Riccardo G Cajola, Cajola & Associati, Milan

1. What is the understanding or definition of AI in your jurisdiction?

By using the wording artificial intelligence (AI) (*intelligenza artificiale*), reference is made to software and hardware systems capable of achieving complex goals, operating in physical or virtual dimensions, perceiving the surrounding environment, acquiring – understanding – inferred data through knowledge continuously acquired (reasoning and machine learning), adopting decisions and choosing solutions in given or extemporary situations. AI is defined as a 'dual' technology, as it can apply to both civilian and military scopes.²³²

Al is a technology ecosystem based on highly performing calculations, mobile broadband technologies, nanotechnologies and the so-called internet of things (IoT). In a few years, the development of these sectors will allow a more synergic interaction among them, mainly due to blockchain, cloud computing and mostly, the operativity of 5G frequency bands.

2. In your jurisdiction, besides legal tech tools (ie, law firm or claim management, data platforms, etc), are there already actual AI tools or use cases in practice for legal services?

We are at the beginning of this new trend; however, there is already some AI software used by lawyers in their practices. They are mostly meant to simplify lawyers' work, setting them free from repetitive work, which can slow down their professional activity.

This software can assist lawyers in statutory regulations and court case searches, as well as with the revision of contracts.

As an example, ROSS can help lawyers in research. It is software based on AI that aims to simplify the work of lawyers. ROSS is capable of simplifying the search of statutory regulations and court cases. It is based on 'Watson', IBM software capable of understanding human language, and can be used by law firms to simplify and render faster any legal searching activity, which young lawyers usually perform.²³³

Besides performing searches on single cases, ROSS is capable of developing logical connections and proposing ad hoc solutions to help lawyers to interpret a

²³² See www.mise.gov.it/index.php/it/intelligenza-artificiale-call accessed 6 July 2020.

²³³ See https://rossintelligence.com accessed 6 July 2020.

specific case and to act accordingly. Several Italian law firms, particularly in Milan, have begun to use it.

A second example of AI software for law firms is Kira, a software expert on contracts.²³⁴ Kira is devoted to cutting down time spent on analysing hundreds of pages of contracts. Kira automatically finds, extracts and reviews significant contract information in minutes.

This software is meant to enhance visibility in contracts, making it easy to get a quick picture of contract terms. Kira rapidly responds to a change in law, antibribery review or force majeure event. According to its provider, Kira can jump between summary text and the original scanned page.

Kira analyses contracts, extracts their most relevant sections and highlights their material provisions. Kira is also capable of analysing documents based on the inclusion or absence of specific provisions, and can extend search and analysis to contracts drafted in different languages.

An interesting bot used for legal data privacy protection is that commercialised by LT42.²³⁵ This Italian software offers the possibility for companies to be appointed as data protection officers (DPO) to comply with the European Union General Data Protection Regulation Directive No 679/2016 (GDPR) on privacy. LT42 offers support that can be provided both through its online platform and through a customised consulting service, as well as constant monitoring to comply with the norms established by the EU. A team of experts retains control of the software on privacy, legal issues and technology.

Contract Intelligence (COIN), is another bot able to substitute 360,000 annual working hours performed by lawyers. So far, it has been tested by JP Morgan.²³⁶ COIN runs on a machine learning system that is powered by a private cloud network that the bank uses. Apart from shortening the time it takes to review documents, COIN has also helped JP Morgan to decrease its number of loan-servicing mistakes. According to the program's designers, these mistakes stemmed from human error in interpreting 12,000 new wholesale contracts every year.

Another example is 'DoNotPay', AI software meant to appeal parking tickets, cancel any service or subscription, and sue in small claim courts, for example, for delayed or cancelled flights. It's a mobile phone app and the company running this business claims that 'the DoNotPay app is the home of the world's first robot lawyer. Fight corporations, beat bureaucracy and sue anyone at the press of a button'.²³⁷

²³⁴ See https://kirasystems.com accessed 6 July 2020.

²³⁵ See www.lt42.it accessed 6 July 2020.

²³⁶ See www.icertis.com/resource/what-is-contract-intelligence accessed 6 July 2020.

²³⁷ See https://donotpay.com accessed 6 July 2020.

In Italy, AI software called 'Flightright' provided by a German company called Flightright GmbH is frequently used by travellers.²³⁸ It is an air passenger claims management software that offers assistance and advisory services. The software offers passengers assistance and advisory services to obtain compensation from airlines when a flight is delayed or there is a failure. Flightright's free checks tell customers whether they are entitled to compensation if they simply type in the flight details – whether there was a delay, cancellation, rebooking or a missed connection.

3. If yes, are these AI tools different regarding

- independent law firms;
- international law firms; and
- in-house counsel;
- and what are these differences?

Based on the above, there is a wide variety of Al-based software already available on the market. Some applications are used to support lawyers in their work, whereas others directly offer legal services to their customers. Most of this software and applications have been developed outside Italy, and they are meant for an international clientele, so independent law firms, law firms operating in several countries and in-house counsel can all avail of their services.

4. What is the current or planned regulatory approach on Al in general?

Al is deemed, by both the Italian Government and the EU, to be one of the key technologies for a new industrial revolution guided through the transition to digital. Italy has undertaken to implement a national strategy on Al within the framework of the European Coordinated Plan on Artificial Intelligence, which constitutes the domestic contribution to synergic action among EU Member States.²³⁹

In April 2021 the European Commission unveiled a proposal for a new Artificial Intelligence Act (AI Act). The Regulation proposal sets out harmonised rules on AI and introduces a technology-neutral definition of AI systems into EU law. The Commission also proposes to adopt different sets of rules tailored to a risk-based approach with four levels of risk:

Unacceptable risk AI: harmful uses of AI that contravene EU values (such as social scoring by governments) will be banned because of the unacceptable risk they create;

• High-risk AI: a number of AI systems (listed in an Annex to the Regulation) that are creating adverse impact on people's safety, or their fundamental rights, are considered to be high-risk. In order to ensure trust and consistent high level of protection of safety and

²³⁸ See www.flightright.com accessed 6 July 2020.

²³⁹ See https://ia.italia.it/assets/whitepaper.pdf accessed 6 July 2020.

fundamental rights, a range of mandatory requirements (including a conformity assessment) would apply to all high-risk systems;

- Limited risk AI: some AI systems will be subject to a limited set of obligations (eg, transparency);
- Minimal risk AI: all other AI systems can be developed and used within the EU with no additional legal obligations than existing legislation.

The proposal is now being discussed by the co-legislators, the European Parliament and the European Council, where negotiations have started to find a common position between Member States.

The domestic strategy comprises nine targets and seven sectors.

The national strategy for AI comprises an initial chapter, called Vision and Targets, and a series of brief chapters explaining the nine targets the strategy is aiming at:

- 1. improving investment, public and private, on AI and related technologies;
- 2. enhancing R&D in the field of AI;
- 3. supporting the adoption of digital technologies based on AI;
- 4. increasing educational efforts at different levels to enable AI to support the workforce;
- 5. exploiting the data economy, real fuel for AI, particularly in the public sector;
- 6. consolidating the legal and ethical frameworks that regulate AI development;
- 7. promoting awareness and trust of AI among citizens;
- 8. improving the public administration sector and making public policies more efficient; and
- 9. favouring European and international cooperation for accountable and inclusive AI.

The following seven key sectors have been given the utmost priority in the allocation of resources: manufacturing industry, agrofood, tourism and culture, infrastructure and energy networks, healthcare and social security, smart cities and mobility, and public administration.

Among the measures that shall be adopted are those to increase the number of Al experts in Italy to support academic, industrial training and research in this field and to finance the hiring of professors and researchers in universities and R&D centres, as well as financing masters carried on by businesses alongside universities and programmes of industrial PhDs. Besides promoting the development of centres operating in the Al field, the government is aiming at realising a national network for the development and wide spread of Al and digital technologies. Material in this context will be the activities of the Competence Centre and the 12 technology clusters, among which is one dedicated to the Intelligent Factory and the Digital Innovation Hub.

There are several possible solutions for improving interoperability and access to public administration data, and the Italian Government is committed to promoting the development of the Data Sharing Agreement, which is a standard contract under which parties undertake with each other to manage data supply and management in accordance with agreed upon rules, as well as to assess, in cooperation with the Antitrust Authority and the Privacy Authority, the implementation of data sharing standards in specific strategic sectors of national interest.

The regulatory and ethical aspects are indeed material to developing AI. The constant interaction between man and intelligent-machine requires an update of the legislative framework to ensure that the AI system engineering is trustworthy. As an example, the current EU Machine Directive does not reflect the changes that have occurred, and a new European directive in that field is needed.

In connection with the ethical aspects, the Italian Government intends to prevent any kind of AI that can increase social differences and is detrimental to some. To that extent, the opportunity to regulate, promote and manage new certifications, which allow the verification that AI systems are aligned with the principles that the European guidelines on ethical AI set forth, is under examination.

Among the public administration sectors that could benefit from the use of Al are countering tax evasion and avoidance, web crimes, combating cyberattacks arising from AI, personal information and sensitive data theft, and fighting against organised crime and terrorism.

The Italian strategic plan represents a contribution to the European Coordinated Plan on AI.

5. Which are the current or planned regulations on the general use of AI or machine learning systems?

The legal effects and legal issues connected to the design, manufacturing and use of new technologies, including those connected to AI, must be examined within the context of the current statutory regulations, and be resolved on the basis of existing legal principles. This is because, to date, there are no statutory regulations in force specifically regulating AI systems, the consequences of availing of them or the liabilities from either a civil or criminal law standpoint, arising from losses or felonies depending on or connected to their use. This means that general statutory regulations on contracts and torts apply to liabilities arising from losses, with all their features and differences, in terms of liability allocation, burden of proof and statutes of limitations, arising therefrom.

By analogy, the general statutory regulations of copyright and intellectual property apply to the invention and development of AI systems and to the output from their use.

Ultimately, the treatment of personal data and privacy rights linked to the use of AI is subject to the GDPR.²⁴⁰ Notwithstanding, the EU directive does not make express reference to the use of new technologies; its scope is that the treatment and protection of personal data are ensured within the current technology context, especially with reference to the risks that innovation can cause to individual privacy.

The main feature of AI compared to other innovative technologies is embedded in its system, which allows 'self-decisions' through machine learning mechanisms, operating on external inputs and gathered data. From a legal standpoint, selfdetermination can interrupt the link between the conduct of those who have conceived, designed or manufactured the system and the output that the system generates. This involves an evident legal issue of linking liability to persons due to the autonomous AI conduct.

Based on domestic civil law, there are rules attributing liability for the conduct of another and or standards of strict liability, for example, liability for carrying out dangerous activities, as a provision of the Civil Code, Article 2050, set forth for car driving. Likewise, some EU statutory regulations, for example, EU Directive No 374/85 on liability for defective products, can apply and determine civil law liability. On the contrary, these standards and principles cannot apply to criminal liability due to the principle of legality and because criminal liability is personal. It is not possible that someone is subject to criminal responsibility for the conduct of another; hence, it is difficult to conceive that an individual can be criminally sanctioned for the autonomous, inevitable and unforeseeable conduct of an AI system capable of self-determination.

Brand new domestic statutory regulations – not directly linked to AI – have been introduced recently in the area of new technologies, for instance, blockchain and smart contracts, based on Act No 12-2019, which introduces definitions of 'technologies based on distributed ledgers' and 'smart contracts'.

New statutory regulations on AI are under discussion and they will abide by the EU Ethics Guidelines on AI and its principles as of 8 April 2019 (High-Level Expert Group on AI – Ethics Guidelines for Trustworthy Artificial Intelligence).²⁴¹

²⁴⁰ See https://eur-lex.europa.eu/eli/reg/2016/679/oj accessed 6 July 2020.

²⁴¹ See https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai accessed 6 July 2020.

The first of these principles provides that there shall always be human control of AI because the aim is to improve human actions and the human's rights, not to reduce the human's autonomy. A second principle provides that algorithms shall be safe, trustworthy and resist errors or inconsistencies during the different phases of the AI system life cycle. The third entails that citizens shall be always informed about the use of their personal data and have full control so that it cannot be used against them, and that shall be done by following consistent provisions in respect of the GDPR.

The fourth principle calls for transparency and aims to guarantee the traceability of AI systems. The fifth principle is to guarantee diversity and non-discrimination, with human beings able to modify the algorithms' decisions, taking into account all the needed factors. In this connection, there shall be procedures to object to algorithms' decisions to ensure the liability of those managing the systems in the case of loss or damages. Eventually, domestic statutory regulations on AI shall be intended for the benefit of social and environmental welfare.

6. Is free data access an issue in relation with AI?

As mentioned in question 5, the treatment of personal data and privacy rights linked to the use of AI is subject to the GDPR. Therefore, the GDPR statutory provisions apply to the use of free data, providing restrictions in order to ensure individual privacy.

7. Are there already actual court decisions on the provision of legal services using AI or decisions concerning other sectors that might be applicable to the use of AI in the provision of legal services?

To date, there are no court decisions on AI.

8. What is the current status – planned, discussed or implemented – of the sectorial legislation in your jurisdiction on the use of AI in the legal profession or services that are traditionally being rendered by lawyers?

Currently, there are no planned, discussed or implemented sectorial statutory regulations in Italy on the use of the AI in the legal profession or services that are traditionally rendered by lawyers. Although not directly related to the use of AI, the Agency for Italian Digitalisation (Agenzia per l'Italia Digitale or AGID) issued Resolution No 116/2019 of 10 May 2019, setting up a Working Group for the implementation of guidelines and technical standards relating to technologies based on distributed ledgers and smart contracts.²⁴² This action was carried on

²⁴² See www.agid.gov.it/it/sicurezza/cert-pa accessed 6 July 2020.

pursuant to the provision of Article 8ter of Law Decree No 135 of 14 December 2018 titled 'Urgent provisions to support and simplify for companies and the public administration', which was ratified through Act No 12 of 11 February 2019.²⁴³ This Act introduces the legal definitions of 'technologies based on distributed ledgers' and 'smart contract'.

According to such statutory regulation, technologies based on distributed ledgers are those 'technologies and digital protocols, which involve the use of a shared ledger and are: 1) distributed; 2) reply; 3) simultaneously accessible; 4) structurally decentralised on cryptographic basis; and 5) capable to allow data recording, validation, upgrade and storage, both encrypted and not, which can be verified by each participant and which cannot be not modified or altered'.

A smart contract, instead, is defined as a 'computer program operating on technologies based on distributed ledgers and its execution automatically binds two or more parties on the basis or provisions pre-set by the same parties. Smart contracts satisfy the legal standard of written form through digital identification of the concerned parties', through a technical procedure matching the requirements AGID sets forth.

The recording of a digital document through the use of technologies based on distributed ledgers has the same legal effects as electronic time stamps in the provision of Article 41 of Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market.²⁴⁴

In this context, the guidelines on technical standards that are about to be issued by AGID are material for ensuring the legal effects of electronic time stamps.

9. What is the role of the national bar organisations or other official professional institutions?

The Italian Bar Associations will play a material role in providing ethical rules and guidelines for the use of AI by the legal profession. Civil proceedings have been digitalised over the last decade, and the way of working for lawyers, judges and court clerks has changed dramatically.

The first step has been the digitalisation of court case registers, which are currently digital databases, and lawyers can access them to file written pleadings and court judgments via the so-called Portale Servizi Telematici (PST) from personal computers, access points and tools there connected (eg, 'Service1' and 'Consolle Avvocato').²⁴⁵

²⁴³ See www.gazzettaufficiale.it/eli/id/2018/12/14/18G00163/sg accessed 6 July 2020.

²⁴⁴ See https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0910&from=EN accessed 6 July 2020.

²⁴⁵ See www.accessogiustizia.it/pa/pct.jsp accessed 6 July 2020.

That has allowed a more efficient update of court claims files through databases, which enable real-time data sharing. Among the most relevant features, the PCT (ie, 'Processo Civile Telematico') has allowed the build-up of a digital archive of court decisions on a national scale.

Such an archive is being developed on a voluntary basis by judges, who filed their relevant decisions, based on their own assessment and by following the guidelines of court chambers. This archive-database enables judges to assess how a specific case was entertained and resolved by his/her colleagues and includes judgments of the courts of appeal. This leads to more uniform judgments on similar lawsuits within the same tribunals and gives lawyers the opportunity to better assess claims to advise clients.

There is an ongoing discussion on the use of tools on these databases, which would allow lawyers to have an automated risk assessment of a potential lawsuit, including the use of AI, to that extent.

As mentioned, several Legal Tech providers are currently offering office automation in some cases through AI tools that automatically select legal documents, for instance, ROSS Intelligence and LT42.

From a technical standpoint, a material aspect of machine learning is the availability of adequate datasets during the several development phases, such as training, cross-validation and testing. There is a direct relationship between the database dimension and the accuracy of the resulting models.

Among the benefits of implementing AI for legal practitioners is the improvement of knowledge and productivity; however, an open issue remains regarding determining the liability of those engineering, managing or using software that leads to wrong automated decisions. Software decisions are, in any case, still revised by individual professionals.

In Italy, the judge tool Consolle del Magistrato provides judges with access to a digital case file, and there is automated filling of the headings of documents, hearing minutes and orders of judgments on the basis of pre-set templates. Nevertheless, the document content, such as fact finding, reasoning and holdings, are entirely controlled by judges; hence, beyond the scope of this article.

Coming instead to the aforementioned digital archive of court decisions, the national bar associations shall discuss whether an AI machine learning system could support legal practitioners and judges in the issuance of decisions, provided the tool is capable of selecting relevant court precedents that fit the specific lawsuit. Such a tool could be implemented into the current PCT system at a centralised/ministerial level through a centralised national database or district court database.

Additionally, the national bar associations are called to examine the ethical aspects of implementing these tools into the legal profession. In their discussion, the bar associations shall take as reference the work of the European Commission for the Efficiency of Justice (CEPEJ) of the European Council, which, in December 2018, issued the European Ethical Charter on the use of artificial intelligence (AI) in judicial systems and their environment (the 'Charter').²⁴⁶ The Charter provides a framework of principles that can guide policy-makers, legislators and justice professionals when they grapple with the rapid development of AI in national judicial processes.

The CEPEJ's view as set out in the Charter is that the application of AI in the field of justice can contribute to improving efficiency and quality, and must be implemented in a responsible manner that complies with the fundamental rights guaranteed, in particular, in the European Convention on Human Rights (ECHR) and the Council of Europe Convention on the Protection of Personal Data. For the CEPEJ, it is essential to ensure that AI remains a tool in the service of the general interest and that its use respects individual rights.

The CEPEJ has identified the following core principles to be respected in the field of AI and justice:

- principle of respect for fundamental rights: ensuring that the design and implementation of AI tools and services are compatible with fundamental rights;
- principle of non-discrimination: specifically preventing the development or intensification of any discrimination between individuals or groups of individuals;
- 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 multidisciplinary manner, in a secure technological environment;
- principle of transparency, impartiality and fairness: making data processing methods accessible and understandable, and authorising external audits;
- 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.

²⁴⁶ See www.coe.int/en/web/cepej/cepej-european-ethical-charter-on-the-use-of-artificial-intelligence-ai-in-judicialsystems-and-their-environment accessed 6 July 2020.