Brazil

National AI Strategy

Brazil is "open for the development of state-of-the-art technology and innovation efforts, such as 4.0 Industry, artificial intelligence, nanotechnology and 5G technology, with all partners who respect our sovereignty and cherish freedom and data protection" said President Jair Bolsonaro before the United Nations General Assembly last September.¹⁷⁶

Following on the Digital Transformation Strategy (E-Digital),¹⁷⁷ the Brazilian government has taken steps toward a national AI strategy, "Estratégia Brasileira de Inteligência Artificial."

Brazil suggests concrete policies can enable the development of an AI ecosystem, including opening government data, establishing regulatory sandboxes, fostering startups in this field, as well as directing R&D investment funds to this area. Additionally, Brazil has said it is essential that nations cooperate in relevant international organizations to achieve a common understanding and develop principles of ethics and responsibility in the use of AI.¹⁷⁸

More recently, the development of the Artificial Intelligence strategy in Brazil has been delayed due to the Ministerial change in Brazil the Ministry of Science, Technology, Information and Communications (MCTIC) was split into two: a Ministry of Science, Technology and Information (MCTI) and a Ministry of Communication (MCom). Artificial Intelligence is now the responsibility of a broad Directorate on Science,

http://www.itamaraty.gov.br/en/speeches-articles-and-interviews/president-of-thefederative-republic-of-brazil-speeches/21770-remarks-by-president-jair-bolsonaro-at-thegeneral-debate-of-the-75th-session-of-the-united-nations-general-assembly-september-22-2020

¹⁷⁷ The 2018 Estratégia Brasileira para a Transformação Digital (E-Digital) includes a specific action "to evaluate potential economic and social impact of (...) artificial intelligence and big data, and to propose policies that mitigate negative effects and maximize positive results". https://oecd.ai/dashboards/policy-

¹⁷⁶ President Jair Bolsonaro, *Remarks at the General Debate of the 75th Session of the United Nations General Assembly* (Sept. 22, 2020),

initiatives?conceptUris=http:%2F%2Fkim.oecd.org%2FTaxonomy%2FGeographicalAre as%23Brazil

¹⁷⁸ OECD G20 Digital Economy Task Force, *Examples of AI National Policies* 10 (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf

Technology and Digital Innovation (under the Secretary of Entrepreneurship and Innovation of MCTI).¹⁷⁹

Public Participation

The Ministry of Science, Technology, Innovations and Communications (MCTIC) organized an online public consultation between December 2019 and February 2020 to gather inputs for "a National Artificial Intelligence Strategy that allows to enhance the benefits of AI for the country, mitigating any negative impacts."¹⁸⁰

According to the terms of the public consultation, "the objective of the strategy is to solve concrete problems in the country, identifying priority areas in the development and use of AI-related technologies in which there is greater potential for obtaining benefits. It is envisaged that AI can bring gains in promoting competitiveness and increasing Brazilian productivity, in providing public services, in improving people's quality of life and in reducing social inequalities, among others."

The consultation presented discussion keys in thematic areas related to AI, focusing on the government's role regarding the impact of such technologies in society. Relevant documents to artificial intelligence were made available on the consultation website. The consultation collected about 1,000 contributions in total, which are being taken into account for the development of the strategy proposal.¹⁸¹

Research & Development

Brazil plans to establish eight AI research centres in 2020 in four focus areas: health, agriculture, industry, and smart cities. Aimed to conduct research, to foster an AI ecosystem and stimulate start-ups, and to build human capacity in related technologies, these centers will bring together

http://participa.br/estrategia-brasileira-de-inteligencia-artificial/blog/apresentacao-e-instrucces

¹⁷⁹ Ministério da Ciência, Tecnologia e Inovações, *Organization Chart,* https://www.gov.br/mcti/pt-br/imagens/organograma/sempi.pdf

¹⁸⁰ Participate Brazil, Ministério da Ciência, Tecnologia, Inovações e Comunicações,

Brazilian Artificial Intelligence Strategy - Qualifications for a Digital Future,

¹⁸¹ OECD AI Policy Observatory, *Policy Initiatives for Brazil,* <u>https://oecd.ai/dashboards/policy-</u>

initiatives?conceptUris=http:%2F%2Fkim.oecd.org%2FTaxonomy%2FGeographicalAre as%23Brazil

governmental, academic, and private sector entities to benefit the private and public sectors and the workforce.¹⁸²

Brazil's largest public/private AI research facility, the Artificial Intelligence Center (C4AI), was launched in October 2020 to tackle five major challenges related to health, the environment, the food production chain, the future of work and the development of Natural Language Processing technologies in Portuguese, as well as projects relating to human wellbeing improvement as well as initiatives focused on diversity and inclusion.¹⁸³

In November 2020, the Brazilian government announced the launch of a national innovation network focused on AI. Aimed to increase the production capacity and competitiveness of local companies, the network results from the cooperation between the MCTI and the Brazilian Industrial Research and Innovation Company. The network will encourage use of advanced technologies in various productive sectors. Seventeen research centers with infrastructure and skilled professionals in areas such as machine learning, Internet of Things, Big Data, will support startups and established businesses in the development of new products and services based on the technology.¹⁸⁴

Privacy

In September 2020, Brazil's President signed the new Brazilian data protection law, *Lei Geral de Proteção de Dados Pessoais* (LGPD).¹⁸⁵ The LGPD is the first comprehensive data protection law in Brazil and mirrors

https://www.zdnet.com/article/brazil-launches-artificial-intelligence-center/

 ¹⁸² OECD G20 Digital Economy Task Force, *Examples of AI National Policies* 10 (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf
¹⁸³ Angelica Mari, *Brazil launches artificial intelligence center*, Brazil Tech (Oct. 14, 2020)

¹⁸⁴ Angelica Mari, *Brazil creates national AI innovation network*, Brazil Tech (Nov. 2, 2020), https://www.zdnet.com/article/brazil-creates-national-ai-innovation-network/

¹⁸⁵ Presidency of the Republic Sub -General Secretariat for Legal Affairs, General Law on Protection of Personal Data (LGPD) (Aug. 14, 2020) (GT)

http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2018/Lei/L13709.htm; Katitza Rodriguez, Veridiana Alimonti, *A Look-Back and Ahead on Data Protection in Latin America and Spain* (Sept. 21, 2020), https://www.eff.org/deeplinks/2020/09/look-back-and-ahead-data-protection-latin-america-and-spain

the European Union's GDPR.¹⁸⁶ Before the LGPD, data privacy regulations in Brazil consisted of various provisions spread across Brazilian legislation.¹⁸⁷

Seven principles underpin the protection of personal data in the LGPD: (1) respect for privacy; (2) informative self-determination; (3) freedom of expression, information, communication and opinion; (4) the inviolability of intimacy, honor and image; (5) economic and technological development and innovation; (6) free enterprise, free competition and consumer protection; and (7) human rights, the free development of personality, dignity and the exercise of citizenship by natural persons.

The LGPD is relevant to the processing of personal data in relation to AI applications.¹⁸⁸

Data Protection Authority

The LGPD establishes a national data protection authority in Brazil *Autoridade Nacional de Proteção de Dados (ANPD)* as an agency of the federal government linked to the office of the President of Brazil.¹⁸⁹ From a subject matter perspective, the ANPD is guaranteed technical and decision-making autonomy,¹⁹⁰ and is given important attributions related to the LGPD interpretation, application and enforcement.¹⁹¹

Among other powers, the National Data Protection Authority (1) regulates the General Data Protection Law; (2) supervises compliance with

¹⁸⁶ Hogan Lovells Engage, *Brazil creates a Data Protection Authority* (Jan. 11, 2019), https://www.engage.hoganlovells.com/knowledgeservices/news/brazil-creates-a-dataprotection-authority

¹⁸⁷ DLA Piper, Data Protection Laws of the World: Brazil,

https://www.dlapiperdataprotection.com/index.html?t=law&c=BR

¹⁸⁸ Lexology, An interview with Demarest Advogados discussing artificial intelligence in Brazil (Nov. 27, 2020), https://www.lexology.com/library/detail.aspx?g=70705701-b4c6-4aa7-8a8a-344dd757f578

¹⁸⁹ LGPD, Art. 55-A.

¹⁹⁰ LGPD, Art. 55-B.

¹⁹¹ LGPD, Art. 55-J. Centre for Information Policy Leadership (CIPL) and Centro de Direito, Internet e Sociedade of Instituto Brasiliense de Direito Público (CEDIS-IDP), *The Role of the Brazilian Data Protection Authority (ANPD) under Brazil's New Data Protection Law (LGPD)* (Apr. 17, 2020), https://www.huntonprivacyblog.com/wp-content/uploads/sites/28/2020/08/en cipl-

idp_paper_on_the_role_of_the_anpd_under_the_lgpd__04.16.pdf

personal data protection legislation, with a view to protecting the fundamental rights of freedom, privacy and the free development of the natural person's personality; (3) develops the guidelines of the National Data Protection Plan in order to protect the fundamental rights of freedom, privacy and the free development of the personality of the natural person; and (4) applies administrative sanctions, after the respective provisions come into force in August 2021 and the matter is regulated, considering the public consultation contributions.¹⁹²

In September 2020, the Federal Government published the regulatory structure of the ANPD with the objective of giving effect to the LGPD and enabling sanctions for non-compliance.¹⁹³

There is concern that the ANPD lacks independent authority. Of the five members of the ANPD Board of Directors appointed by the President, three were military, including the ANPD's president.¹⁹⁴ The OECD stated in October 2020, "administrative and legal frameworks that leave open even a small possibility of a privacy enforcement authority being instructed by another administrative body on how to exercise its functions do not satisfy the independence criterion."¹⁹⁵ The OECD recommended that Brazil amend the law establishing the National Data Protection Authority; ensure that the rules for appointing the ANPD's Board of Directors and the National Council for the Protection of Personal Data are transparent, fair and based on technical expertise; and guarantee an adequate and predictable budget to the ANPD through a transparent process"

¹⁹² LGPD, Art. 55-J [GT], <u>https://www.gov.br/secretariageral/pt-</u>

br/noticias/2020/agosto/governo-federal-publica-a-estrutura-regimental-da-autoridadenacional-de-protecao-de-dados.

¹⁹³ Government of Brazil, *Federal Government publishes the regulatory structure of the National Data Protection Authority: Measure complies with the General Personal Data Protection Law and provides conditions for the operationalization of personal data protection in Brazil* (Sept. 2, 2020) [GT], https://www.gov.br/secretariageral/ptbr/noticias/2020/agosto/governo-federal-publica-a-estrutura-regimental-da-autoridadenacional-de-protecao-de-dados.

¹⁹⁴ Paula Pagani, Rafael Szmid, *Brazil's Senate approves Presidential appointees for Brazilian Data Protection Authority* (Oct. 23, 2020),

https://www.jdsupra.com/legalnews/brazil-s-senate-approves-presidential-63220/ ¹⁹⁵ OECD, *Going Digital in Brazil* 127 (Oct. 26, 2020), https://www.oecdilibrary.org/docserver/e9bf7f8a-en.pdf

Medical Data

According to another OECD report for the G20, Brazil is in the process of establishing regulation in the area of privacy and personal data protection in health systems, consistent with existing legislation, including the LGPD. To this end, the country is developing a national electronic health records system, which aims to provide a robust database for current medical use, as well as for technology development and innovation.¹⁹⁶

Algorithmic Transparency

Article 20 of the LGPD establishes the right of individuals "to request the review of decisions taken solely on the basis of automated processing of personal data that affect his interests, including decisions designed to define his personal, professional, consumer and credit profile or aspects of your personality."

As a result, "the controller must provide, whenever requested, clear and adequate information regarding the criteria and procedures used for the automated decision, observing the commercial and industrial secrets." Where the information is not provided due to the observance of commercial and industrial secrecy, the national data protection authority "may perform an audit to verify discriminatory aspects in automated processing of personal data."¹⁹⁷

Brazilian researchers, such as Prof. Renato Leite Monteiro, understand that a comprehensive interpretation of LGPD, in conjunction with the Constitution, consumer law and other legal provisions, guarantees the existence of a right to explanation in Brazil. However, this position demands greater jurisprudential consolidation.¹⁹⁸

AI and the Judiciary

With a current backlog of 78 million lawsuits, the Brazilian judicial system operates with substantial challenges in case flow management and a

 ¹⁹⁶ OECD G20 Digital Economy Task Force, *Examples of AI National Policies* 10 (2020), https://www.mcit.gov.sa/sites/default/files/examples-of-ai-national-policies.pdf
¹⁹⁷ LGPD, Art. 20 [GT].

¹⁹⁸ Institute for Research on Internet and Society, *Automated decisions and algorithmic transparency* (Nov. 16, 2019), https://irisbh.com.br/en/automated-decisions-and-algorithmic-transparency/

lack of resources to meet this demand¹⁹⁹ has led to numerous initiatives²⁰⁰ involving Artificial Intelligence.

Against this background, the President of the National Council of Justice, *Conselho Nacional de Justiça (CNJ)*, a judicial agency responsible for the administrative and financial control of the judiciary and the supervision of judges,²⁰¹ has published in August 2020 a Resolution on ethics, transparency and governance in the production and use of Artificial Intelligence in the Judiciary.²⁰² The National Council of Justice Resolution addresses AI related requirements such as respect for human rights, preservation of equality, non-discrimination, plurality and solidarity, transparency (from disclosure to explainability), data security, user control and accountability.

The Public Prosecutor's Office²⁰³ of the State of Rio de Janeiro has reportedly invested in data science and AI to expedite investigations and

¹⁹⁹ SIPA, *The Future of AI in the Brazlian Judicial System: AI Mapping, Integration and Governance*, https://itsrio.org/wp-content/uploads/2020/06/SIPA-Capstone-The-Future-of-AI-in-the-Brazilian-Judicial-System-1.pdf. (The study presents an overview of the current uses of AI in the Brazilian Judiciary and suggests the adoption of a collaborative governance structure that allows courts to achieve greater collaboration and cooperation using the Electronic Judicial Process (PJE). In addition, it presents an analysis of the principles, processes, incentives and internal regulations that govern the PJE and suggests ways of improving and expanding the current management model, in accordance with international best practices).

²⁰⁰ AI devices (called "robots"), tested in the Brazilian Judiciary include Leia, Poti, Jerimun, Clara, Radar, Elis, Sinapse, Victor, each with a specific function.

²⁰¹ US Law Library of Congress, *Brazil, Legal Research Guide – The Judicial Branch* (2011), https://www.loc.gov/law/help/legal-research-guide/brazil-judicial-branch2_2011-005662 RPT.pdf

²⁰² National Council of Justice, Resolution No. 332, *Provides for ethics, transparency and governance in the production and use of Artificial Intelligence in the Judiciary and provides other measures* (Aug. 21, 2020),

https://www.jusbrasil.com.br/diarios/documentos/917269827/resolucao-n-332-25-08-2020-do-cnj.

²⁰³ In Brazil, the Prosecution Service is not part of the Executive, Legislative or Judicial branches, being totally independent. It cannot be terminated and its duties cannot be transferred to other government agencies. Prosecutors have their independence guaranteed by the Brazilian Constitution. Therefore, they are subordinated to an authority for administrative purposes only, but each member of the Prosecution Service is free to act according to their conscience and convictions under the law. Brazilian Prosecution Service, http://www.prrj.mpf.mp.br/english

prevent crimes.²⁰⁴ The system allowed information from different sources and bodies to be collected and also real-time data to be collected from suspected criminals.²⁰⁵ Likewise, Brazil's federal and state police are using AI applications such as military drones²⁰⁶ and crime prediction software.²⁰⁷

It is worth recalling that, like the EU GDPR, the LGPD (Art. 4) excludes "the processing of data for the purposes of public security" from its scope and states that such processing "shall be governed by specific legislation, which shall provide proportional and strictly necessary measures in order to serve the public interest." However, such specific legislation does not yet exist in Brazil.²⁰⁸

Facial recognition

Facial Recognition is implemented by both the public and private sectors in Brazil. According to *Instituto Igarapé*, a Brazilian think tank, there were at least 48 facial recognition applications throughout 16

²⁰⁴ MPRJ Aposta em Inteligência Artificial para Agilizar Investigações no Rio, G1 (Oct. 1, 2018), <u>https://g1.globo.com/rj/rio-de-janeiro/noticia/2018/10/01/mp-aposta-em-</u>

inteligencia-artificial-para-agilizar-investigacoes-no-rj.ghtml, archived at https://perma.cc/MYB5-99TW

²⁰⁵ <u>https://www.loc.gov/law/help/artificial-intelligence/americas.php#_ftnref2 -</u>

²⁰⁶ ISTOE, Against organized crime, PF puts unmanned aerial vehicle in the Amazon (Aug, 20, 2016), <u>https://istoe.com.br/contra-o-crime-organizado-pf-poe-veiculo-aereo-nao-tripulado-na-amazonia/</u>

²⁰⁷ Sarah Griffiths, *CrimeRadar is using machine learning to predict crime in Rio*, Wired UK (Aug. 18, 2016), https://www.wired.co.uk/article/crimeradar-rio-app-predict-crime. See also United for Smart Sustainable Cities, *Crime prediction for more agile policing in cities –Rio de Janeiro, Brazil: Case study of the U4SSC City Science Application Framework* (Oct. 2019), https://igarape.org.br/wp-

content/uploads/2019/10/460154_Case-study-Crime-prediction-for-more-agile-policingin-cities.pdf

²⁰⁸ Mariana Canto, Submission to the UN Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression: The Surveillance Industry (Feb. 2019),

https://ohchr.org/Documents/Issues/Opinion/Surveillance/MARIANA%20CANTO.pdf

Federal States between 2011 to 2019.²⁰⁹ The main use sectors are (i) public security, (ii) border control, (iii) transportation and (iv) education.²¹⁰

In August 2018, the Brazilian Institute of Consumer Protection (IDEC) filed a public civil action²¹¹ for breach of privacy and consumer legislation against the São Paulo Metro operator, regarding an AI crowd analytics system that claimed to predict the emotion, age, and gender of metro passengers without processing personal data.²¹² The operator was ordered to stop collecting data and remove the cameras, but the case moved forward, and a decision is now expected to be made soon.

Another monitoring system with facial recognition to be installed in the São Paulo subway network is being challenged in Court. Early 2020, the operating company was requested to provide clarifications on risk and impact assessment expected with the implementation of the new technology, on how personal data will be processed, on technical databases and security systems issues, and on actions to mitigate the potential risk of a data breach.²¹³

The Brazilian police has also been using live facial recognition for Carnival with now plans to use the technology in events involving crowds to find wanted criminals. In 2020, police forces rolled out facial recognition in six capitals across the country. When announcing the use of live facial recognition, the São Paulo police said a "situation room" would monitor the images from the cameras, which are then compared with a database

²⁰⁹ Instituto Igarapé, *Facial Recognition in Brazil*, https://igarape.org.br/infograficoreconhecimento-facial-no-brasil/ ("Facial recognition became especially popular in 2019. The year began with the announcement of a PSL delegation to China to acquire the technology.")

²¹⁰ Thiago Moraes, *Facial Recognition in Brazil*, Wired (Nov. 20, 2019),

https://medium.com/@lapinbr/face-recognition-in-brazil-f2a23217f5f7

²¹¹ Instituto Brasileiro de Defesa do Consumidor (Aug. 30, 2018),

https://idec.org.br/sites/default/files/acp_viaquatro.pdf.

²¹² AccessNow, Facial recognition on trial: emotion and gender "detection" under scrutiny in a court case in Brazil (June 29, 2020), https://www.accessnow.org/facial-recognition-on-trial-emotion-and-gender-detection-under-scrutiny-in-a-court-case-in-brazil/

²¹³ Tozzini Freire, *Facia Recognition is Disputed in Court* (Feb. 14, 2020), https://tozzinifreire.com.br/en/boletins/facial-recognition-is-disputed-in-court

managed by a biometrics lab. According to the police, the aim is to reduce the likelihood of mistakes, such as wrongly arresting people.²¹⁴

OECD/G20 AI Principles

Brazil has endorsed the OECD and the G20 AI Principles and referred to the OECD Principles as important guidance for the development of its national AI strategy. Brazil has not joined the Global Partnership on AI.

Human Rights

Brazil is a signatory to many international human rights treaties and conventions and is considered as a free country in the world for the protection of human rights and transparency.^{215 216}

During the 2018 discussions of the Group of Governmental Experts (GGE) on lethal autonomous weapons (LAWS),²¹⁷ Brazil issued a joint statement along with Austria and Chile, which proposed to establish an open-ended GGE to negotiate a legally binding instrument to ensure meaningful human control over critical functions in LAWS.²¹⁸

Evaluation

Brazil does not yet have a national strategy for AI. Brazil has endorsed the OECD/G20 AI Principles and has promoted public

²¹⁴ Angelica Mari, *Brazilian police introduces live facial recognition for Carnival*, Brazil Tech (Feb. 25, 2020), https://www.zdnet.com/article/brazilian-police-introduces-live-facial-recognition-for-carnival/

²¹⁵ Freedom House, Freedom in the World 2020 – Brazil (2020),

https://freedomhouse.org/country/brazil/freedom-world/2020

²¹⁶ Human Rights Watch, *World Report 2020: Brazil* (2020), https://www.hrw.org/world-report/2020/country-chapters/brazil

²¹⁷ Group of Governmental Experts on emerging technologies in the area of lethal autonomous weapons systems (GGE LAWS) of the High Contracting Parties to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects. ²¹⁸ Proposal for a Mandate to Negotiate a Legally-binding Instrument that Addresses the

Legal, Humanitarian and Ethical Concerns Posed by Emerging Technologies in the Area of Lethal Autonomous Weapons Systems (LAWS), U.N. Doc. CCW/ GGE.2/2018/WP.7 (Aug. 30, 2018)

https://www.unog.ch/80256EDD006B8954/(httpAssets)/3BDD5F681113EECEC12582F E0038B22F/\$file/2018_GGE+LAWS_August_Working+paper_Austria_Brazil_Chile.pd f,

participation in the development of AI policy. Brazil has established a comprehensive law for data protection and has a fairly good record on human rights. But the growing use of facial recognition and the absence of new safeguards for AI systems are matters of concern. Consumer groups have objected to the use of AI crowd analytics on metro passengers.