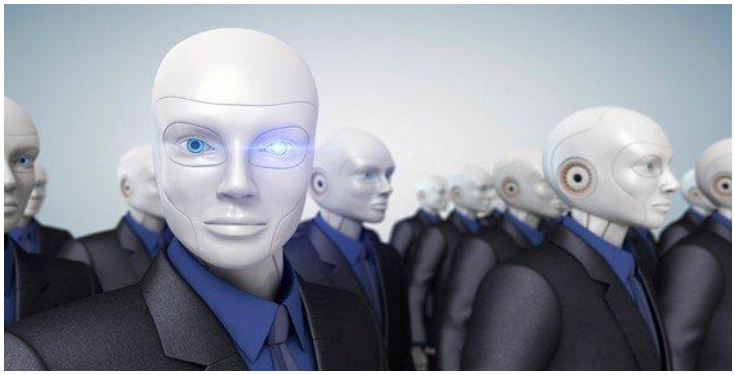
ARTIFICIAL INTELLIGENCE AND THE LEGAL PROFESSION

(methodological issues, potential applications and protection of rights)



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NOTE TO THE JURY:

This work was initially conceived by the Team as a web page, although with the aim to comply with the Legal Game rules we have also transformed it into the word version you are reading now.

However, in order to be able to fully assess the spirit with which the work was originally prepared and in accordance with the subject matter of the same (Artificial Intelligence - innovation), we strongly recommend the Jury to abandon reading this word version and to approach our research through our website.

Click on the following link and have fun:

https://sites.google.com/view/e-legal-game/home

EXECUTIVE SUMMARY AND CONCLUSIONS

Two main ideas or conclusions:

- At least as of today, **the team human + AI is the winning formula**, and this statement is fully applicable to the legal profession, where artificial intelligence is not a substitute for lawyers but a very powerful and indispensable complement to increase their effectiveness and the quality of their work. However, for this complementarity to be positive, powerful and winning, we shall change our mentality, modify the model and review the way in which we relate either internally or with other actors in the legal world. And we have to increase trust in AI. And this is perhaps the hardest part, trust. Because to trust, we have to move forward with transparency and with legal certainty; we have to innovate in a sustainable way.
- Actually, **today the digital transformation will be sustainable, or it will not be**. Sustainability and digital transformation are two concepts that must be absolutely conceived as a unit. The digital transformation is part or a key instrument for sustainability and the goals that can be achieved in sustainability with/through digital improvements are exponentially greater than without them.

This executive summary will address the main information covered by the Team in the following categories:

➢ WHAT'S HAPPENING IN THE LEGAL FIELD RIGHT NOW?

AI & LAW FIRMS -----------> International law firms are enthusiastic early adopters of AI and other advanced technology tools to enable them to deliver a better service to their clients. **E-discovery software tools** have been available for some time to help legal teams with document review. **Contract / documents review** tools are being used for searching specific information or clauses inside documents. **Automated drafting tools**

are becoming increasingly sophisticated. International law firms use this type of tools to allow clients to generate quickly and independently, through direct access to the platform, tailor-made and house-styled documents. In addition, **automated advice system** is being used to provide preliminary advice in highly delimitated and regulated sectors. It uses decision tree technology, accept large amounts of data and provide weighted options for lawyers to take next steps.

AI & COURTS -----------> AI-powered legal technology tools may have a big impact of how judicial services are managed and delivered. We share the view that the AI application designed to improve legal research could be very useful in rendering processing of the judicial workload faster and more efficient but if users (the judges) clearly understand how it works, its limits and potential errors and are duly instructed for its use in the proper conditions.

AI & IN-HOUSE LAWYERS -----------> The implementation of AI or digital tools is a work in progress in which companies will deepen with no doubt in the upcoming future. There is still a long way to go and our feeling is that, as of today, European companies are not yet extracting all the benefits that AI can bring. As for the International Law firms, for in-house lawyers these tools are necessary to increase efficiency and quality. For the legal departments of large international companies such as Enel or Vodafone, AI could be a useful help to increase collaboration between teams from different countries, favoring a global vision of the legal area.

- **BENEFITS**

AI has proved itself as useful in assisting lawyers in doing things faster, better vision of the legal area. and cheaper. Even though the current technology is limited now the possibilities are endless. AI is currently only in the beginning in the in-house legal departments, but it is already useful with legal research, contract development and many others to come. The main benefits are saving time, allowing earlier and more accurate risk assessment, higher quality of work, improving organizational structure, increasing creative analysis, no burnout.

➢ RISKS

Human supervision is still necessary and there are questions that it is important to pose before deciding to use an application that can go wrong. In other words, it is essential to understand how the tool works and be aware of its potential errors and of the costs of such errors. The main risks identified are the following: taking away jobs, vulnerable to cyber-attacks, economic constraints, untrained lawyers, IP rights, privacy & data protection and ethical issues. However, given the human-centric approach to AI taken by the EU in the fort coming legislation, we believe that, at least in Europe, AI will be deployed in a way to enhance human abilities rather that to substitute humans.

➢ WHAT IS NEXT?

Artificial intelligence creates huge opportunities for businesses globally across all sectors. There is no doubt about it. However, we have seen that the use of AI also brings the potential for significant legal, ethical and reputational exposure.

In addition, which is the role of the legal profession in this scenario? More precisely, which is our role as in-house lawyers?

We have made up a proposal in two main blocks: **A. Legals for Tech** and **B. Tech for Legals**.

The first proposal has a global approach and tries to explain how the LCA area can contribute to assess AI implementations aiming to minimize potential risks to the company.

The second one is related just with the legal family and tries to outline proposals to incorporate more AI tools in our area in order to render our work more productive in terms of efficiency and quality Companies need to change their view on the legal area, understanding that Legal & Corporate Affairs is also a key function for business growing. In our turn, we, as in-house lawyers, need to change the way we used to work and be

open to embrace AI as a great opportunity to fall in love again with our careers. There are many changes to do and it would be not easy but there is no other way.

Only companies that understand this new concept of legal services and take steps in this direction will succeed. The others will be left behind.

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"The changes are so profound that, from the perspective of human history, there has never been a time of greater promise or potential peril. My concern, however, is that decision makers are too often caught in traditional, linear (and non-disruptive) thinking or too absorbed by immediate concerns to think strategically about forces of disruption and innovation shaping our future"

K. Schwab – "The Fourth Industrial Revolution" (2017)

A. INTRODUCTION

Artificial intelligence (AI) is a term used for a computer-based algorithm that can analyse, strategize, and draw conclusions to complete tasks typically performed by humans.

We tend to associate AI with science and we always do so in a positive way. Recently, the entire world welcomed the arrival of COVID vaccines in record time due to AI; few days ago, the World Health Organisation has announced the use of AI to prevent future pandemics and we have received that news with hope and happiness; we have unanimously applauded as a great success the first flight on Mars by the Ingenuity helicopter…..

However, talking about AI and the legal profession seems to be a different story. Instinctively, when we think about lawyers, the image that comes first to our minds is a traditional person, in suit, talking in a cryptic language of their own and surrounded by papers, lots of papers. Lawyers and innovation seem not to fit very well and the legal sector has a general reputation for being conservative when it comes to technology. Not anymore. The landscape is rapidly changing and Artificial Intelligence is revolutionizing how attorneys are practicing law.

Actually, although AI is new, people have dreamed of harnessing the capability of computers to assist in legal tasks for hundreds of years. In the late 1600s, the German attorney G.W. Leibniz theorized that machines would someday use a binary logic system to calculate numbers, and he envisioned a partnership between artificial intelligence and lawyers. Despite never seeing anything resembling a computer, he accurately described the benefits that AI now provides to the legal profession: “It is unworthy of excellent men to lose hours like slaves in the labour of calculation which could safely be relegated to anyone else if machines were used.”

Beyond Leibniz's daydreams, perhaps we are just in the early days of a technological revolution in the legal arena. Who knows….. Supporters think that AI could lead the world to a real universal access to the legal services, bridging the inequality gap in this sector as well (the United Nations estimates than more than four billion people are excluded for the rule of law). But feasible or not, unfortunately, we are not yet at that point and the truth is that it is very difficult to predict what the upcoming future will be like.

What we do know now is that we are advancing on a path full of positive expectations but, for sure, not without risks. And while it is important to move forward, it is no less important to do so in a safe, ethical and sustainable way. And for this to happen, it will be essential to count on the cooperation of all the actors involved but mainly on the willingness of lawyers to change and to change in a positive way.

Throughout this presentation we will try to give a general overview of the current situation of AI in the legal profession to know what the starting point is. We will then analyse its benefits and risks, for then trying to draw up suggestions that could help to advance in

what we consider to be the correct direction, which is no other than the one that is based on the pillars of ethics and sustainability.

But don’t panic. You will not find a disruptive approach in this analysis. Instead, we have preferred to approach this matter from the perspective of Sustaining Innovation. Unlike disruptors, who seek to completely replace the model destroying the past and creating something entirely new, Sustaining Innovators respect the inherited legacy, do not renounce to the essences but by changing the way things are done, create an exponential improvement in terms of quality and efficiency.

If you are still with us, we invite you to enter this exciting world and discover, through the following pages, videos and links, the amazing uses of AI in the legal profession.

ARE YOU READY FOR THE CHALLENGE?

B. WHAT IS HAPPENING?

As in other areas, Artificial Intelligence is progressively entering into the legal profession, changing the way in which lawyers carry out their work and provide their legal services to clients.

Digital legal tools have gone beyond the days of Westlaw and LexisNexis, the two companies that pioneered online legal research, and Artificial intelligence is now proposing new instruments that not only improves efficiency but that represent a true exponential leap transforming the legal profession.

In addition, there is no turning back. On the contrary, AI is moving forward at great speed and it is estimated that even more aspects of legal practice will be soon automatized (i.e. according to a Deloitte Insight report, AI can automate more than 100.000 support roles in the legal sector over the next two decades). Therefore, there are only two options: jump in or step aside.

As of today, the most developed AI tools on the market are mainly based on two different type of technologies or on the combination of both: Natural Language Processing and Automation.

Natural Language Processing is a technology able to comprehend language in its natural form (whether that is a legal contract or a spoken question). Early attempts to program a computer to understand language involved a series of rules. While this is fine for some basic concepts, it becomes complicated as you cater for exceptions to the rules. Increasing computer power enables now the latest machine learning tools to use statistical pattern recognition techniques to create their own rules (known as “predictive algorithms”) from large volumes of examples. For example, if you show such a system a collection of documents and their translations into another language, the system can

determine the statistical patterns between the documents and work out how to translate from one language to the other, without having to understand what the individual words mean or the underlying rules of grammar. This system is used within the legal profession for extracting key information from large number of documents or for contracts review.

Automation: Automation refers to technologies that use rules to carry out tasks. Most of these systems are based on decision trees; a type of flowchart that poses a series of questions, the answers to which determine which branch is followed, until there are no more questions and a conclusion (or decision) has been reached. The decision tree can be created by a lawyer or derived algorithmically by a computer based on training data. These systems tend to be used for either giving advice in very specific matters or drafting documents and contracts

Conversational interfaces and bots: Another step is to combine natural language processing tools with automation tools to create systems that can understand questions, extract relevant information, follow a decision tree to determine what needs to be done and, potentially, produce a first draft of the necessary documents to effect the change. There is a lot of focus in this area around the creation of bots to mitigate access to justice problems or chatbots applications for providing simple advice.

International firms were the first to implement AI systems and even today, they are leaders in the use of this technology. They have been followed by large companies, which, systematically, are also embracing AI as a support for their in-house lawyers. Finally, the justice systems are approaching this new world but much more slowly and in an unbalanced way between countries.

We have looked at the uses of AI in the legal profession from these three perspectives and, while inviting you to discover by yourself what is going on by clicking on the corresponding links below, we can anticipate our main first conclusion**: the team wins.**

It is true that AI advances rapidly and those skills that few years ago we believed as exclusive to humans, are now turning out to be capabilities also reachable by AI. Understanding human language seemed impossible and now we have online translation tools; reasoning and decision making seemed far away from AI and we have driving

assistants in our smart cars; negotiating capacity seemed to be our exclusive path and there are already algorithms capable of carrying out the negotiation par excellence, poker. Hence, we have to be humble with what we consider the unique capabilities of humans….

Notwithstanding, it is no less true that, at least as of today, the team human + AI is the winning formula. This has been already demonstrated for example in chess and, in our opinion, is fully applicable to the legal profession, where artificial intelligence is not a substitute for lawyers but a very powerful and indispensable complement to increase their effectiveness and the quality of their work.

However, for this complementarity to be positive, powerful and winning, we shall change our mentality, modify the model and review the way in which we relate either internally or with other actors in the legal world. In addition, we have to increase trust in AI. Moreover, this is perhaps the hardest part, trust. Because to trust, we have to move forward with transparency and with legal certainty; we have to innovate in a sustainable way.

In this sense, the European Union in its White Paper on Artificial Intelligence has based the policy framework in excellence and trust aiming to achieve

- an '**ecosystem of excellence'** along the entire value chain, starting in research and innovation, and creating the right incentives to accelerate the adoption of solutions based on AI, including by small and medium-sized enterprises; and
- a unique '**ecosystem of trust'**, ensuring compliance with EU rules, including the rules protecting fundamental rights and consumers' rights.

"*Building an ecosystem of trust is a policy objective in itself and should give citizens the confidence to take up AI applications and give companies and public organizations the legal certainty to innovate using AI. The Commission strongly supports a human-centric approach based on the Communication on Building Trust in Human-Centric AI and will also take into account the input obtained during the piloting phase of the Ethics Guidelines prepared by the High-Level Expert Group on AI*."

European Commission, Brussels 19.02.2020.

B.1. AI & LAW FIRMS

International Law Firms are enthusiastic early adopters of AI and other advanced technology tools to enable them to deliver a better service to their clients. Actually and according to the 2018 Technology Survey by the International Legal Technology Association, 100% of law firms with 700 or more lawyers are currently using AI tools.

Within this field, a few areas stand out as particularly adapted for the application of AI and exciting progress is already being made in each of these areas. We are mainly referring to the following:

- **E-DISCOVERY TOOLS – EXTRACTING KEY INFORMATION**

E-discovery software tools have been available for some time to help legal teams with document review. The current generation of e-discovery software includes machine learning functionality that enables technology-assisted review (also known as “predictive coding”). This takes place in the context of litigations, tax or regulatory investigations or anti-trust procedures and involves the analysis of large collections of electronically stored information to determine which documents are responsive to a particular issue or related to any person involved.

The system is exposed to a training set (a sample of documents that has been reviewed by an experienced lawyer or subject matter expert) and it develops a preliminary algorithm based on the expert’s decision about the relevance of the documents. This algorithm is then applied to further documents and, through an iterative process where the system’s coding decisions are subject to human review, the system is further trained until its results

reach a statistically acceptable level of accuracy. The final algorithm is then applied to the entire population of documents to identify, or prioritize, relevant documents.

Studies have shown that this approach is more accurate and cost-effective than the traditional approach (which involves having attorneys carrying out the initial review of all the documents). This technology can substantially decrease the number of documents for review or, alternatively, help find the most relevant documents in the fastest way possible.

While predictive coding tools do not acquire “knowledge” that can be transferred between matters, they are still useful in situations (i.e. litigation, regulatory or tax investigations and antitrust filings, as previously mentioned) where significant numbers of documents need to be assessed.

- **CONTRACT / DOCUMENTS REVIEW TOOLS – SEARCHING SPECIFIC INFORMATION OR CLAUSES INSIDE DOCUMENTS**

A second wave of machine learning tools has recently emerged. These have two key differences from the e-discovery tools:

- they do acquire “knowledge” that can be transferred between matters; and
- they operate at the clause level within the document, rather than just at the document level. As such, they are able to identify certain types of clause and extract information from documents.

In this area, the leader tool is Kira, from leading AI company, Kira Systems, due to its flexibility. In this sense, while it already has some “knowledge” out of the box, it can be (and shall be) internally “trained” by lawyers to learn from each of their specific expertise, enabling it to deliver more effectively against clients’ specific requirements and in relation to diverse law matters.

Tools like these can make two different types of mistake:

- false negatives – that is to say, missing something that is in fact there; and
- false positives - indicating that they have found something that is not actually correct.

The false positives, in a minimum percentage, just need to be reviewed and excluded. Regarding the false negatives, specific testing has concluded that tools like these can achieve a “recall rate” (the proportion of all relevant provisions actually found) of about more than 90%. Hence, there is a minimum risk of relevant provisions not found that, depending on a client’s particular risk appetite for a transaction, requires a certain compromise between accuracy (in other words, the risk of missing something important) and efficiency.

It is worth noting that human reviewers tend to be “tuned” in favor of high precision. In other words, if a human reviewer says that a clause is, for example, a “change of control” clause, then it most probably is) but, when acting alone, there is a risk that the rushed or tired human reviewer misses such a provision when reading through.

Considering all above, the common approach of most of the law firms is to use the sum of tool and lawyers, normally using the tool as a first pass and then having lawyers for some degree of quality control. There is academic evidence that the combination of human reviewers and systems is more accurate than either operating alone. While this means that we could be not yet fully exploiting the potential savings of the artificial intelligence, there are some immediate benefits on using the tools. For example, the possibility of examining all the documents on a transaction in situations where, previously, we would have only been able to review a sample of them (for example, individual leases on the acquisition of a property portfolio). In this case, we would gain a 90% understanding of 100% of the documents, rather than a 100% understanding of, say, 30% of the documents.

The use of this type of tool is undoubtedly the most widespread due - among others- to its flexibility, being actually used in most areas of the practice of law (i.e. due diligences in M&A transactions, real state, corporate…).

➢ AUTOMATED DRAFTING SYSTEMS

Automated drafting tools are becoming increasingly sophisticated. International law firms use this type of tools to allow clients to generate quickly and independently, through direct access to the platform, tailor-made and house-styled documents.

Rather than working from model documents or precedents, users simply answer a single online questionnaire, from which the system generates one or more documents. Each document generated is an output of multiple possible text variations (which themselves are dependent on the answers to the questions), rendering a tailor-made result.

The use of document automation by law firms is also extensive, with a high proportion of their most used templates automated and all offices in the law firm network taking advantage of the technology. It is suitable for many types of document, including loan documents, litigation documents, sales contracts, service contracts, supply contracts, share purchase agreements, corporate housekeeping documentation and HR documents, as well as other documents drafted based on models or precedents.

Law firms argue that this type of automated drafting system adds value to clients' documentation process by:

- **saving time**: approximately 50% per document or, in the case of a suite of documents, up to 85% (depending on the type of document or combination of documents). Information entered for the purpose of a document can be re-used at a later stage when creating one or more other related documents (for example, an amendment agreement);
- **improving quality and consistency**: related generated documents are based on the same "mother template" and corresponding questionnaire, whereby legal and factual checks and balances are built in using warnings and/or preventing irrelevant options from rom being offered. In this way, they provide a high level of consistency, resulting in a high-quality first draft;
- **decreasing the burden on the legal and/or compliance departments and therefore a reduction of internal costs:** legal content and knowledge are

embedded in the questionnaire and templates themselves, thereby reducing the costs of review and backup assistance of these departments;

- **improving efficiency in updates**: an automated template can encompass many variations that previously required separate model documents. As a result, updates in texts that are the same for all those separate documents need only to be made once.

➢ AUTOMATED ADVICE SYSTEMS

Certain Law firms, mainly those based on US or UK, have entered into partnerships with companies, like Neota Logic, to provide preliminary advice in highly delimited and regulated sectors. The system uses decision tree technology, accept large amounts of data and provide weighted options for lawyers to take next steps.

It is used, for example, to the impact of regulatory rule changes on financial institutions, for MiFID2 and MiFIR, providing analysis of the direct requirements and indirect implications of the level 1 and 2 MiFID2 regulations. The tool is capable of being filtered by client type, business type, activity type and theme.

Other examples of the use of these tools include advice on cross border acquisitions or cross border financing, where clients can quickly and easily create a tailored report relevant to their transactions. They can use the guides' comparative tables to assess the inconsistencies between the laws of the countries involved and find fast answers to specific queries. This enables clients to undertake an initial assessment of the feasibility of a proposed transaction before instructing external counsel to undertake a detailed legal analysis, or to sense-check legal advice already obtained.

More recently, Clifford Chance Singapore has launched a suite of automated documents called VIMA Solutions to help start-ups with their legal needs. The initial set of documents will cover areas such as NDAs, term sheets for investment, and shareholder agreements. Not-lawyer users can generate the documents free, using a chat bot or questionnaire to input the key information.

As all these systems can be used and accessed by the client directly, it can significantly cut costs.

As AI firmly supporters, law firms highlight that AI-based software allows them to automate lower-level tasks, freeing time for attorneys to focus on complex analysis and client interaction. In other words, AI greatly enhances their availability to create value to clients and to the firm itself.

Undoubtedly, they are leading the adoption of AI for legal services, an area in which they are moving very fast and with great advances. However, this also opens up a large number of uncertainties and doubts: is this a world limited to International Law Firms?; are short or medium-size national Law Firms going to be struggled to compete?; how is AI going to change the traditional relation attorney-client?; which is the impact on the internal organization of the law firm?.

We will try to find answers for these and other questions with one of the largest international law firm that has created a specific area for AI development. In this regard, please find attached as **Annex I** an interview conducted with three representatives of the Spanish Office of Clifford Chance, an internationally renowned law firm.

B.2. AI & COURTS

AI-powered legal technology tools may have a big impact of how judicial services are managed and delivered.

In the United States, “robot lawyers” (such as IBM’s Ross) are already at work and seem to converse in natural language with humans. Legal tech start-ups specialising in the design of new legal tools offer new applications to legal professions, mainly lawyers, legal services and insurers, allowing in-depth access to judicial information and case law. Some tools even aim to **predict judges’ decisions** (such as Intraspexion, which has patented software systems that claim to present early warning signs to lawyers when the AI tool detects threats of litigation; or Ravellaw which is said to be able to identify outcomes based on relevant case law, judge rulings and referenced language from more than 400 courts; or Lex Machina offering variety of features that are said to assist lawyers in their legal strategy).

But AI tools are not limited to help lawyer in relation to their judicial claims. This technology **could also be used directly by Courts** to make the processing of the judicial workload faster and more efficient, by:

- helping the judge to analyse a new case by quickly retrieving precedents and obtaining an analysis on the similarities and differences of such precedents vis a vis the case at hand, or even to get the view of how an AI would rule it based on previous rulings;
- developing prior indicators for diagnosing potential violations of specific Articles in lodged applications and eventually prioritise the decision process on cases where violation seems very likely, thus improving the significant delay imposed by the Court and encouraging more applications by individuals who may have been discouraged by the expected time delays;
- eliminate or streamline many manual processes, allowing the same number of staff to better serve more members of the public, freeing up budget for better-paying, more skilled positions and giving greater emphasis to human interaction in more complex matters.

However, it is important to differentiate between this narrative and the reality of the use and deployment of these technologies in Courts in U.S. and in Europe.

As shown by a study carried out by the Council of Europe, through its European Commission for the Efficiency of Justice (CEPEJ), in Europe judges do not seem to be making, for the time being, any practical and daily use of predictive software. Local tests and academic works have been carried out to explore the potential of these applications (i.e. Nikolaos Aletras, of University College London, and his team in 2016 used machine learning to analyse case text of the European Court of Human Rights, reaching 79% accuracy in their outcome prediction). But in Courts, they have been applied in limited trials (such as the trial of a predictive software carried out in 2017 by the Douai and Rennes Courts of Appeal in France) rather than on a wide scale.

In the United States instead, Courts seems more far ahead in technology adoption, as the US legal systems are heavily dependent on case law. Indeed, the first tests and academic works in history on the possible application of AI to predicting outcome of trials were conducted in the US (i.e. in 2004 a group of professors from Washington University tested their algorithm's accuracy in forecasting US Supreme Court against a team of experts' findings: the algorithm beaten the experts, with a 75% vs 59% accuracy in forecasting judicial outcomes). Moreover, several association of US joined up and established a *Joint Technology Committee* (JTC), with the mission to improve the administration of justice through technology: the JTC developed guidelines to help Courts identifying the uses cases under which AI technologies can drive efficiency in the administration of justice.

Overall, so far the push for the development of technology and their adoption seems to largely come from the private sector rather than the Courts themselves, with a view to reduce legal uncertainty and the unpredictability of judicial decisions. Public decision-makers are therefore beginning to be increasingly solicited by a private sector wishing to see these tools integrated into public policies, and this is leading international organizations, such as the UN, the UE and the UNESCO, **to promote culture and eventually regulate the use of AI in judicial systems** (e.g., the "Global Judicial Integrity Network", launched by the United Nations Office on Drugs and Crime in 2018).

In this respect, it is worth highlighting that the above mentioned CEPEJ has developed, in 2018, a set of principles to regulated the use of AI in judicial systems called "European

ethical Charter on the use of Artificial Intelligence in judicial systems and their environment". Such principles are:

1. Principle of respect of fundamental rights: ensuring that the design and implementation of artificial intelligence tools and services are compatible with fundamental rights;

2. Principle of non-discrimination: specifically preventing the development or intensification of any discrimination between individuals or groups of individuals;

3. Principle of quality and security: with regard to the processing of judicial decisions and data, using certified sources and intangible data with models conceived in a multi-disciplinary manner, in a secure technological environment;

4. Principle of transparency, impartiality and fairness: making data processing methods accessible and understandable, authorising external audits;

5. Principle "under user control": precluding a prescriptive approach and ensuring that users are informed actors and in control of their choices.

For the CEPEJ, compliance with these principles must be ensured in the processing of judicial decisions and data by algorithms and in the use made of them.

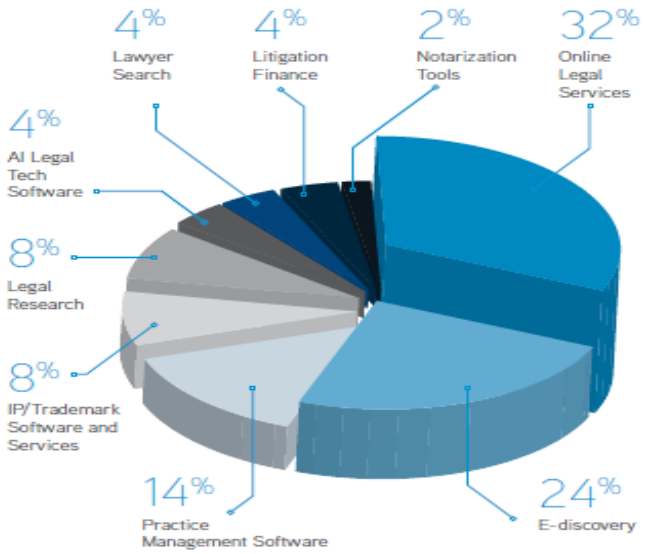
Through all these regulations and policies, policy makers stress the fact that caution is important in the use of AI, taking into account that AI systems make decisions based on the data they are provided and therefore could develop "biases" (i.e., predictions that appear inequitable) and "intuition" (i.e. biases that cast doubt on a prediction) and, thus, generating errors. Actually, also human brain do the same, but at a dramatically lower speed that the machines, and errors, biases and wrong intuitions can be more easily corrected before they become systemic. Therefore, ensuring appropriate, unbiased, ethical use of AI in the public sector is of concern of the policy makers.

In conclusion, while the AI tools supporters highlight their benefits in terms of predictability and standardization of case law, their critics point to the limitations and the reasoning bias of the software currently on the market.

We share the view that the AI application designed to improve legal research could be very useful in rendering processing of the judicial workload faster and more efficient but if users (the judges) clearly understand how it works, its limits and potential errors and are duly instructed for its use in the proper conditions.

B.3. AI & IN-HOUSE LAWYERS

According to a report from CB Insights, in 2017 there were nine basic categories of legal services provided by the tech-enabled companies, two of which represented more than the 55% of the market (online legal services and e-discovery tools), while AI tech software only represented the 4% of the same.



This panorama has exponentially changed. Consolidated and well-known technology companies along with start-ups of new creation have found here a new business niche in full development and are actually revolutionizing the world of legal services provision.

As we have already seen, the international law firms are leading this revolution, firmly followed by in-house legal areas of companies of those countries enjoying a more developed digital culture. We are referring to Norway, Latvia and for sure the United States, where General Counsels have fully integrated artificial intelligence as a common working tool for the legal areas.

However, this is unfortunately not the general picture for all European countries. In Europe, in general terms, companies are now awakening in the implementation of AI in the legal areas, going forward at different speeds depending on the type of company, its previous level of digitization, the enterprise culture and the level of integration of the legal area between or aside the business lines.

Vodafone, for example, makes use of artificial intelligence powered solutions in several areas of its business:

- In customer care, through a digital assistant called Tobi, who also acts as a digital assistant to employees for queries and help in relation to office IT and HR processes;
- In marketing and sales, through business intelligence and real time marketing activities, also making use of algorithms developed by the internal data scientists;
- In finance, for revenue recognition activities. The AI solution powered by Laverton reads and analyses new agreements with customers, extracting data and interacting with other systems to check them against the records in accounting books and also identifying missed opportunities;
- In networks, through a recent solution for the predictive maintenance of the physical infrastructure, as well as a software solution to balance network workloads. Such solutions are also available for business customers.

In the Legal Area, Vodafone has also automated the following tasks through the incorporation of purchased tools:

- Contract Management. In particular, SirionLabs manage contracts with suppliers through a platform, with automatic contract compiler capabilities, contractual risk analysis, advanced analytics and contract life management tools. A similar platform is used for contracts with customers;
- Risk management and Compliance, also through platform like “Risk Connect” and “One Rust”);
- Internal investigations or forensic due diligence;

- Digital assistants to deal with queries related to internal privacy policies.

Like Vodafone, Enel has also a high level of digitalization along all lines and business functions however with a different approach by preferring to build-up in-house the tools instead of purchasing them in the market.

There is also a virtual assistant, called Elena, helping customers to easily take meter readings; check bill payment status; check contract activation status; search for the Spazio Enel closest to each location; register for BollettaWeb and/or update customers' contact details.

Commercial Office or Engineering and Construction (E&C) have put in place digital databases for their respective contracts (like the PPA Library or Sun4Win). In addition, the same has been done by Business Development (Mercatus or Archibus for real estate contracts) or by Procurement (WeBuy).

In the Legal and Corporates Affairs area (LCA), the digitalization in Enel has been focused in two main areas: administrative tasks and management of the governing bodies of all Enel companies.

In this last area, we can mentioned MOSAIC for the management of all relevant corporate information of the Group; eWolf, for management of authorizations and/or information flows in relation to matters to be submitted to the Boards of Directors of all Enel companies worldwide; or Gateway, for the digitization of the board's documentation.

In relation to what we have called "administrative tasks", there is Suite Next, through which the legal area captures and organizes documents and data, including engagements with external law firms; and 4cLegal, a platform for managing beauty contests on-line accessible also for external law firms.

In addition to the aforementioned tools, Enel LCA has been now opened up to artificial intelligence with three pilot projects of tools, all made in house:

- ADR (Alternative Dispute Resolution) a power surge damages dispute resolution platform to facilitate the involved parties to find a solution and close permanently the dispute

- DesKey: for documents flow management
- Joy: a legal Chabot to provide fast replies to basic redundant legal queries

Moreover, Legal Compliance is being supported by the Security area that, with the help of the purchase tool World check one, provides relevant information needed for the legal assessment in relation to international sanctions

The implementation of AI or digital tools is a work in progress in which companies will deepen with no doubt in the upcoming future. There is still a long way to go and our feeling is that, as of today, European companies are not yet extracting all the benefits that AI can bring.

As for the International Law firms, for in-house lawyers these tools are necessary to increase efficiency and quality. Moreover, for the legal departments of large international companies such as Enel or Vodafone, AI could be a useful help to increase collaboration between teams from different countries, favoring a global vision of the legal area.

For sure, AI will change the way we used to work and perhaps the way we are organized now or our relationship with the business. However, it is worth it.

Finally, we have seen that the incorporation of AI tools is being made by each of the areas of the Company separately according to their specific needs. In addition, for some extent, this is correct. However, in our opinion, a general view of the risks the company is facing with the use of such tools is lacking. Our impression is that the areas, including the legal one, are focus on the benefits, minimizing or directly ignoring the risks. And there are risks…

C. RISKS & BENEFITS

C.1. BENEFITS

China has recently present Wudao 2.0, an amazing AI project with which China intends to replace the American GPT-3 from Open AI, until today the leader in deep-learning. Wudao seems to be ten times more powerful than GPT-3 on its capacity to learn language and generate language and experts have qualified its presentation as a new historic milestone in AI development, at the level of others that preceded such as when in 1996 Deep Blue won for the first time Kasparov in chess; or when in 2005 Stanley, the first car with no human-conductor, reached to finish the race at the American Grand Challenge; or even in 2017 when AlphaZero developed its capacity to learn how to play chess, Go and shogi.

These achievements show our growing ability to develop AI models and automate tasks and constitute the most outstanding milestones of what has been called the fourth industrial revolution.

But there is another side to the coin.

On February 2021, the Dutch government had to resign in bloc due to a failure in the system that erroneously detected a fraud in the subsidies granted for children care, accusing 26,000 families, most of them immigrants. Google photos created an algorithm that confused black people with apes. IBM was developing an app based on image vision associated with natural language until they realized that when an image of a person in a wheelchair appeared it was associated with the description of loser.

These are toxic patterns that the tool takes from the networks and tends to increase and perpetuate. That is precisely why human supervision is still necessary and there are questions that it is important to pose before deciding to use an application that can go wrong. In other words, it is essential to understand how the tool works and be aware of its potential errors and of the costs of such errors.

Benefits and risks, therefore. This is what we are going to analyze here.

- **SAVING TIME**

The biggest, most obvious benefit to AI applications is time saving. Computer systems can analyze more information, more thoroughly than humans can, in a tiny fraction of the time. Computers can quickly:

- search through and identify potentially relevant data of all forms and file types
- conduct legal researches that would take a skilled attorney days to complete
- analyze contracts and other documents for errors, missing information and inconsistent language.

Obviously, that time saving can be also translated into monetary savings, since the legal professionals can use their knowledge for other -more useful and added value- purposes in the same amount of time.

- **ALLOWING EARLIER AND MORE ACCURATE RISK ASSESSMENT**

AI can be used to review information in real time. This allows legal professionals to identify potential risks earlier, before they even occur.

When a lawsuit has started, or even merely threatened, these smart solutions can be helpful in quickly identifying relevant information. With this increased information, attorneys can more accurately assess outcomes, minimizing costs and limiting risks.

- **HIGHER QUALITY OF WORK**

AI does not get tired, bored or distracted, and the work it produces can be truly error-free in some fields.

Specialized document software can enhance the organization of documents and flawlessly maintain that organization.

AI can also ensure that language is applied consistently. Through document comparison and automatic learning, software such as contract comparison tools can identify missing clauses or conditions, inconsistently used terminology or undefined terms, both within a single document and across a pool of similar documents.

- **IMPROVING ORGANIZATIONAL STRUCTURE**

Having automatic document comparison and organization can help legal professional identify faster gaps in their documents or in their legal research. For example, contract analysis programs that have learned through repeated analysis can identify missing terms or definitions in known types of contracts.

In addition, AI tools are also useful in large international groups of companies or law firms, as they also help to keep information coordinated between different countries or jurisdictions, facilitating the maintenance of standards throughout the entire group of law firm.

- **INCREASING CREATIVE ANALYSIS**

With the timesaving of automated review, research and document quality control, AI frees up the necessary time and energy resources for higher-level work. This enhances creativity, allowing legal professionals to add unique value and focus completely on the work that computers cannot do. Increased confidence in results also can create the scope they need to take risks and evaluate alternatives. With intelligent legal research software, attorneys can test out variations in fact patterns or legal analyses to identify the most advantageous strategy. Comparative analysis between solutions given in different cases no longer takes days of exhaustive (and exhausting) scanning.

- **NO BURN-OUT**

Document review, proofreading and legal research can represent tedious, mind-numbing work. Even though these are necessary tasks, allowing software to do at least the first part of them can reduce stress and boredom, minimizing the time that attorneys must spend on preliminary or low-level review. At the same time and as previously said, knowing that their AI solution has already completed a comprehensive review gives attorneys more confidence in the results. This can help legal professionals to take better care of the creative, intellectual analysis that they are trained to do which cannot be replicated by computers, no matter how advanced the technology is these days. Together, these can dramatically improve work satisfaction.

Indeed, ***the future is now*** and the benefits of having AI in a legal department are tempting. AI has proved itself as useful in assisting lawyers in ***doing things faster, better and cheaper***. Even though the current technology is limited now the possibilities are endless. AI is currently only in the beginning, but it is already useful with legal research, contract development and many others to come.

C.2 THE RISKS

Three Laws of Robotics:

First Law - *A robot may not injure a human, or through inaction, allow a human to be harmed.*

Second Law *- A robot must obey a human's orders unless the order conflicts with the First Law*

Third Law - *A robot must protect its own existence unless such protection conflicts with the First or Second Law."*

Isaac Asimov

(or Will Smith in "I,Robot")

The following are the main challenges that we have identified within the topic of the use of Artificial Intelligence (AI) in the legal profession, specifically as part of the in-house atmosphere of the Enel Group. These are our selected challenges and do not intend to exclude the (several) additional ones that the topic poses.

- **TAKING AWAY JOBS**

Law firms are already using AI to become more efficient when performing due diligence and doing research work. But it is expected that the impact of AI would become much more transformational. It should be posible for the AI to eliminate most paralegal and junior positions within the next decade.

According to Deloitte, about 100.000 legal sector jobs are likely to be automated in the next twenty years. Deloitte claims 39% of legal jobs can be automated; McKinsey Global Institute estimates that 23% of a lawyer's job could be automated. Some estimates suggest that adopting all legal technology (including AI) already available now would reduce lawyers' hours by 13%.

But will the advance of AI in the legal profession really cost jobs or, in fact, should it be seen as an efficiency tool that will eventually improve the work of the legal professions? While it is difficult to provide a specific answer, the most recent studies imply that lawyers are unlikely to be the main casualties; conversely, legal secretaries and support staff (roles headed for extinction, some argue) are set to endure the most of any contraction.

In any case, the above mentioned studies and reports only target law firms and not in-house counsel environments, where the roles of lawyers should maintain their importance in guiding the business teams while developing their projects.

- **VULNERABLE TO CYBER ATTACKS**

In order to provide their services, AI tools need to have access to and use large amounts of data. AI systems also generate significant amounts of information. And that’s precisely why AI world does serve to increase the surface area for potential targets for

cybercriminals. Experts in fact are very concerned about the many shortcomings that instil a false sense of security in organizations and underlines the need to not underestimate actions to be taken in order to appropriately protect data.

In this regard, on September 2019, the EU Commission on its “Guidelines on ethics in artificial intelligence” underlines the need to have secure and reliable systems and software as an essential requirement. Trustworthy AI requires algorithms to be secure, reliable and robust enough to deal with errors or inconsistencies during all life-cycle phases of an AI system. This requirement is about ensuring cybersecurity. In practice, all vulnerabilities should be taken into account when building algorithms. This requires testing AI systems to understand and mitigate the risks of cyber-attacks and hacking. AI developers should put in place processes capable of assessing the safety risks involved, in case someone uses the AI system they are building for harmful purposes. For instance, if the system is compromised, it should be possible for human control to take over and abort the system. To tackle this important question, the EU applies a twofold approach: first, fostering cooperation between the AI community and the security community, and second, reflecting on how to modify the legal framework governing liabilities in the EU, and to go from a human-conduct-based liability regime to a more machine-based liability regime.

- **ECONOMIC CONSTRAINTS**

AI requires tremendous expenses for not only acquiring the tool but also for its maintenance, repairs, and constant updating and upgrading, which makes these systems not accessible to everyone.

It is important to state that any type of AI solutions for in-house settings such as Enel Group will not be particularly inexpensive, while its advantages do not have a clear demonstration. However, we are sure that the investment in AI’s targeted at the legal professions within the Enel Group could have several benefits. The benefits identified could be (in addition to all mentioned above) the increase in efficiency for the in-house counsels and the decrease in the reliance of external teams for the performance of legal

services (some will, though, be hard to exclude, as due diligence processes and complex litigations and transactions).

- **UNTRAINED LAWYERS**

The introduction of Artificial Intelligence is creating many doubts regarding the present and future training of legal professionals.

First, it is obvious that we have to be digital but senior lawyers are being required to have technical skills that perhaps they lack and that makes it difficult for them to understand and trust the use of AI.

In this regard, Law Schools are already starting to offer specialized education, not only in AI and legaltech, but also on project management and skills that have not been traditionally understood as part of the legal profession. Moreover, of course when engaging new lawyers, both companies and law firms are increasingly taking that into consideration those skills that will make the professional able to adapt to the changing environment we are living in.

And what about the role of junior associate lawyers and paralegals? Some experts think that AI might create a lot of untrained legal professional at the entry level. The main activities when you first start working in the legal field are to prepare study and review documents. If the young professionals skip this phase, they might count only on technology to complete research or document review. In this case, what are they going to do when let us say an application cracks or they need to cover some innovative subject?

Moreover, the fact that college students will see that AI replaces the legal associates will make them resilient in choosing this type of career. Of course, following a lawyer's career path requires some level of experience as a paralegal. Nevertheless, if we have no more graduating legal associates, then who becomes lawyers of the future?

If entry-level jobs decline, this would lead to a change to the organizational chart in law firms. Recruitment will fall, but succession planning will become ever more important.

➢ IP RIGHTS, PRIVACY & DATA PROTECTION

A common highlighted topic of the use of AI (not only in the legal sector) is the fact that they pose huge privacy and data protection challenges, along with other potential commercial risks. However, not only in relation to the aforementioned potential vulnerability of the system to cyber-attacks. One additional challenge in what concerns the use of AI is the need to safeguard all laws and regulations regarding privacy, data protection or intellectual property rights when building, training and feeding the tool.

In this respect, a couple of major issues emerges if the kind of data provided is appropriate and who to access data when protected either for Data Protection or Intellectual Property Rights.

Enhancing data "openness" may conflict directly with the protection of legitimate private, national and public interests leading to (i) the risk of (personal) data breaches that could threaten individuals' privacy and/or (ii) the violation of commercial and non-commercial interests leading to direct losses or losses of business opportunities.

With respect to IP or Trade Secrets, these risks can negatively affect incentives to invest and innovate. For small and medium-sized enterprises (SMEs), identifying which data to share and defining the scope and conditions for access and re-use is perceived as a major challenge. Inappropriate sharing of data can lead to significant costs to companies and/or organizations involved, including fines due to privacy violations and opportunity costs due to a lower ability to innovate. For example, it has been noted that sharing data too prematurely can undermine the ability to obtain IPR (e.g. patent and trade secret) protection.

With respect to personal data, it is quite a given fact that privacy and data protection law in the European Union provides good safeguards and protection for infringement of data subjects' rights, specifically following the enactment of the General Data Protection Regulation. The question is here again, whether this regulation will be enough to cover all risks and challenges that are yet to come.

In this regard, the 2019 EU Ethic Guidelines on AI (mentioned below) advise the AI community to ensure privacy and personal data are protected, both when building and when running an AI system. Citizens should have full control over their own data, and their data should not be used to harm or discriminate against them. In practice, this means that AI systems should be designed to guarantee privacy and data protection. To this end, AI developers should apply design techniques such as data encryption and data anonymization. Moreover, they should ensure the quality of the data, i.e. avoid socially constructed biased, inaccuracies, errors and mistakes.

Regarding the use of AI, transparency of potential harms relating to its use is strongly supported. Data provenance and an informed consent for use and reuse are considered to be of particular importance. Other measures that are being used or proposed include the use of anonymization, privacy notices, privacy impact assessment, privacy by design, use of ethical principles and auditable machine algorithms.

However, it seems clear that IP, privacy and data protection measures shall only be effective as long as they are properly used, supervised and imposed through adequate mechanisms and specific regulations.

- **ETHICAL ISSUES**

Currently, there is no universal consensus on ethical issues in AI, as, among other matters, much depends on the use case of the AI and the stakeholders involved (e.g. customer, regulator). Actually, there have been a number of sectorial papers on ethics and AI published by a variety of stakeholders in recent years at national, European and international level. The Alan Turing Institute published a paper commissioned by the Financial Conduct Authority (FCA), considering the challenges and benefits of AI in Financial Services. More recently, the European Insurance and Occupational Pensions Authority (EIOPA) has also published a report on governance principles for ethical and trustworthy artificial intelligence in the insurance sector, accompanied by non-binding guidance for insurance firms on how to implement them in practice throughout the AI system's lifecycle.

A first attempt to establish a guide of general principles at European level was the publication in April 2019, by the European Commission, of a set of non-binding Ethics guidelines for trustworthy AI. Prepared by the Commission's High-Level Expert Group on AI, composed of 52 independent experts, this document aimed to offer guidance on how to foster and secure the development of ethical AI systems in the EU.

The core principle of the EU guidelines is that the EU must develop a “human-centric” approach to AI that is respectful of European values and principles.

“The human-centric approach to AI strives to ensure that human values are central to the way in which AI systems are developed, deployed, used and monitored, by ensuring respect for fundamental rights, including those set out in the Treaties of the European Union and Charter of Fundamental Rights of the European Union, all of which are united by reference to a common foundation rooted in respect for human dignity, in which the human being enjoys a unique and inalienable moral status. This also entails consideration of the natural environment and of other living beings that are part of the human ecosystem, as well as a sustainable approach enabling the flourishing of future generations to come”

While this approach will unfold in the context of the global race on AI, EU policy-makers have adopted a frame of analysis to differentiate the **EU strategy** on AI from the **US strategy** (developed mostly through private-sector initiatives and self-regulation) and the **Chinese strategy** (essentially government-led and characterised by strong coordination of private and public investment into AI technologies). In its approach, the EU seeks to remain faithful to its cultural preferences and its higher standard of protection against the social risks posed by AI – in particular those affecting privacy, data protection and discrimination rules – unlike other laxer jurisdictions.

To that end, the EU ethics guidelines promote a trustworthy AI system that is lawful (complying with all applicable laws and regulations), ethical (ensuring adherence to

ethical principles and values) and robust (both from a technical and social perspective) in order to avoid causing unintentional harm. Furthermore, the guidelines highlight that AI software and hardware systems need to be human-centric, i.e. developed, deployed and used in adherence to key ethical requirements such as:

- ✓ **Human agency and oversight**

Respect for human autonomy and fundamental rights is at the heart of EU ethical rules. The EU guidelines prescribe three measures to ensure this requirement is reflected in practice:

- to make sure that an AI system does not hamper EU fundamental rights, a fundamental rights impact assessment should be undertaken prior to its development. Mechanisms should be put in place afterwards to allow for external feedback on any potential infringement of fundamental rights;
- human agency should be ensured, i.e. users should be able to understand and interact with AI systems to a satisfactory degree. The right of end users not to be subject to a decision based solely on automated processing (when this produces a legal effect on users or significantly affects them) should be enforced in the EU;
- a machine cannot be in full control. Therefore, there should always be human oversight. Humans should always have the possibility ultimately to over-ride a decision made by a system. When designing an AI product or service, AI developers should consider the type of technical measures that should be implemented to ensure human oversight. For instance, they should provide a stop button or a procedure to abort an operation to ensure human control.

- ✓ **Transparency**

Transparency is, first, paramount to ensuring that AI is not biased. In addition, the lack of transparency, linked to the lack of traceability, is also related to the loss of control and consent in the use of data.

Once data are accessed or shared, unless specific data stewardship and processing provisions are in place, that data will move outside the information system of the original data holder (data controller) and thus out of his/her control. The same is true for individuals who provide their data and give their consent for their re-use and sharing. Data holders and individuals then lose their capabilities to control how their data are re-used. To object to or oppose such uses, they must rely solely on law enforcement and redress. The risks of loss of control are multiplied where the data are further shared downstream across multiple tiers, in particular when these tiers are located across multiple jurisdictions.

Even where individuals and organisations agree on and consent to specific terms for data sharing and data re-use, including the purposes for which the data should be re-used, there remains a significant level of risk that a third party may intentionally or unintentionally use the data differently. The case of Cambridge Analytica illustrates this risk: personal data of Facebook users was used, not for academic purposes as some users had consented to, but for a commercially motivated political campaign, and this although Facebook explicitly prohibits data to be sold or transferred “to any ad network, data broker or other advertising or monetisation-related service” (Granville, 2018[5]).

Trying to avoid such risks, the EU AI guidelines introduce a number of measures to ensure transparency in the AI industry. For instance, the data sets and processes that are used in building AI systems should be documented and traceable. Also, AI systems should be identifiable as such, and humans need to be aware that they are interacting with an AI system. Furthermore, AI systems and related human decisions are subject to the principle of explainability, according to which it should be possible for them to be understood and traced by humans.

- ✓ **Diversity, non-discrimination and fairness**

Though artificial intelligence is capable of a speed and capacity of processing that’s far beyond that of humans, it cannot always be trusted to be fair and neutral. On the contrary, the filters used when the algorithm is being written, aside from the kind of data used, could

be both potentially subject to discrimination. For instance, if the AI tool is programmed to discard in selection process women in fertile age. However, it is worth noticing that it is not a risk of AI per se but from the programmer or the source that feeds in the data. Essentially AI will replicate the prejudice that already exists offline and the main problem is that said discriminatory patterns could go either unnoticed or unpunished or both.

The EU Guidelines focus strongly on avoiding unfair bias when AI products and services are designed or fed. In practice, AI developers should make sure that the design of their algorithms is not biased (e.g. by the use of an inadequate data set). Stakeholders that may be directly or indirectly affected by AI systems should be consulted and involved in their development and implementation. AI systems should be conceived with consideration for the whole range of human abilities, skills and requirements, and ensure accessibility to persons with disabilities.

- **LACK OF LEGISLATION**

Global regulators have been showing that they are aware of the risks of not existing a legal framework in what regards artificial intelligence. All over the world, watchdogs are developing legislation and ethical/moral regulations that may regulate this new field.

Specifically, in the case of the **European Union**, European Commission's new President Ursula von der Leyen announced that new rules on AI-specific legislation would be proposed during her first 100 days of office, confirming the EU's role and ambition as a pioneer in the regulation of tech.

This proposal was presented on 21 April 2021 through the ***"Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts"*** (AI Act). As the European Commission explains, this Regulation has the following specific objectives in mind:

- ensure that AI systems placed on the Union market and used are safe and respect existing law on fundamental rights and Union values;

- ensure legal certainty to facilitate investment and innovation in AI;
- enhance governance and effective enforcement of existing law on fundamental rights and safety requirements applicable to AI systems; and
- facilitate the development of a single market for lawful, safe and trustworthy AI applications and prevent market fragmentation.

As said, the EU AI Act is the first of its kind, setting out harmonized rules for AI systems in the EU. It attempts to strike a difficult balance between two key objectives: (i) promoting innovation and harnessing the benefits of AI, on the one hand; and (ii) addressing key risks and fears AI gives rise to, on the other. In so doing, it seeks to address some of the main concerns levelled at a general, horizontal framework, favoring a risk-based approach and taking account of specific sectoral issues.

At this stage, it is only a proposal and there is still a long road ahead. The AI Act shall be passed now to the European Parliament and Council of the EU for adoption under the ordinary legislative process (formerly known as 'co-decision'). Both the Parliament and Member States must jointly agree the final wording of the legislation before it can be formally adopted. The timing of the legislative process is difficult to predict but the earliest we could expect a final text to be agreed and adopted by the Parliament and Council is end of 2022 or first half of 2023, with a further period of 24 months before it would become fully applicable.

Notwithstanding, we would like to highlight that the AI Act already represents a revolution in the field of AI and a landmark in defining a harmonized regulatory framework for the EU with the potential for setting global standards.

Moreover, the AI Act is a critical part of a wider and very ambitious strategy in Europe on AI, and on tech more generally. Proposals for further legislation are expected in the next months and other key texts in the tech space are already being discussed in the Parliament and Council, including proposals for a Digital Markets Act and a Digital Services Act as well as for a Data Governance Act. All are game-changers. And when viewed together, this is the biggest shake-up ever of European rules in the tech sector, and the effects will be felt for years to come.

Abroad, the EU proposal is having knock-on effects in other jurisdictions that are considering how to design and implement their own regulatory regimes for AI. This may be more relevant for jurisdictions such as **Singapore**, where the current governance framework appears based on similar core principles and approach: transparency, accuracy and the necessity for human oversight, along with a risk-sensitive approach.

In relation to the **United Kingdom,** although the UK's position on AI matters post-Brexit is still evolving, the UK has clearly indicated that it aims to be a world leader in AI.

The UK House of Lords has already warned that a solely self-regulatory approach, based on organizations producing their own ethical AI codes of conduct, risks a lack of uniformity and enforceability. In the same line, on March 2021, the UK Department for Digital, Culture, Media and Sport announced its Ten Tech Priorities. The priorities include helping to set the rules of engagement for AI use and leading the global debate on AI and governance. They have been released in advance of the UK's National AI Strategy, which will be finalized within 2021 and will bring recommendations to the UK government on how to ensure safe and resilient development of AI.

In the meantime, we expect the UK to continue working closely with competition, privacy, financial services and other sector regulators to produce meaningful guidance for companies working with AI, and to see continued enforcement relying on existing legal requirements and ethical expectations.

With respect to **the United States**, the Federal Trade Commission (FTC), the general consumer protection regulator there, has asserted that it would be closely monitoring companies' use of AI. In particular, the Commission has highlighted its concern over AI intended to be used for or that has the effect of discriminating against a protected class, such as by race or gender. To this end, the FTC has set out guidance for businesses to adopt when deploying AI functions, including principles embodied in the EU AI Act such as transparency and monitoring. US banking regulators are also seeking comment on the use of AI by financial institutions, suggesting further guidance may be forthcoming.

Moreover and regardless all above, in our opinion, not only general guidance and/or a clear legal binding framework is needed. The EU, the UK, the US and other **global AI**

players will also need to align and find areas of harmony in order to further boost innovation.

To read more about the EU AI Act, please go to Annex II.

D. WHAT'S THE PLAN?

Artificial intelligence creates huge opportunities for businesses globally across all sectors. There is no doubt about it. However, we have seen that the use of AI also brings the potential for significant legal, ethical and reputational exposure.

In this respect and while the COVID pandemic has exponentially accelerated the digital transformation processes of all companies, it has also underlined the need to commit to social responsibility and sustainability, so that today it is not possible to conceive a digital transformation not based on ethical and sustainable criteria. In other words, today the digital transformation will be sustainable, or it will not be.

At Country level, Europe has already set very clear guidelines in this regard through the Green Pact and, more recently, in the Post-Covid Recovery Plan, by linking its financial aids to the sum of digitization and sustainability, being these two concepts necessary allies and key pillars for the new economy.

At company level, it is expected that reputational concerns will be increasingly important and that, having laid out their principles, regulators will shift towards enforcement action, to demonstrate the cost of not complying with all existing AI law and regulations.

And which is the role of the legal profession in this scenario? More precisely, which is our role as in-house lawyers?

We have made up a proposal in two main blocks: **Legals for Tech** and **Tech for Legals**.

The first has a global approach and tries to explain how the LCA area can contribute to assess AI implementations aiming to minimize potential risks to the company. The Second proposal is related just with the legal family and tries to outline proposals to incorporate more AI tools in our area in order to render our work more productive in terms of efficiency and quality.

D.1 LEGALS FOR TECH

Despite the legal and ethical questions posted by AI, companies are remarkably confident in their ability to understand and address risks. In a recent survey by The Economist Intelligence Unit of 200 board members from large companies around the world, 88 percent agreed that their board fully understands the legal, regulatory and ethical implications of their company's use of data and AI. However, our impression is that such data could be masking reality because, too often, AI risks are oversimplified and underestimated. This creates risks exposure for companies. And that needs to change.

Experts have identified the following three main tools for a responsible AI management:

To assess which of these tools could be appropriate and to which extent they should be implemented, we recommend, first, to proceed as follows:

- **DUE DILIGENCE**

To minimize AI risk, businesses need to assess their use of AI from supply chain to users or final clients, encompassing AI technology that has been bought (from suppliers or via M&A) or built in-house. This should include:

- Data: Where does it come from and do you have the right to use it? Is any bias in the data inputs being addressed?
- Transparency: How is data being used and decisions made? How is that communicated to stakeholders (if needed)?
- Explanations: Is there a written explanation of the AI's functionality? How and where is it documented and is it up to date?
- Review: Are you monitoring and/or testing the AI's decision-making and its impact? To what extent is there human oversight?

- Limits: Have boundaries been set regarding use of AI? Who could be harmed by its use? Are there uses that you will not countenance? Is there an off-switch?
- Liability: What is the contractual framework for the use of AI? How is liability apportioned between the business and its suppliers and/or users or clients?

➢ POLICIES

Businesses will typically have many existing policies that may contemplate or impact the use of AI; for example, GDPR compliance, human rights policies, competition policies, codes of conduct and new product approvals. Where policies already contemplate AI use, are they consistent? If they are not, do they need amending?

➢ MANAGEMENT RESPONSIBILITY

Businesses need to determine and document management responsibility for their use of AI, with a clear governance structure and a consistent approach. Senior managers need to understand the technological capabilities of AI and how to challenge its operation.

D.2 TECH FOR LEGALS

Unlike International law firms, in-house legal areas have often been considered to be slow adopters of new technologies. However, as previously said, the COVID-19 pandemic has completely changed this, forcing many to accelerate their investment in the digital space so as to continue to serve their companies amidst remote working and virtual collaboration.

The 2020 RELX Emerging Tech Executive Report, which surveyed over 1.000 General Counsels in US companies, found that 68% had increased their investment in AI technologies during the pandemic. Of these, 48% had invested in new AI technologies while 40% increased their investment in AI tech they already use.

In Europe we have found that companies have been and still are more tented to invest in digital transformation and implementation of AI tools within the business lines rather than in the legal areas. Perhaps this is because companies use to have in Europe a traditional approach based on a distinction that, from our perspective, is wrong and certainly not valid today. We are referring to the distinction between business lines, on one side, linked to the core business and the real value of the company and in charge of growth; and the staff lines, on the other side, where is traditionally included the legal area and which are seen almost as a mere accompaniment of the business lines. But this view is, for us, clearly dated

The Legal area is also a key function in business growing at the same level of M&A or Business Development, for example. And we need to, first, be recognized as such in order to obtain the same level of investments, innovation development and implementation of digital tools.

As we have underlined throughout this research, Artificial Intelligence is really transforming the legal profession and the practice of law and there is no turning back. Consequently, even for in-house lawyers embracing AI is today an urgent need in order to increase efficiency and quality, adding value not only to the legal work and but to the whole company.

By automating repetitive tasks, lawyers can focus on higher-thinking and more complex operations. Attorneys may be able to say goodbye to long hours spent reviewing documents, can spend more time and devote more energy to formulating arguments and strategic planning. The company can obtain the benefits of finding fresher lawyers, with time to think, open to offer innovative solutions.

And from a sustainability perspective the benefits are also clear. Directly, less paper, less travel and greater efficiency are proven to reduce CO2 emissions. Indirectly and as already mentioned, the incorporation of AI tools in the legal area can contribute to create value in general, strengthening in particular the reputational value of the company.

The implementation of AI in the legal area is, thus, a victory for everyone involved.

Said so, being able to decide where AI is really needed, to which extent and though which type of tool, **requires however a previous analysis** on our internal processes and on the needs of the company, as well as a thought about the best way to eliminate bottlenecks and/or reduce time dedicated to not-added-value tasks. This preliminary analysis is essential because there are no general solutions universally valid. Each decision to invest in AI has to be adapted to each particular situation to be really useful and not all companies are the same or are at the same level of digitalisation.

And the process does not end here, with the choice of the tool. In our research we have verified that those companies or firms that have truly useful tools are those having a one or more persons, inside the legal area, specially dedicated to this matter. They are for sure lawyers and they understand which are the legal needs and requirements but they are also specially dedicated to understand how the tool works, its potential benefits and faults, how to train it and how to feed it. It is not just having the proper tool, it is also needed to have someone with the necessary expertise to extract the best of the tool and optimize its operation.

Companies need to change their view on the legal area. We, as in-house lawyers, need to change the way we used to work and be open to embrace AI as a great opportunity to fall in love again with our careers. There are lot of changes to do and it would be not easy but there is no other way. ***Only companies that understand this new concept of legal services and take steps in this direction will succeed. The others will be left behind.***

Let's have a quick look now on the tools that we have identified as the most useful for companies like Enel or Vodafone:

- **E-DISCOVERY TOOLS**

E-discovery tools are those that commonly General Counsels find as more useful for internal needs.

As previously explained in “AI & Law Firms”, such tools can (i) easily import documents or information in any of over 60 formats, dragging-and-dropping and uploading entire

directories or zip files from the desktop or other platforms or apps; (ii) automatically filed documents in a smart way and/or (iii) converts these smart files in any other format needed or (iv) find clauses and data points in a fraction of the time that it traditionally takes.

In-house, this type of tools could be really useful for:

1. **Litigation Documents Review**: imagine that in-house counsel for Company A receives a few thousand documents relating to a pending litigation. It would be his/her duty to review all the materials associated with a case. It would take long with the added stress that any miss of key terms or changes could be disastrous. With the help of AI, the Company A's attorney can specify terms of interest along with relevant documents for the company's AI to review. The AI scans through thousands of records within seconds and provides the attorney with the necessary information to build the case.

2. **Due diligence**: the same applies for internal due diligence that shall internally be made prior to an M&A transaction. Have you ever been asked to review thousands of documents searching if there is any change of control clause or any other clause that could effectively prohibit a transaction from proceeding forward, or if there are, certain consents required? It sounds familiar, doesn't it? Well, AI can search provided documentation and information, extract key points, and organize everything for thorough review. Actually and according to research by Kira Systems, in-house lawyers can cut documents review time by up to 60 percent by using AI.

3. **Global Procurement**: for attorneys who regularly deal with large volumes of contracts at global level, information is necessary. Artificial intelligence provides a fast and efficient method to organize contracts and collect data over time to help attorneys draw conclusions, create future contract strategies, and discover new insights within the contract terms. AI software provides attorneys with more confidence in contract negotiations and leads to better outcomes for the company.

In addition to the above, e-discovery tools can be also used **as a complement for other digital platforms already in place in the Company,** for example, to automatically collect documents to be uploaded in those platforms and/or to extract key data that are needed to fulfilled specific requirements in such other digital platforms.

- **NDA CHECKER**

AI tools related to the draft of standard contracts are mainly used by companies in relation to simple contracts as Non-Disclosure Agreements. Through the tool and based on in-house models previously uploaded, anyone, anywhere in the company could obtain a first draft of an NDA (in the language and or for the specific jurisdiction required) just by fulfilling a simple questionnaire. In addition, the tool can also review the mark-up provided by the counterparty and, based on the standards of the company, identifies inconsistencies, alerts about significant deviations from the standards and related risks, and automatically suggests a counter-mark-up.

This system allows companies to more efficiently complete NDAs review with fewer resources and saving time, while still providing legal oversight and the opportunity to provide legal input when needed. It also allows to standardize how the company reviews and marks up NDAs, no matter who and where it is being negotiated.

- **CONTRACT MANAGEMENT**

Contracts are the lifeblood of our economic system; business transactions cannot get done without them. However, the process of negotiating and finalizing a contract is today painfully tedious.

Each side’s lawyers must manually review, edit and exchange red-lined documents in seemingly endless iterations. The process can be lengthy, delaying deals and impeding companies' business objectives. Mistakes due to human error are common; no surprise given that attention to details is essential, mark-ups can be a mess and contracts can be thousands of pages long.

There is a massive opportunity, hence, to automate this process.

But negotiating and signing a contract is only the beginning. Once parties have a contract in place, it can be a massive headache to stay on top of the agreed-upon terms and obligations. This challenge is particularly acute for large companies with millions of outstanding contracts signed with thousands of different counterparties across numerous internal divisions.

To a remarkable degree, companies today operate in the dark as to the details of their contractual relationships. AI also offers the opportunity to solve this problem.

Well-funded technology companies, like Kira Systems and Seal Software, as well as newer start-up challengers including Lexion, Evisort and Paperflip, are building platforms for contract management, covering the phase pre-closing (standard models, on-line negotiations and digital signature), the post-closing phase (repository, key clauses extraction, alerts and related reports) or both of them, offering an overall end-to-end platforms from the first drafting to the expiration of the contract and its potential renewal.

For now, these systems are designed to operate with a human in the loop: that is, a human lawyer reviews the AI's analysis and makes final decisions. But as Natural Language Processing capabilities advance, it is not hard to imagine a future in which the entire process is carried out end-to-end by AI programs that are empowered, within pre-programmed parameters, to negotiate and hammer out agreements.

In order to better understand how these tools works, please see here below an excerpt from Evisor, a start-up created by two Harvard students.

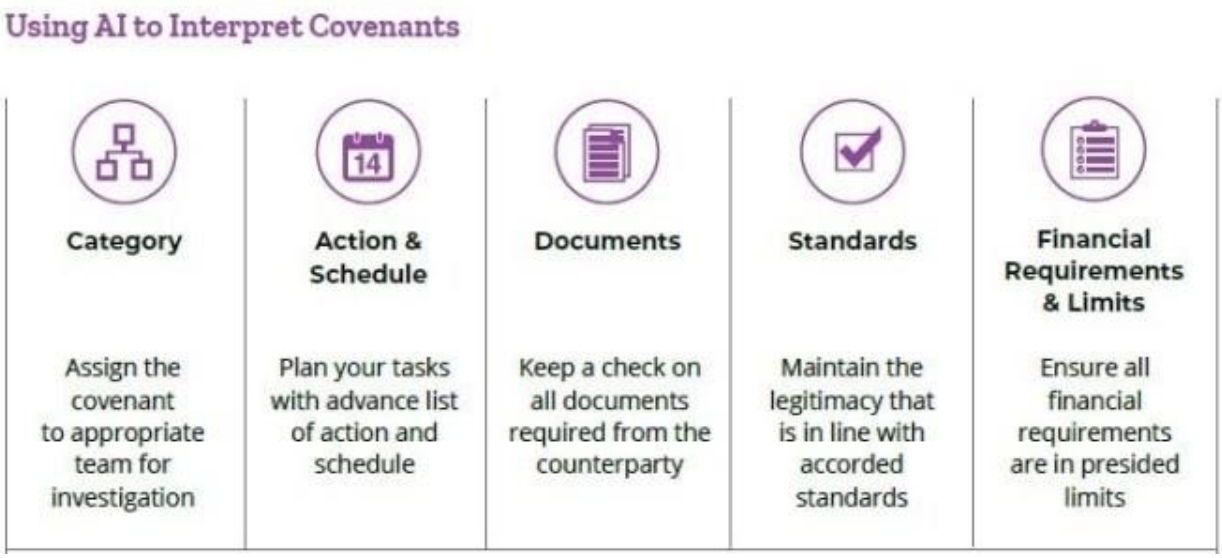
- **FINANCIAL COVENANTS MANAGEMENT**

According to Cerebro Capital, over 38% of middle-market companies have violated a loan agreement and do not know about it. Of these, 23% violated incorrectly calculated financial covenants and 15% missed covenants. This is not all: in its whitepaper, business process management company New Gen suggests that 85% of leveraged loans were

covenant-unbalanced, i.e., the loans were over covered or, on the contrary, not sufficiently protected by covenants.

These are some of the challenges companies and banks and financial institutions face in relation to covenants management.

To solve these problems and with the aim to overcome the traditional approach, specialized tools have recently appeared on the market proposing covenant management solutions based on tools leverages advanced machine learning (ML) and natural language processing (NLP) techniques to interpret the financial and non-financial covenants in contracts. This structured information extracted from the lending contracts can be further used to better negotiate future smart contracts that will retain all the related information so that any changes to terms and execution of the contract can be communicated through a specific alert.



Main benefits of this type of tools could be:

- Improve covenant monitoring and compliance reporting through process efficiency
- Reduce data error rates

- Improve credit decision-making process based on a more accurate information analysis

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ANNEX I

ENEL "LEGAL GAME"

Artificial Intelligence in law firms

INTERVIEWER: Paloma Mateo, e-legal game team

INTERVIEWEES FROM CLIFFORD CHANCE:

Raquel Garcia, Best Delivery Advisor for the Spanish Offices of Clifford Chance

Patricia Puertas, Associate at Madrid Corporate Team of Clifford Chance

Maria Barragán, Junior lawyer at Madrid Corporate Team of Clifford Chance

Clifford Chance, as other international law firms, is betting in recent years to incorporate AI as an important tool to increase efficiency and quality in the provision of your legal services. But based on which criteria do you chose one tool instead of another: based on client's needs or in your specific internal needs?

It is all based in the people – process – tech motto. We first invest in people that will be able to dedicate time to investigate each of the platforms and have enough legal knowledge to take data-driven decisions. Then, those professionals analyse our internal processes (which are designed based on clients needs) and think of ways to eliminate waste, bottlenecks and not-added-value tasks, fully streamlining then if necessary. It's only in that moment when we decide which AI provider suits better our needs: does it fulfil 100% of our needs? Only 80% but also could be implemented in different processes? It's not about making an investment, but obtaining a return from it: making our clients and colleagues lives easier.

And how do you measure the success on your choice? I mean, how do you evaluate the real impact of one specific tool and which are, from your perspective, the parameters that shall be considered to measure the quality of the innovation proposed?

Even we undertake a detailed assessment in advance, there's not a guarantee of success. Sometimes our lawyers find the platform too complex and they don't have the time to wait until the benefits come, or our clients are reluctant about the quality that we can provide if a lawyers' work is being substituted by a machine's work. It all depends on the change management strategy that you do have in place. However, we all love "quick wins", so it's a matter of showcasing the successful stories all around the place. Measuring the impact of AI is very easy: manual work vs machine work in time and quality. That's why the investment in "people" is also such important: if the testing can be done without "bothering" clients and/or lawyers and you can present the data when trying to implement your AI platform, it's very difficult for anybody to resist!

Indeed, what we as lawyers appreciate the most is not only having the platform itself, but someone that is there to assist you when using it, having done the previous exercise of understanding how it works and in which phase or step will it cause the greater impact for you to save as much time as possible.

It is true that there's still quite a lot of resistance, but when giving it a try for the first time and realizing the amount of non-added-value work saved, there's no way back!

In our analysis we have seen that probably the hardest part of the incorporation of AI to the legal profession is trust. We have to rely in the AI systems we have chosen for carrying out certain tasks. In this regard, where have you find opposition or mistrust, inside CC or outside in clients? And how is it overcome?

Trust is a complex issue to overcome. As explained before, it can depend on the level of adoption of legal transformation in general, but it also may not have a specific reason, so it's difficult to offset. Even successful stories and data analysis can help, sometimes neither clients nor lawyers feel confident enough to give it a try. The process of gaining trust is difficult and time consuming, but some of our tips are: (i) look for top-positions

support. The innovation culture shall be a top-down strategy. A junior person would never take the risk of giving a try if the senior person is reluctant; (ii) take care of your champions. The junior positions are usually more willing to embrace this new ways of working, so help them in convincing the seniors to adapt and incentivise them; don't forget they will eventually become senior positions!; (iii) be honest in your communications. It doesn't matter if you fail during a testing; perhaps it will take you more time to convince them, but what surely won't get back their confidence is failing in a real transaction.

We as junior positions can't agree more with the three tips just mentioned. We have lived this "digital transformation" since our early days, which makes us more confident to use legaltech platforms in general, but it is not our decision to make when planning the work or negotiating with the client. That is why the internal trust – or lack of it - of the senior lawyers is the first barrier we need to overcome. A way of achieving that is also showing a problem-solving mindset: do not hesitate to give it a try on your own and already present the cost/benefit analysis. If it's not what expected, don't think of it as a failure, just as not the most adequate need to fulfil.

The process of embracing AI is still ongoing, as well as the full business transformation, but definitely this is the right path to follow.

Looking inside, which are the main benefits you have obtained with the incorporation of AI tools and how have them changed your organization or the way you used to work (if there is any change…)?

Time savings, which translates into money savings, would be the obvious answer, which is itself enough to keep using them. But also lawyers satisfaction, which might be an underlying benefit but as important.

Freeing-up our time from non-added-value tasks and letting us get rid of repetitive activities makes us feel more valued and really doing "what we signed for".

Also, in an international firm like ours, we find very useful the possibility that AI has given us to standardize ways of working across different jurisdictions. Coordinating different

teams is often very tedious, and using a platform to support that and do the hard job is actually making us much more efficient as a network.

In my opinion, at least as of today, the AI cannot completely replace the lawyers. On the contrary, the winning team is a combination of the lawyer with the machine. However, this obliges us to be more digital. In this regard, have you changed the skills required when looking for the incorporation of new lawyers, perhaps now including technological skills? Which could be now the role of the junior associates? In the near future, is this also going to impact Law Schools, do they have to include this matter in their academic programs?

It is completely true that AI won't substitute lawyers, just free up their time to focus on providing legal advise. But indeed this makes us think about the role of junior profiles, who usually take care of less added-value tasks (due to their lack of experience). As previously said, they have a very important role to play in embracing the new technologies, as they are more familiar with them in general, so they will be able to invest their time in understanding how to use the platforms, training them and double checking the results. Yes, double checking what a machine has done. This may sound odd, but it is definitely important for creating the trust relationship that we were discussing about.

On the other hand, Law Schools are already starting to offer specialized education, not only in AI and legaltech, but on project management and skills that haven't been traditionally understood as part of the legal profession. Of course we are increasingly taking that into consideration, as a professional with those skills will be much more able to adapt to the changing environment that our clients and ourselves are living.

Talking about the relationship with clients, how is it changing due to the incorporation of AI tools in the provision of services? Is this for example going to change the system for fees invoicing now based on work-time basis?

AI directly impacts on time, which for a billable-hour model means money. However, we shouldn't understand that because of AI, legal services will cost 50% less. We will

definitely be price competitive and charge hours for high quality content, but the different professionals that have invested their time in making it possible also need to be considered as part of the invoice. If we don't negotiate with Apple for the price of their iPhones when those include AI - it's not their core business (Apple produces smartphones, not AI technology), but an added value - we shouldn't do it with lawyers. It is not about working less, but working more efficiently while keeping the high quality service.

And coming back to trust, AI works based in a specific algorithm but it is also relevant the way the tool is fed. To which extent do you consider needed to disclose these aspects or be transparent with clients? Could the way you have fed a tool be considered as bad practice? Will we see in the upcoming future expressly included in the engagement letters all these details?

We are currently experiencing that with different providers. As an international firm, when we acquire a platform, we need to be cautious about it being designed in i.e. UK and used in i.e. Spain. AI providers tend to differentiate themselves from competitors by offering to share some already- trained knowledge, but we all know i.e. lease agreements are not the same under Common Law and Civil Law. Clifford Chance's strategy is based in appointing at least one person per jurisdiction to do local support, so a lawyer/client can trust that the AI platform is being adapted to their local needs.

Moreover, clients are increasingly requesting demo and/or training sessions to understand better "what's behind", which helps create that trust relationship.

Regarding the engagement letters, it is a question that is in progress and that perhaps could be tackled in the future. With respect to the liabilities is not only the liability that Clifford could be assuming but also the liabilities of the producer of the software because, may be, in the future the idea is that Clifford is liable before the client but also we have a back-to-back with the provider of the tool. This is something that should be analysed in the future because my impression is that as of today the market is still not aware of all the consequences.

Given the competitive scenario you are working in and the increasing importance of the incorporation of AI tools, which requires a considerable economic effort, is this a path exclusive for International law firms? In other words, are small-medium law firms going to survive?

We are still at the beginning of this digital transformation and we are already seeing tons of AI providers. Obviously all of them require an economic investment, but not all at the same level. The same way law firms with different sizes have found their role to play in the market, their partnerships with AI providers could work in different ways – for example, many are willing to lower their prices if lawyers share their knowledge with them.

On the other hand, we are seeing lots of M&A movements: Thomson Reuters acquiring HighQ, DMS provider iManage offering AI solution RAVN, Litera integrating Kira Systems, etc. Perhaps it will also happen with law firms?

For sure, what will happen is that those who don't innovate, will be left apart.

And last but not least – any predictions for the future? Given the new EU Regulation for AI, what do you expect in the upcoming years?

At this stage, there is still a long road ahead. However, a harmonized European regulation seems to be all pros and no cons to date: it establishes a well-known framework in which all developers, providers and users know what to expect, what will be of help in overcoming the trust issue.

On the other hand, we don't think that junior lawyers will be replaced when AI is fully implemented; ways of working will change, but the same those changed 20-25 years ago when Outlook or even the internet started to be implemented as daily tools.

We also think that hybrid professionals will be more demanded in the market, so universities will offer Law + Tech combined degrees as business as usual.

Exciting times are coming!

ANNEX II

The EU AI Act

The European Commission's risk-based approach is structured around four categories of AI systems. Three of the four (those related to unacceptable risk; high risk and limited risk) are regulated under the AI Act. The fourth, related to “minimal risk” and which would include such things as AI-enabled video games or spam filters, is apparently not. However, the AI Act generally encourages the voluntary application of its rules and principles to all AI systems.

A ban on particularly harmful practices creating unacceptable risks

As part of its risk-based approach, the AI Act prohibits certain practices, as a matter of principle, or authorises them exceptionally and subject to specific conditions. These are practices deemed to create unacceptable risks, contravening core Union values. They include (i) **manipulative AI practices; (ii) social scoring by public authorities** in certain circumstances where it leads to detrimental or unfavourable treatment; or (iii) **the use of 'real-time' remote biometric identification systems in publicly accessible spaces for law enforcement**, except in circumstances tied to specific use cases (such as the targeted search for potential victims including missing children and the prevention of terrorist attacks) and subject to specific conditions.

There are questions on the effectiveness of these restrictions, given their limited nature and applicable conditions and exceptions.

These provisions also need to be considered in light of other legislation, including the GDPR and its provisions on automated processing / profiling.

High-risk AI

The main focus of the AI Act is on this category of AI systems, defined, in general terms, as the ones representing a risk of harm to health and safety or having adverse impact on

fundamental rights. Such category expressly includes, among others, AI systems intended to be used as safety components for the management and operation of certain critical infrastructure, such as road traffic and the supply of water, gas, heating and electricity.

Specific requirements apply to high-risk AI systems:

Risk management system: a risk management system must be established and maintained, and it must consist of a process requiring regular, systematic updating. Key steps would include identification and analysis of risks and adoption of suitable risk management measures. In implementing the risk management system, specific consideration must be given to the potential impact on children.

Data and data governance: these aspects appear key and have received special treatment, being subject to the highest level of fines. Requirements are included on the training of models with data and data sets, including to ensure the quality of data sets and address possible biases. The data sets must be relevant, representative, free of errors and complete. One question here is to what extent it is feasible, in practice, to have fully error-free data sets.

The AI Act allows providers to process 'special categories of data' as referred to in the GDPR and other related EU legislation. This refers to particularly sensitive data such as personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and genetic data or data concerning health. And its processing is generally prohibited except in very limited circumstances. Here, the processing is authorised to the extent strictly necessary for bias monitoring, detection and correction, and is subject to appropriate safeguards.

Documentary requirements and record-keeping: this notably covers the technical documentation to be established, maintained and updated, logging capabilities and

traceability. On logging capabilities, additional requirements are included for systems intended to be used for biometric identification.

Transparency and provision of information to users: high-risk AI systems must be accompanied by instructions for use, containing "concise, complete, correct and clear information that is relevant, accessible and comprehensible". The information must include the capabilities and limitations of performance of the AI system, changes that have been pre-determined, expected lifetime, and necessary maintenance and care measures. The information is all the more important as users have a duty to use the system in accordance with the instructions.

Human oversight: the regulation proposes explicit human oversight. As a starting point, high-risk AI systems must be designed and developed in a manner enabling effective human oversight. Two main types of measures are identified: those 'by design', in that they are built into the systems; and those that are identified by the provider and suitable for implementation by the user. Measures are aimed at enabling the person exercising the oversight to for instance, and as appropriate, monitor the system's operation, interpret its output and intervene or even interrupt its operation.

Accuracy, robustness and cyber security: requirements include resilience to errors, faults or inconsistencies and to attempts by unauthorised third parties to alter use or performance by exploiting system vulnerabilities. Provisions are included to address the specific issues of bias and “feedback loops”, as well as “data poisoning”.

Conformity assessments for high-risk AI

A key requirement for high-risk AI systems is that they be subject to a conformity assessment prior to placing on the market or putting into service. There are specific derogations from the conformity assessment procedure. They allow market surveillance authorities to authorise, on a temporary basis and subject to conditions, the placing on the market or putting into service of specific high-risk AI systems "for exceptional reasons

of public security or the protection of life and health of persons, environmental protection and the protection of key industrial and infrastructural assets".

Limited risk AI

Certain AI systems are subject “only” to specific transparency obligations.

One key ethical concern often raised in relation to AI is the need to ensure that people are aware when interacting with an AI system. Each of the 2019 Ethics Guidelines for Trustworthy AI, the 2020 Assessment List for Trustworthy Artificial Intelligence (ALTAI) for self-assessment and the European Parliament's 2020 resolution on a framework for ethical aspects of AI touches on this question. The AI Act follows suit. It requires providers to ensure that systems are designed and developed in such a manner that individuals are informed when they are interacting with an AI system (e.g., a chatbot), unless this is obvious. 8 The AI Act also imposes additional information obligations on users. This is the case in relation to 'deep fake' content, where users must reveal that the content has been artificially generated / manipulated. Likewise, where natural persons are exposed to emotion recognition or biometric categorisation systems, they must be informed of the operation of the system.

There are exceptions however, in particular for certain AI systems authorised by law for the purposes of crime detection, prevention and/or prosecution.

Sanctions – GDPR or antitrust-like fines

Very significant fines are contemplated to ensure effective implementation.

For the most serious non-compliances, administrative fines can reach the higher of EUR 30,000,000 and 6% of total global annual turnover. This applies to prohibited AI practices, as well as to any non-compliance with the data and data governance requirements for high-risk AI systems.

For non-compliance of the AI system with any other requirement or obligation, administrative fines of up to the higher of EUR 20,000,000 and 4% of total global annual turnover apply. Specific fines apply to the supply of incorrect, incomplete or misleading information to relevant bodies/ authorities following a request (up to EUR 10,000,000 or 2% of total global annual turnover, whichever is the higher).

Member States are responsible for laying down the rules on penalties, including administrative fines, and for ensuring they are implemented. Penalties must be effective, proportionate and dissuasive. With respect to a Member State's public authorities and bodies, that Member State would determine to what extent administrative fines could apply. Administrative fines would be imposed by national courts or other bodies in the relevant Member State, as applicable, depending on its legal system.

Different fines and different rules apply for Union institutions, agencies and bodies, and the European Data Protection Supervisor is empowered to impose those fines.
The AI Act generally does not, on the other hand, deal with the question of damages and indemnification.