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Seeking empathy: Mediators for an automated Administration*

Buscando empatia: mediadores para uma administração automatizada

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Abstract: Technological advancements in the field of Artificial Intelligence (AI) are increasingly bringing us closer to the possibility of incorporating automation in administrative decision-making. This tool would yield significant benefits in key areas such as efficiency and improvement of public services. However, it also poses risks, such as the potential loss of empathy that public workers contribute to decision-making and even the displacement of administrative personnel engaged in the processing of files. This study aims to delve into the aspects where the implementation of automated Administration would be feasible, distinguishing between rule-based and discretionary decisions. Administrative mediation and AI have distinct but teleologically complementary scopes of applicability within these powers. Consequently, we will explore how the role of the administrative mediator can represent a new administrative employment opportunity resulting from these new technological advancements, in search of the empathy and humanity compromised by the purely objective and amoral actions of any form of AI.

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Keywords: Artificial Intelligence (AI). Automated Administration. Role of public official. Administrative mediation. Administrative decision-making. Administrative humanization.

Resumo: Avanços tecnológicos no campo da Inteligência Artificial (IA) estão nos aproximando cada vez mais da possibilidade de incorporar automação na tomada de decisões administrativas. Essa ferramenta traria benefícios significativos em áreas-chave, como eficiência e melhoria dos serviços públicos. No entanto, também apresenta riscos, como a possível perda de empatia que os funcionários públicos contribuem para a tomada de decisões e até mesmo o deslocamento de pessoal administrativo envolvido no processamento de arquivos. Este estudo tem como objetivo aprofundarse nos aspectos em que a implementação da administração automatizada seria viável, distinguindo entre decisões baseadas em regras e decisões discricionárias. A mediação administrativa e a IA têm escopos de aplicação distintos, mas teleologicamente complementares, dentro desses poderes. Consequentemente, exploraremos como o papel do mediador administrativo pode representar uma nova oportunidade de emprego administrativo resultante desses novos avanços tecnológicos, em busca da empatia e humanidade comprometidas pelas ações puramente objetivas e amorais de qualquer forma de IA.

Palavras-chave: Inteligência Artificial (IA). Administração automatizada. Papel do funcionário público. Mediação administrativa. Tomada de decisão administrativa. Humanização administrativa.

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1 Introduction

The technological evolution of latter decades has recently achieved remarkable advances in the development of Artificial Intelligence (AI) models. The inclusion of these new technological tools in various aspects of society is far from negligible, as it has been considered as the starting point of the Fourth Industrial Revolution. This technology has the potential to profoundly alter almost all industries and herald significant changes in production systems, management, and governance.¹ It is necessary to start considering the legal implementation of these means and the necessary executive adaptation for their use. The law must keep pace with technology to avoid social and economic stagnation that could limit the country's growth and well-being. This issue needs to be addressed from the legal academia, proposing actions to anticipate an inevitable change. In the realm of bureaucracy, AI can enhance the efficiency and quality of public services while preventing

¹ K. Schwab argues that "there are three reasons why today's transformations represent not only an extension of the Third Industrial Revolution, but the arrival of a Fourth and distinct one: speed, scope, and impact of systems. The speed of current advances has no historical precedent. Compared to previous industrial revolutions, the Fourth is evolving at an exponential pace rather than a linear one" (SCHWAB, K. La Cuarta Revolución Industrial. *Futuro Hoy*, [*S. I.*], v. 1, n. 1, p. 6 2020).



issues such as regulatory hypertrophy and excessive juridification. However, the use of automated decisions raises questions about responsibility, institutional legitimacy, and the limits of such decisions. Focusing on this latter aspect, this study will address the areas in which algorithms can make decisions, as well as the problems of empathy and dehumanization they entail and the solutions that techniques such as administrative mediation can provide – and indeed, in practice, do provide. On the other hand, the application of AI to Public Administration and bureaucracy presents new challenges from a social and labour perspective, as it could lead to the disappearance of current administrative positions. Nevertheless, new technologies also create new employment opportunities, and one of them could be the administrative mediator, acting as an intermediary between decisions made automatically by AI and a dissatisfied citizen.

2 Law and the adaptation of Public Administration to new technologies

Weber asserted that as new needs arise from society, the dependence on bureaucracy increases as well, resulting in its expansion.² In the current "information age," where cutting-edge technological and scientific advancements emerge by dozens - if not hundreds - each year, there is a multitude of new needs and social expectations that recur with increasing frequency. The Administration requires innovative techniques to cope with these technological advancements and to adapt to the circumstances that arise. Thus, it is necessary to expand the legal system to align it with new technologies, while also improving the effectiveness and efficiency of bureaucratic responses. The expansion of the law inexorably entails an increase in the rights and duties of both the Public Administration and citizens, giving rise to more conflicts and claims based on these rights.3 In the absence of adaptable and flexible legal frameworks, the frantic pace required for legislative and bureaucratic resolution becomes unsustainable over time. This leads to regulatory hypertrophy and article hyperdevelopment, such as obscurity, potential contradictions, legal gaps, and inconsistencies⁴ along with a certain degree of legal uncertainty resulting from constant legislative and regulatory changes within constantly evolving regulatory fields. This hyperdevelopment also gives rise to a new problem: juridic-bureaucratic technification. Over time, officials must become more specialized in their assigned

WEBER, M. Economía y sociedad. Traducción: J. M. Echavarría. Ciudad de México: Fondo de Cultura Económica, 1912. p. 729.

As evidence, it is recommended to consult the reports prepared by the Consejo General del Poder Judicial of Spain (hereinafter referred to as CGPJ) on the "Overview of the Judiciary" in recent years, which show a significant increase in administrative litigation. Furthermore, there is a rising trend each passing year.

⁴ GALIANA SAURA, A. La legislación en el Estado de Derecho. Madrid: Dykinson, 2003. p. 34-38.

tasks due to the vast number of specific cases, specializations, and exceptions that may exist within a legal domain, in addition to the prevailing jurisprudential trends of the moment. As a result, it becomes exceedingly challenging for civil servants to engage in the general practice of "administrative law." External legal practitioners are not exempt from this problem either, as the flurry of new regulations implies that their areas of expertise are no longer solely "administrative law" *per se* but are likely to have other designations such as "urban law," "environmental law," "data protection," and so on. The specialty within a specialty is becoming the new norm.

Technological capacities evolve at a frenetic pace, and the Law needs to adapt to this evolution for a very simple reason: society changes as technology evolves, modifying its behaviour and the situations that can lead to conflict. Social changes imply the alteration of the legal framework in order to adapt to new social realities. Legal stagnation could lead to frustration and dissatisfaction, resulting in significant institutional problems. The consequences of not implementing these necessary changes at an institutional level are genuinely concerning. Poor legal adaptation to technological advancements, coupled with bureaucratic stagnation resulting from personnel who are unable or unwilling to adapt to new information and procedural models, can lead to widespread administrative disorganization, resulting in operational instability and inefficiency. This situation is becoming evident in the Spanish administrative system, stemming from the failure of many local entities to embrace the digitalization efforts initiated years ago, which were subject to specified time limits that have not been met.

Consequently, if progress is not made in the simplest aspects of Digital Administration, many local entities may, once again, lack the legal and administrative updates needed to apply the innovations proposed in this study. This would create a division within the Spanish Public Administration, with one segment being modern and functional, while the other remains obsolete and antiquated. These municipalities, still entrenched in late 20th-century bureaucracy, would find themselves overwhelmed by a substantial increase in administrative regulation – and consequently, an increase in workload – coupled with a significant decrease in efficiency. Moreover, they would require additional resources to handle the added workload resulting from their failure to modernize, creating an even greater *ouroboros*-like cycle, as the accumulated work will prevent them from transforming into a digitalized and automated Administration

⁵ PARSONS, T. Ensayos de teoría sociológica. Buenos Aires: Editorial Paidós, 1949. p. 271-272.

In this regard, it is noteworthy to mention the warning issued in CAMPOS ACUÑA, C. La digitalización de los procedimientos en los Gobiernos locales: una tarea pendiente. Cuadernos de Derecho Local, [S. l.], n. 58, 2022. p. 1.12: "The urgency of completing the digital transformation process of local entities must be considered, a conclusion that may seem obvious, but reality shows that while we engage in regulatory challenges of technologies such as Al, blockchain, or data exploitation through big data (...) there are still a significant number of local entities that have deep deficiencies in terms of electronic processing, lack interoperability in their procedures, and consequently, are far from the aforementioned data governance."



without external assistance. This forthcoming technological leap is already on the horizon, as it is being discussed and debated within academic forums as a pressing need for improving public services and administrative efficiency. In this regard, some practical projects are being carried out in different neighbour countries, which will be mentioned later.

2.1 Automated Administration: An imminent reality

The legal reluctance to implement new technologies has been and will continue to be a source of fear and confusion in the future, just as it was in the past with the advent of the first computers. Over fifty years ago, there were reservations about computer implementation, specifically regarding the topic addressed in this study: decision-making by Al. Concerns were raised, which persist today, regarding code transparency and the impartiality of the technicians who implement it. There is also doubt about the adaptability of information to new legal advancements and its necessary application to cases, depending on specialized judicial doctrine^{7.} Certainly, during that time, technology was not capable of achieving the levels of sophistication that are attainable today. Al was, literally, an imaginary concept. Ironically, the issues attributed to the possibility of computers acting as decision-making entities, particularly their technical adaptability to legal advancements, are found today in the majority of human legal practitioners.

López-Muñiz Goñi, in 1971, began to envision the hypertrophy and hyperdevelopment of norms on the legal horizon and warned of the need to seek an adaptive solution to modern and technological requirements. Certainly, this issue constitutes one of the major difficulties that both academia and legal practice currently face. A practical and conceptual shift is necessary in order to promote efficiency and legal certainty in addressing this long-noticed issue. Despite not being perceived as an urgent problem in the 1970s, today legal science points to this factor as one of the major challenges within the realm of the Social State. Computing and its new

FERNÁNDEZ RODRÍGUEZ, T. R. Jurisprudencia y computadores. Revista de Administración Pública, [S. I.], n. 64, p. 327-336, 1971.

LÓPEZ-MUÑIZ GOÑI, M. La electrónica al servicio del Derecho. Revista de Derecho Judicial, [S. l.], n. 46, p. 1-32, p. 2, 1971. The author already observed in early times an inflation of legal information stemming from growing legislation, further accentuated by the increasing jurisprudential factor and academic doctrine.

FERNÁNDEZ RODRÍGUEZ, T. R. Jurisprudencia y computadores. *Revista de Administración Pública*, [*S. l.*], n. 64, p. 334, 1971. Fifty years ago, with a "deflated" legal system, discussions about "legal inflation" began. However, at the time, it was not yet possible to attribute the problem to both the rules and the legal operators who should already start specializing. Fernández Rodríguez pointed out in this regard that "this alleged 'inflation' [in 1971] not yet an insurmountable problem for the specialist (the issue of specialization would be, moreover, a more urgent problem to tackle and, of course, prior to any admission of impotence). However, it must be acknowledged that the fact that there are now many more judgments, books, and regulations raise less of an information problem than a problem of legal education and awareness, which, in my view, are not at the optimal level among legal professionals in our country".

favorite offspring, AI, have evolved exponentially in recent years, yielding fascinating projects such as OpenAI's ChatGPT or Google's Bard. Additionally, there are many other AIs dedicated to specialized domains, such as travel organization, reading, translation, and summarization of scientific articles, or creating presentations for oral exhibitions, among many others. It is a rapidly developing field with significant practical applications, as these AI systems can analyze information and provide solutions based on the data at hand. The European Union has set out to innovate and implement AI in the private economic sector and bureaucracy to enhance European competitiveness, equating this technology to crucial human advancements such as the steam engine and electricity. 10 Consequently, it asserts, "Al is one of the most strategic technologies of the 21st century. Much is at stake. Our approach to Al will shape the world we live in. In the midst of fierce global competition, a strong European framework is needed.. In this way, the EU is committed to this publicprivate support for the application of AI. This European commitment is reaffirmed and increased year after year, with the latest example being the Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on AI (Artificial Intelligence Act) and amending certain Union Legislative Acts (hereinafter referred to as the EU AI Act proposal). Entities at all administrative and governmental levels have already begun to adapt automated systems around the world to enhance administrative efficiency or support officials in decision-making processes. 11 In this regard, there are already some regulatory examples - both national and comparative law - that address this matter. Furthermore, practical cases of the application of automated decision-making by Public Administrations can already be found worldwide. As an example, in the Spanish legal system, in article 14 of Ley nº 40/2015, de 1 de octubre, de Régimen Jurídico del Sector Público, automated Administration is referenced. It acknowledges the possibility of this resolution option in procedures and conceptualizes it as "any act or action carried out entirely through electronic means by a Public Administration within the framework of an administrative procedure and in which no public employee has directly intervened".

At the regional level, examples can also be found, such as article 44 of Catalan Ley 26/2010, de 3 de agosto, de régimen jurídico y de procedimiento de las administraciones públicas de Cataluña. This regulation allows for "automated administrative action [only in] acts that can be taken based on objective criteria and parameters". In comparative law, examples can also be found in France and

Check out Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee, and the Committee of the Regions on Artificial Intelligence for Europe (2018).

VEALE, M.; BRASS, I. Administration by Algorithm? Public Management Meets Public Sector. *In:* YEUNG, K.; LODGE, M. (ed.). *Algorithmic Regulation*. Oxford: Oxford University Press, 2019. p. 140.

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Australia, 12 among others. Regarding practical cases, the Spanish Tax Agency already has references to these mechanisms.¹³ Moreover, international examples include the Swedish student financing system. 14 the optimization of the Polish unemployment service. 15 Finland's significant investment in AI with its Aurora AI program, 16 and the grant allocation process for farmers in Estonia concerning compliance with application requirements.¹⁷ However, the use of these mechanisms must be exercised with caution and prevention, as a malfunction of the system may cause significant and continuous problems over time if not supervised and corrected by human intervention. An example of this occurred in the Netherlands when an algorithm was tasked with creating profiles of families prone to social welfare fraud and identifying them when irregularities occurred, notifying the relevant authorities. The outcome of the project was the algorithm wrongfully accusing over 26,000 Dutch families of fraud they did not commit.¹⁸ However, one should not be alarmed by errors; instead, they should be regarded as opportunities for learning, improvement, and continued evolution. Had humanity surrendered to setbacks and not strived for self-improvement, the world we know today would not exist. Therefore, it is imperative to explore the potential benefits offered by automated systems and the implementation of AI, while simultaneously addressing and rectifying the issues and shortcomings that have surfaced in the courageous practical ventures within the legal sphere.¹⁹ The significance of these pioneering initiatives is of utmost importance, and the problems that arise possess substantial value. Automated systems, designed to enhance decision-making reliability, should not be implemented until a comprehensive assurance of their correct and consistent functionality is established. Failure to do

PONCE SOLÉ, J. Inteligencia artificial, Derecho administrativo y reserva de humanidad: algoritmos y procedimiento administrativo debido tecnológico. Instituto Nacional de Administración Pública S. I.^{1, 2019.}

¹³ An example is Article 96 of *Ley nº* 58/2003, de 17 de diciembre, General Tributaria.

WIHLBORG, E.; LARSSON, H. HEDSTRÖM, K. The Computer Says No! – A Case Study on Automated Decision-making in Public Authorities. *In:* HAWAII INTERNATIONAL CONFERENCE ON SYSTEM SCIENCES (HICSS), 49., 2016, Koloa. *Proceedings* [...]. Koloa: HICSS, 2016. p. 2903-2912.

¹⁵ KUZIEMSKI, M.; MISURACA, G. Governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings. *Telecommunications Policy*, [S. I.], n. 44, p. 6-8, 2020.

Regarding this project, it is possible to consult the website of the Finnish Government, which provides details about Aurora Al. Available at: https://vm.fi/en/auroraai-en. Last accessed on: May 15th 2023.

¹⁷ FINCK, M. Automated decision-making and Administrative Law. *Max Planck Institute for Innovation and Competition Research Paper*, [S. I.], n. 19-10, p. 5-6, 2020.

Even the European Parliament has addressed the issue, as can be seen on the institution's own website: https://www.europarl.europa.eu/doceo/document/E-9-2023-000780_EN.html. Last accessed on: May 15th 2023.

The European Commission expresses its view on this matter in its Communication to the European Parliament, the European Council, the Council, the European Economic and Social Committee, and the Committee of the Regions on Artificial Intelligence for Europe 2018, stating: "As with any transformative technology, some AI applications can pose new ethical and legal challenges, for example, regarding responsibility or potentially biased decision-making. Therefore, the EU must ensure that AI is developed and applied within an appropriate framework that promotes innovation and respects the fundamental values and rights of the Union, as well as ethical principles such as accountability and transparency. The EU is also in a leading position to lead this debate globally."

so may result in the "semblance of credibility" becoming a cause for widespread skepticism regarding the capabilities of automated decision-making.²⁰ This is precisely what happened in the Netherlands following the catastrophic incident of the fraud accusation by the algorithm, which still resonates in conferences and events on Al applied to administrative procedures.

2.2 Benefits and issues of AI in administrative decisionmaking

According to European doctrine, Al can be defined as "systems that demonstrate intelligent behavior, as they are capable of analyzing their environment and taking action – with a certain degree of autonomy – in order to achieve specific objectives". Therefore, as long as they are trained and deemed to function correctly for the tasks they are intended for, they "can help improve and automate decision-making in the same field. For instance, an Al system can be trained for the detection of cyber-attacks based on data obtained from the network or the system in question. The use of Al in administrative procedures has the potential to bring improvements in terms of efficiency and effectiveness in public policies and services, which would enjoy a higher quality than the current state. As a result, at the citizen level, could suppose an increase of satisfaction and trust in public governance as long as the system functions as expected. To achieve this, the EU Al Act proposal foresees the introduction of "a European coordination mechanism, providing for appropriate capacities, and facilitating audits of the Al systems with new requirements for documentation, traceability, and transparency".

Regarding the hyperdevelopment and technification of law, although it is a widespread problem, local entities may be more compromised than other Administrations due to a lack of resources to have the necessary experts to address the growing legal needs. Algorithms can be highly useful in this aspect as they can be used to process this exponential legal complexity²³ instead of relying on an increasing number of specialists dedicated to specific areas of law – given the emergence of more and more legal specialties. This increasing effectiveness problem can thus be solved through the use of Als capable of processing and analyzing the updated

²⁰ KUZIEMSKI, M.; MISURACA, G. Governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings. *Telecommunications Policy*, [S. I.], n. 44, p. 4, 2020.

This is defined in the Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee, and the Committee of the Regions on Artificial Intelligence for Europe (2018).

²² KUZIEMSKI, M.; MISURACA, G. Governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings. *Telecommunications Policy*, [S. I.], n. 44, p. 4, 2020.

VOGL, T. M. et al. Algorithmic Bureaucracy. Managing Competence, Complexity, and Problem Solving in the Age of Artificial Intelligence. SSRN, [S. I.], p. 9, 2019.

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legislation and recently issued jurisprudence much faster. Depending on their proper use, this tool can even enhance the technical and operational administrative capacities, effectively fulfilling their obligations to citizens and achieving a more efficient realization of the right to good Administration as recognized by Article 41 of the Charter of Fundamental Rights of the European Union.²⁴

However, there can be various problems when implementing these tools depending on the bureaucratic level in which they are intended to be used. Al, hardly perfect and infallible in all its decisions, will require a certain level of human administrative control to ensure its adequacy to the factual and legal reality. Thus, Veale and Brass identify, from a governmental perspective, the need to specifically train officials in new techniques for controlling administrative decisions to ensure that automated decisions comply with established public values of accuracy, fairness, and transparency.²⁵ From an executability perspective, they highlight the need to monitor, improve, and update automated systems to address emerging problems. The learning process of Al can pose risks that the Administration is obligated to resolve when they arise, whether intentional or unintentional. Intentional problems refer to cases where specific discrimination against a particular group has been indicated (but this does not necessarily imply a malfunction, rather a misinterpretation, as positive discrimination is well-established in our legal practice). Unintentional problems occur when undetected errors within the AI system lead to undesirable outcomes.²⁶ Lastly, from the perspective of Public-Facing Administration or frontline service, there is the challenging tension of legitimacy that may arise from automated decisions.²⁷ Additionally, there are deeper regulatory issues regarding the discretionary powers of the reviewing official to overturn a decision made by AI or data protection concerns,28 among others.

²⁴ FINCK, M. Automated decision-making and Administrative Law. Max Planck Institute for Innovation and Competition Research Paper, [S. I.], n. 19-10, p. 5, 2020.

VEALE, M.; BRASS, I. Administration by Algorithm? Public Management Meets Public Sector. *In:* YEUNG, K.; LODGE, M. (ed.). *Algorithmic Regulation*. Oxford: Oxford University Press, 2019. p. 140.

FINCK, M. Automated decision-making and Administrative Law. Max Planck Institute for Innovation and Competition Research Paper, [S. I.], n. 19-10, p. 5, 2020.

It should be noted that in today's society, any automation of procedures previously carried out by humans initially faces social resistance. For example, the expansion of banking procedures through ATMs or the replacement of supermarket cashiers with self-checkout machines. In this case, the problem may be greater when it involves a public entity, rather than a private one, conducting the entire decision-making process.

Although it is not the main subject of this study, a brief mention of this aspect of automation in decision-making is necessary due to the subjective legal rights involved in data processing and automated decisions, as stated in Article 22 of the General Data Protection Regulation: "The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her." However, as highlighted in Article 22(2)(b), this right disappears when the automated decision "is authorized by Union or Member State law to which the controller is subject, and which also lays down suitable measures to safeguard the data subject's rights and freedoms and legitimate interests." It is evident, in this regard, that European law seeks to establish basic rights that protect citizens from discrimination that may be exercised through automated decision-making and the capacity to protect against such discrimination. In this sense, Ponce Solé (2019)

Perhaps, the most complex challenge is the applicability of empathetic and equitable factors in automated decisions. While this factor is often discussed in academic debates, it appears to be one of the major concerns regarding the implementation of these new technologies in bureaucratic processes. As Kirat *et al.* point out, it is desirable for Al, when making decisions in any procedure, to use empathetic and equitable means based on the social and cultural values of the citizens, which can be seen expressed in the legal and jurisprudential framework of the moment.²⁹ However, the implementation of this system is not as straightforward as it may seem, as it requires significant interdisciplinary collaboration between two scientific branches that have not traditionally shared substantial academic spaces: legal sciences and mathematical and computer sciences.³⁰

In search of empathy in the new relational paradigm

3.1 The opportunity of mediation as an empathetic balancer of automated decision-making

At first glance, automated decision-making may appear to be another way of exercising administrative powers resulting in unilateral decisions. However, the impersonality brought by decision-making through AI would exacerbate a situation of administrative deafness in relation to citizens' complaints about the resolutions that affect them. From a social and legitimacy perspective, citizens want to be heard and expect the Administration to respond and explain its decisions in a comprehensible manner based on their issues, rather than relying solely on the literal reproduction of legal texts.³¹ Administrative mediation has the potential to reverse this situation and bring empathy to an increasingly dehumanized process.

According to Article 1 of the spanish Ley n^2 5/2012, de 6 de julio, de mediación en asuntos civiles y mercantiles, mediation is defined as "a means of dispute

argues regarding this regulation that "as with any transformative technology, some Al applications can pose new ethical and legal challenges, for example, regarding responsibility or potentially biased decision-making. Therefore, the EU must ensure that Al is developed and applied within an appropriate framework that promotes innovation and respects the fundamental values and rights of the Union, as well as ethical principles such as accountability and transparency. The EU is also in a leading position to lead this debate globally."

²⁹ KIRAT, T. et al. Equité et explicabilité des algorithmes d'apprentissage automatique : un défi technique et juridique. HAL Sciences Humaines et Sociales, [S. l.], p. 38, 2022.

KIRAT, T. et al. Equité et explicabilité des algorithmes d'apprentissage automatique : un défi technique et juridique. HAL Sciences Humaines et Sociales, [S. l.], p. 38, 2022. The authors argue that both disciplines "must intersect and enrich their perspectives. On the one hand, the design of models and the tests used must be understood by social scientists and legal experts; on the other hand, the insights proposed by the latter, combined with an understanding of legal mechanisms and their cultural and institutional context, can be usefully integrated by AI researchers and designers of machine learning algorithms".

BELANDO GARÍN, Beatriz. La mediación administrativa. Entre el derecho a una buena administración y la renovación de la justicia. In: AGUDO GONZÁLEZ, Jorge (dir.). Control administrativo y Justicia Administrativa. Madrid: Instituto Nacional de Administración Pública (INAP), 2016. p. 219.

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resolution, regardless of its denomination, in which two or more parties voluntarily seek to reach an agreement with the assistance of a mediator." However, the interest of this figure in relation to automated decisions lies in its sociological aspect, beyond its plausible legal application in administrative procedures through conventional termination under Article 86 of the Ley nº 39/2015, de 1 de octubre, de Procedimiento Administrativo Común de las Administraciones Públicas (LPACAP) or through contentious proceedings under Article 112 of the LPACAP, as a substitute for administrative remedies. The mediator, in any case, acts as an auxiliary to the agreement, neither deciding nor influencing it.32 Thus, based on their technical expertise in the matter, they are able to bridge the gap between the parties' plausible needs and interests and the reality of the dispute from an outsider's perspective. Consequently, mediation does not necessarily aim to achieve an agreement but rather to bring the parties closer together, enabling communication and understanding of the arguments underlying the controversy.³³ The negotiated mediation process, coupled with communication between the parties and mutual understanding of their interests and needs, can offer new perspectives or overlooked viewpoints that may modify or alter the reality stemming from a previous administrative decision.³⁴ The objective is, therefore, to approach the conflict from an equitable perspective, allowing for the avoidance of strict formalism and literal interpretation of the legal framework, and establishing a fair and empathetic assessment where feasible³⁵ within the discretionary scope, always respecting the principle of legality that binds all Public Administrations in their decision-making.

By enabling all parties to express themselves, a mediation procedure can achieve a sense of inclusion in the decision-making process and provide a lasting pacification of the controversy that brought them together, thereby preventing the persistence or generation of resentment or frustration over time. ³⁶ Although not delving into this aspect, avoiding future conflict or resentment towards the decision-maker can be an important consideration when discussing legitimacy in automated decisions. The lack of legitimacy in decision-making could be seen as a delegation of functions to

MEJÍAS GÓMEZ, J. F. Resolución alternativa de conflictos. In: CONSEJO GENERAL DEL PODER JUDICIAL (ed.). Curso sobre resolución alternativa de conflictos (arbitraje, conciliación). Valencia: Generalitat Valenciana, 1998. p. 27.

³³ AGUILÓ REGLA, J. El arte de la mediación. Argumentación, negociación y mediación. Madrid: Editorial Trotta, 2015. p. 119.

BELANDO GARÍN, Beatriz. La mediación administrativa. Entre el derecho a una buena administración y la renovación de la justicia. In: AGUDO GONZÁLEZ, Jorge (dir.). Control administrativo y Justicia Administrativa. Madrid: Instituto Nacional de Administración Pública (INAP), 2016. p. 206-207.

³⁵ CARBALLO MARTÍNEZ, G. La mediación administrativa y judicial: planificación legal y estratégica para su puesta en funcionamiento. *In:* VÁZQUEZ DE CASTRO, E.; FERNÁNDEZ CANALES, C. (coord.). Practicum *mediación 2016*. Madrid: Aranzadi, 2015. p. 424

³⁶ CALO, R.; KEATS CITRON, D. The automated administrative state: Crisis of legitimacy. *Emory Law Journal*, [S. I.], v. 70, n. 4, p. 797-846, 2021.

algorithm programmers by the responsible parties and ultimately create a legitimacy crisis. All these factors enhance the sociability and interpersonal empathy of the conflicting parties, leading to the consideration from a legal-philosophical perspective that mediation is a valuable tool for humanizing disputes.³⁷ It is precisely the lack of humanization that is attributed to automated decisions.

3.2 Applicability of mediation and AI in statutory and discretionary power

Considering the opportunities that mediation presents to provide the required empathy in the Academia for automated decision-making, it is necessary to study the complementarity of both systems from the perspective of statutory and discretionary powers.

Firstly, administrative mediation, in general, and specifically in Spain, is widely accepted in academic and jurisprudential circles when carried out from the perspective of discretionary powers. The Supreme Court of Spain's judgment of December 20. 2017. in this regard, particularly addressing conventional termination, determines that "the dispositivity principle (inherent to settlement and arbitration)³⁸ ends where the non-disposable binding to imperative law begins", clarifying that alternative dispute resolution methods are applicable only in cases "where powers and norms whose validity and operability cannot be disposed of are not at stake". From a doctrinal perspective, there is also broad acceptance of administrative mediation in matters subject to discretionary powers, while excluding cases where the power is statutory.³⁹ Thus, discretionary power is generally related to administrative actions in which human decision-making is acceptable and, consequently, can be relevant in the final decision. Factors such as equity or justice when choosing one option over another can be interpreted and applied based on reasoned legal grounds, always within the framework of legality. Therefore, communication with stakeholders, understanding the needs and interests of the parties, and making decisions based on legal considerations make mediation a viable option for resolving

Thus, Boqué Torremorell (La naturaleza ética de la mediación. In: ALONSO SALGADO, C.. VALIÑO CES, A. (coord.). La mediación a examen: experiencias innovadoras y pluralidad de enfoques. Santiago de Compostela: Universidade de Santiago de Compostela, 2017. p. 335) argues that mediation "believes in the human being, in their dignity and their humanizing capacities, even when facing conflicts. This is the ethical axis on which the entire process of seeking peaceful solutions to conflicts revolves since it relies on the potential of each person and their freedom to choose the good".

³⁸ Although the judgment mentions a settlement, this is another self-compositional of addressing interests similar to mediation and, therefore, they are perfectly analogous to the presented case.

PONCE SOLÉ, J. Manual de fonaments del Dret Administratiu i de la gestió pública. 3. ed. Valencia: Tirant lo Blanch, 2022. p. 456; PASCUA MATEO, F. Mediación e impugnación de actos administrativos. In: BAUZÁ MARTORELL, F. J. (dir.). Mediación y arbitraje en la administración pública. Cizur Menor: Wolters Kluver, 2022. p. 207.

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administrative conflicts within the discretionary sphere. As for statutory powers, Al appears to be the optimal tool for the task and is already being proposed as an efficient and capable solution within certain sectors of legal scholarship. 40 The rapid and efficient data analysis capabilities, as well as the adaptability to each specific case, enable automated decisions to have increasing potential with technological advancements. Thus, considering the benefits, it can be asserted that automated decisions seem to be a useful tool for resolving procedures based on statutory powers, such as subsidies, for example. However, the existing problems indicate that further scientific advancements are still necessary to solve issues like the one that occurred in the Netherlands. Nevertheless, this statement does not advocate for the implementation ad calendas graecas of automated discretionary decisions but rather encourages legislators and executives to patiently await the necessary advancements in the field of AI to address the aforementioned problems. The creative and problem-solving capacity of this tool is closer than one might think, as technological advancements suggest that artificial reasoning could soon meet the need for discretionary human evaluation.41 Once achieved, Al would be capable of handling the heavy workload associated with processing procedures in this regard. A regular software cannot be compared to AI, which can draw conclusions and make choices based on the information it possesses.

While mediation is theoretically ruled out for statutory powers, it appears to be a suitable system for cases involving discretionary decision-making. This could open the door to a debate between citizens and officials regarding the decision made by Al in a given case, adding an empathetic and human perspective to the final response in case the citizen disagrees with the automated decision. Interestingly, Al itself shares this opinion, as it has been asked about this issue⁴² and responded that "in general, mediation can be particularly useful in situations where administrative decision-making involves a dispute between the citizen and the Administration, and where it is important to reach a fair and equitable solution for both parties. Human

⁴⁰ PONCE SOLÉ, J. Manual de fonaments del Dret Administratiu i de la gestió pública. 3. ed. Valencia: Tirant lo Blanch, 2022. p. 335.

BUBECK, S. et al. Sparks of Artificial General Intelligence: Early Experiments with GPT-4. [S. l.]: Microsoft Research, 2023. p. 92. This is affirmed by the study conducted by Microsoft, which concludes, literally, that "We have presented our initial exploration of GPT-4 across a wide range of tasks and domains, providing supporting evidence to the claim that GPT-4's abilities are comparable to human-level for many of them". Although it is still not possible to classify Artificial Intelligence as possessing general intelligence, there are steps bringing it closer to that, and there is already talk of partial intelligence. "This is demonstrated by its core mental capabilities (such as reasoning, creativity, and deduction), its range of topics on which it has gained expertise (such as literature, medicine, and coding), and the variety of tasks it is able to perform (e.g., playing games, using tools, explaining itself...). A lot remains to be done to create a system that could qualify as a complete AGI".

In this case, the Artificial Intelligence "ChatGPT" was asked the following question: "If you assist in an administrative decision, what would be more effective, a subsequent human review or mediation between the Administration and the citizen?" The question was asked on May 11th of 2023, in version 3.5 of OpenAI.

review, on the other hand, may be more appropriate in situations where the decision is technical or complex, and where it is necessary to ensure that all relevant facts have been considered, and the applicable laws and regulations have been correctly applied. In any case, it is important to address the problem fairly, transparently, and effectively, taking into account the needs and concerns of all parties involved." In this way, automated statutory decisions can involve the affected person and a reviewer-mediator between the decision and the individual, who can seek joint solutions to the problem. In the case of automated discretionary decisions, it would be possible to apply a subsequent mediation procedure to resolve any conflicts that may arise after the automated resolution.

It is possible to see these two tools as complementary, creating a resolution system that is highly effective on both sides of the scale: quick decisions on one hand, and reasoned human judgment and empathy on the other. Furthermore, this could humanize and incorporate, in an empathetic manner, what the mid-2023 Amendment of the European Parliament introduced as "A right to explanation of individual decision-making" in Article 68(c), which states that "Any affected person subject to a decision which is taken by the deployer on the basis of the output from a high-risk AI system which produces legal effects or similarly significantly affects him or her in a way that they consider to adversely impact their health, safety, fundamental rights, socio-economic well-being or any other of the rights deriving from the obligations laid down in this Regulation shall have the right to request from the deployer clear and meaningful explanation pursuant to Article 13(1) on the role of the AI system in the decision-making procedure, the main parameters of the decision taken, and the related input data." However, it should be noted that Europe expresses significant concerns about these types of operations. designating them as "high-risk" in recital 40 of the EU Al Act proposal, and further clarifying this aspect through the mentioned amendments that add the following to its definition: "AI systems intended to be used by a (...) administrative body (...) the final decision-making must remain a human-driven activity and decision." Nevertheless, it is important to highlight that such operations are not prohibited; they will simply have a more protective framework for citizens, which administrative mediation appears to effectively manage. In summary, this fact could provide a new job opportunity that could gradually replace the traditional figure of the administrative professional: the administrative mediator.

3.3 The new role of public workers?

When the regular implementation of automated decisions within Public Administrations begins, as anticipated by many of the scientific fields involved, there will be a paradigm shift in the labor market. Many current case administrative



processors may no longer be necessary, and as a result, they may lose their jobs or simply not be hired for these functions. However, the implementation of AI will create new jobs that do not yet exist today, and within the administrative sphere, one of them could be the administrative mediator.

Depending on the country and the specific field in which public workers are engaged, their missions may vary significantly. Therefore, their conceptualization should focus on their State, legislation, history, and jurisprudence of their courts. Nevertheless, globalization and legal convergence through comparative law techniques allow for increasing similarities among the diverse workers who comprise the administrative framework. ⁴³ These elements – historical, normative etc. – have evolved over time, and thus, the sociological needs regarding bureaucracy are also changing.

The role of public workers as processors tied to the principle of legality will have to change completely with the advent of AI since there will already be an entity responsible for aligning itself objectively and impartially with these basic administrative needs. Public workers will be tasked with moderating automated decisions, and therefore, their labor character will become more social in nature. They will need to strike a balance between equity and justice in a decision-making system completely dominated by this principle of legality exacerbated by AI. Thus, the essential role of the new labor position within the Administrations will no longer be focused on processing, but rather on seeking that teleological-normative purpose in the automated decisions inherent to the Social State. In this way, public workers will move away from the repetitive tasks typical of the current bureaucracy and redirect their efforts towards a more proactive labor sphere related to public service in which they are situated.44 There are already examples of this applied technological evolution today. In the aforementioned Swedish case, after conducting interviews with public workers subject to automated decision-making, Wihlborg, Larsson, and Hedström concluded that these workers were already mediating between citizens and the algorithm precisely in this sense: "When the automated system entered the network, they were constrained both in terms of the decisions they could take part in and how they could manage them. Thus, in the decision-making process, they have to balance the ethics of care and the ethics of justice, where the latter and the rule by law is dominating".45

⁴³ ROYO-VILLANOVA, S. El concepto de funcionario y la relación de función pública en el nuevo Derecho Español. Revista de Administración Pública, [S. I.], n. 44, p. 10-11, 1964.

⁴⁴ KUZIEMSKI, M.; MISURACA, G. Governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings. *Telecommunications Policy*, [S. I.], n. 44, p. 4, 2020.

⁴⁵ WIHLBORG, E.; LARSSON, H. HEDSTRÖM, K. The Computer Says No! – A Case Study on Automated Decision-making in Public Authorities. *In:* HAWAII INTERNATIONAL CONFERENCE ON SYSTEM SCIENCES (HICSS), 49., 2016, Koloa. *Proceedings* [...]. Koloa: HICSS, 2016. p. 2908.

Building upon the study of regulated and discretionary powers and the interrelationship between mediation and automated Administration, and in relation to the analyzed cases, the following framework of public action in conflicts of this nature could be determined as:

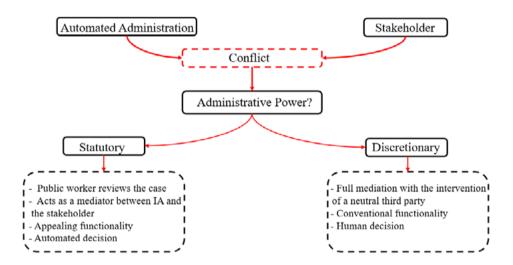


Figure 1 - The role of the public worker in an environment of automated Administration Source: Self-developed.

The figure shows the relation between stakeholders and Administration and the system that should be adopted depending on the administrative power utilised for the decision-making.

In this scheme, automated decisions represent algorithmic systems and Al that can make decisions automatically based on predefined data and rules. These decisions may encompass areas such as request processing, resource allocation, or administrative decision-making. Stakeholders represent individual citizens or groups of people who interact with automated decisions. They can be ordinary citizens, enterprises, or other entities affected by the decisions made by algorithms. The mediator in this scheme, if the administrative power is statutory, is the public worker. Their role is to act as an intermediary between automated decisions and citizens. The public worker can supervise and manage automated decisions, ensuring transparency, ethics, and equity in their implementation. They can also provide advice, resolve disputes, or address complaints from citizens affected by automated decisions. This scheme reflects a dynamic in which the public worker has the responsibility to mediate and ensure that automated decisions are fair and aligned with the needs and rights of citizens. In the context of discretionary

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decisions, where there are multiple possible responses to a given case, a human response should be provided to the problem. Traditional mediation appears to be the optimal system for this purpose, making it the most suitable mechanism for resolving such disputes (if they arise). Thus, it is possible to differentiate this dual aspect: in regulated powers, there must be an active involvement of the public worker-mediator in the case in search of equity and adequacy, while in discretionary powers, while in discretionary powers, a third-party mediator must be present, who is comprehended as a neutral third party, in order to have an effective negotiation regarding the different possible responses to a specific case, thus achieving a human decision when there is a conflict due to an automated discretionary decision.

As can be seen, the proposed mediation is not a procedure based on the common principles of mediation and the neutrality inherent in the third party; instead, it bears more resemblance to the concept of a managing third party suggested by Karambayya and Brett, ⁴⁶ acting as an authority that mediates in a conflict between two individuals under its purview. Thus, it is predisposed to seek a peaceful resolution to the conflict between the entity it must oversee, *i.e.*, AI, and the individual it must pursue the general interest and maintain a good institutional relationship with, *i.e.*, the person. In essence, the proposed model does not rely on the common mediation system but rather on a mechanism that facilitates bridging positions and enhancing the ability to address conflicts through an automated Administration with a human-centric approach.

Following the Swedish case, to relate it to the aforementioned, the authors find two types of positioning by public workers regarding administrative conflict: alliance with the citizen and alliance with the algorithm.⁴⁷ However, this system is designed for an environment where regulated powers are basically found, and individuals' decision-making capacity is very limited. Although, as Carballo Martínez rightly points out, even within regulated powers, there is a margin of discretion, to a greater or lesser extent, when they allow for a solution among different valid alternatives or establish a framework in which that regulated act must be used.⁴⁸ It is this factor, the variables, that places the public worker in an essential position, who encounters limited discretionary power that would allow them to act as a mediator within the decision-making process. Thus, the officials, evaluating the case from their

⁴⁶ KARAMBAYYA, R.; BRETT J. M. El tercero gerente. Estrategias, proceso y consecuencias de la intervención. In: FOLGER, J. P., JONES, T. S. (ed.) Nuevas direcciones en mediación, investigación y perspectivas comunicacionales. Buenos Aires: Paidós, 1994. p. 241-245.

WIHLBORG, E.; LARSSON, H. HEDSTRÖM, K. The Computer Says No! – A Case Study on Automated Decision-making in Public Authorities. *In:* HAWAII INTERNATIONAL CONFERENCE ON SYSTEM SCIENCES (HICSS), 49., 2016, Koloa. *Proceedings* [...]. Koloa: HICSS, 2016. p. 2909.

⁴⁸ CARBALLO MARTÍNEZ, G. La mediación administrativa y judicial: planificación legal y estratégica para su puesta en funcionamiento. *In:* VÁZQUEZ DE CASTRO, E.; FERNÁNDEZ CANALES, C. (coord.). Practicum *mediación 2016*. Madrid: Aranzadi, 2015. p. 418.

professional perspective, can position themselves in one way or another to address the controversy from the best perspective. According to the scheme, by endowing the public worker with that reviewing capacity, an appealing functionality – similar to administrative appeals but with more personalized attention - would be achieved. The alliance with Al can involve factors such as advice on the measures the citizen should take, as well as how they can attempt to reverse or improve their situation by informing them about the documentation to provide to change the algorithm's perspective; even, in the field of transparency, where the right to be informed of the reasons why AI has made a decision can be obtained. The administrative mediator, acting as an educator, can explain the specific circumstances of the case in a transparent and understandable environment for the citizen and provide an empathetic response to this issue that arises from European regulations. In the case of an alliance with the citizen, the public worker can include, modify, or make clarifications about the citizen's requests and their individual situation in the algorithmic variables of the case, so that Al considers previously unassumed aspects and can evaluate new avenues of resolution. It should be noted that, although the authors do not mention it, these avenues do not seem to be mutually exclusive. As inferred from these facts, the key difference of the mediating aspect (and not heterocompositive despite the official's positioning) is that the public worker would not have decision-making power in regulated aspects. The official proposes solutions to the citizen that allow modifying the automated decision by introducing new variables, but in the end, it is the algorithm who resolves it. The function of this public worker at the end is acting as a mediator between the decision and the citizen. A similar approach is presented in the Estonian case, where when clarifications about the data provided to AI are needed. The intervention of an official who clarifies this information and any doubts that may arise about the automated decision must exist⁴⁹. This administrative mediation for automated regulated powers is easily classified within what Alzate Sáez de Heredia et al. understand as formal equity in mediation. Regarding this, they comment that "research reveals that the parties mostly consider that they have been treated fairly in a conflict resolution process if they have been given the opportunity to tell their own story and if they have been heard by a neutral and respectful third party". 50

Regarding discretionary powers, the discussion can become much more complicated in the academic and legal field. As mentioned before, there are

⁴⁹ FINCK, M. Automated decision-making and Administrative Law. *Max Planck Institute for Innovation and Competition Research Paper*, [S. l.], n. 19-10, p. 6, 2020.

⁵⁰ ALZATE SÁEZ DE HEREDIA, R. *et al.* La intervención en conflictos mediante procesos adaptativos: valores de la mediación e intuicionismo ético. *In:* ALONSO SALGADO, C. VALIÑO CES, A. (coord.). *La mediación a examen*: experiencias innovadoras y pluralidad de enfoques. Santiago de Compostela: Universidade de Santiago de Compostela, 2017. p. 370-371.

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reservations and even absolute rejections regarding the use of AI to decide discretionary aspects. However, the role of the public mediator, which in this case should have complete self-compositive character - rather than partial, as a result of the revision of regulated powers - should be able to compensate for this lack of human participation in automated discretionary decision-making. In these cases, the citizen would have the opportunity to discuss with an official authorized to reach agreements and attempt to find a solution that replaces the "high-risk" administrative decision. Likewise, the presence of a neutral third party - external to the procedure - on which both parties agree to participate should be considered. It is important to note that the agreement is always voluntary, and in case an agreement is not reached, the automated decision can still be maintained due to the refusal to reach an agreement. Partial modification of the decision through an agreement that, although does not encompass the entirety of the disputed matter, which could cover only a part of it, would also be possible in these cases. Thus, the solution to discrepant discretionary automated decisions would be a complete administrative mediation, with its phases and voluntary agreement.

Despite the initial rejection, it is a technology that can also be applied to discretionary matters and with the passage of years – or decades – it will eventually be used, just as typewriters or computers were. The number of appealed cases could initially increase due to human willingness to have another person respond to their requests, but the actual workload derived from processing files would disappear completely. The complete elimination of administrative processing burdens would open the door for the Administration to allocate its human and economic resources to socially more important aspects. Consequently, the reassignment of current workers to these new communicative and pacifying positions in administrative resolutions would provide the system with prompt resolution and individualization of each case, improving the service offered by public entities.

4 Conclusions

As the European Union has been advocating for years, there is no need to fear technological progress but rather accept it as an intrinsic part of the future and strive to adapt our institutions and processes to ensure that our organizational system is at the forefront of the world and remains competitive when this progress is definitively implementable. However, as Finck warns, Al is still in developmental stages, and therefore, it is necessary to avoid both alarmism and unwarranted optimism at present.⁵¹ Nevertheless, it is an undeniable reality that, just like the

⁵¹ FINCK, M. Automated decision-making and Administrative Law. *Max Planck Institute for Innovation and Competition Research Paper*, [S. l.], n. 19-10, p. 20, 2020.

wheel was incorporated into carriages, steam engines revolutionized industries, electricity became ubiquitous in various activities, and computers permeated all sectors of labor; developed and enhanced AI will be implemented in the everyday lives of individuals and businesses alike. In fact, its emergence marks the beginning of the Fourth Industrial Revolution. It is the duty of the legislative power to regulate legislation that enables the effective implementation of these technologies as they continue to develop within our legal frameworks. It is the duty of the executive power to begin studying the opportunity that arises and initiate pilot projects to test its viability so that it can eventually be extended to the general administrative sphere. Furthermore, it is necessary to reconsider the job functions of those public workers whose primary tasks will be replaced by AI.

The scenario presented in this study would create a situation of complementarity between the radical objectivity that automated decisions can provide and the humanization of decision-making that humans can contribute when required, as well as new creative perspectives not contemplated by the algorithm itself. Through the role of the administrative mediator, a new role for the future public servant; transparency, equity, and ethics within decisions made from a cold and dehumanized context could be ensured, while also guaranteeing the new right to explanation of individual decision-making. The human solution, where needed, would also allow for problem individualization. With a negligible burden of procedural processing work, public workers could focus on improving public services from a human perspective and consequently increase citizen satisfaction, as they would feel involved in the decision-making processes that affect them. As advocated by Kuziemski and Misuraca,52 this personalization would lead to an evolution of the administrative system towards higher quality standards, thereby enhancing citizen well-being and creating an optimal business environment both domestically and internationally, resulting from accelerated administrative procedures. Therefore, legal progress must keep pace with technological advancements, and while there is no need to rush the implementation of these systems across all Public Administrations, it would be worthwhile to allow the aforementioned pilot projects in controlled areas, where these new technologies are applied to general administrative procedures and the role of the public servant is transformed, in order to observe if there is an improvement in the quality of public services.

⁵² KUZIEMSKI, M.; MISURACA, G. Governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings. *Telecommunications Policy*, [S. I.], n. 44, p. 11, 2020.



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Sobre a Revista

IJDL - INTERNATIONAL JOURNAL OF DIGITAL LAW

Objetivo

O International Journal of Digital Law é um periódico científico eletrônico de acesso aberto e periodicidade quadrimestral promovido pelo Núcleo de Pesquisas em Políticas Públicas e Desenvolvimento Humano (NUPED), do Programa de Pós-Graduação em Direito da Pontificia Universidade Católica do Paraná.

O Conselho Editorial é composto por renomados professores vinculados a instituições de ensino superior do Brasil, Argentina, Austrália, Colômbia, Espanha, Egito, França, Holanda e Índia. A linha editorial segue o eixo das atividades de pesquisa do NUPED, um grupo inscrito no diretório do CNPq e filiado à **Rede de Pesquisa em Direito Administrativo Social (REDAS)**. Seu enfoque é o estudo crítico das instituições jurídico-políticas típicas do Estado de Direito, notadamente as voltadas à inovação e ao desenvolvimento humano por intermédio da revolução digital.

Linha Editorial

A linha editorial segue o eixo de concentração do **NUPED – PPGD/PUCPR** intitulada "**Direito Econômico e Desenvolvimento**". Por sua vez, a área congrega duas importantes linhas de pesquisa: 1. **Estado, Economia e Desenvolvimento** e 2. **Direitos Sociais, Globalização e Desenvolvimento**. A revista dará destaque a este marco teórico. Entretanto, transversalmente ao tema da economia, do desenvolvimento, da globalização e dos direitos sociais, as palavras-chave que melhor definem o escopo da revista implicam a tratativa de temas como: acesso à informação, *big data, blockchain*, cidades inteligentes, contratos inteligentes, *crowdsourcing*, cibercrimes, democracia digital, direito à privacidade, direitos fundamentais, *e-business*, economia digital, educação digital, eficiência administrativa, e-government, fake news, gig economy, globalização, inclusão digital, infraestrutura, inovação, inteligência artificial, interesse público, internet, internet das coisas, jurimetria, *lawfare*, novas tecnologias, perfilamento digital, pesquisa em multimeios, processo administrativo eletrônico, proteção de dados, regulação administrativa, regulação econômica, risco, serviços públicos, sistemas de informação, sociedade da informação, transparência governamental e telecomunicações.

Double blind peer review

A publicação dos artigos submete-se ao procedimento double blind peer review. Os trabalhos são remetidos sem identificação de autoria a dois pareceristas ad hoc portadores de título de doutor, todos eles exógenos à instituição promotora da revista (PUCPR). Os pareceristas são, portanto, sempre pesquisadores vinculados a renomadas instituições de ensino superior nacionais e estrangeiras.