THE LEGAL TECHNOLOGIST

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Contracting visually

Alex Smith discusses the evolution of contracts and considers the benefits of visual contracts.

ARTICLE

ELTA Forecast

Members of the European Legal Tech Association provide their forecast on legal tech in 2020

Our Staff.

Insight into the future of law

The Legal Technologist

A note from the editor

This is the first Legal Technologist issue of 2020 and we are really looking forward to a great year ahead.

We have plenty planned and are looking at hosting a number of joint events throughout the year so watch this space for further details!

On top of providing great bi-monthly content from around the world we will be publishing the brightest and best in the world of legal tech/innovation, starting with the UK but branching out over the course of the year.

In relation to this issue, I want to thank all of those that took time to contribute their fantastic articles. I think this may be the biggest issue yet. I also want to thank the Legal Technologist team, and our newly promoted Editor, Becky Baker.

Please do keep on providing your feedback so we can make the magazine the best it can be.

All the best

Marc May

Legal Contracts Can Be Pretty and Intelligent

By Alex Smith
Global Product Management Lead
iManage RAVN

The legal contracts landscape in any organisation is in a perpetual state of flux because of the wide and continually expanding variety of formats. Over the years, traditional paper contracts have been joined by digital alternatives like PDF and Word contracts, which in turn, are being joined by smart contracts that are underpinned by emerging technologies like blockchain and digital government systems.

To this growing pile of formats, add 'visual contracts' – a new alternative that is gaining interest.

Visual contracts are an attempt to address an all-too-common issue, which is that most contracts are utterly incomprehensible for non-lawyers – despite attempts by lawyers to write contracts in 'plain English'. Have you ever read the terms and conditions from companies like Amazon or Facebook – or the policies from your bank or insurance provider – and walked away with a clear understanding of what you're agreeing to? Of course not. For individuals and business professionals alike, it's difficult to review a contract and immediately understand the rights and responsibilities of the involved parties.

This is where visual contracts come in: as the saying goes, a picture is worth a thousand words. When the contents of an agreement are clearly depicted visually – utilising design elements such as clear font, bullets, colour highlights, graphical images, flowcharts – it's easier to grasp key takeaways such as the rights of the parties, how the agreement can be terminated, what the terms of engagement are, or how some rights will be adapted if the current situation changes.

Many organisations are already looking at this new approach to communicating contractual terms. However, beneath the pretty visual layer, there must be machine readable data if insight and intelligence is to be drawn from those contracts for business advantage. Otherwise, all we are going to do is create another 'next generation' of dumb (but this time, pretty) contracts.

The 'Dumb Digital Data' Problem

The word 'dumb' is used here to highlight the limitations of previous formats of contracts, particularly with regards to the ability of organisations to extract the intelligence that is natively embedded into them by lawyers.

Paper contracts, for example, aren't digitised, which makes it difficult to search for and extract key pieces of information. PDF contracts are digitised, but they aren't machine readable if they haven't been OCR'ed, and the data within them is unstructured from a computer programmer's perspective. Likewise, Word contracts are machine readable, but also unstructured with regard to semantic mark-up.

Visual contracts will suffer from similar limitations if a careful approach isn't taken. Having a clear visual representation or picture that illustrates the key points of the contract is a great step towards making contracts more understandable to a wider audience, but there needs to be a data model underneath those visuals that AI can pick up on.

Put more bluntly, AI isn't going to be able to magically look at a graphic or image in a visual contract and derive meaningful intelligence from it; there needs to be a data-driven approach underlying it.

Unlocking the Intelligence

Consider the above a crucial step for ensuring that organisations don't further abet the 'dumb digital data' problem that already exists. But how should they handle their existing pile of contracts? How can organisations best move forward in their quest for intelligent contract management – one that allows them to unlock the intelligence in contracts of any format?

The following steps provide a framework for quickly getting started while avoiding any potential pitfalls that could unnecessarily hinder the effort.

For starters, identify where all your contracts are. This might sound basic, but many organisations came face to face with a deadline-driven event like the LIBOR transition or Brexit only to realise that contracts that might need to be updated were scattered who-knows-where across the organisation. Rather than waiting for an outside event, organisations should pause and take stock of all their existing assets and their locations. Moving forward, any new contracts that are generated can be kept in a centralised location, so that they are easily accessible.

Next, think about which data points are important to you in those contracts. What intelligence do you want to pull out of them? Don't overthink it: there are probably five to ten data points which matter in every contract – and they will vary from organisation to organisation. For some, it might be deal type; for others, it might be deal length, parties involved, or contractual rights obligations. Ultimately, there isn't one model to say what data you need to be capturing.

After you've thought through what data points are important to capture, you can utilise AI and machine learning to pull the intelligence that's important to your organisation out of these contracts. Note that AI only comes into the picture after you've tackled the preceding steps.

Think of this as 'IA before AI' – which is to say, Information Architecture before Artificial Intelligence.

Once you've started collecting meaningful data from your contracts, you can start to uncover patterns in the data and build models that give you predictive capabilities around business decisions. For organisations looking to digitally transform themselves and make analytical, data driven decisions, there are few capabilities more valuable.

Take the Right Approach

Visual contracts are still in their early stages, but the use cases are interesting, and the potential benefits around clearly translating 'legalese' are significant. If organisations hope to successfully leverage the intelligence in this new contract format, however, they will need to take a data driven approach – just as they must for contracts of any format.

Well structured data especially at the creation stage could allow lawyers to create multiple outputs of their work from a central master – a textual version, smart logic components (in smart contracts) and maybe visual aspects. This is how the publishing industry digitised in the 2000s, lessons to be learnt.

Taking stock of all existing contracts, identifying the important data points to capture, and then using AI to extract and learn from the data provides a way to make this data-driven approach a reality. The result is a world where contracts can readily yield analytical insights and intelligence for business advantage. After all, organisations need not make a choice between legal contracts that are either pretty or intelligent – they can be both.

About the author

Alex Smith is the Global Product Management Lead for iManage RAVN. He has over 20 years of experience in product management and service design, including new and emerging technologies such as artificial intelligence, semantic search and linked data, as well as content management. Prior to iManage RAVN, Alex has held positions at Reed Smith LLP and LexisNexis UK.

Juro Startup Story:

Making Legal More Human

In Part 3, our final instalment about Juro, the inspiring legal tech startup, Richard Mabey describes the benefits of their empathetic team and the inspiring values they live as a company.

"There's no mechanised system for cake!"

We've been conscious about the culture we want to develop at Juro. In the beginning, the founders are the culture. You've got two people in a kitchen; nothing else really matters apart from what the founders believe. After that, I think the first 20 people in a company impact its culture forever.

If you hire the right people who reflect your values, believe what you believe, and exhibit the right behaviours, the organisation is likely to scale in a way that reflects those initial conditions. If you don't, then you end up with a nightmare culture down the line, and it's extremely difficult to get away from that. The main lever we can pull at this stage is not putting bullet points on the wall saying 'we are collaborative', but instead hiring the right people and ensuring they have the right impact.

In the scaleup stage, you don't have the resources to place bullet points on the wall or distribute an employee handbook. You're relying on humanity: are you hiring people who are 'human', who are empathetic? That makes everything easier because a base level of decency is expected.

As a founder, my influence on company culture comes down to every single interaction I have with the team. I have to ask myself if I'm living our values, rewarding or correcting the right behaviours, and giving the right feedback.

Equally, our culture has developed from the bottom up. For something simple like celebrating someone's birthday, someone will go out and get a cake. They don't get a cake because it's mandated by Head Office that a cake must be ordered – there's no mechanised system for cake! Our people are empathetic and want to do that for each other. Those little things can make a big difference.

Making legal more human

Empathy translates into how we build our product and interact with our customers. You'll build a better product if you're empathetic. Your customers will be happier and more successful if you can empathise with their needs and challenges.

Everything comes back to our mission statement: making legal more human. We make all our decisions on the product using that simple framework. It also applies to our choice of investors. We chose to work with Point Nine Capital because they're built around human-centric values. They've had amazing successes in working with businesses with incredible user-experience like ZenDesk, algolia and Typeform, businesses that are truly design-driven. We also recently raised $5m in a Series A round, led by Union Square Ventures - the investors of Twitter, Twilio, and Kickstarter.

'Human-centric' and 'empathetic' aren't the first words people would associate with legal services. We saw this big open space in legal services and we knew our product could fill that gap. I think humanity and empathy will be big drivers of change not only in terms of how people agree contracts but in the way in which the whole legal industry operates.

Juro privacy policy

Our privacy policy is a great example of human-centred design. The legal element was over quickly once we'd been advised on its content by lawyers. Then it was all about designing a document that was easy for people to use. It's a one-page, graphical policy that was the result of a collaborative process with our marketing team, design team, and legal information designers - such people exist!

We've seen an unusual response to our privacy policy: it's had tens of thousands of views, a document that no-one typically reads. It shows that the policy was successfully designed with people in mind; it was easy to navigate, and it also happened to convey important legal information. These sorts of things have indicated that there's a deep-rooted need amongst legal counsel to change the way in which they work.

Rather than asking legal counsel if they want to 'automate the contract process', we ask them if they want to become a better 'enabler' in their organisation. It's a narrative that resonates with people. I think many amazing lawyers are coping with huge challenges and want to be a positive force for good in their business. They're genuinely frustrated that process is holding them back from doing that.

A lot of pain goes into building a product. It's especially painful if you want to build something to the level where the user experience is smooth and effortless. For me, the magic of building software is when the product is helping people. The fact we've made a real improvement to someone's day is satisfying. We hope Juro is going to have a really positive impact on the way lawyers work.

Becky Baker was talking to Richard Mabey, CEO and co-founder of Juro. Juro raised $5m in its recent funding round which was led by USV Ventures, early investors in Twitter. For more information or comments please tweet @LTechnologist, @GetJuro and @rebeccaJKBaker.

Legal Technology in 2020

Forecast by the European Legal Tech Association

The European Legal Tech Association (ELTA) relies on a strong network of influential legal tech pioneers from all over Europe and beyond. Therefore, we asked our Board Members and Ambassadors to look back at 2019 to analyse the takeaways of another exciting year for the European legaltech scene, and to share with us a forecast for 2020 with deep insights from their jurisdiction.

BULGARIA

Ivan Rasic

2019 has been the year where initial awareness of legaltech started to appear. I feel this trend will continue in 2020. Legal professionals will continue to be more aware of various possibilities, both in terms of maintaining their business models, and in terms of disruption. One law company here announced a few weeks ago they will be using AI as their back-office legal assistant. That is a huge leap for the local market. I believe Bulgaria will just enter the Gartner cycle this year and may decide to experiment with various tools (the frontrunners, at least).

CROATIA

Marko Porobija

In general, we can see the legal tech market in Croatia waking up in 2020 and moving from "let's see what others are doing" to "let's make a viable product" phase. Some products are being built from the ground up, taking into consideration local needs and distinct market limitations. One of the already existing products on the market is "eOvrhe", a document automation tool specialized in creating debt enforcement requests (currently in its beta phase). Also, one of the emerging providers is BonsAI, a generic AI-development company that is diverting part of its resources into legal tech. Users and potential users of legal tech are currently still looking for legal tech solutions outside the country (at least those that are language agnostic or customizable to the local language). One viable idea for creating legal tech solutions in Croatia is to "regionalize" the products, as the language and legislature in Croatia, Bosnia & Herzegovina, Serbia and Montenegro are similar enough to enable the providers to sell the same version of the product on all these markets.

FINLAND

Kaisa Kromhof

We are seeing increasing networking between various players in the legal tech field, from law firms, vendors, knowledge management professionals, to in-house lawyers and legal tech leaders in various companies. This kind of organic movement gives a foundation for people to share their views about the adoption of legal tech. In addition there is interest in deepening the collaboration between Nordic countries as well, which could bring these countries closer as their markets are quite similar. More companies are also exploring the area of legal tech. Not only startups, but companies that have been mainly active in other areas are now looking into the possibility of serving the legal industry. This applies, for example, to companies that have developed machine learning orAI related technologies for other industries and are now looking for use cases in the legal profession. This fits well with the data-centric culture that many are adopting, seeing AI, data and analytics as elementary parts of their future success. At the same time, companies are looking for "business as usual" solutions that help them solve everyday problems. Also, public authorities want to find ways to increase efficiency; various digitisation projects of the government aim to achieve this. Legal design plays an increasing role in legal services and thus client-centricity will become an even more intrinsic part of firms' client offerings.

FRANCE

Grégoire Miot

France remains one of the most active legaltech scenes in Europe with more than 250 operating legaltech startups. Although far from reaching the same levels as in the United States, French legaltechs are getting an increasing interest from investors with a new record in 2019 of 52.1 million euros raised (+111.8% in comparison with 2018). Yet, 2019 was also the first year where a few legaltechs disappeared, along with a decline of legaltech launches.2020 will most likely confirm this tendency: mature startups will occupy more space on the legaltech scene, as strategic acquisitions will intensify.

Despite a reluctant approach during the emerging years of the French legaltech

community, legal professionals have now acknowledged the impact of these technologies. Strong disparities subsist between proactive lawyers and more traditional practitioners. However, at least half of the legal profession has started planning a digital transition in the next year on some aspects of their daily work.

In that sense, 2020 will certainly start transforming the preexisting interest for digital tools into a more mature movement towards specific solutions. Besides, as in many jurisdictions, AI keeps raising curiosity regarding its true capacities when applied to law as no solution really stands out. 2020 will most likely allow AI solutions to demonstrate their real value, especially for contract management which is still seen as the best playground for its first applications.

GERMANY

Markus Hartung

The hype about legal tech is gone. The focus in 2020 will be on the effective contribution that legal tech companies offer. It is crucial that new tools can be integrated into the software environment of companies. The German legal tech market is rather small compared to the UK, for example. However, there has always been software for law firm management for small and medium-sized law firms as well, plus two market-dominating databases for legal literature, which, however, have a high technological need for development (Legal Tech 1.0). Apart from that, platforms, workflow engines, document automation tools and AI companies are particularly active here. All these companies will grow, but we will not see any significant new start-ups. AI software will receive a boost towards the end of 2020, as the EU Commission and the German government plan an initiative to promote AI.

GREECE

Konstantinos P. Anagnostopoulos

Even though the Greek legal tech market is at its infant stage of development, we have witnessed a growing interest from the market and a series of infrastructural investments that can propel its growth.

One of the major developments in R&D is the decision of Ernst & Young International to create an Artificial Intelligence Center of Excellence in Greece, in cooperation with the Demokritos National Center for Scientific Research and its Software and Knowledge Engineering Laboratory. A group of researchers – 20 in the first year, to be expanded in subsequent years – will work on how AI can improve text mining, an important framework that can liberate and attract language-specific tech applications.

In regard to the local ecosystem, a few players stand out: A marketplace for lawyers and the most popular online hub for all things legal (Lawspot) , an operations management software for law firms (Tipoukeitos) which was acquired by the biggest telecommunications company (Cosmote) recently and a music rights management platform that has been growing fast in Athens and Los Angeles (Orfium).

Additionally, in the past year, fast-growing international legal tech providers have approached top tier law firms offering solutions on due diligence and contract and document automation. As far as the public sector is concerned, there are quite a few ongoing pilot projects on the digitisation of the court systems and new partnerships have been forged between academic technology centres and stakeholders of the judicial system (The Council of State, Bar Associations, etc).

The trends we forecast for 2020 involvethe education and training of lawyers about the new technologies that disrupt traditional ways of doing business, contract and document automation and management and a deeper investment on behalf of law firms and legal departments in operations management software solutions. As the ELTA Ambassador for Greece and director and co-founder of Athens Legal Tech, I am very excited about the future of the legal tech market in Greece and cannot wait to contribute to advancing its growth.

HUNGARY & CENTRAL EASTERN EUROPE

Orsolya Szabó

Hungary — together with Estonia, Poland and the Czech Republic — is one of the top contributors to the CEE legaltech market. Legal technology tools and services originating from these four countries jointly encompass almost 70% of the legal tech startups in CEE.

In a recent report focusing on the status of legal tech in CEE, we grouped NewLaw players in the region into three main categories:

1. Startups or scaleups developing software tools for the legal industry at large (i.e., we found their product and service offering to be relevant across the CEE region, potentially even beyond);
2. Startups or scaleups developing software tools for a given local jurisdiction only (i.e., country-specific solutions); and
3. Innovative legal service providers that perform a range of tasks enabling the growth and expansion of the CEE newlaw ecosystem: studios and boutique firms offering consulting services for the more traditional players of the legal industry.

- Legaltech tools in Hungary and other CEE countries cover a whole range of tasks. The top categories to be noted for 2020 are the following:
- Document management,
- Legal drafting automation and/or digital contracting;
- Legal matter, time and/or workflow management;
- GDPR & data security; legal search & research; and
- Access to justice.

Law firms and corporate legal departments in Hungary (and CEE generally) are increasingly experimenting with legal tech tools. Some local or regional law firms recognize the potential of new business models to transform the industry and engage with innovative service providers to develop collaborative solutions for clients. Going forward, it will be particularly important that legaltech tools from CEE (and beyond) are not only further developed and scaled, but also successfully implemented in legal workstreams.

ISRAEL

Zohar Fisher

Israel is home to many influential startups, such as Waze, Wix, Mobileye, Fiverr, Moovit and more. The country has well established its ability to raise capital and dominate many high-tech fields in just a few years, and with a population just short of 10 million people.

Though Israel is new to the legal tech market, it is clear that the country is determined to keep up the pace with the rest of the world, as law firms and in-house departments are slowly but surely adopting legal tech products. While the Legal-Tech is not a novel field in the 'Start-up Nation' of Israel, there is still much room for growth. The trend is promising, but it has not yet reached its full potential, as many 'old school' lawyers' recoil from adopting new technologies.

There is potential for growth in Israel, both by improving the accuracy of legal systems and by providing legal solutions to law firms. Israel, which was previously ranked 6th in the start-up ecosystem worldwide, has a great infrastructure to get a range of startups up and running, including new:

- **Law firms** - Israel has the highest number of lawyers-per-capita in the world, ahead of countries such as the U.S., Canada and Germany with a figure of almost 600 lawyers per 100,000 people.

- **Legal Tech Startups** - These tech-savvy lawyers are already taking their places in high positions at their law firms and either influence their firm to use more legal tech products.

- **Legal Tech Organisations** - Tech&Law (Israel) department is Israel's first legal-tech platform, bringing together and connecting the different players in the Israeli legal-tech market and is considered the gateway to Israel in this fascinating field.

ITALY

Nicolino Gentile

I expect a notable growth in the legal tech market in 2020. The legaltech "thing" has finally reached universities, politics, the legal and innovation press and magazines and law professional societies; also legal tech events are well known and participated in. So, legal tech is no longer just something that's known to big law firms and internal legal departments. VC and startup programmes are becoming interested in legal tech; investment from big players such as consultancies and tech companies is changing the legal tech landscape daily. It is still early days, but 2020 is going to be crucial in the affirmation of legal tech as a leading sector in the innovation and investments market in Italy.

NETHERLANDS

Jeroen Zweers

Six years ago the legal sector in the Netherlands was getting slowly excited by the buzzwords reaching our small country, such as AI (Artificial Intelligence). The response was restrained. That may have made sense, because, in spite of the economic crisis, this sector was not hugely hit. There seemed to be little incentive to change. Jelle Veenen (co-founder of Dutch Legal Tech) and I were uncomfortable with this attitude. What if we could introduce legal tech and innovation to the Dutch market in a practical way?

Dutch Legal Tech was created from the mission that Jelle and I had to strip all technological trends from their stylish market jackets and expose the stripped down version, the technology itself, to the sector. Even now, four years on, we still feel that it's our duty to assess, together with the sector, the actual added value of every development in the daily practice of Dutch lawyers. To exchange thoughts about how this applies within the legal domain. We have also started a number of initiatives to bring legal tech to people's attention. For example, last year we began with a concept focusing on students and education. From our perspective change starts with young people. We organised a number of student meet-ups and recruited student ambassadors.

This has led to Dutch Legal Tech being closely involved in the initiative to incorporate legal tech in law studies at institutes for higher professional education. Gradually new ideas are developing across the board, leading to new technological applications which in turn result in the required changes in the legal working climate. This means, however, that we have to change the way we look at legal services: more from the client's perspective and from the possibilities of legal tech. With Dutch Legal Tech we want to further enhance these ideas.

RUSSIA

Holger Zscheyge

After reaching a plateau in 2019, where vendors were looking for new clients and potential clients were looking for new products, legal tech sales and implementation will gaintraction again in 2020. There are several factors that support this outlook:

- The worsening economic climate will force more legal departments to automate and optimize processes to cut legal spend, or do more work with existing budgets.

- Law firms are, albeit slowly, opening up to the idea that legal tech gives them a competitive edge. This could reverse the trend of legal work moving in-house and might open new market possibilities. Consolidation among law firms will enhance this trend.

- The government and regulators will continue to develop the necessary infrastructure legal tech products can build upon (especially by further automating the judicial system). The Federal Bar Association started a project for a country-wide legal tech platform for members of the bar (ca. 70,000 lawyers). Based on ongoing development projects there will be several new legal tech products entering the market in 2020, including AI-based tools.

SERBIA

Srdjan Dejanovic

Due to the fact that Serbia doesn't yet have an officially established legal tech community (I'm currently working on it), the legal tech market consists merely of a few companies that operate in this market segment, probably without even knowing it. Therefore, I see 2020 as the year where the awareness of legal technologies will start to form and grow.

With the exception of Big Law, financial institutions and a few other key stakeholders, currently there is a very low percentage of legal services providers who use beyond basic software tools for everyday work. Big and mid-sized companies will continue to be open for new ways to optimise their processes, and micro and small legal professionals will first have to get education on innovation and technology so demand for legal tech can increase in this segment. Technology wise, Serbia has a strong IT sector and it is a great place to outsource technology creation, which is perhaps a good place to start facilitating legal tech growth.

SPAIN

María Jesús González-Espejo

2020 will certainly be a year of consolidation for legal tech in Spain. Supporting innovation, digital transformation and legaltech is already a priority on the agendas of almost all relevant organizations (the barprofessional associations, CGAE, CGPJ, Procurators, Registrars and Notaries).

Legal tech is already well catalogued. There are also several LegalTech directories and maps: Finnovating, Legaltechies and our Comparador LegalTech.

In the field of B2C there are Spanish legal techs successfully claiming against companies, such as Reclamador or Indemnizame. In family law, 2bepart is very likely to be consolidated. Also legal tech that sell contracts like Bigle Legal, Legaliboo or Milcontratos.com are now mature, as well as Testamenta and those that advise on matters of separation and divorce. The announcement that Arcano will invest in

the financing of Reclamador legal proceedings shows the maturity of a sector where Banco de Sabadell's BStartUp is also a relevant financier.

In the B2B this year we are sure that many firms will acquire software for the management and automation of documents, such as DocXpresso. Some B2B legal techs have already gone international.

For corporate lawyers, it is clear that their organizations are putting pressure on them to reduce costs and be more efficient and proactive. Most of them are in the phase of receiving "in company" training, joining the masters courses of CEU and IE or taking the online courses of UNIR, Escuela de Práctica Jurídica de la Complutense or ESADE.

There are already several events announced for 2020, which we plan to update in this agenda. We expect more books to enlarge the still limited legal tech library, and we expect the specialized media to increase its space devoted to legal tech news.In conclusion, 2020 will be a year of growth and consolidation.

SWEDEN

Helena Hallgarn & Ann Bjork

In Sweden there is a large interest in legal tech in general and many law firms are discussing and working strategically to achieve innovation and digitalisation. One of the largest law firms has even started an innovation lab to support and collaborate with tech start-ups and researchers.

So far, though, the focus for legal innovation on the Swedish market has been on efficiency and cost-squeezing, not on innovation as a game changer to provide new disruptive kinds of legal services. AI has been around for a while, with the larger law firms in Sweden all purchasing the standard AI document review tools. However, we still do not really see any AI tools being used to their full capacity, due to the time and investment needed to train them.

Since there is no monopoly on legal services in Sweden, there should be a good possibility for developing new legal offerings here. So far, we have seen this development in family law, where there are two providers for online legal services who are both widening their service offerings. We also see some other interesting legal start-ups about to launch their services on a larger scale, as well as an increased interest in the concept of Legal Operations, with GCs picking up on the idea and a new Executive Education for Legal Leaders being launched this fall at the Stockholm School of Economics. But there is still an uncertainty what the Legal Ops concept really means and how it should be applied to combine legal processes with

technology, or where such services can be obtained. We hope that 2020 will be one step closer to getting where we need to be, where technology has changed the delivery mechanisms and opened up the market to more alternative service providers delivering accessible and affordable legal services, potentially solving the current "access to justice" problem for individuals and small businesses.

Our conclusion is that there is promising technology behind many legal tech ideas but it has not yet been connected in the right way to the legal practice and processes. In other words, technology and practice are still far apart.

UNITED KINGDOM

Greg Wildisen

There has been further investment in legal tech by venture capital firms seeking to benefit from the noise and hype around legal tech. Legal tech is still largely focused on point solutions solving specific legal issues; these solutions have become highly nuanced, but it can be hard to deploy within corporations. There needs to be continued investigation into the capability of enterprise technology to solve legal automation challenges. There has been continued uptake of Office 365 into corporate and law firms, and a slow but steady increase in Legal Ops positions within corporate legal departments. Law firms continue to invest in innovation departments, but these have remained largely sideline business units.

ABOUT ELTA

What do we do at ELTA?

Our main objective is to strengthen legal technology (Legal Tech) at a European level. Our goal is to represent the interests of our members. The Association is actively involved in social and political debate in order to speak up for the concerns and interests of our members and to strengthen the position of legal technology in the European legal market. In so doing, we address topics that are relevant for the use and continuous development of legal technology, develop specific proposals, and advocate these vis-á-vis the political sphere, business, media and society.

The Association promotes science and research, as well as European and international communication in the legal technology field and its neighboring disciplines. With this in mind, we encourage a dialogue between legal technology users and developers. ELTA regularly informs its members about important current topics, trends and developments. In addition, there are regular in-person and online events designed to promote networking at a European level between all those who share an interest in legal technology.

What are our goals?

1. To raise awareness of technology and software supported solutions and processes in the European legal market.
2. To create a transparent platform to facilitate and support networking among the various European protagonists and stakeholders in the fields of legal tech.
3. To regularly inform our members about important current topics, trends and developments as well as arranging legal tech events.
4. To promote academic surveys and studies, as well as research in the fields of legal tech and its neighboring disciplines.
5. To contribute to vocational training and to ongoing and further education in the fields of legal tech.

More information?

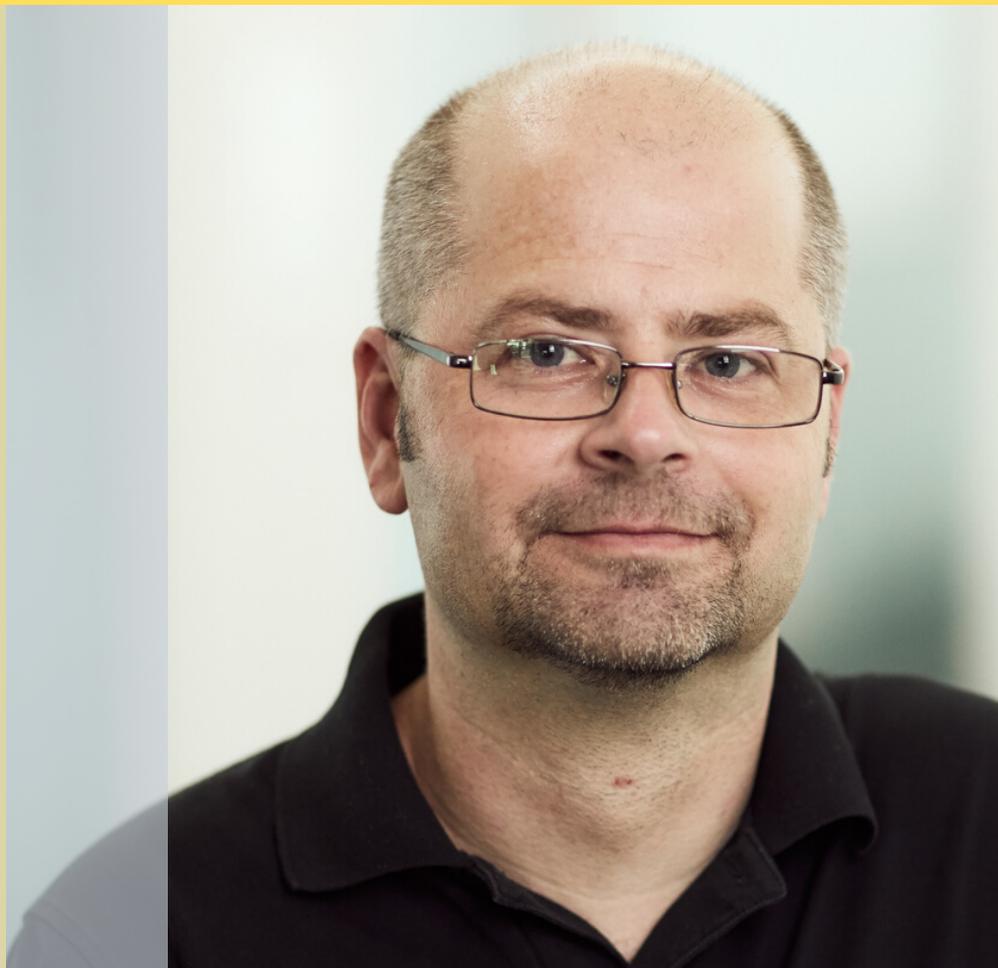More information can be found on their site here.

CAREER STORIES

In this issue we are pleased to have career stories from Richard Parnham, legal tech researcher at Oxford University, Electra Japonas, CEO of The Law Boutique, and Atik Ahmed, Head of Legal at TradeIX.

Richard Parnham

Legal Tech Researcher

Saïd Business School, Oxford University

If I was to describe my dream job, it would probably be what I'm doing right now. I'm a researcher at the University of Oxford's Saïd Business School, where I study the impact of novel technology on the legal sector. I spend a lot of my time interviewing cool people doing cool legaltech stuff, and then contributing to reports which try to make sense of what's happening

The story of how I got here is essentially made up of industry contacts I've made over 25 years, multiple redundancies, interesting opportunities that have randomly dropped in my lap and – like countless people from the legaltech community – Professor Richard Susskind. There hasn't really been a plan behind my career, beyond my willingness to take a punt on projects that seem like fun.

Way back in the early 1990s, I studied law at the University of Essex. Having failed to secure a training contract, I decided to become a legal journalist instead.

Upon graduation, I moved to London, took a short journalism course, and blagged some work experience on the Law Society's Gazette. From there, I moved to Chambers & Partners, where I joined the – now defunct – Commercial Lawyer magazine as a junior reporter.

While working at the Commercial Lawyer, a new book landed on my desk. You might have heard of it: The Future of Law, Facing the Challenges of Information Technology, written by you-know-who. I read it, loved it, and immediately vowed to get involved in legal tech in some way.

A couple of years later, I got my chance. Shortly after being made redundant from Chambers & Partners, I was approached by a former colleague. The colleague was working on the launch of what was – at the time – an innovative legal recruitment website.I had no experience of website development, but could use a computer and talk to coders. That seemed to be enough to get me the job.

I worked at this company for almost two years, slowly familiarising myself with concepts such as user requirements specifications and user acceptance testing.During my time at this company, I completed a master's degree, where my dissertation topic explored online legal services – directly inspired by Professor Susskind's work. I also studied for a part-time Open University diploma in computing for commerce and industry. I enjoyed combining work with part-time study, blending my academic learning with my day job.

Unfortunately, the website I worked for became an early casualty of the dot.com bust - its parent organisation staggered onto the London Stock Exchange, just as market sentiment was turning against internet companies. As a result my share options became worthless, my division was shut down, and I was made redundant for a second time. There's probably a lesson there for anyone hoping to make millions from a legal AI startup: the market can turn against your sector in a heartbeat, and your company might not last long if it does.

Helpfully, just as my dot.com job was disappearing, another former Chambers & Partners colleague asked me to join their new legal magazine, The European Lawyer, as a legal journalist. So I returned to legal publishing. Unfortunately, less than a month after joining my new employer, its parent company was bought out, stripped down, and I was made redundant for a third time. Whoops. But, by miraculous coincidence, at the same time that my redundancy consultation was taking place, my boss inherited enough money to stage a management buyout. As a result, I suddenly found myself working for The European Lawyer Ltd, a small, independent legal magazine company.

As "the guy who knows something about IT", I also became The European Lawyer's IT head, even though I knew practically nothing about servers and networks. I also became the journ-list responsible for writing articles about legal IT, not least because they were advertising money-spinners. One of the first legal tech solutions I wrote about was a newly-launched product called InterAction, which you may just have heard of. Yes, I really am that old!

A few years later, and after facing redundancy yet again, I was offered the chance to go freelance, supported by a retainer from LexisNexis. I'd met, and become friends with, the LexisNexis people while working on The European Lawyer – personal contacts had helped my career yet again. This freelancing offer was very handy, because I now wanted to study for a PhD, but couldn't get funding for it. My chosen PhD topic wasn't legal tech related, but it was legal practice strategy-related – I explored law firms' approaches to geographical expansion.

My part-time, self-funded PhD took a ridiculously long time to complete: over 11 years. During that time, I wrote marketing copy for a handful of legal tech companies, including Rocket Lawyer. More significantly, I was also commissioned to write annual conference reports for Netlaw Media, the company behind the British Legal Technology Forum and London Law Expo. You might have met me during this time – running between presentation stages in a mad panic, and badgering exhibitors to tell me about their latest product launches.

Another key freelance client was Jomati, the law firm strategy consultancy. I'd first met Tony Williams, Jomati's owner, when I worked for The European Lawyer and he was the global managing partner of Andersen Legal. My job at Jomati involved helping to produce the company's in-depth research reports. One of the reports I worked on focused on innovation in legal service delivery, another on law firms' use of legaltech.

Ironically, it was Tony who first tipped me off about what is now my job at Oxford University – he sent me the job advert, and asked if any of my PhD peers wanted to apply for it. My answer was a apologetic "no" – I wanted the job for myself. How could I not? The job spec basically amounted to my career to date: the research team were looking for someone with a PhD, interview and writing skills and, ideally, specialist knowledge of the legal sector. Tick, tick, and tick!

What lessons have I learned throughout my career? Firstly, that personal contacts matter very much in this sector – possibly even more than relevant experience. For example, when I took the job on the legal recruitment website, I didn't – objectively – have the skills required to perform the tasks in hand. But my former colleague knew me, trusted me, and was happy to let me grow into my role.

My second main takeaway is that there is probably a perfect job out there for you, which allows you to draw on all of your career experiences and interests to date. In my case, I found my dream job after more than two decades, multiple redundancies and a few shifts in roles. And for that, I'm very grateful. Who needs a career plan, when you can essentially wing it, and everything seems to work out fine? That is basically my employment plan for the rest of my life.

And, of course, I also have to thank Professor Richard Susskind for inspiring most of my career choices to date.

Richard Parnham is a postdoctoral research fellow at the Saïd Business School, University of Oxford. Details of the research project he's working on can be found here.

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The Legal Technologist

sponsors

Their next event will be the Bristol Legal Hackathon on 3rd April 2020, which is kindly hosted by the law firm Burges Salmon. If you're in the south west of England then please do get your tickets **here**.

Electra Japonas

CEO

The Law Boutique

Hi, I'm Electra and I'm the Founder of The Law Boutique. I started the business in summer of 2017 after spending over ten years in various large organisations in commercial legal roles. I realised there was a gap in the market for a legal company that took a more holistic approach to legal support, beyond just the law.

Through my experience, I came to realise that lawyers were trained to be lawyers and rarely felt comfortable doing anything outside it. Ways of working were largely the same as they used to be 20 or 30 years ago, technology was hardly used to create efficiencies and most importantly, lawyers often didn't get under the skin of a business and instead took an arms-length approach.

Although I am a dual qualified solicitor and Cyprus barrister, the jobs I had were never purely legal. In all organisations I worked for, I was always the conduit between Legal and the business. I believe this gave me a unique insight into the fact that the two functions didn't speak the same language. Arguably, if they did, my role would have been obsolete!

How did I get here?

I studied law in the UK and then went back to Cyprus, where I was born and raised, to qualify as a Cyprus barrister. I wasn't sure if I wanted to stay in Cyprus but since it was my home, it made sense that I qualified there first. After two years at home, I decided it was just a little too small for me. I moved back to the UK and did a Masters in International Business Law at the University of Exeter.

I'd moved right in the middle of recession so finding a job was hard. I was already qualified in a foreign jurisdiction so I didn't really want to take on a training contract - plus, there was a two year waiting for any training contract to commence so it wasn't very practical at the time. I was also not very attracted to the traditional legal career trajectory (training contract, private practice, partner or in-house route instead) and I knew I wanted to be at the heart of a business from the outset.

I was therefore delighted when I got a graduate role at the European Space Agency (ESA) in the Netherlands. My job was to negotiate, draft and manage agreements between ESA, an international organisation that funded space projects, and companies in the space industry that were building satellites, other deep tech solutions and delivering research projects. I staying in the space industry for four years, working as a Contract Manager, Commercial Manager or Legal Manager. My role was very much to bring together Legal and the business so that the two could talk to each other in a meaningful way.

My last role working for one of the largest global FMCG companies, we negotiated a huge IT project with a technology company that was going to deliver it. We engaged a highly reputable law firm to support our negotiations and they invited us to use their beautiful offices to undergo negotiations

with the supplier and their legal representation which comprised of their in-house team only. We had six to eight lawyers in the room at any one time, half external and half were employed by the business as in-house counsel.

One of my biggest frustrations was having to spend a good chunk of my time explaining to our lawyers why the contract needed to be written in plain English and structured in a way that will allow me to train people within the business on their obligations.

That's when I decided that I needed to start my own business, offering legal support to businesses in a pragmatic, commercial way.

The Law Boutique now supports other in-house lawyers with their ways of working and overflow. We help them build scalable legal functions that can respond to the pace of growth that their business is experiencing. We also help them implement design thinking into the processes, documents and training materials. Our objective is to help lawyers provide legal support in a way that the rest of the business wants to engage with. This helps reduce lawyers' workload, reduce the time it takes to go through a legal process (e.g. contract review) and get the rest of

the business to relate to Legal like any other part of the business, instead of seeing them as a function that sits in another world altogether. This in turn, allows lawyers to influence the business in a more meaningful way so that they can input into strategy, growth and innovation, making their own jobs more varied and purposeful. It's a win-win!

Advice on this route

In all honesty, I have never been happier in my life. Having said that, there have been times where I have never felt so challenged and outside my comfort zone - I've thought about quitting hundreds of times! Leaving what is a traditional route to an almost guaranteed healthy income and starting something that is set to disrupt an archaic industry, is not an easy task. But it's without a doubt, the most rewarding thing I've done.

Having said that, I do not wish I'd started any earlier. Spending 10+ years within businesses has given me the insight, knowledge and general life experience that I needed to build a successful business.

It also goes to show that there are more routes a law grad can take than the traditional one.
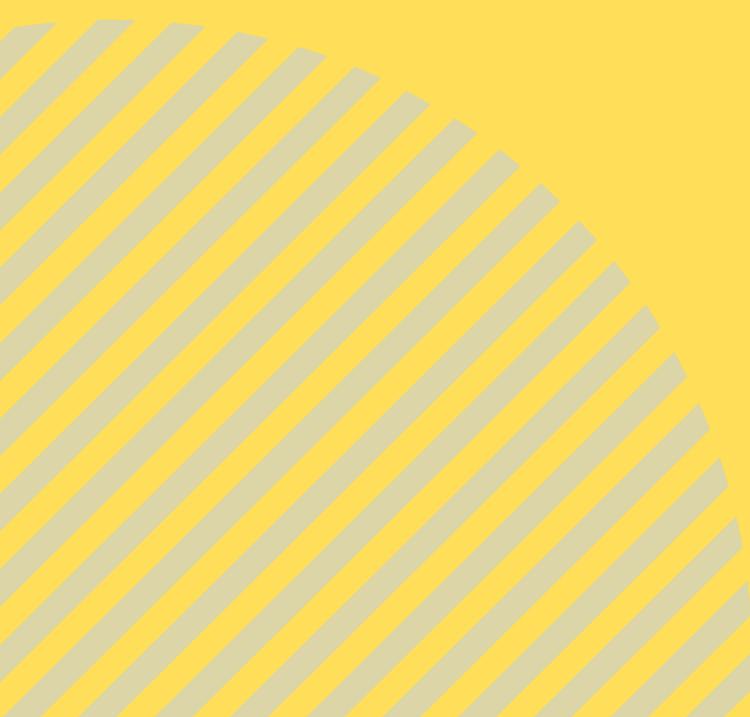
Atik Ahmed

Head of Legal

TradeIX

Atik Ahmed is the Head of Legal at TradeIX, a fintech company using blockchain to revolutionise the trade finance industry. He is an international speaker, most recently presenting about blockchain at the European Company Lawyers' Association conference in Paris. He has collaborated with F-LEX to produce a video box-set for Crafty Counsel: 'Fundamental skills for junior lawyers'.

Atik shares his career story with our editor Becky Baker and offers his pearls of wisdom for lawyers who aspire to a fulfilling and varied in-house career.

Atik, you've achieved prominence in an exciting and innovative sector. Tell me about your career journey.

"When I came to the end of my training contract at Pinsent Masons, the firm wasn't recruiting for NQs in the departments I was interested in. I'd just spent six months on secondment at AXA and found in-house legal work stimulating. I divested some energy in locating a suitable in-house NQ role and decided to move to Unum as Legal Counsel, staying within the insurance sector. It was a good foundational base for my in-house career, and I felt it justified my early decision to move in-house.

My next career move was to Bupa as Legal Counsel. The role had new demands, and I became aware of the need to hone a legally and commercially strategic mindset to matters. I also had to create a strong business network, which needed to be grown and nurtured. I learned the importance of being proactive and, with this in mind, I formed a Legal & Compliance Roundtable with a fellow lawyer to share best practice, insights and encourage greater communication between two highly important business divisions.

As much as I enjoyed the in-house insurance sector, I felt my in-house legal ability and skillsets had transcended to a level where I could embrace a new challenge in a new sector. Axiom had reached out to me, and the more I understood their business model, the more I could see a natural fit with them at this important juncture in my career.

Axiom's core offering is essentially an international, flexible lawyering service, where lawyers are matched with client opportunities across the in-house legal industry. I knew they had opportunities, but it did mean I had to take

what was known as the 'Axiom leap of faith' – meaning signing up as an Axiom lawyer without the guarantee of a client assignment. Thankfully, within a week of joining, Axiom had two assignment interviews lined up for me. I chose to join TradeIX, a burgeoning FinTech company, developing a trade-finance based platform using blockchain technology. They had a need of a general commercial lawyer at the time.

When I took the TradeIX opportunity, I realised the scale of the challenge. It required some immediate upskilling on my part, in both platform licensing and distributed ledger technology (including blockchain), which I spent time exploring, mostly out of work hours.

Since I joined TradeIX almost three years ago, the business itself has grown exponentially, I was the eleventh hire into the company, and we now have over one hundred employees with office bases in the UK, Ireland, Singapore and the US. I moved as a permanent lawyer to TradeIX in 2018, and subsequently became the Head of Legal.

My role encompasses overall responsibility for the delivery of legal services to the TradeIX business, including legal strategy, risk, operations and budgeting. As the business has grown through seed round and Series A investment, corporate work is important, in addition to the 'bread and butter' commercial work that the legal team is strongly focused on.

Having the opportunity to build and grow an in-house legal function for a business like TradeIX has been immensely fulfilling, as I seek to create a truly modern and empowered team."

What's your vision for your legal team?

"My vision cuts down to three main elements: processes, technology and people. These three elements have to be in harmony to enable the team to perform at its best and thrive.

Processes need to be designed to help enable the business and procedural efficiency is at the forefront of team thinking. You don't necessarily need expensive technology to do this – having a unified legal inbox, straightforward policies, key matter tracking, legal request forms etc. are all current examples of how we achieve this, though we constantly re-assess what works.

The purpose of **technology** is to enable talented in-house counsel to do their job most effectively. As examples, we use Practical Law and Workshare (redline tracking software), as we seek to create a truly tech-enabled and self-sufficient in-house legal function, that problem solves for the TradeIX business. We constantly review this, to check our technologies are being utilised and what else can help us as a team be more efficient.

Getting the right **people** is a key strand in successfully growing an in-house legal function. I look for lawyers who are highly adaptable, versatile and creative in seeking solutions, as these are essential attributes in a small in-house legal team. I also like in-house lawyers that are commercial, and can think about and analyse risk and find innovative solutions to manage situations. Finally, in-house lawyers that can quickly adapt to changing business needs, prioritise workloads smartly and work effectively with the wider organisation on a personal level are great assets."

What are the key differences between private practice and in-house?

"I would say the skills you need in private practice versus in-house do not cross-correlate as much as you might expect. For me, they operate in different legal 'spheres'. For example, in private practice, your focus is primarily on delivery to set client objectives, and often the development of unique legal expertise in a particular practice area.

As an in-house lawyer, you need a more expansive mindset to think about how the delivery of legal services is managed (thinking about operations, risks and controls, for example), combined with a well-developed social skillset to interact effectively across the entire business.

A high level of proactivity is certainly desirable as an in-house lawyer, as you have the opportunity to determine your own career path to a greater extent. However, it is likely you also need to be able to handle greater levels of change. The in-house environment can be quite volatile; your working life may be affected by a wide range of factors, such as functional restructuring in line with business needs, new reporting lines and sudden (and sometimes unexpected) shifts in your particular industry and market."

Finally, what would your advice be to those who want to work in-house?

"If you can handle the uncertainty of some aspects of in-house life, it's an exciting opportunity to expand your personal horizons and really challenge yourself. Moving in-house is a decision I've never regretted. It's fulfilled a number of my professional goals, and I still feel there is so much more in-house has to offer me.

If you're tempted to move in-house from private practice, research, explore and ask in-house lawyers in your network about their experiences (bearing in mind that no two in-house companies tend to be the same, even in similar sectors). Moving in-house isn't for everyone, so in-house secondments can be great to get a feel for what working as an in-house lawyer might be like. Good luck in your decision-making process!"

Legal Innovation Top 20 (UK)

Over the course of this year we will creating a series of legal innovation top 20 ranking some of the key people in legal tech or innovation. Although this starts with a UK list please don't worry more international categories will be added in due course so watch this space!

Our first category will be a list of the **Top 20 Most Innovative Junior Lawyers in the UK** and we are looking for those junior lawyers that are one or all of the following:

- are champions of tech/innovation within a law firm or business
- have driven technological change internally within a law firm or business
- have been a key driver in adopting tech to better collaborate with clients

This is limited to lawyers up to 5 PQE. Trainees, paralegals and similar in-house roles are also welcome. It's also possible to self-nominate. This is for UK only but we will do other countries later in the year.

Please nominate by emailing our Managing Editor (Marc) at marc@legaltechnologist.co.uk with the subject "LIT20 Nomination". It should detail the following:

- Who is being nominated
- How they have fulfilled the above criteria
- Nominee's contact details

Nominations close on 31 March 2020.

How to save the third wave of technology from itself

By Dan Wu

New startups are arising to solve the housing crisis. These startups disrupt what ex-AOL CEO Steve Case calls the "Third Wave," industries with large social impact. Think: housing, healthcare and finance.

To survive, these companies need to ensure compliance with regulations early on, because mistakes here can have large social consequences. To help new entrants survive in these industries, two closely related technologies — legal technology ("legaltech") and regulation technology ("regtech") — help companies navigate rules embedded in text, such as contracts or regulations. Without them, incumbents, who have the most resources to hire lawyers to navigate these rules, are set up to dominate in the Third Wave.

Third Wave startups must tread carefully. Unaudited prefabricated housing designs might mean the use of subpar safety measures and tenant deaths during an earthquake. Oversights in financial transactions, for instance, may unintentionally facilitate money laundering. Privacy violations in healthcare data could lead to an unfair increase in insurance premiums for affected individuals.

To mitigate these social harms, regulations can be complex. In finance, for instance, the new Markets in Financial Instruments Directive has 30,000 pages. To comply, banks can spend $1 billion a year (often 20 percent of their operational budget). Citigroup reportedly hired 30,000 lawyers, auditors and compliance officers in 2014.

For startups, ignorance is no longer a viable strategy. In just the past three years, fintech startups have suffered more than $200 million (almost 5 percent of the total venture dollars invested over that same period) in regulatory fines: 50 percent involving consumer mistreatment and 25 percent involving privacy violations. Zenefits fired 17 percent of its staff, including its CEO, after violating insurance brokerage laws. LendingClub paused operations and cut 10 percent of its workforce after violating state usury and unfair dealing laws.

Uber — once infamous for its "do first, ask for forgiveness later" strategies — now engages with regulators directly, by building partnerships and applying for permits. VCs, such as Evan Burfield in Regulatory Hacking, argue that these strategies are critical for the next wave of startups.

This work requires not only perseverance but also tremendous resources. Large companies, such as J.P. Morgan or even Uber, have the most money and staff to navigate an increasingly complex regulatory landscape. Because of this, they are in the best position to shape the future and the Third Wave.

Legaltech and regtech can change this trend. These technologies use anything from data analytics to decision trees to help companies navigate rules embedded in text, such as regulations and contracts. Since technology is scalable in ways that hiring 30,000 lawyers is not, small innovators can better compete in a big company's game.

In one example, Fenergo transformed a highly manual document review for Know Your Customer (KYC) regulations using text analysis and rule logic, speeding up the process by 37 percent.

Other related startups are reducing the costs associated with complying with corporate contracts (such as Ironclad), bankruptcy (such as UpSolve), zoning requirements generally (such as Envelope and Symbium) and for accessory dwelling units (such as Cover), permitting processes (such as Camino.ai) and energy standards (such as Cove Tool).Because of this environment, analysts are bullish about these technologies. In 2018, nearly $1 billion has been invested in legaltech. Spend on regtech in finance alone is estimated to rise from $10 billion in 2017 to $76 billion in 2022 (a 700 percent increase in five years). For comparison, spend on the sharing economy is estimated to rise from $18 billion in 2017 to $40 billion in 2022.

In the Third Wave, companies cannot — and should not — avoid their regulatory and social responsibilities. If the scandals of Uber and Facebook are any indication, when a company violates laws or loses its integrity, the public and the stock market respond in kind. Journalistic coverage of breaches and unethical data practices has captured public attention. Waves of data regulation have passed across major jurisdictions, such as China, California and Brazil.

Embracing legaltech and regtech can plant long-term competitive advantages. Adopting technology that automates data protection, for instance, can create better customer experiences. By safely analyzing more data, even smaller companies can quickly generate insights and build programs that provide value to their customers.

Technology can empower companies both large and small to embrace the mitigation of social harms and the promotion of positive impact.

Startup executives should take notice.

Dan Wu is a privacy counsel and legal engineer at Immuta. He holds a JD from Harvard University, and is a PhD candidate for Social Policy and Sociology at The Harvard Kennedy School. This article previously appeared on TechCrunch.

Contributors Required

Here at the Legal Technologist we are always looking for good content so if you're interested in writing an article about how law and technology are converging then please do get in touch. This could be a practical article on legal tech, a use case of legal tech with clients, how new technology will change legislation or what the future lawyer looks like. This isn't an exhaustive list though so please don't think you are limited to just those topics.If you are keen to contribute then all you need to do is get in touch with our editor at marc@legaltechnologist.co.uk.

We look forward to hearing from you!

Brazilian Legal Tech Market
A country of rising legal tech startups

By Vanderleia Moreira Dionizio

In 2020, it feels like old news to be commenting on the rise of the legal tech market worldwide. Considering the progress of technologies such as machine learning, deep learning and quantum computing, allied to the fact humans can't seem to just live in perfect harmony, legal tech is here to stay and will effectively change the traditional ways of dealing with all aspects of the law.

In the legal tech world, Brazil can be seen as a rising star. With a large population and judicial problems of its own, the country's territory spreads over almost 9 million square kilometres; you could fit whole nations in some of its states alone. It has a population of around 209 million people, 27 Federal Units, over 5,500 cities, 32 political parties (75 waiting for permission to operate), over 500 regulations edited daily, and biennial elections, all entangled by a large legal system.

At the time of writing, there were over 1.1 million registered lawyers and over 25,000 registered law student interns at the Brazilian Lawyers Organization (OAB, "Brazilian Bar"). According to the last year National Council of Justice report , there were nearly 24 million new lawsuits in the common justice, together with about 70 million ongoing cases.

Having this incredible legal landscape, it should not come as a surprise that technology is being used to tackle its issues. New startups and technological courses targeting legal professionals are being created, as lawyers and the "IT crowd" discover this emerging and large market.

The Brazilian National Congress

Some new hubs and organizations were dedicated entirely to legal tech. LawTech Hub is a coworking and networking space and incubator in Rio de Janeiro. According to its CEO and co-founder, the lawyer Fernando Gomes Xavier, lessons learned from the fintech market are behind the idea for the Hub. "There was nothing like this in Latin America", says Xavier who also researched case studies from Australia. The LawTech Hub had six startups working locally by the time we spoke to him, at varying stages of development.

Xavier emphasizes that the gigantic lawsuit ecosystem spread over 90 different courts hinders law firms and legal departments from extracting necessary data from the government judicial databases. Nevertheless, many traditional law firms fail to see the importance of investing in a cross-functional team with lawyers, IT, designers and engineers in order to build software that could deliver a better service. He is also co-founder of the startup Dados Legais ("Legal Data") which focuses on compliance, including dealing with the new data protection regulation that will be adopted in Brazil in August this year.

On another front, Legal Tech Brazil describes itself as the "first platform to gather all the Brazilian legaltech environment". It lists 57 startups, which can also be visualized in a map, most of them in the analytics and management categories. It publishes a blog about technology applied to law with general, non-technical articles.

The Brazilian Association for Law and Legal Techs lists over 100 legal techs divided by categories and current stage. It also promotes local groups and chapters, demo days, projects with universities and tech labs. Antonio Maia, Director of Institutional Relations and counselor for AB2L informs that most startups fall in the disintermediation (no lawyer intervenes, such as consumer-companies' non-litigious issues) and intermediation (online mediation, contract automation) categories.

No lawyers involved? How does the Brazilian Bar, with its strict code on what are the activities that only lawyers can do and how they should do it, feel about it? "The Brazilian Bar already sued and lost against several companies", Maia explains. "They should only concern services reserved to lawyers, but not all legal services are reserved acts, neither the Brazilian Bar can regulate the sector, only represent lawyers", he continues. He argues that a software engineer will be the right person to create a contract automation tool, preferably with a lawyer's counselling. This dispute between legal profession organizations and legal techs was recently discussed in Germany , which might lead to more cases arising cases around the world.

But it is not only the Brazilian Bar's vigilance which presents obstacles to the legal tech market. The legal tech founders we spoke to were unanimous in their argument that law universities in Brazil

do not prepare students to be entrepreneurs. Many of them only succeeded after much trial and error, creating solutions for problems they had experienced during their careers. Maia, who is also the co-founder of Tikal Tech, saw the opportunity to create software for some services for his small law office. At first he felt lost in the process of transforming his product into a business, but after a few years he found success and now invests in other legal techs.

Cristina Salvador, a senior lawyer whose career spans almost 40 decades, could observe from the front row all the changes that occurred in Brazil in this period: "[In the 80's] there were only a few private law firms in Brazil and even fewer practising corporate law. I did not want to work for the government as most of my friends did". She then started working as legal counsel for several different companies, finally settling in a medium size law firm. That was the moment she realized some law offices missed on the organization and structure of the large companies she had worked on. She then co-founded Legal Leaders which aimed to help lawyers and other technical employees how to deal with finances, business plan, technology and talent retention.

Size and inequality also have a big impact on the distribution of legal techs throughout the Brazilian territory. "Brazil, with the exception of the southeast and south, is not a technology center", says Ricardo Vieira de Carvalho Fernandes, co-founder of Legal Labs , one of the most successful startups in the area of AI applied to analytics. Fernandes, who holds a Post-Ph.D in Legal Informatics from the CODEX-The Stanford Center for Legal Informatics, sold his company on June 2019 to the company Neoway for US$ 26 million.

Legal Labs, located in Brasilia, and JusBrasil, from Bahia, are the only examples of larger startups outside the south-southeast region. In fact, Legal Tech Brazil website lists only five startups away from this main centre. It is in the north and northeast of Brazil where the worst statistics for basic rights such access to education, health and justice are found.

These statistics could be improved with the help of technology, by using virtual school environments and health and legal tech apps. In the law area, there is software such as Atlas de Acesso à

Justiça ("Justice Access Atlas") which maps the closest places where someone could solve a legal issue by using the public service administration and EPROC which allows the general public to consult court procedures.

In yet another dichotomy, Brazil, the country with one of the largest gay parades in the world, where trans women could be seen on TV since the 80's and same sex marriage is protected by law, bears terrifying statistics regarding LGBT rights. It is one of the most deadly countries for LGBT individuals. Some reports indicate that 1 person is killed every 25 hours in Brazil for homophobia-crimes.

Trying to reverse this situation, the startup Bicha na Justiça (which roughly translates as "Queer after Justice") offers pro-bono legal advice and diversity training. In 2018, it won the most popular startup prize in the reality TV programme "Startup Show". The Brazilian legal tech market is growing but there is still a lot of space for development. Considering Brazil's complex legal system and its population, it's not risky to say there are still too few startups. For this to happen, both IT and Legal should combine forces, using AI techniques in areas that do not currently receive enough attention, identified by lawyers. Naturally, this would depend on parties that have knowledge and experience on the matter which could be a challenge in the current educational climate where there is a brain drain and university funding cuts.

Vanderleia Moreira Dionizio

CRISPR Cas-9 genome editing: A legal and ethical overview

by Slavina Petrova

We are on the verge of the next revolution, one that will happen within us.The tool that will enable that revolution is CRISPR Cas-9 (CRISPR is the acronym for Clustered Regularly Interspaced Short Palindromic Repeats).

To put it simply, CRISPR is a system that makes it possible to cut a cell's genome at a desired location, allowing existing genes to be removed and new ones to be added.

The technique was discovered in the 1960s, but it was not until 2018 when a Chinese scientist modified a human embryo for the first time. Although genetic engineering in microorganisms, plants and animals is fairly ethically acceptable nowadays, the ethics of the application of the CRISPR-Cas-9 are often questioned. The potential consequences of the technology might be so irreversible that it has become surrounded by big ethical and legal issues.

So the question is, is the use of CRISPR interference with nature or a cure for all diseases?

He Jiankui, the scientist who made the first genome-edited babies in order to reduce the risk of HIV infection, faced widespread criticism. His research was suspended by the Chinese authorities. He was found guilty of forging documents and unethical conduct and sentenced to three years in prison. He also faced a fine of 3 million yuan (approximately £330,000).

On the other hand, we must confront the 'industrial revolution of the genome'. The opportunities are as significant as the ethical uncertainties. Biohackers around the world even experiment at home. The former NASA biochemist Josiah Zayner was the first to use the technology and injected the DIY gene therapy into his left arm, live-streaming the procedure on the internet. He even published a free guide for enthusiasts who want to undertake the experiment themselves. Zayner argues that being able to control what genes we have is a human right.

Sceptics, however, have concerns over the use of CRISPR, including the implications of creating "designer babies" or "super humans". They argue it might create greater societal inequalities - The technology might not be distributed equally and only the rich will gain access to it.

The legal and regulatory issues surrounding CRISPR are also significant.To date, there is no internationally valid regulatory framework for CRISPR; currently each country decides for itself how to regulate and control the new technology.

The European Union has developed a legal framework based on Directive 2001/18/EC, which regulates the use of genetic engineering technology. However, there is a debate questioning whether an organism manipulated by CRISPR is really a genetically modified one because there is no insertion of foreign DNA, but only altering of the existing genome. There is still little clarity on the topic.

Other countries like Canada prohibit human germline editing. The 2004 Assisted Human Reproduction Act criminalises the use of the technology and it is punishable by fines of 500,000 Canadian dollars and the possibility of up to 10 years in jail. The Act has come into force following the public's negative reaction when researchers produced a cloned sheep named Dolly in 1996.

The situation in Germany is similar under the 1990 Embryo Protection Act. It bans the use of embryos for research and experiments. By contrast, France The country has ratified the Oviedo Convention, which states that "*An intervention seeking to modify the human genome may only be undertaken for preventive, diagnostic, or therapeutic purposes and only if its aim is not to introduce any modification in the genome of any descendants*".

China has revised its Civil Code which will include the following clause: '*Experiments on genes in adults or embryos that endanger human health or violate ethical norms can accordingly be seen as a violation of a person's fundamental rights*'. This version of the Code is expected to be adopted in March 2020.

The issues around CRISPR are controversial, challenging, thought-provoking and philosophical. The technology could be revolutionary, but also an ethical minefield. And as Arthur Caplan, a bioethicist at New York University, puts it: "*For one of the most important experiments you could do in the history of eugenics, we're stepping off the ethical cliff with no ropes or safeguards or protections*".

Slavina Petrova

A - Z

of Tech Basics

By Stephenie Ong

B

Blockchain

TL;DR – Blockchain is a form of distributed ledger technology ("DLT"); they are not one and the same, despite what many articles imply. Many would describe blockchain technology as an undeletable account ledger. Arguably more prominent in financial services, blockchain is gaining traction in the legal sector through smart contracts. Also, Bitcoin is not blockchain, it is a cryptocurrency that uses blockchain technology.

What – Blockchain has 3 central features:

1. It is **immutable** - anything recorded on it cannot be deleted.
2. It is **decentralised**, meaning no one single person can control this network.
3. It is **validated** - every transaction is validated by every other listed 'node' before being added to the ledger.

Blockchain is a form of distributed ledger technology ("DLT"); they are not one and the same, despite what many articles imply. Many would describe blockchain technology as an undeletable account ledger. Arguably more prominent in financial services, blockchain is gaining traction in the legal sector through smart contracts. Also, Bitcoin is not blockchain, it is a cryptocurrency that uses blockchain technology.

How – I'll use an analogy. Let's say Arno would like to buy Barbra's purse, which she has made. To sell it to Barbra, Arno has to know 3 things. First, who he's buying his purse from (Barbra), how much for (let's say 5 currency units("CUs")) and the recipient's address (Barbra's address).

Arno now needs to use a postal service to send this currency unit. He puts his 5 CUs in an envelope with the details and hands it in at a special post office. Miner, who works at the post office now has to inspect the package and its contents. He uses a special program to check the envelope's been properly sealed, the CUs contained are not counterfeited, and solves an algorithmic (i.e. a logic-based maths) problem as a proof of his work.

Miner now creates a block with Arno and Barbra's anonymised details and adds it to his stack of blocks, all in chronological order.

Why does this matter – Immutability protects against external hackers and cybercrime as well as internal corruption and embezzlement. Decentralisation

prevents data loss or theft in the event of one user's breakdown. Additionally, it means there is little to no human input; in other words, lower risk of human error/fault. The use case for blockchain technology would be the simplification of manufacturing supply chains, execution of smart contracts (effectively computer programs stored and executed on a blockchain) and most prominently within the finance sector as a means of facilitating peer-to-peer trading by removing banks (thought to be the middlemen in this case).

However, it is these features that create complex regulatory issues. For example, decentralisation means users and servers can be located anywhere in the world; which legislation and which country's jurisdiction will apply? In the event of error in software code or smart contracts, who will be liable for error? Practically, implementation is often faced with difficulties surrounding scalability. Because each transaction needs to be verified before being added to a blockchain, Bitcoin, for instance,can only process up to 7 transactions per second. Ethereum is only able to manage up to 20. By contrast, Visa can process 1667 transactions per second. To make matters more difficult, Bitcoin would take around 10 minutes to generate a new Block on the Bitcoin blockchain, each block with a size of up to 1MB, Meaning, in order to process thousands of transactions a second, all nodes (the post office in our example) would have to have really high network bandwidth and speed to keep up with all this updating.

Stephenie Ong

ASK THE EXPERT!

This month's shoutout also goes to Sophie Rodger – who's asked us this:

"Hello, I read a paper by Jennifer Li where she explored the applications of blockchain (smart contracts) in construction and pin pointed to possible reduction in administration tasks, time, cost and risk. Another possible area could be using smart contracts for marriage - which would be a great area to streamline. My question is, how long do you think it will take before law firms are using blockchain in their day-to-day business? Or is this already happening?" - Sophie Rodger

Hi Sophie! Thanks for your question. I am going to interpret that as when law firms would be using blockchain in their day-to-day internal process. And, the answer to that is they already are – albeit on a fairly limited scale.

The reason for this is twofold.

First, despite an increasing number of use cases for blockchain amongst their clients, internally there is still a fairly prevalent view that use cases within law firms are limited. As you might already be aware, smart contracts seem to be at the forefront of this. However, smart contracts operate on an "if-then" basis i.e. if a specific event happens, only then will a specific process be executed. What this means is until an ecosystem of firms have been established with the help of organisations such as the Global Legal Blockchain Consortium, we may hear about US firm BakerHostetler creating a blockchain-based internal employee recognition

and rewards program. But, we may not hear about Magic Circle firms adopting a similar approach for the next few years. That said, on a firm-to-client basis, many law firms have recently launched bespoke software with expert knowledge and know-how on international legislative issues surrounding blockchain. These are also often accompanied by international, specialist legal services that complement their clients' business needs and objectives. Now we just need to wait for them to apply these services internally.

The second reason is commercial risk. Blockchain technology may have been around for the past decade or so, but scalability issues, the fact that blockchain is still an emerging technology, lack of legal precedent and complex legal issues all point to one thing from the business standpoint of law firms: stay far, far away.

Admittedly this is a shame given the immense potential of blockchains or DLT. However, Gartner predicts this should no longer be an issue by 2023, once sufficiently advanced technology has been rolled out. In addition, the UK Jurisdiction Taskforce (UKJT), part of the LawTech Delivery Panel, issued its Legal Statement in November last year stating that cryptoassets (including Bitcoin) can be treated in principle as property, and that smart contracts are enforceable by the English Courts as having satisfied all conditions of forming contracts under English law. Statements like these should hopefully catalyse further implementation of blockchain within law firms over the next few years.

Hope this answers your question!

S**tephenie Ong**

Do you have questions about legal tech? Why not send them to us? If we don't know the answer we promise to find someone that does! Send your questions in by filling out the form here.

Growing use of Artificial Intelligence

By Mayank Tripathi

Two major threats that the legal sector is facing at the moment are the growing number of alternative legal services providers (ALSPs) and the entry of the Big 4 accountancy firms – KPMG, Deloitte, EY and PwC. The result is an increasingly competitive market where clients want services that are price efficient. In response, law firms have started to adopt technology-based solutions such as artificial intelligence (AI).

The most common way AI is being deployed is Technology Assisted Review (TAR). Barring documents that are specific to an agreement, most documents in a transaction tend to be boilerplate. Examples include employment contracts and licenses. However, while these documents may be of the same type, they differ from one transaction to another and still need to be identified each time. Having lawyers engage in determining and locating documents that are relevant is time consuming; this is where TAR comes in. TAR AI programs can quickly review a large number of documents and produce those documents that are relevant to a transaction. The automation of these tasks makes the whole process more efficient and cost effective. Moreover, the program engages in machine learning – over time it becomes more efficient as it "learns" to spot trends in the type of transaction being engaged in and what documents are required. Eversheds Sutherland has partnered with Luminance to provide AI powered solutions for M&A due diligence.

By automating tasks that are generally time consuming and generic, law firms are becoming more efficient and competitive. Moreover, by not billing clients for such day-to-day work, clients get more value for their fees. However, it needs to be noted that problems would arise regarding documents specific or unique to a transaction. These are likely to be missed by the algorithm as it may not have processed enough data to accurately establish a link between locating the document, deciding whether it is relevant, and retrieving it as a result. At this point, human intervention would be necessary. This goes to show that AI is sometimes only a tool facilitating a task and cannot always be relied on to carry out the entire task on its own.

Moreover, law firms have realized the long term potential of the technology and are paying very close attention to the growing lawtech industry.

Mishcon de Reya, for example, has invested in multiple platforms – Ping, Everchron and Thirdfort. Certain law firms, such as Allen & Overy and Clifford Chance, have started their own incubators, giving lawtech start ups a space to develop and test their platforms in order to stay ahead of the competition.

However, what's stopping AI from being adopted by all law firms across the board? One concern is regarding the reliability of the technology. The efficiency of any AI platform is reliant on the quality and quantity of data that is fed into it. Processing large volumes of high quality data is the only way for any AI platform to provide consistent and reliable results. Given the relatively recent acceptance of AI technologies in contemporary legal circles, there is the question of whether or not AI has had a chance to process an appropriate amount of data. However, law firms possess large amounts of data in the form of old contracts, agreements etc. that if opened up to AI would help improve the efficiency of the technologies in the long run.

Secondly, a program that processes data that is covered by client confidentiality or legal professional privilege also raises privacy concerns. Firms are likely to have to invest in robust data protection teams and the maintenance costs of having to procure additional software, hardware and servers, for example. At the same time, as the technology becomes more reliable and efficient, demand will likely increase. Firms are likely to incorporate the use of AI in order to stay competitive. As demand increases, there will be an increase in supply; this increase in suppliers will lead to lower and more efficient prices over time.

For students applying to vacation schemes and training contracts, it would be a good idea to research your chosen law firm's approach to technology such as AI. Students could also go one step further and learn basic programming skills. Not only does this help one stand out amongst other applicants, basic programming literacy would help trainees understand the technology behind the software used by their law firms.

Mayank Tripathi
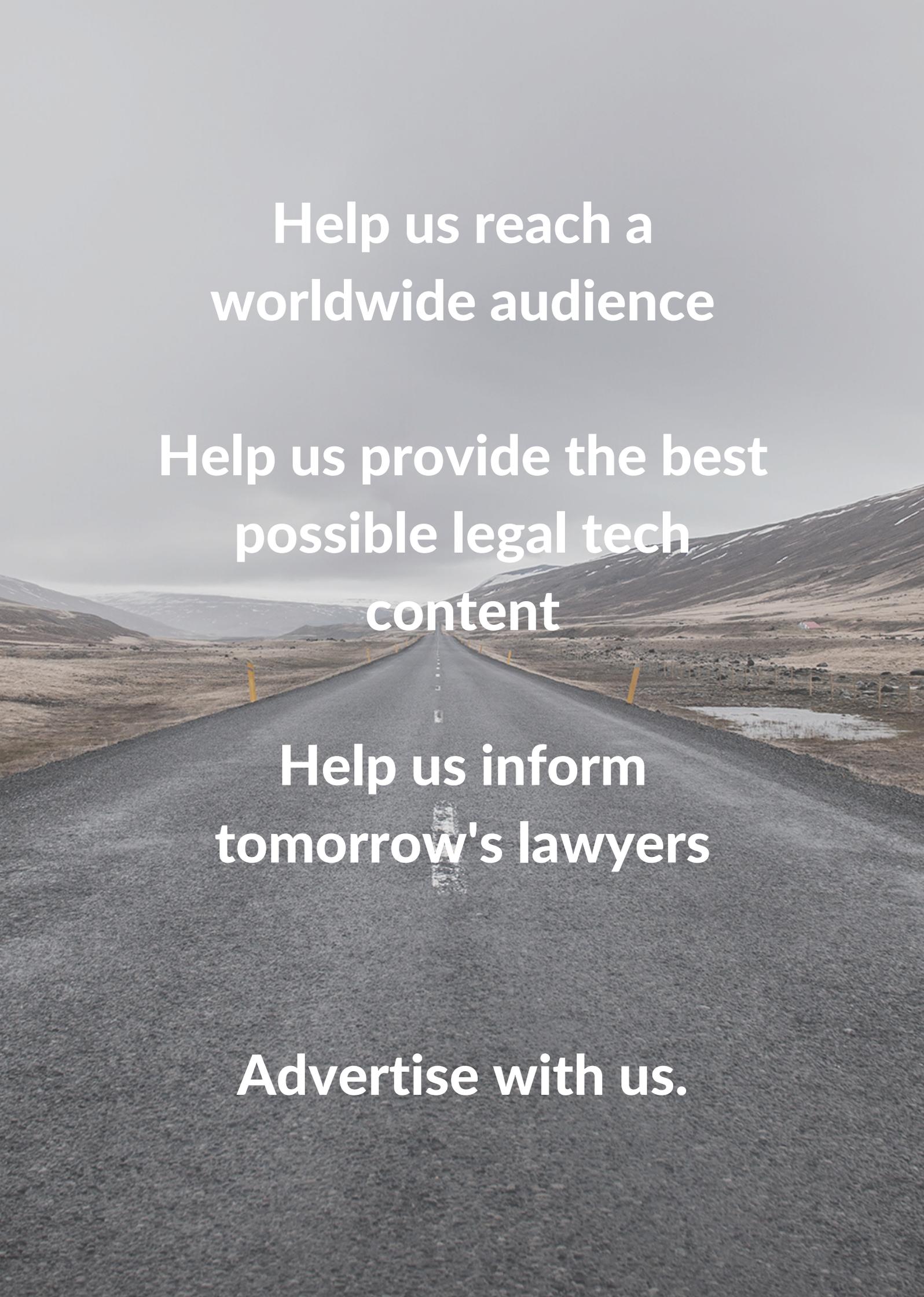
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