Smartjustice, process and evidence: special reference to its use in the court of appeal

Smartjusticia, proceso y prueba: especial referencia a su uso en los tribunales de apelación

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Summary: The purpose of this work is to analyze the legal-procedural scenario in which the inclusion of new means of management, information processing, and decision-making is integrated with artificial intelligence systems today. It begins with a general perspective on the application of AI in the procedural context and leads to its use as a support system for the evaluation of evidence in the second instance, aiming to clarify the possibility and limits of its utilization.

Keywords: artificial intelligence; process; jurisdiction; evidence; court of appeal.

Resumen: *El objetivo de este trabajo es analizar el escenario jurídico-procesal en el que se integra la inclusión de nuevos medios de gestión, tratamiento de la*

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información y toma de decisiones con sistemas de inteligencia artificial en la actualidad. Se parte de una perspectiva general sobre la aplicación de la IA en el contexto procesal y se llega a su utilización como sistema de apoyo a la valoración de la prueba en segunda instancia, pretendiendo esclarecer la posibilidad y límites de su utilización.

Palabras clave: *inteligencia artificial; proceso; jurisdicción; prueba; tribunal de apelación.*

I. INTRODUCTION

Disruptive technologies generate enormous advances, but also great uncertainty, because they operate in the gray zone between the public and private spheres and may even offend the fundamental rights of citizens (Schwab, 2018).

It is clear that our objective is not, nor can should it be, to demonize new technologies, but to understand the effects of their implementation on the Administration of Justice and its environment.

Thus, it is imperative to understand that the process of adaptation of public administrations to new technologies is a necessity, since otherwise the Public Power would remain at the edge of the phenomenon of the technological revolution and would lose more and more space to the large business monopolies in the development and implementation of new technologies.

In this scenario, it is up to the Administration to adopt a proactive stance, which according to Ramió (2019, 10) involves "*solving a good part of its conceptual and organizational problems*", since the different governments have always failed to fulfill the promises of public administration reform, always returning to their starting point. That is why he suggests that "*artificial intelligence and robotics may be the great opportunity to implement a radical institutional and organizational renewal of public institutions and contribute to their adaptation, relevance and survival in a governance context*".

In our opinion, this reform depends on two fundamental factors. First, the implementation of management models that adapt and modernize the processes that already exist in the administration, generating the least

possible legal impact and, second, it depends on a broad legal reform, aimed at validating, adapting, modulating and regulating the use of these new technologies both within and outside the administration.

Such reforms must also be accompanied by mechanisms to reinforce the defense of citizens' fundamental rights, because the modernization of institutions cannot and should not mean that the State or private companies can set themselves up as a leviathan or panopticon capable of controlling people's lives and privacy. This task requires courage on the part of the State and debate on the part of society. Courage to bring these issues to public discussion and moderation to debate them seriously and with the sensitivity required for the progress of society and institutions.

Before discussing the phenomenon of *smartification* of public administration, it should be noted that this process originates from the need to reshape administrative management, including the phenomenon of *big data within the* governance framework of public bodies.

Administrative decisions are based, in some way, on objective or quantifiable data. In this sense, *big data* manifests itself as an infinite substratum of information that can and should be used for the adoption of such decisions, sometimes simple as the control of urban traffic or the management of public services like street lighting.

In this sense, recognizing the importance of the phenomenon of the *Smartification* of public administrations implies accepting that the citizens have the right not only to the provision of a public service, but also that this service must have certain qualities and a minimum efficiency, with the State being understood as a large service provider that, given its exclusive nature, must often act with the efficiency demanded by the citizenry.

For Rodrigues-Arana (2013, 38), good administration constitutes a fundamental right in the European Union and, therefore, "*public administrations, from this perspective, must be led and managed by a series of minimum criteria, called good administration*".

He also points out that the knowledge produced by means of new technologies *should help to improve the daily work of the organization and to improve the work of the people who form part of the public administration, without forgetting that there is an ethical dimension inherent to the administration itself.*

This perspective highlights two points that are fundamental for understanding the problem we are addressing. First, that the process of *smartification* of public administration should be understood as a natural step in the evolution of the State as an organization and, second, that this process is an opportunity to humanize the relationship between the State and those it administers, who come to have greater proximity between their daily realities and the action of the public authorities.

When the administration *smartifies* itself and uses *big data* as a determinant for those governance decisions that effectively depend on such information, its work becomes more efficient, effective and, above all, fulfills the fundamental right to good governance.

In this context, the question of the algorithm is of utmost importance. Its composition must seek to exclude data that could generate inequalities, thus avoiding episodes of bias caused by algorithmic misinterpretation (Castillejo Manzanares, 2022).

This discussion does not mean that algorithms should be considered public enemies, but it warns us that their use, as with any other technology, must take into account, as Rodríguez-Arana (2013, 30) rightly points out, that the person is at the center of the legal system and that all material or legal decisions of the administration, companies or citizens must uphold the dignity of the person as a fundamental value.

In this sense, the process of making public administration intelligent, far from transforming the State into a neutral applicator of statistical data, makes it possible to generate decision-making scales in administrative decisions, automating what is simple and supporting with objective and real data the decisions when complexity and volume of activities demand it.

All this implies a change in the institutional culture, with reflections in the way in which public administration is structured, abandoning the old model of paper and pencil next to the computer, of the civil servant stuck in time, to demand a much more dynamic and proactive profile.

In this sense, it can be said that intelligent administration is both a direct reflection and a consequence of the networked society, requiring the adoption of changes in administrative governance to expand and

improve the use of AI-based technologies, enabling, empowering and guaranteeing a substantial improvement in the provision of public services and considering a series of values that should guide the development of these technologies.

II. BASIC SOCIAL-LEGAL VALUES IN THE DEVELOPMENT OF THE IA: THE EUROPEAN STRATEGY

The development of new technological means, especially expert systems and artificial intelligence systems, must take into consideration the existence of certain values that are the foundation of the social order and that guarantee the respect and effectiveness of human rights (Suárez Xavier, 2023).

The current level of development of systems based on artificial intelligence has as a consequence the fact that there must be a regulation that imposes the recognition of these values in the process of algorithm development (Barona Vilar, 2019).

The major problem, which is the challenge to be faced by public authorities, is the demand for solutions capable of protecting people, their rights, freedoms and data at local and global level. However, the regulatory power of the State faces both territorial and temporal constraints and is also confronted with the difficulties arising from its technological backwardness vis-à-vis companies.

The first major difficulty relates to the form of control of data traffic and processing, since their content is normally stored on servers whose locations rarely coincide with that of the originating site, in addition to the problems generated by the limitations on access and the exercise of police powers in compliance with the rules regulating the use of this information.

Indeed, the powers and competences attributed to the supervisory authorities by Regulation (EU) 2016/679 (General Data Protection Regulation – GDPR) in Article 58 demonstrate the limitations of the system set up, which depends on the keeping of a register by the data processors, leaving room for violations of the provisions of both the Regulation and Organic Law no. 3/2018 of 05 December.

Violations can also emanate from the Public Authorities, as it sometimes incur violations in the use of citizens' personal data, beyond the list of exceptions contained in art. 23 of Regulation (EU) 2016/679.

These shortcomings are a consequence of the model chosen by the legislator for data protection in European Union law, having opted for the *notice and choice* model (Baruh, 2015, 15), a system where the user has the right to consent or not to the processing of their personal data.

It happens that such consent is neither free, because often the refusal to process such data implies a prejudice, with the deprivation of the use of a service, or the impossibility to enjoy a certain benefit, nor is it conscious, since the phenomenon of *big data* had as a fundamental consequence an enormous difficulty in determining which data are personal and protected by law.

In this sense, for consent to be truly free and effective, the individual should know which of the data collected may concern him, regardless of who has disseminated them, how they have been generated and how they will be processed; *what are the objectives, design and operation of the analysis system; what sensitive information may be revealed by the set of data analyzed in each of the phases of analysis and, therefore, over a prolonged period of time* (Suárez Gonzalo, 2017, 290).

This is an inversion of values that is analyzed from the point of view of the obligation of States to protect individuals and their privacy, since - in the model of *notice and choice* - the paradigm of informed consent charges the subject with the right and duty to protect his privacy, with the intention that the management is free.

A real and effective management of privacy demands a mixed model, capable of meeting the need for privacy protection of citizens and reducing the burden that self-management of privacy imposes on individuals, pointing out the existence of mixed models, such as the one supported by Solove (2013, 19), which suggests a combination of the self-management model with a series of decision aids when dealing with complex issues.[2]

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[2] See: METCALF, Jacob; CRAWFORD, Kate (2016). "Where are human subjects in big data research? The emerging ethics divide". Big data and society. Available at: https://doi.org/10.1177/2053951716650211

The second and from our point of view main issue, regarding the legal management of the use of such data and intelligent systems, whether in the private or public sphere, concerns the difficulty of analyzing and monitoring the scope of data processing and regulation of ethical and legal issues regarding algorithmic architecture.

This issue, which is very topical, has been dealt with from different points of view by the state legal systems and now a strategy for artificial intelligence produced in the European Union is being developed, which is currently in a discussion stage whose main protagonist is the High Level Expert Group on Artificial Intelligence.

The group was created by the European Commission in June 2018. Its first communication to the Parliament, the Council and the Economic and Social and the Regions Committees was a draft released for consultation on December 18, 2018 and finalized on April 08, 2019. It should be noted that the only languages in which it was available for consultation in full version were English, German and French.

This is the first and fundamental criticism that can be made of the document, which seeks to be based on an air of publicity and collaboration, but whose consultation was not really open to all citizens of the European Union, since the restriction on the languages used for the consultation substantially affects the participation of citizens.

On the other hand, the strategy is prepared by a group of experts that is not really composed in a pluralistic manner with the purpose of listening to different points of view and social segments, taking into consideration business and banking, but with little representation of representatives of fundamental rights.

The document has no normative content, but marks the beginning of discussions on the subject at EU level. Its content sets out the requirements and rationale for trustworthy artificial intelligence, the technical methods for achieving such trust, how to assess such trustworthiness, and examples of existing AI opportunities and key concerns.

III. THE DRAFT TECHNICAL GUIDELINES ON RELIABLE ARTIFICIAL INTELLIGENCE

Having highlighted the shortcomings of the Ethical Charter on the use of artificial intelligence in judicial systems[3] in some aspects such as advertising and the disregard for European linguistic plurality, as well as the low participation in its preparation[4], we will now analyze the content of the charter.

The objective of the Guidelines is to promote a paradigm of trust in artificial intelligence, taking into account three components that must be observed throughout the life cycle of the system. It is determined that AI must be legal, complying with all applicable regulations, in addition to requiring that it be ethical, ensuring adherence to ethical principles and values and, finally, that it must be trustworthy, from both technical and social perspectives, since, even with good intentions, artificial intelligence systems can cause unintended harm.

Each component in itself is considered necessary, but not sufficient to achieve confidence in IA, acting in harmony and overlapping in their operation. But if tensions arise between the components, society must strive to align them.

Paradoxically, the document does not address the legal framework, which it considers the first pillar of trust in AI. Instead, it seeks to provide guidance on the other two components, which does not imply that the expansion of AI will be prevented, but rather that its regulation right now is based on an ethical framework, which establishes general principles that will influence the functioning of our justice systems and should therefore be discussed.

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[3] The document can be consulted at: https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c. Accessed on 03/22/2024.

[4] During the consultation period on the initial document, the draft received barely five hundred contributions, which does not reflect a high level of participation, given that this is an issue that directly affects citizens, and even more so considering that, as mentioned above, the document was not translated into all EU languages, including Spanish.

In its first chapter, the draft guidelines identify ethical principles and values that must be respected in the development, implementation and use of expert systems, based on fundamental rights, which are:

> "(i) develop, implement, and use artificial intelligence systems in a manner that adheres to the ethical principles of: *respect for human autonomy, prevention of harm, fairness*, and *explainability*. In addition to recognizing and addressing potential tensions between these principles.
>
> ii) pay special attention to situations affecting the most vulnerable groups, such as children, people with disabilities and other groups that are historically disadvantaged or at risk of exclusion, and to situations characterized by asymmetries of power or information, such as between employers and workers, or between companies and consumers;
>
> iii) recognize that while bringing substantial benefits to individuals and society, AI systems also pose certain risks and may have a negative impact, including risks that may be difficult to anticipate, identify or measure (e.g., on democracy, the rule of law and distributive justice, or on the human mind itself). Take appropriate measures to mitigate these risks where appropriate, and commensurate with the magnitude of the risk."

In his second chapter, it outlines seven requirements necessary for AI, the internet of things or expert system to be considered reliable:

> "Ensure that the development, deployment, and use of AI systems meets the key seven requirements for AI Trust: (1) human action and oversight, (2) technical and security robustness, (3) privacy and data governance, (4) transparency, (5) diversity, nondiscrimination, and equity, (6) environmental and social welfare, and (7) accountability."

It also recommends that technical and non-technical methods be considered to ensure the application of the requirements set forth, encouraging research and innovation to assist in the evaluation of AI systems, seeking the implementation of the requirements defined above.

In terms of policy, it raises the need to disseminate results and open questions to the general public and systematically train a new

generation of experts in AI ethics, clearly and proactively communicating information to stakeholders about the artificial intelligence system, its capabilities and limitations, to achieve a realistic expectation setting, influencing the way requirements are applied.

The system must be transparent, making clear to stakeholders the fact that they are dealing with data and decisions with an artificial intelligence system, and traceability and auditability must be possible, especially in critical contexts or situations. It is essential to involve stakeholders throughout the life cycle of the artificial intelligence system.

It advocates the need to promote training and education so that all stakeholders are aware and confident in the use of AIs, being aware that their use could generate tensions between the different principles and requirements of their use.

In short, the aim is to establish the ethical path that will guide the entire life cycle of an artificial intelligence system. The major problem with the strategy is that it lacks any normative value, either because the European Union lacks the necessary powers to regulate the functioning of the institutions of the Member States, or because it seems impractical to establish a system of rules capable of predicting the paths that the development of AI systems will follow.

In Chapter 3, the document provides a non-exhaustive *check-list* of the requirements that an AI must meet in order to become operational, stating that the ideal (and in our view almost automaton-like and not at all *smart*) way is self-assessment. However, it portrays itself and self-diagnoses, stating that "*it is not about checking boxes, but about continuous identification and implementation of requirements, evaluation of solutions, ensuring better results throughout the lifecycle of the AI system, and the involvement of stakeholders in this*".

The list of questions set out on folios 26 to 31 of the document can be understood as nothing more than a self-assessment tool, which can be reproduced in different procedures and branches where AI is to be implemented, but it does not currently entail any obligations for public authorities, individuals, or companies.

Analyzing everything discussed up to this point in our work, it is clear that: (i) the framework for protecting citizens' personal data and privacy is the European and national regulations for the protection of personal

data to which we have already referred and (ii) the European initiative for reliability or trust in artificial intelligence lacks normative content, is still under development, and does not generate any legal obligation.

This is probably justified by the fact that, until very recently, the software development process did not require such transcendental concerns as those that arise with the implementation of artificial intelligence systems. We have never been at such an advanced point of technological development and, therefore, the legal system had never faced these issues, which are ethical, but have a background and a legal relevance that cannot be ignored, because their manifestations affect people's lives, especially when they are implemented by the public administration on a massive scale.

The landscape of legal gaps is almost universal, but it is worth noting that the United States, United Kingdom, China, United Arab Emirates, and Singapore have been prioritizing the development of artificial intelligence, each striving to develop a set of guidelines with different projects and action models, including their legislative plans and initiatives. For instance, the European Initiative sent a final communication to the European Parliament in 2020 and, after a series of procedures, culminated in the recent approval in 2024 of the Artificial Intelligence Regulation. This regulation only establishes limits on its use by risk categories, leaving aside a number of important issues such as data reuse, the means to oversee abuses related to the proposed regulations, and more. It does not fully establish sector-specific regulation or the duty to regulate, leaving it up to the Member States to do so, which could result in inconsistent regulations.

Thus, it is noticeable that the use of artificial intelligence in the era of *smartification* of the Administration, *smart citizenship* and *Smart cities* lacks a legal framework, but has an ethical framework, which, although criticizable, should be analyzed, since its content opens the first stage of an important debate for the future of institutions and society as a whole.

IV. THE DIGITALIZATION OF THE JUDICIAL OFFICE

Up to this point, we have been able to work on the concept of artificial intelligence and to make some incursions on the subject with

regard to its approach in the ethical charters that are being drawn up by the European Union.

It is worth noting that the massive investment in artificial intelligence is reflected in its consideration as one of the six priorities adopted by the EU in its Strategic Agenda for the five-year period 2019-2024[5], where it is textually stated:

> "Our policy must be defined in such a way that it reflects the values of our society, fosters inclusion and remains compatible with our way of life. To do this, *the EU must work on all aspects of the digital revolution and artificial intelligence: infrastructure, connectivity, services, data, regulation and investment*. This must be accompanied by the development of the service economy and by the integration of digital services."

On the other hand, at the recent conference of Ministers of Justice of the Council of Europe, the Spanish State has made a strong commitment to the defense of artificial intelligence systems. According to the Spanish Secretary of State for Justice, at the conference held on October 14, 2019, it is necessary for both public and private institutions to have an Ethics Committee to ensure the ethical, legal and human aspects arising from the development and application of artificial intelligence in Justice. It has also called for reflection to respond to the questions posed by the digital revolution and artificial intelligence, two of the axes of the new strategic agenda of the European Union for the period 2019-2024.

All this leads to the need to understand from a double perspective the judicial office and the jurisdictional organ, which are unified in activity, but divided in functions, which leads us to the need to examine the content of Law 13 of 2009, of November 3, on the reform of procedural legislation for the implementation of the new judicial office.

In its preamble, the law summarizes the new judicial office, which should encourage judges and magistrates to devote all their efforts to the functions entrusted to them by the Constitution, of judging and enforcing what has been judged. These objective demands that they be relieved of *all those*

[5] Document available at: https://www.consilium.europa.eu/media/39914/a-new-strategic-agenda-2019-2024.pdf. Accessed on 05/23/2024

tasks not strictly linked to the constitutional functions just mentioned, and this is the aim of the new model of the Judicial Office. Therefore, those *responsibilities and functions that are not of a jurisdictional nature* will be attributed to other civil servants and, on the other hand, work organization systems will be established for all the personnel in the service of the Administration of Justice, so that their professional activity is carried out with maximum efficiency and responsibility. Drawing a panorama where the members of the Corps of Lawyers of the Administration of Justice gain relevance.

Thus, the judicial office is understood as the administrative center of the judicial body, where other eminently administrative tasks are performed and, therefore, not subject to the provisions of Article 117 of the Spanish Constitution, especially to the principles of exclusivity and responsibility.

Such acts, even if they have procedural relevance and for their adoption it is mandatory to act according to procedural rules, do not pose major obstacles to modernization, with the use of AI systems, either through the use of *machine learning* to support the drafting of documents - a tool that many word processors already use - or through the use of data mining to carry out investigative measures.

This whole process is reflected in the so-called digitalization of the judicial office, which is adopting new technologies to make proceedings faster and more effective.

Let us recall that Article 23 of Regulation (EU) 2016/679 contains a list of exceptions where data protection rules are not applicable, aiming to guarantee a series of values that overlap with the right to the protection of personal data, where even the existence of a protective system beyond the procedural and administrative rules aiming to prevent abuse in the use of such tools could be even cogitated.

On the other hand, it must be taken into account that the use of technologies such as facial recognition and other tools in administrative matters in courts and tribunals for access, for example, to the premises of the judicial body, provided that it is not compulsory, does not imply in any way a violation of fundamental rights, provided that, as we have said, the legal and regulatory provisions on the subject are observed. This is also because the parties often agree to provide such information as long as it improves the service (Suárez Xavier, 2023).

We refer to the authorized use of these technologies to support the judicial office, on a voluntary basis and through the transfer of data in accordance with the legal and regulatory provisions of the legislation and, on the other hand, of those data processing based on *mining data* (the aforementioned data mining) to find people, goods and values in civil executions proceedings for example, cases in which the legislation on personal data explicit authorizes its use.

Regarding the data that depend on the intervention of a notary public, such as the Judicial Counselors (hereinafter LAJ), it can be understood that the acts celebrated with the help of intelligent systems may be valid, provided that the senses used for the perception of the information are ultimately of the notary and it is not a fully automated process.

This means that these resources can assist the LAJ in the execution of his tasks, but not replace him, since he is the holder of the public faith, not the equipment, so that all actions involving the granting of effects of the public faith will necessarily require the direct action of the LAJ, the only one responsible for the actions carried out.

It should be considered, on the other hand, that the LAJ performs a series of procedural steps and activities that, however, not being of a jurisdictional nature, directly affect the right of action of the parties and, therefore, the use of the new technological means should be viewed with caution, since they entail a series of discussions that can and necessarily will generate problems in the future.

We will not go into these questions, since we understand that their quasi-jurisdictional nature means that these acts must be worked on in the same logic as jurisdictional acts, since although art. 117 of the Constitution does not apply to them, they have a direct reflection in what is said to respect the right to effective judicial protection, contained in art. 24 of our Magna Carta and, in this sense, they cannot and should not be understood as merely administrative acts, because they are not.

In this sense, the process of digitalization of the judicial office is based on the same idea that guided the implementation of the digital administration, but here the issue is to modernize the *back office*, because unlike the rest of the Public Administrations, which in most cases takes place outside the administrative body, in the Administration of Justice

the public service provided is developed almost in its entirety in the premises of the judicial office.

Perhaps this difference is the most striking in the case of the administration of justice, because while in administrative agencies this modernization can often be confused with automation and standardization of material acts, our society is not yet accustomed to the magnitude of tasks that AI mechanisms based on the aforementioned technologies can and have been developing for some time.

Hence, the 2019-2024 European Agenda rightly envisages massive investment in artificial intelligence and in preparing people to operate with these new technologies:

> Over the coming years, the digital transformation will continue to accelerate and will have far-reaching implications. We must ensure that Europe is digitally sovereign and gets its fair share of the benefit of this evolution. Our policy must be defined in such a way that it reflects the values of our society, fosters inclusion and remains compatible with our way of life. To do this, the EU must work on all aspects of the digital revolution and artificial intelligence: infrastructure, connectivity, services, data, regulation and investment.

In this sense, AI-based systems can be used in different tasks as mentioned above, from improving filing techniques, generating reports, obtaining procedural information, preparing and managing the judicial office agenda, providing public information to citizens, modernizing the notification model and many other aspects that are not of a jurisdictional nature and should be subject to modernization, providing the judicial office with greater agility and optimizing its services, to allow better human attention to the litigants and other tasks of greater complexity for which AI is not enabled or is not reliable.

Such changes imply demanding a new profile of the different bodies of civil servants entering public employment. One can no longer expect from these people complete ignorance of these management mechanisms and total strangeness to such systems, because the future of public administrations will necessarily entail the fact that humans and robots will share the public service (Ramió, 2019, 156).

On this point there are no major questions, the judicial office is an administrative body and as such must meet minimum requirements of efficiency in its organization, which is why the massive use of artificial intelligence in the organization and evolution of the processes and flows carried out by it cannot and should not find greater limitations than those established by law.

It could be argued that these changes may result in a greater loss of jobs than those that will be generated and this is not the place to discuss such issues, but what should be clear is that the results of progress depend on the policies adopted.

Within these new technologies that must be implemented in the near future, a new profile of the civil servants at the service of justice is expected. This new profile could be defined in a single word as *smart people*, people who, in addition to knowing how the administration of justice works, are capable of working in an environment with a massive presence of computer tools and artificial intelligence.

However, such a society is not the result of a process of social fissiparity, but emerges from educational policies that invest in the formation of individuals capable of knowing and recognizing the language of technology. And this results solely and exclusively from the process of education.

In this sense, the modernization of the judicial office, as with the digital administration, entails a triple challenge: 1) to modernize the *back office in order* to obtain maximum efficiency, safeguarding fundamental rights and the legitimate interest of citizens; 2) to invest in training society and professionals, enabling them to work with new technologies and 3) to overcome the digital divide, the inequality that exists between citizens in access to and use of new technologies.

Thus, we conclude that the implementation of a judicial office that meets the need for the advancement of new technologies, more than a necessity, is an imperative, whose limits are framed in the procedural laws that must be adapted to the use of these new technologies and, on the other hand, that jurisdictional acts or those that are strictly related to the right of action defined in Article 24 of the Constitution obey another regime, which we will now focus on.

V. SMART JUDGE? CHALLENGES JURISDICTION IN THE SMARTIFICATION OF THE ADMINISTRATION OF JUSTICE.

5.1. LEGAL FRAMEWORK FOR THE USE OF INFORMATION SYSTEMS IN JUDICIAL ACTIVITY

Jurisdictional activity is the main task of the Judiciary, although according to Article 117 of the Constitution, paragraph 4 defines the possibility of entrusting other activities by law, in order to guarantee any right.

This task includes, in all types of proceedings, the competence to judge and enforce what has been judged, under the rule of law and through different types of tutelage, such as executive, declaratory and what some consider to be precautionary tutelage, conveyed by means of claims addressed to the courts.

As mentioned above, the Administration in general has been reformulated with regard to its *front office*, an affirmation applicable to the judicial office, which has undergone an extensive digitalization process, with the adoption of new management models and computer systems.

In our country, Law 18/2011, of July 5, 2011, regulating the use of information and communication technologies in the Administration of Justice, seeks to establish a framework of interoperability between the different computer systems adopted in the Administration of Justice, based on minimum guarantees of authenticity, confidentiality, integrity, availability, traceability, conservation and interoperability of the data, information and services it manages in the exercise of its functions.

The scope of application of the Law refers to the relations of the Administration of Justice with other Administrations, with citizens and professions in their relationship with Justice and other institutions, providing in its article 4 a series of guarantees with respect to the protection of data of the parties and the system of notifications:

> a) To choose, among those available at any given time, the channel through which to interact electronically with the Administration of Justice.

> b) Equality in electronic access to the services of the Administration of Justice.
>
> c) To know by electronic means the status of the proceedings in which they are a legitimate procedural party, under the terms established in the Organic Law 6/1985, of July 1, 1985, of the Judiciary, and in the procedural laws.
>
> d) To obtain electronic copies of electronic documents that form part of proceedings in which they are a party or in which they have a legitimate interest, under the terms established in Organic Law 6/1985, of July 1, 1985, of the Judiciary, and in procedural laws.
>
> e) To the conservation in electronic format by the Administration of Justice of the electronic documents that form part of a case file in accordance with the regulations in force on judicial archives.
>
> f) To use the identification and electronic signature systems of the national identity card or any other recognized document for any electronic procedure with the Administration of Justice, under the terms established by the procedural laws.
>
> g) To guarantee the security and confidentiality of the data contained in the files, systems and applications of the Administration of Justice under the terms established in Organic Law 15/1999, of December 13, on the Protection of Personal Data, in Organic Law 6/1985, of July 1, 1985, on the Judiciary, and in procedural laws.
>
> h) To the quality of public services provided by electronic means.
>
> i) To choose the applications or systems to interact with the Administration of Justice, provided that they use open standards or, as the case may be, those others that are widely used by citizens and, in any case, provided that they are compatible with those available to the courts and tribunals and that the guarantees and requirements established in the procedure in question are respected.

Given that Organic Law 15/1999 was repealed by Organic Law 3 of 2018, and that according to its fourth transitory provision and fourteenth additional provision, articles 22, 23 and 24 of LO 15/1999 continue to apply exclusively, as long as no new rule is established to regulate the matter, therefore, a tacit reference to Organic Law 3/2018 will be necessary.

On the other hand, with regard to what it calls the electronic management of judicial activity, the Law determines some criteria in

Article 25, especially that "the electronic management of judicial activity will respect compliance with the formal and material requirements established in the procedural rules".

To this end, the application of electronic means to work processes and the management of procedures and judicial action will be promoted. Determining that the application of electronic means to the management of procedures, processes and services must be "preceded by the realization by the State Technical Committee of the Electronic Judicial Administration of an analysis of functional redesign and simplification of the procedure, process or service, in which the following aspects will be especially considered":

> a) The possible suppression or reduction of the documentation required from citizens, by replacing it with data, data transmissions or certifications.
>
> b) Reduction of the time required to process the procedures.
>
> c) Rationalization of the distribution of workloads and internal communications and the introduction of management indicators.

The electronic judicial file is created, regulated by Article 26, defined as the set of electronic data, documents, procedures and proceedings, as well as audiovisual recordings corresponding to a judicial proceeding, regardless of the type of information it contains and the format in which they were generated, in addition to providing for a general identification number, and an electronic index for foliation, signed (by means of a digital certificate) by the signing judicial office as appropriate.

Judges, magistrates, prosecutors, State Attorneys, administration attorneys and civil servants in the service of the Administration of Justice, in accordance with Article 21, shall have a digital signature, in the form of a digital certificate to be provided by the General Council of the Judiciary.

In other words, the procedure is carried out by means of an electronic file, prepared, numbered, validated and whose processing is carried out in an environment that uses digital media, but is developed in a paper-like manner, since the files are stagnant and different media and storage devices are used, but without the necessary interoperability and fluidity demanded by the law itself.

It should be noted that the term interoperability is used fifty-five times in the text of the law, without any article defining the concept of interoperability, which in the words of Felipe Gómez (2007, 28) means:

> "the ability of an information system to communicate and share data, information, documents and digital objects effectively (with minimal or no loss of their value and functionality), with one or more information systems (these systems being generally completely heterogeneous, distributed and geographically distant), through a free, automatic and transparent interconnection, while at no time ceasing to use the interface of the proprietary system"

The interoperability proposed by the legislator does not determine the conditions and forms under which the data will be shared, but seeks to make the systems used by the different administrations compatible with each other, theoretically allowing the information to be available at all times for the Administration of Justice and the citizens.

These data have a fundamental value, since they translate how, when, at what speed, under what conditions and what the decisional tendencies of the judge are. They are crucial for drawing models, establishing procedural strategies and defining deadlines for action, formatting the roadmap adopted by one or both parties to a litigation.

In this particular, regarding the use and availability of such data, our legal system does not offer just any regulation. Furthermore, this matter entails a triple axiological confrontation stemming from the state's obligation to ensure public processes, the citizens' right to information, and the principle of procedural equality, which establishes a right to equality of procedural means between the parties to make effective the intended judicial protection, which is diminished when one of the parties has prior knowledge of the means to make its action with the jurisdictional authority more effective, from a statistical point of view.

The content of this right to equality, beyond the formal equality raised from a merely proceduralist viewpoint, expands to accommodate the egalitarian notion raised by Carmona Cuenca (1994, 283), but its content can in no way be equated to the notion of existential minimum raised by him, since equality, as Wolfgang Sarlet (2010, 35) points out,

constitutes both a requirement of social balance and an instrument of emancipation of the citizen.

In this sense, there is an absolute lack of regulations capable of guaranteeing the rights of citizens before justice, in order to equalize the balance that the technological gap has formed between states, states and companies and companies, people and the State.

It is not enough to create a regulation to make up for the technological deficit of the State; it is necessary to modernize the State apparatus, especially the Administration of Justice, in order to establish the rules of the game, the rights, the limitations and the possibilities of the parties, since if one of them is granted the capacity to foresee by a statistical model the best ways to adopt procedurally, the same resource must be available to the other party.

Therefore, it was said that it is of fundamental importance the way in which the data concerning the sentences, appeals and other judicial procedures and their statistical treatment are made available, because considering their public nature and the publicity imposed by the constitution and the laws to the process, it is questioned what effects their treatment by a company has.

This complete absence of regulation entails a risk for the justice system itself, of becoming a hostage of such information, since in this model of predictive justice the deviation within the trends observed obeys a double axis, forcing the motivation of a new jurisprudential option and, on the other hand, preventing the adoption of creative solutions by the judge.

In conclusion, what is noticeable is that Law 18/2011 has introduced some important changes with regard to the digitalization of the judicial office, but it also generated a dissemination of information that unequally balances the scales of procedural equality, by not providing anything about these data and the way they are used, an error that is maintained today and that generates an inequality that is already beginning to manifest itself in the legal reality. It is therefore necessary to choose the path to follow, either by limiting the processing of this data, or by allowing it on equal terms to all litigants, ultimately adopting the model of predictive justice.

5.2. ALGORITHMS AND PREDICTIVE JUSTICE MODELING

Predictive justice, according to Viola (2018, 32) establishes a mathematical model for the exercise of jurisdiction. This mathematical model is based on the existence of an algorithm, which performs a series of conjunctive or disjunctive operations to reach a certain result. Let us recall that in contrast to expert systems, algorithms are fed with data and results to establish a routine, and not with routines to process data as was the case in the previous generation.

As arguments in favor of the predictive justice model, it is argued that the predictability of the outcome of a lawsuit is a value for the whole society and that judges will be able to decide more conscientiously when their decisions represent a change in jurisprudence, assuming a response to the "*demagogy that the judiciary is often a victim with respect to judicial errors*" (Viola, 2018, 169).

On the other hand, Viola (2018, 171) understands that it is not a matter of predicting with the utmost precision the device of a judgment, but of identifying the orientation of the judge's reasoning, since judgments are not always linear, but are composed of different resources based on syllogisms, analogies, deductions and inductions.

The predictive justice system is not confused with the processes of automation and file analysis by *machine learning*, as Corvalán (2017, 4) seems to understand, since in these cases of automation a predictive scenario is not established but relies on a statistical model to perform a simple search by *mining data*, in order to then facilitate the choice of a writing model.

The predictive justice system allows individuals to know the tendencies of the courts, based on certain information which, the more information they provide, the more data the algorithm can use to define the predictable outcome in statistical terms.

On the other hand, this system generates risks such as the reduction of the judicial process to a mere mathematical scheme without major correlations with reality, the existence of analysis errors resulting from a misinterpretation of the situation by the algorithm, the formation of biases based on values that violate fundamental rights or violate the

right to effective judicial protection based on the inequality of the parties in the access to the data, which are the extract of the prediction process.

These data come from public files originating from the different electronic files owned by the Administration to the extent that they are necessary for the development of the process, but not the private documents that form the basis for the decision of the judicial body and, therefore, their processing by *mining data* systems must respect a series of principles and rules relating to the protection of personal data to which we have already referred above.

It is also true that the process of predicting judgments is something that every justice operator intuitively and logically performs before taking advantage of the legal resources available to act, choosing the one that is most appropriate to achieve success. The problem is revealed when this process of forecasting results generates procedural inequality, either because public data is used for the benefit of only one of the parties, or when one party has a wider range of data than those available to the other party.

To ignore this fact is to go back to the pure and simple formal equality that emerged from *l'ecole du exegesis (*Halpérin, 2017, 8), going backwards in the conquest of rights such as material equality as a principle to be observed by the State and, especially, the right to effective judicial protection enshrined in Article 24 of the Spanish Constitution.

This does not imply that the use of the predictive justice model by itself is capable of violating the right to effective judicial protection, but rather that its implementation, without due caution, may violate this right, because the digital divide is a reality and affects citizens, states and companies to different degrees within their respective realities, and therefore technological resources should be used to reduce these inequalities, not to widen them.

There are many ways to reduce the impact of these inequalities, especially in cases where one of the parties previously has a greater volume of data and information than the other, a fact that is accentuated by the use of artificial intelligence. One of them is to provide, on equal terms, the predictive justice system by the State for both parties, especially considering that the files used in such systems belong to the State.

Another way is to institute more protective judicial systems, not only with information systems, but with special jurisdictions, where the burden of proof is reversed to the party that has superiority over the other party, an experience that has achieved considerable acceptance and success in other jurisdictions, such as Brazil, for example.

However, what must be clear with regard to predictive justice is that this model precedes the exercise of jurisdiction, is based on statistical information related to similar cases, with a higher level of precision when there is a greater volume of information on the procedure, and that this system may violate, if its use is not regulated with caution, the right to effective judicial protection, due to the inequalities generated in the process.

In conclusion, it is incumbent upon the State, as a guarantee of art. 24 of the Spanish Constitution, to regulate the manner of processing the use of such files generated in the judicial offices, thus allowing equal access to all parties to such prediction systems.

VI. THE USE OF ARTIFICIAL INTELLIGENCE IN JURISDICTIONAL FUNCTIONS

At this point of our work, having established some preliminary notions, we move on to the last and perhaps main, but not conclusive stage of our work, that of questioning whether it is possible to apply such remedies in the jurisdictional processes defined in art. 117 of the Spanish Constitution.

The first thing we must be clear about is that AI systems, whatever their nature, are not a substitute for the judge, but his auxiliary, just as at present there are human assistants, who exercise such activities without performing any jurisdictional task.

To deny that AI plays an important role nowadays is the same as ignoring that the very system from which we are writing this article - which is probably the same one used by a judge in Badajoz or Salamanca - uses different artificial intelligence tools, especially machine learning to learn the way we write, suggesting expressions or correcting mistakes.

Artificial intelligence does not replace judges, nor will it replace them, because the mechanism to carry out the decision-making process

is so complex that it would be not impossible, but unfeasible from the point of view of adequacy with the purposes of justice, for a robot to pass a sentence. Nor could it perform this task due to legal unfeasibility, since the Constitution in its art. 117 determines that jurisdiction is carried out exclusively by judges and magistrates.

However, the fact that decisions are still taken by the judge does not prevent the use of AI-based mechanisms from influencing his decision, either because the evidence used is based on a report produced in an automated way, i.e. by a robot, or because evidence obtained by data mining, facial recognition, or other ICT-related means is used.

Two fundamental perspectives come into play to resolve this issue. The first is that artificial intelligence is not currently adequately regulated in our legal system. Secondly, the process and procedural guarantees are crucial. Regarding the acquisition of evidence through data mining, we understand that there are no major issues as long as it does not violate any fundamental rights of the individuals involved. Article 23 of Regulation (EU) 2016/679 allows a judge, while respecting due process, to adopt measures that may interfere with the protection of personal data of the litigants.

The same applies to the issue of evidence obtained by means of AI systems, with important discussions safeguarding against the violation of fundamental rights, privacy, self-image, self-body, genetic information and other elements of personal dignity. In other words, the evidence will be lawful and acceptable in a jurisdictional process, regardless of the jurisdictional order to which we are referring as long as it does not violate fundamental rights, in accordance with what is determined by art. 287 of the Law 1/2000, of January 7, on Spanish Civil Procedure and correlates in the other jurisdictional orders.

However, when the use of such resources is related to the judgment in such a way that its importance cannot be dissociated from the content of the judgment, i.e., the content of the judgment would probably be different when the appeal to the IA was not used, we understand that the issue must be treated with caution, because first, as mentioned above, the right to effective judicial protection may be affected and, on the other hand, the fundamental rights of the defendants may be violated.

What must be clear, and this is a good point of the European Ethical Charter for the use of AI in Judicial Systems and its environment, is that, in any case of application of AI in judicial systems, the person must be considered as a fundamental value, without being reduced to a mere statistical system.

This Charter, as we have defined above, is not specified in a legal framework and cannot be invoked as a rule applicable to a specific procedure, but from its content we can infer some interpretative criteria in accordance with the respect for human rights enshrined in our legal system.

The charter defines that AI systems cannot be used to undermine the independence of judges in their decision making and must be used with respect for the principles of the rule of law and give ethical precedence to human rights, through a design approach.

This means that AI systems must be designed with an architecture whose algorithmic layers can have transparent criteria, harboring in their learning stages rules that prohibit direct and indirect violations of human rights.

The Charter determines, furthermore, that "when artificial intelligence tools are used to resolve a conflict or as a tool to collaborate in judicial decision-making or to guide public opinion, it is essential to ensure that they do not undermine the guarantees of the right of access to a judge and the right to a fair trial, privileging, as we have said above, the right to equality of arms and respect for the adversarial process".

In this sense, considering the capacity of these processing methods to reveal existing discrimination, through the grouping or classification of data relating to individuals or groups of individuals, public and private actors, they must ensure that the methods do not reproduce or aggravate this discrimination and that they do not give rise to deterministic analyses or uses that undermine fundamental rights, causing the so-called discriminatory biases.

However, such statistical analyses can also be used to prevent discrimination, verifying whether a given authority denies all applications from people of a certain race or social status, belonging to so-called vulnerable groups, and can prevent it with the irrefutable statistical argument, because these are the cases in which AI can make an invaluable contribution to the construction of a freer, fairer and more caring society.

For this reason, the construction of machine learning models should try to reflect as clearly as possible the experience of professionals from the entire justice environment and researchers, providing feedback to the system based on ethical guarantees and preventing the existence of unsolved errors with an audit system of judgments based on sensitive information provided or elaborated by AI, as well as establishing a system of resources adequate to correct the errors that are detected.

With regard to security, the Charter is concerned with establishing that the models and algorithms created must also be capable of being stored and executed in secure environments, in order to guarantee the integrity of the system, its intangibility, which means the use of technologies such as *blockchain*, aiming to guarantee not only the security of the information, but also its unalterability by agents external to the process, ensuring that the information survives intact to possible cybernetic attacks.

In summary, we understand that AI can and should be considered an enormous ally of the court to carry out its function, but like any tool it should be viewed with caution, and its use should be regulated and limited, based on the ownership of the files with which it works, including files of public utility, but owned by the State, such as files from the electronic court file, since they may contain information of a private nature of the parties.

It is not a matter of simplifying what is complex, arguing that the interpretation of the law is already in itself a teleological operation and that more than one meaning can be given. Nor that any decision is a decision, since two coherent arguments can give rise to different judgments according to two different priorities (Linant De Bellefonds, 1994, 705).

The fundamental issue to be understood is that justice is a fundamental service, provided by the State, and to dispense with the idea that justice is imparted by a human authority legally vested, responsible and subject to a legal regime in order to accept that it be done by an algorithm is the same as denying the impartation of justice, since we would be dealing with a fully-fledged automatic system.

In this sense, we maintain that artificial intelligence cannot be used to solve judicial conflicts by itself, nor to substitute judges or even to issue any act of knowledge that implies the exercise of the functions defined in art. 117 of the Spanish Constitution, because it violates the principle of the natural judge predetermined by Law, violates art. 24 of

the Constitution, which determines the effective judicial protection and definitively breaks with the value of legal certainty.

This does not mean, on the other hand, that its use is harmful or negative, since it can support judicial decisions with solid and statistical arguments and documents from different technical points of view, allowing the judge to better analyze the scenarios of each case, speeding up the processing of the files.

On the contrary, this employment must be based on the person as a fundamental value, not reducing people and their rights to mere cells of a staff, or mere percentages, by simple statistical findings, without further investigation, and this is what the European Union is trying to do right now with the Ethical Charter.

The big problem is that as long as its content is merely declarative and lacks normative force, we will not be guaranteeing justice or the rights of citizens, because what is clear is that artificial intelligence is advancing silently and uninterruptedly and the only solution to prevent violations of the rights of the justiciable from occurring in this advance is to accept this advance and regulate its effects, protecting the most basic value of the State, which are people and their dignity.

Therefore, we understand that artificial intelligence can and should be used to improve the work of the judicial office as an administrative body, improve the already archaic system of notifications of the Administration of Justice and support judges in technical as well as legal matters, but its use should be limited and subject to the limits imposed by human rights.

It is therefore necessary to define the model that the State intends to adopt in the exercise of these functions, and all this is based on the participation of the people in this decision-making process. There are many examples of AI systems that have been fulfilling this task, but which are being implemented outside any debate, such as "Prometea", an AI developed by the Prosecutor's Office of the City of Buenos Aires, or an AI called "Victor", developed at the Federal Supreme Court of Brazil in conjunction with the University of Brasilia, which has already been analyzing a requirement for the admission of a class of appeals that reaches that Court[6].

[6] BRAZIL. Supreme Federal Court. Inteligencia Artificial vai agilizar a tramitação de processos no STF. Available at: http://www.stf.jus.br/portal/cms/

In addition to the Víctor robot, operational since 2018, the Rafa robot is also in operation. Rafa is designed to integrate the procedures of the Brazilian Supreme Federal Court into the UN's Agenda 2030. Furthermore, a new intelligence named VitórIA has been recently developed. VitórIA will be utilized to expand the recognition profiles of ongoing proceedings within the court.

Countries around us, such as France, have been developing studies on the subject and in other countries, such as the United States, some reports and analyses of judicial interest are prepared by these robots, thus generating most of the recognized cases of errors based on bias and discrimination.

The topic is too broad to reach a conclusion in this research work, but too important not to be debated. We are faced, as a networked society, with the moment of deciding on the model of justice that is imposed on us and as people we cannot forget that there will always be people without justice, but there is no justice without people.

This observation is fundamental to understand that, no matter how much the judicial systems advance, no matter how many new resources, expert systems, artificial intelligence or other technologies are implemented in the future, only a human being is capable of understanding the complexity of the unveiling of life, the fundamental philosophical and existential value that makes the subject perceive himself and be in the world[7] and that if we distance ourselves as a judicial system from these values, we will not be advancing more than the already outdated Cartesian and positivist idea that the law and the facts of life can be reduced to mere syllogisms, when they are not.

In synthesis and without conclusive pretensions, we defend that artificial intelligence can and must be used to speed up and improve judicial systems, but the person must be the beginning, with the demand, the means, with a fair trial and the end of justice, with a sentence dictated by and for a person, or we will not be facing a true justice system, but a mere virtual one.

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verNoticiaDetalhe.asp?idConteudo=380038

7 See Heidegger, 2018. Also Arendt, 2016.

VII. ARTIFICIAL INTELLIGENCE AND SECOND INSTANCE: QUESTIONS AND NOTES

If the use of artificial intelligence in the judicial environment and by judges and magistrates is already questionable from a procedural point of view at the trial level, as we have seen, its use in appellate proceedings also raises significant doubts.

In this sense, the incorporation of artificial intelligence at the appellate level presents a complex and highly relevant dilemma regarding the standards of evidence review and its potential impact on the right to effective judicial protection.

While it is undeniable that AI can offer significant advantages, such as the ability to process large volumes of data and evidence that can be used as evidence in a proceeding in a reduced time, it also generates several critical concerns that must be comprehensively addressed by the doctrine, as it brings with it a number of challenges, which we will summarily mention.

One of the main challenges lies in the ability of AI to perform analysis and assessments. As is well known, AI technology relies on algorithms, including machine learning, which means that its effectiveness and objectivity are highly dependent on the quality of the data it is trained on. If the training data contains biases, such as systematic biases, discrimination or inaccuracies, the AI may perpetuate these biases in its evidential analysis.

This raises a fundamental concern regarding fairness and the fundamental right to equality in the judicial system, as biased decision making can undermine the right to effective judicial protection, especially for those who have historically faced discrimination, including sex discrimination.

Another important issue is the lack of transparency in AI-based decision making. The algorithms used to analyze the evidence and the standards employed, which would cause it to recommend lines of reasoning that can be extremely complex and difficult to understand. Such a situation, raises the question of how the parties involved, lawyers and ultimately society as a whole, can evaluate and question the basis of judicial decisions when they are influenced by opaque algorithms.

Transparency and the use of rationality are essential to ensure confidence in the judicial system and to allow accountability in case of errors or injustices in the sentences. Not for any other reason, the legislator in the LEC has determined in Article 218 that judgments must be motivated, expressing the factual and legal reasoning that lead to the appreciation and evaluation of evidence, as well as the application and interpretation of the law. The reasoning must have an impact on the different factual and legal elements of the lawsuit, considered individually and as a whole, always in accordance with the rules of logic and reason.

The automation of the review of evidence in the second judicial instance could also lead to a loss of humanity in the process. The concreteness of legal mandates in sentences cannot be reduced to the mere automatism of a syllogism between rule and fact. It is not only a matter of coldly applying the law, but also of understanding and considering the individual circumstances and nuances of each case. AI, lacking empathy and the human condition itself and the ability to evaluate complex human factors, could miss crucial aspects in judicial decision-making, which could jeopardize the right to effective judicial protection.

An additional problem concerns the question of liability. If an error in the AI analysis leads to a judicial decision with an error in the appreciation of the evidence, who would be liable? Judges may argue that they simply followed the recommendations of the IA, which would make it difficult to attribute liability in these cases.

All this could result in violations of the right to effective judicial protection of the parties, since if the same algorithm evaluates the evidence in the second instance, these errors could eventually multiply and the knowledge of their existence could be delayed in time, making the adoption of appeals unfeasible (Pérez Estrada, 2021).

In terms of standards of evidence examination, AI could also influence how witness testimony and the credibility of the evidence presented are evaluated. AI could provide credibility indicators based on language and behavioral patterns, but these indicators could be incomplete or inaccurate. This raises the concern that judicial decisions will be based on automatic credibility assessments rather than a careful, contextual review of evidence, which could further undermine the right to a fair and effective trial.

In addition, the use of AI in the second judicial instance also raises privacy issues. The collection and analysis of personal data through AI to assess the credibility or validity of evidence could be an intrusion on the privacy of the parties involved in a case. Such an issue could become a particularly relevant problem in sensitive cases, such as those involving fundamental rights, where the privacy of individuals is of utmost importance, especially in view of the general mandate established by Article 18(4) of the Constitution.

In the future, an over-reliance on AI in judicial decision-making could also erode the central role of human judges in the judicial process. While AI can be a valuable tool to assist in the review of evidence, it should not replace the discernment, judgment, and decision-making ability that only a human being can provide.

In other words, we cannot turn the judge into Hannah Arendt's (2016) figure of the tool man, who, so dependent on tools, becomes a tool himself, which, figuratively speaking, implies the loss of the human condition itself, which is essential when interpreting the world around him.

In conclusion, the introduction of artificial intelligence in the second judicial instance brings with it a number of significant challenges in terms of the standards of review of evidence and the protection of the right to effective judicial protection.

While AI has the potential to streamline the judicial process and improve its efficiency, it also poses substantial risks related to bias, opacity, dehumanization, privacy and liability issues.

In this sense, to ensure that AI is used legally and effectively in the judicial system, it is essential to establish robust safeguards, guarantee transparency and preserve the central role of human judges in judicial decision-making, so that the right to effective judicial protection is not undermined by the adoption of AI technology, whether in the first or second instance (Suárez Xavier, 2023).

Finally, with regard to the latest and most recent changes related to this matter, while it is true that the newly approved Artificial Intelligence Regulation in the European Union provides a series of limitations on the use of AI based on levels of risk—acceptable and unacceptable depending on the degree of risk posed by the AI—this general framework remains

insufficient to meet the need to comply with the principle of legality in the procedural domain, as we understand it.

VIII. CONCLUSIONS

Modernity invented the singular subject, the atomized man who exists by himself and for himself. Overthrown the *noesis noesos*[8], the search for a transcendental truth, the subject has become the architect of his own destiny, displacing the concepts of moral rationality, of moral superiority, of justice towards an atomized rationality and self-affirmation, creating a society that is self-reproducing from different models, in what philosophers call autopoiesis.

In this scenario, justice ceased to be a claim and is gradually becoming a product provided by the State and for which the Network Society demands a modification, just as it has been happening with the State Administration, the Administration of Justice is compelled to reinvent itself and adapt, reestablishing the rules of the game in order not to be crushed by the advance of companies and to continue providing the necessary public service of jurisdiction.

These changes cannot and should not occur without considering the need to respect fundamental rights, the privacy of individuals, the presumption of innocence and the dignity of the individual as fundamental values of the legal system.

Nor can it be accepted that such advances occur in a democratic society as an imposition of the State on society, and the debate on such issues should be initiated, aiming to allow society to know and implement such means.

It is not enough to establish Charters with programmatic values, but it is imperative to provide real and effective means for the defense of citizens' rights against the invasion of their privacy by the State and companies, forcefully regulating the use of personal or sensitive information by companies and by the State itself beyond the deficient system of *notice and choice*.

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[8] See: BLOCH, 1983. Available at: https://biblioteca.uazuay.edu.ec/opac_css/index.php?lvl=notice_display&id=39862

Beyond implementing a judicial office that preaches modernity, but where professionals are essentially unaware of the functioning of new technologies, it is necessary to promote the training of citizens with knowledge in artificial intelligence, its nature and its modes of use, thus aiming to prepare these professionals demanded by this new reality.

Ultimately, it is a matter of adopting public policies that promote awareness of these mechanisms and allow for the construction of a protective system based on the right to information, providing individuals with the certainty that their rights will not be violated in this modernization process and that justice continues to be dictated by and for people.

Reiterating what has already been stated, in conclusion, the introduction of artificial intelligence in the second judicial instance brings with it a number of significant challenges in terms of standards of review of evidence and the protection of the right to effective judicial protection.

While AI has the potential to streamline the judicial process and improve its efficiency, it also poses substantial risks related to bias, opacity, dehumanization, privacy and liability issues.

In this regard, to ensure that AI is used legally and effectively in the judicial system, it is essential to establish robust safeguards, guarantee transparency and preserve the central role of human judges in judicial decision-making, so that the right to effective judicial protection is not undermined by the adoption of AI technology, whether in the first or second instance.

The challenges are set and time is not an ally in the dispute for the implementation of a modern, free and essentially egalitarian and fair society. Therefore, it is not only up to the State, but to all professionals in the legal environment to understand, adapt and shape the technology around us into a servant of humanity, before we turn humanity into a servant of technologies.

BIBLIOGRAPHY

ARENDT, Hannah. *La condición humana*. Ed. Paidós. 2016. https://doi.org/10.4324/9781912281824

BARONA VILAR, Silvia. *Inteligencia artificial o la algoritmización de la vida y de la justicia*. Rev. Boliviana de Derecho, ISSN-e 2070-8157, Nº. 28, 2019, pp. 18-49. https://hdl.handle.net/10550/72542

BARUH, Lemi; POPESCU, Mihaela (2015). "*Big data analytics and the limits of privacy self-management*". New media & society, pp. 1-18. https://doi.org/10.1177/1461444815614001

BLOCH, Ernest. *El pensamiento de Hegel*. 2 Ed. Fondo de Cultura de Mexico. 1983. https://biblioteca.uazuay.edu.ec/opac_css/index.php?lvl &id=39862

CARMONA CUENCA, Encarnación. *Igualdad Material en la Jurisprudencia del Tribunal Constitucional*. Revista de Estudios Políticos Nueva Época. N. 84 v. 1. https://recyt.fecyt.es/index.php/RevEsPol/article/view/46902

CASTELLS, Manuel. *La sociedad red*. Alianza Ediorial. Madrid: 1997. https://doi.org/10.5377/realidad.v0i81.4290

CASTILLEJO MANZANARES, Raquel. "Nuevas tecnologías y prueba en el proceso penal. Especial incidencia en Inteligencia Artificia"l. *Derecho Digital e Innovación. Digital Law and Innovation Review*, 2022, no 11, p. 2. https://dialnet.unirioja.es/servlet/articulo?codigo=8402093

CORVALÁN, Jua Gustavo. *La primera inteligencia artificial predictiva al servicio de la Justicia: Prometea*. Diario La Ley. 29/09/2017. http://www.pensamientopenal.com.ar/system/files/2019/06/doctrina47747.pdf.

CRAWFORD, Kate; METCALF, Jacob. "*Where are human subjects in big data research? The emerging ethics divide*". Big data and society. (2016) https://doi.org/10.1177/2053951716650211

FELIPE GÓMEZ, Laureano. *Interoperabilidad en los Sistemas de Información Documental*. Revista Códice. V. 3, nº 1 jun/2007. Ed. Universidad La Salle. https://ciencia.lasalle.edu.co/co/vol3/iss1/2/

FOUCAULT, Michel. *Vigilar y castigar*. Ed. Biblioteca Nueva. Madrid, 2012. https://dialnet.unirioja.es/servlet/libro?codigo=143517

HALPÉRIN, Jean-Louis. *Exégesis*. Revista de Derecho de Barranquilla. N. 48, 2017. ISSN: 0121-8697. https://doi.org/10.14482/dere.48.10148

HEIDEGGER, Martin. *Carta sobre el humanismo*. Ed. Alianza. Madrid, 2000. https://dialnet.unirioja.es/servlet/libro?codigo=166281

HEIDEGGER, Martin. *Ser y tiempo*. Ed. Trotta. 3ª Ed. 2018. https://dialnet.unirioja.es/servlet/libro?codigo=93354

KAI-FU, Lee. *As superpotencias da inteligência artificial*. Ed. Relógio D´Água. Lisboa, 2019. https://dialnet.unirioja.es/servlet/libro?codigo=830980

KAULR KALRA, Harsimran. *A Review Study on Humanoid Robot SOPHIA based on Artificial Intelligence*. http://www.ijtc.org/download/volume-4/mar-4/IJTC201803001- 20Intelligence-s320.pdf

LINANT DE BELLEFONDS, Xavier. *L'utilisation d'un « système expert » en droit comparé*. Revue internationale de droit comparé, Vol. 46, 1994, No. 2, p. 703-718. https://doi.org/10.3406/ridc.1994.4899

PÉREZ ESTRADA, Miren Josune. "La inteligencia artificial como prueba científica en el proceso penal español". *Revista Brasileira de Direito Processual Penal*, 2021, vol. 7, no 2, p. 1385-1385. https://doi.org/10.22197/rbdpp.v7i2.505

PINO DIEZ, Raúl. *Introducción a la Inteligencia Artificial*. Universidad de Oviedo. Oviedo: 2001. https://dialnet.unirioja.es/servlet/libro?codigo=64918

RAMIÓ, Carles. *Inteligencia artificial y administración pública*. Ed. Catarata. Madrid: 2019. https://dialnet.unirioja.es/servlet/articulo?codigo=7235331

RODRIGUÉZ-ARANA, Jaime. *La buena administración como principio y como derecho fundamental en Europa*. Revista Misión Jurídica. n. 6 year 2013. https://doi.org/10.25058/1794600x.60

SANTOS, Milton. *La naturaleza del espacio*. Ed. Ariel S.A. Barcelona: 2000. https://dialnet.unirioja.es/servlet/libro?codigo=99359

SAPHIRO, Stuart C. *Encyclopedia Of Artificial Inteligence*. Ed. John Wiley & Sons. Nueva York, 1992. http://www.cse.yorku.ca/~tsotsos/Homepage%20of%20John%20K_files/teai-92.PDF

SCHWAB, Klaus. *La cuarta revolución industrial*. Ed. Debate, 4ª Ed. Barcelona, 2018. https://dialnet.unirioja.es/servlet/articulo?codigo=9369856

SOLOVE, Daniel J. (2013). "*Introduction: Privacy self-management and the consent dilemma*". Harvard law review, v. 126, n. 7, pp. 1880-1903. http://cdn.harvardlawreview.org/wpcontent/uploads/pdfs/vol126_solove.pdf

SUÁREZ GONZALO, Sara. *Big social data*. El profesional de la información, 2017, marzo-abril, v. 26, n. 2. P. 283-292. eISSN: 1699-2407 https://doi.org/10.3145/epi.2017.mar.15

SUAREZ XAVIER, Paulo Ramón. *Informe sobre aspectos bioéticos, legales y procesales del derecho a la identidad y el uso de procedimientos de reconocimiento facial por las fuerzas y cuerpos de seguridad*. UNESCO Chair of Bioethics and Law and Bioethics and Law Observatory of the University of Barcelona, CITI, KU Leuven. Colex Publishing, 2023. https://www.colexopenaccess.com/libros/

informe-sobre-aspectos-bioeticos-legales-procesales-derecho-identidad-uso-procedimientos-reconocimiento-facial-fcse-5080

SUÁREZ XAVIER, Paulo Ramón. *Justicia Predictiva: construyendo la justicia del Siglo XXI*. Aranzadi/Civitas, 2023.

SUÁREZ XAVIER, Paulo Ramón. El Reto de la Regulación de la Inteligencia Artificial en el Sistema Judicial y su Entorno. *Revista Jurídica Portucalense*, 2022, p. 144-157. https://revistas.rcaap.pt/juridica/article/view/26275/19641

VIOLA, Luigi. *Interpetazione della legge con modelli matematici*. Vol. I., 2ª Ed. Ed. Diritto Avanzato. Milán, 2018.

WALLERSTEIN, Immanuel. *Conocer el mundo, saber el mundo*. Ed. Siglo XXI. 2ª Ed. 2002, Buenos Aires. https://arxiujosepserradell.cat/wp-content/uploads/2023/02/Conocer-el-mundo-saber-el-mundo-Immanuel-Wallerstein.pdf

WOLFGANG SARLET, Ingo. *Los derechos constitucionales en el constitucionalismo contemporáneo*. In PRESNO SERNA, Miguel Ángel. (org.) Los derechos sociales como un instrumento de emancipación. Ed. Thomson Reuters Aranzadi. 2010. P.35-61.

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