph Schumpeter famously wrote, lies simply in “new combinations” of resources that either produce different things, or the same things by different methods.¹ Further, even with technology, the true machinery of the law is driven by people and institutions – by lawyers, courts, law schools, clients, students, knowledge engineers, technologists, and more. We therefore defined legal innovation broadly (and somewhat ambitiously) to cover five areas: technological innovation, regulatory innovation, innovations in the dispute resolution process, business innovation, and innovation in legal education. Chapter contributors were asked to respond to questions formulated along these five axes.

Legal innovation has not traditionally been thought of so broadly. In academic literature at least, the phrase has more conventionally been associated with new laws and legal devices. One example is the invention of the poison pill in the 1980s.² This innovation certainly reflects the ingenuity and creativity that lawyers have always had but does not take centre-stage in this report simply because our present focus is on innovation in the practice of law rather than in the law itself (overlaps exist).

This report is not the first to study legal innovation this way. Stanford Law School has, for example, created a “Techindex” of legaltech companies.³ Likewise, the Michigan University Law School has founded a “legal services innovation index” exploring innovation in law firms and law schools.⁴ Both these commendable efforts focus on legal innovation in the United States of America. This report focuses instead on the Asia Pacific (“APAC”) region, of which Singapore is a part, hoping to contribute to what must now be a global effort to document the equally global phenomenon of legal disruption. A snapshot on legal innovation in the US by Mark Cohen is also included for juxtaposition.

Taking stock of a fast-moving field – by definition, innovation is change – is always challenging. But often it is the challenge that makes something worth doing. This report does not claim to be exhaustive. Rather, it aims to provide readers with a roadmap to legal innovation trends in APAC today so we may better expect tomorrow. Second, the report aims to encourage further discussion, informational exchange, and collaboration between APAC countries on legal innovation.

---

innovation. The final aim is to broadcast legal innovation efforts in APAC to a wider audience. We have endeavoured to capture the state of legal innovation as it was in January 2019.\(^5\)

Further, as APAC is a large and diverse part of the world, we could not have hoped to do any jurisdiction justice without input from people based in each country. We were greatly assisted by individual country contributors who volunteered to write about their own jurisdictions. We deliberately approached the editorial process with a light touch to preserve and indeed highlight the diversity to be expected of this region. For example, we chose not to standardise the subtly different definitions of terms like “legaltech” and “artificial intelligence” that each chapter invariably discusses. Chapters that have been written by country contributors have been clearly identified as such; we claim no credit for them. All errors are ours.

Finally, annexed to the report are a set of law firm innovation journeys written by innovation leads in each of these law firms. While these case studies do not reflect the position of or endorsement from SMU and/or SAL, they provide a close look at legal innovation in practice that in turn enlivens the more theoretical discussion in the country chapters. The editorial process for the case studies was accordingly more focused on aesthetics than academics. As with the country chapters we claim no credit for them.

Please direct any suggestions, comments, questions, and/or complaints to jerroldsoh@smu.edu.sg. Queries on the law firm case studies should be directed to the respective law firm authors.

---

\(^5\) A pre-print version of the report was first circulated in April 2019 and stated the date of latest capture at January 2019. Subsequently, chapters from India and Japan, as well as the snapshot chapter on the US, were added to the final printed report. These later chapters may have included later developments, possibly up till July 2019. There would of course have been interesting developments even since then not included in this report.
EXECUTIVE SUMMARY

By Jerrold Soh

The report currently covers ten jurisdictions which, appearing alphabetically in separate chapters following this preface, are Australia, China, Hong Kong, India, Japan, the Republic of Korea, Malaysia, Russia, Singapore, and a snapshot chapter of the United States. Collectively, these country-chapters make three points clear.

I. **Legal innovation is a phenomenon in APAC and probably the world**

All countries studied had much to say on each of the five innovation areas identified; most could name numerous examples of ongoing or planned efforts in each area. No doubt the worry of selection bias arises, since countries with less to say may have been less willing to contribute to the report. But a look at the country chapters assuages this: many contributors admit that legal innovation in their jurisdiction is in its infancy; some openly state that they have much work to do.

Tellingly, across these seven countries is a common theme that regulators have taken notice. Certain countries present relatively more open legal regulatory climates. In countries with more conservative climates, regulators are at least thinking about how to address this phenomenon and consulting stakeholders on the same.

If we assume legal innovation well-established in Europe and the Americas, then with APAC’s addition we are in a position to say that the legal innovation movement has become a truly global phenomenon. Even if new legal innovations and technologies have not yet reached every shore, it is probably safe to say that news of them has.

II. **There is a remarkable non-coordinated coincidence in legal innovation**

How legaltech seems to have emerged mirrors what economists and competition lawyers call “non-coordinated” effects. That is, common behaviours that arise without overt communication or coordination. Remarkably, legal technologies developed by law firms and startups alike coalesce around four common use cases: marketplaces, research, document review, and online advice. Dispute resolution efforts circle around creating online dispute resolution systems. New research centres in law schools typically focus on entrepreneurship, computational law, and AI.

The coincidence of legal innovation efforts across a region as diverse as APAC is telling. There is no central authority instructing each country to focus on these things. Further, in APAC there remains no overarching legaltech association or conference to unite the field. How did each country then arrive at the same conclusions on which innovations were to be pursued? Three possible unifying entities emerge from the country chapters: (a) multinational legal
publishers like LexisNexis and Thomson Reuters (b) multinational law firms and alternative legal services providers, and (c) the Big Four accountancy firms.

New offerings and innovations by these ‘usual suspects’ were raised in many, but not all, chapters. Conceivably these credible institutions have developed and propagated the same legal innovation ideas and products across the region.

But these forces do not alone explain the rising tide of legaltech startups that have likewise coalesced around the same use cases, and why courts across APAC are exploring the same initiatives. Are these technologies popular because they are indeed relevant for lawyers, or are they in fact only relevant for lawyers because they have become so popular? This report is not in a position to conclude, but it is submitted for the reader’s consideration.

III. APAC’s diversity shines through, nonetheless, in the balance of legal innovation

The preceding point should not be taken as saying that legal innovation everywhere in APAC is the same. The uses cases are similar, but priorities differ. And these, it seems, are shaped and influenced by local characteristics unique to each jurisdiction and its legal industry.

The legal industries of Australia, China, and Russia are driven by strong internal demand for legal services. In China this has fuelled the rise of numerous mobile apps (in number possibly the largest in APAC) operated by big and small technology firms alike. The Chinese courts have also played a leading role in championing online dispute resolution and legal AI projects. In Australia, where the legal industry is governed by fierce free market forces (what the Australian contributor calls a “hyper-competitive” market), this internal demand has come to be filled by a proliferation of new legal service delivery models and law-firm-based innovation. Russia seems to fall in between these two extremes. There are many new legal technologies being created to serve its large internal market. However, innovation and adoption by law firms remains a challenge because, as the Russian contributor notes, of the predominance of small law firms located far from technological centres in Moscow and Saint Petersburg.

On the other end of the market size spectrum are small economies like Singapore and Hong Kong. Smaller market sizes mean fewer home-grown, inward-looking startups. But still a healthy picture of legal innovation emerges as these jurisdictions position themselves for relevance in a changing legal landscape. The legal innovation scene in Hong Kong, for example, is shaped by China’s “Belt and Road” initiative. Regulators have made a related online dispute resolution project a focus. The Belt and Road was even used as a theme for a legaltech hackathon recently held there. Meanwhile, Singapore has positioned itself as a regional legal innovation hub. Initiatives such as the “Future Law Innovation Programme” which seeks to draw together lawyers and technologists from across countries. Singapore has also worked with international law firms in setting up regional innovation centres.

Then there are the mid-sized economies South Korea and Malaysia. Teasing out a common thread for them seems more difficult, seemingly because size does not point them clearly to one way or the other. We nonetheless witness a growing legal innovation and technology
movement in both countries and a small but rising number of legaltech initiatives. Interestingly, both chapter contributors note that regulators there are still considering how to respond to the legaltech phenomenon.
01 | australia
AUSTRALIA

By Eric Chin\(^1\) and Graeme Grovum\(^2\)

The Australian legal services industry is a A$23 billion market\(^3\) with 76,773 lawyers servicing 24.9 million people\(^4\) and 2.2 million businesses\(^5\) in the country. The Australian legal industry is also mature, being driven by an increasingly sophisticated client market, the emergence of new competitive landscapes as viable alternatives, and the rise of legal technology (“LegalTech”) solutions. And all of this is occurring within a market that is only growing by single-digit percentages.

\(^1\) Eric Chin is a Principal at Alpha Creates. He is a strategy consultant that works with law firms, listed law firms, LegalTech firms, NewLaw firms and corporate legal departments on strategy, M&A, market analysis, innovation and Asia. His experience spans across the Asia-Pacific region with work completed for law firms and Big Four accounting firms. Eric’s work in the region has culminated in his induction as one of 30 people to watch in the business of law in Asia in 2015 by Asia Law Portal. Eric is also a co-founder and co-organiser of Legal Hackers Melbourne.

\(^2\) Graeme Grovum is a Principal at Alpha Creates. He is a legal technologist with 15 years’ experience in legal and financial services industries. Graeme has worked with one of Australia’s top tier firms as Head of Innovation where he helped the firm through many innovation and technology initiatives. Graeme’s work has been recognised in the 2017 Legal Innovation Index placing as a finalist, as well as by the Financial Times’ Asia-Pacific Innovative Lawyer Awards 2016, placing as “Highly Commended” in the technology category. Graeme is also a co-founder and co-organiser of Sydney Legal Hackers.


Forces of change on the buy and sell sides combined with a stagnating market are fuelling hyper-competition\(^6\) for incumbents in the Australian legal industry. This puts innovation on the agenda of law firms and legal departments across the industry. To truly gauge innovation

\[\text{Number of lawyers in Australia}\]

\[\text{Northern Territory 618 lawyers}\]

\[\text{Queensland 10,390 lawyers}\]

\[\text{New South Wales 33,214 lawyers}\]

\[\text{Western Australia 3,752 lawyers}\]

\[\text{South Australia 3,500 lawyers}\]

\[\text{Victoria 22,282 lawyers}\]

\[\text{Australian Capital Territory 2,400 lawyers}\]

\[\text{Tasmania 617 lawyers}\]

\(^6\) Hyper-competition is a situation where incumbents in the market are unable to keep a competitive advantage long enough to extract extraordinary profits. This can occur because of a combination of very strong competition between companies, an evolving market, and relatively low barriers to entry.
activities in the market, we need to consider the eight major categories of stakeholders that drive the Australian legal ecosystem.

On the buy side of this equation we have the business to consumer (“B2C”) segment, represented by the 24.9 million people in Australia, and the business to business (“B2B”) segment, represented by the 2.2 million businesses in the country. On the supplier side of the equation, we have the incumbents – law firms that have been the traditional supplier of choice – and, increasingly, NewLaw firms, LegalTech firms and the Big Four accounting firms’ legal arms.

Law associations and law schools are also major stakeholders in the legal ecosystem as they provide end-to-end lifecycle training and education for lawyers.

Finally, regulators also play an important role in setting the scene for the legal ecosystem through regulatory policies that either foster or impede the emergence of new types of legal service providers.

I. **Forces shaped by buyers of legal services in Australia**

Australia’s 24.9 million population is the B2C segment for legal services, with a lifetime of legal needs that spans employment, tax, accidents, clinical negligence, property acquisition, disputes, divorce, family law and estate planning. The size of the Australian population has also grown by 25% in the last decade, driven both by organic growth of the population and migration. A strong opportunity for lawyers is to tap into the underserved B2C market.

---

7 “NewLaw” is a neologism introduced by Eric Chin in September 2013. NewLaw firms are businesses that use labour arbitrage at the centre of their business model in the delivery of legal services. Examples include managed legal services, legal process outsourcing and fixed fees legal service providers leveraging on-demand lawyers.

8 Analysis and research by Joel Barolsky of Barolsky Advisors.
Australia’s population

B2C market’s lifetime of legal needs

1. Employment, tax and wealth creation
2. Accidents and clinical negligence
3. Property acquisition and disposal
4. Disputes
5. Divorce and family law matters
6. Estate planning and execution

Source: Serota sky Advisors
As consumers move their consumption online, the Australian online retail market has also seen its industry expanding\(^9\) from A$17.6 billion in 2015 to A$23.4 billion in 2017. While majority of online commerce is driven by product-based industries, the services-based market is also growing. This sets the scene for consumption of legal services online and, as the B2C market becomes comfortable with buying services online, we are seeing the rise of LegalTech firms selling legal services online.

The B2B segment for legal services is the 2.2 million strong business population in the Australian market, 94% of which are small businesses\(^10\) that are too small to have a legal department or in-house lawyer. The small business market for legal services is reliant on its external advisers whether they are lawyers or otherwise. A study by the Legal Services Board\(^11\) in the UK found that only 1.4% of the small business population in that jurisdiction turned to lawyers for legal advice, with a larger percentage actually seeking legal advice from an accountant. This indicates a significant opportunity for Australian lawyers to tap into the underserved market of small business.

---


Big business in the B2B segment of the Australian market is represented by companies with in-house lawyers and legal departments. A study conducted by the Association of Corporate Counsel Australia\(^\text{12}\) on trends in the in-house legal segment in the Australian and New Zealand markets reveals:

Legal departments are starting to right-source to the most cost-efficient providers. The NewLaw segment of the market currently accounts for 9% of legal departments’ legal wallets.

Legal departments are underinvesting in LegalTech and LegalOps13 as only 4% and 3% of internal legal expenditures are allocated to technology and workflow respectively.

This reflects the dominant theme of the last five years for corporate legal departments of having to deliver (and demonstrate) value to the business in the Susskindian “doing more for less” world. The main levers used to achieve increased legal service delivery at a lower cost are two-fold:

(a) Improved service delivery through the application of business process improvement methodologies to legal processes. The Corporate Legal Operations Consortium’s (“CLOC”) growth over the last few years, and launch in Australia in 2018, have been a key source of information and support for in-house counsels looking to improve consumption of legal services; and

(b) Disaggregation of legal services. High-value portions of legal work are increasingly being separated from legal matters and briefed to external legal service providers (whether they are law firms or non-traditional firms) while internal solicitors handle routine matter work and business as usual. The increased delivery of legal services to the business by internal legal teams has seen the ranks of in-house counsel increase over the last five years.

As the number and calibre of in-house counsels rise, so too does their capacity and capability to conduct increasingly complex work, creating a positive feedback loop that steadily increases the volume and scope of work being conducted in-house.

II. Intensifying competition between Australia’s law firms

Hyper-competition can be observed amongst the incumbents as law firms compete to grow in a stagnating market. In search of growth, Australian law firms have expanded geographically into interstate markets. The nationalisation of legal practices in the 1980s and 1990s that fused top tier city-based banking and finance law firms created the top tier firms we know today.

---

13 LegalOps is an abbreviation for “legal operations”. For its definition, see footnote 333 below.
In the last three financial years alone, the Australian market has seen 16 office expansions across the country. A major driver of this is the client demand for national coverage and this is most evident for firms which were servicing insurance companies in Australia. Nine of the 16 office expansions analysed were driven by the law firm’s insurance practice.

Intensifying competition for clients and talent is also driving consolidation in the Australian legal industry. The volume of law firm mergers and acquisitions (“M&A”) peaked in FY18 as FY19 deals were consummated in the Australian market. Notably, the size of the deals, measured by the number of partners involved in the merger, has decreased, pointing to a market with less large deals as consolidation intensifies. As the biggest market in Australia, consolidation can also be observed in New South Wales, with eight merger deals recorded in FY18.
Further breakdown of the law firm M&A deals reveals that MinterEllison and HopgoodGanim are diversifying through acquisitions of non-legal services. MinterEllison’s ITNewcom deal reveals a strategic paradigm shift to expand into IT consulting while HopgoodGanim is moving into corporate governance advisory services through the acquisition of Effective Governance. These, of course, are outliers rather than the norm in the market.
Finally, in a people intensive business, the movement of partners paints a picture of where the competition is gravitating. In FY18 we saw lateral partner hires pick up again as 273 partners switched firms. The yearly breakdown reveals that FY18 saw the highest number of partners switching firms in the last seven years as the war for talent intensified.

As the biggest markets in Australia, it is unsurprising that Sydney (139), Melbourne (55), and Brisbane (44) recorded the highest number of partner lateral hires. Gauging the movement of partners by practice areas also reveals where firms are focusing their efforts for growth. Partners in the property & real estate and banking & finance practice areas were most in...
demand in FY18, as firms acquired expertise to capitalise on strong property deal flows and work arising from the recent Banking Royal Commission.

III. The rise of Australia’s NewLaw firms

One of the more observable changes in recent times has been the rise of alternatives to the incumbent. NewLaw firms are businesses that use labour arbitrage at the centre of their business model in the delivery of legal services. Major examples of NewLaw firms include legal process outsourcing companies that leverage low cost labour in offshore or onshore centres, lawyer secondment firms that provide contract lawyers to corporate legal departments and law firms, and fixed fee legal service firms that use on-demand lawyers.
Our research reveals a high concentration of NewLaw firms in the major markets of Sydney and Melbourne. Some of the Australian-based law firms have also incubated their own NewLaw skunkworks to compete in this space. Examples include Allen & Overy’s Peerpoint, Corrs Chambers Westgarth’s Orbit, Jackson McDonald’s JacMac+, McInnis Wilson’s Lexvoco, MinterEllison’s Flex and Pinsent Masons’ Vario.

Clients are voting with their wallets. Our earlier analysis of corporate legal departments’ external legal expenditure reveals an increasing appetite for NewLaw firms’ services, and this appetite does not appear to have yet been dampened by any perceived risk increase from using services from these providers. In fact, at Law Institute of Victoria’s Future Focus Forum in December 2018, the representative from Australia’s largest professional indemnity insurer shared that no claims have been brought against NewLaw firms yet. This points to NewLaw firms being a permanent fixture of the Australian legal market for the foreseeable future.

IV. Australia’s LegalTech firms growing in influence

As one of the most competitively mature markets in the Asia-Pacific region, the Australian LegalTech market has been leading the way with the incubation of LegalTech start-ups and the adoption of LegalTech solutions. The LegalTech ecosystem in Australia has been driven by a strong grassroots movement that saw the launch of Legal Hackers chapters in Brisbane, Perth and Sydney in 2017 and Melbourne in 2018, and the launch of the Australian Legal Technology Association14 (“ALTA”) in 2018.

---

14 For more information about the Australian Legal Technology Association, see their website at: <https://alta.law/> (accessed 29 January 2019).
LegalTech in Australia traces its origins back to 1988 when LawMaster, a legal practice management software provider, was founded. The market expanded rapidly between 2015 and 2018, as 49 new firms were established. As law firms grapple with challenges of innovating and adopting LegalTech solutions, education institutions like the Centre for Legal Innovation from the College of Law took centre stage to help law firm leaders navigate a highly fluid market.

General counsels are also supporting the emergence and growth of LegalTech. The Association of Corporate Counsel Australia has launched the Legal Tech Corner to provide general

---

15 For more information about the Centre for Legal Innovation, see their website at: <https://www.cli.collaw.com/> (accessed 29 January 2019).

counsels with simple and streamlined information on the ever-expanding LegalTech market. In addition, as mentioned earlier, CLOC has established a local presence in Australia for operations and technology professionals that work in legal departments to congregate and share best practices in legal operations functions.

V. Re-entry of the Big Four accounting firms in Australia

Since the 2010s, the Big Four have announced their intention to grow their legal practice – this time with lessons learnt. Interestingly, if you rewind the clock back to the early 2000s before Sarbanes-Oxley was introduced, it was the Big Five accounting firms’ legal practices that were disrupting the legal market. In fact, Andersen Legal, before it was disbanded, had the highest

![Number of partners in the Big Four firms' legal practice](chart)

- PwC Legal: 40
- KPMG Law: 19
- EY Law: 15
- Deloitte Legal: 11

![The Big Four accounting firms' legal presence in Australia](map)
number of lawyers globally, bigger than even Baker McKenzie (once the largest law firm in the world by that same metric).

The Big Four accounting firms in Australia have re-established their legal arms by acquiring talent from law firms. By far the biggest, PwC Legal now has 40 partners, followed by KPMG Law’s 19 partners, EY Law’s 15 partners and Deloitte Legal’s 11 partners. The Big Four accounting firms are leveraging their multidisciplinary capability and multijurisdictional presence to expand their legal practices. They are also expanding their offering in the NewLaw and LegalTech segments to diversify their revenue streams.

VI. Australian law associations responding to changing legal landscape

In recognition of the changing legal landscape, three of the eight law societies in Australia are responding. The Law Society of New South Wales conducted a yearlong study on the future of law and innovation in the profession in 2017 and has established its LegalTech committee.

![Law societies in Australia responding to change](image)

The Law Institute of Victoria has also established its legal technology committee and is drafting research papers on the future of legal services. The Law Society of South Australia has established its own technology and law committee to examine the intersection of LegalTech and the law, and implications on regulation and lawyers.
VII. Australian law schools preparing law graduates for the future

The market for legal education in Australia has also expanded rapidly in the last 25 years. In 1991, Australia was home to 11 law schools and that number has expanded to 41 institutions offering law degrees in 2018. Whilst some scholars have parsed the social constructs that gave rise to Australia’s explosion of law faculties, others have made the more pragmatic observation that, following reforms in the 1980’s, Australian universities began to operate as businesses.

Whatever the reason, the result has been that we now have annual intakes of up to 16,000 law students at universities and other educational institutions in Australia. To give context to that number we need to recall that, as mentioned at the outset of this paper, the entire legal profession within Australia (practising lawyers) currently numbers 76,773. The entire legal industry is, therefore, capable of being replaced by five intakes of law students.

A beneficial outcome of such a large law student cohort is that the student population has much greater variability than smaller class intakes (and less universities) would cater for. Additionally, many Australian law graduates pursue their degree as a dual-degree or as a second degree. These two facets of the Australian legal study experience mean that students are well prepared, and increasingly interested, to explore opportunities outside the parameters of a “traditional” legal career.

And universities are rising to this challenge, albeit not as a whole, and not with the same levels of commitment. As the graphic below illustrates, 25 of 41 legal education institutions in Australia now offer some form of legal innovation in their curriculum. The depth and breadth of courses on offer vary from none (16 universities sit within this category) or a single elective, through to minor degrees and even a major in “New Legal Futures and Technology”.

---

20 In fairness to Mr. Barker, he does not himself suggest reasons for the surge of law faculties, but invites readers to make their own assessments with the help of quoted observations such as this one from the Australian Law Reform Commission Report No 89: “Law faculties are attractive propositions for universities, bringing prestige, professional links and excellent students, at a modest cost compared with professional programs such as medicine, dentistry, veterinary science, architecture or engineering.” See Australian Law Reform Commission, Managing Justice: A Review of the Federal Civil Justice System (Report No 89, 2000), at para 2.15.
21 We say “up to” because it is not clear (to us, at least). Our media claims that about 15,000 students graduate law school each year (see Edmund Tadros, Katie Walsh, “Too Many Law Graduates and Not Enough Jobs” The Australian Financial Review (22 October 2015) <https://www.afr.com/business/legal/too-many-law-graduates-and-not-enough-jobs-20151020-gkdbyx> [accessed 21 January 2019]), while our Council of Australian Law Deans sharply retorts that the correct figure is only 7,500 (see Council of Australian Law Deans, “Data Regarding Law School Graduate Numbers and Outcomes” <https://cald.asn.au/wp-content/uploads/2017/11/Factsheet-Law_Students_in_Australia-1.pdf> [accessed 21 January 2019]). Whatever the number, it is, in either case, referring to graduates and not new enrollees, which is certain to be higher.
VIII. Australian regulators creating the future of legal service

Many of Australia’s regulatory bodies, including Australian Securities and Investments Commission (“ASIC”), Australian Taxation Office (“ATO”), Australian Transaction Reports and Analysis Centre (“AUSTRAC”), are proactively engaging with new FinTech, LegalTech and RegTech start-ups in a manner that embodies the Australian “give it a go” ethos.

ASIC, as an example, is fully committed to engaging stakeholders across the Australian community, and frequently presents at technology-themed events, hosts its own events (alone or together with regulators like AUSTRAC and ATO), has created licensing exemptions that permit FinTech start-ups to test services without an Australian Financial Services licence, and has created an innovation hub that assists start-ups to navigate Australian regulatory requirements.

To see whether Australia’s proactive regulatory stance to new technologies is paying dividends, we need look no further than the recently announced Australian National Blockchain (“ANB”), a collaborative endeavour by Commonwealth Scientific and Industrial Research Organisation’s (“CSIRO”) Data61, Herbert Smith Freehills, IBM, and King & Wood Mallesons to create an enterprise grade, legally binding digital platform for businesses in Australia.25

---

23 FinTech stands for financial technology. FinTech are technologies and solutions geared towards automating and creating more efficient ways of providing financial services to the client.

24 RegTech stands for regulatory technology. RegTech are technologies and solutions that enhance the regulatory process for regulators.

ANB, through a unique partnership between two of Australia’s pre-eminent law firms, a global technology powerhouse, and Australia’s leading data innovation group – itself part of Australian federal agency CSIRO – is drawing the best elements from law, technology, data and government to radically simplify the way that Australian businesses interact.

In ANB’s own words, binding obligations form the backbone of business in Australia, and there are an estimated 1 million binding commercial contracts in the country at any one time. The scale of ANB’s ambition is impressive – a utility-scale blockchain ecosystem for all Australian businesses – and the utility it will deliver to Australia, if successful, is immense.

IX. Conclusion

The conclusions we can draw about the state of legal innovation in the Australian market stem from the eight stakeholders we have canvassed:

(a) Buyers of legal services are increasingly sophisticated purchasers, thanks to swelling in-house counsel ranks and the application of business process improvement methodologies to legal processes.

(b) Law firms are innovating their business models in attempts to differentiate in a hyper-competitive market. Much of this activity has manifested in M&A activity between firms and with lateral partner movements. A notable exception to this has been two firms expanding from strictly legal services to adjacent competencies that align with their core services.
(c) NewLaw firms are disrupting the incumbents and are making steady headway into the wallet share of legal services clients. This has prompted many Australian law firms to create NewLaw style service offerings, most of which deliver legal services or personnel to clients on an as-needed basis.

(d) LegalTech firms are of strong interest to the market and are gaining good traction. This ecosystem has been driven by a strong grassroots movement that saw the emergence of Legal Hackers chapters in many capital cities in the last two years, as well as the launch of the ALTA.

(e) The Big Four accounting firms have firmly re-entered the legal market through lateral hires. They are also expanding into NewLaw and LegalTech segments quite rapidly.

(f) Australian law societies are aware of, and in some cases keeping pace with, legal innovation activities in their jurisdictions that are impacting the way legal services are delivered and consumed.

(g) Australian law schools are, similarly, acknowledging that change is afoot, and some are acting to align their curricula with the reality of legal practice in a post LegalTech environment.

(h) Australian regulators are also alive to the changes that technology is bringing to regulation and to the application of law more generally. Many are working to shape regulatory frameworks to foster innovation, and to ensure that the Australian start-up economy is competitive, all while maintaining safeguards that protect the Australian population.

Each of these stakeholder snapshots combine to deliver a view of legal innovation that is also unfolding in other jurisdictions across the world. Australia operates within a legal framework that is conservative in its approach to change: while some within our industry may have misinterpreted the need for prudence as a license for inaction, this view is under challenge and often directly rejected by the buyer of legal services.

As innovations from new market entrants continue to deliver benefits to the consumers of legal services, we are seeing an industry whose incumbents are beginning to feel compelled to make changes to their service delivery models in order to remain relevant to their clients.
CHINA

By Tan Hui Xin1 and Rennie Whang2

I. Country overview

A. Legal system in brief

China employs what is known as a socialist legal system. The Constitution is the highest law of the land and appoints the National People’s Congress as the highest organ of state power and legislative authority. In turn, the National People’s Congress oversees four other political bodies, namely, the state administration (the State Council), the armed forces (the State Central Military Commission), the highest judicial organ (the Supreme People’s Court), and the prosecutor’s office (the Supreme People’s Procuratorate).

Under the Supreme People’s Court (“SPC”), there are four levels of courts: grassroots, intermediate, higher, and supreme people’s courts. Existing alongside the people’s courts are special courts such as military and maritime courts.3

B. Key stakeholders in the legal industry

The main legal service providers in China are local law firms, international law firms and increasingly, alternatives such as online legal service portals.4 The main regulatory authority is the Ministry of Justice, which oversees legislation drafting, sentencing, prosecution, public awareness educational programs, and participation in international treaties amongst other responsibilities. The Ministry comprises various agencies, including the Legal Aid Centre and the All China Lawyers Association, a self-regulatory organisation whose members include every licensed lawyer and law firm in the country.

C. Key statistics

Due to government policies to increase innovation, high-tech initiatives in China have been growing rapidly. Most notably, artificial intelligence (“AI”) has been experiencing accelerated growth. In 2017, total investment in AI surpassed US$9 billion, a hundred times higher than in 2012.5 The government has announced its intention to attain global leadership in the field of AI by 2030.

---

1 Singapore Management University School of Law.
2 Singapore Management University School of Law.
The number of lawyers in China is low relative to its total population. A 2017 report by Xinhua places the number of law firms in China at 25,000, and the number of lawyers at 300,000. Relative to China’s massive population size of 1.39 billion, lawyers comprise only 0.02% percent of the population. This has been viewed by observers as a major factor for the rise in alternative legal service providers and legal technology.

II. Technological innovation

Both private firms and public institutions have been actively developing legal technologies. Some important trends are AI, big data, and online legal service providers.

AI-enabled robots capable of providing basic legal advice have been installed in different parts of China. For example, in a Beijing court, an AI robot named XiaoFa dispenses advice to over 40,000 litigation questions and 30,000 legal issues. In Qinghai’s legal service centres, another robot has been trained in a range of subjects such as marriage, labour, consumer rights, and mediation law. In Hangzhou, a robot named Faxiaotao can assist customers in dispute analysis and even recommend suitable attorneys.

Apart from catering to the public, AI has also been utilised to assist judges. For example, the Shanghai High People’s Court partnered with iFlytek Co Ltd to implement a case review system. The system will be able to review up to 79 types of cases, suggest appropriate sentences, and evaluate whether the available evidence is sufficient to justify a particular sentence. This sophisticated software is outfitted with numerous capabilities, such as incremental learning, knowledge mining, and voice recognition.

Big data has also been used to increase the legal system’s transparency. One prominent example is Legal Miner, whose products mine Chinese court decisions and offer solutions on risk assessments and strategy development. Another example is the Chinese government’s recently-compiled online database of 32 million judgments.

In addition, internet-based legal service providers have had a positive impact on the market for legal services. For instance, the phone application Pocket Lawyer allows customers to purchase legal services from lawyers registered on the application. When a customer places an order, Pocket Lawyer transmits the order to selected lawyers located nearby. The lawyer with the fastest response or most competitive quote is then awarded the order. In this way, the application aims to increase the speed and affordability of legal services. Other platforms include the websites Yifatong and Yingle, which can identify issues in a customer’s case and

---

6 Hua Xia, “China has 300,000 Lawyers” Xinhua (9 January 2017).
10 Ma Si, “iFlytek Developing AI-enabled System for Legal Purposes” China Daily (7 March 2018).
recommend attorneys with the relevant expertise. Such websites are intended to help clients select reliable lawyers for their case, thereby reducing information asymmetry between clients and lawyers.

III. Regulatory innovation

Beginning with Premier Li Keqiang’s announcement of the “Internet Plus” (“互联网+”) initiative, the Chinese government has been actively promoting innovation in many sectors of the economy, not least the legal industry. The government’s efforts have targeted most of the key stakeholders in the legal industry. For instance, Chinese courts at all levels have been directed by the SPC to experiment with how big data and AI can facilitate the litigation process. In 2016, law firms and technology firms received awards for excellent “Internet + Law” projects at the China Internet Rule of Law Conference organised by the Ministry of Justice.

IV. Dispute resolution innovation

The SPC has since 2015 pushed for the use of multiple dispute resolution mechanisms in courts nationwide. By December 2016, the courts had established 2,338 centres for litigation and mediation, and approximately 13.617 million cases were handled via mediation in 2017. At the first meeting of the 13th National People’s Congress on 9 March 2018, in the annual SPC Work Report, SPC President Zhou Qiang affirmed the continued promotion of, among others, the “Emei Mountain Experience”. This refers to how courts at two levels in Meishan, Sichuan, solved 80.72% of disputes by means of alternative dispute resolution between 2014 and 2016, with only 7.06% of cases entering the judicial adjudication process. SPC President Zhou also said that the SPC will establish a national court online mediation platform, having since February 2017 carried out online mediation pilot projects in four provinces (Zhejiang, Hebei, Anhui and Sichuan), two cities (Beijing and Shanghai) and the Shanghai Maritime Court.

In Zhejiang, for example, the WeChat phone messenger application has been used to build a mobile micro-court which allows, among others, online filings, inquiries, mediation, trials, and payment, and is expected to be able to cater to over 90% of court cases. Parties enter through ID card-matching and face recognition authentication, and are able to directly communicate

---

16 Li Ji, “2016 年‘优秀’ 互联网+法律‘创新项目’ 周勇(到)获奖” Hexun (16 October 2016).
with judges via text, voice messages, pictures, and videos. Furthermore, court actions such as freezing, sealing, and enforcement are publicly disclosed.

A focus of the SPC has also been on establishing “smart courts.” This term, first mentioned by SPC President Zhou in 2016 and later reiterated in 2018, connotes informatisation, which may in turn be harnessed to enhance the transparency and standardisation of judicial processes. It involves improving centralised data management, strengthening the analysis of big data, promoting the standardisation of judicial treatment and sentencing, and making the litigation process a more electronic one. To this end, the SPC established the China Justice Big Data Institute on 10 November 2016 to promote the management of judicial big data resources and the use of AI technology in courts, engage in the training of personnel, and so on.

A forerunner in the electronic litigation process may be said to be the Hangzhou Internet Court, which was established in 2017 to explore using the Internet to adjudicate cases concerning the Internet. Hangzhou was a natural choice as many of the country’s e-commerce companies, including Alibaba, are located there. Hangzhou was also the first cross-border e-commerce experimental zone in the country. The court adjudicates contract and product liability disputes arising from online shopping, disputes concerning internet service contracts, loan disputes executed over the Internet, as well as online copyright infringement. The entire court process takes place online, with just 20 days needed for a case to be taken from prosecution to resolution, including a 15-day period of proof. Trials may also be “asynchronous”: that is, parties may log into the platform at different times, as long as this is within prescribed time limits. As of end-October, over a year into the establishment of the court, the 20 judges of the court had accepted a total of 14,233 cases, concluded 11,794 cases, and issued three white papers on e-commerce trials and intellectual property protection. Additionally, the average time and duration of trials were reduced by 65% and 25% respectively. The Internet Court has also been addressing novel points of law involving new technologies, such as adjudication of the first Bitcoin “mining machine” dispute in October 2018.

The Beijing Internet Court and Guangzhou Internet Courts were subsequently set up in September 2018, with the former receiving 5,497 applications for filing just within two months of its establishment.28

Other technologies have been incorporated into the dispute resolution process. For example, the SPC has declared its acceptance of blockchain-based evidence after it was first accepted by the Hangzhou Internet Court in June 2018,29 and in February 2018, the Guangzhou Arbitration Commission issued the first arbitral award based on the “Arbitration Chain”.30 This was because Qianhai Weizhong Bank and the Commission jointly keep loan contract elements in a blockchain: once a loan is overdue, arbitration may be conducted based on information stored there. The Nanjing Arbitration Commission also launched an online arbitration platform in September 2018 that is based on blockchain technology, with participating nodes including depository institutions, financial institutions, and arbitration institutions.31 It is noted that blockchain technology has been extended to the notarisation of documents, with the country’s first judicial alliance chain legalXchain covering 11 courts, IP360 (a cloud-based intelligent system which monitors Internet data),32 judicial appraisal institutions, legal service companies, and other 11 authoritative judicial nodes.33

Apart from blockchain technology, virtual reality technology was used in March 2018 to replicate a crime scene in Beijing’s No. 1 Intermediate People’s Court,34 and intelligent speech recognition has been used in court trials.35

V. Business innovation

The market size of China’s legal services reportedly reached 500 billion yuan in 2017, with online legal service platforms increasingly involved.36 Indeed, a 2017 report on the online legal

---

services industry by King & Capital Law Firm estimated that a total of 251 online legal organisations were in operation.\textsuperscript{37}

Types of business innovation observed include legal marketplaces and services targeted at the legal community. Under the former, models include the one-stop legal service, software-as-a-service (“SaaS”), and the online-to-offline (“O2O”) model. An example of the one-stop legal service is Ancun, which deals with electronic data storage. One of Ancun’s solutions, a platform for financial disputes, was recently selected as one of 20 outstanding services – a 2018 Annual China Internet Legal Service Innovation Project.\textsuperscript{38} The platform helps financial institutions quickly file litigation and automates the trial process from beginning to end, such that judges only need to check the judgments before delivery. As a result, it takes an average of 15 minutes for a judge to handle a credit card case, from reviewing the documents to adjudication.

An example of an SaaS service provider is Jianfabang, which allows start-ups and early stage companies to generate their own legal documents, including documents relating to angel investing, equity options, day-to-day contracts, and company shareholding. Other online tools include a financing calculator, equity allocation calculator, and AI which helps to annotate and interpret a Letter of Intent.\textsuperscript{39}

Instances of O2O services abound, such as online services which connect clients with lawyers – including Pocket Lawyer, Yifatong and Yingle as mentioned previously. These “matchmaking” portals may also involve human intermediaries, who can jump in where a user needs advice on lawyer selection.\textsuperscript{40} Notably, 51djl (“点击律”), a.k.a. ClickLaw, provides users with a visualisation of a lawyer’s success rate according to the level of court and type of case he or she was involved in, as well as links to the judgments of these cases.\textsuperscript{41} These portals may also offer other big data related services, such as Falvgu (“法律谷”) and Wusong which both enable users to evaluate the chances of litigation success.\textsuperscript{42}

Platforms with services targeted at the legal community include Legaltech.cc, which provides data management system solutions for the legal services industry. Additionally, Sujian Law provides legal financial technology services, including matching creditors, finance institutions and law firms, and enabling the quick processing of litigation financing.\textsuperscript{43}


\textsuperscript{40} Jing Li, “Platform Economy in Legal Profession: An Empirical Study of Online Legal Service Providers in China” (2018) 35 UCLA Pac Basin LJ 97 at p 120.

\textsuperscript{41} Click Law website, “Check Lawyers” <http://www.51djl.com/lawyer/query> (accessed 26 December 2018).


fraternity itself, Lawyers’ Cloud is a mobile platform for lawyers to engage in practical discussions, communicate, and even share training videos.\(^4^4\)

VI. Education innovation

In light of the Chinese government’s focus on strengthening research to establish laws, regulations and ethical frameworks for the healthy development of AI,\(^4^5\) law schools and the private sector have responded by setting up new courses and even institutes.

For example, Tsinghua University Law School said in April 2018 that it will establish a Master of Laws in Law and Computing, and technical courses on the Internet, big data and AI.\(^4^6\) In July 2018, the University also held its first computational law-themed summer camp for 46 undergraduate students from different schools and majors such as computer science, information and communications technology, and statistics. Among other activities, campers visited Alibaba’s Beijing headquarters and met officials from the China Justice Big Data Institute.\(^4^7\)

Research centres and associations dedicated to law and technology innovation have been also created. For instance, the School of Big Data and Artificial Intelligence Law in the China University of Political Science and Law, the Law Artificial Intelligence Laboratory of Peking University, as well as the Research Center for Legal Artificial Intelligence of Peking University, were all established, on the same day, on 29 December 2017.\(^4^8\)

Academia is also working with technology companies. For example, Peking University Law School partnered with Gridsum Holding, a provider of cloud-based big data analytics and AI solutions, to set up the Peking University Legal AI Lab and Research Institute mentioned above.\(^4^9\) In April 2018, the KoGuan School of Law at Shanghai Jiao Tong University and Shanghai Jiao Tong University Huigu Information Industry Co Ltd signed a strategic cooperation agreement with Shenzhen Tencent Computer System Co Ltd and Tencent Cloud Computing (Beijing) Co Ltd to research in fields including informatisation, judicial reform, and judicial application of big data.\(^5^0\)

---


Legal education enterprises, such as Beijing Fangyuan Zhonghe Education Technology Co Ltd, have also been offering online law courses.\footnote{Zhonghe school website <https://www.zhongheschool.com/fakao/> (accessed 26 December 2018).}

VII. Conclusion

Given the SPC’s strong push towards “smart courts” over the past two years, the technological innovation currently observed in the Chinese courts is just the tip of the iceberg, with more efficiencies and insights expected in coming years. It is hoped that these processes allow for increased judicial transparency and standardisation across judgments as envisioned. What is likely to be particularly interesting for observers are innovations in handling e-commerce cases, given the size of the Chinese market: thus, further developments among the Hangzhou, Beijing and Guangzhou Internet Courts are ones to watch. As for the private sector, the growth of new Internet legal organisations has slowed.\footnote{King & Capital Law Firm, “2017 Research Report on the Online Legal Services Industry” <http://www.pkulaw.cn/LawFirmQikDetail/PDFReader.aspx?pdf=VB3Yd_a3jCYmCwWnwFMfhoKWd5cZHDYKEeSuczwOFcsgBeat3RraFIIFK0PtAwI2jm7Ptmwnzwk=> (accessed 25 December 2018).}

China has a sizeable head start when it comes to implementing ideas, while further improvements that the country can look forward to is finetuning the accuracy of some solutions, especially with regard to those using AI.
hong kong
HONG KONG

By Brian W Tang

I. Introduction

Legal innovation, newlaw, lawtech, legaltech, regtech, suptech and govtech are phrases that are increasingly (and often confusingly) being used interchangeably, in deliberations and pronouncements about the confluence of emerging technologies (such as automation, artificial intelligence (“AI”), data analytics and distributed ledger technologies such as blockchain) and business models (such as outsourcing and online or software subscriptions) that is impacting the delivery of legal and regulatory services.

Whether such developments normatively constitute legal innovation or legal disruption is in the eye of the beholder, and depends on who the purported beneficiary or client is:

(a) Law firm market – the beneficiary or customer is the law firm seeking to improve its delivery of services that augments or at least maintains the profitability of partners of those legal professional services firms (often associated with the term “Legaltech”, “NewLaw” and “alternative legal service providers”).

(b) Corporate counsel and regulatory compliance market – the beneficiary or customer is the in-house lawyer and/or compliance officer who is also seeking such improvements, but at the same time often with priorities relating to internal efficiencies and cost savings, which could be detrimental to the profitability of lawyers in the first category (often associated with the term “Legaltech” and “Regtech”).

(c) Governments, regulators and the judiciary – the ultimate beneficiary or customer is the ordinary citizen and/or small and medium enterprise who seeks to benefit from easy-to-use and low-cost governmental and regulatory services and access to justice (often associated with terms “Suptech and “Govtech”). Such initiatives, as well as the emergence of certain legaltech providers, may well disintermediate some of the current service providers, similar to the way fintech is disintermediating large segments of the financial industry. In many cases, governments also have a national agenda to remain competitive in the global environment of cross-border trade that is increasingly online and where data and digital identity are key strategic components.

At its core, these discussions relate to the changing structure and composition of the legal profession and market, in circumstances where large corporate clients are increasingly

---

1 Founding Executive Director, LITE Lab@HKU; Managing Director, ACMI; Co-Chair, Fintech Association of Hong Kong Regtech Committee [Brian.tang@asiacman.com; bwtang@hku.hk].
unwilling to pay for the work of trainees and newly-qualified lawyers, and emerging technologies are narrowing the traditional law firm pyramid by replacing or at least changing the roles played by junior lawyers.

This report is a brief summary of the State of the Legal Profession and Innovation in Hong Kong in 2018, and updated as of August 2019.

II. Overview of the structure of the legal profession in Hong Kong

Hong Kong is a special administrative region of China that has operated in accordance with the Basic Law under the “one country, two systems” principle since 1 July 1997. This principle enables Hong Kong to retain autonomy in relation to its governmental system, legal, economic, and financial affairs at least until 2047, while the central government maintains control over the special administrative region’s foreign affairs and ultimate legal interpretation of the Basic Law. As a result, Hong Kong has retained its Westminster-style government and British common law system that was introduced after it became subject to British rule in 1841 as a British crown colony and British dependent territory.

A. Hong Kong’s legal education and requisite qualifications to be admitted

Hong Kong has three universities that offer bachelor of laws degrees, namely the University of Hong Kong (“HKU”), Chinese University of Hong Kong, and City University of Hong Kong. Each university also offers a myriad of postgraduate Master of Laws (“LLM”) to Juris Doctor (“JD”) degrees. Graduates of these universities, and of any recognised tertiary institution under the common law jurisdiction (or who pass the Common Professional Examination of England and Wales for non-law graduates) must also obtain a Postgraduate Certificate in Law (“PCLL”) (run by these three universities) and:

(a) in the case of a solicitor, undergo two years employment as a trainee solicitor; or

(b) in the case of a barrister, undergo six months pupillage under a pupil master before being called to the Bar, and another six months before he or she can commence full practice.

The Hong Kong Legislative Council has a Standing Committee on Legal Education and Training (“SCLET”) which stated in its 2017 Annual Report:

---

(a) 702 and 674 candidates took part in the PCLL Conversion Examination in eight different prerequisite subjects in January and June 2017 (as compared to 687 and 680 candidates respectively in the January and June 2016 Conversion Examinations).

(b) The average pass rate of the subjects examined in January 2017 was 66.27% (as compared to 71.5% in the January 2016 results) and that in June 2017 was 55.32% (as compared to 70.2% in the June 2016 results).

In the landmark Comprehensive Review of Legal Education and Training in Hong Kong – Final Report of the SCLET Consultants, it was estimated that the rate of training employment is 80-90%.

B. Hong Kong’s legal profession

Hong Kong’s legal profession is governed by the Legal Practitioners Ordinance (Chapter 159) and is mainly divided into:

(a) Solicitors (with limited rights of audience before the courts) who are regulated and licensed by the Law Society of Hong Kong; and

(b) Barristers who are regulated and licensed by the Hong Kong Bar Association.

Solicitor firms are typically structured as sole practitioners and firms consisting partnerships or limited liability partnerships (available only for foreign law firms). Barristers operate as independent legal practitioners (i.e. sole proprietor) and are prohibited from entering into partnerships.

Foreign law firms comprising foreign registered lawyers can advise on the laws of their own jurisdictions or international law, but cannot advise on Hong Kong law. Overseas lawyers who have practiced as solicitors for at least two years may complete the Overseas Lawyers Qualification Examination to qualify as a Hong Kong solicitor. Similarly, there is a Barristers Qualification Examination for overseas barristers.

Associations of law firms may be established if there is a common solicitor, and a formal association is formed where there is a common equity partner. Groups practice amongst different sole practitioners or firms (akin to the barrister “chamber practice” model) is permitted, if premises, facilities and unqualified staff can be shared without creating a partnership.

Multi-disciplinary practices are not permitted.

---

According to the Law Society of Hong Kong, as of 31 December 2018:\(^7\)

(a) There were 9,903 solicitors with a current practising certificate compared to 9,463 in 2017.

(i) 7,282 solicitors were in private practice, working in 915 Hong Kong law firms.

(ii) 2,816 solicitors were partners or sole practitioners.

(iii) 4,466 solicitors worked as assistant solicitors or consultants in Hong Kong law firms.

(iv) 2,612 solicitors held a current practising certificate but were not in private practice (mainly in-house corporate lawyers and government legal officers).

(b) Of the 915 Hong Kong Law firms, 424 of 46% were sole practitioners. Of all the sole practitioners, 46% did not employ any other legally qualified persons.

(c) Of all 9,904 practising solicitors, 51% were men and 49% were women. By comparison, of the 1,241 trainee solicitors, 39% were men and 61% were women.

(d) There were 86 foreign law firms. A total of 1,151 foreign lawyers were employed in Hong Kong law firms and 433 foreign lawyers in foreign law firms.

According to the Bar Association of Hong Kong, as of July 2019, there were 1,546 practicing barristers, up from 1,489 in 2018. This consisted of 106 senior counsels and 1,440 juniors.\(^8\) Annual admissions are rising, with 108 admissions in 2018 compared with 86 in 2017.\(^9\)

Hong Kong recognises the role of notaries public for the preparation and authentication of documents for use abroad, which are licensed and regulated by the Hong Kong Society of Notaries. As of 30 April 2018, there are 372 members, all of whom are experienced solicitors, and majority have 15-20 years post-admission qualification.\(^10\)

Under the Closer Economic Partnership Arrangement (“CEPA”), Hong Kong permanent residents with Chinese citizenship can sit the legal qualifying examination and acquire Mainland China (“Mainland”) legal professional qualifications and engage in non-litigation

---

\(^7\) Hong Kong Law Society website [https://www.hklawsoc.org.hk/pub_e/about/#profileprofession> (accessed 3 August 2019).


\(^9\) Hong Kong Bar Association Report on Standing Committee on Local Admissions 2018 [https://www.hkba.org/sites/default/files/Standing%20Committee%20on%20Local%20Admissions%202018%20%28e%29%20%28f%29.pdf> (accessed 3 August 2019).

legal work in Mainland law firms.\textsuperscript{11} According to Hong Kong Trade Development Council research, 602 Hong Kong residents took the National Unified Legal Professional Qualification Examination in 2018, with 108 of them passing.\textsuperscript{12}

CEPA also allows for Hong Kong law firm representative offices to form non-partnership associations with Mainland law firms in the Guangdong province, and to form partnership associations in Qianhai in Shenzhen, Nansha in Guangzhou, and Hengqin in Zhuhai, with further geographic expansions pending Mainland legislation and regulation amendment.\textsuperscript{13} Further, according to research by the Hong Kong Trade Council, as of end-June 2019, Hong Kong law firms (including many Hong Kong-based foreign law firms) had set up 72 representative offices on the Mainland, of which 40 were set up after the implementation of CEPA (most commonly in Beijing, Shanghai and Guangzhou). In the meantime, 24 Hong Kong law firms have entered into association arrangements with their Mainland counterparts under CEPA.\textsuperscript{14}

Many corporate or in-house lawyers based in Hong Kong are not registered with the Law Society of Hong Kong, especially those that work for multi-national corporations and financial institutions. The Association of Corporate Counsel – Hong Kong (formerly Hong Kong Corporate Counsel Association) is the pioneer association representing in-house lawyers and has over 900 members.\textsuperscript{15}

\textbf{C. Judiciary}

Since 1997, the Court of Final Appeal replaced the Judicial Committee of the Privy Council as Hong Kong’s final appellate court, with the power of final interpretation of the Basic Law vested in the Standing Committee of the National People’s Congress of China.

Under the Basic Law, Hong Kong maintains the separation of an independent judiciary, and judicial appointments are made by the Chief Executive upon nomination and recommendation of the Judicial Officers’ Recommendation Commission (headed by the Chief Justice and composing local judges, persons from the legal profession and other reputable persons) in consultation with the judiciary and the legal profession and endorsed by the Legislative Council by way of resolution. All judges and magistrates must have been qualified as legal practitioners either in Hong Kong or in another common law jurisdiction and have had substantial professional experience.

\begin{footnotesize}
\begin{itemize}
\end{itemize}
\end{footnotesize}
Currently, the Court of Final Appeal consists of three Hong Kong permanent judges and 15 non-permanent judges (12 of whom are from overseas).16

III. Hong Kong’s legal market in the international context

Hong Kong has long been known to have a sizeable legal market as a global financial centre and common law jurisdiction. This relates to Hong Kong-based lawyers assisting with cross-border transactions and dispute resolution, including arbitration and mediation (although it should be noted that neither arbitrators nor mediators need to be lawyers although a majority of them are).

According to Hong Kong Trade and Development Council research,17 Hong Kong’s export of legal services in 2017 amounted to US$374 million (HK$2.9 billion), up 16.0% from a year earlier.

Hong Kong has also consistently been ranked as one of the five most preferred seats of arbitration, alongside London, Paris, Singapore, and Geneva.18

In 2018, Hong Kong International Arbitration Centre (“HKIAC”) handled 521 dispute resolutions (including arbitration, mediation, and domain name disputes), with the total disputed amount increasing from HK$39.3 billion in 2017 to HK$52.2 billion in 2018. Of all arbitration cases submitted to HKIAC in 2018, 71.7% were international in nature, i.e. at least one party was not from Hong Kong.19

Hong Kong has long played host to many international legal industry conferences such as International Chamber of Commerce’s Asia Conference on International Arbitration, iTechLaw’s (International Technology Law Association) Asia Pacific Conference and ALM and International Legal Technology Association’s LegalTech Asia Technology Summit. Legal innovation is increasingly a focus, with Hong Kong hosting a roundtable led by the College of Law Centre for Legal Innovation (Australia, New Zealand and Asia), as well as the 2019 Association of Corporate Counsel Asia-Pacific Annual Meeting, which had Innovation and LegalTech as one of its three dedicated streams (featuring Slaughter & May-funded Luminance).20 Furthermore, at the 2019 Asia-Pacific In-house Counsel Summit, an invitation-only roundtable luncheon was held, with 20 general counsels and heads of legal departments

engaging in a lively discussion on the legaltech and legal innovation journeys of their respective law departments.\footnote{2019 Asia-Pacific In-house Counsel Summit agenda <https://www.asialaw.com/general/APIHCl9A> (accessed 3 August 2019).}

**IV. Growth of alternative legal service providers in Hong Kong**

A 2016 survey by the In-House Congress Hong Kong showed that 82.1% of in-house legal counsel have used or would be willing to use an alternative legal service provider (“ALSP”) or NewLaw.\footnote{Hong Kong Law Society, “What’s Driving the Trend of “On-Demand” Lawyers for Hong Kong Corporates?” *Hong Kong Lawyer* (December 2016) <http://www.hk-lawyer.org/content/what%E2%80%99s-driving-trend-%E2%80%98-%E2%80%99-demand%E2%80%99-lawyers-hong-kong-corporates> (accessed 18 December 2018).} Flexible work arrangements have contributed to this growth of “law’s third way” of retaining and deploying talent (traditional law firm and in-house careers being the first two); as these organisations provide secondment opportunities into legal departments of large companies, or opportunities to work remotely.\footnote{Elizabeth Beattie, “Law’s Third Way” *Asian Legal Business* (24 October 2018) <https://www.legalbusinessonline.com/features/laws-third-way/76642> (accessed 18 December 2018).}

Currently, NewLaw flexible contract lawyer providers in Hong Kong include Axiom (which filed for a US IPO in February 2019), KorumLegal, Lawyers On Demand (which had merged with AdventBalance and was acquired by private equity firm Bowmark Capita from Bryan Cave Leighton Paisner in 2018), as well as from law firms Allen & Overy’s Peerpoint and Eversheds Agile. Traditional legal recruitment firms also operate contract lawyer units. In 2019, private equity funded Elevate established its Hong Kong presence by acquiring Cognatio Law (founded by the former Hong Kong head of Lawyers on Demand) and law firm Pinsent Masons’s Vario opened in Hong Kong led by the former APAC head of Axiom.

Legal operations have increasingly emerged as a growing driver of efficiency and cost savings in legal departments,\footnote{See eg, the various initiatives of the Corporate Legal Operations Consortium (CLOC). CLOC website, "Get Ahead for CLOC Initiatives" <https://cloc.org/achieve/#initiatives> (accessed 18 December 2018).} with the appointment of legal department chief operating officers and the involvement of procurement.\footnote{See eg, Buying Legal Council, “2018 Buying Legal Services Survey – Insights into Legal Procurement” <http://www.buyinglegal.com/?p=14740> (accessed 18 December 2018).} For example, KorumLegal is expanding services in this area.

Managed legal services (“MLSs”), or the contracting out of a part or whole of a legal function to an independent legal service provider, is also growing. In June 2019, EY acquired Thomson Reuters Pangea3 Legal Managed Services and its 1,100 legal project managers, services professionals and technologists worldwide, to add to its Riverview Law acquisition in 2018. Furthermore, MLS is now offered in Hong Kong by KorumLegal, and possibly Eversheds Sutherland spin-off Konexo as well.

LegalTech is also emerging, with cloud legal software solution provider Zegal (formerly Dragon Law) growing ever since being founded in 2013 in Hong Kong and now expanding into Singapore, Australia, New Zealand, and the United Kingdom.

\footnote{This is focussed on North America and Europe, not Asia.}
Yet, it is important to note that the Acritas Asia Pacific Alternative Legal Brand Index\(^2^6\) shows that the top five brands recognised in a survey of 221 senior counsel collectively responsible for US$1.2 billion of legal spending consists of three Big Four accounting firms and the two longstanding legal research vendors: PwC Legal, EY, KPMG, LexisNexis and Thomson Reuters.

In January 2019, affiliates of both KPMG and Deloitte launched their Hong Kong legal practices through SF Lawyers and J.E. Jamison & Co respectively. They join Tiang & Co (which is associated with PwC Legal International) and LC Lawyers LLP (which is part of the EY global network of law firms). The expansion of the Big Four into the Hong Kong legal market is thus now complete, with each reportedly targeting 20-30 lawyers each by the end of 2019.\(^2^7\)

After the sale of 55% of its financial and risk business (now known as Refinitiv, that was in August 2019 sold in turn to the London Stock Exchange in a US$27 billion deal), Thomson Reuters is set to invest more heavily into its legal product lines of legal research and know-how (adding AI to Westlaw Edge and Practical Law), business and practice management, litigation support, conducting investigations and mitigating risk (e.g. CLEAR) and fast-track drafting (e.g. Contract Express).

Similarly, RELX Group’s Lexis-Nexis has been launching new products, such as Integrated Web Search and Context (which turns legal language from judicial decisions and expert witness documents into analytics), and the 2019 launch of Lexis Advance Hong Kong.

In the meantime, eDiscovery has been a burgeoning business in Hong Kong, where recent local securities regulatory and the United States Foreign Corrupt Practices Act investigations have driven its adoption, as have cross-border data transfer issues.\(^2^8\) One report estimates that the Asia-Pacific region will have the world’s highest compound annual growth rate by 2023.\(^2^9\)

Software and services have been ever improving, such as Relativity offering custom text analytics and machine learning applications by language.ai built on kCura’s platform.


V. Hong Kong's innovation and technology policy priority as it relates to the legal sector

Hong Kong Chief Executive Carrie Lam has stated that “[m]y Government has made innovation and technology a policy priority, which I believe will benefit all sectors, including the legal sector” and “[a] part from fintech, lawtech is also becoming increasingly important”.

In the 2018-19 budget, the Hong Kong government outlined four areas of technological innovation which will be given substantial financial support: biotechnology, AI, smart city and financial technology. The focus on funding for AI research and development, startups, and the Technology Talent Admission Scheme can benefit the growing of the ecosystem for legal innovation. For example, legaltech company Zegal grew and benefitted from being an incubatee in Hong Kong government owned Cyberport.

The Chief Executive's 2018 policy address was expanded upon by the Secretary of Innovation and Technology, who announced that a Smart Government Innovation Lab will be established by the Office of the Government Chief Information Officer, as well as more chatbot functions in the GovHK portal for search and use of e-Government services, and the rollout of eID to access e-Government services and submit government forms electronically.

Separately, the judiciary has been developing in phases its Informational Technology Strategy Plan to provide an electronic option for the handling of court-related documents, including an Integrated Court Case Management System, and will seek the requisite legislative amendments. Permanent administrative headcount is currently being sought and should greatly assist the Judiciary in implementing these important initiatives.

VI. Hong Kong’s role in regional and online dispute resolution

On 14 December 2017, Hong Kong’s Chief Executive signed the Arrangement with the National Development and Reform Commission for Advancing Hong Kong’s Full

Participation in and Contribution to the Belt and Road Initiative (“BRI”), with a “blueprint” focusing on six key areas, namely: finance and investment; infrastructure and maritime services; economic and trade facilitation; people-to-people bonds; taking forward the Guangdong-Hong Kong-Macao Bay Area Development; and enhancing collaboration in project interfacing and dispute resolution services.

Relevantly, the arrangement seeks “to support Hong Kong in establishing itself as a centre for international legal and dispute resolution services in the Asia-Pacific region to provide relevant services for the Belt and Road Initiative.”

The Chinese Central Government’s February 2019 Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area, which covers an area of 56,000km², with over 70 million people and gross domestic product of around US$1.6 trillion, reiterated its goal of improving the development of the “core city of Hong Kong” to “establish itself as the centre for international legal and dispute resolution services in the Asia-Pacific region.”

In addition to promoting Hong Kong’s common law and international dispute resolution credentials at the 2018 Colloquium on International Law, Chief Executive Carrie Lam also reported that “the legal profession and the dispute resolution professional sector, with the policy support of the Government, are actively establishing an online dispute resolution platform.”

The eBRAM platform was originally described as an “eBelt and Road Arbitration Mediation” platform by Teresa Cheng SC in 2017 (before she assumed her role as Hong Kong’s Secretary of Justice in January 2018). Since then, eBRAM has been rebranded to stand for “Electronic Business Related Arbitration and Mediation”, with the incorporation of an e-BRAM Centre, and the Logistics and Supply Chain MultiTech R&D Centre receiving funding from the government’s Innovation and Technology Fund for the eBRAM technical platform development project in order to create a creating a proof-of-concept prototype of an internet-

---


based electronic arbitration and mediation platform. The eBRAM platform aims “to provide through innovative approaches a full spectrum of [online dispute resolution ("ODR")|] services including negotiation, conciliation, mediation, adjudication, [and] arbitration” and “also be able to provide deal-making services to assist parties to enter into business deals on a secure and user-friendly online platform.”

ODR remains a high priority of the Department of Justice ("DOJ"). In its 2018 Policy Initiatives presented to the Legislative Council Panel on Administration of Justice and Legal Services in October 2018, the DOJ resolved to:

(a) Encourage the development of ODR and give policy support to the development of a Belt and Road e-arbitration and e-mediation platform by non-governmental organisation, so that Hong Kong will be able to provide efficient and cost-effective ODR services; and

(b) Give policy support to the development of a smart contract platform for use by enterprises of countries along the Belt and Road through exploiting developments in LawTech to facilitate transactions and resolve disputes.

Through its work at the Asia Pacific Economic Cooperation ("APEC") Economic Committee’s Friends of the Chair group on Strengthening Economic Legal Infrastructure, representatives from the Hong Kong DOJ chaired the Work Plan on Online Dispute Resolution Workshop on the Use of Modern Technology for Dispute Resolution and Electronic Agreement Management Particularly Online Dispute Resolution, with reference to the UNCITRAL Technical Notes on Online Dispute Resolution, and a Collaborative Framework for Online Dispute Resolution is being proposed.

These ODR initiatives correspond with the developments in the Mainland, with its establishments of the Hangzhou Internet Court in August 2017, followed by the Beijing and

---

45 Legislative Council Panel on Administration of Justice and Legal Service, “2018 Policy Initiatives of the Department of Justice” (CB(4)20/18-19(01), October 2018) at [40] <https://www.legco.gov.hk/yr18-19/english/panels/ajls/papers/ajlscb4-20-1-e.pdf> (accessed 18 December 2018). DOJ also resolved to “continue to enhance Hong Kong e-Legislation (HKeL) to facilitate quicker and more convenient access to legislation.”
Guangzhou Internet Courts in September 2018. The Supreme People’s Court has also allowed evidence stored and verified on blockchain platforms to be used in legal disputes.

Hong Kong’s 2019-20 Budget announced in February 2019 allocated HK$150 million to the development and initial operation of an online dispute resolution and deal making platform by a non-government organisation. eBRAM Centre is proposed to be the recipient, where it is hoped to be well-positioned to also serve the APEC ODR project to benefit micro, small and medium-sized enterprises.

VII. Facilitation of regtech and suptech adoption in Hong Kong

The Hong Kong Monetary Authority (“HKMA”) has signalled its support to “work with the banking industry and the technology community to further facilitate the adoption of Regtech”, namely the “use of innovative technologies by banks to achieve regulatory compliance or better risk management in a more effective and automated manner”, through its Banking Made Easy initiative, focusing on four areas:

(a) Anti-money laundering (“AML”) and Combatting Financing of Terrorism surveillance technologies;
(b) Regtech for prudential risk management and compliance;
(c) Studies on machine-readable regulations; and
(d) HKMA’s exploration of Suptech (supervisory technology).

This corresponds with the ongoing initiatives by regulators in other jurisdictions such as the United Kingdom’s Financial Conduct Authority, the Australian Securities and Investments Commission, and the Monetary Authority of Singapore.

The Fintech Association of Hong Kong has convened a RegTech Committee comprising of financial institutions, fintechs, regtechs, large traditional vendors, consultants and lawyers. The

---

Committee organised its inaugural Regtech Live! event that showcased four companies recognised as part of the Regtech 100, with solutions to address the know-your-customer and AML concerns to combat financial crime. In 2019, the Regtech Committee organised a Regtech Live! AI edition featuring five award-winning AI-powered regtech solutions, including two which are companies based in Cyberport. It also launched the APAC Regtech Network together with the Regtech Committees of each of the Singapore Fintech Association and the Fintech Association of Japan.

Representatives from the Securities and Futures Commission (“SFC”) and the HKMA also served as mentors and observers respectively at LegalRegTechHack in conjunction with Global Legal Hackathon in 2019, and the HKMA participated in the United Kingdom Financial Conduct Authority’s 2019 Global AML and Financial Crime TechSprint.

RegTech also features prominently in Asia’s first fintech Massive Open Online Course (“MOOC”) that was led by HKU on edX which has had more than 40,000 learners worldwide. The success of MOOC has led to Asia’s first interdisciplinary Professional Certificate Program in Fintech on edX with courses on “Fintech Ethics and Risks” already launched, and “Blockchain and Fintech: Basics, Applications and Limitations” to follow in 2019.

VIII. Building the legaltech and innovation ecosystem in Hong Kong

The University of Hong Kong’s Law and Technology Centre (a centre jointly established by the Faculty of Law and the Department of Computer Science) and the Legal Hackers Hong Kong chapter organised a Legal Innovation Panel Series in 2017 comprising a LegalTech Day and a TechLegal Day that brought together academics, practitioners, and policy-makers.

The Chinese University of Hong Kong (“CUHK”)’s Faculty of Law Centre for Financial Regulation and Economic Development set up the Machine Lawyering Blog in December 2017. Subsequently, 2018 proved to be a pivotal milestone in the development of legal innovation in Hong Kong.

References:

57 To view a Youtube video of the event, see <https://youtu.be/fJnXPPHu1ao> (accessed 18 December 2018).
58 To view a Youtube video of the event, see <https://youtu.be/nhTzmSkjNEo> (accessed 3 August 2019).
59 To see a Youtube video of the event, see <https://youtu.be/D3UKWpYNQjg> (accessed 3 August 2019).
In February, Hong Kong held its first legaltech and regtech hackathon hosted by Asia Capital Markets Institute (“ACMI”) and Thomson Reuters, where teams of law students, lawyers, and compliance officers worked with computer science students, data analysts, programmers, technologists, and AI researchers to create solutions to address legal business and access to justice.\(^5\) The top Hong Kong team Decoding Law won the public sector category at the Global Legal Hackathon final in New York.\(^6\)

In March, the Legal Hackers Hong Kong chapter organised the Hong Kong Node of the global Computational Law and Blockchain Policy Festival, where panel discussions on legaltech, blockchain, and access to justice were held, as well as a workshop on smart contract drafting. The Blockchain Innovation and Policy Panel included a representative of the HKMA’s Fintech Facilitation Office and was featured in the inaugural Stanford Journal of Blockchain Law and Policy.\(^7\)

The Law Society of Hong Kong has 11,469 members as of June 30, 2019,\(^8\) and its InnoTech Committee (“ITC”) has since 2017 been developing the Technology Roadmap for the Law Society, in response to what its committee member Sebastian Ko calls a “widely recognized need to innovate Hong Kong’s legal services for competitive growth locally, in Greater China and internationally”. In April and September, the ITC organised an Access to Justice Hackathon\(^9\) and a Belt and Road Justice Challenge,\(^10\) with the latter held on the same day as the Law Society’s “The ABC to Building a Smart Belt and Road: Law and Artificial Intelligence, Blockchain and Cloud” Conference.

In October, as part of Hong Kong Fintech Week and HKU Fintech Day, HKU soft-launched its Law, Innovation, Technology and Entrepreneurship (“LITE”) programme.\(^7\) LITE Lab@HKU is an interdisciplinary and experiential programme that is supported by the HKU Asian Institute of International Financial Law and the HKU Law and Technology Centre that will make a professional joint-appointment in collaboration with the Faculty of Law and the Department of Computer Science. In addition to the courses that are part of two new interdisciplinary Bachelor of Arts and Science (“BASc”) streams, namely BASc in Financial

---


Technology (led by the Department of Computer Science and Faculty of Business and Economics)\(^72\) and the BASc in Design+ (led by the Faculty of Architecture),\(^73\) LITE Lab@HKU\(^74\) has already created a community that has supported student teams at hackathons (where HKU teams won the first and second prizes of the Law Society’s Belt and Road Justice Challenge), has commenced an AI and autonomous driving initiative using the Duckietown platform originally developed by the Massachusetts Institute of Technology,\(^75\) and is supporting the creation of a student-led HKU Blockchain and Crypto Club.\(^76\)

In 2019, the momentum of ecosystem-building in legal technology and innovation has continued with increased education, engagement and scholarship across Hong Kong.

LegalRegTechHack in conjunction with Global Legal Hackathon 2019 was organised by ACMI with co-organisers LITE Lab@HKU and Cyberport, and was supported by major law firms Allen & Overy, Ashurst, Baker McKenzie, DLA Piper, Freshfields, King & Wood Mallesons and Linklaters, together with legal service providers Thomson Reuters and KorumLegal, as well as the DOJ and Association of Corporate Counsel.\(^77\) The hackathon featured mentors from companies such as HSBC Innovation, Swire Properties Ventures and Tencent, and also for the first time brought together legaltech and innovation managers from Baker McKenzie, Clifford Chance, and Allen & Overy (the latter based in Singapore). The top Hong Kong team, Access Our Community, was one of two finalists in New York for the Global Rise of Women in LegalTech Award,\(^78\) where ACMI’s initiative to establish a Hong Kong-based legaltech and regtech incubator and accelerator – LEXi – was also announced.

Hong Kong’s law schools have also been active in relation to legaltech-related events. CUHK CRED organised a series of LegalTech seminars throughout the year. HKU’s Law & Technology Centre held its inaugural Technology Law Symposium, while LITE Lab@HKU facilitated a Legal Innovation Seminar featuring Stanford Law CodeX fellows, as well as a Global Blockchain and DLT Leadership Series, with speakers such as Charles Hoskinson (IOHK/Cardano founder) and Nathan George (Sovrin Foundation CTO) – a first for a Hong Kong law school.

In another first, LITE Lab@HKU also organised a Smart Legal Contract Challenge in conjunction with Legal Hackers’ Computational Law & Blockchain Festival 2019 at HKU’s entrepreneurship and innovation hub iDendron, where legal and technologist participants

\(^{72}\) For more information on HKU BASc in Financial Technology curriculum, see: The University of Hong Kong, Bachelor of Arts and Sciences, Financial Technology website, “Regulations, Syllabus & Timetables” <https://fintech.cs.hku.hk/Curriculum/CDetails/> (accessed 3 August 2019).

\(^{73}\) For more information on HKU BASc in Design+ syllabus, see: The University of Hong Kong, Bachelor of Arts and Sciences in Design+ website, “Regulations, Syllabus & Timetables” <https://www.arch.hku.hk/programmes/design/bachelor-of-arts-sciences-in-design-plus/regulations-syllabus-timetables/> (accessed 3 August 2019).

\(^{74}\) For more information on LITE Lab@HKU, see their website at <https://lite.law.hku.hk/> (accessed 3 August 2019).

\(^{75}\) For more information on Duckietown, see their website <https://www.duckietown.org/> (accessed 3 August 2019).


\(^{77}\) To view a video of LegalRegTechHack on Youtube, see <https://www.youtube.com/watch?v=OtsurVp_6fA> (accessed 3 August 2019).

learned about and developed smart contract prototypes using Consensys’s Open Law, the open-source Accord Project, Clause and Hong Kong developed ContractPen.

In the meantime, to implement the Law Society’s Technology Roadmap, the ITC has launched a “InnoTech Law Hub” (“ILH”) as the Law Society’s program for legal practice innovation.

According to the ILH’s chairman Sebastian Ko, “The ILH focuses on identifying technology-based solutions relevant to the Roadmap and making them accessible to legal practitioners so that they can meet their innovation priorities in delivering legal services. To achieve this objective, the ILH is building communities to cultivate cross-disciplinary communication and collaboration between lawyers and technologists, and to approach the challenges of innovation with multi-stakeholder engagement and systems-thinking. Through face-to-face meetings, workshops and hackathons, the ITC have engaged with corporate, government and community stakeholders to understand their current state of and future readiness for technology adoption in legal services.”

Large international law firms are actively engaged in their own innovation journeys in Hong Kong. These include Baker McKenzie establishing an Innovation Hub in their new offices in Taikoo Shing; Clifford Chance’s appointment of a legaltech advisor; and Linklaters creating permanent tech leadership roles for managing associates at Linklaters Nakhoda (which launched its full version ISDA Create online initial margin documentation tool in January 2019).79

IX. Ongoing evolutionary journey of Hong Kong’s legal profession and market

Europe’s colonial expansion which began in the early 15th century effectively resulted in the creation of the legal profession seen across many parts of the world. This was perhaps due to a combination of the colonial export and evolution of the guilds formed by university educated jurists in Roman and canon law in Medieval Western Europe,80 together with the Inns of Court system which housed, trained and disciplined all barristers from which came the English judges who laid out the common law.

Lawyers worldwide have generally retained the trust of society to regulate their own professional standards to serve the best interests of clients over their own. However,

---

independent regulatory oversight is a trend being seen in other professions, such as auditors of publicly listed companies,\textsuperscript{81} and also in the legal profession.\textsuperscript{82}

The 2018 SCLET Comprehensive Review of Legal Education and Training in Hong Kong report observed:

> Technological and associated organisational disruption of legal services has important implications for access to justice, the business of “doing” law, the skills required of new lawyers, and, perhaps, the demand for new lawyers as well. These developments require both new knowledge and skills… and, it is argued, potentially a different mindset.\textsuperscript{83}

Developments for the year to date in 2019 have demonstrated encouraging signs for the legal technology and innovation journeys of many of the key stakeholders in Hong Kong: from law firms to corporate counsel; from the government, industry bodies and the judiciary, to legaltech start-ups, ALSPs, law schools, law students and ordinary citizen/users.

The 2019 July/August issue of Harvard Law School Centre for the Legal Profession’s \textit{The Practice} features a timely article entitled “Taking the ‘Alternative’ out of Alternative Legal Service Providers”.\textsuperscript{84} Its conclusion harks back to the seminal essay on “Lawyers as Professionals and as Citizens: Key Roles and Responsibilities in the 21st Century” by former General Electric General Counsel Ben Heinemen, former WilmerHale managing partner (and first Asian-American to lead a major American law firm) William F. Lee and Harvard’s David Wilkins,\textsuperscript{85} on the requisite “complementary competencies” of lawyers that include technology and data fluency, business literacy, and cross-cultural adaptability.

We look forward to continuing to facilitate and report on the evolution of such mindsets and complementary competencies in Hong Kong.

---

\textsuperscript{81} For example, the US Public Company Accounting Oversight Board (PBAOB) was established by the Sarbanes-Oxley Act of 2002 to oversee accounting professionals who provide independent audits for publicly-traded companies after the bankruptcies of WorldCom and Enron and the collapse of Arthur Andersen. Similarly, in Hong Kong, the Financial Reporting Council was created to conduct independent investigations into possible auditing and reporting irregularities in relation to listed entities, with a bill currently in the Hong Kong Legislative Council to regulate auditors of listed entities over the Hong Kong Institute of Practicing Certified Public Accountants: see eg Legislative Council, “Legislative Council Legal Services Division Report on Financial Reporting Council (Amendment) Bill 2018” (26 January 2018) (LC Paper No. LS25/17-18) <https://www.legco.gov.hk/yr17-18/eng/hc/papers/hs20180126ls-25-e.pdf>; “Legislative Council Brief – Financial Reporting Council Ordinance (Chapter 588), Financial Reporting Council (Amendment) Bill 2018” (File Ref: ACCT/2/1/1C) <https://www.legco.gov.hk/yr17-18/eng/bills/brief/b201801191_brfr.pdf> (accessed 18 December 2018).

\textsuperscript{82} See eg, the UK Legal Services Act that resulted from the 2004 Clementi Review of the Regulatory Framework for Legal Services in England and Wales.


04 | india
INDIA

By Karthik Mahalingam¹ and Aditya Shivkumar²

I. Introduction

As a leading democracy, India has established itself as one of the key players in the global stage today. India has a common law legal system and a robust, independent, and well-regarded judiciary. It has well-developed legal principles, several of which, like the 1883 Indian Penal Code, originate from the British colonial era. Indian union laws take precedence over state specific legislation. The Supreme Court is the apex court of the country. Under the supervisory jurisdiction of the Supreme Court are the High Courts and various district courts.

Some key highlights of the Indian legal system include:

(a) The binding nature of precedents is well established in India, ie, judgments delivered by the superior courts are as much the law as legislative enactments;

(b) The Supreme Court is the highest constitutional court and appellate authority;

(c) Public Interest Litigation and suo moto cognizance of several citizen issues have developed the strength of the Supreme Court;

(d) There are 25 High Courts for the various states. They have jurisdiction over a state, a union territory or a group of states and union territories;

(e) District courts and several other lower courts operate under their ambit;

(f) Indian courts have a significant number of pending cases. As of 2018, the case backlog was around 29.9 million cases, of which 1.7 million cases have been pending for over five years. One of the reasons for the backlog is that 20% of the sanctioned positions for judges are vacant.³

In addition to the courts, the Government of India has set up various Tribunals across the country to address the issue of pendency of courts. These tribunals are sector specific, and are

¹ Mr. Karthik Mahalingam has over 17 years of entrepreneurial and strategic business experience. He was a senior partner at Shardul Amarchand Mangaldas, where he led the National Practice for Venture Capital and was Head of the Bangalore office. Before Amarchand, Karthik was Director – Legal at Omidyar Network, a Silicon Valley venture capital firm focused on investments in consumer internet, mobile, and technology. He recently graduated from the Sloan Fellows MBA from the MIT Sloan School of Management. He is now focused on the intersection of law, business and technology and has authored papers on Legaltech and Corporate Venture Capital.

² Mr. Aditya Shivkumar is the Co-Founder of Resolve Disputes Online, which was founded to enable easier access to justice through innovation of the law with technology. He is a sought-after speaker in the field of Legaltech. Aditya has been a member of the international Mediation Institute’s ODR Taskforce for the year 2015-2016. Aditya has been nominated to Fortune India 40 Under 40 Class of 2019 and is an emerging thought leader in the field of Access to Justice and Legaltech.

often considered the forum of first instance for litigants seeking relief. Some tribunals that have been set up include the National Company Law Tribunal, Income Tax Tribunal, Intellectual Property Appellate Board, National Green Tribunal. These tribunals function both at the Central and State level.

Key aspects of the legal profession in India are:

(a) The practice of the legal profession is governed by the Advocates Act of 1961;

(b) The Bar Council of India is a statutory body created by Parliament to regulate and represent the members of the various Indian bar associations;

(c) At last count (in 2011) there were 1.3 million registered lawyers in the country, with an average annual growth rate of 4%;

(d) Majority of them run single office court practices in family, civil and criminal laws. Many reputable law firms focused on corporate, intellectual property and litigation have been built over the years;

(e) Lawyers working in-house at various Indian and international multinational corporates;

(f) Legal process outsourcing has also been growing with an influx of lawyers in this space, primarily servicing international clients;

(g) E-signing of documents and legal advertising are still bound by traditional rules.

II. Legal technology and innovation

Legal technology (“legaltech”) is evolving in India and over the last few years entrepreneurship in this space has grown significantly. The lack of standardisation and structure in the creation and organisation of data is a major problem. With more than 33 million cases pending, the legal system is ripe for an overhaul. There are over 39,000 startups in India, with only around 100 to 200 startups focused on legaltech.

Routine tasks are being automated using Artificial Intelligence (“AI”), Machine Learning (“ML”), and NLP. This includes contract review, document generators, case research, etc. The landscape of legatech within the Indian startup ecosystem includes the following:

---


AI Powered legal assistants (MikeLegal⁶ and Pensieve⁷);

AI Contract review and analysis (Anvi⁸);

Legal marketplaces (LawRato⁹ and VakilSearch¹⁰);

Data intelligence and research (Veratech¹¹);

Case research (Casemine¹², Riverus¹³ and Manupatra¹⁴);

Digital verification (Signzy¹⁵); contract creation and management (SpotDraft¹⁶ which was recently funded, and WillSecure¹⁷ which exited to Kotak¹⁸); and

Legal literacy: free Indian law case search (IndiaKanoon¹⁹); and FAQs on common legal topics (Nyaaya²⁰).

The legal industry is witnessing burgeoning growth aided by the emergence of new legaltech startups. Indian Kanoon is a leader in the field of legal literacy, whilst Sirion Labs²¹ is a player in contract management and enterprise supplier relationships. Other notable online legal services providers and marketplaces include LawRato,²² LegalRaasta,²³ ProVakil,²⁴ and VakilSearch,²⁵ to name a few.

India’s legaltech landscape is growing organically with most startups being supported by passionate entrepreneurs, with only a handful funded by VCs. Some legaltech companies that have been funded in India include:²⁶

---

²² Supra n 7.
²⁵ Supra n 8.
²⁶ “Which are some of the most promising legaltech startups in India?” Quora <https://www.quora.com/Which-are-some-of-the-most-promising-legal-tech-startups-in-India> (1 July 2019).
<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
<th>Year founded</th>
<th>Company HQ</th>
<th>Total funding raised by company till date (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HiGrit²⁷</td>
<td>Legal consultation platform</td>
<td>2016</td>
<td>Delhi</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>LawRato²⁸</td>
<td>Online open marketplace for lawyers</td>
<td>2012</td>
<td>Delhi</td>
<td>$410,000</td>
</tr>
<tr>
<td>LegalDesk²⁹</td>
<td>Online legal document drafting service</td>
<td>2014</td>
<td>Bangalore</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>LegalRaasta³⁰</td>
<td>Online legal services provider</td>
<td>2015</td>
<td>Delhi</td>
<td>$6 million</td>
</tr>
<tr>
<td>Legistify³¹</td>
<td>Online platform to create legal documents</td>
<td>2014</td>
<td>Delhi</td>
<td>$48,700</td>
</tr>
<tr>
<td>MyAdvo³²</td>
<td>Online marketplace to book lawyers</td>
<td>2015</td>
<td>Delhi</td>
<td>$471,000</td>
</tr>
<tr>
<td>SirionLabs³³</td>
<td>Enterprise supplier relationship and contract management platform</td>
<td>2012</td>
<td>Gurgaon</td>
<td>$17 million</td>
</tr>
<tr>
<td>Spotdraft³⁴</td>
<td>Cloud-based AI-enabled contract creator and invoice sending platform</td>
<td>2017</td>
<td>Gurgaon</td>
<td>$1 million</td>
</tr>
<tr>
<td>Surukam Analytics³⁵</td>
<td>NLP and machine learning solution tool</td>
<td>2014</td>
<td>Chennai</td>
<td>Undisclosed</td>
</tr>
<tr>
<td>VakilSearch³⁶</td>
<td>Online platform to search and book for</td>
<td>2010</td>
<td>Chennai</td>
<td>Undisclosed</td>
</tr>
</tbody>
</table>

²⁸ Supra n 7.
³⁰ Supra n 21.
³³ Supra n 19.
³⁴ Supra n 14.
³⁶ Supra n 8.
Organisations such as Legal Hackers have a specific emphasis on data access and transparency as a pre-requisite for legal innovation. New data-driven applications are focused on case management, practice management, fraud prevention, prison reform, and improvements in court processes and decision making.

Despite anonymisation, client confidentiality of training data sets is a challenge and could lead to potential conflict and confidentiality issues. Many clients who are accustomed to Legal Operations and the use of AI and ML are more open to using software for more refined results. With respect to privacy, there is a need to achieve a balance where technology and human interaction would complement and co-exist.

The emergence of legal aggregators has opened up issues as to whether these start-ups are encroaching upon the grey area of offering legal services and hence contravening the Bar Council Act that governs the conduct of lawyers and legal services in the country.38

Over the years, both law firms and the judiciary have also been experimenting with the use of technology to bring in more efficiency into the system.

### III. Innovation by law firms

The traditional legal services industry is at the cusp of being eclipsed by technology in the coming decades. Law firms are realising the importance of technology, especially with the growing need for automation in commoditised work products. The size of the Indian legal services market is pegged at around US$1.3 billion.39

---

Many top law firms in India are examining the use of legaltech:

(a) Elite\(^{40}\) and iManage\(^{41}\) have been in use for several years at some top firms as well as billing and Enterprise Resource Planning software. However, the use of legaltech is still limited with smaller law firms.

(b) The use of document generators (for commercial document playbooks) and next level AI-led research and due diligence.

(c) E-discovery is not developed in India. E-data rooms and vendor due diligence are currently under development.

(d) The ability and willingness of clients to pay for this and actual time savings for lawyers (using tech) is still untested.

(e) The accuracy of results is around 80% per company, hence senior legal supervision is required to ensure correct outputs are received.

\(^{41}\) iManage <https://imanage.com/> (accessed 15 July 2019).
In 2017, one of India’s largest law firms, Cyril Amarchand Mangaldas (“CAM”) was one of the first movers into the legaltech space in India with its use of Kira Systems, an AI legaltech platform. They have also recently started Prarambh, an incubator for legaltech startups. This is expected to be a 6-month program, with no equity stake. The selection process is ideagnostic, but the startup needs to have a working product, with potential use at CAM and potential client referrals. Many other law firms are also working on integrating technology with their own legal services.

Indian law firms are developing new practice areas such as forensic, AI, blockchain, and defence advisory. Jaipur-based law firm Capstone Legal tied up with Washington-based tech-firm Knovos to develop an electronic discovery (“e-discovery”) practice in India. E-discovery refers to discovery in legal proceedings such as litigation and government investigations, where the information sought is in electronic format.

IV. Innovation by the Judiciary

Having seen startups emerge in providing last mile legal services delivery for the citizens of India, the governments and the judiciary are not far behind. As part of the Indian Government’s initiative to offer services to the public, the National Informatics Centre (“NIC”) has come out with eCourts Services, which is an application available on Google Play and iOS App Store. This application provides information related to cases filed in subordinate courts and most of the high courts in India.

The eCourts Project was conceptualised on the basis of a report submitted by the eCommittee (Supreme Court of India), with a vision to transform the Indian Judiciary through ICT enablement of Courts. The eCommittee is a body constituted by the Government of India in pursuance of a proposal received from the Honourable Chief Justice of India to constitute an e-Committee to assist him in formulating a national policy on the computerisation of the Indian Judiciary and advise on technological communication and management related changes. The eCourts Mission Mode Project is a Pan-India Project monitored and funded by Department of Justice, the Ministry of Law and Justice, and the Government of India for District Courts across the country.

46 eCourts Services High Courts of India District and Taluka Courts of India <https://ecourts.gov.in/ecourts_home/> (accessed 1 July 2019).
The Delhi High Court has paved the way for High Courts around the country by offering e-filing services for all litigants and lawyers. In 2013, there were only 609 filings that came through this initiative. However, for the year 2016-2017, the Delhi High Court received close to 21,790 e-filings; representing a shift in the adoption of technology by the users of this service.49 Similar projects have taken place at the other High Courts such as the Madras High Court, in order to embrace the e-courts vision and modernise the judiciary.50

Technology is making inroads by improving access to justice. This is essentially being done by promoting the concept of Digital Justice and making justice effortless and accessible. The United Nations Sustainable Development Goal 16 advocates for the need to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels.51 Many startups in India are contributing to enabling access to justice amongst citizens of India.

V. Innovation in dispute resolution

Organisations such as Daksh52 are trying to improve the issue of many pending cases. Vidhi53 is educating legislators on building well drafted legislative policies. Access to Justice is a focal aspect upon which online dispute resolution (“ODR”) platforms have begun to emerge within India as well as among Indian companies catering to the overseas markets. Indian startups like Presolv36054 are offering bespoke ODR platforms. Presolv360 is a startup that is looking to address the issue of access to justice through its ODR platform. Citizen participation in democratisation of law and justice is increasing with such initiatives.

The E-ADR Challenge55 is developing an online platform to provide for low cost dispute resolution, especially in light of the high case pendency and backlog. The E-ADR Challenge has the following aims:

(a) Through arbitration and other mechanisms, to solve the issue of court pendency, cost of litigation and timely case resolution;

(b) To find commercial use in banks and other corporates, especially for high-volume low-cost matters like cheque bouncing, etc; and

(c) To build standardised technical criteria for security, scalability, etc.

To this end, the ICICI Bank has offered to use the platform and fund the court-fees for specific number of cases that would be solved using this E-ADR mechanism.

53 Vidhi Centre for Legal Policy <https://vidhilegalpolicy.in/> (accessed 1 July 2019).
Furthermore, the Agami prize announced for legaltech aims to build and celebrate the ecosystem for reshaping legal industry and systems of law and justice in India. This prize was launched in association with Omidyar Network and Ashoka. Some key highlights of their report include:56

(a) Of eligible applicants, 114 are in the citizenship category and 52 in industry;

(b) Only 48% of the participants are using technology to solve legal issues;

(c) Around 45% of legaltech focused startups are self-funded / bootstrapped, with only 1% getting institutional funding; and

(d) 79% list funding as a major challenge for them, followed by visibility and mentors in the legal sector.

VI. Conclusion and future developments

The Indian legaltech industry is conservatively worth about US$1.2 billion but this pales in comparison with the US and Europe. Nevertheless, the industry is witnessing a surge of startups to improve efficiency within the system. The legal regulator has shifted its stance on technology as an enabler and not disruptor.

India is finding its ground between managing the aspirations of an emergent legal tech ecosystem and the laws that govern this domain. The Government (along with the Judiciary) should look at systems around the world such as Singapore, the United Kingdom, and Israel to examine the best practices that can be adopted.

There has been a greater emphasis on legaltech in India. Whilst India is competing with mature legaltech economies such as the United States and Israel, there is a need for stronger infrastructure and funding for startups to compete in the long run. With efficient use of technology coupled with increased awareness, India is emerging as a preferred legal tech hub.

05  |  japan
I. Introduction

Japan is unarguably one of the world’s technological powerhouses, with its cutting-edge technologies in manufacturing, automotive, robotics, and telecommunications. Yet, with respect to legal innovation, Japan is not among the global leaders. The conservative Japanese legal system, Japan’s approach to developing lawyers, the dearth of technologists trained in or interested in legal innovation are some of the root causes for the current situation.

Still, there is some positive movement in Japan with respect to legal innovation. As we describe in this chapter, several leading companies and legal associations are determined to be pioneers in the legal innovation space.

Furthermore, unlike some other countries in APAC, the Japanese legal innovation scene is still quite siloed. A serious amount of work is underway, but the work is not occurring in a coordinated fashion in our opinion. If the various siloed efforts were to collaborate, we believe that could have a great impact in accelerating legal innovation in Japan.

In this chapter, we provide an overview of how collaboration might take place.

Overall, Japan is making inroads into addressing legal innovation for the practice of law and access to legal services. However, we believe that a more multidisciplinary approach is required in addressing how to lawyer more effectively and efficiently in the 21st century. Japan needs various stakeholders at the table, including:

(a) The various Japanese bar associations;
(b) The various legal associations in Japan;
(c) The Japanese Ministry of Justice;

---

1 Alexius Miller is the Founder and Principal at Alexius Miller Law. Alexius is an international lawyer with more than 15 years of litigation experience and 10 years of experience in legal education. Alexius currently lives in Japan and has served Japanese and U.S. legal needs during her time in Japan.
2 Clare Weaver is the Founder and Principal Consultant at Putney Consulting, providing legal and business consulting services to Japanese corporates and technology companies. Clare spent over 17 years working with Japanese clients, with more than 6 years spent in Tokyo, and is currently supporting a Legaltech startup in London to tailor products for Japanese clients.
3 Maurice Rabb is the Founder and Managing Editor of LegalTechJapan.com and he runs the Tokyo Chapter of Legal Hackers. Maurice is an international business lawyer and human resources professional. He has more than 15 years of experience living and working in Japan [mrabb@legaltechjapan.com].
5 We based our observations described in this report on publicly available information and non-public information to which we have access. Japan is notorious for conducting internal studies which are not publicly available. To the extent, we neglected to include such non-public information, we welcome corrections and additional information.
Practicing lawyers and legal professionals;

Legal educators;

Law students; and

Legal tech vendors.

We urge these stakeholders to look for opportunities to collaborate with other professionals, such as:

Technologists;

Regional and global legal associations;

Fintech leaders; and

Other related emerging technologies experts.

As of the writing of this report, we are not aware of any such collaborative approach underway. We hope that this report can serve as one source of inspiration for a movement into a multidisciplinary approach to addressing legal innovation in Japan.

A. Legal system in brief

Japan uses a hybrid civil law and common law system. Notably, traditional Japanese values influence the application of the more recently adopted common law. The National Diet is the sole law-making organ of the State. Judicial power is vested in the Supreme Court and lower courts. There are five types of ordinary courts in Japan, namely the Summary Courts, Family Courts, District Courts, High Courts, and The Supreme Court. Japan utilizes a three-tiered judicial system, with a summary, family, or district court typically the court of first instance depending on the nature of the matter.

\[\text{7} \text{ Ibid.}\]
\[\text{9} \text{ Ibid.}\]
The independence of the judiciary is guaranteed by the Constitution. Most judges are virtually life-time employees of the judiciary. Case law precedent offers non-binding guidance that may, in some cases, be persuasive, and may be relied upon if not in conflict with code.

B. An evolving legal education system

The state of legal education in Japan has undergone significant reform for the last two decades to address a shortage of lawyers. Historically, Japan relied on a combined undergraduate education and apprenticeship program to educate its future lawyers. However, few students passed the required bar exam and advanced into the apprenticeship training at the national Legal Training and Research Institute. As part of a push to produce more lawyers and improve the quality of legal education, the government established a new American-style graduate level training system in 2004 while also maintaining its undergraduate law programs.

Presently, students who pass an entrance examination may, based on previous undergraduate studies, accelerate their law school studies within two years. However, most students opt for a degree over three years to allow more time to study for the National Bar Examination.

The law school curriculum is controlled by the government. Notably, legal technology is absent from the curriculum and we are not aware of any law schools creating a research center focused on the future of law or legal technology generally. However, some schools have taken the initiative to introduce technology into the curriculum. For example, Kyushu University regularly hosts law and innovation events with a combination of domestic and international participants. Outside of the law school curriculum, educational resources include “Coding for Lawyers” workshops that meet periodically and legal technology study groups.

As the legal education system continues to evolve and law schools remain under increasing pressure to train students who can pass the National Bar Examination and contribute to the legal community, room may exist to revise the curriculum. To be truly effective in this arena, law schools could consider introducing courses such as legal analytics, legal technology and innovation, and legal project management, with a focus on teaching a technology-based issue-spotting skillset. That is, students should learn how to identify when a legal service is being delivered inefficiently, and understand the tools and methods that can improve quality and reduce price, as opposed to merely learning the latest technology.

12 Ibid.
14 Id, at 7.
15 Id, at 10.
16 Id, at 14.
17 Id, at 13.
II. Japan’s legal market

Japan is the world’s third largest economy\(^{19}\) and has a population of 126 million. Yet, even after the transformation of the legal education system, legal services in Japan remain an industry with a small number of stakeholders in comparison to other countries.\(^{20}\)

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Japan</th>
<th>United States</th>
<th>United Kingdom</th>
<th>Germany</th>
<th>France</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attorneys</td>
<td>40,066</td>
<td>1,255,146</td>
<td>147,603</td>
<td>165,538</td>
<td>65,592</td>
</tr>
<tr>
<td>Judges</td>
<td>2,782</td>
<td>32,533</td>
<td>3,074</td>
<td>20,739</td>
<td>5,736</td>
</tr>
<tr>
<td>Prosecutors</td>
<td>1,957</td>
<td>33,039</td>
<td>2,284</td>
<td>5,503</td>
<td>1,955</td>
</tr>
</tbody>
</table>

The ratio of legal professionals to the population in Japan similarly pales in comparison to the ratios in the United States, United Kingdom, Germany, and France, with Japan having 2,800 people per legal professional as compared to below 1,000 people per legal professional in the other four countries.\(^{21}\)

The same can be said for the ratio of lawyers to the population, with Japan having fewer than 3,200 people per lawyer as compared to well below 1,100 people per lawyer in the United States, United Kingdom, Germany, and France.\(^{22}\)

Also, the number of Japanese law firms is relatively small, at a total of 16,720.\(^{23}\) Law firms account for about US$5 billion or 0.1 per cent of Japanese GDP, according to estimates from the Ministry of Economy, Trade and Industry. Firms are largely centralized in Tokyo and Osaka and consist of ten or fewer lawyers.\(^{24}\)

---


\(^{21}\) Ibid.


\(^{23}\) Id., at p 62.

\(^{24}\) Id., at p 61.
In addition to Japanese law firms, a system of Legal Professional Corporations (“LPCs”) and Foreign Law Joint Enterprises serve the Japanese population. Under the LPC system, attorneys may form corporations for the purpose of engaging in legal practice. This system aims to enable attorneys to provide highly specialized legal services in a stable manner, and to continue providing services for clients as a law corporation. As of 2018, 1,134 LPCs have been established. The Foreign Law Joint Enterprise allows foreign lawyers and an LPC or Japanese attorney to form a contract for the purpose of providing legal services. As of 2018, 23 Foreign Law Enterprises have been established.

Outside of firms, attorneys also work in companies, ministries, local governments, and other bodies, though these positions constitute a small percentage of attorney positions. In 2018, 2,161 attorneys had in-house roles while 207 attorneys held roles as public officers.

Japan’s legal system also heavily relies on non-attorney professionals. At a total of 246,077, these professionals far outnumber attorneys in Japan. Non-attorney professionals include, for instance, judicial scriveners, certified public tax accountants, patent attorneys, certified public accountants, and administrative scriveners.
III. Japan’s technology initiatives

A. Japan’s government setting the stage for innovation

In 2013, after several decades of economic stagnation, Prime Minister Shinzo Abe unveiled a comprehensive policy package to revive the Japanese economy, now commonly referred to as “Abenomics.” The centerpieces of the package include three “policy arrows”: aggressive monetary policy; flexible fiscal policy; and growth strategy. Abenomics aims to boost productivity to combat the effects of an aging population through a “Productivity Revolution.” The Revolution will introduce open data to promote innovative products, create a regulatory sandbox and an ecosystem for startups, and promote industry-academia collaboration.

In 2016, the government established the Strategic Council for AI Technology to create research and development goals and a “roadmap for the industrialization” of artificial intelligence. The 11-member Council consisted of academic, industry, and government representatives. The Council released a plan in March, 2017, entitled “Artificial Intelligence Technology Strategy,” making Japan only the second country after Canada to have a national AI strategy. As part of the plan, an Industrialization Roadmap envisions AI as a service. The Roadmap organizes the development of AI into three phases:

Phase 1: 2020 completion
- Utilization & application of data driven AI developed in various domains

Phase 2: 2025-2030 completion
- Public use of AI & data developed across various domains

Phase 3: Creation of ecosystems built by connecting multiplying domains

In October 2017, the Government established a committee to consider, among other areas, online and one-stop administrative services for the incorporation of companies and the evolution of technology in court proceedings. Such anticipated technology includes web conferences for court cases starting around fiscal year 2022, thereby increasing the efficiency and speed of proceedings, and expanding access so that such technology can contribute to the

---

33 Id. at p 1.
34 Id. at pp 3-5.
35 Id. at p 5.
37 Ibid.
38 Id. at p 4.
39 Ibid.
national interest. The Japanese Federation of Bar Associations (“JFBA”), the legal industry regulatory entity, recommends that “careful attention should be given to a trial of those who are not familiar with computers such as the elderly; the (robustness of) security; and the harmony with principles such as the importance of oral statements, direct appearances, and others.”

In June 2018, the Government introduced a framework under the Act on Special Measures for Productivity Improvement to encourage innovation across all industrial sectors through a project-based “Regulatory Sandbox.” The Act is intended to create an environment wherein businesses can conduct proof of concept and pilot testing for new technologies and business models that are not covered by existing regulations. Unlike previous regulatory approaches, the Act uses a “try first” approach to collect the necessary data for deregulating, with subsequent policy formation based on a dialogue with the market. The type of technology or industry that can access the “Regulatory Sandbox” is unrestricted; however, four areas are highlighted as falling within the intent of the Act: Internet of Things (“IoT”); Artificial Intelligence; big data; and blockchain.

Also, in June 2018, the Japanese government announced that artificial intelligence would become an official part of its “integrated innovation strategy, intended to dramatically increase the number of young researchers in the AI field.” Another element of the strategy is to unify data formats and standards throughout various industries to enhance the ability to utilize big data techniques in Japan.

B. Japan’s Bar Association moving into the 21st century

The JFBA Committee on Legal Practice Issues has also entered the technology revolution by creating the “IT Review Project Team,” which studies “IT tools to support the work of attorneys and disseminates findings to members, examines the issue of electronic trials, and considers legal issues concerning the computerization of contracts and forms”. It also holds symposiums on Legal Practice Reform, which have covered topics such as how attorneys can provide better legal services with IT (in 2003 and 2011); the e-court revolution (in 2015); and custody and bankruptcy in e-trial, and electronic contracts (in 2017).

However, regulation of the practice of law must keep up with evolving technology. The regulatory regime governing lawyers mainly comprises the Attorney Act (1949) (“the Act”),

---

43 Id., at p 18.
47 Ibid.
48 Bengoshi Hou, Law No. 205 of 1949 (Japan).
the Articles of Association of the JFBA,\textsuperscript{49} and the Basic Rules on the Duties of Practicing Attorneys.\textsuperscript{50} Attorneys must belong to one of the local bar associations and at the same time to the JFBA, which is composed of local bar associations and all individual attorneys. Article 72 of the Act prohibits unqualified persons from providing legal services or acting as an intermediary. Unauthorized practice of law is a criminal activity. While restrictions on partnership between Japanese law firms and foreign attorneys or law firms have loosened in recent years, regulatory barriers remain for attorney and non-attorney partnership. Such limits impede the introduction and successful adoption of new technology. To effectively develop and bring new technology to market, regulation should encourage cooperative relationships, even if financial in nature, between practitioners and non-practitioners, such as programmers, technologists, and AI researchers. Such relationships will be pivotal to creating technology to enhance the practice of law and access to justice.

IV. Technological trends in Japan

A. Artificial intelligence

Compared to the thousands of AI companies that have emerged in, for example, the United States, Japan has a small but growing AI company population. Approximately 200 to 300 commercial AI companies have developed, covering IoT, natural language processing (“NLP”), Fintech, Robotics, and Data Analytics – many of which are funded by both Western and Japanese mega-corporations, such as Google, Intel, Toyota, Hitachi, Fujitsu etc. The ten most-funded AI companies in Japan can be seen below.\textsuperscript{51}

Nascent legaltech companies using AI for contract creation, review, and analysis have become more commercialized in the past few years. Market leaders AI-Con, Contract Express, and Legalforce are now actively seeking large corporate customers in Japan alongside international legaltech companies such as Legal Geex, Lexical Labs, and Thomson Reuters.

B. Blockchain

Japan was one of the early-adopters of blockchain technology due to the rise of Mt. Gox, the world’s largest Bitcoin exchange. By 2014, around 70% of all Bitcoin transactions were handled by Mt. Gox in Japan, before it went bust the same year.\textsuperscript{52} The collapse of Mt. Gox led the Japanese government to put in place a regulatory framework intended to allow Bitcoin and other cryptocurrencies to develop safely and securely. Japan is taking ambitious steps to remain as world leader in what is a relatively young field, but there is a lack of Japanese local ventures. Instead, Japanese companies look to international partners for collaboration in blockchain-related fields such as finance, food traceability, education, or cryptocurrency mining.

\textsuperscript{49} Nippon Bengoshi Rengoukai Kaisoku [Articles of Association of Japan Federation of Bar Association Rules] (Japan).
\textsuperscript{50} Bengoshi Shokumu Kihon Kitei [Basic Rules on the Duties of Practicing Attorneys] (Japan).
Japanese megabanks have led the way in collaborating with international FinTech companies, one example being MUFG Bank, which created a dedicated Digital Innovation Division in May 2015, and the MUFG Digital Accelerator Programme in 2016. Other projects demonstrating collaboration by Japanese firms leveraging capabilities via partnerships with foreign blockchain startups include Fujitsu’s collaboration with IOTA (Germany), Softbank with TBCASoft (USA), and TEPCO with Grid+ (Germany). In the cryptocurrency space, new players from other sectors have launched their own currency exchanges, such as Yahoo Japan, Line, Mercari, and Rakuten.

Whilst Japan’s current regulatory framework is intended to facilitate blockchain innovation, the legaltech blockchain startup culture in Japan remains nascent. Compared to Europe or even the United States, there is a much lower proportion of blockchain developers and a lack of diversity of startups in Japan, especially in the development of blockchain technology for legal services.

C. Cloud computing

The US export agency, Export.Gov, named Japan as ranking first in its analysis of cloud-based computing services in the world in 2017, and the Asia Cloud Computing Association selected Japan as the top cloud market for the third consecutive year in its Cloud Readiness Index. Government regulations are just one of the means by which authorities have stimulated cloud services growth. The Japanese government has strengthened the regulatory infrastructure for cloud computing services in Japan through its “Digital Japan Creation Project” which it established in 2009. Under this project, the “Kasumigaseki Cloud” supports all government ICT systems and has been a key factor in the growth of the cloud computing market in Japan.

According to a review by Mori, Hamada & Matsumoto law firm in March 2019, the cloud computing market in Japan is currently valued at about ¥700 billion (US$6.56 billion) and is expected to increase up to about ¥1,200 billion (US$11.25 billion) by 2023. The majority of Japanese companies, especially financial services, megabanks, and insurance companies, now use cloud services for both internal and external communications, document management and storage facilities, and for inter-office information-sharing, with an increasing use by small- and medium-sized businesses.

International providers include Amazon.com (AWS), Microsoft, Google, and IBM; and local cloud computing providers include NTT Communications Corporation, NTT DATA Corporation, KDDI Corporation, Softbank Group Corporation, Fujitsu Limited, NEC Corporation, and Internet Initiative Japan Inc., providing both public and private cloud computing services to domestic and international clients in Japan.

55 Ibid.
D. Big data and legal analytics

Large corporations such as NTT Data, KDDI Corporation, Hitachi, Gartner, and IBM (Watson) sit alongside smaller offerings such as Cognitee and Z-Works in a growing data analytics market in Japan. Factors such as the growth in social media, giving huge amounts of customer data allowing companies to design effective customer strategies; and growth in the amount of transitional information have led to a strong big data market in Japan57.

However, as with other international markets, the issue of privacy remains a constraint on the growth of data analytics in Japan. The 2003 Act on the Protection of Personal Information effectively embodies the eight basic principles of the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data, aligning Japan with other international data privacy regimes, and a 2015 Amendment to this Act addressed global transfers of data and harmonized the Japanese regime with other international legislation, for example, the EU General Data Protection Regulation (“GDPR”).58

In the field of legal analytics, one company, Legalforce, claims to be the first tech company in Japan to have developed an AI-driven system that reviews Japanese language legal contracts, analyses the data contained in them, and provides that analysis for lawyers or in-house legal departments.59 Legalforce’s development shows a start in the movement towards the Western use of contract data as a business tool, which until now has been lacking in Japan, possibly due to the AI/NLP limitations of the Japanese language documents and a lack of tech-trained lawyers in Japan.

E. Online dispute resolution

Current Japanese legislation is not conducive to an online dispute resolution system. The Japanese government is currently looking into what changes it will need to make to the current dispute framework, with the ultimate aim of launching an online dispute resolution framework.60 It remains to be seen what the Japanese government will ultimately decide; however, for now, there is some movement in this area.

F. Legal operations

Legal operations61 is not quite recognized as a role in Japan. Currently, with the exception of contract managers, few corporations have dedicated staff to specifically analyse and improve

---

61 Legal operations is the set of business activities, processes, and people that maximize an in-house legal team’s ability to protect and grow the company. It requires a wide-ranging combination of skills including strategic planning, financial
legal operations. However, legal operations as an area of focus is becoming a current major topic in Japan due to the efforts of various associations, including:

(a) The Association of Corporate Legal Departments (“Keiei Hoyu kai”). Founded in 1971, the Association is one major source for addressing issues important to legal departments, such as how to integrate legaltech into legal department workflow.

(b) The Japan In-House Lawyers Association (“JILA”). Founded in August 2001, JILA has study groups on a variety of topics, such as labour law, international arbitration, diversity, and overseas trends; however, there does not appear to be any study group dedicated to legal operations.

(c) The Japan In-Counsel Network (“JICN”). Founded in 2005, this relatively new association in Japan caters to in-house lawyers and legal professionals. Unlike the JILA, the JICN is not an incorporated entity and does not have as large of a membership and offerings as compared to JILA.

As attention to legal operations grows in Japan, we expect that the legal operations staff will seek out relevant legaltech to help with the improvement of legal operations efficiency and effectiveness.

V. Legaltech innovations in Japan

A. Overview of current legaltech platforms, products, and services

Similar to other countries in the region, legaltech companies in Japan have been increasing in number. In late 2018, CloudSign, a prominent Japan based e-signature company, published an overview of legaltech companies at that time. In its publication, Cloudsign identified eight categories of legaltech in Japan: Legal Consultation Tech; Registration Tech; Contract Creation Tech; Contract Work Process Tech; Contract Management Tech; Intellectual Property Tech; Evidence/Fraud Investigation Tech; and Dispute Resolution Tech. Each of these categories is explained below:

(a) **Legal Consultation Tech**: Technology in this area is limited to providing Q&A and lawyer matching services because Japanese law forbids non-lawyers to provide legal and mediation services.

(b) **Registration Tech**: Services via technology that provide support for establishing a company or related application procedures. Technology in this area is increasingly

---

64 Ibid.
attracting attention due to a campaign for public administration productivity led by the Japanese Cabinet Secretariat.

(c) **Contract Creation Tech**: An area that is expected to gain the most due to recent advancements in AI technology. Services can be roughly divided to those providing one-size-fits-all type of contracts and those providing automatic review of contracts for negotiation.

(d) **Contract Work Process Tech**: Technology that digitalizes contract review requests for legal departments, tracks changes to documents during the course of negotiations, and automates approval processes. There is a strong demand for technologies in this area due to the importance of managing appropriately legal documentation.

(e) **Contract Management Tech**: This area includes e-signatures, which replaces the need for personal seals, and the electronic filing, storing, and managing of files to improve work productivity. A high-demand area due to the increase in working style innovation and remote work.

(f) **Intellectual Property Tech**: Technology that assists with processing a substantial number of technical documents to expedite patent and trademarks applications.

(g) **Evidence/Fraud Investigation Tech**: Technology that conducts identification and information analysis, including fraud investigations, to locate relevant evidence from a significant amount of data.

(h) **Dispute Resolution Tech**: Technology that assists with estimating the cost for a dispute resolution, providing methods for finding an attorney to assist with a dispute, and providing support for evidence preparation. Similar to the legal consultation area, this area is also heavily regulated.

Since the CloudSign report, we have identified additional companies in the following areas: 2 legaltech startups not listed in the Contract Management Tech category; 1 new legaltech startup focusing on M&A due diligence; and 1 early stage legaltech company in the Legal Consultation Tech category.

Furthermore, categories that are traditionally covered in the legaltech space were not listed in the CloudSign report. For example, the following categories created by Stanford University’s CodeX, 65 were not covered in the CloudSign report: Practice Management software, eDiscovery-related software, Legal research, Compliance, and Legal Education.

While we have identified a few Japan-based companies that cover these categories, more research is needed to determine the exact numbers for each category.

---

B. Funding of legaltech

Unlike the Japanese FinTech market, which has received substantial funding in the past few years, Japanese legaltech companies are still in the early stages as it relates to funding. A handful of legaltech startups in the cloud contract and document review categories have received early stage funding in 2018 and 2019. For example, the abovementioned Legalforce, one of the Japanese legaltech rising stars, closed a round of funding for about US$5 million in late 2018.66 A few other companies have received similar funding, but the amounts are still relatively modest.

C. Slow adoption of legaltech by legal departments and lawyers

A UK-based legaltech consultancy, Putney Consulting, undertook a preliminary study of the Japanese legal market and the adoption of legaltech in Japan in 2018,67 interviewing both external lawyers and in-house legal counsel to understand the level of interest in and adoption of legaltech. The study was revisited in early 2019 and showed a marked upturn in the level of general interest in using technology in day-to-day legal operations.

Whereas the UK and US legal markets are generally seen as being early adopters of legaltech, with the wider legal community in those markets now being “early majority” users of legaltech, the 2018 study revealed that the legal market in Japan was not yet at the “late majority” stage of adoption of legaltech.68 Japan has a way to go to catch up to the level of adoption in Western markets.

As summarized by the original study and its revisit in 2019:

(a) There is a low level of innovativeness in the Japanese legal market, caused partially by a lack of knowledge and awareness of innovative products, and certain particular characteristics of the Japanese market, lawyers, and products which affect innovative change;

(b) A change to the knowledge, skills, and mind-set of Japanese lawyers is needed to support innovation, coupled with increased information-sharing by external counsel and overseas peers; and

(c) Products and applications that are specific or tailored to the Japanese market may be more acceptable than products developed for Western markets, coupled with the notion that incremental (not breakthrough) innovation may be more suitable in Japan.

67 Putney Consulting, “Exploring the Innovativeness of Japanese In-house Legal Departments and the Factors Affecting the Adoption and Diffusion of Legal Innovation in Japan” (February 2018).
68 These terms are with reference to E.M. Rogers’ Diffusion of Innovation Theory, which provides five established adopter categories in explaining how a new idea spreads and is adopted by members of a social system. These categories are: innovators, early adopters, early majority, late majority, and laggards.
VI. Recommendations for the future of legaltech in Japan

The 2018 report on the Japanese legaltech market by Putney Consulting⁶⁹ essentially found that General Counsel and Heads of Legal Departments in Japan face the same demands from business for better lawyering as their Western counterparts, to achieve ‘more with less’ and to increase efficiencies in the provision of legal services. Competition from international law firms, who have brought legal innovation and legaltech products to the Japanese market, has inevitably helped the growth of interest in innovative changes to legal services in Japan, albeit at a slower, or lagging, rate to date. The growth of legal AI products by companies such as Contract Express and Legalforce show that whilst both the technology and adoption rates in Japan are nascent, the interest is increasing and the development of legal technologists will continue to rise.

As development in this area continues, we can highlight three key actions that need to occur in Japan for the adoption of legaltech to take off, bearing in mind some of the key peculiarities of the Japanese legal services market, as well as the wider business environment in Japan, compared to that in Europe and the West. We therefore recommend:

(a) Increasing the flow of information about developments of legal innovation in other markets into and within the Japanese market.

(b) Taking an adopt and adapt” approach to “re-inventing” existing innovations and technologies for specific use in the Japanese market.

(c) Empowering an “opinion leader” for innovation in the market, to promote leadership of innovative change and open the market for other players.

⁶⁹ Supra n 67.
republic of korea
I. Country overview

A. Legal system in brief

(1) General introduction

The Republic of Korea (“Korea”) is a civil law-based country. Written laws and regulations are the primary sources of law in Korea. The Korean legislative framework consists of the Constitution, Acts, and subordinate statutes such as orders and rules of local governments, etc. The Constitution, which is the prime law in the Korean legal system, stipulates the basic rights of citizens as well as the power and balance among the legislative, executive and judicial branches. The Korean Constitution was first enacted in 1948 and has been revised nine times since then. Revised in 1988 as a result of a pro-democracy movement against dictatorship, the current Constitution regulates a five-year single-term presidency. As there has been a call for a revision of the Constitution to reflect the changes in society, a revision bill of the Constitution was submitted by the incumbent President Moon Jae-in, which did not pass the quorum in the Congress in 2017.

As the legislative branch, the Congress may pass Acts or amendments to Acts to realise constitutional rights, with these subsequently becoming effective upon proclamation by the President. The President, Prime Minister and Ministries may issue the Orders as administrative legislations to stipulate specific details to execute and implement the Acts properly to the extent delegated by the Acts.

Furthermore, a constitutional adjudication system has been adopted in Korea since 1988. Under this system, the Constitutional Court is empowered by the Constitution to decide constitutional cases, including decisions on whether any Act or Order is in violation of the Constitution, whether a certain political party is in violation of the Constitution, disputes between constitutional organisations, and impeachment cases against the President, Prime Ministers, Ministries or Judges. In 2014, the Constitutional Court ordered the United Liberal Party to be dissolved due to the unconstitutionality of the party for the first time. In December

---

1 Narae Lee is a partner and General legal counsel of Block Crafters, Co. Ltd. She passed the Korean Bar Exam in 2008, received professional legal training at Judicial Research and Training Institute, and is licensed to practice law in Korea as an attorney. She has worked at Kiwoom Securities Co. Ltd (online broker-dealer), eBay Korea (e-commerce company), Kakao Page (platform operator for content) as Legal Counsel, and practiced law for eight years. She obtained her bachelor’s degree in law, Cum Laude from Yonsei University in 2009 and her master’s degree in corporate law in Feb 2018 with a thesis titled “Legal Characteristics of Virtual Currency- Focusing on the characteristics of the rights that the Virtual Currency right holder has”.

2 Haebin Lee is a researcher at Block Crafters, where she conducts analysis of blockchain innovation and the related regulatory environment. She is also a co-organizer of Legal Hackers’ Seoul chapter, a global organization to explore legal innovation. Haebin has previously worked with leading firms including the Boston Consulting Group, LG CNS, and Cheil Worldwide (a marketing agency of Samsung) as a researcher. Her recent research article on stablecoin and its economic implications has appeared in Altcoin Magazine. She holds a B.A in Business Administration from Yonsei University and is expecting an M.A. in International Business from Yonsei University.
2016, the Constitutional Court made a historical decision to impeach then-president Park Geun-hye for violation of the President’s obligations to preserve the rights of the citizens pursuant to the Constitution.

(2) Judicial system

The Korean judicial system is based on a three-instance trial system, which grants the right to anyone to receive judgments no less than three times for the same case in the District court, Appellate court, and Supreme court. There are special courts such as the patent court, family court, and administrative court to deal with specific types of cases. While the Korean legal system is based on codes, precedents decided by the Justices of the Supreme court are binding on later cases, and agreement of majority of the Justices – with two-thirds of the Justices in quorum - is needed to revise the precedents.

The jury system has been partially adopted in Korea in criminal cases from 2008, for when the defendants wish to receive jury trials. However, jury trials have been implemented in only a limited scope in Korea. According to the statistics, merely 0.04% out of all criminal cases have proceeded to jury trials, while 1.4% out of the total subject cases for jury trials prescribed in the Act have been tried in jury trials for the last six years from 2008.

(3) Education system for legal professionals

From 1964 to 2017, the education system for legal professionals in Korea had been based on a state national bar exam called “Sabup-gosi”. Regardless of whether he or she has a bachelors’ degree, anyone who has acquired 35 credits in legal courses and passed an English aptitude test should pass Sabup-gosi, which is structured in three steps, and anyone who passes Sabup-gosi should receive a two-year mandatory professional training at the Judicial Research and Training Institute (“JRTI”), which is a sub-organisation of Supreme court. After completing the two-year training at JRTI, he or she becomes a judge, public prosecutor or attorney-at-law.

However, as some argued for a change in legal education under the traditional system and the necessity of revamping legal education in a changing world, a law school system modeled after that of the USA and Japan was adopted in Korea in March 2009. Under this system, a person who has attained a bachelor’s degree may enter law school and receive a three-year training in law. After completing training, he or she should pass the bar exam, upon which he or she becomes a lawyer, public prosecutor or a law clerk at court.

By the time the last Sabup-gosi took place in 2017, Sabup-gosi and the law school system had co-existed in Korea, causing a sharp increase in the number of lawyers in Korea, which had been tightly controlled by the government before the adoption of the law school system. The number of newly-entered legal professionals, including attorneys, public prosecutors and

---

judges, during the period from 2012 to 2014 (7,818) occupies 65% of the total number of attorneys-at-law who were active as of 2011 (10,976).\(^5\)

Currently, there are 25 law schools authorised in Korea, and the total number of students who are accepted in the law schools are about 2,106 each year.\(^6\) As several problems in the law school system have been pointed out, such as fairness and objectivity of student recruitment procedures,\(^7\) as well as too much focus on the bar exams in the law school curriculum,\(^8\) controversial debates are going on to request changes to be made to legal education in the law schools.

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of attorneys</td>
<td>12,607</td>
<td>14,534</td>
<td>16,604</td>
<td>18,708</td>
<td>20,531</td>
<td>22,318</td>
<td>24,015</td>
<td>25,451</td>
</tr>
<tr>
<td>Newly-registered attorneys</td>
<td>847</td>
<td>2,057</td>
<td>2,074</td>
<td>2,148</td>
<td>1,888</td>
<td>1,839</td>
<td>1,778</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Introducing the law school system also affected the bar exam. The bar pass rate for law school graduates has increased to 87% in 2012, which was striking given that the rate was only under 2% in Sabup-gosi. With the criticism and concerns toward the sudden increase in the number of attorneys, the pass rate has declined from 87.2% in 2012 to 49.4% in 2018.

(4) **Legal market opening to foreign law firms**

The FTA (Free Trade Agreement) has provided a regulatory framework for Korean legal market liberalisation in three phases. Phase 1 permitted foreign law firms to establish branch offices in Korea (so-called “Foreign Legal Consultant Office”) and to advise their clients only on foreign law. In phase 2, the Foreign Legal Consultant Offices were permitted to make a partnership and a fee arrangement with Korean law firms for cases in which both Korean and foreign laws are applied. Lastly, in phase 3, foreign and Korean law firms were permitted to establish a joint venture that may hire Korean attorneys and handle either Korean or foreign legal matters. Starting from phase 1 in 2012, phase 3 has been applied to EU law firms from July 2016, and to US law firms from March 2017.

\(^5\) Korea Bar Association, “Work Manual for In-house Counsel” (February 2015) at p 16.
Statistics show, however, that despite the Korean legal market liberalisation, the rate of foreign law firms entering the Korean market is relatively low. There are 29 branch offices of Foreign Legal Consultant Offices in Korea, among which six are from the UK, one is from China, and 22 are from the United States, as of 30 November 2018. Except the initial year of 2012, there is no striking increase in the number of new Foreign Legal Consultant Offices. The statistics also demonstrate limited entry of foreign legal consultants, which refers to attorneys licensed to practice laws in foreign nations and whose status is approved by the Ministry of Justice to provide legal services in Korea. There are 164 of foreign legal consultants in total as of 30 November 2018 without a noticeable increase in its number during the last seven years.

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of newly registered Foreign Legal Consultants</td>
<td>34</td>
<td>30</td>
<td>18</td>
<td>12</td>
<td>35</td>
<td>21</td>
<td>14</td>
<td>164</td>
</tr>
<tr>
<td>The number of newly registered Foreign Legal Consultant Offices</td>
<td>13*</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>29</td>
</tr>
</tbody>
</table>

Note: *Korean office of Simpson Thacher & Bartlett LLP Foreign Legal Consultant Office (US) which had opened in 2012 is now closed as of 30 November 2018.

Even after phase 3 went fully into effect in 2017, there has been not been a single joint venture established by Korean and foreign law firms. It is often pointed out that the Foreign Legal Consultant Act obstructs legal market liberalisation by limiting partnership between foreign and Korean law firms, as opposed to its original purpose of promoting legal market liberalisation by setting rules.\(^\text{12}\) Pursuant to Article 35(16) of this Act, a foreign participant of a joint venture shall not hold more than 49% of shares of the joint venture law firm. As foreign law firms with limited portion of shares cannot exercise decisive power in the joint ventures and are subject to unlimited liability for any professional negligence, this restriction acts as a disincentive for foreign law firms to enter into the Korean legal market.

---


\(^{11}\) *Ibid.*

B. Key stakeholders in the legal industry

(1) Main types of legal services providers

Legal services are mainly provided by law firms in Korea. Just like attorneys, the total number of law firms operating in Korea has been increasing for the last eight years after the adoption of the law school system. Table 3 shows the number of law firms according to size. We define large law firms as firms with more than 100 attorneys, while medium firms have 25 to 100 attorneys, and small firms have less than 25 attorneys. The number of large and medium law firms has been consistent over the years. The number of large law firms has been ranging from seven to nine, while that of medium law firms ranges from two to four with a slight exception in 2011. On the other hand, the number of small law firms has increased significantly by 241% in 2018 since 2011.

Table 3 and Table 5 show more aspects of the law firm industry growth in Korea. While the number of large law firms has been steady, the number of attorneys hired by those firms doubled in the last eight years. However, Table 5 shows that the attorneys working at large law firms occupy ten to 12% without much fluctuation, suggesting that large law firms have hired new attorneys in proportion to the increasing number of attorneys. Table 5 also indicates that the massive influx of new attorneys in the market did not bring substantial changes to the legal service industry. The group of large law firms still stays large, while small firms remain small and has only become greater in number. According to the news, Korean legal market share is concentrated in a few large law firms. Kim and Chang, which is one of the biggest law firms in Korea, recorded over one trillion KRW total yearly revenue in 2017, which occupies 49.9% of the total yearly revenues of the major six law firms that exceeded 100 billion KRW yearly revenue respectively.14

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large law firms</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Medium law firms</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Small law firms</td>
<td>466</td>
<td>619</td>
<td>720</td>
<td>837</td>
<td>915</td>
<td>979</td>
<td>1037</td>
<td>1124</td>
</tr>
<tr>
<td>Total</td>
<td>481</td>
<td>630</td>
<td>731</td>
<td>848</td>
<td>926</td>
<td>990</td>
<td>1048</td>
<td>1135</td>
</tr>
</tbody>
</table>

Table 4 and Table 5 show more aspects of the law firm industry growth in Korea. While the number of large law firms has been steady, the number of attorneys hired by those firms doubled in the last eight years. However, Table 5 shows that the attorneys working at large law firms occupy ten to 12% without much fluctuation, suggesting that large law firms have hired new attorneys in proportion to the increasing number of attorneys. Table 5 also indicates that the massive influx of new attorneys in the market did not bring substantial changes to the legal service industry. The group of large law firms still stays large, while small firms remain small and has only become greater in number. According to the news, Korean legal market share is concentrated in a few large law firms. Kim and Chang, which is one of the biggest law firms in Korea, recorded over one trillion KRW total yearly revenue in 2017, which occupies 49.9% of the total yearly revenues of the major six law firms that exceeded 100 billion KRW yearly revenue respectively.14


Besides law firms, in-house attorneys are also providing legal services to corporations. Many companies are hiring in-house attorneys by internalising the legal services inside the firms. As the number of lawyers increase upon the adoption of the law school system, barriers to hiring attorneys as in-house counsel have been lowered. Moreover, after the IMF financial crisis in Korea, it has been emphasised that companies should manage their businesses in compliance with the laws and regulations, which resulted in an increasing number of in-house counsel.

---

<Table 4. The Number of Attorneys at Korean Law Firms>\(^\text{15}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of attorneys at Large law firms</td>
<td>1,457</td>
<td>1,773</td>
<td>2,066</td>
<td>2,394</td>
<td>2,539</td>
<td>2,660</td>
<td>2,839</td>
<td>2,719</td>
</tr>
<tr>
<td>The number of attorneys at Medium law firms</td>
<td>353</td>
<td>361</td>
<td>285</td>
<td>156</td>
<td>161</td>
<td>157</td>
<td>138</td>
<td>244</td>
</tr>
<tr>
<td>The number of attorneys at Small law firms</td>
<td>10,018</td>
<td>10,398</td>
<td>14,196</td>
<td>16,158</td>
<td>17,831</td>
<td>19,501</td>
<td>21,038</td>
<td>22,488</td>
</tr>
<tr>
<td>Total</td>
<td>12,607</td>
<td>14,534</td>
<td>16,604</td>
<td>18,708</td>
<td>20,531</td>
<td>22,318</td>
<td>24,015</td>
<td>25,451</td>
</tr>
</tbody>
</table>

<Table 5. The Percentage of Number of Attorneys at Korean Law Firms>\(^\text{16}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of attorneys at Large law firms</td>
<td>11.6%</td>
<td>12.2%</td>
<td>12.4%</td>
<td>12.8%</td>
<td>12.4%</td>
<td>11.9%</td>
<td>11.8%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Percentage of attorneys at Medium law firms</td>
<td>2.8%</td>
<td>2.5%</td>
<td>1.7%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>0.7%</td>
<td>0.6%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Percentage of attorneys at Small law firms</td>
<td>85.6%</td>
<td>85.3%</td>
<td>85.8%</td>
<td>86.4%</td>
<td>86.8%</td>
<td>87.4%</td>
<td>87.6%</td>
<td>88.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

---


\(^{16}\) Ibid.
There are 1,825 in-house counsel registered in Korea In-house Counsel Association as of 31 December 2017.

(2) Main regulatory body of legal industry

The Ministry of Justice is the main government organisation which regulates and supervises the legal industry in Korea. The Ministry of Justice supervises and monitors the legitimacy of attorneys’ practices and has the authority to review any cases imposing penalties on attorneys in violation of the Attorneys’ Act as an appellate body of the Korean Bar Association’s decision. Furthermore, the Ministry of Justice takes the lead in negotiating on the legal services sector in Free Trade Agreements, including with regards to legal market opening. Many public prosecutors work in the Ministry of Justice for a relatively short span of two to three years, and the Minister of the Ministry of Justice had usually been appointed from people with extensive experience in practicing law as public prosecutors. This was the case until the incumbent Minister, Sanggi Park, was inaugurated in July 2017. After Minister Park’s inauguration, several senior positions in the Ministry of Justice have been opened for non-public prosecutors in an effort to reform the organisation into having more non-public prosecutors.17

(3) Legaltech startups and the funds they have raised

In Korea, legaltech is at its early stages, exploring its possibilities in a limited scope due to regulatory limitations. Since there are no credible statistics on the number of legaltech startups or its market size, this paper will list only a handful of legaltech startups through media/online research. The list includes Intellicon, LawTalk, Help Me, Amicus Lex and DLN Company, the five most prominent and seemingly the only legaltech startups in Korea.

Intellicon, a tech startup established in 2013, aims to develop an Artificial Intelligence (“AI”) system focused on intuitive legal search, legal inference, and legal Q&A optimised for continental law. LawTalk provides an AI chatbot which helps clients identify legal issues through online conversation and finds similar cases with their problems. This service also provides a marketplace where clients efficiently search for attorneys. Help Me is a startup that features a legal writing automation service for corporate registration and inheritance. It also provides a platform which helps clients find suitable attorneys, which is similar to that of LawTalk. Amicus Lex is another startup that provides extensive legal contract writing automation services. DLN Company declared in December 2018 that it rolled out a beta version of its service called “Comake”, which is an online contract service based on blockchain technology, and is planning to launch a formal service in 1Q 2019.18

Recently, it was reported that Amicus Lex has hosted 15 billion KRW from the Korea Credit Guarantee Fund and will be additionally hosting up to 10 billion KRW from the government

and private funds pursuant to Tech Incubator Program for Startup (TIPS), a startup incubator and investment program hosted by the Small and Medium Business Administration of Korea.\(^\text{19}\) Besides this startup, funding status for the other legaltech startups are not disclosed to the public.

\(4\) \textit{Specific obstacles faced by industry players seeking to innovate}

First, we can point out lots of restrictions on the way to practicing law in the Attorneys’ Act. Pursuant to the Act, any person who is not licensed to practice as an attorney in Korea (“non-attorney”) is prohibited from practicing law, including advising or representing clients in lawsuits or arbitration in exchange of any economic profits, and a criminal penalty of up to seven years in prison shall be imposed on anyone in violation of this prohibition (Article 109(1) of Attorneys’ Act). Whenever a new way of providing legal services is introduced, it usually becomes an issue whether the new service is in violation of this article. Specifically, when it comes to a machine-learning based legal database which automatically finds legal issues for the users, the question of whether this service is in violation of this article would arise.

Moreover, attorneys-at-law are not allowed to be hired as an employee of any commercial corporations or entities without permission from the Korean Bar Association (“KBA”) according to the Attorney’s Act (Article 38). Originally, this article was designed to prevent any situation where attorneys are hired by brokers who illegally connect attorneys to clients. Due to the broad wording of this Article which makes various interpretations possible, many legal issues have been raised. For example, KBA’s sub-committee had opined in 2014 that working as in-house legal counsel in corporations could be interpreted as a violation of Article 38 of the Attorney’s Act. Having encountered strong opposition from Korea In-house Counsel Association, the sub-committee did not publicly declare its opinion.

In addition, attorneys are not allowed to operate their business in partnership with non-attorneys according to the Attorneys’ Act (Article 34). Due to this restriction, consulting firms which advise corporate entities on operations including strategies and HR matters cannot provide legal advisory services to the corporate entities in Korea.

Furthermore, the ways that the attorneys advertise themselves are strictly restricted according to the Act (Article 23(1)). Unless the attorneys receive approval from KBA on professional areas of legal expertise, they are not allowed to indicate their professional areas of legal expertise in the advertisements. There have been several cases where the KBA’s Ethics Committee imposed penalties on attorneys for violating regulations on advertisements.

\(^{19}\) Lee Seokwon, “탤스 선정된 ‘세상에는언니’” \textit{Venture Square} (27 December 2018) 
<https://www.venturesquare.net/772604>. 
II. Technological innovation

Legal technologies in Korea are found mainly in three domains: searching for a lawyer, legal writing automation, and legal research. First, legaltech startups such as LawTalk are noticeable in the lawyer-search segment. Based on AI chatbot technology, these firms provide clients with a list of attorneys and their work experience and clients’ reviews on the platform, and even recommend attorneys suited to the user’s case by analysing online chats. With the service, users can even make a reservation for a legal consultation with the attorneys online. Established in 2012, there are more than 1,200 attorneys registered on the platform, and more than 157,615 matches have taken place through the platform as of December 2018. In a legal service market which presents severe information asymmetry, clients have a hard time finding suitable attorneys due to the lack of information on the attorneys’ career backgrounds and fee estimates. New technologies are lowering the barriers for the public to access legal services.

Legal writing automation is another domain where legaltech startups have started to flourish. With a service such as Amicus Lex, clients can write legal documents online using the pre-designed format in just a few minutes, without getting help from a licensed professional. Amicus Lex explained that the time and costs for legal documentation can be reduced by 80% with its service. This service is now provided free-of-charge, unless the users request online document review services by the attorneys.

“LawnB” is one of the most popular legal research database platforms in Korea, which provides keyword-searching services and databases for relevant statutes, cases and recent legal news and updates. After being acquired by Thomson Reuters in 2012, LawnB has updated its platform several times to provide better services to the legal professionals. Recently, LawnB also launched a contract automation service called “Contract Express” which helps attorneys to draft documents with reduced legal risks in a short time.

AI technology is also frequently used in legal research. Legal research is known as one of the most time- and cost-consuming steps in the legal service. Statistics also show that attorneys spend 20% of their time on case research while law firms spend immense expenses on legal research. Intellicon has developed “i-LIS”, which is claimed to be the first Korean legal AI system. i-LIS is an advanced legal search engine, combining AI, big data, and cognitive visualisation technologies. In 2018, DR & AJU, one of the largest law firms in Korea, announced that it adopted U-Lex, a legal search engine based on the i-LIS system, which marks the first case where a major law firm officially adopted a legaltech solution developed by a startup. The interview with DR & AJU revealed that attorneys could easily find complicated special acts and orders through i-LIS in just a few seconds.

---

20 These statistics may be found on the homepage of LawTalk Korea’s official website at <https://www.lawtalk.co.kr/> (accessed December 2018).
25 Ibid.
The Korean government has tried to apply AI technology to public legal research service. The Ministry of Justice has launched “Bubbi”, an AI chatbot service for legal Q&A and legal research for the public in 2017, which was built based on a database of Supreme Court precedents, legal counseling cases, and applied examples. Users can access the service at any time and easily search for legal information focused on real estate leases, labor affairs and the law of inheritance through internet and Kakao Talk, the most widely-used messaging platform in Korea. Through this service, the public can easily research legal matters in an efficient manner.

### III. Regulatory innovation

Recently, with the assistance of Korean Bar Association, the rules on perusing and copying of judgments of criminal cases have been revised so as to allow anyone to be able to peruse and copy decisions on criminal cases from January 2019. Until now, judgments of civil and criminal cases were only partially disclosed due to privacy concerns, and attorneys had difficulties finding other cases for reference when preparing their cases through legal research. This change is a big step forward from the current situation, which may help the development of legaltech based on machine learning.

With regards to the stringent restrictions on attorneys pursuant to the Attorneys’ Act, substantial regulatory revisions have not been put in place yet. However, many agree on the necessity to revise the stringent regulations in the legal service market in line with the changing environment. In May 2018, Sung Ho Chung, a congressman of the ruling party, hosted a discussion session regarding the revision of the regulatory framework for technological innovation to enhance efficiency in the legal service market. In the session, Byung Chul Oh, a professor in the Department of Law in Yonsei University, quoted an opinion saying that if only law firms and attorneys are allowed to provide legal services based on AI technology due to the Attorneys’ Act, the entry barrier to legaltech will become too high.

The regulatory sandbox which will be effective from the first half of 2019 can be an opportunity for some legaltech startups to be granted exemption from the current regulations to a limited extent. Although the regulatory sandbox is not particularly designed for the legaltech sector, legaltech startups can apply their services to the regulatory sandbox, which grants ad-hoc permission to the innovative service providers to provide their services in a limited scope for up to two years.

---

IV. Dispute resolution innovation

An electronic case filing system and e-discovery rules have been adopted in Korea to encourage innovation in dispute resolution. From 2010, an electronic case filing system has been used for any legal case except criminal cases, which will be adopted in 2020. Through this system, litigants can file lawsuits online, and the courts can promptly deliver official notices and documents to the person involved in the case via the internet.

According to the statistics by the National Court Administration in 2017, 65.7% of total civil lawsuits filed were processed through electronic case filing system, while more than 80% of civil lawsuits were filed online in southern and central district courts in Seoul. The courts can effectively manage the cases by digitising documents involved in lawsuits, and the parties can easily submit required documents to the courts in a timely manner with reduced costs.

In line with the adoption of the e-filing system, the courts also adopted electronic courtrooms for civil lawsuits beginning from 2010, which are equipped with digital facilities to access the online lawsuit records anytime and to share documents with the judges, lawyers and the parties at the same time. There are now 450 electronic courtrooms equipped with these facilities across the nation in high courts and district courts.

The e-discovery system has been partially adopted in criminal cases through the revision of the Criminal Procedure Act in 2007. Unlike in common law countries, discovery is only adopted in criminal cases to preserve the right of the defendants to defend themselves with equal evidence in Korea. Defendants have been able to request public prosecutors to provide evidence and relevant documents in their hands pursuant to the Criminal Procedure Act, and through the revision of the Act in 2007, defendants are able to request public prosecutors to provide any online documents in digital formats as well (Article 266(3) of the Criminal Procedure Act). However, specific procedures and scope for e-discovery have not been put in place, and it is hard to find any cases where the defendants or their attorneys exercised e-discovery on public prosecutors so far since 2007. Public prosecutors express concerns that the investigation information leakage may lead to an unjust criminal penalty, while the defendants, accusers, and attorneys claim that the current e-discovery system is not clear enough.

V. Business innovation

Many law firms use case management software by tech companies, which helps them manage cases and clients in an efficient manner. For example, due dates for appeals or petitions submission, which are exemplary peremptory periods that render the appeals or petitions void in case of a lapse, used to require extra attention from attorneys and officers working in the attorneys’ office to count appropriately and not to miss the date. This case management system

29 National Court Administration, “Judicial Yearbook 2017” at p 738–739.
helps them manage due dates in an efficient manner. Lawtop\textsuperscript{32} and Lawffice\textsuperscript{33} are two well-known case management software that several law firms or offices have adopted in Korea.

In addition, some in-house legal teams have adopted a software to efficiently manage internal legal matters as well as outside legal counsel, while others have developed their own management system for legal issues which is connected to a groupware used by the corporations. Law.ai is one of the representative companies which provide management solutions for legal issues to in-house legal teams.\textsuperscript{34}

VI. Education innovation

There have not been any significant changes in educating or training current or future legal professions in new methods or techniques. As the laws and legal practices have remained the same despite the emergence of new technologies, legal education and training have not changed much. However, there has been a trial to adopt new technology in legal education in 2015 when Professor Soonkoo Myoung, a civil law professor from Korea University, taught a civil law class to his students via a Massively Open Online Course. He mentioned that it helped him prepare the classes in detail and that the students gave positive feedback, saying that they could take initiative over their studies and could focus on the class very well.\textsuperscript{35}

VII. Future developments

To develop legaltech further in Korea, it is necessary to revise the Attorneys’ Act, which builds high entry barriers for those interested in this market. Moreover, the restrictions on attorneys building a partnership with non-attorneys should be changed as well to open up various possibilities of cooperation between attorneys and non-attorneys. Introducing desirable cases of legaltech from other countries would help the public understand correctly the concept of legaltech and the benefits from it, such as easy access to justice. In this way, legaltech may provide new opportunities to the attorneys and work as a catalyst to reform Korean legal system to be more transparent and open to the public.

\textsuperscript{35} Myung Soonkoo, “Education in Civil Law through Mooc: An Experience and Assessment – Based on an Example of Korea University”, (2016) Korea University Law Review vol 80, Legal Study Institute of Korea University.
I. Country overview

A. Legal system in brief

Malaysia is a common law jurisdiction which adopts a Westminster-modelled constitution and a constitutional monarchy. The Yang di-Pertuan Agong, also known as the Supreme Head or the King, is the monarch and head of state of Malaysia. The constitution specifies that the executive power of the Federal government is vested in the Yang di-Pertuan Agong. However, he is bound to exercise this power on the advice of the Executive or a minister acting under the Executive’s authority. The Executive is headed by the Prime Minister, appointed by the Yang di-Pertuan Agong from among the elected members of Parliament. The Legislature is a bicameral Parliament comprising the 222 Members of Parliament in the Dewan Rakyat - the lower house, and 70 Senators in the Dewan Negara - the upper house; and is tasked with making laws, checking on government actions and policies, and financial scrutiny of the government.

As a federation of 13 states and 3 federal territories, each state in Malaysia also has its own Monarch and Executive arms. The Federal Constitution of Malaysia provides for different areas of powers which fall under the jurisdiction of the Federal Government and State Government respectively. The Judiciary is led by the Chief Justice and comprises the Superior Courts – The Federal Court, Court of Appeal, and High Courts - and the Subordinate Courts consisting of the Sessions Court and Magistrates Court.

B. Key stakeholders in the legal industry

The Attorney General of Malaysia (currently Tommy Thomas) is the main legal adviser to the Government of Malaysia; providing counsel on the nation’s legal matters as well as leading public prosecutorial cases. Further, the Federal Constitution of Malaysia provides for the Public Prosecutor’s statutory powers, which extend to instituting, conducting or discontinuing any proceedings for an offence, so long as it stays within the ambit of the civil or criminal courts, and does not interfere with the jurisdiction of the Syariah courts.

Next, the Malaysian Bar is a statutory legal entity established under the former Advocates and Solicitors’ Ordinance 1947, which was subsequently replaced by the Legal Profession Act 1976 (“LPA”). The Bar is an independent body whose aim is to uphold the rule of law and the cause of justice, and protect the interests both the legal profession and the public. The legal profession in Malaysia is a fused one with a membership of approximately 16,000 members. Each advocate

---

1 Legal Hackers Kuala Lumpur.
2 Legal Hackers Kuala Lumpur.
and solicitor is automatically a member of the Malaysian Bar as long as he or she holds a valid Practising Certificate.

Foreign law firms, on the other hand, are defined as firms which provide legal services in foreign law and include a corporation duly constituted for the purpose of practicing law established or licensed to provide legal services by the appropriate licensing authority of a state or territory other than Malaysia, under Section 40A of the LPA. Albeit allowed to practice in Malaysia (provided that the requirements and application for a license are fulfilled), these firms can only practise in the permitted practice areas, which expressly excludes, inter alia, constitutional and administrative law, criminal law, and conveyancing procedures. The admission of foreign law firms is governed by Part IVA of the LPA. Only up to five licences will be granted for foreign law firms, as this avenue has been created to support the Malaysian Government’s Malaysian International Islamic Finance Centre (“MIFC”) initiative. These licences will therefore only be granted to firms that have proven expertise in international Islamic finance, and which would be able to support and contribute to the MIFC.

Law schools in Malaysia have the great responsibility of bringing students up to competent levels in both secular and Islamic law, as well as of equipping them for long-term careers in the law. Thus, the foundations set in school must adhere to proper guidelines and have a view of producing future legal practitioners. This is where industry-based administration of law courses, legal research, and industrial training come in to successfully meet the students’ academic targets and career aspirations in a fast-paced business world. The local Bachelor of Laws (LL.B) programme is offered by public universities (eg, University of Malaya, National University of Malaysia, International Islamic University Malaysia etc) and private institutions (Multimedia University), and there are also alternatives for students who opt to undertake the UK LL.B program which include Taylor’s University and HELP University’s UK Degree Transfer (2+1/1+2) programmes, which is typically governed by the University of London.

C. Key statistics

 Particularly for West Malaysia and the Federal Territory of Labuan, the Bar Council has released the confirmed number of active legal practitioners as of October 2018 which amounts to a total 18,915 members, of which the largest portion (8,217) comes from legal practitioners located in the Federal Territories. In contrast, the least number of practitioners is recorded in the state of Perlis. The same pattern is seen in the amount of registered law firms in Malaysia, which extends to 7,953 law firms across the Peninsula. In East Malaysia, the Advocates Association of Sarawak reported a total of 1,390 active practitioners followed by 251 law firms registered in the state. It is to be noted however that this report was accurate as of 2016 and the number is expected to have grown over the span of two years. The Sabah Law Society, on the other hand, reported fewer lawyers (719 people) practicing in the state of Sabah but boasts a larger number of 333 registered law firms. Relative to Malaysia’s considerably large population size of 32,276,919 people, lawyers comprise only 0.065% of the population. This has been viewed by observers as a major factor for the rise in alternative legal service providers and legaltech.
II. Technological innovation

Both private firms and public institutions have been actively developing legal technologies. Some important trends are in artificial intelligence, big data, and online legal service providers. As indicated in the Chief Justice of Malaysia Richard Malanjum’s speech at the 2019 Opening of the Legal Year, the legal sector has been actively (yet cautiously) moving towards technological innovation in the industry. These efforts have targeted most of the key stakeholders in the legal industry. In the speech, CJ Malanjum underlined some key points that are very relevant to the regulatory part of the legal industry when it comes to the application of technology.

The problems faced by lawyers such as the inconvenience of being present physically to keep up with the status of their cases has been tackled by the introduction of e-Review, where all case management at the appellate levels is done online. Furthermore, the option of video conferencing will be made available in Kuala Lumpur, Penang and Shah Alam, which all experience heavy traffic flow daily. This innovation will allow case hearings to be conducted on a timely basis and concluded significantly faster than it would have been if conducted traditionally. Next, the Queue Management System was phased in to allow lawyers to be notified of their place in line through their mobile phones, instead of having to be present and wait for their turn to present their cases. Another effort by the judiciary that has notably developed is the Complaint Mechanism provided via hotlines and social media to receive public complaints and suggestions on their performance. Finally, the CJ teased the attendees with the possibility of the Malaysian courts going paperless by June 2019.

Apart from the initiatives mentioned above, legal firms and practitioners have also jumped on the bandwagon towards adopting more tech-savvy methods of solving real life issues. The Current Law Journal is an independent legal publishing company employing the Internet as its medium of delivery. They were one of the first online publishers in South-East Asia and specialise in the provision of Internet services and use of Extensible Markup Language (“XML”). Its subscription database stores numerous legislations, articles and cases, all easily accessible for its users. A similar service used in Malaysia is the LexisNexis database which delivers powerful, new decision tools to customers by applying machine learning, natural language processing, visualization, and artificial intelligence to their global legal database. These recently-compiled databases have been a breakthrough in law practice as lawyers no longer have to spend hours flipping pages in search of one particular part of the law to refer to or apply to their case.

Legal firms have also benefited from CoreMatter, which is a legal practice management system. The CoreMatter team has spent over 20 years providing legal software solutions and services to law with a focus on providing solutions in document management, cost recovery, and IT services. The service helps SME-type law firms gain profitability and efficiency while doing their best for clients. The market has also seen SpiderLaw, which caters to small to medium sized law firms by providing them with the necessary tools to run their practice efficiently. This platform integrates AI in processing client accounts and details, office accounts, financial reports, billing, and payroll for the subscriber. In addition, the Denning Law Office established
in Malaysia offers a revolutionary Auto Document Drafting system. The user simply has to choose from a range of preloaded templates to auto-draft any letters, forms, agreements, bank or court documents they need with a single click. The system automatically fills in all required particulars into templates to produce completed documents in seconds.

Due to the demand for technological alternatives to the conventional legal sector, multiple new startups have emerged in Malaysia, all market their services competitively:

(a) **EasyLaw** is a calculator phone app which automates fees calculation on Sale & Purchase Agreement ("SPA"), Loan & Tenancy Agreement on your phone and promises instant results within 9 seconds.

(b) Landlords, tenants, and agents can utilise **Lesys Tenancy** to manage tenancy agreements using templates that are carefully drafted by the company’s panel of lawyers and vetted by qualified lawyers, to ensure adequate protection in Tenancy Agreements.

(c) **Locum Legalis** allows lawyers to communicate privately with counterparties, manage multiple hearings, exchange documents, and make payments for outstation hearings.

(d) **Contract Hero** may appeal to law firms as it boasts web-based professional firm management software assisting firms in storing documents, matter status, and client information, and allows access from anywhere. It also reminds the user of upcoming works and important dates at the same time.

There have also been startups in the past five years with compelling concepts, but which have since permanently closed. This includes BurgieLaw, which adopted hotel booking sites’ *modus operandi* by letting users filter lawyers by specialty and geography, then connecting them to the lawyers for an estimate and track record. CanLaw, on the other hand, provided a lawyer discovery platform on which the public could post their legal needs, and subsequently compare quotations and experience from lawyers who responded to the request. Last but not least, Answers-in-Law is a legal expenses indemnity service offered via an interactive legal and public services directory that provides immediate and affordable access to legal service providers, specialising in the area of law that assistance is required, from the network of independent law firms registered with the Malaysian Bar. Answers-in-Law indemnifies the cost of the initial legal services extended by the network of independent law firms.

III. **Regulatory innovation**

Over the years, there have been discussions on whether the services offered by legaltech platforms are legal, with particular attention given to Section 37 of the LPA. The section stipulates that no one is authorised to act as an advocate or solicitor or an agent for any party to proceedings or in any capacity, other than as a party to an action which he is himself a party. Under Section 37, legaltech companies could be considered as providing legal services on behalf of a lawyer due to the fact that it uses technology such as AI to simplify and offer legal advice.
and solutions to the user. From a practitioner’s point of view, this may be a threat to the profession, apart from it being unethical as mentioned. Debates on the legality of such services have been rising in light of a constantly increasing number of startups entering the market.

A landmark case concerning the permissibility of legaltech is *Bar Malaysia v Index Continent Sdn Bhd.* Here, the defendant was an online service provider that offered a public service directory of lawyers to the general public under the name of Answers-in-Law. In addition, they actively advertised their services by sending out electronic mails to law firms and individual lawyers. Legal practitioners complained to the Bar, which then initiated an action for an injunction to further prevent the defendant from profiting from the service of which legality was highly questionable. The Kuala Lumpur High Court found that the defendant had *prima facie* committed a breach of the Act and that its action was intolerable, as it sought to provide services of a legal nature to the “unsuspecting and gullible” members of the public.

On appeal, the Court decided that the Bar did not have the *locus standi* to forward the claim and failed to comprehensively address the issue of breach of section 37 of the LPA. However, the apex court (Federal Court of Malaysia) ultimately put an end to the saga which carried on for five years by overturning the judgment of the Court of Appeal and giving ss. 37, 41, 42 and 57 of the LPA a narrow and restrictive interpretation. It held that to appreciate the extent of the objective and purpose of the LPA, and the roles and functions of the appellant in the context of the wider interest of the legal profession and the public at large, a purposive interpretation promoting the purpose behind the enactment of the aforesaid provisions must be accorded; otherwise it would create an absurd situation which would defeat the appellant’s statutory purpose of protecting the public, including the members of the Bar from violations of the LPA. The appellant, as the governing body for the legal profession, was empowered to bring a civil action to seek legal redress, including injunctive relief against the respondent who had acted in contravention of the LPA.

The judgment caused fear and hesitation among existing tech companies which had been trying to enter the legaltech market with their products. The Bar’s position of taking a very strict interpretation of Section 37 may cause future legaltech startups to be reluctant to make their services available in Malaysia and cause a disruption in the market. On the matter, former Malaysian Bar President, George Varughese, mentioned that the Bar is not against technology *per se.* He further explained: “[It is out of the] need to protect the legal profession from unscrupulous vendors and/or access to products and services that flout the LPA and related legislation, or violate the rules and ruling of the Bar Council. It is also due to the need to ensure that access to legal services is properly regulated so that the general public is protected in terms of their access, including with reference to the quality of legal services.”

This leads us to believe that there are quite possibly existing plans to liberalise the provisions of the LPA in the near future. The Bar Council guaranteed that it would recommend the

---

3 [2012] 4 MLJ 90.
4 *Id.*, at [30].
necessary amendments to the LPA, which could include a specific provision on legaltech to encourage technology and innovation in the industry. Once proper vetting of providers and their product and services is done, Malaysia will be able to catch up on the legaltech trend and emerge as one of the leading markets in the future. Educational institutions also have a part to play in the regulatory innovation, as can be seen from the creation of numerous dedicated research centres and associations.

IV. Dispute resolution innovation

A domain name dispute generally arises from the conflict between the registration and use of a particular domain name online. Such disputes are closely connected to intellectual property rights and a regulatory body is thus needed to enforce and arbitrate domain name issues. In Malaysia, the Asian International Arbitration Centre (“AIAC”) has been directly appointed by the Malaysian Network Information Centre (“MNIC”) to administer said disputes. MNIC is the body that handles the registration of .my domain names and this is the only country code that can be registered by MNIC, considering that its jurisdiction lies within Malaysia. For the purposes of this discussion, we will look at the role of AIAC in attending to the aforementioned dispute, not focusing as much on domain name dispute resolution on a transnational level. Following this, the centre has come up with several rules and model laws that may be used by parties to the dispute in resolving their issues. Among the policies introduced in domain name dispute resolution proceedings consist of the application of MNIC’s Domain Name Dispute Resolution Policy (“MYDRP”), the Rules of the MYDRP, and AIAC Supplemental Rules. This is specifically seen to be an innovation, as parties no longer strictly conform to the traditional means of resolving disputes and are becoming more open to accepting novel approaches in issues concerning the usage of technology.

As of 30 September 2017, the number of registered domain names with “.my” was 327,109, according to the data offered by MYNIC, the sole administrator for web addresses with “.my” in Malaysia. This represents a steady increase of 2% over the same date of the previous year, which had a total of 320,619 registered domain names. In addition, the number of registrations has continued to expand at a determined and relentless pace. Since the first official record of registered “.my” of January 2008 to the present, registrations have grown by an outstanding 426.3%. At the same time, the number of cases handled by alternative dispute resolution centres continues to grow. For instance, 2016 was a year of records for domain name disputes under the Uniform Domain Name Dispute Resolution Policy (“UDRP”). The World Intellectual Property Organisation (“WIPO”), as a UDRP service provider, registered 3,022 cases in 2016, nearly a 10% increase from the preceding year. The Asian Domain Name Dispute Resolution Centre (“ADNDRC”), with four operating offices at the Chinese International Economic and Trade Arbitration Commission, Hong Kong International Arbitration Centre, Korean Internet Address Dispute Resolution Committee, and Kuala Lumpur Regional Centre for Arbitration, in 2014 handled 226 cases under UDRP of a total of 246. The total number of cases of ADNDRC also represented an increase of 41% from 2013.

---

V. Business innovation

As regulations remain strict on how legal services can be rendered, the models in which legal services are provided remains limited. Apart from the traditional partnership system practiced by almost all law firms in Malaysia, there has recently been an introduction of Group Law Practice. The Legal Profession (Group Law Practice) Rules 2018, which came into operation on 30 June 2018, is a culmination of the Bar Council’s initiative over the years — through its Small Firms Practice Committee — to introduce rules to permit small law firms to operate through a Group Law Practice while maintaining their individuality and remaining as separate entities. Under these rules, up to five small firms are allowed to operate as a Group Law Practice, from common premises with shared facilities, resources and infrastructure. By operating as a group, the small firms can reduce their operating costs, increase their skill sets, and maximise their potential, marketability, and competitiveness in an increasingly competitive legal environment. By operating from common premises and sharing facilities and resources — such as furnishings, equipment, subscriptions, library, and staff — it is believed that small firms will be able to reduce their operating costs. Other than that, small firms will be able to promote themselves as a larger “firm”, become more attractive to clients, and draw higher fee-earning work.

With a generally conservative legal industry, there are only a very few innovation services targeted at the legal community. Locum Legalis is marketed as an app that allows lawyers to get in touch with each other to call in favours, like running mentions on behalf of each other and other routine attendances in court. According to its website, the app allows lawyers to communicate privately with counter-parties, manage multiple hearings, exchange documents, and make payments. This is especially useful in jurisdictions like Malaysia, where lawyers may have cases in different states and cities around the peninsular. In addition, EasyLaw provides services for conveyancing lawyers to do land searches nationwide from their website, with a starting price of RM 20. Through a simple form on their website which captures the request of a particular lawyer, they have a team that operationalizes these tasks and a network of runners to undertake these searches at the relevant land offices, which results they subsequently deliver back to the lawyers digitally.

VI. Education innovation

The Prime Minister of Malaysia, Mahathir Mohamad, has drawn special attention to the importance of Artificial Intelligence (“AI”) through education in the Q&A session with Malaysian students that was a part of his first official visit to Singapore as the 7th Prime Minister in November 2018. As he said, “for productivity, they must be well-educated and they must have new skills. They must understand new technology.” Thus he urged young people to actively acquire this fundamental knowledge. For this to happen, the current education system needs to be revolutionised, he added. His remarks were made following his observation of new businesses, not only in Malaysia, but in most economically booming countries across the globe,

---

focusing and operating primarily on AI. This sentiment has been shared by the Education Minister, Maszlee Malik, who has assured that the Education Ministry is working towards revamping the system by incorporating AI and coding into future syllabi in schools. It is undeniable that the government is gearing towards producing more graduates with technological expertise to stay relevant in this era.

In light of the Malaysian Government’s focus on strengthening research to establish laws, regulations and ethical frameworks for the healthy development of AI, law schools and the private sector have responded by setting up new courses and even institutes. Brickfields Asia College (“BAC”) is one of the first educational establishments that is starting to look into legal innovation and technology. The Asia Developer Academy (“ADA”), which is an initiative of BAC together with Established Education Providers and iTrain Malaysia, was established with the aim of teaching students to code in three months. This academy promises that its graduates will learn the semantics of code to be able to pick up new and ever-evolving programming languages (or frameworks) easily later on in life, on top of learning how to troubleshoot code. In addition, they will possess the skills to develop their own applications with a focus on first building a strong foundation in problem solving, which is key to building competence, confidence, and independence.

Besides that, Legal Hackers Kuala Lumpur - a local chapter of the global non-profit Legal Hackers movement - also aims to play a role in educating the market on the benefits of legal innovation not just for the industry, but also for society at large. It is an informal community with an active online and offline presence, and which organizes monthly meetup sessions in the form of workshops, panel discussions, or dinner-table discussions with relevant topics on legal innovation, with the hopes of bridging the gap between tech entrepreneurs, innovators, regulators, students, and lawyers. They also organized Malaysia’s very first Law Tech Hackathon in October 2018, which saw participants from all around the country coming together to undertake problems in legal services through technological solutions.

VII. Conclusion

Legal innovation is still in its infancy in Malaysia, and the legaltech industry has found it very difficult to drive it beyond this stage, with some resistance from within the industry as well as the regulators. As a result, the market has not been able to enjoy the full benefits of innovation in accessing legal services.

While some of this resistance may be attributed to the knee-jerk aversion that lawyers may have towards technology, arguably a bigger reason has been cost considerations: the cost of labour is much lower than what is required to adopt many of these tools and technology available in the market.

That said, with various educational initiatives being rolled out, and calls from segments of the profession as well as the judiciary to move on with the times and stay competitive, there has been an increase in pressure for the legal industry to progress. Perhaps it will be the judiciary
that will lead the way in innovation in Malaysia, and it is up to the rest to catch up and hop on-board the wave of change.
Legal innovation in Russia is currently focussed on delivering new tools for lawyers and increasing their efficiency, rather than substituting lawyers themselves (which is not its aim in any case).

Two factors have been encouraging legal innovation and the development of legal technology (“legaltech”) solutions. First, Russia generally does not have any regulatory barriers against the provision of legal services by non-lawyers or against external investment into law firms at present. Second, the Russian government has been consistently improving IT infrastructure, thereby facilitating the dispute resolution process and the provision of governmental services and dispute resolution.

Although legaltech in Russia remains in its early stages today, the abovementioned factors constitute favourable conditions for the further development of legal innovation in general, and legaltech in particular.

I. Country overview

The Russian Federation is a civil law country. Its legislation includes a number of codes (codified laws). Other laws, as a general rule, must be consistent with the codified legislation. International agreements have precedence over national legislation, but the decisions of international judicial bodies (eg, the European Court for Human Rights) are not always nationally binding.

A significant feature of the Russian legal system that distinguishes it from other markets is that the Russian laws and subordinate legislation are constantly changing, in all areas and at a very fast pace. This is one of the factors that has promoted the fast adoption of legal databases across the country. Today, the developers of such products remain major stakeholders in the legaltech market, and are among those who constantly innovate by adding new services to their product portfolios.

---

1 LegalTech Director at Skolkovo Innovation Center.
2 Partner, Baker Mackenzie.
3 Some reservations apply.
II. Overview of the legal market

The Russian legal services industry is a US$3.4 billion market\(^6\) with approximately 47,000 law firms registered every year.\(^7\)

The Russian legal market is rather small in terms of revenue, but has a substantial number of qualified lawyers.

Large law firms with more than 100 lawyers constitute only 0.2% of all legal service providers and are primarily located in Moscow and Saint Petersburg. The legal market is heavily centralized, as almost one quarter of all law firms that practice in Russia are located either in Moscow or Saint Petersburg.\(^8\)

---


\(^7\) PRAVO TECH website, "Крупные компании составляют только 0,2% от зарегистрированных в России юрфирм" (07 December 2017) <https://pravo.ru/news/view/146457/> (accessed 05 March 2019).

The Russian legal services industry is generally represented by non-regulated law firms. The number of attorneys-at-law, who are subject to special rules established by both legislation and their self-regulating association, constitute only 15% of the market.\textsuperscript{9}

\begin{center}
\textbf{Main types of legal service providers}\\
in %
\end{center}

\begin{itemize}
\item Law firms 53
\item Attorney organisation 15
\item Non-for-profit organisations 2
\item Self-employed entrepreneurs 30
\end{itemize}

According to the limited publicly available statistics, small law firms with less than ten lawyers are the most common category of law firms in the Russian market.\textsuperscript{10}

\begin{center}
\textbf{Number of small, medium and large law firms}\\
in %
\end{center}

\begin{itemize}
\item Small (1-10 lawyers) 83
\item Medium (11 - 20 lawyers) 10
\item Large (more than 20) 7
\end{itemize}

\textsuperscript{9} Ibid.
\textsuperscript{10} Ibid.
Information about the revenues of law firms is also limited, as only 30% of respondents among law firms agreed to disclose the relevant figures when polled.\footnote{PRAVO TECH website <https://pravo.ru/news/view/146457/> (accessed 05 March 2019).}

The most competitive areas of the Russian legal market according to a survey by Thomson Reuters currently are:

(a) Civil Law;

(b) Government relations;

(c) Bankruptcy;

(d) M&A; and


However, the situation may change dramatically in the future, if Russia takes the approach proposed by the Department of Justice of the Russian Federation on regulating legal services.\footnote{PRAVO TECH website, ”Кompromissный вариант”: эксперты оценили новый вариант регулирования юррынка” (26 October 2018) <https://pravo.ru/news/view/145384/> (accessed 05 March 2019).}
The first group of initiatives proposes restricting the provision of legal services in certain areas for non-attorneys-at-law. The second group of initiatives targets international law firms by imposing restrictions on the ownership of legal service providers. However, these initiatives remain on hold for an indefinite period for the time being.

Considering the above, Russian legal market may be described as a relatively small market that lacks regulation and restrictions on the types of legal service providers. This lack of restriction on investments into legal service providers opens wide opportunities for the growth of legaltech and alternative legal service providers.

III. Technological innovation

A. Overview of the most prominent players

The past few years have seen a rise in the number of legaltech companies and acceleration in the adoption of legaltech solutions and services among legal service providers.

However, as compared to other markets, the overall number of legaltech service providers remains relatively small and the technology offered by many startups is usually not very sophisticated.

Some of the key legaltech areas in the Russian market, as well as notable players in these areas include:\footnote{The list is not limited to local technology service providers and includes a number of foreign solutions that are prominent on the local market.}

(1) Document automation management solutions which generate drafts from automated templates

(a) ContractExpress is an intuitive, natural language mark-up solution for Microsoft Word by Thomson Reuters. All configurations can be made by lawyers within Microsoft Word.

(b) TurboContract comprises cloud-based document workflow, template-based document creation tools and allows real-time multi-user document editing.\footnote{TurboContract website <https://turbocontract.ru/> (accessed 05 March 2019).}

(c) Doc.one offers interactive templates integrated with Microsoft Office 365.\footnote{Doc.one website <https://doc.one/> (accessed 05 March 2019).}

(d) Legium is a tool for creating, signing and verification of documents, which is based on blockchain.\footnote{Legium website <https://legium.ru/> (accessed 05 March 2019).}
(e) **Doczilla**, **EasyLaw**, **FreshDoc**, and **ProstoDocs** offer databases with ready document templates. Freshdoc has announced its development of a vast user database exceeding 1,400,000 users.

(f) **Soica** is a Russian product allowing for the digitization of paper documents, the recognition and extraction of data from paper and digitized media, and the inputting of the recognized data into target IT systems.

(2) **Lawyer search / marketplaces and online legal services which are designed for obtaining legal advice online or finding information on practicing lawyers, including ratings, reviews and profiles**

(a) **Marketplaces**: Pravoved.ru, LawStock, Justiva, Yurbee.

(b) **Online legal support**: Pravoved.ru, European Legal Service (“ELS”), Pravocard, Amulex.

(c) **Online legal services** (examples):

(i) Online Patent is an online platform for patent and trademark application management.

(ii) Nalogia is an Internet service for the online preparation and online submission of tax returns and tax refund documents for individuals, with remote support available.

(iii) B-152 and Legal Box offer online services and assistance in preparing the necessary documents for compliance with Russian and EU data protection laws.

(d) **Chatbots and AI** offer legal advice and respond to client requests:

---

21 Freshdoc has more than 1,400,000 users.
32 B-152 website [https://b-152.ru/](https://b-152.ru/) (accessed 06 March 2019).
(i) Pravoved.ru – A Skolkovo resident startup working on machine learning and AI to instruct chat-bots, further directing customers to real lawyers to provide legal advice online.

(ii) FastLaw.io is a startup working on smart legal assistants (chatbots) based on natural language processing technology. The startup is a resident of the Skolkovo technopark.

(3) Online dispute resolution - online alternative dispute resolution services based on the submission of electronic documents

(a) Online arbitration serves to facilitate the independent, impartial and efficient resolution of commercial disputes arising out of contractual and non-contractual relations and is administered by the Association for the Promotion of Arbitration.

(b) DI’S PUT is a new platform being developed for online arbitration in the area of intellectual property.

(4) Law practice management software which offers ecosystems for law firms and law departments that simplify billing processes, task management and case analysis

(a) Case.pro - provides a project management ecosystem integrated with Microsoft Office, Dropbox, Gmail and other platforms.

(b) Jeffit is a time and task management tool for the whole firm or in-house legal department that also enables clients to check task fulfilment, with real-time remote and transparent access to a law firm’s billing details.

(c) XSUD, ProjectMate, and You-right.ru offer court case and claim management software solutions.

(d) Legal Research solutions comprise databases of legislation, case law and other materials based on text recognition that facilitate legal research (ConsultantPlus, Garant, Pravo.ru, kad.arbitr, GAS Pravosudie).

In sum, legal innovation in Russia is currently largely based on online marketplaces, document automation and similar low-tech solutions. Just a few players have adopted blockchain or sophisticated AI for natural language processing as the core for their innovative solutions.
The Russian market also has only a few prominent international legaltech solutions, probably in part due to language barriers. Russia has only one state language on the federal level (Russian), and the majority of legal documents do not have official English translations.

According to Skolkovo, legaltech startups in Russia generally do not raise more than US$150,000. However, there are certain exceptions: for instance, Pravoved.ru managed to raise US$2 million and OnlinePatent.ru about US$800,000.

In general, experts highlight the following trends with respect to adoption of legaltech in Russia:

(a) Legaltech startups are starting to raise investments;

(b) The number of strategic alliances and mutual projects is growing; and

(c) There is increasing interest from in-house law departments and support for legaltech from the Russian government.42

B. Underlying legal technology

Legaltech in Russia in both B2B and B2C segments can be divided into hi-tech and relatively simple automation technologies. There are four main technologies used for legal innovation in Russia:

(a) Machine Learning / AI (including chat-bots). The most known project based on machine learning is "Pravoved.ru". The lawyers of "Pravoved.ru" trained their tool using a great number of cases and it can now provide users with automated answers in natural language.

Another well-known system is "Caselook," which can help predict the outcome of a dispute based on existing case law.

(b) Text recognition. Russia differs from many markets in terms of its availability of publicly available and free databases containing legislation and court practice notes (such as the kad.arbitr.ru IT system used by commercial courts and GAS Pravosudie used by courts of the general jurisdiction). The majority of documents in such systems are in machine-readable format.

Such government-based text recognition is an important infrastructural foundation that can aid the development of more sophisticated commercial services over time.

(c) **Cloud Computing** is extensively used for document automation, the provision of access to various databases and data rooms, and the delivery of web browser-based services.

TurboContract is a good example of a legal startup based on cloud technologies. Its core idea is to store contracts and other legal documents in the cloud for real-time multi-user document editing. TurboContract indicates that its solution helps reduce the time spent on a contract by up to 30%.

(d) **Blockchain** is primarily used in legaltech for the verification of documents and data certification. However, we have seen some other applications apart from verification and certification.

One of the most well-known local startups in this area is “IPChain” – an association for intellectual property use and protection in digital sphere. IPChain is a decentralized network (distributed register) that automatically records all transactions related to IP rights and objects. It was created to facilitate the development and usage of leading-edge technological solutions, and ensures the evolution of the practice of intellectual property for the general good.

IPChain stores information on intellectual property-related rights and other intangibles, as well as information on atomic transactions, which are recorded by the distributed IPChain registry – these being the most significant for all participants in the IP sphere, and reflecting key facts and types of publicly-available information.

Another prominent player in this area is “Legium”. It helps to sign documents at the single click of a button and helps with contractor verification as well as the usage of electronic documents for dispute resolution.

IV. **Regulatory innovation**

The Government of the Russian Federation has adopted a policy of promoting innovation. In recognition of the changing technology landscape, the Russian Government adopted in 2017 its Digital Economy program that aims to foster innovation in all spheres of the economy.

One of the purposes of this new policy is the development of legaltech. This program has sparked various discussions in many institutions such as the Skolkovo Innovation Center, which has identified legaltech development as a priority area, and which has been holding Legaltech Conferences annually from 2017.

Additionally, to promote innovation, the Government created the Unified System of Identification and Authentication (“ESIA”). While it was originally designed for providing governmental services, it is also now starting to be used to enhance electronic document management.
Moreover, Russia has relatively modern regulation on the use of electronic signatures, which are utilized by a great number of legaltech startups (Federal Law of 2011 “On electronic signature”). Russia also plans to permit cloud-based qualified e-signatures and increase propagation of this technology among the population in Russia, which may significantly increase the use of e-documents in all spheres.

These measures have relevantly small impact on the regulation of legal innovation. However, governmental policy creates a foundation for new technology-based services and business models, inspires respect for innovation and enhances debates about new regulation and attitudes towards the economy of the future.

Finally, emerging legislation on remote medical services and debates about regulatory sandboxes in Russia may be said to exemplify Russia’s open-mindedness towards regulatory innovation.

V. Dispute resolution innovation

Governmental initiatives on free electronic databases of case law (kad.arbitr, GAS Pravosudie) simplified legal research and created a good foundation for further legal innovation in the area of machine learning and electronic document management. It is now possible to file procedural documents online (“Moi arbitr”) and remotely participate in legal proceedings.

Innovation has also been taking place in the area of alternative dispute resolution.

A. Online arbitration

Russian Arbitration Association developed its Online Arbitration Rules (available in English). Online arbitration under these Rules shall be conducted via the RAA Information System that is used to file, process, store, and transfer documents. Online arbitration is conducted only on the basis of copies of documents uploaded to the RAA System. Previously, there were no advanced online dispute resolution systems in Russia.

B. Blockchain for state courts and online dispute resolution in the area of intellectual property (“IPChain”)

In April 2018, IPChain - which, as mentioned above, is developing a blockchain solution for recording intellectual property rights - and the Russian Court for Intellectual Property Rights announced an agreement to cooperate. In December 2018, they publicly confirmed that the
IP Court had made a number of records to the blockchain solution developed by IPChain to confirm transfers of trademark rights resulting from its judicial decisions.47

In addition to innovation in the area of litigation, IPChain also launched a blockchain-based alternative dispute resolution project “DI’S PUT” - a platform for online dispute resolution in relation to IP rights infringement. This platform is intended to unite arbitrators, experts and parties.48

VI. Education innovation

The market for legal education in Russia has expanded rapidly in the last 20 years. Bachelor’s and Master’s in Law programs have become popular education pathways and produce more than 150,000 graduates every year. Additionally, many Russian law graduates pursue their degree as part of a dual-degree program, or as a second degree.

Still, most Russian universities do not prepare law graduates for the future. Only a few of them have introduced a technology-focused curriculum:

(a) Plekhanov Russian University of Economics offers courses about blockchain and cryptocurrencies, including a program called “Blockchain Lawyers.”49

(b) The Kutafin Moscow State Law University has launched “LegalTech Director” postgraduate courses.50 The impact of such courses on the legal services industry is not yet clear.

(c) The National Research University Higher School of Economics has developed a Master’s program in “Law of Information Technologies and Intellectual Property” that aims to help law graduates adapt to today’s trend towards digitalization.51

Russian State Academy of Intellectual Property with the support of IPChain and Federation of Intellectual Property launched a new Digital Economy academic department within the Academy, to focus on innovative technologies in the area of intellectual property and intangibles management, and their role in the development of the digital economy.

There are also a number of legaltech conferences that unite students, law school professors, and practitioners. One of the most renowned ones is Skolkovo LegalTech that also conducts pitching sessions and the LegalTech Awards. Other famous conferences are Moscow LegalTech, Legal Expert Awards, and a number of conferences from Pravo.ru.

To summarize, universities have risen to the challenge of new technologies, albeit not as a whole, and not with the same levels of commitment.

VII. Conclusion

Generally, legaltech is an embryonic market in Russia, but it also appears to have a large potential customer base. It is currently difficult to forecast when this market is likely to mature. Legal innovation in Russia has certain drivers for development and certain obstacles standing on its way; and both may be explained by the peculiarities of the Russian legal services market.

First, the predominance of small law firms located far from technological centres explains the low penetration of technologies at the moment. However, this can also be a driver for innovation in future, as the demand for efficiency and more affordable technologies may lead to a further adoption of legaltech solutions. An increasing client demand for cost reduction may also drive law firms to innovation in the most competitive spheres of legal industry. The application of cloud computing and transparent blockchain solutions may be an answer to this challenge.

Second, the attitude of the Government and regulators towards the digital economy in general is expected to foster the emergence of legaltech startups.

Third, the general technological environment is also influencing the education system. Certain universities have started contributing to the changing legal market, primarily with less sophisticated programs. However, we anticipate the introduction of more comprehensive programs in the future to respond to market needs.
SINGAPORE

By Dylan Mah

I. Country overview

A. Legal system in brief

Singapore is a Common Law jurisdiction which adopts a Westminster-modelled constitution. The Executive is charged with administering the law and includes the President, the Attorney-General, and the 19-member Cabinet which is led by the Prime Minister. The Legislature, which comprises the 100-member, unicameral Parliament and the President, is tasked with making laws, checking on government actions and policies, and financial scrutiny of the government. The Judiciary comprises the Supreme Court, the State Courts, and the Family Justice Courts (the “Singapore Courts”). Led by the Honourable the Chief Justice Sundaresh Menon (“Menon CJ”), there are currently 20 Judges, including four Judges of Appeal and Menon CJ, six Judicial Commissioners, and four Senior Judges on the Supreme Court Bench.

B. Key stakeholders in the legal industry

In addition to the Singapore Courts, key stakeholders of the legal industry include the Ministry of Law (“MinLaw”), the Law Society of Singapore (“LawSoc”), the Attorney-General’s Chambers (“AGC”), and the Singapore Academy of Law (“SAL”). MinLaw regulates legal services by licensing law practices and registering foreign-qualified lawyers and regulated non-practitioners; LawSoc administers the licensing regime applicable to Singapore law practitioners and regulates the conduct of the legal profession in Singapore; AGC functions as the legal adviser to the government, the public prosecutor, and the drafter of laws; and SAL leads the development and promotion of the legal industry, including driving legal innovation.

Other stakeholders include the three law schools housed in National University of Singapore (“NUS”), Singapore Management University (“SMU”), and Singapore University of Social Sciences (“SUSS”) respectively.

---

1 Singapore Management University School of Law.
C. **Key statistics**

As of 31 August 2018, there are 922 law practices and 5,336 law practitioners in Singapore. Of the 922 law practices, most practices (751) comprise one to five lawyers, 151 practices comprise six to 30 lawyers and 20 comprise more than 31 or more lawyers. As regards law practitioners, a majority (2,354) have more than 15 years of experience, 1,821 have less than five years of experience and 1,161 have between five to 15 years of experience.

D. **Legal innovation at a glance**

Legal innovation in Singapore can be traced back to as early as the 1990s. In 1990, SAL launched LawNet, a platform for legal research where users can retrieve materials such as law reports, unreported judgments, journal articles, and legal news. Today, LawNet also provides content from other common law jurisdictions such as English, Malaysian, and Indian judgments.

In 1995, the first technology court was launched in the Supreme Court. It was equipped with audio-visual capabilities and allowed information to be accessed through the click of a mouse, oral testimony to be digitally recorded and litigation to incorporate video conferencing. The initiative was described as a success, with much time and costs saved as video conferencing was used to connect with jurisdictions such as the UK, Australia, and Switzerland. In addition, it was noted to be particularly useful in criminal trials where vulnerable witnesses could give evidence remotely. In 1997, an electronic filing system was implemented. This allowed court documents to be prepared, filed, processed, stored, retrieved, updated, and served electronically.

Legal innovation received another impetus in recent years when Parliament debated the importance of the legal industry embracing technology. Today, initiatives such as the Legal Technology Vision crafted by SAL provide the framework for legal innovation and more efficient legal service delivery. In brief, the Legal Technology Vision advances a four-pronged model to achieve this. The first prong encourages adopting baseline legal technologies. The
second prong focuses on improving the baseline. The third prong seeks to adapt emerging technologies for application to the legal industry and the fourth prong strives to create a landscape viable for developing legal technologies. In 2018, SAL launched the Future Law Innovation Programme (“FLIP”) to lead an industry-wide effort to encourage the adoption of technology, drive innovation, and create a vibrant ecosystem for legal technology.\textsuperscript{15, 16} To this end, FLIP organises a range of activities such as workshops to introduce legal technologies, networking sessions, hackathons, and conferences.\textsuperscript{17}

II. Technological innovation

Technology innovation in Singapore is primarily driven by legal technology companies seeking to solve problems in the legal industry which they have identified. Prominent innovative technologies that have been developed are practice management software and document assembly, legal research, and legal analytics systems.

Asia Law Network developed Tessaract, a practice management software, which contains functionalities such as billing and expense tracking, creation and storage of case templates, and optical character recognition for extraction of text from documents.\textsuperscript{18} Tessaract was created as a response to feedback from lawyers that they had too many cases from Asia Law Network to handle.\textsuperscript{19} As further detailed below,\textsuperscript{20} Asia Law Network is a marketing platform that connects lawyers with parties seeking legal advice.

Various firms have also aimed to increase lawyers’ efficiency in their services by working on document assembly software. They include Vanilla Law LLC, the developer of Vanilla Law Docs, a document assembly software that allows its clients to create a first draft of a document by themselves before the lawyer reviews it, thereby quickening the process of document review.\textsuperscript{21} Another company working on document assembly software is Legalese, a legal technology startup which aims to allow legal documents to be drafted in the manner software is coded.\textsuperscript{22} To that end, it is developing a domain-specific programming language for law – L4. L4 is designed to be able to capture legal semantics and logic such that all laws and legal documents will share a common programming language. If achieved, the various language editions of a contract – whether in English, Chinese, or German, for example – will all produce

\textsuperscript{16} Disclosure: Persons involved in the management and operation of the FLIP programme were involved in conceptualising and supporting this report. However, they were not involved in writing the report and did not in particular write this chapter.
\textsuperscript{17} FLIP website, “Events” <https://www.flip.org.sg/events> (accessed 29 December 2018).
\textsuperscript{18} Tessaract website <https://tessaract.io/> (accessed 29 December 2018).
\textsuperscript{20} See infra Part V.
an identical translation in L4. The first product that they have launched creates, automates and executes workflows for fundraising.\textsuperscript{23} Recently, OCBC Bank also ventured into the development of document assembly systems. It launched a free will writing service, aiming to benefit senior citizens in particular. After inputting the required details online, the user can print, sign before two witnesses and register the will with the National Wills Registry.\textsuperscript{24}

Furthermore, INTELLLEX is a LegalTech startup which aims to manage the knowledge base of law firms more efficiently by organising and storing completed work for future use.\textsuperscript{25} Its enterprise product uses AI to categorise documents and allows the lawyers within a law firm to upload, retrieve and share resources among themselves. Thereafter, its search algorithm strives to understand the legal context in order to retrieve more relevant search results.

Initially started by NUS students wanting to learn how AI would impact the legal industry, Lex Quanta\textsuperscript{26} is a LegalTech startup that provides legal analytics services for organisations to interpret cases quantitatively.\textsuperscript{27} In early 2018, Lex Quanta was reported to be piloting a programme that predicts the division of matrimonial assets in a divorce. Subsequently, it aims to extend its outcome simulator to other practice areas such as contractual and intellectual property disputes and personal injury claims.

An automated document review and analysis software is being developed by Pactly.\textsuperscript{28} The software uses a machine learning algorithm to identify key terms in contracts, accelerating the process of risk assessment. Presently, it is able to analyse non-disclosure agreements.\textsuperscript{29}

While LegalTech companies are driving innovation, law firms are also increasingly adopting technology products in their services. This comes following a push in 2017 by MinLaw, LawSoc, and SPRING Singapore (now known as Enterprise Singapore) to encourage law firms, particularly the small- and medium-sized firms, to embrace basic technologies in their practices by allocating S$2.8 million to subsidise the cost of implementing such technologies.\textsuperscript{30}

The scheme, known as Tech Start for Law, saw over 90 approved applications, largely from

\textsuperscript{25} Isabelle Minasian, “‘This is Our Conviction,’ says INTELLLEX CEO Chang Zi Qian” LexBlog (23 August 2018) <https://www.lexblog.com/2018/08/23/this-is-our-conviction-says-intelllex-ceo-chang-zi-qian/> (accessed 07 January 2019).
\textsuperscript{26} Disclosure: One of this report’s editors, Jerrold Soh, is one of Lex Quanta’s founders and still has, at the time of this writing, an interest in the startup.
small firms, for the funding support by the end of 2017.\(^{31}\) Tech Start for Law concluded in February 2018.\(^{32}\)

Larger law firms have also been adopting legal technologies. For example, WongPartnership LLP has been using Luminance’s AI software when carrying out due diligence\(^ {33}\) while Dentons Rodyk & Davidson LLP uses the AI-enabled Contract Companion, which is meant to make reviewing and documents more efficient.\(^ {34}\) In addition, innovation hubs are also being set up. In December 2018, Clifford Chance launched Create+65, an initiative that aims to gather venture capitalists, start-ups, and relevant stakeholders to develop legal technologies.\(^ {35}\) Participants in Create+65 can, among other things, gain insights from Clifford Chance on problem areas and access to “cleaned” data sets.

Initially created by a team of law students and graduates, LawTech.Asia is a leading law and technology review that aims to be a thought leader in law and technology (including on LegalTech) in Asia.\(^ {36}\) It features a wide variety of articles ranging from interviews with frontrunners of legal innovation\(^ {37}\) to highlights of major legal technology events,\(^ {38}\) including an evergreen document that provides a helpful overview of the legal technology space in Singapore.\(^ {39}\)

III. Regulatory innovation

The Legal Profession Act (Cap. 161) (“LPA”) regulates the provision of legal services in Singapore and is administered by the Legal Services Regulatory Authority (“LSRA”). Law firms can be registered under one of the following six entities by the LSRA: Singapore Law Practice;

---


Qualifying Foreign Law Practice; Joint Law Venture; Formal Law Alliance; Group Practice; and Representative Office (“Registered Legal Entities”).

In 2015, amendments were made to the LPA to allow, among other things, law practices to form legal disciplinary practices (“LDPs”). LDPs are a form of alternative business structure (“ABS”) that provide only legal services where non-lawyers can become partners, directors, shareholders, or have a share in the profits of the law practice, subject to prescribed limits; the non-lawyers in LDPs will be regulated as non-practitioners by LSRA. While the LDP was an innovation to allow non-lawyers to participate as employees of the firm and to own equity and/or share in the profit of the LDP, it was decided that ABS entities should not be permitted to provide both legal services and extra-legal services.42

In recent years, new law firms were established to offer legal services in close association with the “Big Four” accountancy firms.43 For example, in 2018, Rachel Eng, former Deputy Chairman of WongPartnership LLP, a “Big Four” law firm in Singapore, started Eng and Co LLC, an independent law firm that is now a member of the PwC network.44 Meanwhile, Deloitte Legal International Pte Ltd was established as a licensed Foreign Law Practice and is part of Deloitte’s legal network.45

Another recent legal innovation of interest is that Consigclear LLC became the first law firm in Singapore to be approved by MinLaw to operate out of a co-working space.46 Traditionally, under the Legal Profession (Law Practice Entities) Rules 2015, law firms were not permitted to share, occupy or use premises with unauthorised persons unless approval is granted.47

IV. Dispute resolution innovation

Three examples of innovation in dispute resolution that are taking root in Singapore include online dispute resolution (“ODR”), simplified civil processes, and streamlined processes at the Employment Claims Tribunals (“ECTs”).

---

41 The Qualifying Foreign Law Practice scheme is presently not open for application: see ibid.
47 Legal Profession (Law Practice Entities) Rules 2015 (Cap 161) r 81(1).
The use of ODR is currently being studied by various dispute resolution bodies. For example, the State Courts are looking into using ODR for personal injury disputes arising from road traffic accidents while the Family Justice Courts may adopt it for maintenance disputes. In July 2018, the State Courts concluded a public tender for an ODR system while the award for an ODR system for the Ministry of Manpower ("MOM") is currently pending. The Singapore Mediation Centre ("SMC") started a pilot programme for ODR in April 2018 by working with industry partners with a pool of cases to resolve. As of November 2018, one case has been resolved successfully. The SMC reports that ODR is particularly useful in acrimonious situations when parties do not want to be in the same room and involve issues in which a low amount is being claimed. In addition, parties must be comfortable with using technology. Two key challenges presently faced are: getting mediators trained to carry out ODR; and encouraging parties to try using mediation as a form of dispute resolution.

In 2015, the Community Disputes Resolution Tribunals (“CDRT”) were launched to provide individuals an accessible and efficient forum for resolving neighbour disputes in relation to the statutory tort of interfering with the enjoyment or use of places of residence after non-litigious alternatives have been exhausted. Simplified forms in plain English are used by the plaintiff and respondent and service methods are simplified to include personal service, leaving and posting CDRT documents at the opposing party’s residential address. Costs are kept low by generally getting the individuals to conduct their own cases and having a flat fee for the plaintiff to file a claim. During the process, the Judge leads the case management and can order parties to attend counselling or mediation. In the event that counselling and mediation are not successful in resolving the dispute, the Judge may order for the payment of damages, an injunction, a specific performance, and/or an apology to be made. From 2018, CDRT claims are required to be submitted online through the Community Justice and Tribunals System ("CJTS"). Through the CJTS, the process of CDRT and Small Claims Tribunals claims are made paperless. This platform allows parties to, among other things, file their claims, make payments, negotiate for settlement, and undergo mediation online.

In 2017, the ECTs were established to adjudicate on statutory and contractual salary-related claims from employees such as unpaid salary, overtime pay, and maternity benefits; this was...
a function previously carried about by the MOM. Before filing a claim at the ECTs, parties must first seek to resolve their dispute through mediation at the Tripartite Alliance for Dispute Management – only when mediation is unsuccessful, the dispute will be referred to the ECTs.\(^{55}\)

After hearing the dispute, the ECTs may order one party to pay money to the other party, dismiss the claim in whole or in part, and/or require one party to pay costs to the other.\(^{56}\) From January 2019, applicants may also file their claims online instead of physically going to the ECTs.\(^{57}\) In its first year of operation, the ECT reported that three out of four cases were resolved at the case management stage, without needing to proceed to a full hearing.\(^{58}\) From April 2019, following amendments to the Employment Act (Cap. 91), the ECTs will be empowered to adjudicate wrongful dismissal claims, a function which is currently carried out by the MOM.\(^{59}\)

Following the streamlined process, in the event that wrongful dismissal claims and salary-related claims arise concurrently, parties will be able to resolve both issues at the ECTs.

V. **Business innovation**

Forms of business innovation that recently emerged include alternative modes of legal service delivery, varying engagement models, and extra-legal services offered concurrently with legal services.

Firstly, more avenues of obtaining legal services, as opposed to visiting a law firm, have been created. For entrepreneurs, start-ups and small-and-medium enterprises, one such avenue is First Counsel. First Counsel provides basic legal support such as company formation, creation of legal documents, and engagement of legal professionals.\(^{60}\)

Another form of legal service delivery is marketing legal services through online marketplaces such as Asia Law Network and myLawyer. Lawyers registered on these platforms may be matched with clients based on the formers’ areas of specialisation. On Asia Law Network, the user first narrows down the specific issue that he is seeking advice for. Thereafter, he can select the relevant lawyer, provide the relevant facts, and input specific questions. Within one to two days, Asia Law Network will schedule the user for a flat-fee, 15-minute consultation with the

---


\(^{56}\) Employment Claims Act 2016 (Act 21 of 2016) s 22(1).


\(^{60}\) First Counsel website, “About Us” [https://www.firstcounsel.co/about-1] (accessed 07 January 2019).
selected lawyer. In offering its services, Asia Law Network hopes to help individuals get relevant information through its platform to make an objective assessment before engaging a lawyer.\(^61\)

Innovation in legal service delivery are also emerging from law firms. For example, some firms such as Consigclear LLC and 6sLaw LLC are providing “outsourced in-house legal services. Such services are said to be particularly useful for businesses in situations where: a lawyer is needed for a particular period or reason; the business’ in-house legal team needs extra resources; the business does not require a full-time in-house counsel; or the business does not have a legal team in Singapore.\(^62\)

The establishment of Rajah & Tann Technologies Pte Ltd ("RTT") is an initiative to create a new business model to offer more than just legal services to clients. Following its acquisition of LegalComet, RTT offers technology-enabled services such as electronic discovery, cybersecurity, and data breach readiness and response to its clients and member firms of the Rajah & Tann Asia network (“R&T”).\(^63\) As a result, clients of R&T will be able to obtain legal and technical services conveniently – the technical service through RTT and the legal service through one of the law firms of R&T. Furthermore, the services received by clients will be subject to legal privilege and confidentiality.

Finally, in response to the push for law firms to adopt legal technology, Bizibody Solutions, a legal technology consultancy business, seeks to fill the niche of advising law firms on implementing legal technology, in addition to assisting lawyers to start their practices.\(^64\)

VI. Education innovation

Initiatives for more innovative education are being carried out by the law schools and Singapore, as well as SAL.

More technology-related courses such as are being offered as electives. This includes Artificial Intelligence, Information Science & Law and IT Law in NUS,\(^65\) and Introduction to Law & Technology as well as Privacy and Data Protection Law in SMU.\(^66\)

More avenues to learn about legal technology are being created outside the classroom. For example, NUS has held a legal technology competition to improve access to legal aid\textsuperscript{67} and SMU has organised workshops that teach computation thinking and programming. Also, students can attend events organised by FLIP such as a recent blockchain conference jointly organised with SUSS\textsuperscript{68} without charge.

New programmes are also being launched. For example, the SMU School of Law will begin offering a joint undergraduate degree in 2020 with the School of Information Systems while the SMU Academy, targeted at working professionals, will be offering a list of technology law courses, covering areas such as blockchain and smart contracts, and big data and AI.

For the legal industry, SAL’s Legal Industry Framework for Training & Education (“LIFTED”) provides a platform for legal professionals to engage in continuous learning. Through LIFTED, participants can enrol in workshops offering training in areas such as e-litigation and take online courses covering fundamentals such as using Microsoft Excel for legal operations.

VII. Other forms of innovation

There are also initiatives to improve access to justice. Recognising that more people are visiting Singapore Statutes Online, the website hosting Singapore’s legislation, the AGC started the “Plain Laws Understandable by Singaporeans” project to simplify the language used when drafting laws, while also taking into consideration that Singaporeans typically get information through digital, as opposed to print platforms. Therefore, efforts are being made to keep sentences within 45 words so that they would fit on most mobile devices, and simpler words, rather than archaic ones such as “heretofore”, are used when drafting laws.\textsuperscript{69} In 2017, the AGC set up the Legal Technology & Innovation Office to enhance its technology expertise. Some of its endeavours include using text analytics to improve high-volume information review, establishing “Sprint Labs” with legal divisions to pilot new technologies, and introducing new software applications to solve existing problems.\textsuperscript{70}

A new system will also be implemented by the Legal Aid Bureau, the office that provides legal assistance to low-income Singaporeans for civil cases, to improve the process of assigning lawyers to cases. From 2019, assigned lawyers will be able to browse and select cases that they


would like to take on and applicants will also be able to track their application through the new platform.\textsuperscript{71}

The Judiciary has also established an Office of Transformation and Innovation to look into matters such as making better use of data, reducing paperwork and physical meetings, and exploiting emerging technologies.\textsuperscript{72}

\section{VIII. Conclusion}

Legal innovation in Singapore has been largely driven by a top-down approach. Ranging from initiatives such as FLIP to create a vibrant ecosystem for legal innovation and the numerous calls by Menon CJ for the legal industry to embrace technology;\textsuperscript{73} moving forward, we can likely expect to see more innovation emerging in many respects.

More innovation in technology is likely to occur as more conversations about legal innovation and collaborations are facilitated by FLIP. FLIP’s first cohort saw 23 entities, including law firms, legal technology companies, and corporate counsels, enrol in a series of its activities.\textsuperscript{74} As of October 2018, participants of FLIP have expanded to include international law firms such as Linklaters Singapore Pte Ltd and PwC Legal International Pte Ltd.\textsuperscript{75} Through activities such as its monthly open house,\textsuperscript{76} FLIP creates an environment where legal innovation can take place through collaborations, rather than individual efforts, by gathering lawyers, technologists and other interested parties. In this regard, FLIP is also working to extend its efforts beyond Singapore to reach out to the wider legal industry globally.\textsuperscript{77}

With regard to dispute resolution, given the various efforts to pilot ODR, it can be expected that more disputes will be heard online in order to lower costs and simplify the process for parties. According to Menon CJ, Singapore could be witnessing motor accidents disputes being addressed online as early as end-2019.\textsuperscript{78}

\begin{flushleft}


\textsuperscript{73} See, eg, Menon CJ, “Change and Constancy – Admission of Advocates & Solicitors” (30 August 2018) \texttt{<https://www.supremecourt.gov.sg/Data/Editor/Documents/Mass%20Call%202018%20-%20Address%20by%20the%20Chief%20Justice.pdf>, at paras 18 – 21 (accessed 07 January 2019)}.


\textsuperscript{75} Ibid.

\textsuperscript{76} FLIP website, “The FLIP Programme” \texttt{<https://www.flip.org.sg/get-involved> (accessed 07 January 2019)}.

\textsuperscript{77} Noemie, TeamFLIP, \textit{supra} n 74.

\textsuperscript{78} Menon CJ, “Response by Chief Justice Sundaresh Menon – Opening of The Legal Year 2019”, \textit{supra} n 72, at para 58.
\end{flushleft}
UNITED STATES

Snapshot by Mark Cohen

I. The current state of the US legal market

The US legal market is the world’s largest by annual spend and constitutes nearly half of the trillion-dollar global legal industry. US-based companies spend 166% more of their revenue on legal spend than their global counterparts. While the US economy is growing, the legal industry has registered a modest decline of 0.07% as recently as May 2019, and the sector has not seen a material change in job totals since 2016 according to Bureau of Labor Statistics figures. In fact, the number of legal jobs is approximately 40,000 less than the pre-global financial crisis totals in 2007.

The foregoing data suggests a stagnant market, but that is a misleading conclusion. The US legal market is experiencing a period of unprecedented change. It is transforming, not contracting. The very definition of “legal work” is in flux. That’s because clients—not lawyers—now determine what is legal work, when licensed attorneys are required, on what basis, collaborating with what other resources (machines and humans), from what delivery model, and at what price.

The lawyer-centric legal delivery paradigm dominated by partnership-model law firms with economic models built on leverage, labor-intensity, a rigid hierarchical structure, a lack of

---

1 Mark A. Cohen is the CEO of Legal Mosaic, a global legal business consultancy. He is a regular Forbes contributor, international keynote speaker, and has taught at several leading global law schools. Mark serves as the Singapore Academy of Law/LIFTED inaugural Catalyst-in-Residence and as the Global Partner Editor-in-Chief of its forthcoming Report on skills required of legal professionals in the digital age. Mark spent the first 25 years of his distinguished career as an internationally acclaimed civil trial lawyer. He was a highly-decorated Assistant United States Attorney (Civil Division), BigLaw partner, founder and managing partner of a multi-city national litigation boutique, outside General Counsel, and federally-appointed Receiver of a global aviation parts company, repatriating in excess of $100M. Mark is widely recognized as a global thought leader in the legal industry.


3 Ibid.


5 Supra n 2.


diversity, and an insular outlook is in its sunset. It is morphing into a global legal marketplace with new legal providers that are inter-disciplinary, client-centric, tech-enabled, increasingly automated, “right-sourced,” flat, agile, diverse, and better aligned with legal consumers. These providers are often referred to as “Alternative Legal Service Providers” even as they are already mainstream, performing more and increasingly complex work once exclusively sourced to law firms. The new model providers are rapidly capturing increasing market share. The rapid pace of business digital transformation will accelerate the process of legal modernization. Migration of work to client-centric providers offering new skillsets is projected to accelerate as the industry struggles to meet the elevated demands of legal consumers, especially in the corporate sector.

The convergence of the global financial crisis of 2007, astonishing advances in technology, and globalization has produced a steadily accelerating change in the US legal market and beyond. Corporate consumers—not incumbent partnership-model law firms—and service providers with new delivery models are driving marketplace change. Corporate (in-house) departments and a cadre of legal service providers are in the vanguard of legal experimentation and innovative model delivery/adoptive. Legal “practice” is shrinking, and the business of delivering legal services—everything other than regulated practice activities—is expanding. This is the emerging US—and global—legal market.

A synopsis of four key market drivers yields a more balanced overview of the US legal industry:

(a) Regulatory framework;

(b) New technologies;

(c) New business models and processes; and

(d) Legal education and training.

It also provides a clearer understanding of rapidly accelerating industry transition that will materially alter the topography of the legal landscape.

---


II. Self-regulation: a tale of two markets

The self-regulated US legal industry has resisted efforts to liberalize restrictions on ownership, management, and institutional capitalization of law firms. It has rejected regulatory reform — akin to the UK and Australia — three times since the turn of the Millennium. US resistance to “alternative business structures” has been a success at the regulatory level but a failure in the marketplace.\(^\text{13}\) The Clearspire “two-company model” -- separating the practice of law from the delivery of legal service -- has provided a roadmap for circumnavigation of most US regulatory constraints affecting the corporate sector and has been followed by a slew of new-model legal service providers.\(^\text{14}\) The corporate segment is now functionally reregulated, and reports of unauthorized practice of law are exceedingly rare. The retail segment, however, continues to be the battleground for unauthorized practice. This adversely impacts access to legal services for the majority of Americans and their businesses.

The bulk of US legal spend is attributable to a relatively small segment of its population and business community. The US, not unlike other mature markets, is a tale of two legal marketplaces: the corporate segment sustained by large corporations and the retail sector focused on individuals and small business. As Derek Bok, an attorney and former President of Harvard University famously noted decades ago, “There is far too much law for those who can afford it and far too little for those who cannot.”\(^\text{15}\)

The vast percentage of individuals as well as small and mid-sized enterprises (85% and 65% respectively) in the United States are denied meaningful access to legal services, even when they are desperately needed. This phenomenon, often described as the “access to justice crisis” is an existential threat to the profession, the rule of law, and democracy itself. The high cost of legal services typically places them beyond the reach of all but large corporations and wealthy individuals. Law’s exorbitant cost is tied to its traditional labor-intensive, lawyers-do-all-the-work and determine how much is needed approach to their craft. It is generally tepid in its embrace of technological advances that have enabled new delivery models that drive down legal cost, make it more efficient, and create closer provider/consumer alignment.\(^\text{16}\) Law also tends to resist the widespread use of data to predict and mitigate risk, gauge performance, and monitor customer satisfaction.\(^\text{17}\)


Self-regulation—especially in the retail market segment—contributes to the high cost of legal services. Regulations designed to “protect” the public from the “unauthorized practice of law” perpetuate the profession’s hegemony over the delivery of legal services. This is especially so in the retail legal segment where new delivery model providers like LegalZoom, Rocket Lawyer, and other tech-enabled, capitalized companies that offer self-serve and “low-touch” lawyer services are often met with regulatory pushback in the form of “unauthorized practice of law” claims. These claims are extremely expensive to defend. Each State has its own practice/unauthorized practice rules that are consistently vague and are vigorously enforced in the retail market segment but almost never in in the corporate sector. LegalZoom, a tech-enabled, well-capitalized legal services provider with more than 7 million customers and a sky-high net promoter score has successfully defended nearly a dozen unauthorized practice claims. The company won them all but would have been put out of business but for its deep pocketed institutional investors and its tremendous popularity and market penetration.

California is in the midst of inviting public comment to liberalize its unauthorized practice rules by carving out exceptions for improving access to justice. A handful of other States are taking similar measures designed to recognize the important impact that technology, capital, and new delivery models have in delivering legal services. These steps towards regulatory liberalization not only recognize the acute need to address access to justice but also acknowledge several marketplace realities. That list includes: legal services need not be delivered exclusively by lawyers and traditional law firms; legal practice and legal delivery are no longer synonymous; and self-regulation has stifled competition in the world’s largest legal market where those that can afford legal assistance and those that cannot are equally keen to have client-centric, efficient, easily accessible, and cost-effective legal service options.

III. Technology

Last year saw an astonishing 713% growth in legal technology investment. The US legal industry is awash in all things “legal tech.” Some sources list more than 1,000 legal tech companies, an indication of the tech fever pitch and a harbinger of a “thinning of the herd.”

There are already signs of rapid consolidation within the tech sector, a sign of its maturity. Legal tech incubators and accelerators are sprouting up in the US and around the globe. There is a proliferation of legal tech events, a plethora of blogs devoted to it, and articles on artificial intelligence, blockchain, and other potentially game-changing technology platforms are among the most widely-read legal industry topics.

The rapid adoption of artificial intelligence by the in-house community confirms its push to automate high volume/low value tasks to extract more value from lawyers. Even the Academy has jumped on the tech bandwagon, offering an ever-expanding array of tech-related courses, workshops, and externships. The tech fever has reached the point where academics debate whether law students should be required to learn how to code.

There’s good reason for the legal tech stampede. The impact of technology on the way we live, work, and conduct business is pervasive. The legal profession has been slow to embrace technology for cultural, competitive, and economic reasons. Law firms are starting to pay for this, ceding business in-house and/or to new delivery models—notably enterprise legal service providers—that meld technological, business, and legal expertise. But not all traditional firms are standing in place. A cadre of prominent firms are investors in a tech app platform start-up called Reynen Court. Launched in late-2018, Reynen will provide law firms streamlined access to an array of tech tools that will include artificial-intelligence infused apps that can design smart contracts and perform other tasks. This evidences a growing recognition—even among elite traditional partnership-model firms, that technology is changing the way legal services are delivered and that legal services are now at the intersection of legal, business, and technological expertise and delivery capability.

The US and global legal communities continue to regard technology as a “disruptor” of the industry. Many in the industry are engaged in a quest to find the technology platform or app that will be law’s silver bullet. New models, not technology, will transform the legal industry. Technology is a means, not an end, for improved legal access and delivery. Technology has

---

been a key driver of legal delivery’s paradigm shift from brute force labor to automation and value maximization of resources. It has replaced repetition, “reinventing the wheel” with routinization, automation, and institutional knowledge. IT has accelerated globalization, collaboration, and, a host of other operational and cultural changes in legal delivery. It has eroded the side-effects of legal hubris, anti-competitive regulation, and practice rules by exposing the absurdity of the profession’s “lawyer and ‘non-lawyer’” classification. But in the end, it is people—and the new delivery models they construct—enabled by technology—that will change the industry. The culture of the industry that must also change. Law is no longer solely about lawyers. Tech is not solely about techies. Law in the digital age requires cross-disciplinary collaboration,31 and diversity in the broadest sense—skillsets, geographies, gender, generation, and perspectives.32

Law’s preoccupation with technology diverts attention from its real value: to enable new business models to better align with and serve customer needs. Law’s focus should be on its objectives—what can lawyers/legal providers do to solve the industry’s wicked problems and what kind of business structures would facilitate that? This requires a cultural shift within the profession, an appreciation that law is an industry of which the profession is a part but by no means the whole. It also demands that legal consumers—not lawyers—are the focus of legal service business models.

Technology is not a panacea for consumer challenges. To be meaningful, technology must be relevant to a material client use-case. Legal tech holds tremendous potential, but its efficacy is a footnote to the culture it operates in and the business models from which it is deployed. Tech alone will not drive legal transformation; new business models will. Those models will extend management and compensation parity beyond licensed attorneys to tech and business professionals. Failure to do that has a chilling effect on the impact of technology and process. Artificial intelligence, blockchain, enterprise platforms, and software will not replace lawyers, but these tools will change how, when, for whom, and at what price they are engaged. It also means that “knowing the law” is a baseline, not an end-game for lawyers. It must be augmented by additional skills—business basics, analytics, project management, “people skills,” and collaboration, among others.

Technology has also accelerated legal delivery’s cultural transformation from a sole-source, clubby, homogenous, tradition bound, pedigree-centric, labor-intensive parochial guild into something entirely different. The legal industry is morphing into a diverse global marketplace where legal practice—differentiated skills and expertise possessed by some lawyers—is

separated from “the business of delivering legal services.” Practice is shrinking and delivery is expanding—in no small part because technology and business expertise are reshaping the contours of practice and identifying, then implementing, innovative delivery models. These new models operate at the intersection of law, technology, and business; promote efficiency; predict risk; gauge value; reduce cost while mitigating risk; and “right-source” resource to task. Some examples follow.

IV. New business models and processes

New business models are the key to innovation, not new technology. That’s the conclusion of a recent Wall Street Journal CIO article that draws from business guru Mark Johnson’s new book “Reinvent Your Business Model.” Johnson offers several cogent observations on business transformation that can be applied to the delivery of legal services:

(a) A business model is “a representation of how a business creates and delivers value for a customer while also capturing value for itself, doing so in a repeatable way;”

(b) Successful business models have four interdependent elements—customer value proposition, profit formula, key resources, and key processes;

(c) Most successful new business models come from startups, not well-established companies;

(d) New technology alone, no matter how transformative, is not enough to propel a business forward;

(e) The new business model, enabled by technology, is key to an organization’s success or failure; and

(f) Many successful companies are risk averse and reluctant to venture into “white spaces” (new opportunities) that require new business models and skillsets.

A handful of new-model service providers are applying these principles to the legal industry. Their expanding influence and market share is described by Thomson Reuters in its second biennial “Alternative Legal Service Study.” The inaugural Report popularized the “alternative legal service provider” (ALSP) moniker to describe a new breed of legal providers with different


34 Supra n 9.
economic models, structures, expertise, and DNA than traditional law firm partnerships.\textsuperscript{35} The study separates ALSP’s into different categories: captive and independent legal process outsourcers (LPO’s), managed legal services, staffing companies, and “accounting and audit firms.” The latter group refers principally to the Big Four, the collective name given to Deloitte, Ernst & Young, PricewaterhouseCoopers, and KPMG, the world's four largest professional services networks. Each operates under a unified brand that ranks at or near the top of the most respected global professional service providers, has 9-12 times the revenues of the world’s top-grossing law firms, and employs thousands of attorneys—not to mention many more legal professionals. Not all ALSP’s are created equal.

What is most significant about ALSP’s—especially the Big Four—is that they are reshaping the boundaries of “legal” services and providing the expertise, skills, experience, and tools required to satisfy clients/customers. In the case of the Big Four, they also provide “brand security” derived from long, deep-rooted relationships with the corporate C-Suite. All this is emblematic of a changing legal industry—the by-product of the complexity and speed of business, shifting consumer needs, new skillsets and elevated expectations of providers, and new buy dynamics. Law is morphing from a lawyer-centric guild to a customer-centric marketplace.

The genesis and evolution of ALSP’s is unmet legal consumer demand for value-driven, efficient, cost-effective, data-reliant, predictive, proactive, interdisciplinary solutions to customer challenges. Law firms have largely continued to focus on legal expertise—practice—even as legal delivery—the business of law—has become a three-legged stool supported by legal, business, and technological capability. ALSP growth reflects two key market trends:

(a) An opportunity for tech and process-enabled, well-capitalized, corporatized, digital, client-centric delivery models to provide managed “business of law” legal services with augmented expertise, efficiency, value, and measurable results that law firms have typically failed to deliver; and

(b) Growing willingness of legal consumers to engage a new suite of providers for tasks/matters traditionally the province of law firms.

Leading ALSP’s are agile, proactive, fluid, able to scale, aligned with consumers, and constructed to deliver at the speed of business.\textsuperscript{36} They are not tech companies \textit{per se} but deploy capital to invest in technology to scale and to augment existing infrastructure, “right-source” work to the lowest level competent human resource and/or machine, and “up-task” lawyers.


and other professionals and paraprofessionals to drive client impact beyond the legal function to the enterprise.

Legal consumers—not law firms—now hold the industry’s reins. Legal buyers, especially a growing number of General Counsel and new-model legal service providers, are driving legal innovation. They are steering the industry away from its lawyer-centric, practice-focused, labor-intensive past towards a multidisciplinary, market-driven, consumer-oriented delivery model that uses technology and a wider array of human resources to solve challenges that raise legal issues.

General Counsel now focus on problem solving, not on whether its source is the corporate legal department, law firm, legal department, or some combination. They are collaborating more and in different ways to meet the challenges of expanding portfolios, responsibilities, new risks, and C-Suite mandates of year-over-year operational improvement. DXC’s collaboration with UnitedLex is both case study and foreshadow of legal delivery in the digital age. 37 There is a growing sense that the zero-sum, proprietary legal industry can and must collaborate to satisfy the demands of legal consumers.

V. Legal education and training

US law schools, with few exceptions, are encountering convergent challenges that include: financial stress, intensifying competition, declining applicant pools, legacy faculty cost and cultural burdens, exorbitant tuition, an average education debt of US$144,550. per law graduate (a small portion is attributable to undergraduate debt) and a tight legal job market. 38 They are also confronting a growing industry perception that they fail to provide practice training for graduates, even as fewer lawyers will engage in pure practice careers. Many of today’s graduates will concentrate on the business of delivering legal services, and that requires leveraging traditional legal training and augmenting it with new skillsets. US law schools rarely teach these new skills that include: project management, data analytics, business basics, understanding how technology is utilized to streamline and scale legal delivery, client management, and personal brand building to cite a few.

There are a legion of explanations for law school misalignment with the needs of the marketplace: complacency, 39 detachment from the University—notably the business, engineering, computer science, and mathematics schools— as well as the broader legal

39 Harrison Barnes, "An adjunct law professor: to be or not to be", Law Crossing <https://www.lawcrossing.com/article/8022/An-Adjunct-Law-Professor-To-Be-or-Not-to-Be/> (accessed 30 July 2019).
ecosystem and business community, faculty composition/hiring criteria, the American Bar Association’s ineffective law school accreditation oversight,\textsuperscript{40} and absence of accountability and performance metrics—especially student outcomes,\textsuperscript{41} and self-regulation.\textsuperscript{42} Law schools are an island that has become increasingly detached from the broader legal mainland.

Many in the Academy will take exception to the foregoing, but the data supports this stark general assessment of American legal education.\textsuperscript{43} Several law schools, particularly lower-ranked ones, are taking aggressive steps to modernize their curricula and to augment traditional doctrinally-based courses with experiential learning that includes externships, internships, clinics, and colloquia. Adjunct professors, many of whom are practicing lawyers with “real-life” experience, are increasing in numbers (in part because they are cheap labour), if not in academic influence. Still, the gap between what today’s law graduates need to be competitive in the marketplace and what law schools provide is wide.

A similar skills gap exists for lawyers in the early and mid-stages of their careers. Many late-stage lawyers elect to pass on investing in the cultural, temporal, and financial commitment to upskill prior to retirement.\textsuperscript{44} A cottage industry of executive education courses offered—at considerable cost—by leading law and business schools as well as a handful of well-branded consultancies, has sprung up. These programs typically focus on leadership skills, management, and other “soft skills” that cater to the higher echelon of the profession. There is a dearth of upskilling opportunity for the rank-and-file within the profession. Law’s skills gap will become even more acute as business demands that digital transformation principles are applied to the legal function.

If the legal Academy does not take the lead to solve the legal industry’s skills gap who will?\textsuperscript{45} Short answer: Government, the private sector, and a handful of academic institutions that have forged strong marketplace ties and tailor their curricula to its needs. Here are some examples. Singapore is taking bold, sweeping steps to modernize the legal industry domestically, throughout the ASEAN region, and beyond. Singapore is a global leader in digitization, and it has tasked the Singapore Academy of Law (SAL) to apply digital principles to the legal function.

\textsuperscript{44} Joel A. Webber, “Managing Legal – Cut your company’s legal spending and prevent legal problems”<https://www.controllingcorporatelegalcosts.com/> (accessed 30 July 2019).
function. SAL is galvanizing all segments of the legal ecosystem in this effort—Government, the judiciary, regulators, business, the Academy, and international thought leaders. One of SAL’s many noteworthy initiatives is the LIFTED (SAL’s educational arm) Global Partners Initiative, a global, diverse, multidisciplinary group of thought leaders and doers charged with producing a white paper detailing key skillsets for all legal professionals around the globe. This will serve as a roadmap for global legal education and training upon its issuance in mid-2020 and beyond.

The private sector is beginning to address the legal industry’s skills gap. DXC Technology ("DXC") and UnitedLex ("ULX"), collaborators in a ground-breaking enterprise legal services agreement, have been inundated by requests from General Counsel to share their digital journey. Building off DXC’s digital transformation centers and UnitedLex’s global infrastructure and UnitedLex Academy, the companies are planning to launch the Legal Digital Exchange ("DLX"), a unique, business-to-business digital legal community and training center. DLX is designed to apply digital transformation and experiential training techniques to the legal function to solve real-world, high-stakes business challenges in real-time. A formal announcement will be forthcoming this Fall.

The Corporate Legal Consortium ("CLOC"), The Institute for the Future of Law Practice (IFLP), and LawWithoutWalls are three examples of market-aligned, client-centric, legal upskilling programs that have successfully bridged the gap between the marketplace and the Academy. A handful of international law schools including Bucerius (Germany), IE (Spain) and the soon-to-launch Ryerson(Canada) meld law with business and technology, take a global approach, have faculties with industry experience, and collaborate with thought leaders and other leading universities from around the world. US law schools would be wise to emulate them.

VI. Conclusion

The US legal market receives outsized attention because of its size, share of global spend, and innovative reputation in other industries. The US has much to learn from other legal markets — especially in education, training, regulatory reform, and alignment of law with existing clients, those in need of legal services, and society. Law is no longer provincial by design; legal practice and the idiosyncratic rules and practices created by lawyers to thwart competition is now part of the business of delivering legal services. Lawyers can find precedent among...
physicians who are now part of healthcare delivery. Law, like medicine and other professions and business, is being transformed by technology, new delivery models, and new skillsets. This provides an opportunity for the global community to collaborate as never before to solve wicked challenges in the legal sector and beyond.
acknowledgements
ACKNOWLEDGEMENTS

The editorial team is grateful to The Honourable Justice Lee Seiu Kin and Professor Goh Yihan (Dean, Singapore Management University School of Law) for their special support for and interest in this report. Further, this report would not have been possible but for the logistical support of the Singapore Academy of Law and a much-appreciated research grant extended by the Singapore Judicial College.

We thank the following individuals for their contribution:

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul Neo</td>
<td>Chief Operating Officer, Singapore Academy of Law</td>
</tr>
<tr>
<td>Melissa Goh</td>
<td>Deputy Director, Singapore Academy of Law</td>
</tr>
<tr>
<td>Noemie Alintissar</td>
<td>Programme Manager, Future Law Innovation Programme, Singapore Academy of Law</td>
</tr>
<tr>
<td>Jameson Dempsey</td>
<td>Director, Legal Hackers</td>
</tr>
</tbody>
</table>

Chapter Contributors

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eric Chin</td>
<td>Principal, Alpha Creates</td>
</tr>
<tr>
<td>Graeme Grovum</td>
<td>Principal, Alpha Creates</td>
</tr>
<tr>
<td>Brian Tang</td>
<td>Founding Executive Director, LITE Lab, Hong Kong University</td>
</tr>
<tr>
<td>Karthik Mahalingam</td>
<td>Graduate, Sloan Fellows MBA, MIT Sloan</td>
</tr>
<tr>
<td>Aditya Shivkumar</td>
<td>Co-Founder, Resolve Disputes Online</td>
</tr>
<tr>
<td>Alexius Miller</td>
<td>Founder and Principal, Alexius Miller Law</td>
</tr>
<tr>
<td>Clare Weaver</td>
<td>Founder and Principal Consultant, Putney Consulting</td>
</tr>
<tr>
<td>Maurice Rabb</td>
<td>Founder and Managing Director, LegalTechJapan.com; Legal Hackers Tokyo</td>
</tr>
<tr>
<td>Name</td>
<td>Position and Organization</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Narae Lee</td>
<td>Partner and General Legal Counsel, Block Crafters, Co. Ltd.</td>
</tr>
<tr>
<td>Haebin Lee</td>
<td>Researcher, Block Crafters, Co. Ltd.</td>
</tr>
<tr>
<td>Pang Jofan</td>
<td>Legal Hackers Kuala Lumpur</td>
</tr>
<tr>
<td>Sanjev Sharma</td>
<td>Legal Hackers Kuala Lumpur</td>
</tr>
<tr>
<td>Anton Pronin</td>
<td>LegalTech Director, Skolkovo Innovation Centre</td>
</tr>
<tr>
<td>Mark Cohen</td>
<td>CEO, Legal Mosaic</td>
</tr>
<tr>
<td>Min Chen</td>
<td>Vice President &amp; Chief Technology Officer, LexisNexis Asia Pacific</td>
</tr>
<tr>
<td>Rajesh Sreenivasan</td>
<td>Head, Technology, Media &amp; Telecommunications, Rajah &amp; Tann Asia</td>
</tr>
<tr>
<td>Faith Sing</td>
<td>Director, FSLAW LLC</td>
</tr>
<tr>
<td>Sabiha Shiraz</td>
<td>Deputy Executive Director, Singapore Mediation Centre</td>
</tr>
<tr>
<td>Murni Binte Mastan</td>
<td>Manager (Online Dispute Resolution), Singapore Mediation Centre</td>
</tr>
<tr>
<td>Jam Chee Chong</td>
<td>Deputy Director, Secretariat, Singapore Judicial College</td>
</tr>
<tr>
<td>Laura Collins Scott</td>
<td>Innovation Lead, Create+65</td>
</tr>
<tr>
<td>Rocio Perez</td>
<td>Head, Innovation and Knowledge Management, Dentons Rodyk</td>
</tr>
<tr>
<td>Sophie Mathur</td>
<td>Corporate Partner, Global Co-Head of Innovation Linklaters</td>
</tr>
</tbody>
</table>
The editorial team comprises the following individuals and roles:

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerrold Soh</td>
<td>Singapore Management University School of Law</td>
<td>Chief Editor</td>
</tr>
<tr>
<td>Josh Lee Kok Thong</td>
<td>Singapore Management University School of Law; Co-Founder, LawTech.Asia</td>
<td>Co-Chief Editor and Designer</td>
</tr>
<tr>
<td>Dylan Mah</td>
<td>Singapore Management University School of Law</td>
<td>Copy Editor and Author, Singapore Chapter</td>
</tr>
<tr>
<td>Rennie Whang</td>
<td>Singapore Management University School of Law</td>
<td>Copy Editor and Author, China Chapter</td>
</tr>
<tr>
<td>Tan Hui Xin</td>
<td>Singapore Management University School of Law</td>
<td>Copy Editor and Author, China Chapter</td>
</tr>
<tr>
<td>Jane Hon</td>
<td>Singapore Management University School of Law</td>
<td>Copy Editor</td>
</tr>
</tbody>
</table>