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TOWARDS ALGORITHMIC TRANSPARENCY IN THE PUBLIC SECTOR IN LATIN AMERICA

Technology Procurement, Implementation and Development

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ACRONYMS AND ABBREVIATIONS

ADM: Automated decision-making

AI: Artificial intelligence

FLPPDPP: Federal Law on the Protection of Personal Data Held by Private Parties

FLTAPI: Federal Law on Transparency and Access to Public Information

GLPPDMP: General Law on the Protection of Personal Data Held by Mandated Parties

GLTAPI: General Law on Transparency and Access to Public Information

IASHR: Inter-American System of Human Rights

INAI (Spanish acronym): National Institute for Transparency, Access to Information, and Personal Data Protection

INFO (Spanish acronym): Institute for Transparency, Access to Public Information,Personal Data Protection and Accountability of Mexico City

IPFLPPDPP: Implementing Provisions of the Federal Law on the Protection of Personal Data Held by Private Parties

IT: Information technologies

NDS: National Digital Strategy

NISG: National Institute of Statistics and Geography

OECD: Organisation for Economic Cooperation and Development

PCUMS: Political Constitution of the United Mexican States

UNESCO: United Nations Educational, Scientific and Cultural Organisation

FOREWARD

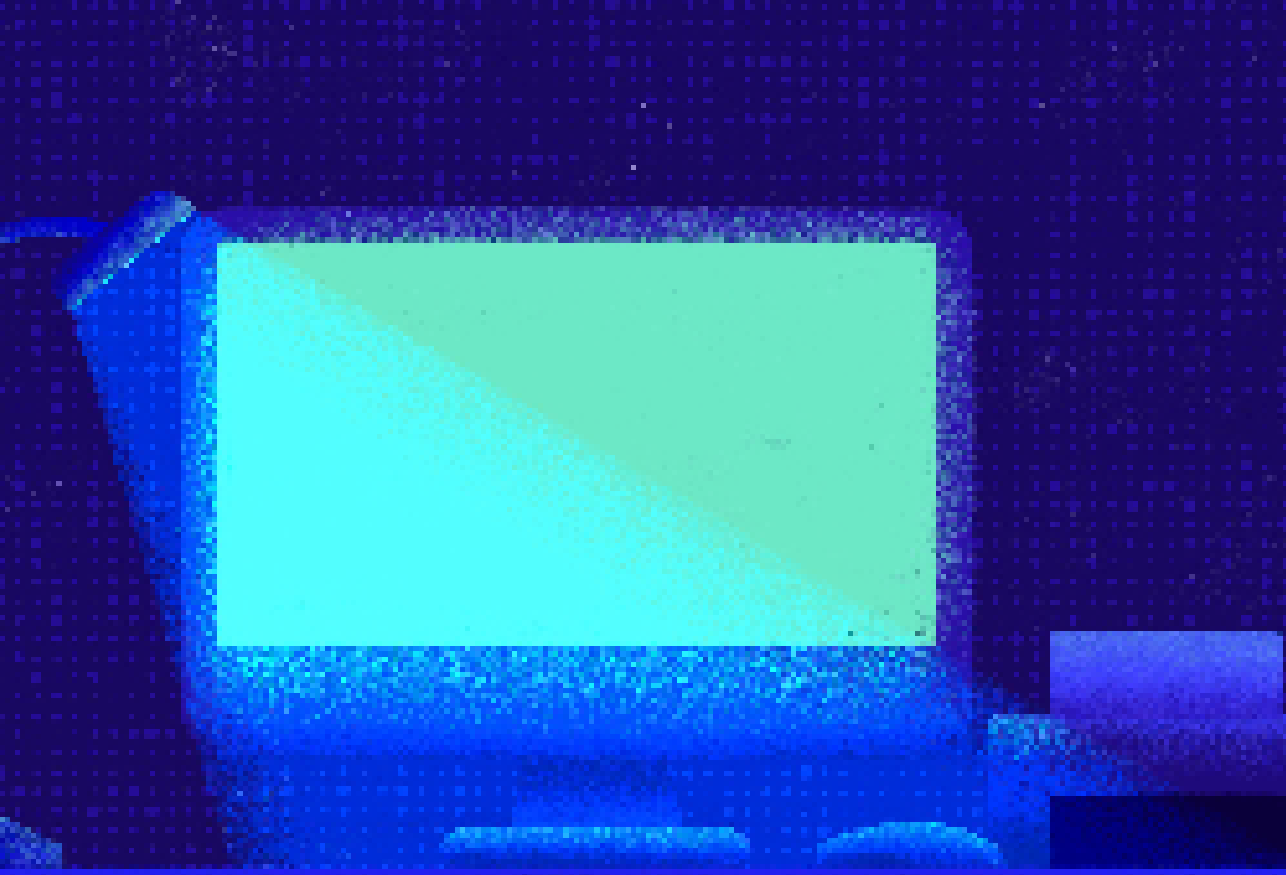
Emerging technologies have a major impact in many areas, including the exercise of certain human rights such as freedom of expression and access to information. In a world driven by innovation and immediacy, transparency regarding their use, implementation, development, procurement, and acquisition in the public sector plays a key role in securing public trust and promoting the responsible use of these technologies. Transparency helps to strengthen the democratic system and generate certainty in society by providing information about these practices, and in this regard, Latin America is a critical context for analysing how governments address this challenge.

It is not the aim of this study to identify the algorithms used in the public sector, but rather to assess the current legal framework on transparency in the procurement, implementation and development of these emerging technologies in the region. Its main objective is not to find out where algorithms are used in the public sector - studies on this topic have already been carried out in Latin American countries such as Colombia[1]1 and Mexico[2] - but rather to assess the current legal framework applicable to these activities. We draw attention to the importance of algorithmic transparency as a key component of accountability and trust in government. This legal report provides a detailed comparative analysis and a series of recommendations to improve transparency in the management of emerging technologies in Latin America.

With this document, we hope to strengthen transparency in the implementation of emerging technologies in Latin America by making specific recommendations to promote public policies in three key areas: procure-

1 Juan David Gutiérrez and Sarah Muñoz-Cadena, "Adopción de sistemas de decisión automatizada en el sector público: Cartografía de 113 sistemas en Colombia" ("Adoption of automated decisión-making systems in the public sector: Map of 113 systems in Colombia"), GIGAPP Estudios Working Papers 10 (2023): 267-272, https://www.gigapp.org/ewp/index.php/GIGAPP-EWP/article/view/329.

2 CIDE algorithms, http://algoritmos.cide.edu/.



ment, development and implementation of these technologies. Our aim is to encourage government actors, civil society, and the private sector to engage in informed, constructive dialogue on the search for inclusive, ethical and sustainable technological development in the region.

This study was carried out in collaboration with ARTICLE 19, Office for Mexico and Central America, the Law and Artificial Intelligence Research Department (LIDIA, in Spanish) of the UNAM Institute for Legal Research (IIJ-UNAM), and five law firms that have worked pro bono through the connection facilitated by TrustLaw, the Thomson Reuters Foundation's pro bono legal network.

ARTICLE 19, Office for Mexico and Central America
IIJ-UNAM Law and Artificial Intelligence Research Line
Thomson Reuters Foundation

WHO WE ARE

About ARTICLE 19's Office for Mexico and Central America

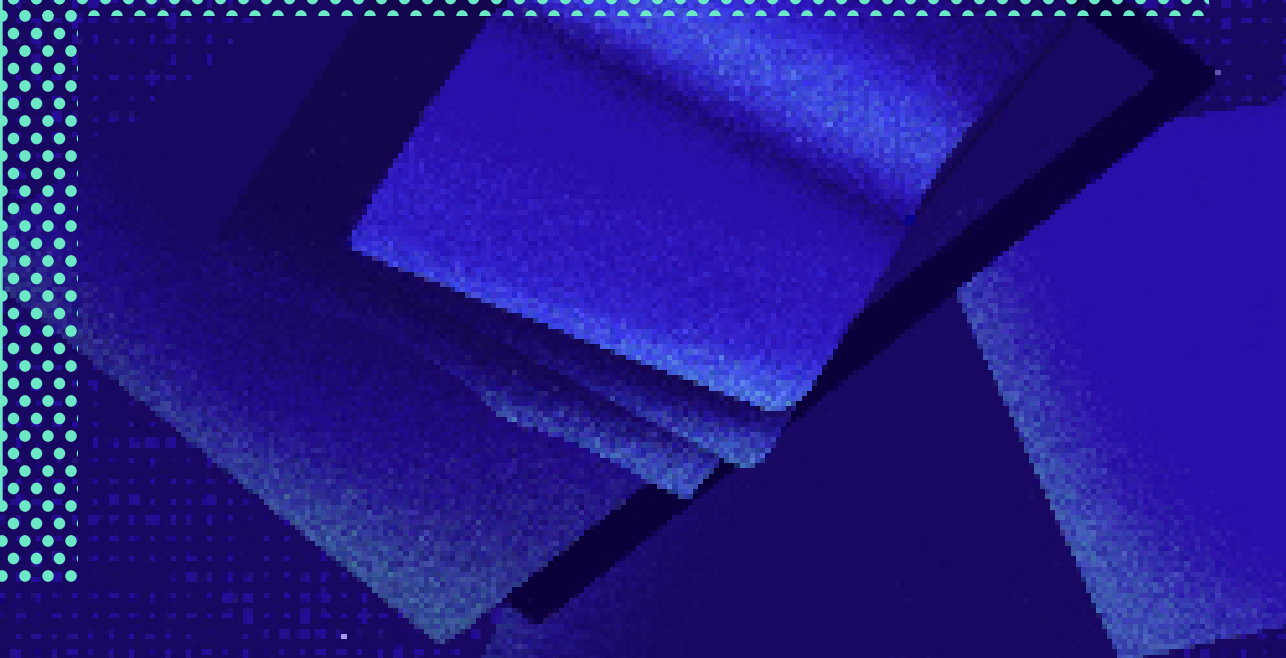
ARTICLE 19 is an independent non-governmental organisation that promotes and defends the progressive implementation of freedom of expression and freedom of information worldwide in accordance with the highest international human rights standards, thus contributing to the strengthening of democracy. We visualise a region where all people can exercise their right to information and express themselves in an environment of freedom, security and equality, thereby enabling society to be included in informed decision-making about themselves and their environment and leading to the full realisation of other individual and collective rights.

We work to link the promotion of public policies, the support of local processes, and the exercise of human rights in various entities in Mexico and Central America. ARTICLE 19 also promotes the recognition and protection of digital rights to prevent internet censorship mechanisms and measures that circumvent their exercise, through public policies, international treaties, judicial and administrative decisions, and private initiatives aimed at preventing people from exercising their digital rights. ARTICLE 19 works to ensure the appropriate conditions for individuals, the media, and journalists to exercise their rights of freedom of expression and information, privacy, access to the internet without discrimination, and any other rights relevant to the digital ecosystem.

The activities of ARTICLE 19's Office for Mexico and Central America are organised within the framework of the Central America, Digital Rights, Truth and Memory, and Protection and Defence programs. The Digital Rights Program organises activities related to online freedom of expression, including:

- multi-stakeholder advocacy to establish human rights standards on the Internet;
- monitoring and evaluation of patterns of digital aggression against journalists and digital rights;
- promotion of legal remedies to counteract surveillance or censorship practices.

The Digital Rights Program currently focusses on monitoring and investigating public mechanisms and measures by analysing the legal frameworks used to censor information on the Internet and highlighting their incompatibility with the highest standards of freedom of expression and information. The ubiquitous, open nature of the Internet creates an environment that shapes in complex ways a communication tool that enhances the exercise of individual rights, while also facilitating the attacks and aggressions documented by ARTICLE 19.



Law and Artificial Intelligence Research Department UNAM Institute for Legal Research

Since its launch in 2020, the Law and Artificial Intelligence Research Department (LIDIA) of the UNAM Institute for Legal Research has specialised in exploring the dynamic relationship that exists between law and emerging technologies. LIDIA analyses the legal and ethical regulatory implications of emerging technologies, with special emphasis on artificial intelligence (AI). Its objective is to address the challenges facing Mexico in this area. Its interdisciplinary and multi-sectoral approach is central to the training of legal practitioners and other professionals to equip them to be able to face the challenges of digitisation, the implementation of AI systems, and the protection of human rights in digital environments. LIDIA also works to disseminate a legal culture through publications and events that foster and enrich the dialogue that is essential to understanding how technology is transforming the social and regulatory environment in Mexico and Latin America. This combination of research and professional training demonstrates the commitment of UNAM and the IIJ to the study of cutting-edge topics with transformative potential, and positions LIDIA as a leading authority on the legal impact of technological advances.

Francisco Chan Chan is a researcher at the Notarial Institute for Legal Research of the College of Notaries of Mexico City; lecturer in Internet and Law (undergraduate and master's degrees) at the Faculty of Law of the Autonomous University of Yucatan (UADY), and Research Seminar lecturer for the Master of Laws degree at the Ibero-American University of Tijuana. He has also participated in academic and research projects for the Law and Artificial Intelligence Research Department (LIDIA) of the IIJ-UNAM since 2021, and has worked with the MX Internet Association, ARTICLE 19's Office for Mexico and Central America, the *Cultivando Género* (Nurturing Gender) Association, Meta, Uber, Rappi, and others.

Jesus Eulises Gonzalez Mejia is a lecturer at the UNAM Institute for Legal Research, where he has participated in the Law and Artificial Intelligence Research Department since its inception. He has an undergraduate and master's degree in law from the National Autonomous University of Mexico (UNAM). In the public sector, he served as head of the Personal Data Protection Department of the National Institute for Transparency, Access to Information and Personal Data Protection from 2010 to 2014, where he participated in the implementation of the first law on access to information and protection of personal data. In 2017, he founded the IIJ's Transparency, Data Protection and Archives Office, where he still participates in projects seeking to implement and monitor public information processes. He is co-author of several books, including *Libertad artificial: Discurso, redes*

y pluralidad, Moderación automatizada de contenido en plataformas digitales (Artificial Freedom: Discourse, Networks and Plurality, Automated Content Moderation on Digital Platforms). Through his participation in the Law and Artificial Intelligence Research Department he has promoted research into and the teaching and dissemination of legal knowledge by addressing key issues at the intersection of law and information technologies.

Thomson Reuters Foundation

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TrustLaw, an initiative of the Thomson Reuters Foundation, is the world's largest pro bono legal network. Working with leading law firms and corporate legal teams, we facilitate free legal support, ground-breaking legal research and resources for non-profits and social enterprises in over 190 countries. By spreading the practice of pro-bono world-wide, TrustLaw wants to strengthen civil society and drive change. If you have ideas for resources we could develop or legal research projects that would be of assistance after reading this guide, please contact us at trustlaw@thomsonreuters.com. If you are a non-profit or social enterprise in need of legal support, you can find out more about the service at www.trust.org and join TrustLaw for free.

We are grateful to the law firms that have participated in this research on a pro bono basis through the connection facilitated by TrustLaw: Mattos Filho, Veiga Filho, Marrey Jr. and Quiroga Advogados in Brazil; Hogan Lovells in Mexico; ECIJA Legal in Argentina; Cariola Diez Pérez-Cotapos & Cía. Ltda. in Chile; and a further pro bono law firm in Colombia.

INTRODUCTION

In this digital age, governments around the world, including those in Latin America, have increased their use of advanced computer systems to support the services that they provide to society. These technologies, which range from simple algorithms to advanced artificial intelligence systems, streamline and optimise government processes and improve the efficiency of public services. However, they bring with them significant risks to human rights, and ethical and regulatory challenges, particularly regarding transparency and equity in automated decision-making.[3]

The use of algorithms to influence or determine decisions that directly impact rights has raised significant concerns in academic sectors and civil society organisations globally. In countries such as Mexico, certain rights, such as the protection of personal data, freedom of expression, and access to information, are enshrined in the constitution. Although individuals have a legal right to be informed about what the state does, and how and why it does it, exercising this right is not always easy. The situation is further complicated by the complex, often opaque nature of information technologies, artificial intelligence, and automated decision-making processes, which are at times incomprehensible to the public, and even to government officials. The lack of algorithmic transparency increases the risk of biased or discriminatory decisions that disproportionately affect certain groups and individuals, and

3 Pablo Jiménez Arandia, *Transparencia algorítmica en el sector público* ("Algorithmic Transparency in the Public Sector") (Spain: Generalitat de Catalunya (Govern obert 9), 2023), 19, https://governobert.gencat.cat/web/.content/01_Que_es/recursos-i-publicacions/colleccio-govern-obert/GovernObert_9/Govern-Obert-9-cast.pdf.

at times it is impossible to fully comprehend, much less question, these processes.

According to Sangüesa, society has progressed from simple interconnection via the internet to the accumulation and cross-referencing of all kinds of data in Big Data, and from there to automatic decision-making based on advanced analytics. The introduction of generative artificial intelligence and its increasing complexity has led to calls for the development of *explainable artificial intelligence* that neutralises the problems associated with technological black boxes.[4] The use of these technologies in the public sector has increased concerns about lack of transparency (and calls for more transparency)[5] particularly in fiscal and public safety matters, and in the pursuit and administration of justice, all of which are key areas due to the potential impacts of non-human decisions on the rights of those affected.

This begs the critical question: *Is it possible to achieve transparency in the use, implementation and development of emerging technologies in the public sector?*

The focus of this study into transparency in emerging technologies in Latin America is to explore how regional governments are addressing the challenge of communicating their policies, projects and processes related to the implementation and development of emerging technologies and making them transparent. The aim of this analysis is to identify best practices, challenges, obstacles, and potential areas of improvement in the responsible implementation of technological innovations, thereby promoting transparency, accountability and rights-centred approaches.

4 Ramón Sangüesa, "Artificial intelligence and algorithmic transparency: 'It's complicated'", *BiD: textos universitaris de biblioteconomia i documetació* No 41 (December 2018), https://bid.ub.edu/en/41/sanguesa.htm.

5 Pablo Jiménez Arandia, *Transparencia algorítmica en el sector público* ("Algorithmic Transparency in the Public Sector"), 41.

Although the concept of algorithmic transparency is absent from Latin American regulations, human rights-related legal mechanisms are enshrined in national constitutions and governed by the legal, institutional and doctrinal framework of the Inter-American System of Human Rights (IASHR). Rights such as the protection of privacy, freedom of expression, and rectification of inaccurate communications, among others, can help us conceptualise and create rules of algorithmic transparency in the public sector. This is exemplified by the existing personal data protection laws in Mexico, which establish obligations related to algorithmic transparency, and compliance models relating to risk prevention which are already in operation and mandatory for the public sector.

Objectives

The objective of this study is to explore the regulatory framework governing the *procurement*, *development* and *implementation* of emerging technologies by the public sector, and the algorithmic transparency mechanisms in place in Argentina, Brazil, Colombia, Chile and Mexico. We aim to:

a. Establish the basic concepts and definitions needed to develop the notion of public access to information related to the development, procurement and use of AI and other emerging technologies;

b. Review the status of public sector transparency regarding the use and development of emerging technologies in Argentina, Brazil, Colombia, Chile and Mexico;

c. Identify best practices and put forward recommendations for drafting regulations and implementing public policies on algorithmic transparency in Mexico; and

d. Disseminate the main findings of this study.

Methodology

This report is the result of an exploratory analysis and comparative research conducted by five pro bono law firms connected through the TrustLaw pro bono legal network of the Thomson Reuters Foundation. The study was conducted in various stages:

In the *preparatory stage*, we developed a detailed questionnaire on the legal framework governing the procurement, development, and implementation of emerging technologies and transparency mechanisms in five Latin American countries: Argentina, Brazil, Chile, Colombia and Mexico. The aim of the questionnaire was to obtain a comprehensive overview of how these countries are currently integrating new technologies into their legal and administrative structures. We focused on different critical aspects such as transparency and accountability to identify strengths and weaknesses in existing regulations and the processes used to implement new technologies. This stage included the following steps:

FOCUS ON ALGORITHMIC TRANSPARENCY

a. *Theoretical and conceptual framework.* To build a solid basis for the study, we reviewed multiple sources of information, data, and relevant academic studies. This phase included a review of specialised literature and documents offering broad perspectives on algorithmic transparency. This, the central theme of our study, was defined as the capacity of algorithmic systems to be understood and audited by third parties. The theoretical review ranged from key definitions to ongoing debates surrounding the implementation of transparency and its associated ethical challenges.

b. *Methodological dialogue.* Following a collaborative dialogue with members of the ARTICLE 19 team and the Thomson Reuters Foundation, we decided to focus the study on algorithmic transparency, even though we were aware of the potential lack of standards or policies that address this issue to the required depth. For this reason, the scope of the study was expanded to include regulations related to accountability, personal data protection, and transparency in the procurement of emerging technologies. This strategic decision allowed us to develop a more comprehensive conceptual framework and to explore both existing regulations and potential gaps in the legislation governing the right to information in the countries studied.

c. *Development of search protocol and data collection.* The aim of this protocol was to draft clear, systematic questions to collect relevant data.

During this stage, five law firms[6] located in these countries participated pro bono in the study by completing the study questionnaire. These law firms were responsible for carrying out the research, responding to the questions, and providing the information used by ARTICLE 19 and the Thomson Reuters Foundation to understand the legal landscape in each country. Following this, they were given feedback and asked to provide additional details and clarify certain points to improve the quality and comprehensiveness of the information compiled.

ALGORITHMS CAN AFFECT HUMAN RIGHTS IF THEY ARE NOT SUFFICIENTLY TRANSPARENT

6 The participating law firms included: ECIJA Legal, Argentina; Hogan Lovells, Mexico; Mattos Filho, Veiga Filho Marrey Jr. e Quiroga Advogados, Brazil; Cariola Diez Pérez-Cotapos & Cía, Chile; and a further pro bono law firm in Colombia.

The feedback session focused on enriching the content and providing additional data relevant to the study.

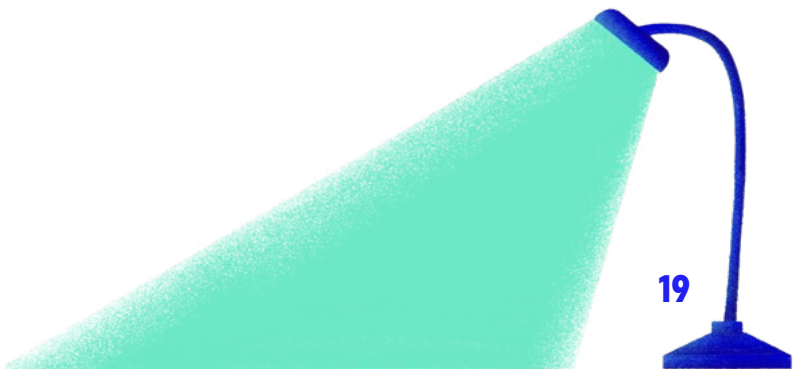
Analysis and Development

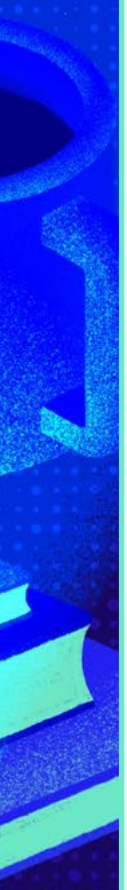
The inputs from the five law firms were collated and analysed methodically to identify similarities and differences between the countries and risks related to algorithmic transparency. This report summarises the results of this analysis and comparative study.

A. Development. This report brings together the main findings and lessons learnt from our regional analysis, as well as public policy approaches and a critical analysis of the information gathered. We make a series of recommendations for the different actors involved in regulating the procurement, development and implementation of emerging technologies.

B. Presentation of results. The main findings will be widely disseminated and shared.

The research was carried out in collaboration with ARTICLE 19's Office for Mexico and Central America, the Law and Artificial Intelligence Research Line (LIDIA) of the Institute for Legal Research of the UNAM (IIJ-UNAM), and the Thomson Reuters Foundation. This shows the importance of inter-institutional collaboration in projects analysing algorithmic transparency and technological innovation in the Latin American public sector.





CONCEPTUAL FRAMEWORK

First, it is important to explain the general concepts used in the study to introduce and explore the evolution and impact of the technological innovations reshaping public services, culminating in automation of critical decisions by artificial intelligence (AI). The aim of this approach is to understand how these technologies are changing fundamental aspects of our lives, including the decisions made by public authorities.

It is important to explore in depth issues of transparency and ethics in the implementation of these tools and to highlight the most relevant ethical principles used in their development and implementation to ensure that automated decisions comply with human rights standards. We also introduce concepts such as *algorithmic transparency* and *the right to explanation*, which play a key role in empowering users to understand and, if necessary, question decisions that affect their lives.

Finally, we analyse the increasingly standardised strategies and policies designed to promote effective accountability. This ensures that emerging technologies are implemented in a way that fosters general wellbeing and respect for human rights, paving the way towards a responsible and sustainable use of technology in the future.

Defining emerging technologies can be a daunting task due to the pace at which they are being developed and the changes they have undergone in recent years. For the purposes of this report, emerging technologies are defined as:

> [T]he synergistic combination of four major "NBIC" (nano-bio-info-cogno) provinces of science and technology, each of which is currently progressing at a rapid rate: (a) nanoscience and nanotechnology; (b) biotechnology and biomedicine, including genetic engineering; (c) information technology, including advanced computing and communications; (d) cognitive science, including cognitive neuroscience.[7]

When we talk about emerging technologies, we are referring to the four major areas of technology (*nano-bio-info-cogno*). To construct a suitable framework for this report, we will address emerging technologies that combine with others to make automated decisions and belong to the fields of information technology, advanced computing and communications. In other words, we will focus solely on the study of information technologies driven by AI mechanisms or that automate decision-making processes.

TRANSPARENCY AND ETHICS ARE KEY TO THE IMPLEMENTATION OF EMERGING TECHNOLOGIES

7 Mihail C. Roco and William Sims Bainbridge, *Converging Technologies for Improving Human Performance Nanotechnology, Biotechnology, Information Technology and Cognitive Science. NSF/DOC-sponsored report* (Virginia: WTEC, 2002), 1-2, https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/bioecon-%28%23%20023SUPP%29%20NSF-NBIC.pdf.

In the public sector, information technology (IT) plays a key role in driving operational efficiency and facilitating automated decision-making based on data. IT comprises a wide range of solutions, including computer systems, software and networks, that are used to process and distribute information effectively. These technologies enable governments to improve public services by automating tasks, managing large volumes of information, exchanging data efficiently among different agencies and releasing it to the public.

However, according to the Organisation for Economic Co-operation and Development (OECD), automation is more than mere changes in the technology resources used in public services:

> [T]he advantages offered by *digital transformation* go beyond converting analogue information into digital format. They create an opportunity to rethink public services around users and their needs, fostering vertical and horizontal integration within governments as well as the adoption of user-centred approaches when services are designed and delivered. Similarly, the shift [...] builds on appropriate governance and collaboration mechanisms for joined-up government services as well as a culture around users and their needs to achieve the transformative potential of digital technologies in public service delivery.[8]

Automating government involves using technology to reduce human intervention in repetitive, time-consuming tasks and procedures by, for example, digitising paperwork and managing documents electronically. This not only increases efficiency and reduces errors, but also improves the quality of the services offered to the public. E-government, meanwhile, refers to the integration of

8 Organisation for Economic Cooperation and Development and CAF Development Bank of Latin America, *Digital Government Review of Latin America and the Caribbean* (Paris: OECD and CAF, 2024), https://www.oecd.org/en/publications/digital-government-review-of-latin-america-and-the-caribbean_29f32e64-en.html

IT in government activities[9] to deliver more convenient, easily accessible public services. This includes everything from online service portals to electronic voting systems and citizen participation platforms to improve transparency, citizen participation, and access to services while maximising the efficiency of public administration.

This report focuses on a particular aspect of automation: automated decision-making (ADM), a term used to describe a process or a system where human decisions are assisted or fully executed by a computer program or an algorithm. ADMs are widely used in various sectors, both public and private. For instance, ADM can be embedded in standalone software that produces a medical recommendation for a patient, an online behavioural advertising system that shows a particular content to a specific target audience, a credit score system to determine whether an applicant should be granted a loan, and recognition filters that scan and ban user-generated content from a particular platform.[10]

AUTOMATED DECISIONS MUST COMPLY WITH HUMAN RIGHTS STANDARDS

In the Mexican public sector, ADMs have been integrated into various operational and management processes, tax collection systems, video surveillance, and service provision. By automating tasks that previously required considerable human intervention, and by analysing large, complex data sets to make decisions, these technological tools can maximise the efficiency and effectiveness of go-

9 Maribel Patricia Rodríguez-Márquez, "Ciberseguridad en la justicia digital: recomendaciones para el caso colombiano" ("Cybersecurity in digital justice: Recommendations for Colombia"), *Revista UIS Ingenierías* 20, No. 3 (2021): 19-46, https://doi.org/10.18273/revuin.v20n3-2021002

10 Rossana Ducato, "Automated decision making", in *Glossary of Platform, Law and Policy Terms* (December 2021), https://platformglossary.info/automated-decision-making/

vernment activities. An example of the use of ADM in tax collection can be found in the Mexican Tax Administration System, which has introduced electronic supervision, or "audits that consist of electronically reviewing specific items or headings from notification to conclusion".[11]

Regarding the use of digital channels to access public and private banks during the COVID-19 pandemic, ADM played an important role in providing remote financial services that guaranteed continuity of critical operations in times of crisis.

These are just some examples of how automated decision-making systems have been central to modernising and improving public administration in Mexico by providing the speedier, safer, accurate information-based processes that are needed to effectively meet today's needs and challenges.

The term *algorithm* comes from mathematician Muhammad ibn Musa al-Khwarizmi, who introduced the decimal system to the West and was a pioneer in mathematics and algebra. Today, an algorithm is "a series of instructions that must be executed automatically by a computer."[12] Simply put, an algorithm is a defined method to process input data to produce an output. In essence, an algorithm is a sequence of steps that transform input data into a specific answer or result. It can be understood as a tool designed to solve a specific problem, where the description of the problem indicates the relationship that should exist between the input data and the expected outcome. The algorithm provides a set of accurate instructions to achieve this outcome. For example, an algorithm can be used on a mobile phone to sort contacts alphabetically,

11 Servicio de Administración Tributaria (Mexican Tax Administration Service), "Otros trámites y servicios. Fiscalización electrónica" ("Other proceedings and services. Electronic supervision"), https://www.sat.gob.mx/personas/otros-tramites-y-servicios

12 UNESCO, "A Lexicon for Artificial Intelligence". 17 May 2023, https://courier.unesco.org/en/articles/lexicon-artificial-intelligence

taking an unordered list as input and producing the same items ordered from A to Z as output.[13]

From a regulatory perspective, an algorithm can be understood as a set of instructions or rules that are used to process or manage information to obtain specific results. In the field of data regulation, for example, algorithms play a fundamental role in the protection of personal data. In essence, they are used to automatically collect, analyse, and store personal information, and in some cases, to make decisions based on such data. This capacity to automatically process data and make decisions is critical, as it can influence important aspects of people's lives, such as credit, employment, access to services, and the exercise of their rights.

From the perspective of freedom of expression, algorithms have the power to moderate content on digital platforms by filtering and managing the visibility of specific discourses or messages. This is often done to prevent the spread of content such as hate speech, and to modulate the presence of speech to maintain a balance between freedom of expression and the protection of other rights.

Transparency is a multifaceted concept used in various settings, ranging from the legal and political to the organisational and technological, each with its own implications and challenges. Opacity, in contrast, in the political, economic and technological spheres, presents a significant challenge to modern ethics, legal practice, and governance, and is reminiscent of the *arcana imperii*, or secrets of power; in other words, the information that governments hide to maintain their power and control the population. Historically, these secrets have been fundamental to the administration of power, especially under authoritarian regimes that derive their political stability from their dexterity in manipulating information.

13 Thomas H. Cormen, ed., *Introduction to Algorithms*, 3rd. ed. (Cambridge: The MIT Press, 2009).

More recently, opacity has been associated with corruption, particularly regarding the use of public funds that should be distributed for the collective benefit and not for that of the ruling elite and their associates who give contracts to family and friends. Another form of corruption occurs among associates of dishonest government officials; individuals and corporations use sophisticated tools to create complex legal structures and use 'secrecy jurisdictions' (jurisdictions lacking corporate transparency) to hide assets and evade taxes. Tax evasion and corruption, facilitated by corporate secrecy, not only undermine the principle of tax fairness, but also erode trust in financial institutions and governments.

ALGORITHMIC TRANSPARENCY SEEKS TO ENSURE THAT AUTOMATED DECISIONS ARE UNDERSTANDABLE AND ACCOUNTABLE

Automated decision-making systems are just the latest addition to these opaque practices. These systems are becoming increasingly widespread in many sectors, where their lack of transparency makes their processes and decisions incomprehensible even to those who created them. The lack of clarity about how these automated decisions are made presents serious ethical and practical problems, particularly when algorithmic errors or biases can have devastating consequences for people and their rights. The need for effective governance and for public policies and regulations that guarantee inclusive access to technology is now more pressing than ever.

In the legal and political spheres, transparency is a fundamental indicator measuring the quality of governments that aspire to be considered democratic, and is a prerequisite for the exercise of individual freedom through deliberation

and true participatory intervention.[14] In Mexico, for example, there are three basic manifestations of transparency: reactive, mandatory, and proactive.[15] *Reactive* transparency involves responding to specific requests for information from individuals; *mandatory* transparency obliges government bodies and agencies to disclose information; and *proactive* transparency anticipates the public's need for information. The main aim of these manifestations is to enforce accountability and protect people's rights, thus facilitating more informed and effective participation in democratic processes.[16]

In the private sector, transparency is crucial for regulatory compliance and corporate reputation management. Companies are subject to international standards[17] that regulate, among other things, financial disclosure relating to competitive practices, environment, social and government (ESG) policies,[18] and more recently, human rights impact assessment mechanisms. Corporate transparency not only ensures certainty in operations with users, part-

14 Castilla-La Mancha, "Gobierno Abierto y Transparente ¿Qué es y para qué sirve la transparencia?" ("Open and Transparent Government: What is transparency and what is it for?"), https://transparencia.castillalamancha.es/transparencia

15 Reactive transparency refers to government agencies providing the public with information in response to specific requests. This type of transparency is activated by a direct request by the interested parties. Mandatory transparency refers to the obligation imposed on government agencies to disclose information without the need for a prior request. This includes data that are essential for public knowledge and that contribute to government transparency. Proactive transparency seeks to anticipate the public's information needs, providing data that could be of interest even before they are explicitly requested. This approach not only improves the accessibility and availability of information but also fosters greater citizen trust and participation in public affairs. *See* Rodrigo Sandoval Almazán, "México entre el gobierno abierto y la transparencia artificial" ("Mexico between open government and artificial transparency"), *Espacios Públicos* 21, No 51 (2018): 95-113.

16 Catalina Botero Marino, "El modelo mexicano de transparencia en el contexto latinoamericano" ("The Mexican transparency model in the Latin American context"), in *Hacia el sistema nacional de transparencia*, ed. Jacqueline Peschard Mariscal (Mexico: Instituto de Investigaciones Jurídicas-UNAM, 2017), XXXIII-XXXV, http://ru.juridicas.unam.mx:80/xmlui/handle/123456789/36344

17 United Nations, *Guiding Principles on Business and Human Rights* (Geneva: OACNUDH, 2011), https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf; and Inter-American Commission on Human Rights, *Report on businesses and human rights: Inter-American standards* (REDESCA, 2019), Business_Human_Rights_Inte_American_Standards.pdf

18 ESG (environmental, social and governance) criteria are a set of standards used to evaluate the sustainability and ethical responsibility of investments in companies. Environmental criteria examine a company's environmental impact; social criteria analyse its responsibility and relationships with the community, employees and customers; and governance criteria review corporate governance practices and business ethics. These criteria help investors and other stakeholders make informed decisions about sustainability and corporate social responsibility. *See* the Consolidated GRI Standards for Sustainability Reporting, published by the Global Sustainability Standards Board (GSSB), https://www.globalreporting.org/how-to-use-the-gri-standards/

ners and competitors, but also improves the company's image with consumers, investors and other stakeholders. As such, it is an essential element in building and maintaining public trust and contributes to the long-term success of the organisation. According to Transparency International, companies that are managed efficiently and have a high level of integrity and transparency are more likely to maintain their advantageous position in a global market in which the likelihood of success is progressively undermined by unfair or non-transparent business practices.[19]

Another new type of transparency is emerging in both the public and private sectors, namely algorithmic transparency, which combines technology with ethics. According to Oreste Pollicino and Giovanni De Gregorio, the proliferation of automated decision-making in both the public and private sectors challenges democratic systems due to its impact on public discourse. Furthermore, the impossibility of understanding decisions made by automated systems affects individual and collective rights and freedoms.[20]

THE RIGHT TO EXPLANATION ALLOWS PEOPLE TO QUESTION AUTOMATED DECISIONS AFFECTING THEIR RIGHTS

19 Barbara Kowalczyk-Hoyer, Liliya Akhmadullina, Nicole Knapen, Gabriele Simeone, Santhosh Srinivasan, Betty Wong and Hongbin Xiang, *Transparency in Corporate Reporting: Assessing Emerging Market Multinationals*, ed. Susan Coté-Freeman (Transparency International, 2013), http://www.jstor.org/stable/resrep20591

20 Giovanni De Gregorio and Oreste Pollicino, "Constitutional Law in the Algorithmic Society", in *Constitutional Challenges in the Algorithmic Society*, ed. Hans-W. Micklitz *et al.* (Cambridge: Cambridge University Press, 2021), https://doi.org/10.1017/9781108914857.

The terms 'algorithmic transparency' and 'explainability' refer to the ability to understand and explain how decisions are made by automated systems, particularly in fields that affect important aspects of human life, such as criminal justice, loans, immigration, and employment. These concepts play a vital role in ensuring that automated decision-making systems operate appropriately, providing those affected by these decisions with the information needed to challenge or appeal decisions perceived as being incorrect or that have a disproportionate impact on certain individuals due to their characteristics or belonging to a vulnerable or at-risk group. In this context, transparency serves to mitigate the risk of discrimination and error and ensure that technology benefits the common good and respects human rights.

According to Sangüesa, some argue that transparency should include not only access to data, but also to the codes of the algorithms used to process them. For example, it should involve explaining how the machine and the computer program use, organise, classify, sort, and mix the data to obtain a result.[21] This, however, does not guarantee that users[22] or even programmers will be able to understand the codes. Understanding the code may make it more difficult to understand how the algorithm behaves the way it does, and even the experts who programmed the algorithm might not be able to explain why it behaves like it does, as is the case with complex AI models.[23] Even understanding why it behaves the way it does not guarantee that we can *justify* the result. Sangüesa points out that justification is not a technical issue, but rather an ethical, moral or legal question, and goes on to say that "Transparency of data and algorithms, known as *algorithmic transparency*, involves the capacity to determine which data are used, how they are used, by whom, for what purpose, and how they form the basis for decisions that affect the lives of

21 "Fase de codificación: Implementación del algoritmo en el lenguaje de programación más adecuado: obtención del programa" ("Coding phase: Algorithm implementation in the most appropriate programming language: obtaining the programme". *See* Ingeniería Técnica Industrial. Fundamentos de Informática, "Tema 2. Conceptos básicos de algorítmica" ("Topic 2. Basic Algorithmic Concepts") (Huelva: Universidad de Huelva, undated.) 2.

22 Ramón Sangüesa, "Artificial intelligence and algorithmic transparency: 'It's complicated'

23 Hadi Asghari *et al.*, "What to explain when explaining is difficult. An Interdisciplinary Primer on XAI and Meaningful Information in Automated Decision-making", *Zenodo* (22 March 2022), https://doi.org/10.5281/zenodo.6375784.

those who demand this transparency."[24] It could be argued, therefore, that this is not only a legal problem, but also a technological issue in terms of the algorithms used.[25]

According to Araya Paz, the failure of existing laws to consider the complexity of emerging technologies leads to a *rigid, limited* regulatory framework.[26] He goes on to say that the problem of bias (in public policies) can be solved by introducing transparency into algorithm-based decision-making; this is what is known as *algorithmic transparency*.

Algorithm-driven decision-making poses two challenges relating to accountability:

a. Achieving transparency into a tool's workings; and

b. Establishing the best regulatory mechanisms to translate that information into the desired compliance.[27]

Two approaches to transparency have begun to emerge in response to concerns about implementation and regulatory mechanisms:

24 Ramón Sangüesa, "Artificial intelligence and algorithmic transparency: 'It's complicated'".

25 Carlos Araya Paz, "Transparencia algorítmica ¿un problema normativo o tecnológico?" (Algorithmic Transparency, a regulatory or technological problem?"), *CUHSO* 31, No. 2 (2021): 1, https://www.scielo.cl/pdf/cuhsotem/v31n2/2452-610X-cuhsotem-00002.pdf.

26 Carlos Araya Paz, "Transparencia algorítmica ¿un problema normativo o tecnológico?", 1.

27 David Freeman Engstrom, *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies. Report submitted to the Administrative Conference of the United States* (Stanford: Administrative Conference of the United States, February 2020), 75, https://www.acus.gov/sites/default/files/documents/Government%20by%20Algorithm.pdf.

1. How to mix modes of explanation to achieve desired transparency; and

2. Model simplification to make them more parseable[28] *(capable of analysis into more easily processed components).*

Even where AI systems can be made transparent, there remains the challenge of choosing regulatory mechanisms that can translate this transparency into accountability. Here, regulators and legislators have several options:[29]

a. *Mechanisms* that promote political accountability and transparency;

b. *Hard rules*, such as prohibitions on certain models or the introduction of licensing or certification requirements;

c. *Soft rules*, such as impact assessments designed to air concerns about algorithmic tools; and

d. *Correction and access rights*, like those in the European Union's General Data Protection Regulation.

28 David Freeman Engstrom, *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies. Report submitted to the Administrative Conference of the United States*, 75.

29 David Freeman Engstrom, *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies. Report submitted to the Administrative Conference of the United States*, 75.

The concept of *right to explanation* refers to the informational duties owed by a data controller, be it an individual or institution, towards a data subject in relation to automated decisions based on profiling. This right allows individuals to understand and challenge decisions made automatically, so that they can obtain clarity about how their personal information has been used and how a particular decision has been reached, all of which is essential for the protection of privacy and personal and collective autonomy in the digital age.[30]

30 Nicolo Zingales, "Right to explanation", in *Glossary of Platform, Law and Policy Terms* (December 2021), https://platformglossary.info/right-to-explanation/.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TOOLS FOR THE ANALYSIS OF ETHICS IN THE USE OF ARTIFICIAL INTELLIGENCE

The Principles of Artificial Intelligence

The principles of governance, such as transparency, fairness, non-discrimination and accountability, are fundamental pillars on which all AI-related policies and regulations must be built. "Principled Artificial Intelligence: Mapping Consensus in Ethical and Rights-based Approaches to Principles for AI", by Jessica Fjeld *et al.*[31] is a study that clarifies the global consensus on ethics in the use of AI.

Such study establishes a solid foundation for an ethical framework for AI development. Despite the diversity of its sources, a consensus is gradually emerging on issues such as a commitment to fairness and non-discrimination. Nevertheless, significant challenges remain in effectively implementing these principles, and ongoing efforts are required to adapt and refine regulations in parallel with the ever-expanding capabilities and

31 Jessica Fjeld *et al.*, "Principled Artificial Intelligence: Mapping Consensus in Ethical and Rights-based Approaches to Principles for AI", *Berkman Klein Center Research Publication* 2020-1 (15 January 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3518482.

applications of AI. Given the current situation, we now need to understand the relationship between AI rules and regulations governing information.

By analysing documents from various sources, such as governments, corporations and multi-sector organisations, we have identified eight key ethical principles that are essential for the responsible development of AI. These principles reflect an international commitment to the ethical management of technology in a context of rapid advancement and implementation.

The *principle of privacy* is present in 97% of the documents reviewed and underlines the importance of respecting the rights of data subjects. Privacy involves taking specific measures, such as obtaining informed consent, robust data protection, and implementing privacy by design. This emphasis on privacy shows that the priority is to protect individuals from any potential invasion of privacy resulting from the use of AI systems.

TRANSPARENCY AND EXPLAINABILITY DRIVE ACCESSIBILITY AND AN UNDERSTANDING OF DECISION-MAKING PROCESSES

Accountability is another fundamental principle that is present in most of the documents analysed. Accountability calls for effective mechanisms to monitor and audit AI systems and to guarantee that AI developers and operators take responsibility for the impact of their systems. This includes conducting regular impact assessments and implementing rigorous controls to ensure the transparency and accountability of AI systems.

Security is a crucial technical capability that protects AI systems from unauthorised access and ensures that they operate reliably and safely. This appears in 81% of documents and centres on the importance of designing systems that minimise risks and protect the system against internal and external threats. It is important to consider the life cycle of the information and the AI system, since different measures are applied to the creation, use and decommissioning of AI systems.

Transparency and explainability are present in 94% of documents, highlighting the need for AI decision-making processes to be accessible and understandable to all users. Transparency is essential for building trust in AI systems and for the responsible and ethical use of technology. Transparency means allowing adequate supervision of automated decisions and of the processes and technological applications used to make these decisions.

The commitment to *fairness and non-discrimination*, present in 100% of the documents reviewed, shows the importance of developing bias-free AI technologies that promote inclusiveness. This reflects the consensus that AI must not only replicate existing inequalities but also actively contribute to achieving a more equitable society.

In this regard, we believe that transparency and explainability are crucial to understanding and communicating how automated decisions are made, especially in contexts that affect important aspects of human life. The aim of these principles is to mitigate the risks of invasions of privacy, discrimination and error, thereby securing technology and guaranteeing accountability. The *right to explanation*, derived from the principle of right to information, allows us to understand and question

A COMMITMENT TO FAIRNESS AND NON-DISCRIMINATION INVOLVES ELIMINATING AI BIASES

automated decisions, and this in turn clarifies how personal information is used and how a particular decision is made.

In relation to this, Floridi and Cowls, in their comparative analysis of various initiatives seeking to establish ethical principles in AI, argue that a new principle - explainability - is currently needed to fully comply with the principles of transparency.[32] This principle incorporates both intelligibility and accountability in the implementation of AI-based systems. According to the authors, explainability complements the five principles for AI in society:[33]

- **Beneficence:** promoting social well-being, preserving dignity, and sustaining the planet;
- **Non-maleficence:** privacy, security and capability caution;
- **Autonomy:** the power to decide;
- **Justice:** promoting prosperity, preserving solidarity, avoiding unfairness; and
- **Explainability:** enabling the other principles through intelligibility and accountability.

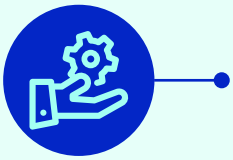
32 Luciano Floridi and Josh Cowls, "A Unified Framework of Five Principles for AI in Society", *Harvard Data Science Review* 1.1 (Summer 2019), 5, https://bit.ly/3UZk9sY.

33 Luciano Floridi and Josh Cowls, "A Unified Framework of Five Principles for AI in Society", 5-7.

KEY ETHICAL PRINCIPLES

PRIVACY

Rights of personal data subjects must be protected through informed consent and privacy policies.



RESPONSIBILITY

AI developers and operators must be responsible for the impact of AI and must implement audits and supervision mechanisms to ensure transparency and accountability.

SECURITY

AI systems must be protected from unauthorised access and external and internal threats to ensure that they are reliable.

TRANSPARENCY AND EXPLANABILITY

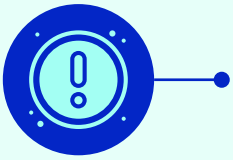
Automated processes must be accessible and understandable to users to promote trust.

FAIRNESS AND NON-DISCRIMINATION

AI systems must not replicate bias or discrimination and must promote inclusivity and social justice.

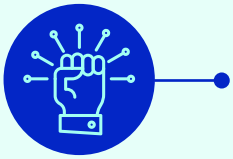
BENEFICIENCE

AI systems must promote social well-being, protect human dignity, and sustain the planet.



NON-MALEFICENCE

AI systems must avoid harm by protecting privacy, safety and security and guarding against potential risks.



AUTONOMY

Individuals must have the right to make informed decisions about how they interact with AI systems.

According to the cited authors, these principles can form the basis of laws, rules, technical standards, and best practices to be developed in specific sectors, industries, and jurisdictions.[34] For this reason, explainability, as mentioned above, plays an extremely important role in this report as a means of verifying that the other principles have been met.

AI Governance

Ideal governance in the era of artificial intelligence must be based on solid ethical principles and must adapt to prevailing technological and social dynamics.

Roberts, Hine, Taddeo, and Floridi define strong global AI governance as the process whereby diverse interests that transcend borders are accommodated, without a single sovereign authority, so that cooperative action may be taken in maximising the benefits and mitigating the risks of AI.[35]

AI governance should promote transparency, fairness, non-discrimination and accountability, and should be developed in a way that actively involves all key stakeholders: the private sector, governments, civil society, academia, and the technology sector. Inter-stakeholder collaboration and diversity is crucial to developing a comprehensive approach that can effectively address the ethical and regulatory challenges posed by algorithmic technologies.

AI GOVERNANCE IS CHALLENGING DUE TO THE LARGE NUMBER OF USERS AND DIVERSITY OF CONTENT

The governance of AI, like that of the internet, is complicated by its vast number of users

34 Luciano Floridi and Josh Cowls, "A Unified Framework of Five Principles for AI in Society", 9.

35 35 Huw Roberts et al. "Global AI governance: barriers and pathways forward", *International Affairs* 100, No 3 (May 2024), https://papers.ssrn.com/sol3/papers.cfm?abstract_id-4588040.

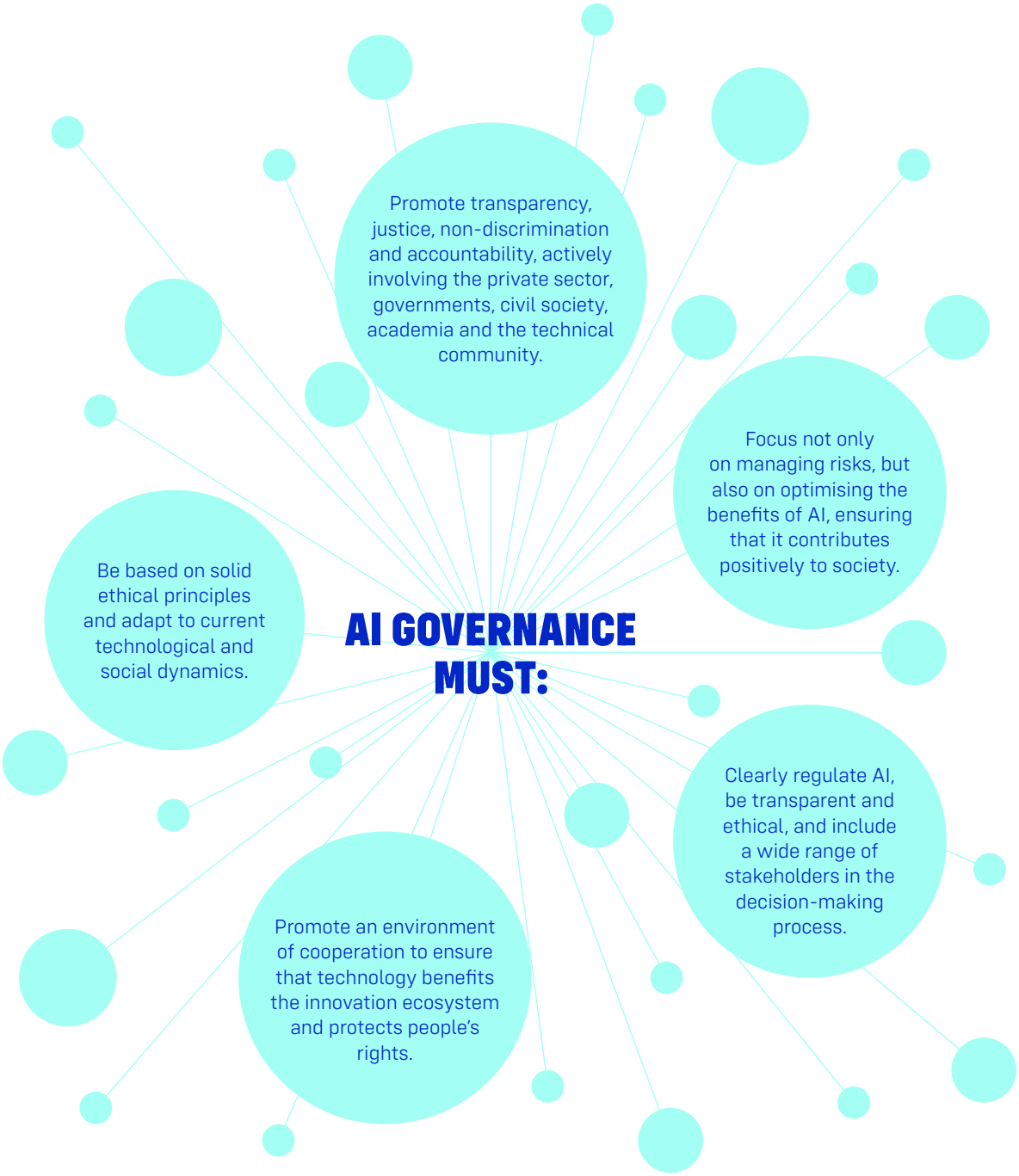
and the diversity of the content that it generates and consumes. The number of users of generative AI models, such as GPT, has grown exponentially as has that of social media platforms. These systems are fed by large volumes of data, and like social media, the quality of the output depends inherently on the quality of the input. Furthermore, both often operate in the cloud, and pass over national borders, entering multiple legal jurisdictions and further complicating their regulation.

The AI regulatory environment must be agile enough to adapt to technological innovation, while maintaining the principles of ethics and human rights. AI governance should promote an environment in which cooperation between different stakeholders ensures that the technology is used in ways that benefit the innovation ecosystem and protect the rights of people worldwide.

The "governance triangle" model for internet governance put forward by Robert Gorwa is based on the interaction between groupings of state, non-governmental and business actors and is inspired by Internet governance structures. This same approach could be applied to AI governance and would explain the different ways in which these stakeholders can work together to regulate and govern technology more effectively. Co-governance, which involves the cooperation of multiple stakeholders, is placed at the centre as a potentially powerful tool to address the ethical and regulatory challenges of AI.[36]

In our opinion, however, Gorwa's digital platform governance triangle only serves to identify and conceptualise the different stakeholders involved in the AI ecosystem (industry, state, and civil society) and their areas of con-

36 Robert Gorwa, "The Platform Governance Triangle: Conceptualising the Informal Regulation of Online Content", *Internet Policy Review* 8 (2019), https://doi.org/10.14763/2019.2.1407; and Alejandro Pisanty *et al.*, *Moderación de contenidos en plataformas de Internet: modelo de gobernanza* ("Content moderation in Internet platforms: governance models") (Mexico: Instituto de Investigaciones Jurídicas-UNAM and Asociación Mexicana de Internet, A. C., June 2022), https://archivos.juridicas.unam.mx/www/bjv/libros/15/7404/1b.pdf.


AI GOVERNANCE MUST:
Promote transparency, justice, non-discrimination and accountability, actively involving the private sector, governments, civil society, academia and the technical community.
Focus not only on managing risks, but also on optimising the benefits of AI, ensuring that it contributes positively to society.
Be based on solid ethical principles and adapt to current technological and social dynamics.
Clearly regulate AI, be transparent and ethical, and include a wide range of stakeholders in the decision-making process.
Promote an environment of cooperation to ensure that technology benefits the innovation ecosystem and protects people's rights.

vergence.[37] Due to its complexity, AI governance impacts all stakeholders involved in different ways.

The lack of involvement of all stakeholders in AI governance can be particularly detrimental to vulnerable individuals and groups. Technology governance has been widely criticised for impacting freedom of expression and other human rights without taking users into consideration. From our perspective, the best governance approach must accept the inclusion of the greatest possible number of social groups, understood in radically intersectional terms. This is based on Guerrero Mc Manus's theory, which establishes that there is no subjectivity capable of fully representing the interests of all, and no subjectivity free of bias. This diversity, therefore, is best approached by including as many perspectives as possible within a deeply intersubjective critical dialogue.[38] It is essential to maintain an agreement in which not only specialists from various professions are heard, but also the people who use, live with and experience these new technologies. By taking this open approach, it is possible to develop a more complete understanding of how content moderation develops and collides with people's rights.

AI REGULATIONS MUST KEEP UP WITH TECHNOLOGICAL INNOVATION WHILE RESPECTING ETHICS AND HUMAN RIGHTS

An AI governance model must have a clearly defined regulatory scope, be transparent and ethically sound, and be based on a decision-making system in which a wide range of stakeholders are heard.

37 Terry Flew, *Regulating Platforms* (United Kingdom: Polity, 2021), 141

38 Siobhan Guerrero Mc Manus, "'Let boys be boys and girls be girls'. Una lectura crítica del concepto de 'Ideología de género' desde la Epistemología Feminista" ("'Let boys be boys and girls be girls', A critical reading of the concept 'Gender Ideology' from Feminist Epistemology"), in *En todos los colores. Cartografías del género y las sexualidades en Hispanoamérica*, eds María Celeste Bianciotti, María Nohemí González-Martínez and Dhayana Carolina Fernández-Matos (Barranquilla: Ediciones Universidad Simón Bolívar, 2017).

This model should not only focus on risk management, but also on optimising the benefits of AI to ensure that it contributes positively to society. It is essential to implement an inclusive, ethically informed governance framework to navigate the challenges and capture the opportunities offered by AI in the modern era.

Ethical and Regulatory Frameworks

The roles of the OECD, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the Institute of Electrical and Electronics Engineers (IEEE) in AI governance are both essential and complementary. From a global government governance perspective, the OECD and UNESCO, through their recommendations on ethics and their promotion of international cooperation, seek to ensure that AI is developed in a way that respects human rights and promotes global well-being. The IEEE, meanwhile, brings to bear its technical governance standards and professional ethics initiatives to make AI safe, transparent and fair. Both approaches help create an environment in which AI can be a positive tool that promotes public trust by providing information and inviting participation in the ethical adoption of these technologies.

In Mexico, a member of the OECD, these principles, while not legally binding, serve as guidelines for the development of internal policies and regulations. UNESCO recommendations are also non-binding and serve as guiding frameworks that member states can adopt and adapt to their own legal and social contexts. IEEE standards are voluntary. They are used primarily in industry and academia as good practices, although they are not legally binding unless they are incorporated into national law. Therefore, despite being soft rules, these principles make up the global economic, development, technical and state governance standard.

The OECD Recommendation on Artificial Intelligence[39] establishes a framework of principles and recommendations for the implementation of trustworthy, human-centric, economically sustainable AI. It recognises the potential benefits of AI for global well-being and the economy, as well as the risks it may pose to human rights, privacy and security. The principles include promoting inclusive development of these technologies, respect for human rights, transparency, security and accountability. Recommendations to governments range from investing in AI research and development, creating inclusive digital ecosystems and formulating flexible governance policies to preparing for labour market transformation and international cooperation.

The OECD calls for trustworthy, human-centric AI that promotes well-being without compromising human rights and privacy. To achieve this, it is essential for AI systems to be transparent and explainable, if we are to understand how they work and question their decisions. Data protection and privacy are fundamental in this context, because they establish the requirement for mechanisms to prevent the misuse of personal information and data security measures. Widespread adoption and trust in AI will only be possible when all actors involved shoulder their responsibility to guarantee implementation and compliance with these principles.

AN INCLUSIVE, ETHICALLY INFORMED GOVERNANCE FRAMEWORK IS ESSENTIAL TO OVERCOME CHALLENGES AND SEIZE OPPORTUNITIES

From another perspective, the UNESCO Recommendation on the Ethics of Artificial Intelligence[40] also considers algorithmic transparency and explainability as essential ethical principles. Algorithmic transparency ensures that

39 Organisation for Economic Cooperation and Development, *Recommendation on Artificial Intelligence,* OECD, https://oecd.ai/en/assets/files/OECD-LEGAL-0449-en.pdf

40 UNESCO, Recommendation on the Ethics of Artificial Intelligence, 2021, https://unesdoc.unesco.org/ark:/48223/pf0000381137

AI processes and decisions are clear and understandable and prevents them from becoming black boxes that are immune to public scrutiny.

The right to explainability complements algorithmic transparency by requiring that AI systems are not only transparent, but also understandable. Explainability implies that the results of AI systems and the subprocesses leading to those results are intelligible and traceable. This is crucial in the case of applications that could have a significant, not easily reversible, impact on people's rights. UNESCO notes that to ensure the fairness of AI systems, users must be able to understand and challenge their decisions,

UNESCO also recognises that AI can deepen existing social inequalities if it is not managed appropriately. Transparency and explainability are key tools in mitigating these risks, because they facilitate proper scrutiny and ensure that automated decisions do not perpetuate discrimination or increase exclusion. Human intervention is also essential to ensure responsibility and accountability in the use of AI. AI systems must be designed to enable people to understand and, if necessary, challenge automated decisions.

Finally, UNESCO notes that the implementation of transparency and explainability should not be an obstacle to innovation, but rather an opportunity to encourage ethical research and development. Although transparency and explainability can strengthen public trust in AI technologies and promote their adoption in ways that benefit the whole of society,[41] they must be flexible enough to

41 Member States are encouraged to develop national and regional AI strategies and to consider forms of soft governance such as a certification mechanism for AI systems and the mutual recognition of their certification, according to the sensitivity of the application domain and expected impact on human rights, the environment and ecosystems, and other ethical considerations set forth in the Recommendation. Such a mechanism might include different levels of audit of systems, data, and adherence to ethical guidelines and procedural requirements in view of ethical considerations. At the same time, such a mechanism should not hinder innovation or disadvantage small and medium enterprises or start-ups, as a result of an excessive administrative burden. *See* UNESCO, *Recommendation on the Ethics of Artificial Intelligence.*

accommodate new competitors. Transparency and explainability, embedded in a robust ethical context, can help ensure that AI is developed and used in ways that respect and promote human rights and contribute to an innovative, yet fairer society.

In "Ethically Aligned Design: A Vision for Prioritizing Human Well-Being with Autonomous and Intelligent Systems", the IEEE Global Initiative on the Ethics of Intelligent and Autonomous Systems[42] states that this standard establishes ethical guidelines applicable to a wide variety of autonomous, intelligent systems, including mechanical robots, algorithmic robots, self-drive vehicles, software, medical diagnosis systems, intelligent personal assistants, and algorithmic chat bots. These guidelines are relevant in a variety of real, virtual, contextual, and mixed-reality environments where artificial intelligence is present.[43]

The recommendations repeatedly highlight the importance of algorithmic transparency and the right to explainability in autonomous and intelligent systems. Transparency means traceability, explainability, and interpretability.

Transparency must be able to meet the following requirements:

- For users, to understand what the system is doing and why
- For developers, including those performing validation and certification of autonomous and intelligent systems, to understand system processes and input data;

42 IEEE Robotics & Automation Society, *Ethically Aligned Design: A Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems* (IEEE Robotics & Automation Society, March 2019), 1-294.

43 Fabio Morandín-Ahuerma, "IEEE: un estándar global como iniciativa ética de la IA" ("IEEE: A global standard as an ethical AI initiative"), in *Principios normativos para una ética de la Inteligencia Artificial* (Puebla: Consejo de Ciencia y Tecnología del Estado de Puebla, 2023), 134.

- For accident investigators, to provide effective care in the event of an accident;
- For those involved in legal processes, to inform evidence and decision-making; and
- For the public, to generate trust in technology.

Without adequate access to data and the ability to manage and rectify incorrect information, people cannot fully benefit from the insights derived from their data or ensure its accuracy. The IEEE stresses that transparency and explainability are crucial if we want to ensure that all consent is informed, explicit and unambiguous, in line with the requirements of the European Union's General Data Protection Regulation (GDPR) mentioned below.

The IEEE makes several recommendations designed to improve transparency and explainability. First, service providers must ensure that personal data management tools are easy to find and use in their service interfaces. These tools should allow users to see who has access to their data and why and, where relevant, to manage access permissions. It should also be easy for users to delete their data from the service, following best practices established by the GDPR.

Algorithmic transparency also extends to the creation of privacy impact assessment systems related to autonomous and intelligent systems. The IEEE suggests that, like environmental impact studies, privacy impact assessments (PIA) should be developed to certify that products and services are safe and comply with data protection regulations. These assessments should be applicable not only to government agencies, but also to businesses and other organisations to ensure that all projects, products, services or policies that could impact privacy have been appropriately assessed.

Finally, the IEEE notes that transparency and explainability must be built into the oversight and accountability of AI systems. Transparency is essential for accountability to function effectively. Without transparency, it is difficult to challenge AI-based decisions,and ensure that the right to a fair trial and an effective remedy are respected. Transparency also helps create more democratic societies by facilitating public scrutiny to combat corruption and discrimination and detecting and preventing adverse effects on human rights.

The European Union has been regulating data for 30 years, culminating in the GDPR, and it now sets the global standard for data protection due to its comprehensive and rigorous approach to safeguarding the privacy of individuals in an increasingly digitised world. Although it has been criticised for other aspects that are not necessarily applicable to or compatible with the Inter-American Human Rights System, the fundamental principles established in the GDPR on the collection and processing of personal data and specific requirements that address technological advances, and the complexities of IT are applicable in our setting.

By requiring transparency, explicit consent, access and rectification rights, and privacy impact assessments, the GDPR compels organisations to be more accountable and to implement proactive measures to protect personal data. In addition, its extraterritorial scope, and the severe penalties imposed for non-compliance have encouraged companies and governments outside the EU to adopt similar practices, thereby raising the bar globally on data protection and adapting to rapid developments in IT. The GDPR is a reference framework for transparency, because data processing is based on informing individuals in a clear and understandable manner how their data is used and how decisions that affect them are made.

The right to explainability is closely related to algorithmic transparency, and is a fundamental right guaranteed by the GDPR. This right ensures that individuals can understand the logic underlying automated decisions and the impact they could have on their lives. Following the concept of consent, Article 12 of the GDPR indicates that data controllers must provide concise, transparent and intelligible information about how personal data are processed. Section 2 of Article 13 establishes the need to provide information from the moment that personal information is collected:

> 2. In addition to the information referred to in paragraph 1, the controller shall, at the time when personal data are obtained, provide the data subject with the following further information necessary to ensure fair and transparent processing: (f) the existence of automated decision-making, including profiling, [...] meaningful information about the logic involved, as well as the significance and the envisaged consequences of such processing for the data subject.[44]

Article 22 of the GDPR specifically addresses decisions based solely on automated processing, including profiling, and states that such decisions are generally prohibited, and only permitted under certain conditions, for example, if they are necessary for entering into or performing a contract, are authorised by law, or based on the explicit consent of the data subject. The GDPR also requires that appropriate measures be implemented to protect the rights and freedoms of the individuals concerned, including human intervention and the right to contest the decision.[45]

44 Regulation (EU) 2016/679 of the European Parliament and Council, of 27 April 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R0679

To ensure transparency and compliance with the GDPR, data controllers must carry out Data Protection Impact Assessments (DPIA) when processing operations that are likely to result in high risk to data subjects. These assessments help identify and mitigate risks associated with automated decision-making and profiling.[46]

Algorithmic transparency, the right to explainability and the need for impact assessments are fundamental to AI ethics and data protection, and are included in the recommendations of the OECD, UNESCO and the IEEE, and required by the EU's GDPR. Transparency and ex-ante evaluation ensure that AI processes and decisions are clear and understandable, which is crucial for public scrutiny and trust in these technologies.

45 Article 22. Automated individual decision-making, including profiling
1. 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.
2. Paragraph 1 shall not apply if the decision:
(a) is necessary for entering into, or performance of, a contract between the data subject and a data controller;
(b) is authorised 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; or
(c) is based on the data subject's explicit consent.
3. In the cases referred to in points (a) and (c) of paragraph 2, the data controller shall implement suitable measures to safeguard the data subject's rights and freedoms and legitimate interests, at least the right to obtain human intervention on the part of the controller, to express his or her point of view and to contest the decision.
4. Decisions referred to in paragraph 2 shall not be based on special categories of personal data referred to in Article 9(1), unless point (a) or (g) of Article 9(2) applies and suitable measures to safeguard the data subject's rights and freedoms and legitimate interests are in place.

46 Article 35. Data protection impact assessment
1. Where a type of processing in particular using new technologies, and taking into account the nature, scope, context and purposes of the processing, is likely to result in a high risk to the rights and freedoms of natural persons, the controller shall, prior to the processing, carry out an assessment of the impact of the envisaged processing operations on the protection of personal data. A single assessment may address a set of similar processing operations that present similar high risks.

OVERVIEW OF EMERGING TECHNOLOGIES AND TRANSPARENCY IN THE PUBLIC SECTOR IN LATIN AMERICA

In this section, we present key findings on the procurement, implementation and development of emerging technologies in Argentina, Brazil, Colombia, Chile and Mexico, and comment on different practices and principal innovations in each of these countries.

Argentina

Argentina has no specific national laws regulating the use of emerging technologies at governmental level. However, the country does have provisions at different levels that establish a series of standards and guidelines on the use of technology in the public sector. These standards and guidelines are based on existing regulations, such as the Personal Data Protection Act and Patients' Rights Act, and on constitutional principles which, together, create a regulatory framework that indirectly regulates emerging technologies.

One of the most important provisions is National Decree No 50/2019, creating the Department of Public Innovation for the purpose of designing and coordinating State administrative and technological innovation policies and proposing regulatory standards. As part of its functions, it approved the following guidelines:

- Recommendations for reliable artificial intelligence,[47] approved by the Ministerial Department of Information Technologies through provision 2/2023 of 1 June 2023. This document sets out principles for the implementation of AI projects, their intended use and human oversight.[48]
- Guidelines for the incorporation of new technologies in the national public sector,[49] establishing technological standards for public authorities.

The authorities have introduced new technologies for specific purposes, ranging from improving administrative efficiency to strengthening healthcare and public safety. These technologies can be found under the following headings:

a. *Geolocation applications* (Covid-19). The *Cuidar-covid 19* application enabled self-diagnosis of symptoms, provided recommendations on what to do in the event of having symptoms compatible with coronavirus, and provided provincial governments with contact-tracing and case-monitoring tools. This application did not publish a data processing impact assessment and did not inform users of risks or measures that could be used to mitigate these risks.[50]

47 Public Innovation Secretariat, *Recomendaciones para una inteligencia artificial fiable* ("Recommendations for Reliable Artificial Intelligence") (Buenos Aires: Presidency of the Cabinet of Ministers, Argentina, undated), https://www.argentina.gob.ar/sites/default/files/2023/11/recomendaciones_para_una_inteligencia_artificial_fiable.pdf.

48 Department of Public Innovation, *Recomendaciones para una inteligencia artificial fiable* ("Recommendations for a trustworthy artificial intelligence")

49 Department of Public Innovation, *Guía para la incorporación de nuevas tecnologías en el sector público nacional* ("Guide to the Incorporation of New Technologies in the National Public Sector") (Buenos Aires: Presidency of the Cabinet of Ministers, Argentina, 21 June 2021), https://www.boletinoficial.gob.ar/detalleAviso/primera/246061/20210625.

50 Presidency of the Cabinet of Ministers, Argentina, "Acerca de la Aplicación Cuidar-Covid 19" ("About Cuidar-Covid 19 App"), https://www.argentina.gob.ar/sites/default/files/acerca_de_aplicacion_cuidar_-_covid_19.pdf.

b. *Virtual Assistants* for the management of public consultations. The two main examples are:

- Tina (chatbot). This is the Argentine government's virtual assistant that helps people with more than 350 procedures in 49 state bodies or agencies.[51] It represents a significant step forward in streamlining various bureaucratic procedures and greatly reduces the administrative burden.
- Mi Argentina (app). This app can be used to manage administrative procedures, make appointments, access credentials and receive personalised information, in other words, to access state digital services.[52] It greatly promotes accessibility and facilitates citizen participation, strengthening the relationship between the State and its citizens.

These tools are an example of the significant efforts that have been made to modernise and improve government-citizen interactions.

c. Systems for creating *medical records*. Law No. 27.706, the Single Federal Program for Computerisation and Digitalisation of Medical Records of the Argentine Republic, provides for the creation of a single system. The implementing authority is the Argentinian Ministry of Health, which is empowered to determine the technical and operational characteristics of the process of digitising medical records and of designing, implementing and distributing the sof-

ARGENTINA NEEDS A COMPREHENSIVE LEGAL FRAMEWORK TO ENSURE TRANSPARENCY IN THE IMPLEMENTATION OF NEW TECHNOLOGIES

51 *See* Argentina.gob.ar, "Tina siempre está" ("Tina is always available"), https ://www.argentina.gob.ar/tina.

52 *See* Argentina.gob.ar, "miArgentina", https://www.argentina.gob.ar/miargentina.

tware throughout the health system.[53]

d. Use of *facial recognition* technology in public places. The Fugitive Facial Recognition System (SRFP, in Spanish) is the result of an agreement signed in 2019 between the government of the city of Buenos Aires and the national government. Through this agreement, law enforcement authorities in Buenos Aires were given access to the biometric data of fugitives from justice stored in the Civil Registry to incorporate them into the facial recognition software used in cameras installed in public areas to locate these individuals. The programme was challenged in court.[54]

e. Use of artificial intelligence in the criminal justice system. The Ministry of Justice passed Regulation No. 111/2024 creating the National Comprehensive Programme for Artificial Intelligence in the Justice System for the purpose of improving responses and procedures and optimising administrative formalities. Under the Regulation, the coordinator of the programme must submit an annual report to the Ministry of Justice containing, among other things, a list of projects incorporating AI, the results of the impact assessment and audits conducted prior to implementation in any area within the competence of the Ministry or the Justice System, and AI risk control measures.

OVERSIGHT OF TECHNOLOGICAL IMPLEMENTATION IS STILL TOO WEAK TO EFFECTIVELY PROTECT SAFETY AND PRIVACY

53 Decree No. 144/2023, Programa Federal Único de Informatización y Digitalización de Historias Clínicas de la República Argentina (Single Federal Programme for the Computerisation and Digitalisation of Medical Records of the Argentine Republic) (Buenos Aires: *Boletín Nacional*, 16 March 2023), https://www.argentina.gob.ar/normativa/nacional/decreto-144-2023-380711.

54 Natalia Pacheco, "El Sistema de Reconocimiento Facial de Prófugos del GCABA y su lesión a los derechos a la privacidad y autodeterminación informativa" ("The Fugitive Facial Recognition System of the City of Buenos Aires and its harm to privacy and information self-determination rights"), *Revista de la Escuela del Cuerpo de Abogados y Abogadas del Estado* 7, No 10 (October 2023): 175-190, https://revistaecae.ptn.gob.ar/index.php/revistaecae/article/download/265/231/627.

The absence of a clear definition of the *procurement and deployment of emerging technologies* could jeopardise regulatory coherence and compliance. Although these technologies appear to be subject to regulatory oversight, some aspects could potentially escape the control of the regulatory authorities. This would make effective oversight hard to achieve, particularly in terms of privacy and security, and the alignment of these principles with the rights guaranteed by law.

The government of Argentina shows a progressive approach in its *adoption of emerging technologies*, but lacks a specific, comprehensive legal framework that guarantees adequate oversight and transparency. Reforming the personal data protection law could represent a major step forward, but it is essential to address the lack of clarity in the procurement and oversight of these technologies to ensure that their implementation is safe, fair and transparent.

Brazil

Although Brazil has no specific federal laws governing emerging technologies, several decrees, regulations, and bills have been drafted to address issues such as artificial intelligence and data protection.

In 2018, the country published the Brazilian Digital Transformation Strategy (e-Digital),[55] which provides a definition of artificial intelligence and serves as a launch pad for different government regulations on emerging technologies. Following the publication of e-Digital, the federal government implemented various similar programmes, such as the National Plan for the Internet of Things, the Digital Governance Strategy, and the Digital Government Strategy.

In 2021, the Ministry of Science, Technology, Innovation and Communications developed the Brazilian Artificial

55 Decree No 9.319. Institui o Sistema Nacional para a Transformação Digital e estabelece a estructura de governança para a implantação da Estratégia Brasileira para a Transformação Digital ("Creation of the National System for Digital Transformation and a governance structure for the implementation of the Brazilian Digital Transformation Strategy") (Brasilia: *Diário Oficial da União*, 21 March 2018), https://www2.camara.leg.br/legin/fed/decret/2018/decreto-9319-21-marco-2018-786355-publicacaooriginal-155087-pe.html.

Intelligence Strategy (EBIA, in Portuguese)[56] with the aim of actively and ethically stimulating federal government engagement in the research, innovation and development of AI systems in Brazil. The strategy consists of three cross-sectional and six vertical lines of action. The former include (i) legislation, (ii) regulation, and ethical use, and (iii) AI governance, and international actions; the latter include (i) education, (ii) workforce and training, (iii) R&D and entrepreneurship, (iv) application in productive sectors, (v) application in the public sector, and (vi) public safety.[57]

BRAZIL'S FRAGMENTED APPROACH COULD LEAD TO INCONSISTENCIES IN SAFETY AND PRIVACY

In December 2024, the Brazilian Senate passed draft bill No. 2.338/2023 establishing a national regulatory framework that covers the development, use, and governance of AI systems in Brazil. The bill reflects a commitment to the centrality of the human person, responsible innovation, competition in the AI market and the implementation of trustworthy and safe systems. After being discussed in the Senate, the Bill still requires further analysis in the House of Representatives and presidential approval before it can be enacted and become enforceable.[58]

In Brazil, the lack of specific federal legislation that broadly regulates emerging technologies has led to a *fragmented* regulatory landscape. This is the result of a reactive rather than proactive approach, where regulations are developed in response to specific needs and not for the purpose of establishing a coherent general framework.

56 Ministry of Science, Technology and Innovations. Department of Entrepreneurship and Innovation, *Estratégia Brasileira de Inteligência Artificial -EBIA-* ("Brazilian Artificial Intelligence Strategy") (MCTI, July 2021), https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/arquivosinteligenciaartificial/ebia-documento_referencia_4-979_2021.pdf.

57 Ministry of Science, Technology and Innovations. Department of Entrepreneurship and Innovation, *Estratégia Brasileira de Inteligência Artificial -EBIA-*.

58 Draft bill No. 2338, of 2023. PL 2338/2023 - Senado Federal

MAIN INNOVATIONS

MEXICO

- Internal Rules of the Department of Finance and Public Credit.
- National Digital Strategy.
- General Law on the Protection of Personal Data Held by Mandated Parties (GLPPDMP).
- Law on Procurement, Leases and Services in the Public Sector..

- Coordination of the National Digital Strategy (CEDN).

COLOMBIA

- Transformation towards a digital government.
- Digital Government Handbook.
- MinTIC.
- Ethical framework for artificial intelligence in Colombia.
- Personal data protection: Laws No. 1581 of 2012, No. 1266 of 2008 and No. 2157 of 2021.

- 113 automated decision-making systems.

- National Public Procurement Agency - Colombia.

CHILE

- Relevant laws: Law No. 19.628; Law No. 17.336; Law No. 21.180; Law No. 21.521; Law. No.19.886.
- Data processing regulations (Law No. 19.628).
- AI bills.
- National AI policy..

- National Commission on Artificial Intelligence.
- Transparency Council.

- ChileCompra.

BRAZIL

- Brazilian Digital Transformation Strategy.
- National Plan for the Internet of Things.
- Digital Governance Strategy.
- Digital Government Strategy.
- Brazilian Artificial Intelligence Strategy (EBIA, 2021).

ARGENTINA

- Department of Public Innovation.

- Tina (*chatbot* / virtual assistant).
- Digital Medical Records System.
- Facial recognition (SRFP).

- Principles for the implementation of human-controlled AI.

- Cuidar-covid 19 App
- Mi Argentina App

The absence of clear guidelines could cause inconsistencies in the use of these technologies by government agencies, possibly resulting in the inefficient use of AI systems or safety and privacy problems.

Colombia

Since 2000, Colombia has sought to move towards a so-called *digital government*,[59] in other words, to adopt and promote the use of new technologies to improve government efficiency and effectiveness.

During this time, the Colombian government has implemented various public policies promoting, encouraging and instructing its agencies to pursue digital transformation. This process has been developed in five phases:

- Online information: creating informative websites;
- Online interaction: two-way communication between government agencies and citizens;
- Online transaction: exchange of products and services;
- Online transformation: operational changes, such as virtual procedures and intranet; and
- Online democracy: development of public policies using ICT.[60]

Colombia has developed a series of legal instruments to facilitate the transition to digital government, the most recent being the Digital Government Handbook issued by the Ministry of Information and Communication Technologies (MinTIC), based on Decree No. 1008 of 2018.61 In this document, the Colombian government

59 Document CONPES 3072 (Bogotá: National Department of Planning, 9 February 2000).

60 Decree No. 1151 (Bogotá: 14 April 2008), Article 5.

61 Decree No. 1008 (Bogotá: Ministry of Information and Communication Technologies, 14 June 2018).

focuses on establishing a series of principles, and determining the processes required to plan, execute and measure the government's use and exploitation of ICTs, but does not establish specific regulations according to the type of technology implemented.

COLOMBIA HAS BEEN TRANSITIONING TOWARDS DIGITAL GOVERNMENT SINCE 2000 BY IMPLEMENTING POLICIES FOSTERING THE USE OF TECHNOLOGY

As a result, Gutiérrez and Muñoz-Cadena have identified at least 113 automated decision-making systems within the public sector.[62] This is an indication of the efforts the government has made to use new technologies in public administration.

The MinTIC plays a crucial role in defining guidelines and standards for the implementation of digital transformation policies, and the Digital Government Handbook is the most important tool for this purpose. The Handbook is mandatory[63] and establishes three-stage guidelines on the use, deployment and evaluation of these technologies: planning, execution and measurement stages. It also establishes general guidelines on various aspects of using ICTs in the Colombian government, and provides clear, specific guides. For example, the objective of the *planning* stage is to "preserve the confidentiality, integrity and availability of information assets and guarantee their proper use and data privacy",[64] and in the *measurement* stage, the Handbook establishes indicators for the consolidation of an open State. Both parameters are important, albeit indirect, aspects of algorithmic transparency.[65]

62 Juan David Gutiérrez and Sarah Muñoz-Cadena, "Adopción de sistemas de decisión automatizada en el sector público: Cartografía de 113 sistemas en Colombia" ("Adoption of automated decision-making systems in the public sector: Map of 113 systems in Colombia"), 267-272.

63 Decree No. 1008, Article 2.2.9.1.2.2.

64 Digital Government Handbook, Decree No. 1078 (Bogotá, 2015), book 2, part 2, title 9, chapter 1.

65 Digital Government Handbook.

Another important government agency in the context of this study, due to its involvement in acquiring new technologies, is The National Public Procurement Authority – "Colombia Compra Eficiente", which issued the Guidelines for Public Procurement of ICTs.

Such Guidelines[66] define two types of procurement processes: commercial public procurement and pre-commercial public procurement. The former consists of acquiring the goods or services required for technological transition, and the latter consists of acquiring research and development services capable of developing alternatives and designing solutions and product prototypes. Importantly, during the procurement process, the parties engage in a technical dialogue that facilitates transparency, deepens trust, and establishes measures to protect confidential information.

COLOMBIA IS UNCLEAR ON THE USE OF TECHNOLOGY TO GUARANTEE TRANSPARENCY

Colombia considers data protection a constitutional right,[67] and this has led to the enactment of various laws, such as Statutory Law No. 1581 of 2012 (General Personal Data Protection Act), Statutory Law No. 1266 of 2008 (governing data processing on compliance or non-compliance with monetary obligations) and Statutory Law No. 2157 of 2021 (which regulates the accountability principle and aspects of identity theft). These provisions mean that under Colombian law, once personal data processing has served its purpose, such data must be destroyed.[68]

66 Guía de lineamientos de compra pública de tecnología e innovación, Agencia Nacional para la Contratación Pública-Colombia Compra Eficiente (Guidelines for Public Procurement of ICTs, National Agency for Public Procurement - "Colombia Compra Eficiente"), 15 July 2022.

67 Political Constitution of the Republic of Colombia (Bogotá: *Constitutional Gazette*, 4 July 1991), Article 15.

68 Decree No. 1074 (Bogotá: 26 May 2015), Article 2.2.2.25.2.8.

In terms of transparency, it is unclear whether the general mechanisms established to guarantee transparency are applicable to new technologies. Nevertheless, Colombia has introduced a soft law instrument in the form of a Framework for the Ethical Implementation of Artificial Intelligence in Colombia. The first principles mentioned in this document are those of transparency and explainability, which should be understood as "providing comprehensive relevant and understandable information about the design, operation and impact of artificial intelligence systems both for developers and users, and also for individuals that could be affected by the decisions and outcomes of these systems".[69]

Chile

Chile has no specific legislation governing the use of emerging technologies by the public or private sectors. Similarly, there are no specific government agencies for emerging technologies, despite the existence of the Department of Public Procurement (ChileCompra), which is responsible for advising government bodies and agencies on procurement and managing the platform through which procurement is conducted.

Chile has some general regulations, including the Constitution itself, which guarantees the respect and protection of private life and honour and reputation, and the protection of personal data, which is independent from the right to privacy.[70] These rights inevitably impact the use of emerging technologies.

Other provisions at different levels have become the main tools for regulating AI and emerging technologies, albeit not drafted for that specific purpose:

69 Marco ético para la inteligencia artificial en Colombia (Framework for the Ethical Implementation of Artificial Intelligence in Colombia) (Bogotá: Administrative Department of the Presidency of the Republic, May 2021).

70 Political Constitution of the Republic of Chile (Santiago: Official Journal, 21 October 1980), Article 19, https://www.camara.cl/camara/doc/leyes_normas/constitucion.pdf

a. Law No. 19.628. on the Protection of Private Life (Data Protection Law) is essential in the context of AI, especially regarding machine learning. Once the amendment of this law, currently under debate in Congress, is approved, it will contain a regulatory framework with sanctions for data protection breaches that will bring Chile in line with the standards of the GDPR.[71]

b. Law No. 17.336 (Law on Intellectual Property) is designed to protect the intellectual rights acquired by the authors of literary, artistic and scientific works of their own creation, whatever their form of expression, and related rights determined by the law.[72]

BILLS HAVE BEEN PUT FORWARD TO SEEK TO ESTABLISH A SUITABLE REGULATORY FRAMEWORK FOR THE ILLEGAL USE OF AI

c. Law No. 21.180 (State Digital Transformation Act). Under this law, all administrative procedures in all government bodies and agencies subject to the Administrative Procedures Act (Law No. 19.880) shall be performed entirely electronically. This will maximise the certainty, security and speed of government services for individuals, and improve the transparency of the government's processes and dealings with its citizens.[73]

d. Law No. 21.521 (Fintech Law) promotes competition and financial inclusion through innovation and technology in financial services.[74]

71 Law No. 19.628 (Santiago: 28 August 1999), https://www.bcn.cl/leychile/navegar?idNorma=141599.

72 Law No. 17.336 (Santiago: 2 October 1970), https://www.bcn.cl/leychile/navegar?idNorma=28933.

73 Law No. 21.180 (Santiago: 11 November 2019), https://digital.gob.cl/transformacion-digital/ley-de-transformacion-digital/#:~:text-La%20 Ley%20n%C2%AA21.,se%20realice%20en%20formato%20electr%C3%B3nico.

74 Law No. 21.521 (Santiago: 4 January 2023), https://www.bcn.cl/leychile/navegar?idNorma=1187323.

e. Law No. 19.886 on administrative contracts for the supply and provision of services (Law on Public Procurement).[75]

Chilean lawmakers have proposed several AI-related bills, most of which relate to criminal law and focus on identifying individuals making illicit use of AI.[76]

The introduction of a bill regulating Artificial Intelligence Systems (SIA, in Spanish) is intended create a National Commission on Artificial Intelligence under the Ministry of Science, Technology, Knowledge and Innovation.[77] This Ministry, in partnership with Digital Government, has issued guidelines on the use of AI in the public sector, specifically: human-centric AI, data privacy and usage, and AI transparency and explainability.

Chile has also created a strategic government instrument that serves as national AI policy and contains more than 70 priority actions and more than 180 initiatives for the public and private sectors.

The government agency in charge of procurement and contracts is ChileCompra, which has established several standard bidding document categories,[78] one of which - technology - covers cloud computing services, data centre services, development and maintenance of computer systems, and data science and AI.

These bidding documents are based on the principles of transparency, privacy, non-discrimination and explainability. Importantly, by introducing these bidding documents, Chile has become the first Latin American country to enforce data ethics requirements for public

75 Law No. 19.886 (Santiago: 30 July 2003), https://www.bcn.cl/leychile/navegar?i=213004.

76 Congress pages, citation 22 of the original document.

77 *See* https://www.camara.cl/legislacion/ProyectosDeLey/tramitacion.aspx?prmID=16416&prmBOLETIN=15869-19.

78 Due to a recent regulatory change, the standard bidding documents are no longer available, as they are currently being revised and updated by ChileCompra.

sector procurement of automated systems. It is relevant to highlight that the implementation and adoption of AI systems in the public sector is only possible when there is an adequate procurement mechanism.

Once the respective procurement contracts have been signed, no specific rules apply to the use and implementation of the acquired technology, and the service falls within the scope of Chilean public law, and above all to the contents of the bidding document.

Under Law No. 19.628 (the data protection law), which is generally applicable to both the public and private sectors, the only legal basis for personal data processing is the consent of the data subject, notwithstanding the rights of access, rectification, cancellation and objection (ARCO).

As soon as the purpose of the data processing ceases to exist, the data must be deleted, cancelled, removed, or anonymised, unless there is consent or legal authorisation to retain them for a longer period.

CHILE STILL FACES THE CHALLENGE OF CORRECTLY DEFINING AND MONITORING AI AND OTHER TECHNOLOGIES

Transparency in Chile depends on whether the contract awarded is private or public. In the case of the former, there is no special regulation requiring the transparency of any algorithm; while in the case of the latter, the Transparency Council has a key role in establishing guidelines and standards within its area of competence. Furthermore, ChileCompra's standard bidding documents include clauses on algorithmic audits that have the potential to significantly affect public procurement processes.

At the time of conducting this study, there is no known case law on the use of AI in government bodies or agencies, although some does exist on technological issues in general.

One of the most important cases concerned a personal data protection rights action filed against the bioinformatics and technology company Emotiv Inc., in which the Supreme Court ruled that a brain device violated the appellant's physical and mental integrity and right to privacy and ordered the company to review how the device is used and sold, the data obtained from the device, and how these data are deleted.[79]

The authorities, aware of the importance, risks and challenges associated with these emerging technologies, have formulated and implemented several policies and regulations aimed at promoting their development while protecting human rights and ethical conduct.

It is important to emphasise that Chile lacks a legally binding, uniform definition of AI. Different definitions can be found in government documents, but in practice, *algorithm* is the term used to describe what is generally understood as AI. Similarly, the absence of a central organisation, body or agency in charge of addressing data protection and regulating issues relating to AI imposes a certain level of risk, as there is no way of properly guaranteeing rights in this new digital age.

Mexico

Mexico has few laws and regulations that specifically address emerging technologies. However, significant progress has been made at different levels of government.

For example, there are various federal provisions on the incorporation of AI or the use of certain technologies, such as the Internal Rules of the Ministry of Finance and Public Credit,[80] and the National Digital Strategy,[81] which

79 Supreme Court of Chile, Ruling of 9 August 2023, https://www.doe.cl/alerta/11082023/20230811001.

80 Internal Rules of the Ministry of Finance and Public Credit (Mexico: *Official Journal of the Federation*, 6 March 2023), https://dof.gob.mx/nota_detalle.php?codigo=5681710&fecha=06/03/2023#gsc.tab=0.

81 Agreement issuing the 2021-2024 National Digital Strategy (Mexico: *Official Journal of the Federation*, 6 September 2021). https://www.dof.gob.mx/nota_detalle.php?codigo=5628886&fecha=06/09/2021#gsc.tab=0.

made its first appearance in the 2013-2018 National Development Plan, and after a sluggish start was updated in the 2021-2024 National Digital Strategy.

At the state level, some laws mention AI without going into specific details on its use, and some regulations on the adoption of certain information technologies have also been implemented, such as the Law Regulating the Use of Technology for Public Safety for the State of Mexico[82] and Mexico City,[83] the Mobility Agency and Public Transport Act in Querétaro[84] and the creation of the Department of Innovation and Digital Government[85] in Aguascalientes.

As for regulatory authorities, at the federal level there is the Coordination of the National Digital Strategy (CEDN, in Spanish), which is responsible for partnering with other competent agencies and entities to adopt and develop information and communication technologies and promote digital government.

MEXICO HAS FEW SPECIFIC LAWS AND REGULATIONS ON EMERGING TECHNOLOGIES

At the local level, despite the lack of a specific regulatory authority for emerging technologies, several authorities make use of them and have therefore been compelled to develop a framework and oversee their implementation, at least within the agency in question. These include the Department of Public Security of the State of Mexico and Mexico City, the Querétaro Mobility Agency, and the Aguascalientes Department of Innovation and Digital Government.

82 Law Regulating the Use of Information and Communication Technology for Public Safety in the State of Mexico (Toluca: *Official Journal Government Gazette*, 14 May 2014), https://legislacion.edomex.gob.mx/index.php/node/2120.

83 Law Regulating the Use of Technology for Public Safety in the Federal District (Mexico: *Official Gazette of the Federal District*, 27 October 2008), https://www.congresocdmx.gob.mx/media/documentos/8ea7523101a88c4d0c8c94c7eb166fb5833c5949.pdf.

84 Mobility Agency and Public Transport Act for the State of Querétaro (Querétaro: *Official Journal*, 10 November 2023), https://bj.scjn.gob.mx/doc/legislacion/4NME9nMB1tiV43eL63o-.

85 Government of the State of Aguascalientes, "Department of Innovation and Digital Government", https://www.aguascalientes.gob.mx/SIGOD/.

Article 16 of the Mexican Constitution recognises the right of data subjects to access, rectify, cancel and use their personal data. This formed the basis of the General Law on the Protection of Personal Data Held by Mandated Parties (GLPPDMP), which regulates data protection within the public sector, and makes it mandatory, among other things, to provide personal data subjects with a comprehensive privacy notice. It also establishes that in the case of excessive data processing, a risk impact assessment must be carried out and submitted to the regulatory authority before proceeding with the processing of personal data, although there are exceptions.

The GLPPDMP is based on key principles such as legality, purpose, loyalty, consent, quality, proportionality, information and accountability.[86] These principles ensure that personal data are processed in an ethical and transparent manner, thereby protecting the privacy and rights of individuals.

Mexico has no specific laws governing the procurement of new technologies. However, the Law on Procurement, Leases and Services in the Public Sector applies to the procurement of new technologies.

Although Mexico has made progress in the field of emerging technologies, it has yet to enact the legal instruments required to regulate these technologies. The absence of specific laws has generated legal loopholes that have had to be filled by other supplementary laws, so there is a clear need for specific, updated legislation that comprehensively addresses emerging technologies and provides adequate legal certainty on the subject.

86 General Law on the Protection of Personal Data Held by Mandated Parties (México: *Official Journal of the Federation*, 26 January 2017), https://www.diputados.gob.mx/LeyesBiblio/pdf/LGPDPPSO.pdf.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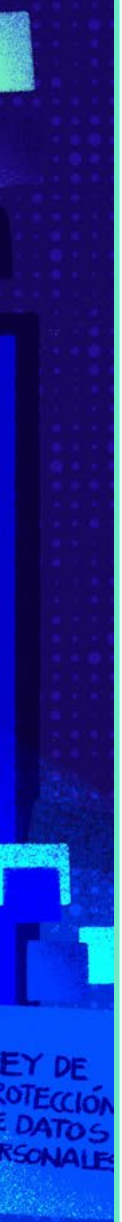


TOWARDS ALGORITHMIC TRANSPARENCY IN THE PUBLIC SECTOR IN MEXICO

Constitutional and Legal Considerations

Mexico has developed a robust legal framework that emphasises the protection of the transparency and privacy of personal data - essential prerequisites for the ethical implementation of AI. This framework is supported by constitutional provisions and specific laws that guarantee access to information and protection of personal data and ensure that individuals can understand and monitor how their data are used and how automated decisions impact their lives.

Article 6 of the Political Constitution of the United Mexican States establishes the right of access to information. In this context, information held by government bodies and agencies is, in principle, public and can, with few exceptions, be freely accessed. This is essential to ensure transparency in the implementation, development and use of technology, as it allows people to request and receive information about how the government uses technology and in

particular AI, and how algorithm-driven decisions are made. Access to information, as an *enabling right*, becomes a catalyst for transparency in the public sector on issues such as compliance by public authorities (mandated parties under the GLPPDM) and regulations governing the collection, processing, storage and communication of information in automated decision-making systems are interwoven.

Article 6 establishes the principles of document management, a basic instrument for controlling the information systems that make up the country's documentary heritage. Articles 6 and 16 establish the obligation of government agencies to protect all personal data in their possession, and lay down a series of principles, rights and specific obligations for the safe, confidential processing of this data.

Article 134 of the Political Constitution of the United Mexican States establishes the fundamental principles for the administration of the economic resources of the federation, the federal entities, the municipalities, and the territorial districts of Mexico City. These resources must be managed with efficiency, effectiveness, economy, transparency, and honesty to achieve the objectives for which they are intended. It also establishes that the results of the use of these resources must be assessed by the technical agencies created by the federal government and federal entities.

The procurement, leasing, transfer, and provision of goods and services must be awarded by open tender or similar procurement processes. This ensures that bids are submitted freely and openly, and guarantees the best market conditions in terms of price, quality, financing and opportunity. These are key principles for the use and development of artificial intelligence in public administration. The implementation of AI must be aligned with the principles of efficiency, effectiveness, economy, transparency, and honesty. Accountability and technical

evaluation are also essential to ensure that any resources allocated to AI are used appropriately, and that the results obtained are evaluated objectively and technically.

New international regulations and standards relating to how governments should procure and develop AI systems have also been introduced. These best practices and rules for risk analysis and documentation safeguard automated decision-making, and ensure that impact assessments are performed, adverse outcomes are mitigated, and processes are transparent and open to human intervention. They also promote security, innovation and competition, support workers threatened by automation, protect consumers and privacy, and facilitate the adoption of AI in the public sector under the principles of transparency, accountability and interoperability. Some of the most important documents in this regard include: the *fast-track principles*,[87] which revolve around rapid risk assessment, implementation of best practices, and the creation of a culture of responsible innovation in AI; the Government of Canada's *Directive on Automated Decision-Making*[88], the aim of which is to ensure that decisions are data-driven, the impact of algorithms is assessed, and the process is transparent and open to human intervention; and the World Economic Forum's *AI Procurement in a Box*[89] project, which provides guidelines for AI procurement in the public sector based on the

THE USE OF AI MUST BE ALIGNED WITH THE PRINCIPLES OF TRANSPARENCY, SAFETY, INNOVATION AND ACCOUNTABILITY

87 David Leslie, *Understanding Artificial Intelligence Ethics and Safety: A Guide for the Responsible Design and Implementation of AI Systems in the Public Sector* (The Alan Turing Institute, 2019), https://doi.org/10.5281/zenodo.3240529.

88 World Economic Forum, *AI Government Procurement Guidelines* (Colombia: BID, June 2020), WEF_AI_Procurement_in_a_Box_AI_Government_Procurement_Guidelines_2020.pdf.

89 Treasury Board of Canada Secretariat, "Directive on Automated Decision-Making", 2 July 2024, https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32592.

principles of transparency, fair competition, multi-stakeholder intervention, accountability, interoperability and knowledge transfer.

Relevant Legislation

The General Law on Transparency and Access to Public Information expands the fundamental principles outlined in Article 6 of the Constitution and provides a detailed framework for guaranteeing the right of access to information. Its origin dates to the Federal Law on Transparency and Access to Public Government Information (FLTAPGI), which was replaced by the constitutional amendments of 2007, 2013 and 2014. Currently, this law establishes the procedures by which individuals can request public information and the protocols that government bodies and agencies must follow in responding to such requests. It also promotes transparency in the use of technologies, including AI, by requiring government institutions to proactively disclose important information, such as public contracts and documents related to compliance, evaluation and the auditing of the use, implementation and development of technologies.

To complement existing data protection laws, such as the Law Regulating Credit Information Entities,[90] the FLTAPGI[91] - both from 2002 - and the Personal Data Guidelines of 2008, Mexico's Federal Law on the Protection of Personal Data Held by Private Parties (FLPPDPP), passed in 2010, was the first law to specifically regulate how private entities should process personal data.[92]

Its scope of application is the processing of data by individuals and legal entities of any type and size. The rules apply equally to a freelance physician and a large

90 Decree enacting the Law for the Regulation of Credit Information Entities. (Mexico: *Official Journal of the Federation*, 15 January 2002), https://www.diputados.gob.mx/LeyesBiblio/pdf/LRSIC.pdf.

91 Federal Law on the Protection of Personal Data Held by Private Parties (Mexico: *Official Journal of the Federation*, 5 July 2010), https://www.diputados.gob.mx/LeyesBiblio/ref/lfpdppp.htm.

92 Federal Law on Transparency and Access to Public Government Information (Mexico: *Official Journal of the Federation*11 June 2002), https://inicio.inai.org.mx/LFTAIPG/LFTAIPG.pdf.

technology company. Our analysis shows that the provisions of this law are equally relevant for government bodies and agencies and their contractors, particularly regarding projects involving AI, given the proliferation of public-private collaborations. This law enshrines certain basic rights: the rights of access, rectification, cancellation and objection (ARCO), and lays down a regulatory framework of eight basic principles: legality, information, purpose, consent, quality, security and accountability in the processing of personal data.[93]

Despite being adopted more than ten years ago, the Implementing Provisions of the Federal Law on the Protection of Personal Data Held by Private Parties (IPFLPPDPP),[94] provides a good precedent for the use of automated decisions made without direct human intervention. Article 112 of this law refers to the processing of personal data in decisions made *without evaluation by a human person*[95], and addresses the issue of automated decisions as follows:

a. *Information to the data subject*: The data controller must inform the data subject that a decision-making process is being carried out without human intervention. It is vital to clarify this to maintain trust and ensure that people are aware of how their data are being used.

b. *Right of access:* The data subject has the right to access the personal data used in the decision-making process. This allows individuals to verify the accuracy and relevance of the data used in decisions affecting them.

c. *Right of rectification:* If the personal data used are inaccurate or incomplete, the data subject may request a correction.

93 Federal Law on the Protection of Personal Data Held by Private Parties.

94 Regulation of the Federal Law on the Protection of Personal Data Held by Private Parties (Mexico: *Official Journal of the Federation* 21 December 2011), http://www.diputados.gob.mx/LeyesBiblio/regley/Reg_LFPDPPP.pdf.

95 Processing of personal data in decisions without evaluation by a human person: "Article 112. When personal data are processed as part of a decision-making process without evaluation by a human person, the data controller must inform the data subject of this. Data subjects may also *exercise* their right of *access* to know what personal data was used in the corresponding decision-making and, if applicable, the right of *rectification* when they consider that any of the personal data used is inaccurate or incomplete, so that they may request the decision to be *reconsidered*, in accordance with the mechanisms that the data controller has implemented for this purpose,". *See* Regulation of the Federal Law on the Protection of Personal Data Held by Private Parties.

This is crucial to ensure that automated decisions are not based on incorrect or outdated information.

d. *Reconsideration of the decision:* The data subject may request the decision to be reconsidered using the mechanisms implemented by the data controller. This is a fundamental right that guarantees fairness by allowing individuals to challenge and review decisions that could have a significant impact on their lives.

Given the proliferation of automated decision-making and the use of AI in Mexico, the FLPPDPP and its implementing provisions provide an essential legal framework for the protection of individual rights. By requiring private entities, and by extension, government contractors, to process personal data accountably and transparently, this law helps prevent abuse and ensure that technology benefits the well-being of all people.

General Law on the Protection of Personal Data Held by Mandated Parties

This law establishes specific requirements for the processing of data by government bodies and agencies and other parties, and in so doing guarantees that personal information is treated in a secure and transparent manner. The main provisions are:

The principle of information

• ***Privacy notice:*** An essential document that informs people how their personal data is collected, used and protected. The notice should be clear, accessible, and provide detailed information about the use of the data.[96]

96 Civil Service Department, "Aviso de Privacidad Integral. Sistema DeclaraNet" ("Comprehensive Privacy Notice: 'DeclaraNet' System"), February 2021, https://www.gob.mx/cms/uploads/attachment/file/662766/AVISO_DE_PRIVACIDAD_INTEGRAL_DECLARANET.pdf.

The principle of security

- ***Security document:*** Security procedure documents should be made available to the public to ensure that individuals understand how their data is protected. This document details the security policies and procedures implemented to protect data from unauthorised access, alteration or loss.[97]
- ***Asset inventory:*** This lists all the information resources held or managed by the mandated party. This information is essential for effective information management and to ensure that all assets are adequately protected.[98]
- ***Risk analysis:*** This helps to identify and assess potential risks to the security of personal data. This is a crucial step in developing effective mitigation strategies and prioritising data protection strategies.[99]
- ***Gap analysis:*** This involves assessing the gaps between current and optimal security measures, allowing entities to identify areas for improvement in data protection.
- ***Inventory of security measures:*** This lists all security measures that have been implemented to protect personal data, and makes it possible to continuously review and improve data security.[100]

97 *See* Mexican Social Security Institute, *Documento de Seguridad para el Tratamiento de Datos Personales del Instituto Mexicano del Seguro Social* ("Security Document for the Processing of Personal Data of the Mexican Social Security Institute") (Mexico: IMSS, undated), https://imss.gob.mx/sites/all/statics/pdf/transparencia/datospersonales/Documento-Seguridad-IMSS.pdf.

98 *See* an example of an asset inventory of the Bank Savings Protection Institute https://www.gob.mx/cms/uploads/attachment/file/556986/Inventario-de-datos-personales-y-de-los-sistemas-de-tratamiento.pdf.

99 This document outlines the risk analysis methodology used by the Mexican Supreme Court of Justice, https://datos-personales.scjn.gob.mx/sites/default/files/medidas-de-seguridad/Metodolog%C3%ADa%20Riesgo%20Brecha%202023.pdf. It should be noted that risk and gap analyses, by their very nature, are confidential.

100 Example from the Mexican Supreme Court of Justice, https://datos-personales.scjn.gob.mx/medidas-de-seguridad/Recursos-y-medidas-implementadas.

CONSTITUTIONAL FRAMEWORK

Article 6 of the Constitution:

This guarantees the right to access public information, which is essential for monitoring the government's use of technologies such as AI. This enables citizens to find out how data is used and automated decisions are made in the public sector.

Article 16:

This protects personal data and regulates how they must be securely processed by government bodies and agencies, establishing clear obligations to ensure the confidentiality of the information.

Article 134:

This establishes that the State's economic resources must be managed with efficiency, effectiveness, economy, transparency and honesty. These are key principles for the implementation of AI in public administration.

PRINCIPLES FOR AI IN THE PUBLIC SECTOR

Global initiatives:

- "Directive on Automated Decision-Making" published by the Government of Canada
- "AI Procurement in a Box" published by the World Economic Forum

These guidelines help the public sector to implement AI under the principles of transparency and ethics.

RELEVANT LEGISLATION

General Law on Transparency and Access to Public Information:

This expands the principles of Article 6 and regulates access to information related to the implementation of technologies, such as AI, and promotes the proactive disclosure of data by government bodies and agencies.

Implementing Provisions of the FLPPDPP:

This includes several rights, such as the data subject's right to information on automated decisions, the right to access and rectify data, and the possibility of requesting a reconsideration of automated decisions affecting the rights of individuals.

Federal Law on the Protection of Personal Data Held by Private Parties (FLPPDPP)

This regulates the processing of personal data by private entities and it also applies to government contractors involved in AI projects.

ARCO RIGHTS

- The right of access, rectification, cancellation and objection (ARCO) allows people to manage the use of their personal data in automated processes. These rights are crucial to prevent misuse of AI and ensure that data is accurate and up to date.
- The right to object to automated processing allows individuals to challenge automated decisions that have a significant impact on their rights.
- General Law on the Protection of Personal Data Held by Mandated Parties: This promotes security and transparency by establishing specific requirements for the processing of personal data by government bodies and agencies. The right to information and the requirement to publish a privacy notice are fundamental elements of this law.

Practical implications of ARCO rights and the right to object to automated processing

In the GLPPDMP, the rights of access, rectification, cancellation and objection (ARCO) play a key role in making it possible for people to manage the use of their personal data and object to automated decisions that could affect their rights or freedoms. Article 47 of this Law is particularly important, since it empowers individuals to object to the automated processing of personal data under certain conditions, such as when such processing will have significant legal effects. The GLPPDMP include the following key provisions and principles:

a. *Knowledge of automated processing*. Individuals have the right to be informed about the automated processing of their personal data. This includes the right to request detailed information about how their data is processed, and how automated decisions are made. It is essential for people to have such knowledge to make informed decisions about the use of their data.

> Under Article 44, the data subject has the right to access their personal data held by the data controller, and to know under what conditions they are held and how they will be used.[101]

From our perspective, data subjects should have access to *information relative to the conditions of how their data is held and how it will be used*, irrespective of whether data processing is automated or not. As mentioned in the GDPR and the IPFLPPDPP, this is a necessary to enable data subjects to exercise other rights, such as the right to cancellation, which we will discuss later.

101 General Law on the Protection of Personal Data Held by Mandated Parties, Article 44.

Rectification: If the data used in automated processing are incorrect or incomplete, individuals may exercise their right of rectification to correct this inaccuracy. This is important, as it ensures that automated decisions are based on accurate, updated data and prevents errors or bias in automated decisions.

DIFFICULTIES IN IMPLEMENTING DATA PROTECTION LAWS HAVE UNDERMINED THE ABILITY TO MONITOR DATA PROCESSING AND RESOLVE DISPUTES

Although the law does not refer specifically to automated decisions, there is evidence of its use in this context, namely, the important case of Commissioner Adrián Alcalá, reported in the 2023 Work Report of the Mexican enforcing authority for data protection, who demanded the correction of certain data used by the mivacuna.salud.gob.mx platform.[102]

b. *Objection to automated processing.* The right to object allows the data subject to stop or prevent their data from being used for automated decision-making that could have a significant impact on their life. This is particularly important in situations where the automated processing of personal data could have adverse legal consequences or significantly affect the interests, rights or freedoms of the data subject. For example, in the field of public administration, an individual could object to their

102 Importance of the decision: "The vaccination certificate is an official proof that must contain accurate and updated data to demonstrate that the person has received the vaccine, which is of great relevance, if we consider that due to the global health situation caused by Covid-19, several countries, including the United States and most European countries, have imposed restrictions on people travelling from countries with high cases of infection of the virus. In this regard, the Ministry of Health set up a digital platform for people vaccinated in Mexico to obtain the Covid-19 vaccination certificate, as official proof that they have received the vaccine, which can be useful in facilitating their trips abroad. In view of the fact that that some vaccination certificates may contain incorrect data and that there may be more cases in which rectification is requested, it is important that the Ministry of Health takes responsibility for the processing of the personal data that it holds which is provided for in its privacy notice". *See* National Institute for Transparency, Access to Information and Personal Data Protection, *2022 Work Report* (Mexico: INAI, 2022), 103, https://micrositios.inai.org.mx/informesinai/.

tax return being calculated automatically if they believe that the resulting evaluation is incorrect and could affect their financial rights.[103]

Practical example of exercising the right to object

An individual discovers that their tax return has been automatically calculated by a public administration system, and the resulting amount is incorrect and detrimental to their financial interests. Under Article 47 of the GLPPDMP, they may exercise their right to object by requesting a human review of the tax return. To do this, they must submit a formal request to the relevant authority detailing why they consider that the automated process has produced an adverse legal effect. The authority is then obliged to review the request, consider the information provided by the claimant and, if appropriate, make the necessary adjustments to rectify the situation.

This is an example of how ARCO rights and the objection to automated processing empower individuals to take effective control over the use of their personal data and protect themselves against automated decisions that may adversely affect their rights and freedoms. It is essential to enforce these rights to mitigate the risks of algorithmic discrimination and ensure that technology is used fairly for all.

General Law on Files

The organisation and conservation of information held in automated decision-making systems is also regulated.

103 General Law on the Protection of Personal Data Held by *Mandated Parties*, Article 47: "Data subjects may object to the processing of their personal data or demand that the processing be stopped, when:
I. Even though the processing is lawful, it must cease to prevent from causing damage or harm to the data subject, and II. Their personal data are subject to automated processing which produces unwanted legal consequences or significantly affects their interests, rights or freedoms, and are intended to evaluate, without human intervention, certain personal aspects or to analyse or predict, in particular, their professional performance, economic circumstances, state of health, sexual preferences, reliability or behaviour."

The new General Law on Files[104] has an extended scope to the national level and established more detailed principles and procedures for document management. This new law requires mandated parties to organise and store their files, use an institutional filing system (SIA, in Spanish) that groups documents in logical and chronological order, and guarantee the preservation of documents that may have historical value. It also requires each mandated party to conserve the physical document and its content and to implement all security measures needed to protect the information contained therein. The main provisions are:

a. *Document inventory.* This inventory, like that required under the GLPPDMP, helps entities to manage their documents and files effectively, ensuring that all important assets are properly catalogued and protected.

b. *Simple user guides.* Simple user guides should be publicly available to give individuals and other interested parties a clear understanding of how the files are organised and how they can be accessed. These user guides facilitate transparency and public access to information.[105]

Under articles 61, 62 and 63 of the General Law on Files, cloud document storage services must be used in such a way as to guarantee regulatory compliance, and data security and privacy. Article 61 establishes that when third party services are used, mandated parties must enter into formal

104 General Law on Files (Mexico: *Official Journal of the Federation*, 15 June 2018), https://www.diputados.gob.mx/LeyesBiblio/ref/lga.htm

105 See this example from the Public Security Department of the State of Yucatan.: https://www.yucatan.gob.mx/docs/archivo/ssp/instrumentos_1.pdf.

agreements or other legal instruments that identify the third-party in charge of file management. Article 62 details the specific requirements that must be followed, such as implementing stringent data security and privacy controls, knowing the location of servers, and using private infrastructure under the control of authorised personnel. In addition, sensitive data must be protected and risks must be mitigated through information security policies, ensuring interoperability with internal systems, and reflecting a coherent document management policy.

These laws provide a detailed framework for data and file management and, as such, play a crucial role in protecting people's privacy and promoting government transparency. By complying with these requirements, Mexico is moving towards more ethical and responsible management of information in the digital age. Mexico's regulatory framework lays the foundation for addressing transparency and privacy challenges in AI implementation. However, the rapid evolution of AI technology poses ongoing challenges that may require legislative updates and flexible interpretation of existing laws to ensure they remain effective. Furthermore, it is essential for the public and private sectors to work together to ensure that AI practices are not only compliant, but also respect human rights standards.

IN MEXICO, THE PROLIFERATION OF DIRECT AWARDS IN TECHNOLOGY TENDERS LIMITS COMPETITION AND INCREASES THE RISK OF CORRUPTION

Finally, the Law on Procurement, Leases and Services in the Public Sector in Mexico[106] establishes various mechanisms by which government bodies and agencies can procure technology. These include public tenders, which may be national or international, depending on whether they are restricted to Mexican nationals or open to foreign bidders, and whether the goods to be procured are of national or foreign origin. The law allows the exclusive participation of Mexican micro, small and medium-sized enterprises in certain cases, provided that the estimated value of the contract is less than the thresholds established by free trade agreements that include chapters on public sector procurement.

Specific Procurement Rules for Emerging Technologies

In this regard, the 2021-2024 National Digital Strategy (NDS),[107] coordinated by the President's office and applicable to the Federal Government, establishes a framework for the procurement, use, and management of information and communications technologies (ICT) in the public sector, with a strong emphasis on transparency, efficiency and security. This document provides the government with guidelines for improving its digital infrastructure and prioritising transparency and accountability in public administration. The NDS seeks to standardise the procurement of ICTs through transparent, stringent procurement procedures that maximise the efficient use of public resources, foster fair market competition, and adhere to best practices in technology procurement.

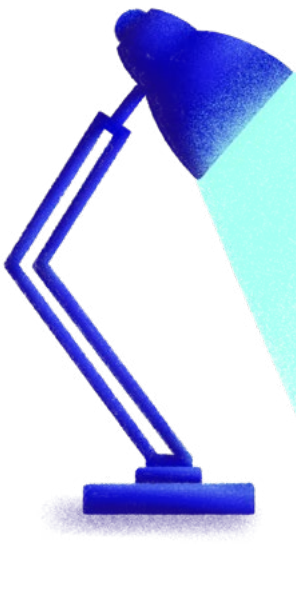
One of the main objectives of the NDS is to secure the technological sovereignty of the Mexican State

106 Law on Procurement, Leases and Services in the Public Sector (Mexico: *Official Journal of the Federation*, 4 January 2020), https://www.diputados.gob.mx/LeyesBiblio/ref/laassp.htm.

107 Agreement issuing the National Digital Strategy

by prioritising the use of open-source software and open standards to reduce dependence on external suppliers and avoid technology monopolies. It also recommends that the government develop its own IT systems to ensure that it maintains control over its data and systems, thereby improving transparency and security. The Strategy also calls for the interoperability of systems and applications as a means of simplifying and streamlining government procedures. This will also ensure that systems are scalable and replicable to easily adapt to different contexts and needs. This is expensive because, while the NDS encourages development, it also requires the development of various security layers, ruling out the possibility of immediately adopting the models currently used in global companies and organisations that already comply with international technical standards.

Information security is important to build trust in government technology services. The NDS includes the implementation of policies that guarantee the confidentiality, integrity and availability of information, and establishes the need for a Standard Cyber Incident Management Protocol that allows institutions to efficiently detect and manage threats and respond transparently to security incidents. The NDS also highlights the use of technological solutions to improve transparency and monitoring in the allocation of public resources for social programmes, a measure that would facilitate effective management and prevent corruption and embezzlement.



However, the reality is far from the rhetoric, and there are many challenges to overcome in the implementation and effectiveness of transparency and data protection laws in Mexico. One of the main challenges in this regard is the institutional transparency crisis, which is widely debated in political circles. One manifestation of this crisis lies in the traditional powers of the State and its inability to maintain institutional continuity due to its failure to fully resource

enforcing authorities, as in the case of the former INFO[108] and currently the INAI[109]. The lack of officials within these institutions weakens their capacity to oversee and resolve disputes. The growing disregard for resolutions issued by the INAI is also a sign of institutional reluctance to respect decisions that favour transparency and access to public information. In 2018, the rate of non-compliance was only 2%, while by 2022 it rose to 10%.

IMPORTANT CHALLENGES PERSIST IN MEXICO, SUCH AS A LACK OF OVERSIGHT AND EFFECTIVE IMPLEMENTATION OF THESE REGULATIONS

The inconsistencies found in data protection laws in Mexico make it difficult to implement them effectively. For example, under the General Law on Credit Information Entities of 2002, credit bureaus fall beyond the scope of the FLPPDPP.[110] The rights provided in the FLPPDPP, such as the right to portability, need to be updated. Furthermore, the principle of explainability and the right to object to decisions made without human intervention should cease to be merely regulatory and should be enforced by law, in line with other standards. The most recent GLPPDMP needs to incorporate regulations on automated decisions, since these are a particular type of data processing that requires specific attention. Likewise, applications need to

108 INFO, "Boletín: DCS/025/18/. INFO reconoce decisión del Inai de atraer recursos de revisión de la CDMX" ("Bulletin DCS/025/18/: INFO recognises INAI's decision to address objections in Mexico City"), 24 April 2018, https://infocdmx.org.mx/index.php/2-boletinesZ5777-dcs-025-18.html.

109 Mexican Supreme Court of Justic. " Comunicado núm. 341/2023. La Corte autoriza al Pleno del Inai para que provisionalmente pueda sesionar con menos de cinco personas comisionadas", (Communication No 341/2023. The Court authorises the Plenary of the INAI to provisionally meet with fewer than five commissioners."), 2 October 2023, https://www.internet2.scjn.gob.mx/red2/comunicados/comunicado.asp?id=7531.

110 *See* Mexican Supreme Court of Justice , Amparo en revision 179/2021 ("Protection action under review No. 179/2021") (Mexico: Supreme Court of Justice, 1 December 2021), https://www2.scjn.gob.mx/juridica/engroses/2/2021/2/2_282570_5429.docx.

be updated to comply with the new rules of portability and interoperability.[111]

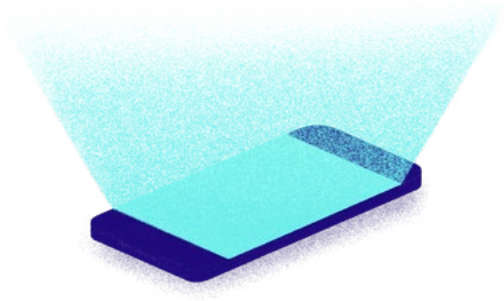
Finally, the implementation of regulations on files and personal data merits particular scrutiny. Among public authorities covered by the GLPPDMP (known as mandated parties), a mere 25% comply with basic requirements such as publishing comprehensive privacy notices, which shows that there is considerable room for improvement. In addition, only 22% have security procedure documents, and only 25% have established confidentiality controls. Regarding ARCO rights, only 29% provide the resources and procedures needed to respond to these requests, and only 36% have a Transparency Committee. Moreover, only 30% have approved training programs, and only 35% adequately manage ARCO requests through their Transparency Unit. These figures underline the urgent need to strengthen the protection of personal data among mandated parties at federal level, and raise the question of what is happening at the local and municipal levels, which have the largest number of mandated parties but the least resources.[112]

The recent history of public tenders in Mexico is also dismal. Direct awards are the norm, with 90% of public tenders in 2020 being awarded directly, according to the Mexican Institute for Competitiveness (IMCO, in Spanish). Despite the government's promises of transparency and efficiency, significant problems persist, such as a lack of competition in tenders and opacity in the management of resources.

111 Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales (National Institute for Transparency, Access to Information and Personal Data Protection), "Comunicado INAI-372-23 Actualización de Ley Federal de Protección de Datos debe reconocer derechos humanos en el ámbito digital: Josefina Román" ("Communication INAI-372-23 Updates to the Federal Data Protection Law should recognise human rights in the digital sphere: Josefina Román"), 28 December 2023, https://home.inai.org.mx/wp-content/documentos/SalaDePrensa/Comunicados/Comunicado%20INAI-372-23.pdf.

112 Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales (National Institute for Transparency, Access to Information and Personal Data Protection), *Evaluación del desempeño de los sujetos obligados en el cumplimiento de las disposiciones en materia de protección de datos personales 2022-2023. Informe de resultados* (2022-2023 Evaluation of the performance of mandated parties in complying with the provisions on personal data protection. Report of Findings) (Mexico: INAIi, 2023), https://home.inai.org.mx/wp-content/documentos/pdp/estadisticas/evaluaciondesemp/informe_resultados_evaluacion_%202022-2023.pdf.

This practice limits competition, favours discretionary management of public resources, and increases the risk of corruption and poor management, leading to higher prices and lower quality in the goods and services acquired. According to IMCO, there is an urgent need to strengthen control and supervision mechanisms, implement best practices, and adopt technologies that facilitate access to information to improve transparency and efficiency in the public procurement system in Mexico.[113]



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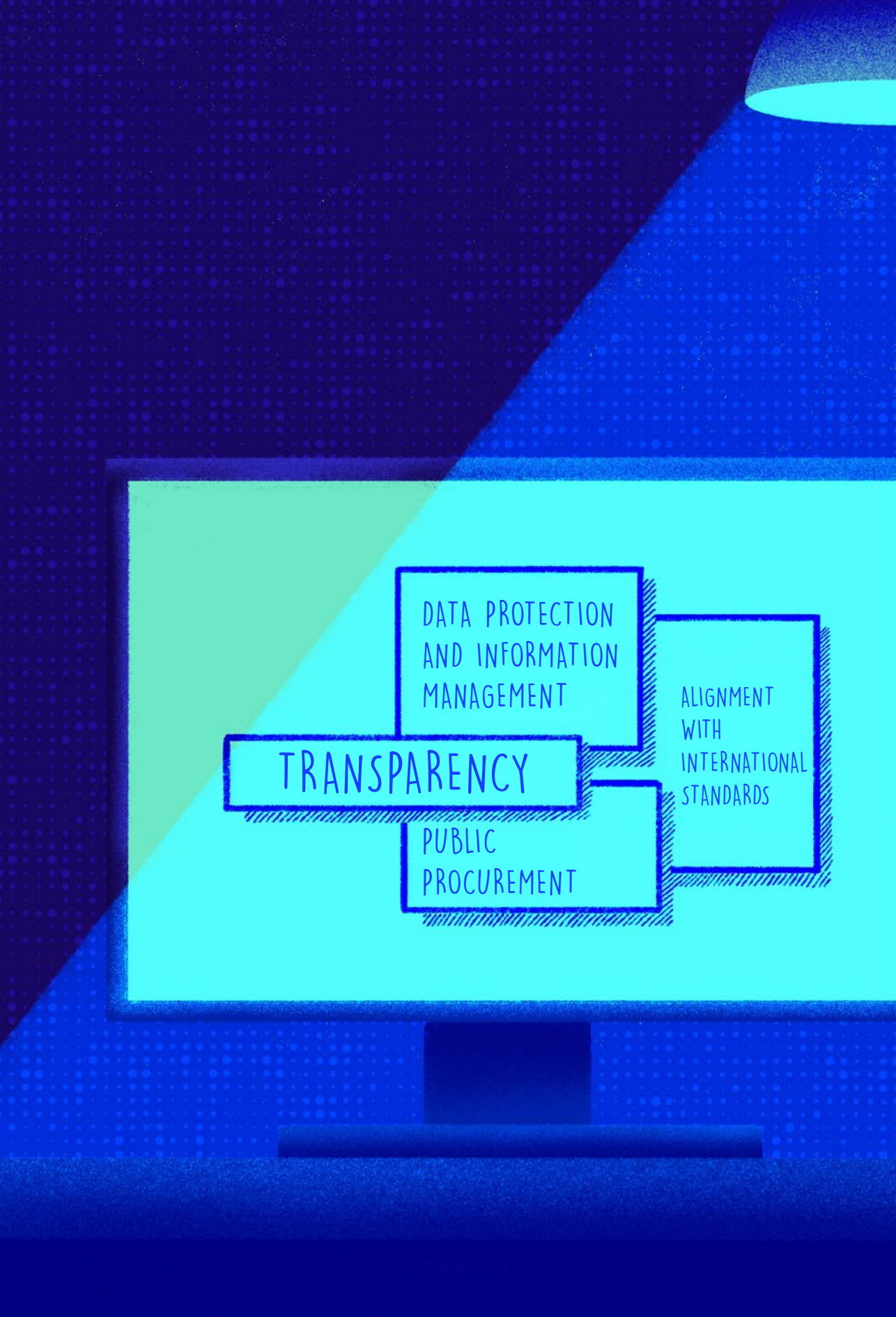

DATA PROTECTION AND INFORMATION MANAGEMENT
TRANSPARENCY
ALIGNMENT WITH INTERNATIONAL STANDARDS
PUBLIC PROCUREMENT

CONCLUSIONS AND RECOMMENDATIONS

Conclusions Specific to Mexico

The main conclusions regarding the use of new technologies and artificial intelligence in the public sector in Mexico can be summarised as follows:

1. Transparency

Mexico has developed a robust constitutional and legal framework to ensure transparency in the public sector. The right of access to information, enshrined in Article 6 of the Constitution, plays a key role in monitoring and understanding how information technologies and artificial intelligence are used in government decision-making. The effective implementation of these principles is, however, hampered by a lack of institutional transparency and poor compliance by some mandated parties.

2. Data Protection and Information Management

The protection of personal data is well-defined in Mexican legislation and is regulated by laws such as the FLPPDPP and the GLPPDMP, which establish clear rights and obligations for the safe, transparent management of personal data. However, the practical application of these laws is plagued by inconsistencies and challenges, especially in terms of document management and the protection of the data used in automated decision-making.

3. Public Procurement

Mexico's Law on Procurement, Leasing and Services in the Public Sector establishes procedures for acquiring technology, including AI. However, the predominant practice of direct awards of public tenders limits competition and increases the risks of corruption. The lack of open, transparent tendering is an obstacle to the development of an efficient, competitive emerging technologies market.

4. Alignment with UNESCO and OECD Standards on AI

The implementation of AI in the public sector must be aligned with international standards such as those established by UNESCO and the OECD. This includes ensuring transparency, accountability, security and the protection of human rights. Mexico's NDS highlights the importance of technological sovereignty and information security but faces significant challenges in its effective implementation and alignment with international standards.

Recommendations

1. Transparency

- Strengthen the capacity of enforcing authorities such as the INAI to oversee and resolve disputes related to access to information.
- Implement more effective oversight and auditing mechanisms to ensure that mandated parties comply with transparency laws.
- Promote citizen participation and inter-institutional collaboration to improve transparency in the use of technologies and AI-driven decision-making.

2. Data Protection and Information Management

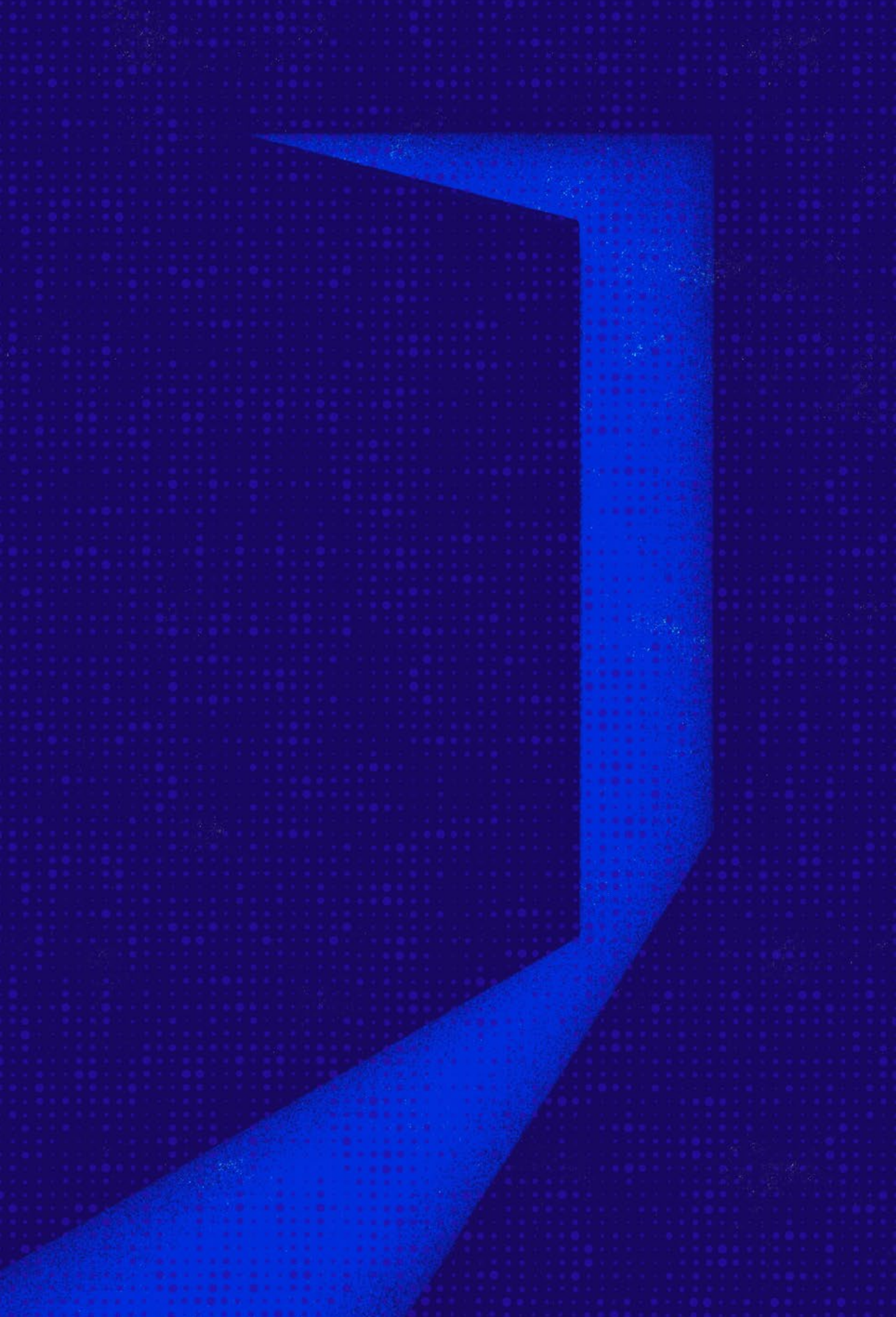
- Update the FLPPDPP to include up to date rights and principles, such as data portability and explainability in automated decisions.
- Improve the training and resources available to mandated parties for the management of personal data and the protection of information.
- Implement continuous, strict monitoring of compliance with privacy notices, security documents, and other compliance documents by mandated parties.

3. Public Procurement

- Promote transparency and competition in public procurement using open, public tenders.
- Establish stricter controls and oversight mechanisms to reduce the practice of direct awards and mitigate the risk of corruption.
- Adopt technologies that facilitate access to information and improve efficiency and transparency in the public procurement system.

4. Alignment with International Standards

- Align the NDS with UNESCO and OECD standards, promoting transparency, accountability and the protection of human rights in the implementation of AI.
- Develop clear policies and protocols for cyber incident management and the protection of information in the use of AI.
- Promote public-private collaborations to ensure ethical and responsible practices in the use of AI while promoting innovation and adherence to international standards.
- .



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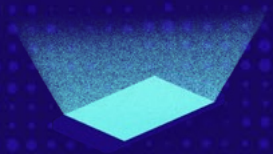

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