The future of court's procurators with the advent of artificial intelligence technologies

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Abstract

The use of artificial intelligence, as well as the digital transformation and the incorporation of advanced technologies in the field of the justice administration is a fact that has left no one indifferent. The progress of artificial intelligence-based technologies, which are allowing the automation of a multitude of tasks that are currently performed by different operators and legal professionals, will cause that many of these services and routine tasks will be developed by machines, with the consequent loss of prominence of these professional groups. In this context, what is the future for the legal professionals who represent the citizen in Courts? It seems difficult to imagine the need for the figure of Court's Procurator, especially when many other operators and legal professionals could be replaced by intelligent machines. For this reason, this paper will try to analyze the impact that these new technologies will have on the functions that these professionals perform daily on behalf of the parties before the courts.

Key words

Artificial intelligence; justice administration; legal professions; court's procurator

Resumen

El uso de la inteligencia artificial, así como la transformación digital y la incorporación de tecnologías avanzadas en el ámbito de la Administración de Justicia es un hecho que no ha dejado indiferente a nadie. El avance de las tecnologías basadas en la inteligencia artificial, que están permitiendo la automatización de multitud de tareas que actualmente son realizadas por diferentes operadores y profesionales jurídicos, provocará que muchos de estos servicios y tareas rutinarias sean desarrollados por máquinas, con la consiguiente pérdida de protagonismo de estos colectivos

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profesionales. En este contexto, ¿cuál es el futuro de los profesionales del Derecho que representan al ciudadano ante los Tribunales? Parece difícil imaginar la necesidad de la figura del Procurador de los Tribunales, máxime cuando muchos otros operadores y profesionales del Derecho podrían ser sustituidos por máquinas inteligentes. Por ello, este trabajo tratará de analizar el impacto que estas nuevas tecnologías tendrán en las funciones que estos profesionales desempeñan diariamente en representación de las partes ante los tribunales.

Palabras clave

Inteligencia artificial; administración de justicia; profesiones jurídicas; procurador de los tribunales

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1. Introduction

Artificial intelligence (hereinafter AI) is on everyone's lips. The development of high-quality AI technologies and their applications has revolutionized our society. It is a revolution that cannot be reversed. It has also come to transform much of the labor landscape, affecting a large number of services and professions, which have been forced to adapt their way of acting to these new times.

The latest technological advances are here to stay and to bring about a profound transformation, not only in the administration of justice, but also in society as a whole. The adaptation and speed with which each country, each institution, each administration and each individual faces these changes will be the key to success in this new starting point.

In this context, the following article will try to reflect on the impact of these technologies in some of the professions related to the field of justice administration in Spain, and more specifically in the functions performed by the court's procurator as procedural representative of the party.

2. The right to defense and the mandatory procedural representation

The Organic Law of the Judiciary, 6/1985, of July 1 (LOPJ), and the Civil Procedure Law, 1/2000, of January 7 (LEC), have come to consolidate the figures of lawyer and court's procurator as an important part of the right of defense. Moreover, the LEC itself, in its Statement of Reasons, expressly states that, representation by a court's procurator and the assistance of a lawyer or attorney at law are necessary.[1]

Thus, the right to defense is today one of the rights contained in Article 24 of the Spanish Constitution, of December 29, 1978 (CE), which recognizes the right to effective judicial protection of all justiciable persons.

A first approach to the meaning and content of the right to effective judicial protection is provided by the reiterated jurisprudence of the Constitutional Court, which states that this fundamental right includes, among others: freedom of access to the process; the right to a reasoned and irrevocable ruling on the merits of the case; the right to a due process without undue delay, the right to defense and the presumption of innocence; the

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[1] In this regard, see Law 1/2000, of January 7, 2000, on Civil Procedure, which states in its Statement of Reasons VII that: "The mandatory representation by a procurator and the imperative assistance of a lawyer are configured in this Law without substantial variation with respect to the previous provisions. Experience, supported by unanimous reports on this point, guarantees the correctness of this decision. However, the present Law does not cease to respond to rationalization requirements: the requirement for the certification of powers of attorney, which has long been meaningless, is eliminated, and the material scope in which representation by a procurator and the assistance of a lawyer are necessary is completely unified. The responsibilities of the procurator and the lawyer are accentuated in the new procedural system, in such a way that the justification of their respective functions is underlined". Likewise, and with respect to the necessary intervention of both professionals, Organic Law 6/1985, of July 1, 1985, of the Judiciary, states in its Article 542.1, that: "the name and function of lawyer corresponds exclusively to the graduate in Law who professionally exercises the direction and defense of the parties in all kinds of proceedings, or legal advice and counsel". Likewise, Article 543.1, states that: "the representation of the parties in all types of proceedings corresponds exclusively to procurators, except when otherwise authorized by law".

prohibition of defenselessness; the right to enforcement of judgment; and, finally, the right to the remedies that may be available under the law.[2]

2.1. The need for legal professionals

It is difficult to understand the right to defense without the need for postulation (understood this as the need for legal assistance and procedural representation that every defendant needs to defend his or her rights before the courts). With respect to the concept of postulation, Arregui Zamorano (2006, p. 70) states that, to speak of postulation, within the framework of procedural law, is to speak of the requirements of assistance and technical representation that are demanded of the parties in order to be able to act validly in the majority of judicial proceedings, so that the parties are denied direct access to the jurisdictional body, requiring the intervention of a lawyer and a court's procurator in order to appear validly before it.

Thus, the intervention of both professionals, according to Esparza Leibar (1995, p. 74), is presumed necessary under the pretext of guaranteeing the right of every defendant to due process (understood as the right to be heard and the right to know the elements on which the opposing party bases its accusation, so that a defense can be prepared on equal terms with the accusation, thus guaranteeing full contradiction). Bear in mind that the procedural activity is very complex and highly technical, so it is advisable that a legal professional mediates between the party and the court. Likewise, Picó i Junoy (1997, p. 106) adds that the procedural laws require that, in certain cases, individuals appear represented by a procurator and directed by lawyer, since this is the only way to legally protect their claims.

Furthermore, Herrero Perezagua (2000, p. 15), points out that for the defendant to be able to seek judicial protection from the courts, in the legitimate exercise of his constitutionally recognized right, it is necessary that the postulation must be properly exercised. This is the only way to exercise said right without causing the party to be defenseless. In the same sense, Gay Montalvo (2011, pp. 15-30) points out that numerous constitutional jurisprudence requires, as an essential element of effective judicial protection, the right to defense and to the assistance by a procurator, and adds that the professions of lawyer and procurator in Spain must be linked, without a doubt, to article 24 of the Spanish Constitution.

An important part of the procedural doctrine justifies this need in the fact that the defendant needs to be well advised and defended by legal professionals, taking into account the interests at stake, on the one hand, and the technical complexity involved in the process itself, on the other hand. In this respect, Montero Aroca (2012, p. 303) points out that the obligation of postulation is necessary in the interest of the parties, since they are not in a position to know the material law, nor to develop the complex judicial

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[2] See, in this regard, STC No. 223/2201 of November 5, FJ. 4. STC No. 228/2001 of November 26, F.J. 5, STC No. 40/2002 of February 14, F.J. 3. Likewise, Article 24.1 and 2 of the Spanish Constitution of 29 December 1978 expressly states that: "All persons have the right to obtain the effective protection of the judges and courts in the exercise of their rights and legitimate interests, without, in any case, the possibility of defenselessness. Likewise, all have the right to an ordinary judge predetermined by law, to a defense and to the assistance of counsel, to be informed of the accusation made against them, to a public trial without undue delay and with all guarantees, to use the means of evidence relevant to their defense, to not testify against themselves, to not confess guilt and to the presumption of innocence".

activity. Therefore, the intervention of legal professionals is necessary to assist them in these tasks.

Moreover, other authors, such as Rivero González (2012, p. 112) alludes to the need for these professionals under the pretext of the technical complexity of the process, as well as for reasons of making judicial proceedings more efficient. The author points out that the inevitable complexity of the legal system, the practice of its correct handling by a non-lawyer, as well as the convenience (no less real for being topical) of removing litigants from the direct management of their interests and the inevitable passion that would otherwise be produced in their defense, make the laws establish, in general and except in exceptional cases, the obligatory assistance to the parties of legal professionals, who assume their representation and technical defense, that is, procurators and lawyers. Furthermore, Gimeno Sendra (2012, p. 121) points out that the intervention of these professionals provides efficiency to the processing of judicial proceedings to the extent that the attorney acts as an intermediary or collaborator in the communication between the jurisdictional body and the lawyer, thus contributing to relieve the workload of both parties.

2.2. The need for the intervention of a court's procurator

The need for these professionals has historically been sustained on the basis of three criteria. In the first place, we have to mention the historical criterion, as Ciarreta Antuñano *et al.* (2010, p. 186), remind us, the figure of the court's procurator responds to a profession with a consolidated tradition and historical roots. Furthermore, they point out that the reasons why liberal professionals such as the procurators currently charge for their services according to a tariff would not be understood without an approach to the historical roots of the figure of the procurator.

In this regard, it has to be recalled that the definitive consolidation of the figure of the procurator occurred with the enactment of the provisional Organic Law of the Judiciary of September 15, of 1870, although, as Fernández Galarreta (2022, p. 50) states, it is a profession that dates back to ancient Rome. The same author reminds us that, in fact, it is an institution and a figure older than the figure of the lawyer. Furthermore, reputed academics who have studied the historical evolution of this figure, such as Arregui Zamorano (2006, p. 19) and Miquel (1992, p. 147), point out that it will appear in the history of Roman law, as a figure to whom the functions of representation will be attributed, responding to the idea of that person of trust of the *dominus* who will be in charge, among other functions, of the management of the latter's patrimony, adding that the origin of the procurator corresponds to the figure of the servant to whom his dominus entrusted some kind of management or administration of his own house, in view of his frequent absences to serve the republic. This relationship was based on trust or friendship and was generally developed in the family sphere and outside the sphere of law, becoming of great importance for the family economy. The *raison d'être* and the essence of this figure was the management on behalf of another. Likewise, Díez Riaza (1999, p. 13) remarks, in this regard, that the figure does not arise circumscribed or linked to the scope of the process, but to other areas of the administration of the goods and the patrimony of the dominus.

Secondly, the importance of this collective has been highlighted, as it is a collaborating figure with the administration of justice, and its presence is necessary in the process in order to manage, adequately, everything related to the acts of communication between the jurisdiction and the defendant. Thus, these professionals, with technical knowledge of the process, meet the ideal conditions to receive notifications and to be in charge of carrying out the service of pleadings and documents to the opposing parties. Functions which, in turn, serve to relieve the administration of justice of an enormous amount of management work.

Thirdly, this function of being in charge of receiving all notifications and of being in charge of communicating with the jurisdictional body, goes beyond benefiting the administration of justice. This function acquires its true transcendence to the extent that it is essential to guarantee the right to effective judicial protection, understood as the right of the parties to be notified of all writs, documents and judicial decisions that are issued in a proceeding. Thus, the omission, the error or the defect in the notifications will constitute a possible violation of the right of defense of the parties. In such a way that the procurator, as the person responsible for the reception of all notifications, becomes a key figure for the party, in order for it to be aware of everything that is done in the process, and therefore, a key element in guaranteeing the right to be heard and, therefore, the right of defense[3]. Likewise, De la Rocha García (2001, p. 11) remarks that the intervention of this figure, in the process, is a key element to guarantee a process without undue delays, given the valuable task that this figure performs in its daily work before the courts, helping to expedite the proceedings.

In this context, these functions that have been justifying the need for the intervention of these professionals are in danger of becoming unnecessary or superfluous due to the irruption of new information and communication technologies (hereinafter ICT). Therefore, before examining the extent to which these and other AI technologies may affect the work of these professionals, in the following section, we will address the issue of the phenomenon of artificial intelligence and its rapid rise.

3. The irruption of artificial intelligence in the administration of justice

Change, transformation and, of course, technological revolution have been present at all times in history. Indeed, we could say that it is a constant in the history of humankind. In fact, change is, and continues to be, its hallmark. To speak of industrial revolution or revolution in plain language is to speak of profound changes, of transformations resulting from the intuition and initiative inherent to the human condition. In the course of history, transformations have been happening one after the other, and they do not seem to be going to stop. The technological revolution continues. With respect to this constant evolution, Schwab (2016, p. 7) points out that the so-called fourth industrial revolution will cause a profound change in the way we relate, live and work, since the scope and complexity of this new paradigm will be different from any other reality that

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[3] See, Regulation 3/2017, of the Service of Communication Acts of the Procurator´s Bar Association of Madrid (ICPM), Approved in Extraordinary General Meeting dated April 27, 2017, and dated June 15, 2018, agreement of conformity, of the Executive Committee of the General Council of Court Procurators of Spain.

humans have experienced before, due to the unprecedented impact that the irruption of artificial intelligence will generate in all areas of our lives.

With respect to this ongoing technological revolution, which has now entered its fourth phase and has come to be known as Industrial Revolution 4.0., Barona Vilar (2021, pp. 59-60) points out that, as analog society has gradually given way to a digital world, digital transformation and the emergence of the Internet have led to the improvement of business processes and the creation of new business models. She also adds that this fourth industrial revolution is a consequence of globalization and represents a period of gradual but unstoppable transformation of spaces, players and values.

In this regard, it is enough to recall some examples of these changes and transformations: from the mill wheel to wind turbines. From the pulley to elevators or magnetic elevators. From the telettrophone to the latest generation of cell phones. From reed and papyrus boats, to the electric ship USS Zumwalt (DDG-1000). From the first steam-powered cars to the prototypes of autonomous vehicles such as Waymo or Google's autonomous vehicle project. All this, without forgetting that the human being has also managed to conquer the sky, just as she/he has also conquered outer space.

In this context, within this reality of constant change, artificial intelligence is a new turn of the screw. We are undoubtedly facing a new paradigm shift, driven by a new technological phase. In short, by a new technological reality.

3.1. In search of a concept of artificial intelligence

Although it is difficult to provide a fully convincing definition of AI, a first approach to its concept is provided by Nieva Fenoll (2018, p. 20). He presents it as the possibility for machines to think or rather imitate human thought and behavior. In other words, it is a branch of computation (of computer programs), made up of a set of complex algorithms, mathematical and logical equations, which try to simulate intelligent behavior, being able to perform human-like tasks.

Likewise, other authors such as Pérez Estrada (2022, pp. 29-30), remind us that, ultimately, AI mimics various capabilities of the human brain by performing intelligent behaviors through a sequence of instructions that are part of an algorithmic structure and that serve to solve certain problems. This author adds, with respect to AI, and, in reference to the definition provided by John McCarthy, that AI is a branch of computational science that develops models capable of performing human tasks by simulating reasoning and behavior. She also reminds us that the origin of the expression AI, can be traced back to the USA, on the occasion of the theoretical computer science course given in 1956 by professors Allen Newell and Herbert Simon, who presented a computer program, "Logic Theorist", which imitated characteristics of the human brain. This program is considered to be the first artificial intelligence system capable of demonstrating the theorems on mathematical logic set out in the three volumes of *Principia Mathematica* by Alfred N. Whitehead and Bertrand Russell.

This "algorithmization" is, unstoppably, making its way into various areas of the administration of justice and in the management of judicial proceedings. In this new era, and henceforth, as Barona Vilar (2019, p. 2) notes, the aim will be to design and train such algorithms so that they can learn to perform and execute procedural rules.

Aware of the challenges this entails, the European Commission has developed a strategy to seize the opportunities offered by artificial intelligence and to address the challenges it presents. The European Ethical Charter on the use of AI in judicial systems and their environment, adopted by the European Commission for the Efficiency of Justice (hereinafter CEPEJ), at its 31st plenary session held in Strasbourg on December 3, 2018, is an example of this.[4]

In this same regard, Esparza Leibar (2021, pp. 1068-1069) reminds us that the European Commission has also published two important documents that show its clear commitment to the use of AI applied to the field of justice. These documents are the "White Paper on Artificial Intelligence", published on February 19, 2020, and the report entitled "Study on the use of innovative technologies in the justice field" of September 2020. Both aim to clarify the scenario for the implementation of the use of AI, by means of exhaustive information, in order to increase the quality and compatibility of national production systems and public services, including those related to the services of the administration of justice. He also adds that the Commission is committed to facilitating scientific progress, preserving the EU´s technological leadership and ensuring that new technologies are at the service of all Europeans, so as to improve their lives while respecting their rights. And, he ends by stating that the purpose of the White Paper is, therefore, to encourage a deep and sufficient reflection, which will finally allow an orderly, homogeneous, comprehensive (in all sectors of activity) and large-scale implementation of AI in Europe, in order to approach excellence.

In line with the postulates set out in these documents, the Commission has recently proposed the first legal framework on AI, which addresses the risks of AI and puts Europe in a position of global leadership. In this political context, the Commission proposes a regulatory framework on artificial intelligence with the following specific objectives: on the one hand, to ensure that AI systems introduced, and used, on the EU market are safe and respectful with the existing legislation on fundamental rights and EU values; and, on the other hand, to ensure legal certainty to facilitate investment and innovation in AI.

To achieve these objectives, the Regulation presents a horizontal, balanced and proportionate regulatory approach, which is limited to establishing the minimum requirements necessary to address the risks and problems associated with AI, without unduly hindering or impeding technological development and without disproportionately increasing the cost of introducing AI solutions on the market. To this end, a list of prohibited AI practices will be established (set out in Title II). Likewise, a list of limited practices will be established, for those AI systems that pose a high risk to the fundamental rights of natural persons (set out in Title III).[5]

3.2. Its applications in the field of justice administration

In the following section, we will try to highlight some examples of the use of new AI technologies in the performance of the tasks carried out in the field of justice

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[4] See, in this regard, European Ethical Charter on the use of AI in judicial systems and their environment, adopted by the European Commission for the Efficiency of Justice, Strasbourg, in December 2018.

[5] See, Proposal for a Regulation of the European Parliament and of the Council laying down harmonized Rules in the field of Artificial Intelligence and amending certain acts of the Union, April 2021.

administration, and which, in turn, have had an important impact on the work of some professionals linked to the judicial field.

In this regard, and in the first place, one of the advantages of the incorporation of new AI technology in the administration of justice is that it allows for the automated processing of procedures. In such a way that it simplifies the processing and management of the different judicial files, as well as the activity of filing and documentation and verification of the same. As Pérez Estrada (2022, pp. 100-101) remarks, it also serves to streamline everything related to notifications and acts of communication. And, finally, it is also used to conduct hearings telematically. In this regard, the author points out that the use of automated judicial action has multiple possibilities of application that are only limited in the case of motivated procedural resolutions or that affect fundamental procedural rights. Therefore, it would be applicable to all procedural steps that do not require legal assessment or motivation. And, by these she is referring to those procedural acts such as of beginning and ending of term, those of issuance of notifications and communication, those of integration of Registries, as well as those of documentation of procedural acts, of transfer of already documented versions of those acts or, finally, those of the issuance of certifications, testimonies, acknowledgements of receipt, or compilation and processing of statistical and personal data of the judicial office. Undoubtedly, the automation of all these procedural actions will result in the optimization of public resources, which will have an impact on the improvement of the service to be provided to the citizens, especially in terms of quality, agility and efficiency.

Thus, as Esparza Leibar (2022, p. 184) points out, the application of AI to the field of procedural law and the incorporation of these AI tools in the processing of judicial proceedings would have a direct impact on the reduction of undue delays and the avoidance of suspensions, thus improving effective judicial protection.

Secondly, as Gómez Colomer (2020, p. 429) appoints, other applications range from the technological investigation of crime, including the profiling of the person under investigation, to questions related to technological means of evidence and criteria for their evaluation. AI, also, can be used to help, to ascertain the existence of the necessary requirements, for the adoption of precautionary measures.

Another AI tool, in lines with the mentioned above, is the *Prometea* program, which can help legal professionals as a predictive tool. Corvalán (2019, p. 54), reminds us that *Prometea* is the first predictive artificial intelligence at the service of the Justice Administration in Argentina, created by two officials of the Public Prosecutor's Office of Buenos Aires, with the purpose of optimizing the justice service in that city, and which makes basic judicial predictions by detecting decisional patterns based on the "history" of similar and previously resolved cases. Likewise, Pérez Estrada (2022, p. 86), points out that *Prometea* is based on a large database that is used to make a prediction that could be used as a possible solution to the case presented to the judge. And she adds that the tool, also, allows the creation of legal documents in less time, making it a great help for different legal professionals.

This tool, at the service of legal professionals, such as judges, prosecutors and lawyers, will be able to, starting from all the judgments of a specific subject of the last two years of a court, and applying one or more algorithms, it extracts patterns that can be

translated into forecasts or predictions based on some statistical criteria, based on machine learning techniques, as Barona Vilar (2021, p. 96) states. Furthermore, the author points out that machine learning is that area of AI that develops computer programs capable of learning by themselves and making predictions. That is, it has the ability to incorporate data and to learn from its own, modifying and adapting algorithms through information processing and adaptation to the environment, so that it uses past experience to make future decisions. In short, as Pérez Estrada (2022, p. 81) remarks, we are talking about a tool whose training is based on information patterns identified in previous cases, which will help us to make a future prediction regarding a specific case or issue.

An example of this type of AI for forecasting results in the context of litigation is a tool called Forecasting Criminal Sentencing Decisions. It helps us to foresee the degree of success or failure of a defense strategy, being able to predict the future judicial decision. Regarding this tool, Barona Vilar (2021, p. 24) points out that it is configured by means of computational systems that offer a proposal through the elaboration of statistical sampling models of criminal sentences, from which it is possible to predict both the extent and the sense (confirmatory or revocatory) of the appeal sentences.

More importantly, AI can be used (and its being used) to take the place of the judge in the judging functions, creating the figure of the "Robot Judge". In this regard, Gómez Colomer (2023, p. 209) remarks that the evolution of AI has led us to think whether it is possible to build a computer that can decide a civil litigation or a criminal case by responding clearly and forcefully to the questions posed to it and making an indisputable decision, that is, going beyond the pure storage and processing of data and information, in short, whether it is possible to build a judging machine equivalent to a human being. And then, with respect to this approach or possibility, he points out that the important thing is not so much whether it is possible for an AI to perform the work of a human judge, but whether the judging machine can comply with the same guarantees of independence and impartiality that are required of those bodies that exercise the jurisdictional function.

Furthermore, Pérez Estrada (2022, p. 66) reminds us that there are already countries such as China and Estonia where this tool is being used to adopt decisions in the form of judicial resolutions. To this respect, she notes that Estonia and China have, recently started to apply artificial intelligence systems in the judicial field. In the case of Estonia, certain court decisions relating to the resolution of legal disputes in minor cases, small claims for amounts not exceeding €7,000, have been automated. And she adds that, in the case of China, a robot has been created to interact with users of the judicial system, lawyers and citizens, guiding them and, in the case of judges, it works as a help or as an assistant.

Regarding the possibility of machines adopting judging decisions, many critical voices have been raised to point out the dangers that such practices can generate. Thus, Stremitzer *et al.* (2023) point out that among the normal population there is a perception that robot-judges or artificial intelligence systems dedicated to adopting judges' own decisions are less fair than human judges.

As Kenneally (2001) points out, one of the main reasons for this lack of trust in robot judges is the fact that the algorithms on which AI decisions are based, being patented,

completely prevent anyone outside the company from seeing their source code and the methodology used to determine the final scores. Furthermore, she adds, in this regard, that proprietary software is frequently referred to as a "black box" since it restricts anyone outside of the software creator from reading the source code, in contrast to open-source software, which permits anyone other than the software developer to view a program's code. Anyone besides the developer and those working for the software company won't be able to decipher this code because it is hidden from public view. That is, this type of AI presents problems of accessibility, transparency and traceability of the algorithm.

Along with this concern, there are also authors such as Angwin and Larson (2016), who point out that, in addition, AI can generate discriminatory biases by training the algorithm with incomplete data, or with data that only reflect a part of the reality of the world to be represented by those data. In short, the concerns that this practice raises are related to two specific problems: firstly, the fact that AI applications that use neural network and machine learning systems do not allow knowledge of the fundamentals that have led the algorithm to make a decision, and secondly, the possibility of biases in the algorithm's predictions, since the database used for its preparation or decision making contains, in origin, biased information.

These problems, ultimately, imply a violation of the right to defense and the right to due process, to the extent that such lack of transparency (not being able to know all the elements by which the IA reaches a specific solution) does not guarantee the principle of contradiction and hearing, thus affecting the constitutional guarantee of the fundamental right to effective judicial protection. An example of this, as Freeman (2016) reminds us, is the well-known case of *Loomis v State of Wisconsin*.

Finally, it is worth mentioning another important area of application of AI tools. We are referring to the different Generative AI systems. Abdullahi and Mohan Mittal (2023) state that Generative AI is a type of AI that is used to generate content based on instructions. This type of AI uses a combination of machine learning and deep learning algorithms to generate somewhat new content. Generative AI undergoes a series of processes of data set feeding, analysis and output of results. And they add that, unlike predictive AI, which is used to analyze data and predict forecasts, generative AI learns from available data and generates new data from its insights. Thus, Generative AI analyzes these different data sets, figures out the patterns in the given data, and uses the learned patterns to produce new and realistic data. An example of this is the so-called Natural Language Processing Technology. In this case, as Pérez Estrada (2022, p. 111) points out, the machine can communicate in human language, that is, as if it was a person. The author states that Natural language processing technology is another tool that will undoubtedly be applied in the jurisdictional field, incorporating audiovisual materials in procedural management systems. This technology aims to enable the machine to communicate in a human language. She adds that the European Union has shown interest in this type of techniques, and has launched various initiatives within the framework of different research programs such as Horizon 2020 or the Connecting Europe Platform with the online automatic translation service "e-Translation", which develops an automatic translation mechanism for the public sector.

One of the examples of this type of AI, that is gaining most prominence, as Saiz Garitaonandia (2023, p. 75) reminds us, is Chat GPT, which is a language model developed by OpenAI, which is an artificial intelligence research organization based in San Francisco, California. It was founded in 2015 by a group of AI researchers and entrepreneurs, including Elon Musk, Sam Altman and Greg Brockman. He points out that Chat GPT is a model of Natural Language Processing (NPL) developed by the company OpenIA, controlled by Microsoft.

Chat GPT, is a language model that has been trained with a large amount of text data to be able to perform a wide variety of natural language related tasks, as Pérez (2023) states. The GPT language model can be used to improve online customer service through chatbots.

The Chatbots are computer programs based on artificial intelligence that are capable of having a conversation with an Internet user on a specific topic. That is, they can hold natural conversations with users, responding consistently and accurately to their questions, as well as solving problems quickly and efficiently. Among the variety of tasks and services related to natural language that Chat GPT can offer are financial, health and, above all, legal services. Lobo (2022), emphasizes that these types of tools could even be used in teaching or psychology services.

In relation to the importance and relevance that this tool is taking on, Saiz Garitaonandia (2023, p. 11) reminds us that Chat GPT has served to expand and popularize in an extraordinary way its importance and utilities, as well as to increase exponentially the presence and interest in AI in different areas, including the legal field.

3.3. The impact of artificial intelligence applications on the functions of legal professionals

To come to the issue that matters to us, and which is none other than the impact of this type of AI tools in the work of legal professionals, it is worth highlighting some predictive AI systems that are beginning to be used by different law firms. An example of this is the *Jurimetry* or the so-called Legal Decision Support Systems.

This innovative jurisprudential analytical tool allows to define the most suitable procedural strategy for the success of a specific case, through interactive graphic indicators, based on the cognitive analysis of millions of judicial decisions. As Ast (2020) and Barona Vilar (2021, p. 365) point out, can offer, among other services, services such as support services for the predictability of the possible outcome of a legal dispute; assistance for the development of argumentation strategies; or services for the development of efficient legal negotiation strategies.

Furthermore, Barona Vilar (2021, p. 369) notes that all of these tools are manifestations of artificial intelligence that have an undeniable applicability in the legal field. In short, they are instruments that allow the presentation of different solutions to conflicts, in which the parties are advised by intelligent machines, instead of being advised by the traditional lawyer. The author adds that, with these Legal Decision Support Systems, a statistical and predictive jurisprudential analysis is carried out, offering a huge amount of information about what is called jurimetry of the case (attending to cases with identical or similar objective starting points), jurimetrics of the magistrate (with a

treatment of the data on the magistrates that leads to determine whether they are upheld or dismissed, whether they adopt measures or not, whether they have been challenged or not, what is usually the sense of their sentences, etc.), jurimetrics of the lawyer (which can facilitate the consultation of clients when deciding on legal assistance in a given case). And she adds that, with this exploitation of data, the results obtained by the jurimetric computational system have an eminently predictive purpose, which can avoid useless processes, or useless resources, or favor one or another strategy of procedural defense or non-procedural strategy, in its case, offering legal argumentation in the specific case according to the probability criteria that may occur in the framework of a process.

In short, and with regard to the legal professions, an important part of the tasks of lawyers and other collaborators in the administration of justice can now be taken on by intelligent machines or robots, since they are mechanical jobs that require efficient handling of data and information. An example of this is the so-called Expert Legal Systems.

In relation to these Expert Legal Systems, Pérez Estrada (2022, p. 47) points out that the functioning of these expert systems is based on the use of logic for the development of their functions; that is, they try to imitate human logical behavior in a given area of knowledge. She adds that these Expert Legal Systems imitate legal reasoning, solving in an intelligent way; i.e., drawing conclusions from the application of legal rules or obtaining a general rule from precedents. Likewise, she points out that the basis of the expert system in the legal field is constituted by jurisprudence and legislation with the purpose of providing a legal solution to a legal problem posed. In short, the expert legal system has the capacity to solve a legal problem by using the analogy of previous similar cases.

Furthermore, Barona Vilar (2021, p. 74) points out that these models allow an analysis of legal documents, legal norms, judicial resolutions, cases presented and resolved in jurisprudence, which, in short, serve to offer a better interpretation and argumentation of a matter in a certain sense. She adds that these models are being improved as they have been complemented with statistical analyses and with the profuse incorporation of legal data obtained. In this context, it is worth asking whether a profession so deeply rooted in our legal culture, as that of the lawyer, could be compromised by the irruption of AI in the administration of justice.

The traditional figure of the lawyer, as the legal professional who provides legal advice and defends the parties in legal proceedings, following the definition offered by Alonso Romero and Garriga Acosta (1998, p. 71), is becoming obsolete in the face of new AI legal systems. As we have seen, the new AI tools can offer, among other services, services such as support services for the predictability of the possible outcome of a legal dispute; assistance in the development of argumentation strategies; or services for the development of efficient legal negotiation strategies. All of these are manifestations of AI that have an undeniable applicability in the legal field. In short, they are instruments that allow different solutions or solutions to conflicts to be presented, in which the parties are advised by intelligent machines, instead of being advised by the traditional lawyer. For this reason, some authors point out that lawyers are facing a profound transformation that implies assuming the challenge of having to renew themselves or

succumb to the thrust of these new computational solutions. Thus, as Fernández Galarreta (2021, p. 1112) and Susskind (2020, pp. 196, 250) point out, the future of the lawyer will necessarily involve incorporating new skills and abilities to those that they have traditionally performed.

And as an example, here's a button. In this regard, it is worth recalling that a Canadian firm has created the first "Robot-Lawyer" named Ross. This robot-lawyer, created from the Watson supercomputer technology, developed by the American firm IBM, is designed to understand human language. Thus, it is able to give its answer to legal questions, citing the corresponding laws and codes, and unlike a conventional search engine, it does not offer a list of possible answers, but chooses and gives the answer that it considers most accurate to the problem posed to it. Today, Ross works in the bankruptcy management department of the firm Baker & Hostetler in the USA, together with 50 real lawyers.

Furthermore, in an interview on YouTube, the Dean of IE Law School, J. De Cendra (2018) reminded us that half of a lawyer's tasks can already be automated. Moreover, he pointed out that: "An important part of the tasks currently performed by lawyers and some administrative figures in the administration of justice could be taken on by robots, since these are mechanical jobs where the applicable criterion does not depend on a human but on a process established by law". And, he added: "the impact of the digital world in the legal field is so profound that in a few years it could be very different from how it is now".

Given this scenario, many legal professionals, especially lawyers, are concerned about the possible legal aspects and repercussions that the use of AI may have on their work as professionals in charge of the legal defense of the parties in the process.

3.4. Court's procurator a profession in danger

Another profession that is being affected by the irruption of AI in justice is the profession of court's procurator (or party´s procedural representative). The incorporation of ICT has called into question the need for the intervention of the procurator as a professional in charge of receiving notifications and as a collaborating figure in the administration of justice. Thus, the appearance of information technologies (such as the Lexnet: telematic notification platform), which ensure and certify the transmission of these acts of communication between the administration of justice and the defendant, may lead to the disappearance of this group of professionals. In this regard, Magro Servet (2004, p. 1509) points out that the incorporation of ICT will facilitate the citizen's accessibility to speedy justice.

The so-called ICT, which includes this digital platform for telematic notifications, are an example and one of the first milestones in the use of AI in the administration of justice. A first approach to the concept of ICT is provided by Rodríguez (2017), who defining them as a set of technological and communicational tools or resources that serve to facilitate the emission, access and processing of information, by means of varied codes that may correspond to texts, images, sounds, among others.

The incorporation of three new communication and information technologies such as the electronic judicial file (EJE), which allows the carrying out of communication acts

and the presentation of writings electronically, and which will bring the progressive disappearance of paper support; the Lexnet electronic notifications platform, which allows the relationship and exchange of information between legal operators at any time and place; and the electronic signature, which allows verification of the origin and integrity of telecommunications, are tools that have had and will have a direct impact on the daily work of this group of professionals.

In this sense, as pointed out by Fernández Galarreta (2022, p. 343), the court's procurator, as the party's procedural representative and as the professional in charge of receiving notifications, may find his or her main function affected and compromised, with the emergence of new technological tools such as the telematic notification platform, as well as with the rise and prominence that the use of AI-based technologies is acquiring in the process.

Indeed, the incorporation of ICT has meant a revolution, not only in the field of the administration of justice, but also in the rest of the areas of our lives. Through the use of this type of technology, it is expected that from now on it may even be the citizens themselves who establish communication with the Public Administration in general, and with the Administration of Justice in particular. Even more so, with the incorporation of the Lexnet system or the *Avantius* system. The incorporation of these technologies has been carried out progressively.

Briefly summarizing the norms that regulate this area, it is worth highlighting RD 1065/2015, of November 27, which regulates the Lexnet system. It is also worth highlighting another norm that will mean the definitive recognition and consolidation of the rights of individuals to communicate electronically with the administration of justice, as a corollary of an entire process of modernization and digital transformation of the administration of justice. We are referring to Law 18/2011, of July 5, regulating the use of information and communication technologies in the administration of justice (LTICAJ). This Law announces, from the beginning, the need to update the administration of justice and adapt it to technological advances, in order to streamline judicial procedures and guarantee the right to a public process without undue delays, for the benefits of all the parties in the process. And, finally, it is also worth highlighting Law 42/2015, of October 5, modifying the LEC 1/2000, of January 7, where a specific date is established for the implementation and for the incorporation of the use of ICT in the administration of Spanish justice.

As Valiño Ces (2017, p. 67) points out, the purpose of incorporating ICT in the administration of justice is none other than to try to extend to citizens and individuals most of the services that the Administration of Justice has through the Internet, so that they can be accessed from anywhere and at any time, favoring the possibility of exchanging information immediately, allowing agile and effective electronic communication between judicial offices, citizens and professionals directly involved in judicial procedures, through the use of electronic signature.

In this context and given the emergence of this new reality, such as the technological transformation of the administration of justice, we understand that it is necessary to ask the following questions: to what extent can the incorporation of these technologies affect the work of justice professionals, such as the figure of court's procurator? Is this profession strengthened in its functions with the incorporation of technological

advances in the processing of judicial procedures? And, finally, could the incorporation of ICT, in the administration of justice, anticipate its death certificate, since this new situation could cause the end of the days of this professional as a liaison figure with the judicial office in the reception of the notifications and other judicial actions? In this regard, authors such as González Sánchez (2008, p. 116) point out that this technological transformation, instead of strengthening and consolidating the figure of the procurator, has called it into question further, weakening its image. Furthermore, and in order to justify the assertion, the author adds that the implementation of new technologies in the Administration of Justice, and specifically, the implementation of telematic communication systems between said Administration and the different legal operators, has meant that the work of carrying out the acts of communication by the Court's Procurator has become a remarkably mechanical function facilitated by technological tools.

In short, the analysis carried out forces us to reflect and ask ourselves if, with the incorporation of new technological tools, we would not be witnessing the chronicle of a death announced for the profession of court's procurator. We wonder if the modernization of the administration of justice, far from implying a strengthening and consolidation of the figure and functions of these professionals, has not, on the contrary, had a boomerang effect and has turned against them, possibly even reaching to accelerate and cause their death certificate, as Fernández Galarreta (2022 p. 405) points out.

It is not surprising in this context that the alarm bells have gone off. But these complaints are not of today. Let's take a brief look at the different voices that have been warning us of the danger that the advent of AI technologies entails.

As early as 1936, Charles Chaplin's film *Modern Times* warned of the danger posed to the working class by the emergence of mechanization in the industrial production system. The film reflected on the desperate conditions in which the working class labored due to the advent of industrialization, chain production and the new paradigm of efficiency.

More recently, Andrés Oppenheimer (2018, p. 17), Columnist for the Miami Herald, in his book *Every man for himself! The Future of Work in the Age of Automation* already asked: "Are robots an imminent threat to our jobs?" and, he himself, went on to answer: "Robots have been replacing human workers for decades, but with the rapid expansion of artificial intelligence, they are taking over jobs and professions at an ever-increasing speed".

Earlier this year, a recent research, published by U.S. financial institution Goldman Sachs, states that artificial intelligence puts 300 million jobs at risk worldwide. It adds that the most affected group would be educated workers who perform legal and administrative tasks. According to this document, the advance in artificial intelligence could lead to the automation of a quarter of the work performed in the United States and Europe, while around two thirds of current jobs are exposed to a degree of automation. Although the report has positive predictions such as that systems like Chat GPT could lead to a productivity boom, increasing annual global gross domestic product (GDP), the flip side of the coin is the exposure of up to 300 million full-time workers to automation, with the corresponding risk of losing their jobs. This is pointed out by the report's authors, Joseph Briggs *et al.* (2023).

These alarm bells remind us of the dangers of the unstoppable technological transformation we are witnessing. And they force us to reflect, if not to act, in a decisive manner to seek alternatives to the crisis that their incorporation may provoke.

To conclude this point, note that, beyond the ethical concerns, and the problems related to fundamental rights, posed by the incorporation of AI in the field of justice (to which a large part of the procedural doctrine has dedicated numerous articles and monographs), in this work we only wanted to highlight the impact that this new reality can have on the legal professions and more specifically on the function carried out by those professionals who represent the parties in the process, called court's procurators.

4. Conclusions

Once the analysis of what has been studied in this article has been carried out and completed, we will then proceed to make a series of conclusions regarding the topics addressed in it.

1. The modernization of the Spanish administration of justice, whose main purpose was to implement and incorporate information and communication technologies into its scope of action, is already a fact, regardless that it is far from being completed. This path (with no turning back and pending of completion), will have as its ultimate purpose that of contributing to achieving a justice without undue delay. In short, a more accessible, a faster and a more effective justice, capable of streamlining procedures and lowering the costs of the proceedings, by lowering the cost of communications and notifications between the administration and the administrator. This is to say, a more agile, a fairer and a closer justice, that will bring the administration of justice closer to the citizen, that is: bringing justice closer to the defendant.

2. This plan has been carried out thanks to the creation and implementation of a strategic plan, which has culminated in the implementation of objectives such as: the complete computerization of the administration of justice; the creation of a complete interconnected communication system that has promoted network communication; the promotion of the use of electronic signatures; the generalization of the use of videoconferences in the development of procedures and hearings; and finally, the complete training of the personnel serving the administration of justice in everything related to the use of technological tools, including those artificial intelligence tools that help automate tasks within the judicial office.

3. Within this technological transformation of the administration of justice, one of the milestones and fundamental objectives has been for electronic communication to be, from now on, the usual way in which the administration of justice communicates with the defendant. To this end, it has been established the obligation, for all acts of communication between the administration of justice and the rest of the operators involved in the processing of judicial procedures, to be carried out through telematic systems, at the electronic addresses enabled for the effect. To carry out this mandate, a valuable technological tool has been created and implemented, such as the telematic communications and notifications system.

4. However, with regard to the different professionals who act in the field of the administration of justice, such as lawyers and court's procurator, from the analysis

carried out in these lines, we can conclude that the impact that the implementation of the Digital justice has had on these figures and on the functions that they perform in the Spanish administration of justice has been, and may become, important, if not worrying.

5. With regard to the group of professionals dedicated to represent the parties in the process (which has been the true purpose of this article), we can maintain that the emergence of these new technological tools will have an important impact on said figure and on the functions that these professionals perform in relation to the reception of communications and the performance of communication acts. In this sense, we can affirm that these professionals have lost part, or all, of their prominence, since, if there is something that has become evident, it is that the function of carrying out the acts of communication and receiving notifications can be carried out without their intervention.

6. These new developments, and the use of digital justice (more specifically, the implementation of the telematic notification platform), have relegated the function of the procurator as representative of the party and as recipient of notifications, to a mere formalism that, lacking of meaning in current times, is no longer necessary, and even more so, essential. In short, the incorporation of ICT and AI has done nothing more than accelerate a digitalization process that was necessary and, with this, relegate the figure and function of the procurator to the background. What's more, we could conclude that, with the incorporation of new AI technologies, we would be witnessing the chronicle of an announced death of the figure of the procurator, as it is currently configured.

7. On the contrary regarding the work of lawyers, as we have already pointed out, AI can be a very helpful tool to advance the work of law firms, since AI can help these firms to carry out their work faster, more efficiently and more accurately, thanks to the enormous database from which it is fed. However, and although many lawyers are concerned about the repercussions that the incorporation of AI may have on their work, we understand that, as of today, AI is not ready yet to take the place of lawyers, because it lacks the necessary emotional intelligence, which is a fundamental element of the rhetoric, by which the lawyer can convince the judge of the arguments presented when defending a litigation (which is ultimately its main function).

8. Regarding the relationship of AI with the right of defense and the right to due process (understood as a right that must guarantee the principle of hearing and contradiction), and with the way in which AI could be a valid and helpful tool for the administration of justice, we can conclude that this will depend on the way in which AI will be implemented and used in the process and in the jurisdictional activity. We understand that the use of artificial intelligence in the field of the administration of justice is advisable in those mechanical and repetitive processes that are carried out by the judicial office and its personnel. In the same way that it is advisable to the functions performed by court´s procurators who are in charge of receiving notifications.

As far as the jurisdictional function is concerned, although artificial intelligence cannot replace it (since it corresponds exclusively to the judges), we do consider that AI systems can be used as a support tool for judges, when adopting judicial decisions. However, we say support or help functions, because we understand that AI should never replace the function exercised by judges. We reached this conclusion due to the reasons that have been already exposed throughout this article and more specifically because of two main reasons: in the one hand, because of the lack of transparency in the way the algorithm

reaches the conclusions. And, in the second hand, because it can reproduce patterns of racial discrimination in its conclusions.

Furthermore, even to perform support functions for the courts, it would be necessary for AI to be able to guarantee algorithmic transparency, in the sense that when AI is used in a judicial process, its design, development and use should ensure that "black boxes" are not configured; that is, that it is guaranteed that the existence of failures in the algorithm design could be verified. In other words, artificial intelligence must be transparent in its decisions, which means that it is possible to infer or deduce, from its design and development, the criteria that have been taken into account to reach a certain conclusion.

Likewise, and in order to comply with the requirements of the right to effective judicial protection, the implementation of AI without bias should be guaranteed; that is, artificial intelligence systems should be prevented from processing information or data under bias or distinctions between human beings on the grounds of race, color, sex, language, religion, political or other opinion, national or social origin, economic position, birth or any other social condition. Only in this way, we could be talking about an AI that, complying with the due requirements, could be valid to perform functions of support and assistance to the jurisdictional function.

9. On a more general level, we could also conclude that this incorporation of AI applications (not only in the field of justice) can lead to the loss of many direct and indirect jobs of many other professionals, without being able to predict the economic impact of this, in terms of GDP. Keep in mind that internal consumption, that is, household consumption, accounts for a third of the GDP in most countries with capitalist economies. Therefore, the loss of work of one or more members of a family can only have a negative impact on its economy, and therefore on that of society as a whole.

10. Likewise, the emergence of a new actor in the labor market, such as AI, can alter (and impose) the rules of supply and demand. In this context, it does not seem very plausible that humans can compete with machines. Therefore, in the future, machines will be the ones that set final salaries in the labor market, with what this may mean in terms of inequality. Inequality that will translate into advantages in favor of those who can invest in AI, which will lead to an inevitable increase in social inequality and therefore, an increase in poverty.

Before we finish, we would like to address that throughout history humans have been in constant change, transforming both their own personal reality as well as their environment. Every time humans have invented something new, this has brought with it the loss of something old, something consolidated that has become obsolete. Moving forward often implies leaving something behind. Each advance, in some sense, implies a loss in another. Thus, every time we, humans, invent something, we necessarily have to reinvent ourselves to recover lost spaces that we do not want to leave behind. In short, it seems that we, humans, are condemned to invent, in order to reinvent ourselves.

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