Conversation 7

Artificial Intelligence and Legal Services

ABSTRACT

This chapter investigates the impact of artificial intelligence on legal services. The questions addressed include: How will artificial intelligence change and improve the legal services offered by lawyers? How will the legal profession change as a result of the increased use of artificial intelligence? How will artificial intelligence change the way lawyers work and the way they organise, charge for and finance their work? A key insight discussed concerns the focus when thinking about the impact of artificial intelligence on the work of lawyers: concentrating on the 'tasks' that lawyers perform reveals more insights than asking whether artificial intelligence will destroy 'jobs'. Exploring the impact on 'tasks' of lawyers shows that they are both consumers and producers of services augmented by artificial intelligence. Focusing on 'tasks' also helps in understanding what kinds of activities are affected by artificial intelligence and which activities will be performed, at least for the foreseeable future, by human lawyers. The discussion also deals with the emergence of multidisciplinary teams and the success indicators for LawTech start-ups.

Speaker	Mari Sako
Comments	Masakazu Iwakura
Moderators	Felix Steffek and Mihoko Sumida
Concluding Conversation	Felix Steffek and Mihoko Sumida
Questions for Further Thought	Felix Steffek

THE IMPACT OF AI ON LEGAL SERVICES FROM AN ECONOMIST'S PERSPECTIVE

Steffek: Good evening in Tokyo and good morning in the United Kingdom. It is a great pleasure to introduce Professor Mari Sako, who speaks both English and Japanese. Since I do not speak Japanese, I am afraid, I must do my introduction in English. You will benefit from our excellent translation. I would like to use this opportunity to thank our fantastic translators, who have been with us during these sessions.

Professor Sako is Professor of Management Studies at Saïd Business School, the University of Oxford. She is an economist, not a lawyer, but very much interested in what LawTech people do. Her main areas of expertise include global strategy, comparative institutional analysis, which I think we will benefit from today, outsourcing, offshoring and professional services. That is another topic we are looking at today. Her most recent work has focused on business and professional services and on outsourcing. Her work has attracted the interest of policymakers, and she has, thus, been active in the field of policymaking. For example, her research on the globalisation of legal services and its impact on the profession has led to her becoming a member of the UK Legal Services Board Research Strategy Group. So, when Mari told me earlier that she did not know much about the law, it was not the truth (laughs). Mari, you have been engaging a lot with lawyers and you wrote excellent articles with lawyers, so at least you are friendly with lawyers. We can probably say that much. Mari, it is a great pleasure having you here – over to you.

Sako: Thank you very much for the kind introduction, Felix, and thank you so much, Professor Sumida, for giving me this opportunity to address a Japanese audience, which will be my first time for this particular topic. In the next hour, I will engage you in a conversation around several topics related to the adoption of artificial intelligence (AI), which are as follows. First, the impact of AI on what lawyers do. Second, the impact of AI on new business models that are being created in legal services. Third, opportunities for LawTech start-ups using some new business models to capture value in this field. And last, implications of AI adoption for the future of what lawyers and law firms do in the face of competition. I am very interested in your reactions, either as a law student or as a practising lawyer or even as a LawTech start-up entrepreneur. This is a global field and what is happening primarily in the United Kingdom and the United States, I think, surely will have implications on what is going to happen in Japan as well.

My interest in looking at the technology, AI, is very much predicated on understanding its impact on the legal profession, what lawyers do. I will focus on the combination or the alignment of new business models and organisational design to see what the exact impact on the legal profession is. As an academic trained in economics, I do empirical work, so much of what I am going to say is based on seventy-plus interviews that we have conducted with respondents not just in law firms, but also in in-house legal departments, alternative providers of legal services and LawTech start-ups. We conducted a survey, about a year ago, of solicitors in

England and Wales and we also interviewed start-up founders and investors comparing LawTech and FinTech as well in different locations, London, New York and San Francisco. This is joint work with some of my Oxford-based colleagues, some of whom are in the law school. Others are in the economics department, in the business school like me or computer scientists who are researching at the forefront of applying things like deep learning and natural language processing to improve legal reasoning. Thus, if you are interested in any aspects of that, please visit our project website.[1] I should also say that there are some people who are in the education department looking at what reforms there should be for the content of the education and training for future lawyers. Something like the present conversation series would certainly be listed as a prime example of what we should be doing.

TASK-BY-TASK ANALYSIS IS IMPORTANT FOR UNDERSTANDING THE IMPACT OF AI

Sako: With that, let me go straight to understanding the impact of AI on lawyers' work. I am going to focus on the notion of an AI-enabled legal service delivery pipeline, which is basically a series of steps that you need to take if you would like to produce and deliver legal services which are enabled by AI. Firstly, I do not think I need to dwell too much on defining what AI is. AI obviously automates tasks ordinarily requiring human intelligence and the use cases in legal services are quite vast and varied, ranging from things like contract analytics to due diligence in M&A to litigation support and legal research. There are different branches of AI, in particular rule-based top-down thinking around expert systems on the one hand, and a more bottom-up, data-based approach focusing on machine learning. The current phase of interest in AI is very much driven by machine learning with lots of computing power and data, enabling the widening and deepening of the application of AI in various domains, including legal services.

AI technology has two effects on what people do and it is important here not to think about jobs, but tasks. A job can be broken down into separable tasks and it is those tasks which are subjected to an AI impact. First, AI substitutes or replaces humans in some tasks, and I will elaborate on what those are in a minute. Second, AI augments humans' work in other tasks. So, it is quite tempting to have a notion of the end of lawyers, which is the title of a book by Richard Susskind[2] where there is this evocative quotation about the fading away of the prominence of certain professions like blacksmiths, tallow chandlers and mercers. Richard's prediction is that lawyers might be going the same way, to fade in prominence. But I think it is

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[1] 'Unlocking the Potential of Artificial Intelligence for English Law' (*Faculty of Law, University of Oxford*) <www.law.ox.ac.uk/unlocking-potential-artificial-intelligence-english-law>, accessed 1 November 2023.

[2] Richard Susskind, *The End of Lawyers? Rethinking the Nature of Legal Services* (Oxford University Press, 2008). See also Richard Susskind and Daniel Susskind, *How Technology Will Transform the Work of Human Experts* (Oxford University Press, Updated Edition, 2022).
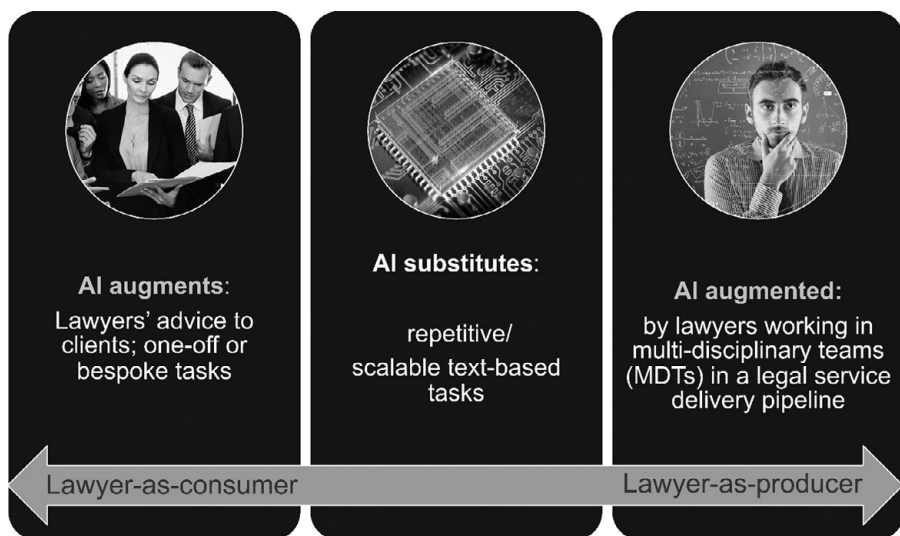
FIGURE 7.1 Three effects of AI on lawyers' work

important to remember that substitution is only part of the story, that AI obviously replaces some tasks that lawyers are doing, but augmentation is equally important. Here, AI augments lawyers' work so that lawyers become better lawyers because they can use the output generated by AI. In that sense, lawyers are consumers of AI. But it is also important to think of lawyers as producers of AI so that AI tools are augmented by lawyers.

Let me say a bit more about the distinction between these two aspects of augmentation by showing you Figure 7.1. In the middle, of course, AI substitutes certain tasks that lawyers are doing. These are the repetitive, scalable, text-based tasks. Here, you may have an image of litigious America in New York where young junior associates are canned into hotel rooms where there are piles and piles of paper that they have to go through to identify relevant text in a particular litigation case, for example. Equally important, to the left of this figure, is AI augmenting what lawyers do. As consumers of AI, lawyers can become better advisors to clients, particularly on one-off or bespoke tasks, and if it is about a bet-the-house litigation case or an important M&A matter, then this is what lawyers are really hired for. This task of advice is bespoke or customised to each client. The quality of that advice is advanced or enhanced due to the application of AI. The right of this figure, though, shows that some lawyers might become much more familiar with what AI is and could actually become producers of AI, in the sense of lawyers working within a multi-disciplinary team. I am going to use this word quite a lot. Multi-disciplinary teams (MDTs) are teams where lawyers work with other professionals like data scientists and project managers. As a team, they become an input into what I call a delivery pipeline.
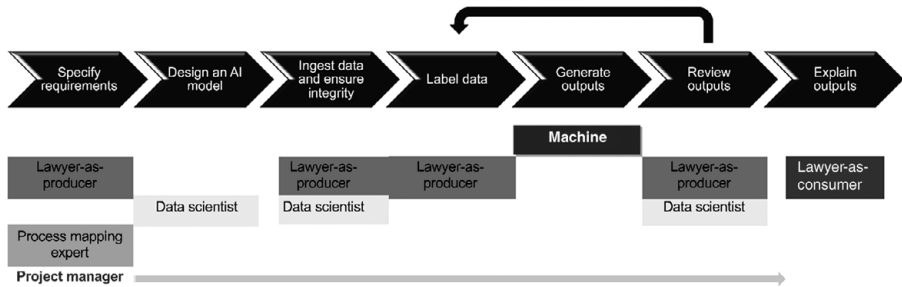
FIGURE 7.2 AI-enabled legal service delivery pipeline

LEGAL SERVICES AS ASSEMBLY LINES

Sako: The delivery pipeline can be thought of as an assembly line. I used to research the car industry. If you visit a car factory there is an assembly line where different components are assembled into a final car. In the past, maybe at the beginning of the twentieth century, a craftsman might have made an entire car on their own. That is where legal work or some of the lawyers' work is, even today. If you introduce an assembly line into what lawyers do, then you can think of it along the following different steps shown in Figure 7.2, while having machine learning like AI in mind.

First, we must specify the requirements. Let us imagine that this is a project which is to improve prediction about which contract clauses are more likely to cause disputes. For this, we need lawyers' input into defining the requirements of the project and then we need some input from process mapping experts and project managers to be able to define the process steps and the project management scoping. Second, we need to define and design an AI model for this project, and the data scientists' input here is essential. Third, we turn to choosing and ingesting data and making sure that there is integrity and security as regards such data. This again involves collaboration between lawyers as producers and data scientists. And then, of course, we need to label the data. Labelling used to be done by junior associates and paralegals, but now this is the work of a lawyer as a producer. Then, the only bit that is totally substituted and automated is the task of generating the output, which is going to be done by the machine. Once it reaches this point, we need some human input again to review the output. There is a bit of a recursive process here if you want to increase the prediction rate by improving the algorithm and thinking about adjusting the labels used. Ultimately, the prediction is used by lawyers as consumers to advise the clients.

In most of the steps, we have a collaborative setting of lawyers working as part of a team. We think of lawyers working with data scientists, process-mapping experts and project managers, as lawyers working as part of a MDT. This is the legal services delivery pipeline, which I hope is a notion that is not too strange to lawyers if you think about other industries like the car industry. I am not saying that this way of thinking would apply to every practice area or every kind of legal work that can be done. But I think that it can be applied to many more situations than a typical lawyer might think today.

SURVEY OF LAWYERS WORKING IN MDTS

Sako: Where can we find these kinds of MDTs? This can be explained using a survey that we conducted about a year ago, in collaboration with the Law Society of England and Wales. The survey asks individual solicitors about their use of LawTech, including, but not limited to, AI, and the kind of training that they have received to be able to use the technology. We distributed the survey online between November 2019 and January 2020, and we obtained 353 responses from qualified lawyers in England and Wales. We asked the respondents about where they worked. About two-thirds, 67 per cent, worked for law firms of various sizes, and 28 per cent worked in-house, inside business corporations. We also wanted to target alternative providers and LawTech solution providers, but the number of responses was not high enough from those categories. Hence, I am just going to compare the responses from those who worked for law firms and those who worked for in-house departments.

Lawyers who work in law firms are less likely to be working in MDTs than in-house lawyers. At the same time, AI deployment is associated with lawyers working in MDTs. Let me show you a few charts to back up that statement. Firstly, one of the questions that we asked in the survey was, 'Which types of specialist experts do you work with on a day-to-day basis?' Notably, as the question specifies, the parameter was everyday work and not just from time to time. We asked the solicitors to select all that apply. You can see that the top two, paralegals and other lawyers, would be lawyers just working with lawyers. But we also put down four separate other categories – legal project managers, process mapping experts, data analysts or data scientists and IT and legal innovation experts. These are emerging new job titles, some of which are used in this way, but there are lots of different labels being applied to what, in effect, are similar roles. Some of you might have heard of legal engineers or legal product architects. All these are new job titles emerging in the field. Those lawyers who only ticked the first two, i.e. those working only with paralegals or other lawyers, were considered not to be working in MDTs. Those who ticked any one of the other four were classified to be working in MDTs. Thus, it is quite a generous definition of MDTs because if you ticked any one of the legal project managers, process mapping experts, data analysts or IT/legal innovation experts, then you were considered to be working with a non-lawyer, if you like, and therefore part of an MDT.

CORRELATION BETWEEN MDT EXPERIENCE AND AI USE

Sako: With this classification, we tried to understand the incidence of working in MDTs for those working in in-house legal departments and those working in law firms. You can see from Figure 7.3 that 48.5 per cent of those who said that they worked in-house, were working in MDTs, whereas the fraction is 35.6 per cent for those working in law firms. Whilst the incidences are reasonably high in law firms, they are higher in in-house legal departments. I will address the possible reasons behind these figures a little later.

	In house legal dept	Law Firm	Grand Total
Other solicitors / lawyers	81.8%	90.3%	87.3%
Paralegals	41.4%	58.9%	53.0%
IT / legal Innovation experts	26.3%	21.6%	23.8%
Other	21.2%	13.1%	15.3%
Legal project managers	12.1%	10.2%	10.5%
Data analysts / data scientists	8.1%	2.5%	4.2%
Process mapping experts	6.1%	3.4%	4.2%

	Other	In house legal dept	Law Firm	Grand Total
	18	99	236	353
In MDT	50.0%	48.5%	35.6%	39.9%

*'Grand Total' includes all complete responses, including from respondents working at ABS and legal technology solutions providers.

FIGURE 7.3 Opportunities to work in MDTs, by organisation

	In house legal dept	Law Firm	Grand Total
Legal research	32.3%	25.0%	27.2%
Due diligence	12.1%	18.2%	16.4%
eDiscovery / eDisclosure / technology assisted review	13.1%	14.0%	13.3%
Regulatory compliance	10.1%	12.3%	11.6%
Contract analytics	8.1%	10.2%	9.6%
Other	10.1%	5.1%	7.1%
Fee-earner utilisation analytics and / or predictive billing	2.0%	10.2%	7.9%
Predictive analytics for litigation	1.0%	2.1%	2.0%

	Other	In house legal dept	Law Firm	Grand Total
	18	99	236	353

*'Grand Total' includes all complete responses, including from respondents working at ABS and legal technology solutions providers.

FIGURE 7.4 Usage of AI-assisted legal technology, by organisation

We also asked about the use of AI. We defined AI to include machine learning, expert systems and similar approaches. In Figure 7.4, you can see that apart from legal research, the rate of AI deployment is relatively modest. Similar results are also observed in other surveys which are conducted by other organisations, not just in the United Kingdom, but elsewhere, for example, by the American Bar Association as well.

Figure 7.5 looks at the use of AI by those working in MDTs as compared to the use of AI for the whole population. Whilst this is complex, please look at these two charts to compare and contrast the differences between these two groups. In the case of legal research, 33.8 per cent of lawyers who work in MDTs said that they were using AI, whereas for the whole sample, including lawyers working in MDTs and those who are not working in MDTs, only 27.2 per cent were using AI, which is lower than the former. A starker contrast is evident in due diligence where 40.5 per cent of lawyers in MDTs were using AI, whereas only 18.2 per cent of all lawyers were using AI. Thus, being part of an MDT is more common in-house than in law firms, and being in an MDT is correlated with the use of AI. Now, we cannot say a huge amount about causation here, but this correlation gives you some hint as to the kind of workplaces that are likely to accommodate the use of MDTs and that, in fact, appear to be facilitating the adoption of AI.

Use of AI–assisted legal technology, by organisation type

	In house legal dept	Law Firm	Grand Total
Legal research	32.3%	25.0%	27.2%
Due diligence	12.1%	18.2%	16.4%
eDiscovery / eDisclosure / technology assisted review	13.1%	14.0%	13.3%
Regulatory compliance	10.1%	12.3%	11.6%
Contract analytics	8.1%	10.2%	9.6%
Other	10.1%	5.1%	7.1%
Fee-earner utilisation analytics and / or predictive billing	2.0%	10.2%	7.9%
Predictive analytics for litigation	1.0%	2.1%	2.0%

Other	In house legal dept	Law Firm	Grand Total
18	99	236	39

*'Grand Total' includes all complete responses, including from respondents working at ABS and legal technology solutions providers.

Use of AI–assisted lawtech in MDTs, by organisation type

	In house legal dept	Law Firm	Grand Total
Legal research	38.1%	33.3%	33.8%
Due diligence	28.6%	40.5%	36.8%
eDiscovery / eDisclosure / technology assisted review	14.3%	26.2%	20.6%
Regulatory compliance	23.8%	21.4%	22.1%
Contract analytics	23.8%	31.0%	27.9%
Other	14.3%	19.0%	17.6%
Fee-earner utilisation analytics and / or predictive billing	9.5%	26.2%	20.6%
Predictive analytics for litigation	0.0%	7.1%	4.4%

Other	In house legal dept	Law Firm	Grand Total
9	48	84	141

*'Grand Total' includes all complete responses in MDTs, including from respondents working at ABS and legal technology solutions providers.

Annotations: 33.8% of lawyers in MDTs use AI in legal research, compared to 27.2% of all lawyers — Whole sample — 40.5% of lawyers in MDTs in law firms use AI for due diligence, compared to 18.2% of all lawyers in law firms — Sub-sample who are in MDTs
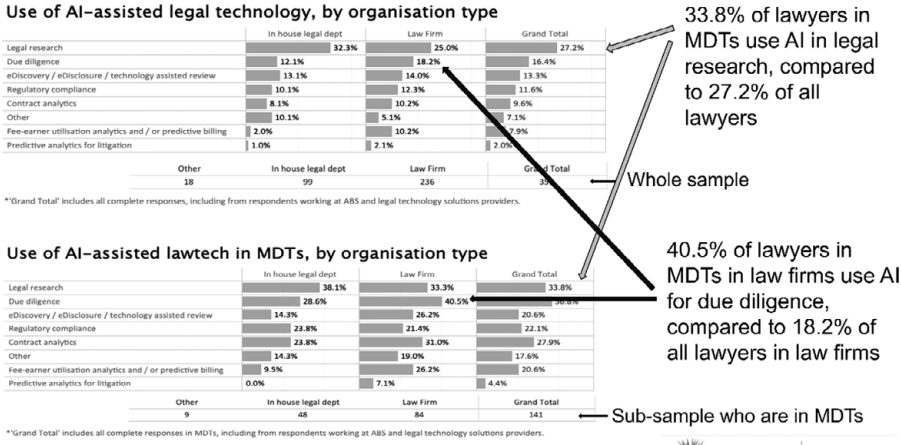
FIGURE 7.5 Usage of AI-assisted legal technology in MDTs, by organisation

Before I go to the next issue, I wish to remind you that we demonstrated the importance of MDTs for the AI-enabled legal service delivery pipeline. I am going to just pause here and see if there are any questions or any comments from you.

Steffek: Thank you very much, Mari. I find the differentiation that you made between tasks and jobs very, very helpful for the discussion. It is very helpful for your scientific research, but it is also helpful for discussions about the future of the profession. In my experience, these discussions are often overloaded or made difficult by the over-emphasis on job replacement. To give an example, I introduced to the students a competition that students in Cambridge had organised three years ago where they organised a competition between an AI and lawyers in London. The task was to predict the outcome of certain ombudsman procedures. A conference was organised to discuss the results. Very soon the conference was about job replacement. Also, the way the media reported on the event was dominated by the job-replacement issue and lawyers reacted very sensitively to the topic.

At the same time, I find your assembly line concept very helpful because it shows the other professions involved. It also, at the same time, shows that there are jobs created for other professions. While it shows that there is a replacement of lawyers in the output generation process, there are other people coming into the job market. If you look at it from a societal perspective, then it is not just about lawyers. Lawyers think that lawyers are terribly important, but there are also people who are not legal experts but are still key for access to justice.

POSSIBILITY OF AI JUDGES

Steffek: I would also like to raise a question that concerns legal decision-making. Your research focused on a group that perhaps one could call the advisors, external advisors and in-house advisors. With decision-makers, I mean people such as judges,

ombudsmen and arbitrators. A part of the discussion is whether AI may be replacing these decision-makers, the neutrals, perhaps we could call them. I just wonder whether you have a first take on what might be different about them. Compared with the advisors who are often on the side of one of the parties of a dispute, and who even have an incentive to gain competitive advantages over the other party using AI to have better information, the decision-makers are usually neutral and stand between the parties. If you do not mind, could you turn your thoughts to these people?

Sako: Thank you so much, Felix. That is helpful because, being based in a business school, the kind of analysis that we are doing is for a segment of the legal market only, the segment which has corporations as clients. Thus, the analysis that I have presented is most appropriate for corporate legal services. Beyond it, John Armour at the law school and I are now extending our attention to what Bill Henderson some time ago called 'people law',[3] where the clients are individual households and small- and medium-sized enterprises – i.e. clients who do not have the same knowledge about law as corporate clients with their in-house legal department.[4] I think that humans are going to continue to be in the loop for corporate legal services because, ultimately, the human lawyer, the trusted advisor is probably always going to be there as an intermediary interpreting the machine learning output. As regards people law there is at least a demand for a chatbot or a robot that can give you some advice on a reasonably simple but nevertheless important query on conveyancing, will writing or whatnot. However, the technology for this might not be there yet. Data aggregation is a real challenge. Humans may be out of the loop eventually. The area that I know the least about is the area that you just talked about concerning the judiciary, where there is a discussion about robot judges. I think eventually some of the simpler dispute resolution could be subjected to AI. Thus, I think the pipeline that I have presented could be extended ultimately to the end point where a lawyer as the consumer could also be replaced by automation or semi-automation.

ROLE OF AI IN LITIGATION FINANCE

Steffek: 'People law' nicely links us to tomorrow's session where we look at the use of technology in law and how it can improve access to justice. The issue of access to law or access to justice for consumers and people who do not have access to prime

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[3] William D Henderson, *Legal Market Landscape Report: Commissioned by the State Bar of California* (July 2018). <https://board.calbar.ca.gov/docs/agendaItem/Public/agendaitem1000022382.pdf>, accessed 1 November 2023.

[4] John Armour and Mari Sako, 'Legal Tech: Levelling the Playing Field in Legal Services?' in David Engstrom (ed), *Legal Tech and the Future of Civil Justice* (Cambridge University Press 2023) ch 2; available at <https://ssrn.com/abstract = 3831481>, accessed 1 November 2023; Mari Sako and Richard Parham, *Technology and Innovation in Legal Services: Final Report for the Solicitors Regulation Authority* (July 2021), <www.sra.org.uk/globalassets/documents/sra/research/full-report-technology-and-innovation-in-legal-services.pdf?version = 4a1bfe>, accessed 1 November 2023.

legal services needs to be seen against the background that it is either not rational for them to spend that much money on access or that they just do not have the money.

Mari, I wondered while listening to you about the use of AI in law by non-lawyers. In your research, you looked at in-house lawyers and external law advisors. I started wondering whether sometimes non-lawyers are quite good at recognising where they can replace lawyers by using AI. Thus, it is not the lawyers themselves who augment their work using AI, but non-lawyers seeing that they can get even better results than paying a lawyer triple figures per hour. For instance, people engaging in litigation finance may use AI to predict the value of claims. That essentially means knowing whether or not the claim will be successful in court, how long it takes and what the costs are to bring this claim to court. Litigation finance is an area where we see that AI is used. However, these are not lawyers using AI, but finance experts who think that AI may produce better results for the cost. Before using AI, they asked a lawyer to give them an estimate of the possible outcome. Now they may use AI to predict the outcome of such claims themselves. We have seen, in the United Kingdom and the United States, that new areas of litigation finance are being accessed via AI. For small claims, it is not very attractive to take recourse to traditional litigation finance mechanisms as the cost of using lawyers to estimate the outcome is relatively too high. Using AI, however, which is scalable, now provides access to new areas of litigation finance, in particular those concerning smaller claims. Hence, to sum it up, what is your take on non-lawyers using AI in law and how would that fit with your research?

Sako: That is a great segue into the next section. The focus really is on what consumers or clients value, and rarely do clients have a legal problem. They have a problem, an issue which could be solved by applying legal analysis. In all areas of law, what AI is most likely to do is redefine the market of legal services. The one-stop-shop solution that some of the clients, whether corporate or individual, are looking for, say, a tax issue in corporate matters or an immigration issue concerning individuals, has a legal aspect, but it also has a non-legal aspect. What AI is able to do is help develop a solution that is packaged, integrating legal and non-legal aspects. This will provide a quicker comprehensive solution to the ultimate client. Whether this is led by a lawyer or somebody who is called a lawyer, as opposed to somebody who is not called a lawyer, is uncertain now.

CONCEPT OF BUSINESS MODELS

Sako: The next part of my presentation is about business models. It is important to note that business models are a particular concept that we use in business schools. We can think of business models in different ways. We have law firms, the likes of Clifford Chance and Linklaters, and legal departments of global corporations like Barclays or BT. That used to be the main thick pipeline of legal services. But we now have new players, law companies like Elevate and UnitedLex, and investors, incubators and data vendors like Thomson Reuters and LexisNexis, which most of you have heard of.

Business models	What customers value	How value is created	How value is captured
Legal advisory	Bespoke legal advice	Input-based (billable hour)	Trust, reputation, leverage
Legal operations	Process efficiency and project management	Output-based (fixed fee)	Process & project management capabilities
Legal technology	Technology solutions	Subscription, licensing	Intellectual property (copyright or patent) and platforms
Consulting	Consulting advice	Input-based (charged by the hour)	Consulting expertise grounded in legal operations and/or legal technology

FIGURE 7.6 Four business models in legal services

I am now going to talk about business models using Figure 7.6 as illustration. Business model is a term that has been used in many ways by many different people, but it is basically a way of thinking about how a firm pursues its activities to create and capture value.[5] We start with the customer value proposition, or what customers value. As a provider, you think about how to create value and how to capture value. In our work, which is already published, we identified four different business models, one of which is the traditional legal advisory. What customers value here is bespoke legal advice. Value is created typically through input-based billable hours. Value is captured because lawyers are trusted advisors with a reputation that they can leverage. An organisational complement to this business model is a professional partnership, i.e. a partnership of lawyers only, which is the typical way of organising legal advice in many countries. It is the best mode to deliver this business model because lawyers as peers know each other very well. They can set their ethics and norms, and they can monitor each other well. Consensus decision-making also works well.

Lawyers charge by the hour because legal advice is what economists call a credence good. A credence good is a good or service where consumers cannot verify its quality even after consumption. Think about being a patient and being prescribed a medicine by a doctor. You take it on faith, but it takes some time for the effect to come through. As a patient, you are buying a credence good because you do not have the expertise to understand the medical basis for why a medicine that you have been prescribed works. It may actually work, or it may not. That is the kind of thinking as regards legal advisory.

[5] John Armour and Mari Sako, 'AI-Enabled Business Models in Legal Services: From Traditional Law Firms to Next-Generation Law Companies?' (2020) 7(1) Journal of Professions and Organization 27.

If you think about what new business models are being created using AI, then the first type I would like to mention is 'legal operations'. Here, what customers value is process efficiency and project management. Value is created through output-based pricing, the so-called fixed fee. You can predict costs a lot better this way, and you can capture value by having capabilities in process and project management. The organisational complement here is structured so that it incentivises both lawyers and non-lawyers to deploy AI tools efficiently.

A second business model enabled by AI is what we call 'legal technology'. Here, customers value technology-based solutions. Pricing can be through subscription or licensing. Value is captured by the provider typically by way of intellectual property – patents, in some cases copyright – and by offering platform services.

Finally, it is important to consider 'consulting' as a separate value proposition. Clients value advice on what kind of technology to adopt, for example. Funnily enough, here, the value is created again by charging by the hour, just like in legal advisory. Much of the expertise is in the experience of using certain types of technology.

COMBINING THE BUSINESS MODELS?

Sako: There are different ways in which we can combine these business models. Much of the competition that is presently going on concerns different players thinking about how best to combine these different business models.

From the perspective of a law firm, you can have a law firm that remains, if you like, pure play, as in not combining anything, i.e. sticking to legal advisory and externalising everything else. You can access new services by buying rather than making. In that way, law firms can externalise all the complexities that arise from combining business models. This also concerns human capital. But there are certain law firms, which have brought legal operations expertise in-house. A while ago, you may have read about knowledge centres created in places like India, the Philippines or Northern Ireland. Some law firms like Simmons & Simmons have purchased LawTech start-ups like Wavelength Law. So, legal tech can be bought as a service, but acquiring a LawTech company is also a possibility. Other law firms, including Pinsent Masons, have created an in-house consulting wing within the law firm. This is an interesting development.

LawTech companies like UnitedLex, Elevate and Axiom start with expertise in legal operations and consulting and to an extent legal technology. They are not stopping there but are quite ambitious in wanting to get into the legal advisory work as well. A company like Elevate has created its own in-house law firm called ElevateNext. Another company, UnitedLex, has an in-house law firm called Marshall Denning. Without such an in-house law firm they would not have access to premier corporate clients. So, everybody is trying to get into each other's turf, and there is competition in terms of combining different business models.

WHAT CAREERS DO LEGAL TECH ENTREPRENEURS NEED?

Sako: I am now going to discuss the LawTech start-up business model. There is a lot of buzz and a lot of excitement around different types of LawTech start-ups in different areas of law.[6] In our research, we compared LawTech and FinTech start-ups in three locations, London and New York, which are two global financial centres, and the San Francisco Bay area known for its tech start-ups broadly, well beyond FinTech and LawTech.[7] We compiled data concerning the start-ups' social connections by looking at the founders' educational and employment ties – what kind of university they went to in the past, what kind of work they did before they founded the start-ups. We also tried to classify the founders' knowledge according to whether they are coders or whether they are from the financial markets' domain, whether they are lawyers or had a management role beforehand. We ended up with a database of just over 600 founders for just over 300 venture firms. We found that ventures with founders who have denser social ties, i.e. who are located in an ecosystem where there are other people who have gone to the same university or who have worked for the same employer, scale up faster. We also found that founders' knowledge domain matters as well.

Figure 7.7 shows that the founders' social networks are the densest in San Francisco and most sparse in the New York LawTech ecosystem. Moreover, in San Francisco founders with coding skills dominate, which is not surprising. In New York and London founders come from very different knowledge domains, including coding and law, which is an interesting finding.

In Figure 7.8, we analyse how fast start-ups grow, which is the vertical axis, according to what kind of founders are involved – on the horizontal axis. Across FinTech and LawTech, we find that a founding team with coder skills only grows the fastest. I am not going to dwell on the middle bit, but on the extreme right is the founding team with lawyers only. That is the slowest to grow. We conducted some interviews to understand this better. Here are some of the insights in the form of quotations.

A retired managing partner who set up a LawTech company said:

> I was a partner for 20 years. Frankly, I am too impatient and can't be bothered to have to go around seeking external investors and then build our own infrastructure.

He basically says that his retirement venture makes a reasonable amount of money and that scaling up is not his objective. On the other extreme is an ambitious founder with an Oxford PhD in Physics saying,

> Our vision is to help companies unlock the value of their data. So, our play is a data play as opposed to a legal workflow play. Our platform is industry-agnostic.

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[6] For one of the many diagrams and infographics on this matter, see <www.legalcomplex.com/wp-content/uploads/2019/02/tnw-deloitte.jpg>, accessed 1 November 2023.

[7] Mari Sako and others, 'Scaling Up Firms in Entrepreneurial Ecosystems: Fintech and Lawtech Ecosystems Compared' (15 January 2020), <https://papers.ssrn.com/sol3/papers.cfm?abstract_id = 3520533>, accessed 1 November 2023.
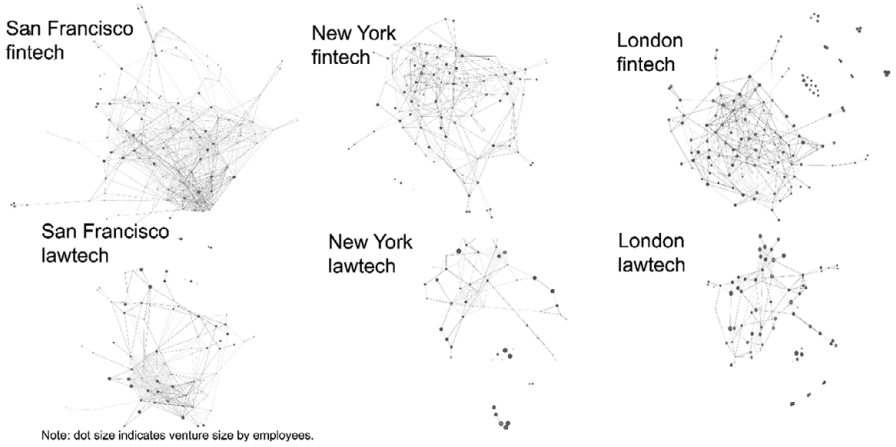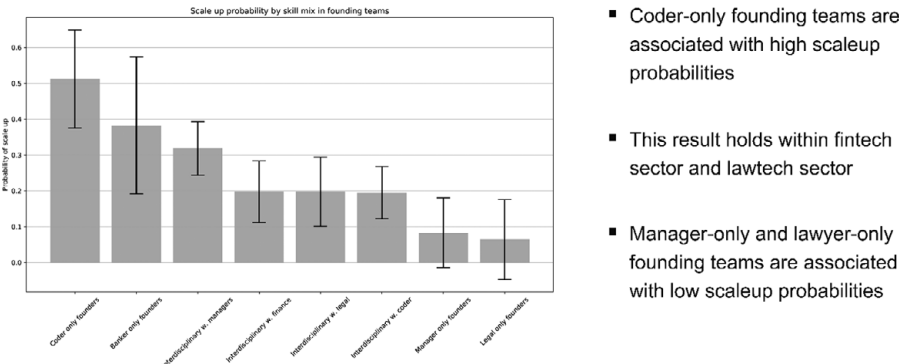
San Francisco fintech

New York fintech

London fintech

San Francisco lawtech

New York lawtech

London lawtech

Note: dot size indicates venture size by employees.

FIGURE 7.7 Founders' social networks

Scale up probability by skill mix in founding teams

- Coder-only founding teams are associated with high scaleup probabilities

- This result holds within fintech sector and lawtech sector

- Manager-only and lawyer-only founding teams are associated with low scaleup probabilities

FIGURE 7.8 Speed of scaling up

Industry-agnostic means that his target market is not just legal, but also finance and well beyond. Anything that uses data is his target market. This shows the extreme ends of different ambitions, different corporate aims that have been predicated in part on the background, the knowledge domains and the experiences of the founders. I find that quite interesting.

To sum up, from a LawTech provider perspective, you have business models where you, obviously, start with the legal technology, but can then take different approaches, including selling to law firms or data providers or partnering with law firms. The likes of Thomson Reuters and LexisNexis are in the business of buying these LawTech start-ups. There is a certain amount of consolidation going on. What is interesting about the LawTech start-up scene is that some of the companies are

not treating legal services as a defined well-scoped market. The ambition is to go well beyond, to address other markets.

Sako: Are there any questions at this point?

Student A: Thank you for the presentation. You mentioned that law firms have the choice of internalising or externalising complexities arising from combining business models. Could you explain these complexities in more detail, please?

Sako: Sure. What I meant by complexity concerns not only the organisational management complexity but also managing the careers of professionals with different expertise. Law firms are typically partnerships of lawyers only. The career route leads from junior associate to senior associate to partner. Partner is a status involving being an equity owner of the law firm. In many countries, except, however, England and Wales, you can be an equity owner of a law firm only if you are a lawyer. In that context, if you try and combine a business model beyond legal advisory to also include legal operations or legal technology business models, then you need to hire and incentivise data scientists and other specialists who are not lawyers. This is difficult. The complexity arises from the need to recruit and retain different talents who are not lawyers and, as a consequence, do not enjoy the opportunity to get promoted to the top management team.

There are other complexities, but one of the main complexities concerns managing human capital when you have a variety of different professionals and talents. If a law firm does not adopt a different business model and just buys legal technology services rather than having a legal technology operation in-house, then it can rely on somebody else to hire and incentivise those people.

Student B: Thank you, Professor, for your informative presentation thus far. I really found your research comparing founders of LawTech start-ups interesting. I was wondering whether you have any further ideas as to why legal-only founders experience slower scale-ups.

Sako: Thank you. Our research shows slower scale-up for ventures that had lawyer founders compared with ventures with other types of founders. Some might think of lawyers as being more cautious and not very prone to taking risks, but the reason that has come to light through our research rather concerns the target market. Lawyer founder ventures tend to target the legal market only. That is a vast market because there are not that many start-ups, and there are different types of start-ups. One start-up may be focused on contract analytics, another one on legal research and another one offers on-demand lawyering. The latter means creating a marketplace allowing the hiring of lawyers on a project-by-project basis. Nevertheless, it is a legal market only. This market constrains their ambition to scale compared with a start-up that has, as a starting point, a piece of technology or tool that can be applied to all kinds of markets, including legal, but also finance and marketing and so on. Such companies partner with big corporations like SalesForce for marketing or they partner with DocuSign for all kinds of document signing, not just legal documents.

Sumida: Thank you. Would you like to continue with your presentation?

WHAT YOU NEED TO SURVIVE AS A LAWYER

Sako: Sure. I would like to think about the future of lawyers, all of you in the audience, the law students and the practising lawyers. Let's think about the future of law firms. I will avoid black-and-white futuristic projections, terms like 'the end of lawyers' or 'the end of law firms', partly because I am an academic, but partly also because I think there are really important nuances concerning what will stay and what will disappear.
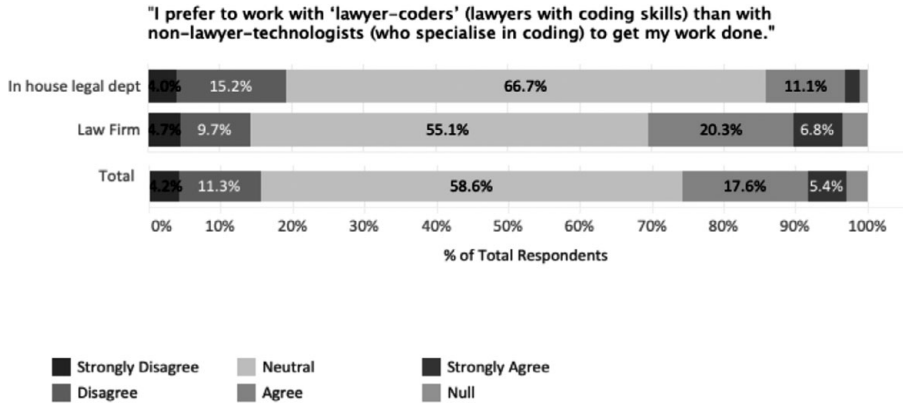
The classical advisory roles of giving valued advice to clients will stay. It will be enhanced in quality but will decrease in quantity. The number of lawyers who are going to be specialised in this role will not be high because some of these services will be substituted by machines. New roles in MDTs, augmenting legal services through technology, will increase in importance. This requires new training and career paths. Importantly, some of these people may not be called lawyers anymore in the future. The MDTs involved may be facilitated in different ways. One can have lawyers and non-lawyers working together in a team seamlessly because they speak the same language, they understand each other. Or lawyers themselves acquire technical skills. This is the notion of the lawyer-coder.

Turning back to the survey, we asked respondents to agree or disagree with the statement, 'I prefer to work with lawyer-coders (lawyers with coding skills) than with non-lawyer technologists (who specialize in coding) to get my work done.' You can see in Figure 7.9 that in the first bar, which represents respondents from in-house legal departments, 11 per cent agreed with that. It is a very low number. In the middle bar, 27 per cent of the respondents from law firms agreed. This is not the majority, but more people working in law firms agreed with this statement.

Sako: This gives us some indication of the career path that is available to people who are working in law firms. One of the questions asked earlier concerned the complexity of law firms. The corresponding situation is illustrated by the following quotation: 'We have obviously been a very good firm, with a good brand associated, in terms of access to young talent. In the software space, they normally do not want to join a law firm, they want to go and work for a cool software company.' If you have a choice of working for Amazon or Google or working for a top law firm, however top that would be, if you are a data scientist, I think the choice is rather clear.

WHAT LAW COMPANIES HAVE THAT LAW FIRMS DO NOT

Sako: Here is another statement that we have collected: 'We have all kinds of people who have been practising lawyers, people who have been general counsel who understand the executive communication, we also have people experienced in business process outsourcing, people in IT or HR, people who are process specialist blackbelts. We have change management. We have financial analysts.' Law firms like this one will be able to accommodate a variety of different talents. I think that is the real stark contrast. Thus, if you think about what is necessary in an MDT from a

"I prefer to work with 'lawyer–coders' (lawyers with coding skills) than with non–lawyer–technologists (who specialise in coding) to get my work done."

FIGURE 7.9 Lawyers in law firms prefer lawyers with programming skills over technicians

law firm perspective, it is not just about lawyers becoming coders. It is really about mindset and a common language. As one law firm member said, 'I don't think that lawyers should code or need to code. I think that what they need to do is to think about the interpersonal skills, be curious and be willing to adapt. This is really less about a technical perspective and more about how they interact, how they work and how they are continually changing.' I think that is a novel way of thinking about how effective you can be in an MDT.

What would determine the pathways to multi-disciplinarity? It depends on two things. One is to do with what the professional control would look like. What would lie within and what would lie outside of the jurisdictional boundaries of a licensed lawyer. In the United States, you have the notion of authorised practice of law and the opposite of that is the unauthorised practice of law. What is required is a re-definition and revisiting of such definitions. The second factor, which determines the pathways to multi-disciplinarity, is law firm governance. Let me spend a few minutes each on these points.

THREE CAREER PATHS FOR FUTURE LAWYERS

Sako: On the first point, I project that there are three possible futures in twenty–thirty years from now. One is what happens in law firms now. The main body of human capital is licensed lawyers. They are assisted by specialists who are in data science or who are process and project experts. These two categories are support staff and are never going to be a part of the law firm's core hierarchy. A second scenario is what I call incorporation. Here, all licensed lawyers, some of whom become lawyer-coders

and some of whom become lawyer-managers, stay within the legal profession. The third is what I call the professional fragmentation scenario. Here, licensed lawyers will work with other specialists and these other specialists are professionals in their own, different rights, be it in legal operations or in legal engineering.

Let's think about these three scenarios, as shown in Figure 7.10, and consider the possible career paths for lawyers. On the left is business as usual, licensed lawyers. I expect that the associate-to-partner progression will remain the main career path. Data scientists and managers are rewarded financially if they are to be attracted to work for law firms. They will probably have to think about a career path which is more self-managed. They will probably be coming into and out of law firms and other kinds of workplaces as well.

In the middle, we have the rise of lawyer-coders. There are some signs that lawyers' technical skills are being accredited, for example by the Law Society of Scotland, which has a certificate for legal engineers. That is an interesting development, but the question here is whether, if you move to specialise in legal engineering, you can also still become a law firm partner.

Finally, in the professional fragmentation scenario, licensed lawyers' work will be fragmented. Some of them will go into legal engineering and others into legal operations. Legal operations experts have their own professional association called CLOC. Some of the entry points for becoming a legal operations expert or legal engineer may not be through getting a licence to be a lawyer. There will be multiple entry points for people who work in legal services.

For the law firms, the implications are quite interesting. I do not think that time is running out for law firms. Some law firms will survive. As you probably know, in the United States, the ABA Model Rules of Professional Conduct 5.4 basically mandates law firms to be owned by lawyers only. Fee sharing is forbidden, except in regulatory sandbox experiments which are going on in the states of Arizona, Utah and California. The United Kingdom is a little bit ahead in permitting what they call
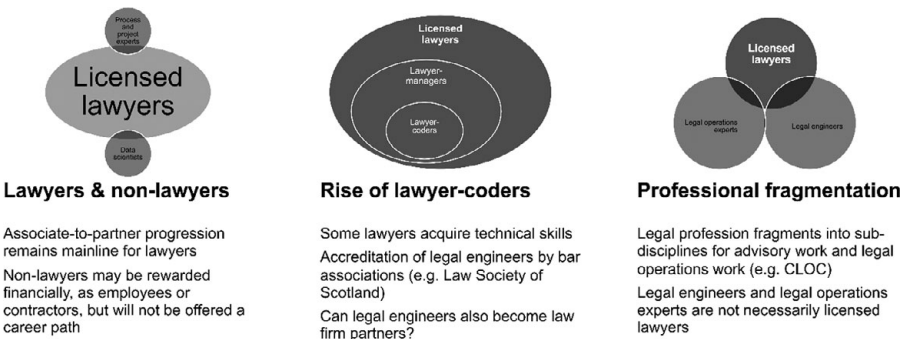

Lawyers & non-lawyers

Associate-to-partner progression remains mainline for lawyers

Non-lawyers may be rewarded financially, as employees or contractors, but will not be offered a career path

Rise of lawyer-coders

Some lawyers acquire technical skills

Accreditation of legal engineers by bar associations (e.g. Law Society of Scotland)

Can legal engineers also become law firm partners?

Professional fragmentation

Legal profession fragments into sub-disciplines for advisory work and legal operations work (e.g. CLOC)

Legal engineers and legal operations experts are not necessarily licensed lawyers

FIGURE 7.10 Possible legal career paths

'alternative business structures'. They enable lawyers to co-own and co-manage law firms with non-lawyers.

Sako: Much of the policy concern focuses on relaxing rules so that law firms can get access to outside finance for innovation, including investing in legal technology. But in our interviews, nobody has really expressed concern about lack of finance, outside or inside, for legal tech adoption. In contrast, the key concern appears to be the recruitment and retention of non-lawyer human capital. So, we wish to re-direct people's attention to the career path issue that I have already talked about. The issue is that, if you are a lawyer, you can get to the top, but if you are not a lawyer, you cannot get to the top, and that obviously is damaging to incentives.

There is a puzzle as regards the United Kingdom, which has created the opportunity for an alternative business structure (ABS) where lawyers and non-lawyers can co-own and co-manage law firms. Ten years after the Legal Services Act has enabled this structure, large law firms remain mono-professional partnerships. If you talk to the likes of Clifford Chance, Linklaters and Freshfields, they are not considering using the ABS. The question arises as to why that is the case. We think that they fear that the ABS would risk diluting the reputation and value of the core intangible assets, which are the lawyers themselves.

As a result, what is most likely to happen is that the law firms, some of which are going to just be pure play with the advisory business model only, will remain partnerships. They will be consumers of AI-enabled legal services. There will be other law firms that want to produce AI-enabled legal services by having an in-house technology division. I predict that they will use the ABS model.

Let me conclude by reminding you of the importance of thinking about the impact of AI in terms of the delivery pipeline. We are talking about the end of some things that lawyers do, but definitely not the end of lawyers. AI automates tasks, not jobs. We can think of lawyers as consumers of AI, but also as producers of AI working in MDTs. There is a variety of AI-enabled business models in legal services that many players, whether it is a law firm, a law company or a legal tech provider, are experimenting with, including by combining them in different ways. This has fundamental implications for the future careers of lawyers and also of law firms. I would project that law firms are here to stay as niche players and that with the possibility of three different kinds of scenarios in the future, it is up to not just the regulators and the government, but also the legal professionals themselves to influence which direction they want to take. Thank you very much. I really look forward to some questions and comments.

Steffek: Thank you very much, Mari. It was a fantastic talk. We are very grateful that Masakazu Iwakura is willing to provide comments. In his comments, he will

consider the situation in Japan. Thank you very much again, Mari. We will come back to you later in the discussion.

JAPANESE BUSINESS LAW: 30 YEARS BEHIND THE UNITED STATES AND THE UNITED KINGDOM

Sumida: Today's commentator is Professor Masakazu Iwakura, a Senior Partner at TMI Associates. Professor Mari Sako has discussed the situation in the United Kingdom and the United States. I thought that Professor Iwakura would be the perfect person to discuss the implications for Japan, drawing from the presentation of Professor Sako. Professor Iwakura, without further ado, the floor is yours.

Iwakura: Thank you, Professor Sumida, for your kind introduction. As Professor Sumida mentioned, I am now working as a partner in a law firm, and I have been practising law for the last thirty-four years. Including my time at Harvard University and Hitotsubashi University, I have been teaching in higher education for over thirty years. I was very impressed by the wonderful presentation by Professor Sako. The topic of my talk is the Japanese situation by way of comparative analysis of the materials presented by Professor Sako. I must first let you know that I am not an expert in LawTech. Rather, I am a professional business lawyer. I am involved more in bespoke cases in the areas of intellectual property and M&A. Hence, I am not quite versed in state-of-the-art legal technology. It has been quite an educational opportunity for me today. Going forward, I will be using the knowledge I acquired today.

It is often said that the Japanese legal sector is behind that of the United Kingdom and the United States by 20–30 years. In the areas of LawTech and legal AI, Japan is lagging behind substantially. We are rather primitive in these sectors. But those countries, including Japan, which are lagging behind, are in a position to cherry-pick, making it possible to leap-frog. Thus, we can cherry-pick all the knowledge and achievements that have been made in other markets. Japanese law firms, lawyers and academics can be good students of the innovation we have been exposed to today.

THE BIG FIVE JOINTLY FOUNDED LAWTECH VENTURES

Iwakura: I agree with Professor Sako's key assertions. The propagation of AI in the Japanese legal industry is lagging behind that of the United Kingdom, the United States and China. The speed at which the Japanese legal industry is adopting AI is much slower. That is a unique challenge Japan is facing. In Japan, there are many law firms. We might not have the Big Four or Big Eight firms in the world in the accounting industry, but we have the Big Five law firms – big by Japanese standards. The definition of a big law firm in Japan includes those with more than 400 lawyers. The Big Five firms are all located in Tokyo.

However, the majority of Japanese law firms are very small in scale. Most are one-attorney or two-attorney offices. There is a huge difference in the way of doing business and in terms of aspirations between the Big Five and the smaller law firms. I have

belonged to two of the Big Five law firms in the past. Within the Big Five, AI is being adopted at a much slower rate than that seen in the United Kingdom or the United States. All the Big Five firms are engaged in cross-border and international cases. That requires them to be more familiar with AI, especially because they must communicate with their counterparts in the United Kingdom and the United States on a daily basis.

In cross-border cases, the Big Five are, for example, engaged in e-discovery. E-discovery is a process that did not exist in Japan. What I have in mind is not the deployment of AI for e-discovery in Japan, but the use of e-discovery in international M&A or arbitration cases. To support such a case, big Japanese firms must be able to manage the e-discovery process. Legal research, due diligence review and contract drafting also use AI, though the level of reliance is much lighter. Some of the Big Five are now working with LawTech providers. The approach they are taking is to jointly launch LawTech companies.

At TMI, which I now belong to, a company named TMI Privacy and Security Consulting has been launched, separate from the law firm. TMI Privacy and Security Consulting specialises in specific areas of privacy and security. It is aspiring to expand the scope of business to include wider areas of LawTech. Nagashima, Ohno and Tsunematsu have launched MNTSQ, another LawTech firm. I believe that this is a joint venture. So, it is interesting to see that some of the Big Five law firms have jointly launched these specialised LawTech firms.

As mentioned already, small- and medium-sized law firms, even though I really regret and am rather embarrassed to say this, have not engaged at all with AI. This is the result of a survey conducted in 2019.[8] Ninety-eight per cent of the law firms in Japan have ten or less lawyers. One- or two-lawyer firms constitute around 80 per cent of the entire law firm market. Hence, the demography of the law firms is very different compared with the British or the American industries. With technical advances, the proportion may change, and small- and medium-sized law firms may become more interested in the use of AI because AI can possibly augment their skills and capabilities. But as we speak today, the LawTech ecosystem is much less developed in Japan. There is little engagement by small- and medium-sized law firms. The attorneys in the Big Five and junior and upcoming aspirational lawyers may have an interest in creating law firms that have a stronger emphasis on LawTech. They are yet to assert their unique value.

HAS THE INTRODUCTION OF AI IN THE JUDICIARY MADE PROGRESS?

Iwakura: This is a very sensitive issue, and I must be bold to say this to you, but the Japanese Supreme Court is focusing on the wider use of IT. Introduction and

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[8] Japan Federation of Bar Associations (ed), *White Paper on Attorneys* (2019) 72, <www .nichibenren.or.jp/library/en/about/data/WhitePaper2019.pdf>, accessed 1 November 2023.

application of IT are being encouraged at the Supreme Court level in Japan. This is also supported by the government of Japan. We are seeing rapid development with regard to the wider use of IT. However, the area of IT usage is focused more on civil procedure practices, not on criminal cases. It, frankly, is not really AI. Instead, the focus is on very basic IT services. Hence, within the Japanese legal sector, AI has very little practical relevance.

What about the legal community in Japan? I am not quite sure if Professor Sumida is of the same opinion, but only a limited number of scholars are versed in AI. Correlations or the relations between AI and the law, or the implications and repercussions that the same may have, have been drawing much attention, however, the level of knowledge is still limited. The younger generation tends to be more interested than the older ones. Younger lawyers are aspiring, and I am hoping that Japanese scholars, too, will become more interested in this area. Scholars of older generations are not quite sure even as to how to use these technologies or how these technologies can impact their areas of research.

EMERGENCE OF NEW PLAYERS

Iwakura: Now, I will turn to new players. While the number of new players is still limited in Japan, there are some LawTech providers starting new businesses. I do not have any personal affiliation with these companies, but I can say that there are new players in the Japanese market of legal technology. Some of them are affiliated with the Big Five law firms. In-house counsel and corporate services are the areas that these players are trying to serve.

A key point raised in Professor Sako's presentation is the emergence of MDTs. As Professor Sako mentioned, compared to in-house lawyers, lawyers at law firms are less eager to engage with LawTech. Within big firms, it is the data scientists that the lawyers work with. TMI and Nagashima Ohno have a joint business alliance with LawTech providers. In that sense, lawyers have opportunities to work with non-lawyers, but especially in small- and medium-sized law firms, MDTs are virtually non-existent.

As far as in-house counsels are concerned, the number of lawyers was earlier limited in Japan, and, as a result, the number of in-house lawyers was also limited. After legal reform, the number of lawyers has increased dramatically in recent years. I became a lawyer about 40 years ago. In that specific year, 450 applicants passed the bar exam. Now, around 1,500 applicants pass the bar each year. That also means that the number of in-house lawyers is increasing. Business firms aspire to have an in-house lawyer and we now have professional associations of in-house lawyers. But looking at the entire pool of lawyers, most of them are not in-house. Since legal issues arise within businesses, LawTech is being sought after by business entities. I think that this is a unique factor in Japan. The Big Five and other larger law firms may consider developing MDTs, but other than those major players, MDTs may be created mainly in non-legal businesses in Japan.

WHY JAPAN IS BECOMING GALAPAGOS

Iwakura: How exactly does the situation in Japan differ from that in the United States, the United Kingdom and China? Be it technology, the economy or even culture, there is something unique about Japan. I am not really a person who worships the uniqueness of the Japanese situation, but I still believe that there are unique factors present in Japan. Legal jargon and legal terms are specific. I have a US bar licence and I also have taught law at Harvard. Against that background, I can say that the Japanese legal language is very different from the English legal language. American court decisions, while they can get philosophical at times, are very articulate and clear in terms of the reasons. In Japan, on the other hand, precedents are not as clear as the judges themselves would like them to be. Precedent is used in a much more multi-faceted way by lawyers in general, and people working in legal roles in companies in particular. One of the reasons for this may be the ambiguity of the Japanese language. This is not to say that ambiguity is generally a bad thing. However, because the Japanese language has such a special character and is not a language used by many people around the world, as is the case with English and Chinese, it may be lagging behind in some of the basics that are useful for the development of legal AI.

Another thing that I mentioned earlier is that the Supreme Court is making progress with IT. But in fact, it is also lagging behind considerably. As reported in the news, Japan has a stamp culture, which is not necessarily the case in other countries. When signing a contract or creating an official document, you have to stamp it. This is considered to be very inefficient, especially since remote working was recommended during the pandemic. This is also a factor that demonstrates how Japan is lagging behind.

WHEN WILL THE JAPANESE LEGAL PROFESSION CHANGE?

Iwakura: Be it law firms or lawyers or legal society, how will they be impacted by legal AI? In my opinion, AI should be used, not only by consuming it but also by producing new LawTech services. I believe that we have such movements in the Japanese legal industry, even though we are still in a nascent phase. We are lagging behind, but we can still learn from and cherry-pick American and British experiences.

Since Japanese lawyers mostly work in small-sized law firms, they have yet to face the immediate consequences of legal AI. Aspiring younger lawyers who wish to work for Google, Apple, Facebook or Amazon (GAFA) may possibly start using AI, thereby changing the landscape of the legal industry. In terms of the management of law firms, I believe that law firms will survive. There is a solid client base for such law firms as well.

Talking about court litigation, not arbitration, courts and judges may feel a sense of resistance against using AI in decision-making. Arbitrators may want to use it for arbitration, but there is little thought of using this technology for court litigation, even though that is the direction we may be heading towards. In terms of litigation, lawyers are paid when the cases are won. So, there is a reward for successful

litigation. Lawyers may use AI for the preparation of litigation. Younger scholars or up-and-coming new players are curious about new technologies and start using them. They may start finding new business or research opportunities as well.

Shogi is a Japanese chess game and there is a very young professional Shogi player in Japan whose name is Sōta Fujii. He is still a teenager, and it seems to me that he uses AI technology. He has come up with new skills and he has won two of the seven big major titles of Shogi, defeating big names. So, as is the case with Fujii-san, the Shogi player, it is the younger generation that will bring the change. Looking at the successes of young people, maybe we should be learning from them. I hope that this is the general trend in Japan.

Sumida: Thank you very much. Professor Sako, would you like to respond?

DATA AVAILABILITY IS KEY FOR LEGAL AI

Sako: Thank you so much for the thoughtful and insightful comments on Japan, about which I only have a very narrow and blinkered perspective. Having studied a little about in-house legal departments in Japan, I found it interesting that the majority of people are not qualified lawyers. As you say, there are perhaps advantages to being able to incorporate MDTs in a smoother way. In terms of where Japan can be ahead of the game, there is a lot of talk about digital transformation of legal departments including other corporate functions such as marketing and finance. Maybe Japan could be ahead of the game in digitally transforming some of the major Japanese business corporations in that way; and lawyers can play a part there, too.

You also had some questions concerning the situation in the United Kingdom as opposed to that in the United States. It is not an area that I know a lot about, but my understanding is that London is a centre for litigation funding. So, there is equity and other financial capital appetite for the use of AI in predicting court cases. I think that is a major driver. As regards the courts, Richard Susskind has contributed a lot to the application of AI to arbitration and litigation. Much of the use of AI, I think, is in commercial areas, in international arbitration and in minor commercial dispute resolution. Much of the difference between the United States and the United Kingdom is in the availability of data for both academics and others to analyse. Felix may know more about that than I do, but I think there is a huge gap in terms of being able to access court-based data in the United States and China, compared to the United Kingdom where it is much more closed. It is not about digitisation. I think it is more about the will to disclose the data.

WHAT YOUNG LAWYERS CAN DO TO MAKE A DIFFERENCE?

Student C: Young keen and upcoming lawyers in the future may start using AI, as you were saying, but in a former class by Mr Ludwig Bull, we heard

that in Japan, data is not really made public, so it is very difficult to use AI. He talked about the scarcity of public data in Japan. So, in this situation, for young lawyers in Japan to act, we need change. What do you think?

Iwakura: In Japan, compared to the United States, overwhelmingly, important data is not made public. In the past, court cases were not disclosed. The courts decided whether to make decisions public or not. But now, the Supreme Court is trying to make decisions publicly available on an anonymous basis, if there are no problems regarding privacy. So, there is an improvement, but there is a lot of legal data that is not disclosed in Japan. In my area of specialisation, M&A, in the United States, there is a certain standard under which M&A transaction contracts are all disclosed for listed companies. In the case of Japan, the rules of the Tokyo Stock Exchange do not stipulate for these contracts to be disclosed. I believe that they should all be disclosed like in the United States. I have been saying this for a long time, but for a variety of reasons, these contracts are not disclosed in Japan.

Student D: I have a question about AI development. Could the government, or a public institution, provide datasets regarding the law to facilitate the development of legal AI? I would be interested in Professor Sako's opinion on this.

Sako: If I understood your question correctly, it concerns the limited availability of legal data, which we have not addressed fully in this session. I do not think that it is just a Japanese problem. This limitation is everywhere in the legal market. We need to distinguish between technical constraints and non-technical constraints on the ability to make data publicly available and/or open-sourced. I think that we will get there, but we need collective action to do this. On the technological side, advances in technology might ease the privacy fear of individuals sharing their personal data. But then, even if technology is solving that aspect, from a business perspective, there is commercial sensitivity around sharing certain types of data, including on M&A. If the data is at the core of the competitive advantage of a particular company, they are not going to be willing to share. So, we need that to be put aside.

Much of the difficulty in aggregating data has to do with the lack of standardisation and the lack of templates for structuring data in such a way that it can be aggregated. In the United Kingdom, there is an initiative, called Engine B, in which the Big Four audit and accounting firms are getting together to try and create a standard for sharing their client data. Similar collective action of the Big Five in Japan or the Magic Circle firms in the United Kingdom as regards aggregating data following a certain standard would make a big difference. But none of those initiatives is happening in the legal field, at least not yet, as far as I know.

Sumida: Thank you to our two wonderful guests. This has been a very interesting session.

CONCLUDING CONVERSATION

Steffek: Mari Sako's presentation analysed the use of LawTech applications from the perspective of an economist and a management researcher. I found her presentation fascinating in many respects as she shed new light on the discussion.

Sumida: As an organiser, I was so excited to invite Professor Sako to give a lecture at our university. Her suggestions for the Japanese commentators and her ideas on how to organise the session in order to make the dialogue with the students more enjoyable were also very much appreciated. It was a real treat to have the essence of the most advanced research in such a condensed and easy-to-understand format.

Steffek: From my perspective, the first point of Professor Sako's presentation is to enlighten the debate on the impact of AI on the legal profession. She makes it clear that lawyers will be either consumers or producers of AI applications, and that where AI applications are used, they may lead to augmentation of lawyers' services, or they may lead to substitution of such services. For the latter, she observed that they are more likely to be concerned with repetitive and scalable 'tasks'. Professor Sako's analysis went beyond the simple question of whether AI can replace human lawyers and showed that lawyers need to ask more differentiated questions about where they can become consumers of technology and where they can produce AI services.

Sumida: What surprised me was the way she applied the automobile assembly pipeline to the provision of legal services. By the way, she used the concept of 'task' to analyse the process of providing legal services by breaking down the process into very detailed 'tasks'. I remember that the categorisation of work into repetitive, interactive, cognitive and manual labour, introduced in the Labour Economics study on the impact of information and communication technology on labour, also focused on 'tasks'.[9] However, that study focused on 'tasks' when analysing 'occupation'. The different granularity of the discussion is a point that should not be overlooked.

Steffek: That is right. Professor Sako suggests that we look at the individual 'tasks' required to deliver legal services and ask how these will be affected by the use of AI. As a result, she points out that while the generation of outputs, in particular, will be strongly affected, new tasks will also be created, in particular those that require the cooperation with non-lawyers such as data scientists and project managers, who will contribute to legal services with greater relevance in the future. This focus on tasks is useful in order to better understand the impact of AI on the legal profession. From this perspective, we have found that the question of whether AI will replace human lawyers overlooks the potential for AI to create new jobs.

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[9]   David H Autor, Frank Levy and Richard J Murnane, 'The Skill Content of Recent Technological Change: An Empirical Exploration' (2003) 118(4) The Quarterly Journal of Economics 1279. A well-known study in this context is: Daiji Kawaguchi, 'Will People Lose Their Jobs to Machines?' in Mihoko Sumida and Shunsuke Kudoh (eds), *Society Living with Robots – How Does the Law Deal with AI?* (Koubundou 2018) 73 [in Japanese].

It was also very interesting to analyse the business models as regards how firms operate and capture value. For example, law firms traditionally charge on an hourly basis, whereas LawTech start-ups often charge on a subscription fee basis. Also, law firms are traditionally organised as partnerships, whereas LawTech start-ups are organised as capital-based companies. The question for the future will be whether these two types of firms will partner or merge their businesses.

Sumida: In explaining why legal advice, the traditional business model of lawyers, is charged on an hourly basis, I was struck by the point that it is a 'credence good' and, like a doctor's prescription, it is uncertain whether it has really worked! I think this highlights the difficulty of preserving this value as new business models emerge and compete with each other.

Steffek: After listening to Professor Sako's presentation, I wondered which group of professionals would be best placed to understand the value that AI applications could bring to the legal services market. Is it lawyers themselves, or is it non-lawyers such as litigation finance specialists? At the same time, it was also an interesting observation that people rarely have 'legal problems'. People do have 'problems', and they may use the law to help solve them.

Sumida: That was a very memorable phrase for me. It is this perspective that underpins the idea of redefining the market. I think it is also connected to the issue of how to package legal and non-legal solutions in a one-stop solution, which is a topic in the following session.

Steffek: Further questions I pondered were whether local lawmakers can effectively shield local legal services markets from international competition as regards LawTech applications. Are there areas where such protectionism is not possible? Just to avoid a possible misunderstanding, I am not proposing that advanced jurisdictions should shield their markets against international competition. I rather wonder whether this is possible at all and, if not, what this means for professionals in jurisdictions where lawmakers are not open to the use of technology in legal services. This links to Mari Sako's analysis of professional laws where she finds that some jurisdictions allow joint business structures of lawyers and computing experts, whereas other jurisdictions exclude outsiders from holding equity in legal services firms.

Sumida: Is there a technology side to this question, such as foreign AI applications and language issues? In his comment, Masakazu Iwakura pointed out the Japanese language barrier. In our joint research project, we are discussing how high and how thick the Japanese language barrier is.

Steffek: Masakazu Iwakura compared Mari Sako's insights with the situation in Japan and pointed out notable developments, such as the fact that major Japanese law firms are setting up subsidiaries to deal with LawTech, which was very interesting. I also thought that it was important to point out that, in considering the future of LawTech in Japan, it is critically important that there are many smaller law firms in Japan compared to the United Kingdom and the United States. How these law firms

relate to and adopt LawTech will be a topic to watch. He also confirmed the earlier speaker's assessment that, although LawTech is slow to take off in Japan, we can expect to see an expansion of AI-powered legal services.

Sumida: Masakazu Iwakura pointed out that MDT lawyers in Japan have already started in the big law firms, but apart from that, they are going in-house. I think this is true in terms of legal careers, but if we look at it more broadly, we can point to database companies as employers of MDT in Japan. It seems to me that the most pressing need is to solve the need for datasets, for example by shifting to open data for court decisions. Of course, it is not only Japanese database companies, but also foreign database companies that are expanding their business in Japan, which may be relevant to the issue raised by you.

QUESTIONS FOR FURTHER THOUGHT

- Should the government interfere with the use of LawTech, or should it be left to commerce and the 'invisible hand' of the market?
- Will non-lawyers be the future drivers of AI applications in law in case lawyers are not moving into this field fast enough?
- What environment is needed for law firms to engage with AI?
- Is an explanation of the slow use of AI perhaps the fact that the services offered are not attractive enough?
- When you start your own legal business in the future, how do you evaluate the incentives for colleagues who are not qualified lawyers?
- Can legal markets insulate themselves such that even if AI is used in other jurisdictions, it will not matter in the insulated market?
- What role will lawmakers play in the future development of the legal profession and its relationship with technology?