Data and Metadata. 2025; 4:1095 doi: 10.56294/dm20251095





Artificial Intelligence and Human Rights: Protection of privacy and personal data

Inteligencia Artificial y Derechos Humanos: Protección de la privacidad y los datos personales

Judith Josefina Hernández García de Velazco¹ © ⋈, John Eric Rhenals Turriago¹ © ⋈

¹Universidad de La Costa, Department of Law and Political Sciences, Barranquilla, Colombia.

Cite as: Hernandez Garcia de Velazco JJ, Rhenals Turriago JE. Artificial Intelligence and Human Rights: Protection of privacy and personal data. Data and Metadata. 2025; 4:1095. https://doi.org/10.56294/dm20251095

Submitted: 05-10-2024 Revised: 19-02-2025 Accepted: 15-06-2025 Published: 16-06-2025

Editor: Dr. Adrián Alejandro Vitón Castillo

Corresponding author: Judith Josefina Hernández García de Velazco

ABSTRACT

Trends in digital development and updating issues have been characterized by a permanent asymmetry between their characterization and application, varying according to the available resources and social environments. In this sense, new technological trends such as robotics, augmented reality, blockchains, sustainable technology, and artificial intelligence are directed. Artificial intelligence, with its impact on personal rights such as privacy, freedom, intimacy, and human dignity itself, requires protection and recognition of fundamental rights both at the level of the domestic systems of each nation, as well as international justice, especially by the Human Rights Courts. From the bibliographic review, the purpose is to analyze the evolution of the law in protecting privacy and personal data from a global perspective, with the effective recognition of human rights contributing to the discussion of ethical restrictions and transparency as a guarantee. Ethics, morality, and transcendental human values must permeate the use of artificial intelligence, as well as national and transnational legal safeguards to protect privacy rights and personal data.

Keywords: Artificial Intelligence; Human Rights; Privacy; Personal Data.

RESUMEN

Las tendencias en temas de desarrollo y actualización digital se han caracterizado por una permanente asimetría entre su caracterización y aplicación, variando según recursos disponibles y entornos sociales, en tal sentido, se direccionan las nuevas tendencias tecnológicas como la robótica, la realidad aumentada, cadenas de bloque, la tecnología sostenible, y en específico de la inteligencia artificial. Inteligencia artificial con su impacto en los derechos personales como la privacidad, la libertad, la intimidad, la propia dignidad humana, precisando desde sus aplicaciones, la protección y el reconocimiento de los derechos fundamentales tanto a nivel de los sistemas domésticos de cada nación, como de la justicia internacional, especialmente por parte de los Tribunales de Derechos Humanos. Siendo el propósito; analizar desde la revisión bibliográfica, la evolución del derecho en la protección de la privacidad y de los datos personales desde una visión global en perspectiva con el reconocimiento efectivo de los derechos humanos, a modo de contribuir en la discusión de las restricciones éticas y de la transparencia como garantía. La ética, la moral y los valores humanos trascendentales deben permear el uso de la inteligencia artificial, así como las salvaguardas legales nacionales y transnacionales para proteger los derechos de privacidad y los datos personales.

Palabras clave: Inteligencia Artificial; Derechos Humanos; Privacidad; Datos Personales.

© 2025; Los autores. Este es un artículo en acceso abierto, distribuido bajo los términos de una licencia Creative Commons (https://creativecommons.org/licenses/by/4.0) que permite el uso, distribución y reproducción en cualquier medio siempre que la obra original sea correctamente citada

INTRODUCTION

Artificial intelligence is the automation of intellectual tasks in a synthesized way in any human area, which compiles and replicates cognitive capacities in computer systems in different areas of interest, expressing itself in different artificial intelligences according to its thematic contextualization. Undoubtedly, as a technology, it also derives ethical problems in its application, which involve its uses and scope, and a central approach in this sense is the protection of personal data, as a fundamental right independent of the right to privacy that has had an asymmetrical development in different human rights systems. Despite the evolution of technology, globalization of the economy, and digitalization of human relations, there is no common level of data protection in the world.

In this order of ideas, the aim is to address and analyze the main aspects of the evolution of the protection of the right to privacy and personal data from a global perspective, based on its characteristics and special contexts, starting from a systematic review of qualitative bibliography with an exploratory and descriptive nature, to identify the main trends and dynamics.

METHOD

To develop the proposed review, a review was carried out from different databases (WOS-Scopus), implementing a qualitative approach with a bibliographic-documentary analysis for this purpose. This systematic orientation involves processing data from secondary sources, such as academic articles and documents related to the research topic, in successive phases of search, evaluation, analysis, and synthesis. (1,2,3)

RESULTS AND DISCUSSION

Privacy and Personal Data Protection Principles

In the area of personal data protection, the existence of a series of general principles, guarantees, and exceptions has been recognized. General principles are essential to guarantee, directly, the adequate protection of personal data (and, in some cases, the legitimate interests of legal persons), and indirectly, to safeguard the rights to privacy, honor, reputation, and freedom of expression (including freedom of the press), among others, through the creation of an adequate legal framework where each and every one of these human rights and fundamental guarantees can be made effective. (4,5,6)

This makes it possible to begin to consider a possible definition of the right to privacy, an issue that is difficult to address because there is no consensus among international human rights courts regarding its content. (7) From this perspective, the right to privacy has been enshrined as a human right, both in the Universal Human Rights System and in regional systems, specifically in the European and Inter-American systems. As regards the Universal System, i.e. with global scope, the Universal Declaration of Human Rights of 1948 (Article 12), the International Covenant on Civil and Political Rights of 1966 (Article 17), the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families of 1990 (Article 14) and the Convention on the Rights of the Child of 1989 (Article 16) consider it in practically the same terms. (8)

Other international guidelines, particularly regional ones, address specific countries, enshrined the right to protect personal data, and established a close link with the right to privacy. An example of such regulations is the documents issued by the Organization for Economic Co-operation and Development (OECD) on the protection of privacy and transborder data flows, which were initially adopted in 1980 and updated in 2013. According to them, these represent international unanimity in the general guidelines for the collection and management of personal information. Its objective, although it includes principles that inform the protection of personal data, is to adopt minimum standards to ensure privacy, although it is not binding. Thus, the protection of personal data acquires an instrumental character that makes the right to privacy effective.

Up to this point in the analysis, it is feasible to affirm that the basis and meaning of privacy in the legal sphere, which is also connected with privacy as a right, is found in the principle of the dignity of the person and the protection of the individual person. Ensuring the dignity of individuals to the full development of the individual personality, and consequently of the self-determination that emerges from the life project of each human being beyond sex, race, or nationality. In this way, it is convenient to affirm that the right to privacy is postulated as a personality right since it constitutes an instrumental good to guarantee the freedom of the individual in the development of his own life. (9)

The right to the protection of personal data as a fundamental right

Technologies have transformed and impacted the production of wealth using personal information, currently catalogued as personal data processing, which is directly related to these rights. In parallel to this situation, another new crisis arose, technological tools that allowed governments to invade the private lives of citizens under the doctrine of national security, promoting serious problems between the dynamics of human rights and the general interests of states, especially after September 11, 2001.

To reconcile these two conflicting needs, it was necessary for both organized civil society and the government,

in a unique exercise of citizen participation, to propose the issuance of the first personal data protection laws. It is important to note that the fundamental right to data protection seeks to guarantee the individual the power to control any type of personal data, its use, and destination, with the aim of preventing illicit trafficking and damage to the dignity and rights affected.

All processes related to the treatment and handling of personal data are of decisive importance, especially from the great universe of Big Data, which involves the management and processing of immense amounts of personal data that grant great privileges to public and private organizations and society in general but also entail proven risks in terms of privacy and intimacy. Thus, it is important that each entity establishes a personal interest in complying with the principle of the quality of the personal data used, as well as in their conservation and storage. (10)

The first reference to the above situation, that is, the gradual recognition of the protection of the rights of individuals and human dignity, was evidenced in the continental system related to the right to data protection when the German Federal Constitutional Court, through the judgment of December 15, 1983, on the Census, completed the constitutional rights of personality, based on the right to human dignity and the free development of personality, which guaranteed the continuity of the basic freedoms previously recognized through the formulation of a new right called informational self-determination. This right recognizes the ability of individuals to decide on the processing of their personal data, thereby guaranteeing related rights, such as the right to non-discrimination and the free development of personality. (11)

In the same order of precedents, and more recently, it is represented by the development of state control instruments that have enabled the protection of human rights with respect to artificial intelligence, through the intervention of the Council of the European Union, which presented in February 2019 conclusions regarding the Coordinated Plan on AI "Made in Europe," among which stands out the importance of ensuring full respect for the rights of citizens through the implementation of ethical guidelines for the development and use of artificial intelligence.

Faced with the described reality, the human right to the protection of personal data has profound challenges to overcome, especially in the face of artificial intelligence, focusing particularly on the humanistic part related to certainty and trust in all digital environments in an ethical manner to users. Extending this dynamic, it is necessary to invoke the Declaration of Principles of the World Summit on the Information Society, in which a commitment was made to build a society based on the person in which we could all create, consult, use, and share information and knowledge, to promote sustainable development and improve the quality of life, based on the purposes and principles of the Charter of the United Nations and fully respecting and defending the Universal Declaration of Human Rights. (12)

From the above, it follows that the defined and sustainable recognition of human dignity must be more present than ever in technological development and in the way in which regulation is configured around this postulate. Thinking about it in another way, we can say that technological development must preserve a balance between freedom and human dignity, which can be achieved through solid humanism and respect for such dignity as the central axis of scientific advances, where these scenarios are characterized by technology as a tool to empower people by dignifying them.

The right to the protection of personal data in artificial intelligence systems

The Universal Declaration of Human Rights, in Article 12, recognizes the right to non-interference in the private life of individuals, categorized as the most important antecedent, established as the foundation of the normative evolution through which the internal legal frameworks in each nation have been gradually incorporated, as evidenced by the different legal figures, which together protect the private life of individuals.

In this context, the right to the protection of personal data grants the owner of such data the power to decide on the treatment of their information, from its structuring to its destruction. This legal privilege usually materializes and comes to life in most constitutional documents of different countries through so-called ARCO rights, consisting of the rights of access, rectification, cancellation, and opposition to the processing of personal data.

However, the scope of this privilege, as with other human rights, the one related to the protection of personal data is not absolute, and in general in all constitutional charters it is interpreted and applied that all persons shall enjoy the right to the protection of their personal data, unless there is an impediment or restriction for reasons of national security, public order, public safety and health or to protect the rights of third parties.

A concrete and effective example of the challenges faced by the exercise of the prerogatives of access, rectification, cancellation, and opposition to the processing of personal data in Artificial Intelligence systems is the difficulty of exercising them in the face of a possible violation of human rights in the processing of personal data in facial identification systems used by different states. In other words, the Artificial Intelligence system logically operates with the information provided by the state entity, making it almost impossible to access,

rectify, or cancel data before or after a violation of a human right, such as freedom of expression.

An analysis of the above situation leads to the conclusion that the facial identification AI system constitutes a direct violation of freedom of expression in a democratic society, which establishes a systematic and prior measure of censorship and is disproportionate on the part of the state. This conclusion, which apparently has nothing to do with the right to the protection of personal data, can be deduced from an analysis of the type of data a system processes, the purposes for carrying out such processing, and an assessment of the principle of proportionality in matters of personal data.

It is necessary to qualify for the above example, indicating that the enormous challenge that looms with respect to the right to the protection of personal data in Artificial Intelligence is based on achieving a balance that allows taking advantage of the benefits of this technology without putting at risk the dignity of individuals and their fundamental rights. This is not an easy objective, since postulates such as transparency, the scrutiny of proportionality in the use of artificial intelligence systems, the incorporation of regulatory and ethical compliance schemes, state supervision mechanisms, and the defense against effects derived from automated decisions would have an imminent prevalence of fundamental rights in their essence.⁽¹³⁾

It is not difficult to conclude that the legal basis of human rights, especially the right to the protection of personal data, contributes to the establishment of rules for the processing of data using artificial intelligence systems. However, because of the automated processing of personal data by artificial intelligence, it is essential to recognize new ways of exercising the right to the protection of personal data that would even serve to guarantee other human rights, such as the right to nondiscrimination. (14)

Right to informational self-determination and personal data protection

Personal data protection was originally conceived in the European regulatory framework and was subsequently systematically reproduced by various Latin American countries. Since 1995 and based on Directive 95/46/EC, the European Union issued a personal data protection regulation, and in 2016, different levels of protection were established because of the existence of different criteria when implementing and applying Directive 95/46/EC in various scenarios. This resulted in the repeal of the Directive and the enactment of Regulation (EU) 2016/679.⁽¹⁵⁾

This type of right has been outlined in case law since 2014 with the judgments of the Court of Justice of the European Union, specifically in the Mario Costeja case, where the so-called right to be forgotten was expressly recognized for the first time, setting a precedent aimed at recognizing that any holder of personal data has the right to have any old personal information that is harmful to an individual deleted from the network.

In the same judicial dynamics, the same court determined that Google, given its status as a search engine, was obliged to develop a mechanism through which it could request de-indexing of content on the Internet, a procedure that currently involves the submission of an online form. In this way, it sets the world precedent that a private legal entity has the possibility of deciding and applying direct restrictions to the legitimate exercise of freedom of expression.

From this important judgment, the right to be forgotten began to be implemented, and consequently explicitly recognized in the new European Union Regulation, categorizing it as the right to the deletion of personal data, imposing an obligation on those responsible for the processing of personal data to adopt reasonable measures to satisfy the request made by the owner of the respective data.⁽¹⁶⁾

In the context of this analysis, it should be noted that the rule, in Article 17.3, regulates the right to freedom of expression as an exception to the exercise of the right to be forgotten. It establishes that in all cases in which there is obvious tension between the right to be forgotten and other fundamental rights, the balancing test must be carried out. This implies that, if the background is assessed, different authors consider the need to consider the passage of time as a determining condition for interpreting the right to be forgotten because the past relevance of a certain fact may disappear and, consequently, the information must return to the private sphere of the individual, a criterion that has not received unanimous acceptance worldwide. (17)

The human right to privacy and the management of personal data at national, international and cross-border levels requires maximum protection against the exchange of information that takes place between different countries on various issues, such as health, politics, trade and the use of new technologies, as well as the possible collision with the right of access to information. This inevitable reality necessarily leads to rethinking the way of interpreting fundamental and human rights from an interdisciplinary perspective that guarantees the effects and scope from political, legal, and social perspectives in favor of a vision of global citizenship for the future. (18,19,20)

CONCLUSIONS

In summary, artificial intelligence is used to consider human rights for the protection and transparency of privacy and personal data, extrapolating ethics, morals, and human values, which are intimately linked to the description of the background, advances, and realities that characterize the topic addressed. Such principles

J Hernandez Garcia de Velazco 33, el

ensure the welfare of human beings and determine the foundation and essence of universal human rights, which today represent the basis of all democratic rules of law.

The current digital and technological era represents a variety of risks to the right to privacy and the protection of personal data due to the lack of regulations and limits on the matter. However, this is not enough; the successive issuance of emerging regulations that are usually based on the negative experiences that shape such risks is sufficient.

Apart from the above, a new hermeneutic is needed to ensure a more comprehensive vision of domestic and international rights, focusing on the humanization of systems in the dignification of individuals and avoiding the systematic violation of fundamental rights such as freedom, identity, privacy, and intimacy at all levels of expression.

REFERENCES

- 1. Marín Rodríguez WJ, Andrade Girón DC, Zúñiga Rojas ZR, Susanibar Ramírez ET, Calvo Rivera IP, Ausejo Sánchez JL, et al. Artificial Intelligence and Augmented Reality in Higher Education: a systematic review. Data and Metadata. 2023; 2:121. https://doi.org/10.56294/dm2023121
- 2. Neuman WL. Social research methods: Qualitative and quantitative approaches. Pearson; 2016. https://www.scirp.org/reference/referencespapers?referenceid=3541386
 - 3. Boland A., Cherry M., Dickson R. Doing a Systematic Review: A Student's Guide. London: Sage; 2014.
- 4. Rainer A. TECHNOLOGY AND THE RULE OF LAW. LEGAL AND ADMINISTRATIVE STUDIES. 2023;29(2):7-20. https://www.upit.ro/_document/304501/jlas_2_2023.pdf
- 5. Inter-American Commission on Human Rights. *Inter-American Yearbook on Human Rights / Anuario Interamericano de Derechos Humanos, Volume 32 (2016): Volume 1.* Brill | Nijhoff; 2018. https://brill.com/edcollbook/title/36030
- 6. González Fuster G. Privacy and the Protection of Personal Data Avant la Lettre. En: The Emergence of Personal Data Protection as a Fundamental Right of the EU. Cham: Springer International Publishing; 2014. p. 21-54. (Law, Governance and Technology Series; vol. 16). https://doi.org/10.1007/978-3-319-05023-2_2
- 7. Maqueo Ramírez MS, Moreno González J, Recio Gayo M. Protección de datos personales, privacidad y vida privada: la inquietante búsqueda de un equilibrio global necesario. Revista de derecho (Valdivia). 2017;30(1):77-96. http://dx.doi.org/10.4067/S0718-09502017000100004
- 8. Piñar Mañas, J. L., ¿Existe la privacidad? En: Protección de datos personales. Compendio de lecturas y legislación. Colección INAI, Tiro Corto Editores, Mexico, Miller; 2010. https://archivos.juridicas.unam.mx/www/bjv/libros/12/5669/3.pdf
- 9. Sobrino García I. Protección de datos y privacidad. Estudio comparado del concepto y su desarrollo entre la Unión Europea y Estados Unidos. Revista de Derecho UNED. 2020;(25):687-713. https://doi.org/10.5944/rduned.25.2019.27017
- 10. Arellano López CA. El Derecho de Protección de Datos Personales. Biolex. 2020;12(23):127-36. https://doi.org/10.36796/biolex.v0i23.194
- 11. Judgment of December 15, 1983, issued by the German Federal Constitutional Court. https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/1983/12/rs19831215_1bvr020983en.html
- 12. Mendoza Enríquez OA. El derecho de protección de datos personales en los sistemas de inteligencia artificial. REVISTA IUS. 2021;15(48). https://doi.org/10.35487/rius.v15i48.2021.743
- 13. Contreras Gómez C. El papel del gobierno en la era digital: un enfoque de economía pública. Editorial Universitaria Ramón Arces; 2017. https://www.researchgate.net/publication
- 14. López Baroni MJ. Las narrativas de la inteligencia artificial. Revista de Bioética y Derecho. 2019; (46):5-28. http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1886-58872019000200002&lng=es

- 15. Franco García D, Quintanilla Perea A. La protección de datos personales y el derecho al olvido en el Perú. A propósito de los estándares internacionales del Sistema Interamericano de los Derechos Humanos. Derecho PUCP. 2020; (84):271-99. https://doi.org/10.18800/derechopucp.202001.009
- 16. Martínez López-Sáez M. Nuevos perfiles del derecho al olvido en Europa y España. Anuario de la Facultad de Derecho (Universidad de Alcalá). 2017; (10): 231-266. http://hdl.handle.net/10017/32729
- 17. Cobacho López Á. Reflexiones en torno a la última actualización del derecho al olvido digital. Revista de Derecho Político. 2019; (104):197-227. https://doi.org/10.5944/rdp.104.2019.24313
- 18. Robles Osollo AG. El derecho a la privacidad y la protección de datos personales transfronterizo. Revista Eurolatinoamericana de Derecho Administrativo. 2021; 8(1):35-60. https://doi.org/10.14409/redoeda. v8i1.9543
- 19. Carrasquilla-Díaz L, De Luque-Pisciotti A, Lagos-González E. Al Adoption in Colombian Legal Practice: Challenges and Opportunities. Procedia Computer Science. 2024; 241:508-513, https://doi.org/10.1016/j.procs.2024.08.072
- 20. Hernández García de Velazco JJ, Córdova Jaimes ER, Álvarez Pertuz AA. Digital Transformation: Participatory Actions Based on the Uses of Information and Communications Technologies (ICT). Procedia Computer Science 2024; 231:545-55. https://doi.org/10.1016/j.procs.2023.12.248

FINANCING

No financing.

CONFLICT OF INTEREST

None.

ACKNOWLEDGMENTS

TSU Johnny A. Velazco Gonzalez, Translator.

AUTHORSHIP CONTRIBUTION:

Conceptualization: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Data curation: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Formal analysis: Judith Josefina Hernández García de Velazco.

Research: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Methodology: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Project management: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Resources: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Software: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Supervision: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Validation: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Display: Judith Josefina Hernández García de Velazco, John Eric Rhenals Turriago.

Drafting - original draft: John Eric Rhenals Turriago.

Writing - proofreading and editing: Judith Josefina Hernández García de Velazco.