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AI regulation in Brazil: Advancements, flows, and need to learn from the data protection experience

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A B S T R A C T

Brazil has recently moved forward on two important developments in its regulatory framework for artificial intelligence: the creation of a national AI strategy and parliamentary discussions on an overarching AI law. These efforts follow considerable advances in AI regulation in foreign jurisdictions, and the country might be able to learn important lessons from these previous experiences. This article presents and analyses the nascent Brazilian AI regulatory framework, demonstrating its positive aspects and shortcomings.

1. Introduction

This article aims at analysing the creation of a Brazilian Artificial Intelligence (AI) Framework, discussing both the institutional and normative elements that compose such framework. The analysis encompasses the existing and potential bodies that might regulate AI in Brazil, the proposed legislation on the subject, and the norms framing automated processing of personal data, defined by the Brazilian General Data Protection Law (typically referred to by its Portuguese acronym "LGPD"), which fully entered into force in August 2021.

The article draws its theoretical approach from law and technology literature, the study of multistakeholder governance and policymaking, and is informed by comparative research on AI and data governance in multiple jurisdictions. Importantly, despite being a relative latecomer regarding data protection and having only an embryonic AI institutional and regulatory landscape, Brazil is at the forefront of AI policymaking in the region, and, given the continental size and relevance of the country in Latin America, the Brazilian AI framework has the potential to become a regional trendsetter.

To provide a more complete context, we begin this paper by carrying out a systematic review of emerging approaches for AI governance at the international level, focusing specifically on recent developments in the United States, Europe, and China. Subsequently, we focus on the Brazilian case, examining the governance model established by its Strategy for AI (known as "EBIA"[1] in its Portuguese acronym) and the transparency and participatory deficiencies of the governance structure defined by EBIA. We also focus on analysing the proposed Draft Bill on an AI Regulatory Framework,[2] which is currently discussed by the Brazilian Federal Senate. Finally, we consider the existing connection between AI regulation and data protection, with a particular focus on the lessons that must be learned from the recent experience in the field, since the entry into force the LGPD.

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[1] See Gaspar, W. & Curzi, Y. (2021). Artificial Intelligence in Brazil Still Lacks a Strategy. Report by the Center for Technology and Society at FGV Law School. CyberBRICS website. May 2021. available at: https://cyberbrics.info/wp-content/uploads/2021/05/EBIA-en-2.pdf.

[2] For an unofficial English translation of the Draft Bill, see the Non-Official Translation of the Brazilian Artificial Intelligence Bill, n. 21/2020. CyberBRICS website. October 2021. https://cyberbrics.info/non-official-translation-of-the-brazilian-artificial-intelligence-bill-n-21-2020/.

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Our initial consideration is that the increasing deployment of AI technologies in the public and private sectors is a worldwide phenomenon,[3] and Brazil is not an exception.[4] From the use of AI applications to increase efficiency in the health and education sectors to the digitalisation of public services, the possibilities and potential benefits brought by such new technologies are continuously expanding, together with the risks linked to an incautious approach to AI.

AI applications have been considered disruptive in several fields, prompting positive advancements but also increasing the type and breadth of potential harm. Several studies have emphasised numerous perils posed by flaws in AI technologies, such as data misuse, biases, and discrimination,[5] which can lead to fundamental rights violations, amongst other considerable social costs. Hence, several governments have started various types of regulatory efforts backed by relevant international recommendations,[6] but few approaches seem to have reached convinced and convincing solutions to date. Once again, Brazil appears to be no exception.

In this perspective, this article explores the Brazilian path leading to the establishment of an AI regulatory framework while investigating what lessons the Brazilian Legislature has – or should have – learned from the recent establishment of a new general data protection framework. The Brazilian AI regulation experience was inaugurated by the launch of the Brazilian Strategy for Artificial Intelligence (EBIA) and the discussion of a National Draft Bill on Artificial Intelligence[7] (a.k.a. PL 21/2020). The procedure for approving both relevant instruments included civic participation. The Ministry of Science, Technology, and Innovation (MCTI) opened a public consultation on EBIA, and members of the National Parliament instructed a public hearing to discuss the Draft Bill on an AI Regulatory Framework.[8] Despite these efforts to democratise the processes, researchers and civil society advocates have been pointing out the lack of consideration given by public authorities to the suggestions expressed by the participants to the consultative processes.[9]

Given this context, this article attempts to address and contextualise the main elements of the upcoming Brazilian AI framework[10] by analysing both the Brazilian Strategy and the Draft Bill on AI. The initial discussion of a selection of international initiatives and recommendations, especially those designed by OCDE, will be used to frame the discussion. Then, we will assess the Brazilian scenario, exposing shortcomings in the proposed regulatory framework and suggesting possible solutions and alternative approaches.

We conclude that Brazil offers a curious example of anti-Collingridge logic. In technology circles, the Collingridge dilemma is a well-known methodological quandary, considering two types of problems and trade-offs that the regulation of technology inevitably raises. On the one hand, an information problem, as the potential effects of a nascent technology and its applications, cannot be entirely and easily foreseen until the technology is developed and adopted. On the other hand, a power problem, since regulating and shaping the evolution of technologies is particularly complicated when the technology is already widely utilised and embedded into societies.

As we will argue, the Brazilian proposed framework offers a curious solution to the dilemma, as it seems to put forward a regulation that will likely have a very limited impact on the evolution of AI after having dedicated very timid efforts to the understanding of AI implications through the available participatory and multistakeholder means. We provide three types of evidence to back our claim based on our paper structure. First, we highlight the very limited consideration given to much-supporting information discussing the impact of AI provided during the EBIA consultation. Second, we stress the limited and – to some extent – opaque use of a new multistakeholder body created to implement the EBIA, especially regarding its working group on "Legislation, regulation and ethical use of AI", which could act as an excellent venue to gather information on how to regulate AI in Brazil, if used correctly. Last, we stress that the proposed Draft Bill for an AI Regulatory Framework contradicts several existing legal provisions, notably regarding consumer protection, LGPD transparency and non-discrimination clauses.

2. Methodology

To develop this article, we conducted a literature review analysing the emerging approaches for AI governance in the

[3] See McKinsey Analytics. (2021). The State of AI in 2021. December 2021. Available at: https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/McKinsey%20Analytics/Our%20Insights/Global%20survey%20The%20state%20of%20AI%20in%202021/Global-survey-The-state-of-AI-in-2021.pdf.

[4] See OECD. (2020). *Going Digital in Brazil* (OECD Publishing 2020). Available at: https://doi.org/10.1787/2f42e299-en.

[5] Noble, S. U. (2018). Algorithms of oppression. In Algorithms of Oppression. New York University Press.

[6] See Fjeld, J., Achten, N., Hilligoss, H., Nagy, A., & Srikumar, M. (2020). Principled artificial intelligence: Mapping consensus in ethical and rights-based approaches to principles for AI. *Berkman Klein Center Research Publication*, (2020-1). Available at: https://ssrn.com/abstract=3518482.See also Van Roy, V., Rossetti, F., Perset, K., & Galindo-Romero, L. (2021). AI Watch-National strategies on Artificial Intelligence: A European perspective (No. JRC122684). Joint Research Centre (Seville site). Available at: https://ideas.repec.org/p/ipt/iptwpa/jrc122684.html.

[7] Roman, J. (2021). Artificial Intelligence in Brazil: the Brazilian Strategy for AI and Bill 21/2020. Institute for Research on Internet and Society. 5 October 2021. https://irisbh.com.br/en/artificial-intelligence-in-brazil-the-brazilian-strategy-for-artificial-intelligence-bsai-ebia-and-bill-no-21-2020/.

[8] Draft Bill 21/2020 (Brazilian National Congress 2020) <https://www.camara.leg.br/propostas-legislativas/2236340> accessed 26 January 2022.

[9] Gaspar, W. & Curzi, Y. (2021). Artificial Intelligence in Brazil Still Lacks a Strategy. Report by the Center for Technology and Society at FGV Law School. CyberBRICS website. May 2021. Available at: https://cyberbrics.info/wp-content/uploads/2021/05/EBIA-en-2.pdf.Corresponding author: Walter Britto Gaspar, walter.gaspar@fgv.br, +55 21 999764907

[10] By "Brazilian AI framework", the authors mean the existing and potential group of institutions and hard and soft law instruments on the subject. When, however, an "AI Regulatory Framework" is referenced in complement or as a synonym to the draft AI Bill, the word "framework" is applied as a common, albeit inaccurate, translation of the Portuguese "marco", meaning an overarching piece of legislation on a particular subject.

United States, Europe, China and Brazil, with a particular focus on AI strategies. We also relied on international reports and guidelines on AI implementation, as well as official documents such as from the Council of Europe (CoE), the US Department of defence (DoD), and the Brazilian Ministry of Science, Technology, and Innovation (MCTI).

Regarding the Brazilian Framework for AI, we examined the archives of the MCTI official website to map an systematise the contributions to the public consultation that led to the elaboration of EBIA, and documents describing the EBIA committees' composition and agenda. Such records were consulted for a more extensive understanding of the participatory and transparency dimension related to the EBIA's conception and implementation, with particular regard to the EBIA Governance Committee.[11]

To examine the Legislative initiatives regarding AI, we analysed the Draft Bill 21/2020, which is currently in a fast-track procedure at the Brazilian Federal Senate, having absorbed other draft bills for AI regulation in the country. To facilitate the understanding and contextualisation of the Brazilian Framework for AI, we developed an online tool, containing a complete timeline of the EBIA process, the documents describing the EBIA committees' composition, the Draft Bill 21/2020, and the existing governmental programmes on AI.[12]

3. Emerging approaches to AI regulation

This section offers[13] an overview of recent AI regulatory developments, presenting some of the main international policymaking initiatives – focusing on the US, EU, and Chinese approaches – and, subsequently, we will examine the Brazilian case. Our choice for this path is because we deem it essential to provide a brief preliminary analysis of global developments to facilitate the reader's understanding of the key features of the proposed Brazilian model.

3.1. *Recent international developments: EU, US, and China*

With the rise of AI usage to leverage digital transformation, several countries are finding it necessary to elaborate new approaches to AI regulation. Europe is elaborating a rather overarching approach, at both the European Union and Council of Europe levels. The European Union is elaborating a comprehensive AI regulation, currently in advanced stages of legislative debate, aiming at adopting an AI Act,[14] following the EU strategic plan on "Artificial Intelligence for Europe" .[15] In addition to the EU efforts, the Council of Europe (CoE) is also elaborating an AI treaty "to regulate the design, development, and use of artificial intelligence systems".

This latter effort, which is also ongoing and will need longer negotiation and adoption procedures, being an international law instrument, has been shaped by the CoE Ad Hoc Committee on Artificial Intelligence, which recently published a document entitled "Possible elements of a legal framework on AI, based on the Council of Europe's standards on human rights, democracy and the rule of law."[16] This document, which is considered as the early draft of what may be the future treaty, was delivered to the CoE Committee of Ministers in December 2021.

Importantly, the explicit goal of the EU proposal AI Act is to shape global technology regulation, thus replicating the success of the EU General Data Protection Regulation (GDPR), which is currently considered as the golden standard for data protection laws, based on which multiple countries have recently shaped their national frameworks. Indeed, in its initial proposal, the European Commission highlights the purpose of the AI Act will be to "strengthen significantly the Union's role to help shape global norms and standards and promote trustworthy AI that is consistent with Union values and interests."[17]

The proposed EU regulation follows a risk-based approach, with four levels of risk related to the implementation of AI systems and corresponding levels of obligations: unacceptable risks (uses that are not allowed due to the risks involved); high risk; limited risk; and minimal risk (uses that do not present sufficient risk to merit any extra caution under the regulation). This approach is based not only on ongoing control but

[11] The result of our systematisation effort is available at <https://bit.ly/3LbH50W>

[12] The tool is available at <https://bit.ly/ebiabr>

[13] Regulation is conceptualized not only as formal and enforceable rules, but the body of practices, guidelines, and hard and soft law rules by which governments maintain oversight of regulated actors – including co-regulation and self-regulation. For more on this debate, see Hague, R., & Harrop, M. (2004). Comparative government and politics (Vol. 6). New York: Palgrave Macmillan, pp. 376–381; Radu, R. 'Regulation' in Belli, L., Zingales, N., & Curzi, Y. (2021). Glossary of platform law and policy terms. Available at: https://platformglossary.info/regulation/; Weber, R., 'Self-Regulation' in Belli, L., Zingales, N., & Curzi, Y. (2021). Glossary of platform law and policy terms. Available at: https://platformglossary.info/regulation/; Weber, R. 'Co-Regulation' in n Belli, L., Zingales, N., & Curzi, Y. (2021). Glossary of platform law and policy terms. Available at: https://platformglossary.info/regulation/>; Keller, C. (2020). Exception and Harmonization: Three Theoretical Debates on Internet Regulation (August 23, 2019). HIIG Discussion Paper Series, 2020(02), Available at SSRN: https://ssrn.com/abstract=3572763 or http://dx.doi.org/10.2139/ssrn.3572763.

[14] Council of Europe (CoE). (2021). Artificial Intelligence Act - Presidency compromise text (Brussels November 2021). Available at: https://data.consilium.europa.eu/doc/document/ST-14278-2021-INIT/en/pdf.

[15] Commission (EC). (2018). Artificial Intelligence for Europe, (SWD(2018) 137 final), available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A237%3AFIN.

[16] Council of Europe (CoE). (2022). Council of Europe's Work in Progress (October 2021 – January 2022), available at: https://www.coe.int/en/web/artificial-intelligence/work-in-progress#01EN.

[17] See European Commission Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts. COM (2021) 206 final. Section 1.3. Consistency with other Union policies. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0206#footnote4.

also on pre-market authorisations, certification, and registration. It also intends to create a new enforcement body at the Union level, the European Artificial Intelligence Board, which national supervisors would accompany.[18] Every EU Member State will have to direct "one or more national competent authorities"[19] to implement the Act.

The United States has opted for an approach based on co-regulation, where federal agencies set principle-based documents and private sector actors implement them. For instance, the Federal Trade Commission (FTC) published guidelines for AI systems implementation, highlighting already existing regulation which applies to automated decision-making systems (e.g., the Fair Credit Reporting Act (FCRA) and the Equal Credit Opportunity Act (ECOA)). The guidelines also emphasise that such systems should be "transparent, explainable, fair, and empirically sound while fostering accountability" .[20]

In parallel, the US's Department of Defence (DoD) has adopted, after a 15-month long consultation, a – rather succinct – set of AI ethical principles to be applied to AI systems in both combat and non-combat functions. Said principles revolve around five major areas: responsibility, equitability, traceability, reliability, and governability.[21] The U.S. Food and Drug Administration also points to regulation in the area, having issued an "Artificial Intelligence and Machine Learning (AI/ML) Software as a Medical Device Action Plan" and considering a regulatory framework that:

> "[C]ould enable the FDA and manufacturers to evaluate and monitor a software product from its premarket development to postmarket performance. This approach could allow for the FDA's regulatory oversight to embrace the iterative improvement power of artificial intelligence and machine learning-based software as a medical device, while assuring patient safety."[22]

These developments are joined by legislative initiatives, most recently with the proposal of the Algorithmic Accountability Act of 2022.[23] These are but a few of the ongoing efforts in the US, among "listening sessions" organised by the White House and standard-setting and research initiatives spearheaded by the National Institute of Standards and Technology.[24]

Finally, one international development that deserves mention is the recent Chinese regulation on algorithmic recommendation systems.[25] The regulation, which entered into force on 1st March 2022, focuses on the use and impact of algorithmic recommendation systems. It creates transparency obligations which entail, among others, user notifications regarding the criteria for recommendation and clear indicators of algorithmically generated or synthetic information; orders the implementation of mechanisms of manual intervention and autonomous user choice; regulates the use of information control, ranking, and presentation in various ways in order to avoid manipulative recommendations; and mentions the creation of a registry and categorisation system to manage algorithms placed on the market.[26] It is also worth noting that the UK government recently published their own algorithmic transparency standard, accompanied by a template and guidance to aid public sector organisations in following the standard.[27]

This recollection of rather heterogeneous regulatory and strategic planning efforts illustrates the pressing relevance of the matter in the current political agenda, both nationally and globally. It also demonstrates the varying level of advancement of the various regulatory approaches: these are comprehensive rules tailored to frame risks posed by all types of AI systems (in the case of the EU draft); specific sectoral regulations and coregulation approaches (in the case of the FDA and DoD documents cited); and actionable regulations of specific uses of AI (in the case of the Chinese and British algorithm reg-

[18] See Kop, M. (2021, September). EU Artificial Intelligence Act: The European Approach to AI. Stanford-Vienna Transatlantic Technology Law Forum, Transatlantic Antitrust and IPR Developments, Stanford University, Issue. Available at: <https://law.stanford.edu/publications/eu-artificial-intelligence-act-the-european-approach-to-ai/; Wardynski & Partners. (2022). Artificial Intelligence Act: Will the EU Set a Global Standard for Regulating AI Systems? (Lexology, 12 January 2022), available at: https://www.lexology.com/library/detail.aspx?g=2be11c44-99fd-47b0-8a28-fc8d7f39d3ea&utm_source=Lexology+Daily+Newsfeed&utm_medium=HTML+email+-+Body+-+General+section&utm_campaign=Lexology+subscriber+daily+feed&utm_content=Lexology+Daily+Newsfeed+2022-01-1.

[19] See n (17). Section 5.2.6. Governance and Implementation.

[20] See Smith, A. (2020). Using Artificial Intelligence and Algorithms (Federal Trade Commission, 8 April 2020), available at: https://www.ftc.gov/news-events/blogs/business-blog/2020/04/using-artificial-intelligence-algorithms.

[21] See United States, DOD, DOD Adopts Ethical Principles for Artificial Intelligence (U.S. Department of Defense, 24 February 2020), available at: https://www.defense.gov/News/Releases/Release/Article/2091996/dod-adopts-ethical-principles-for-artificial-intelligence/.

[22] See United States, FDA. (2021). Artificial Intelligence and Machine Learning in Software as a Medical Device. U.S. Food & Drug Adminsitration, 22 September 2021. Available at: https://www.fda.gov/medical-devices/software-medical-device-samd/artificial-intelligence-and-machine-learning-software-medical-device.

[23] See Wyden, B. & Clarke Introduce Algorithmic Accountability Act of 2022 to require new Transparency and Accountability for Automated Decision Systems' (Ron Wyden United States Senator for Oregon, February 2022.

[24] Lee Tiedrich, Terrell McSweeny and James Yoon, An Interview with Covington & Burling Discussing Artificial Intelligence in the United States (Lexology, 5 January 2022), available at: <https://www.lexology.com/library/detail.aspx?g=081982cd-7e9e-4d16-8b88-d81c2a0d20d0&utm_source=Lexology+Daily+Newsfeed&utm_medium=HTML+email&utm_campaign=Lexology+subscriber+daily+feed&utm_content=Lexology+Daily+Newsfeed+2022-01-19&utm_term=> (accessed 26 January 2022).

[25] China, Translation: Internet Information Service Algorithmic Recommendation Management Provisions (Rogier Creemers, Graham Webster and Helen Toner eds, Digichina, 1 March 2022), available at: https://digichina.stanford.edu/work/translation-internet-information-service-algorithmic-recommendation-management-provisions-effective-march-1-2022/.

[26] ibid.

[27] See CDDO. (2021). Algorithmic Transparency Standard (GOV.UK, 29 November 2021), available at: https://www.gov.uk/government/collections/algorithmic-transparency-standard.

ulations). Although a deep dive into each of these would merit separate research efforts and reveal a full set of possible criticism and compliments of their own, their scope and degree of specificity indicates a certain phase of regulatory efforts that surpasses mere principle-based approaches, and may be built upon existing generic rules and guidelines.

Some of these efforts, although culminating recently, have been ongoing for some years – as is the case with the European efforts. Meanwhile, Brazil has only recently begun to develop its normative and strategic approach to AI, although sparse AI-related initiatives have happened before.[28] This situation means Brazil has a lot of ground to cover, especially if the goal is to adopt a coherent and comprehensive approach, but there are also existing theoretical frameworks and practical experiences upon which the country could base regulatory efforts, avoiding shortcomings and learning from foreign experiences. In the next section, we will analyse whether this potential has been fulfilled so far.

3.2. *The Brazilian strategy for artificial intelligence (EBIA)*

Between December 2019 and March 2020, the Ministry of Science, Technology, and Innovation (or "MCTI", according to the Portuguese acronym) held a public consultation for the draft of the Brazilian Strategy for Artificial Intelligence.[29] The draft document was composed of three transversal axes and six thematic vertical axes. The transversal axes featured: (1) Legislation, regulation, and ethical use; (2) International aspects; and (3) AI Governance. The six vertical axes were: (1) Qualifications for a digital future; (2) Workforce; (3) Research, development, innovation, and entrepreneurship; (4) Governmental AI application; (5) AI application in the productive sectors; and (6) Public security.

The document was structured around several questions for each axis, developed by an expert group hired by MCTI in partnership with UNESCO.[30] Contributions took place on a governmental online platform where civil society organisations, academics, private sector representatives, and other experts could provide their comments on specific fields. In total, there were 908 contributions published on the platform and 12 additional contributions sent to the Ministry.[31]

In April 2021, the Strategy was adopted by MCTI Ordinance No. 4617/2021 and the final version of the document was defined by MCTI Ordinance No. 4979/2021.[32] It reiterated much of the issues raised in the draft document and added 73 strategic actions distributed across the nine axes. Nevertheless, it did not indicate the most strategic elements of a strategy, such as clear metrics to evaluate the successful implementation of the strategy, precise timelines, persons, or entities with responsibility for implementation, or budgetary considerations. The Strategy triggered mixed reactions from the public. While some observers lauded the mere existence of the strategy as an important step, many analysts pointed out the strategy's lack of a concrete direction for AI in Brazil.[33] Moreover, even though many organisations contributed to the consultation, its final version was overly general and bore more resemblance to a letter of intentions than to an actual planning document.[34]

The limited integration of a wide and detailed range of comments expressed over the consultation into the outcome elaborated by MCTI is the first piece of evidence, leading us to argue that Brazilian policymakers seem to adopt a peculiar anti-Collingridge logic. Indeed, both the EBIA and the Draft Bill for an AI Regulatory Framework seem to be elaborated with the ambitious goal of framing the development of AI in the country, while paying remarkably modest attention to the large amount of information shared by stakeholders through participatory processes.

Another significant issue pointed out by researchers regarding the implementation of AI strategies and regulations in Brazil is the lack of dedicated governance structures. On this topic, the Centre for Technology and Society at FGV Law School (CTS-FGV) pointed out in its contribution to EBIA's pub-

[28] Some examples include the EMBRAPII /MCTI Network on Innovation in Artificial Intelligence, a network of 17 EMBRAPII units where infrastructure, know-how and human resources will be shared to implement AI projects ; the Open Innovation and Artificial Intelligence Program (IA2) of the MCTI, which has provided grants of up to 500.000 reais (equal to roughly 100.000 USD) to 31 companies working on AI projects; and the eight Centres for Applied Research on AI, two of which have already been created, an open call for research initiatives that bring together academic research centres at public universities and private actors around AI implementation and with a yearly grant of up to 1 million reais for five years.

[29] A full timeline can be found at https://bit.ly/ebiabr (developed by the authors). It includes the EBIA, PL 21/2020 as well as some government programs regarding AI in Brazil (accessed 26 January 2022).

[30] See Comitê de Governança da EBIA, Relatório de Acompanhamento: EBIA (MCTI 2021).

[31] See Magrani, E. (2021). Reportes de Política Pública: Brasil. in: Ana Jemio (ed.). (2021). Centro Latam Digital.

[32] See MCTI Ordinance No. 4,617, of April 6, 2021 - Establishes the Brazilian Artificial Intelligence Strategy and its thematic axes; MCTI Ordinance No. 4,979, of July 13, 2021 - Amends the annex to MCTI Ordinance No. 4,617, of April 6, 2021. https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/inteligencia-artificial-estrategia-repositorio.

[33] See Lemos, R. (2021). Estratégia de IA Brasileira é Patética Folha, 11 April 2021, available at: https://www1.folha.uol.com.br/colunas/ronaldolemos/2021/04/estrategia-de-ia-brasileira-e-patetica.shtml, Xavier, F. (2021). A Estratégia Brasileira de Inteligência Artificial. MIT Technology Review Brasil, 23 April 2021), available at: https://mittechreview.com.br/a-estrategia-brasileira-de-inteligencia-artificial/. Magrani, E. (2021). Estratégia Brasileira de Inteligência Artificial: Comentários Sobre a Portaria 4.617/2021 Do MCTI (2021), available at: https://secureservercdn.net/192.169.220.85/dxc.177.myftpupload.com/wp-content/uploads/2021/12/OPINION-Brasil-PORT-.pdf?time=1643260747.; Del Rey, A. (2021). A Estratégia Brasileira de Inteligência Artificial. Noomis CIAB Febraban. 19 April 2021) https://noomis.febraban.org.br/especialista/alexandre-del-rey/a-estrategia-brasileira-de-inteligencia-artificial. Saboya, F. Existe Mesmo Uma Estratégia Brasileira de Inteligência Artificial? Canal MyNews, 13 April 2021. Available at: https://canalmynews.com.br/francisco-saboya/existe-mesmo-uma-estrategia-brasileira-de-inteligencia-artificial/.

[34] See Gaspar, W. & Curzi, Y. (2021). Artificial Intelligence in Brazil Still Lacks a Strategy. Report by the Center for Technology and Society at FGV Law School. CyberBRICS website. May 2021. available at: https://cyberbrics.info/wp-content/uploads/2021/05/EBIA-en-2.pdf.

lic consultation that "[the] creation of a specialised and independent regulatory body, capable of reviewing and licensing algorithmic decision systems" would be a way to mitigate issues arising from AI systems and regulation enforcement. Such body could define "what types of audits can be carried out; what technical and legal requirements must be met for each case"; and determine in which cases automated decisions should be allowed or not by assessing the risks to rights that specific categories of AI systems present and evaluating the systems' "intrinsic opacity" – an approach resembling the EU draft regulation.

The establishment of an AI regulatory body seems also useful to address what types of "decision or contexts (…) require a more accurate explanation of the [automated] decision or the possibility of human review" and define "technical requirements to be followed by organisations both in the development and in the use of AI systems".[35] In this perspective, other consultation participants pointed out that many countries are discussing the development of specific AI regulatory authorities, to address its inherent complexity and assure coherence and legal certainty for enterprises – a finding eloquently discussed in the Principled Artificial Intelligence study, by the Berkman Klein Centre.[36]

Considering the above, it is even more striking to read that most actions proposed in the Brazilian Strategy for AI do not define who will be the responsible for execution and oversight. For example, the EBIA mentions in the "Legislation, regulation and ethical use" axis the creation and implementation of best practices and codes of conduct "regarding the collection, implementation and use of data" to encourage "organisations to improve their traceability, safeguarding legal rights", as well as the promotion of "innovative approaches to regulatory supervision". However, it does not mention who will identify or develop these best practices and codes of conduct, nor it suggests any concrete directions for regulatory supervision.

Although it does not explicitly foresee the creation of an independent authority or even an indication that existing authorities should include this function in their regulatory scope,[37] the EBIA does point to governance bodies to operationalise the execution of the strategy. These were mentioned in Ordinance n° 4617/2021 – the same one that establishes the Strategy. The ordinance emphasises that it will be *up to the Ministry* "to create governance instances and practices to prioritise, implement, monitor and update strategic actions established in the Brazilian Artificial Intelligence Strategy". In this sense, a Governance Committee was established after EBIA's publication by the MCTI. This organ is constituted of representatives from three stakeholder groups: (1) the Ministry of Science, Technology, and Innovation (MCTI); (2) the MCTI/EMBRAPII[38] Network of AI Innovation; and (3) invited institutions.

The Governance Committee is responsible for defining concrete measures aimed at implementing the general actions foreseen by the EBIA. To do so, the organ is structured in dedicated working groups and holds periodic meetings where decisions on specific measures are taken. Since its inception, the Governance Committee has held five closed meetings and has published an activity report for 2021 and a strategic plan for 2022. The following section explores some key features and trends that we may distil from the analysis of this body's *modus operandi*.

3.2.1. *Transparency and participatory issues in the governance of the Brazilian AI strategy*

As indicated in the previous section, the Ordinance which established EBIA also contained very broad language referring to the creation of a governance body to steer the strategy's execution. This Governance Committee had its first meeting in May 2021 and has had five meetings at the time of drafting of this paper (only four of which fall under the scope of this article, as the fifth meeting happened after the manuscript was concluded). It comprises members from the MCTI, the MCTI/EMBRAPII AI network[39] and "invited institutions" according to its bylaws.[40] These invited institutions are not specified in the bylaws nor categorised (a full list has since been published on MCTI's website). However, the analysis of the attendance of the four meetings reveals they generally gravitate towards four stakeholder groups: academia, government (broadly including the Executive, Legislative and Judicial branches), civil society and the private sector.

While processing these data,[41] however, we have chosen to apply a different categorisation that may more closely re-

[35] See Hartmann, I. A., Franqueira, B. D., Iunes, J., Abbas, L., Curzi, Y., Villa, B., … & Dias, R. (2020). Regulação de Inteligência Artificial no Brasil: policy paper. Available at: https://hdl.handle.net/10438/30078.

[36] See Fjeld, J., Achten, N., Hilligoss, H., Nagy, A., & Srikumar, M. (2020). Principled artificial intelligence: Mapping consensus in ethical and rights-based approaches to principles for AI. Berkman Klein Center Research Publication, (2020-1). available at: https://ssrn.com/abstract=3518482 or http://dx.doi.org/10.2139/ssrn.3518482.

[37] It is worth noting that the insufficiency of the Brazilian Strategy for AI, regarding the governance structure, is made evident in comparison with other Federal Decrees. For example, Decree n° 9,319/18, which institutes the National System for Digital Transformation and defines a governance structure to apply and oversight the activities towards digital transformation. In the same way, Decree n° 9,854/19 that institutes the National IoT Plan, establishes the Management and Monitoring Chamber for the Development of Machine-to-Machine and IoT Communication Systems (the "IoT Chamber"), composed of representatives from the MCTI, the Ministry of Health, the Ministry of Economy, the Ministry of Agriculture, Livestock and Supply and the Ministry of Regional Development.

[38] EMBRAPII (Empresa Brasileira de Pesquisa e Inovação Industrial) is a corporation established under the MCTI with the goal of fostering industrial research and innovation. This non-profit organisation works closely with the Federal Government with the aim of supporting innovation in the Brazilian private sector and bridging gaps between academic research, private initiative, and government. See https://embrapii.org.br/en/.

[39] The MCTI/EMBRAPII AI network is a network of companies and research institutes working on AI. It sits within the structure of EMBRAPII, a "social organisation" – a sort of non-profit association in Brazilian law created to manage innovation funds from the government in partnership with companies.

[40] Regimento Interno do Comitê de Governança da EBIA 2021.

[41] The full data set can be found at: <https://bit.ly/3LbH50W> (developed by the authors, accessed 18 February 2022).

veal the profile of the meetings and the governance body as a whole. The categories aim at closely resembling the interests a certain institution might mainly represent. E.g., an industry association represents the interests of the private sector, although it is legally established as a non-profit in the same way as civil society organisations. All the categories and subcategories that compose our taxonomy are further explained followingly.

The goal of our categorisation is to distinguish stakeholders based on the substance of their interests rather than adopting a taxonomy merely based on the formal feature of a given entity. Indeed, the purpose of a multistakeholder body should not be to simply provide a façade of diversity but rather to support and strengthen policy-preparation and decision-making processes, by supplying a wide range of pluralistic information and expertise.[42] To achieve such diversity, it seems essential that inputs be provided by stakeholders having different standpoints and interests. On the other hand, excessive focus on formal categorisation of stakeholders rather than on the interests they have in the process' outcomes risks being counterproductive or even misrepresentative.[43] This approach intends to give a more nuanced view of the participation in the Governance Committee than in the four "traditional" sectors mentioned above. Moreover, the work of the Committee seems anchored on a paradigm of National Innovation Systems,[44] as the strategy mentions innovation ecosystems and the need to create ties between the public sector, the private sector, academia, and civil society,[45] in line with other previous national strategies on other technological issues, and regulations.[46] Thus, the proposed classification intends to reflect more precisely the presence and interests of each component of this system in this governance structure.

First, under the civil society denomination, usually denominated "Third Sector" in Brazilian doctrine and policy vernacular, we can find three sub-divisions. A first and most evident Third Sector subcategory we identify is "non-for-profit civil society", which includes non-governmental organisations that are not created by private companies or with the purpose of representing or bringing together private companies. Subsequently, third sector can also encompass "private sector associations", created with the purpose of representing the private sector or bringing private companies together around shared agendas. This type of non-governmental organisations includes, for example, the National Industry Confederation, CNI, a representative body of Brazilian industry. While this subcategory is typically labelled as Third Sector, as this type of associations are usually incorporated in the form of non for profits, de facto they represent purely business interests.

Lastly, we can identify so-called "Social Organisations (OS / OSCIP)", which are non-profit organisations with a special legal denomination allowing them to manage public funds through specific contracts with public organs and provide public interest services. Many of the institutions included under this classification are organisations created to manage federal funds (for example, EMBRAPII was created to foster innovation via the management of specific public innovation grants matched by private companies in support of research institutions). Also, this subcategory is traditionally categorised as Third Sector, but the interests of such entities clearly overlap with governmental interests.

Additionally, a specific category was used for "international institutions", which have various legal statuses, but, in this case, represented mainly technical bodies. Finally, "academia", "government" and "non-specified" are the last categories we introduced in our taxonomy. Academia includes research centres/institutes and universities. Government comprises members of all three powers and their respective branches, including elected politicians who participated in the most recent meeting of the Governance Committee. Non-specified are people who did not state any affiliation to any institution. In some cases, the affiliation of the non-specified participants was prominent or easy to verify. However, we chose to still classify them as non-specified following the original data set.

The list of participants at the first Committee Meeting had a significant majority of government and private-sector-association representatives, with 42% (34 people) and 24,7% (20 people), respectively. This data includes instances where more than one person represented the same institution at a meeting, which is relevant since the Committee's bylaws determine that it is the "incumbent member's attribution […] to deliberate on matters brought to deliberation by EBIA's Governance Committee", among a set of other participatory and agenda-setting capacities.[47] However, even when we consider only one representative of institutions with multiple representatives taking part in the meeting, the majority is maintained: 34,8% from the government and 26,1% from private sector associations. This trend is maintained throughout the meetings and is also present in the overall sum of all participants of all meetings (which includes repeating people in various meetings).

The numbers reveal an apparent unequal representation of important sectors, such as academia and civil society organisations not linked to corporations. The government majority is not surprising and can be expected, since the gov-

[42] See Belli, L. (2015). A heterostakeholder cooperation for sustainable internet policymaking. Internet Policy Review, 4(2). https://doi.org/10.14763/2015.2.364; Luca Belli (2016). De la gouvernance à la régulation de l'Internet. Berger-Levrault, Paris

[43] Idem.

[44] Mazzucato, M. and Penna, C. (2016). The Brazilian Innovation System: A Mission-Oriented Policy Proposal. Centro de Gestão e Estudos Estratégicos.

[45] MCTI, Estratégia Brasileira Para Inteligência Artificial (2021), available at: https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/arquivosinteligenciaartificial/ia_estrategia_diagramacao_4-979_2021.pdf.

[46] See e.g., the Brazilian Internet of Things (IoT) Strategy. Plano de IoT, estratégia de transformação digital, política nacional de inovação, lei de inovação.

[47] Regimento Interno do Comitê de Governança da EBIA 2021, art. 8.

ernance body is presided and managed by MCTI employees. However, the consistent majority of private sector associations (which could arguably be added to the occasional private sector participants, although these are not many) in relation to academia and civil society might translate into an eschewed view of the challenges of AI implementation.

The reasons for this disparity may vary and investigating them would merit a research effort of its own. In this paper we limit our observation to note that the Governance Committee composition is opaque, and the traditional stakeholder categorisation can be highly misleading. Importantly, the bylaws only mention "invited institutions" as potential Governance Committee members, but MCTI does not explain why these specific institutions are invited. Thus, there is no objective parameter to analyse the choices of the Ministry, creating a potentially profound harm to transparency and accountability. There is also no clear path for the participation of non-invited entities, and meetings seem to be conducted behind closed doors.[48]

Another issue concerning transparency arises from the "non-specified" participants of the meetings. This category grew significantly after the first meeting. There is a genuine public interest in knowing what institutions participate in these meetings, especially if they are taking part in deliberations – which is not made explicit but seems to be the case from the language used in the bylaws.

Given the complex nature of the matter as well as the very large spectrum of interests at stake, the guarantee of broad participation of academia and non-for-profit civil society should have been considered in developing such body and its decision-making procedures. It is noteworthy that the National Data Protection Authority (ANPD) only appeared at the fourth meeting of the Governance Committee. Since many of the most sensitive issues involving the use of AI nowadays involve personal data protection, this late arrival seems rather peculiar.

The meetings of the Governance Committee represent, however, only part of its activities. Each thematic axis is organised around a workgroup aimed at taking the strategy's actions and giving them a greater degree of practicality. These actors are, then, responsible for translating the general actions in EBIA into actionable and measurable efforts.

Analysing the work of each of these groups would take up more time and space than this paper allows. Still, there is one relevant highlight for the purpose of building an AI regulatory environment with solid roots grounded in fundamental rights. The "Legislation, regulation and ethical use" axis counts among its members a diverse set of participants – from the public transparency non-profit Transparência Brasil to companies such as Facebook (now Meta) and IBM, smaller companies, private sector associations and academic representatives[49,50].

However, once again, the Brazilian National Data Protection Authority (ANPD) is missing. The Authority is only cited in the 2021 activities report twice – under the "Public security" axis – stating that it is necessary to invite the ANPD to participate in the Governance Committee.[51] For such a sensitive subject as the ethical considerations around the use of AI and the regulation of these issues, discussions would greatly benefit from a varied set of viewpoints, as well as the presence of regulators playing a key role regarding AI governance, such as ANPD.

The aforementioned "Legislation, regulation and ethical use" group has had two meetings up until December 2021. After the meetings, it decided to focus on developing a framework and recommendations for ethical AI, mentioning the need to "incentivise" ethical AI. The use of such generic wording seems to be further weakened by the absence of ANPD, which would have remit to enact authoritative regulation. Furthermore, the group has produced no concrete outcomes to date: it is considering and studying ethical AI certification schemes and mapping the scenario and has listed ongoing projects worldwide, although it is not clear how this is relevant.[52]

The unclear and limited use of the aforementioned group can also be criticised for being an example of underexploitation of public body whose task is precisely to provide multistakeholder advice on "Legislation, regulation and ethical use of AI". This type of organ could be used to discuss existing AI-related draft bills, allowing a wide range of stakeholders to provide meaningful feedback. On the contrary, the group has a very low-profile and its rather reduced agenda seems to confirm the aforementioned anti-Collingridge logic, where policy proposals are adopted while existing opportu-

[48] The authors of this paper attempted to request access to the meetings using the contact email address indicated in the record of the first meeting, but no response was given. In the MCTI's webpage dedicated to AI there is no mention of any means for public participation, nor in the bylaws.

[49] Participants of this axis are: ABINEE (Electric/Electronic Industry Association), ABRIA (National AI Association), ASSESPRO (IT Industry Association), BRASSCOM (ICT Firm Association), C4IR (Center for the 4th Industrial Revolution), CNI (National Industry Trade Association), CGI (Internet Steering Committee), EMBRAPII, I2AI (International AI Association), Micropower Institute, MRE (Brazilian Foreign Ministry), Transparência Brasil, ABIPAG (Payment Intermediaries Association), BSA, CPQD, C4AI/USP, SiDi, ORACLE, SOFTEASY, MCTI, IBM, Câmara Brasileira de Economia Digital (Brazilian Digital Economy Chamber), IFMG (Federal Institute of Minas Gerais), Microsoft, Ministry of Economy, Brasoftware, Matrix Saúde, Venturus, ABDI (Industrial Development Agency), FMUSP (Medical Faculty of the São Paulo University), ABIPTI (STI Institutions Association), Mapperidea (Software developpers), UFRGS (Rio Grande do Sul Federal University), EPGADV (Law firm), Facebook.

[50] The meetings of the work groups are not restricted to the participants of the Governance Committee, but attendance seems to depend on invitation. Here, too, there is a visible majority of private sector actors / associations in comparison to academia and civil society.

[51] Secretaria Executiva do Comitê de Governança da EBIA, 'EBIA - Relatório de Acompanhamento 2021' (2021) 55 and 57 <https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/arquivosinteligenciaartificial/ebia_relatorio-de-acompanhamento-2021.pdf> accessed 14 February 2022.

[52] Comitê de Governança da EBIA. (2021). Relatório de Acompanhamento: EBIA. MCTI. Available at: ebia-relatorio-de-acompanhamento-2021.pdf (www.gov.br).

nities to better inform policymaking are not seized. Besides confirming our assumption of a limited use of a potentially meaningful body that could gather information on the impact of AI and how to regulate it effectively, the under-exploitation of this body is particularly frustrating considering the strong multistakeholder tradition that characterises Brazil. Indeed, the involvement of a diverse set of stakeholders into both policy elaboration and implementation is a feature deeply rooted in the DNA of Brazilian multistakeholder governance model, especially regarding digital policymaking.[53]

The Brazilian multistakeholder approach is most evidently expressed by the country's Internet Steering Committee, more commonly referred to by its Portuguese acronym "CGI.br" which is the first example in history and a global benchmark of multistakeholder body dedicated to Internet governance issues.[54] Given such a strong tradition of multistakeholder participation, it is even more frustrating to note that an existing body is underexploited rather than being utilised to continuously collect stakeholder contributions to provide high quality and diverse inputs to policymakers.

3.3. *Brazilian legislative efforts regarding AI*

Besides EBIA, Brazil also has multiple ongoing legislative efforts aimed at shaping AI regulation at the national level. A search on the online repository of legislative proposals revealed 36 draft bills. Still, the most relevant in terms of the stage of the legislative procedure so far is Draft Bill n° 21/2020 (a.k.a. PL n° 21/2020) – which became the most discussed and prevalent one. The Brazilian Congress is currently discussing the consolidation of multiple draft bills into PL n° 21/2020. Nevertheless, observers have been criticising this draft bill for numerous reasons, and, especially, for its short deliberation period.[55]

Despite the existing criticisms, the Brazilian government seems to adopt a similarly rushed attitude[56] as regards the elaboration and approval phases of AI-related policies. The public consultation preceding the adoption of the Brazilian AI Strategy lasted only four months (December 2019-March 2020). The author of the Draft Bill n° 21/2020, congressman Eduardo Bismarck, presented the proposal in February 2020, and the document has been on a fast-track procedure since July 2021. The Draft Bill was approved by the Chamber of Deputies – the Brazilian Congress' lower chamber – in September 2021 and is now examined by the Federal Senate. In comparison, the European proposal for an AI Act has been debated in the Parliament since 2021, and the expectation is for its approval to occur in 2023 or 2024 (LAPIN, 2021, p. 06).

Importantly, the Draft Bill n° 21/2020 adopts a very light touch and minimalistic approach, having a total of only ten articles. This rather succinct text – especially when compared with the 89 recitals, 85 articles and multiple annexes of the proposed European AI Act – contains essential mechanisms for the promotion of transparency in deploying and developing AI systems and promotes a principle-based approach for the responsible use of AI.

While the proposition of a light-touch regulatory approach is understandable, the proposal has still several substantial gaps, being either laconic or vague as regards some key elements such as risk assessment and oversight mechanisms. As a result of the hastened debate, some of its provisions are problematic simply because of poor drafting. Some proposed articles are extremely generalist and can lead to confusion, encompassing multiple activities, thus potentially causing societal risks or the ineffectiveness of the Bill or both. For example, as LAPIN highlights,[57] Article 1 establishes "the principles and grounds for the development and application of AI in Brazil" without making any distinctions amongst the actors subjected to it. Such generality implies that this disposition may simultaneously (1) adversely affect innovation in the smaller sectors by establishing excessive duties to those actors and (2) neglect cases where the imposition of a more dedicated risk assessment is needed – e.g., cases of application of sophisticated AI in health, military, or transport sectors.

Draft Bill 21/2020 also establishes goals and principles for AI application in Brazil in its articles 3 and 4. Nevertheless, such purposes are not harmonised with EBIA or other relevant international documents that Draft Bill report explicitly identifies as a source of inspiration, such as the OECD recommendations for AI.[58] Hence, the Draft Bill seems to forego or to adopt a generic approach to important principles, such as social and regional development, digital inclusion and education, environmental conservation, and protection of children, without offering a justification for this arbitrary selection.

In addition, the proposed liability framework has been criticised by most observers.[59] Article 6, item VI, establishes that "agents who work in the chain of development and operation

[53] A telling example of how multistakeholder participation can directly benefit the elaboration of digital policies is provided by the process of elaboration of the Brazilian Civil Rights Framework for the Internet, better known as Marco Civil da Internet (MCI), Federal Law n. 12.965 of 2014, considered a symbol of participatory democracy. The open process leading to the creation of the MCI included multiple open consultations, was initiated by the Center for Technology and Society of Fundação Getulio Vargas (CTS-FGV) and orchestrated jointly by Brazilian Ministry of Justice of Brazil, the Brazilian Internet Steering Committee (CGI.br) and CTS-FGV. See, Brazilian Internet Steering Committee (CGI.br), "Um pouco sobre o Marco Civil da Internet", April 20, 2014. Available at http://bit.ly/2fQpL3E.

[54] See Belli et al. (2020). Exploring Multistakeholder Internet Governance: Towards the Identification of a Model Advisory Body on Internet Policy. PoliTICs n 30. Available at: https://cyberbrics.info/exploring-multistakeholder-internet-governance-towards-the-identification-of-a-model-advisory-body-on-internet-policy/.

[55] "(...) the Brazilian Congress has sought to urgently vote on a text that has been criticized by the most diverse sectors of society, such as representatives of civil society, companies and the government." LAPIN. Nota Técnica Substitutivo ao PL 21/2020. September 2021.

[56] Especially when compared to other jurisdictions, such as the European Union, for example, that had been holding a broad discussion with civil society entities and experts since 2018. See European Commission, The European Commission appointed a group of experts to provide advice on its artificial intelligence strategy (27 Sep. 2021), available at: https://digital-strategy.ec.europa.eu/en/policies/expert-group-ai.

[57] See LAPIN. (2021). Nota Técnica Substitutivo ao PL 21/2020. September 2021, p. 8.

[58] Brazil adhered to the OECD AI principles in 2019.

[59] For example, the "Coalizão Direitos na Rede" (a.k.a. "CDR"), a collective which comprises around 48 entities from civil society

of artificial intelligence systems" will bear subjective civil responsibility (based on the subject's intent or fault) unless it is stated otherwise by specific legislation. Such a general provision seems to be very ill-suited to frame the diversity of types and uses of AI systems, which suggests the need to foresee different liability regimes. During the Draft Bill public hearings, several experts and civil society entities criticised this legal provision, arguing that the generalisation of this regime would potentially pose risks to victims, shift the burden of proof of AI misfunction to the users, or even incentivise the negligence of developers and operators of AI systems.[60]

Considering that AI is increasingly applied in an extremely wide range of fields, to support diverse products and services, the users of systems where AI is being applied may be literally any person, thus often lacking expertise and knowledge to understand how an AI system operates (or even that it is in operation) and contest potential failures. Therefore, it would be not only difficult for a regular individual to gather evidence of AI system malfunctions: it would be a telling example of what Roman jurists used to define as "*probatio diabolica*", i.e., a legal requirement to achieve an impossible proof.

For most users of most AI applications, it would be simply impossible to explain where the failure occurred, which agent is responsible for the failure, and to what degree. Although we concur that some cases may justify adopting a subjective civil liability model, AI systems are diverse enough for this generalisation not to be established as the unique standard foreseen by law. On the contrary, we consider necessary to have a detailed specification of multiple liability regimes that, at the very least, consider the different uses of AI systems, the risks of operating such systems, the level of autonomy of the specific AI system applied to the task at stake, the role of the actors in case of damage (i.e., the causation nexus and degree of fault), and user vulnerability.

The final version of the Draft Bill encompassed the experts' and entities' remarks made during the public hearings, establishing other liability regimes in an attempt of harmonising the Draft Bill with the broader legal framework. In this sense, Article 6, §3, establishes the strict liability regime for AI applications in consumer relations, in accordance with the Brazilian Consumer Protection Code, and its §4 states that "[p]ublic entities or private entities that provide public services shall be liable for damages that their agents, acting as such, cause to third-parties, maintaining the right of recourse against the person responsible in cases of intent or fault".

Other widespread critiques concern the way in which the principles of transparency and non-discrimination, prescribed by art 5 of the Draft Bill, are phrased. These points directly contradict existing LGPD provisions and will be discussed in the next section.

Lastly, it is important to mention that, when the Draft Bill n° 21/2020 landed in the Federal Senate two other draft bills were annexed to it, with the goal of consolidating the three into a unique Bill. The Draft Bill n° 872/2020, authored by Sen. Eduardo Gomes, consists of only six articles that aim at establishing the principles and grounds for AI development and use in Brazil (nevertheless, it still manages to leave aside relevant principles such as the protection of the environment and the protection of children). The Draft Bill n° 5051/2019, authored by Sen. Styvenson Valentim, establishes ethical frameworks, guidelines and principles for the development and use of AI in Brazil with a particular focus on the application of AI in the public sector.

Interestingly, the liability scheme defined by article 4 of Draft Bill n° 5051/2019 establishes that all automated decisions should be subsidiary to a human decision (*caput*); that human supervision should be proportional to the societal risks of the AI system (§1°); and, most importantly, that "[t]he supervisor is liable for damages resulting from the use of Artificial Intelligence systems" (§2°). Regarding the *caput*, such an obligation of human oversight for all automated decisions disregards the variation in the degrees of risk posed by various AI implementations. Therefore, it might become a burdensome obligation where a less strict approach would have been enough.

4. AI regulation in light of the Brazilian general data protection law (LGPD)

As we have argued above, Brazil enjoys the privilege of regulating AI without having to start from scratch. However, this privilege also entails the responsibility of duly considering the existing regulation and shaping the new AI framework in accordance with existing legislation. Particularly, as it happens in the EU, China and many Latin American countries, existing data protection norms already provide valuable elements that must be considered as precious allies, supporting the establishment of AI frameworks with useful normative and institutional aids.

Data protection principles, rights, and obligations, established by such laws, need to be applied by the existing data protection authorities when considering the use of AI and must be integrated fully into AI frameworks. The principles of good faith, transparency, purpose limitation, adequacy, necessity, prevention, data quality, non-discrimination and accountability are all enshrined in article 6 of the LGPD, and most of them can be found in most existing data protection laws.

This consideration is particularly relevant as data protection laws already guarantee rights to data subjects, including

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and academia, published a public statement against the Draft Bill approval in September 2021, highlighting several issues, among them, the risks posed by its liability scheme. This public statement is available at: https://direitosnarede.org.br/2021/09/23/inteligencia-artificial-nao-pode-ser-regulada-a-toque-de-caixa/. See also: Nogueira, P. (2021). Projeto de marco legal da IA no Brasil é pouco consistente e pode ser inútil, dizem especialistas. July 2021. Available at: https://jornal.unesp.br/2021/07/29/projeto-de-marco-legal-da-ia-no-brasil-e-pouco-consistente-e-pode-ser-inutil-dizem-especialistas/. Roman, J. (2021) Inteligência Artificial no Brasil: A Estratégia Brasileira de Inteligência Artificial (EBIA) e o Projeto de Lei nº 21/2020. Oct. 2021. Available at: https://irisbh.com.br/inteligencia-artificial-no-brasil-a-estrategia-brasileira-de-inteligencia-artificial-ebia-e-o-projeto-de-lei-no-21-2020/.

[60] In this sense, see LAPIN. (2021). Nota Técnica Substitutivo ao PL 21/2020. September 2021, and also, Fernandes, A. (2021). PL da Inteligência Artificial erra ao criar regime de responsabilidade subjetiva. Jota. Nov. 2021. Available at: https://www.jota.info/opiniao-e-analise/artigos/pl-21-2020-inteligencia-artificial-01112021.

when AI systems process personal data, thus extending general data protection rules conceived for the proper functioning of society, economy, and democracy to the use of AI systems.[61] In this context, some of the most acute critiques to the Draft Bill concern the peculiar phrasing adopted by art 5 to frame the principles of transparency and non-discrimination, which contradicts existing LGPD provisions on these matters.

According to art 5.III of the Draft Bill, non-discrimination means to "mitigate the possibility of using systems for illicit or abusive discriminatory purposes." Hence, the Draft Bill does not prohibit *in toto* discrimination but merely suggests a duty to mitigate discrimination, thus ignoring evidence that certain types of AI applications which are particularly prone to bias and adverse impacts, such as facial recognition.[62] This conception of non-discrimination seems incompatible with art. 6.IX of LGPD which defines the non-discrimination principles as the "impossibility of processing personal data for illicit or abusive discriminatory purposes," thus setting a general prohibition of data processing for discriminatory purposes, rather than a mitigation of discrimination.

This lack of precision becomes even more worrying, when read in conjunction with the transparency principle foreseen by art 5.V, which strongly limits not only the possibility to prove liability and understand what type of discriminatory treatment might be undertaken by an AI system: it also directly conflicts with the existing LGPD provisions mandating general transparency obligations as regards automated treatment of personal data.

Indeed, the LGPD guarantees not only the right to access information on data processing, which must be provided "in a clear, adequate and ostensive manner" (art. 9) but also the right to request the review of decisions made solely on the basis of automated processing "which affect the data subject's interests", in addition to obtaining from the data controller "clear and adequate information about the criteria and parameters utilised to take the automated decision" (art. 20). Importantly, this latter provision, which reminds in many respects art. 22 of the EU General Data Protection Regulation (GDPR), can be even more forceful than the European standard as it concerns any automated decision affecting any interest of the data subject.

In light of the above, it is clear that the approach to transparency proposed by the Draft Bill 21/2020 fails to integrate the existing normative framework defined by the LGPD and can be seen as conflicting. Art. 20 of LGPD establish a general obligation of transparency while art. 6.V.c of the proposed AI Bill would limit transparency "on the general criteria that guide the functioning of the artificial intelligence system" to the cases where "there is a potential of considerable risk to fundamental rights." The justification leading the Legislator to such limitation is unclear but should the current wording of art. 6.V.c be adopted, its impact would be a considerable restriction of a very protective provision set by art. 20 LGPD.

The above-mentioned incompatibility between the proposed Draft Bill norms and the existing LGPD ones leads us to a third set of reasons based on which we argue the current Brazilian policymaking efforts concerning AI reveal a peculiar anti-Collindridge logic. Not only the available information on the impact of AI, offered by specialist over public consultation are not duly considered and existing multistakeholder advisory bodies are considerably underexploited, it seems also that existing legislation is not fully appreciated or considered.

Importantly, along with the normative compatibility between the proposed AI regulatory Framework and existing LGPD provisions, we also need to carefully consider the Brazilian experience implementing data protection law, to understand what limits Brazil faces to effectively regulate data intensive areas. On the one hand, it is highly likely that similar obstacles faced in the implementation of data protection, such as the highly technical, new, and complex nature of the regulation and consequent difficulty to comply with it, may emerge again, and probably in an even more acute form, when Brazil will need to regulate AI. On the other hand, it is important to emphasise that, while LGPD sets a general framework for the protection of personal data, additional regulatory guidance from ANPD is needed to fully exploit the LGPD potential to regulate data-intensive AI systems.

While LGPD can be a powerful ally, some key elements of the law that would apply to AI systems are yet undefined and must be regulated by ANPD. For instance, how can a controller supervising an AI system provide "clear and adequate information about the criteria and parameters utilised to take the automated decision" when a system exploits a vast number of variables that cannot be easily explained? By the same token, it is incredibly challenging for even the best-intentioned controller to have a clear understanding of what data might be "pertinent, proportionate and not excessive" about the processing to comply with the necessity principle. Without clear guidance from the regulator, it is highly unlikely that any form of compliance may be undertaken on such issues.

Indeed, compliance with the LGPD provisions mentioned above would be already challenging for well-trained controllers following well-defined regulatory prescriptions. In this sense, it becomes almost impossible to respond to the above-mentioned questions for professionals that typically have poor level of data protection training[63] and, so far, dispose of literally zero regulatory advice on the matter, as is the case in Brazil. Unfortunately, the proposed Bill for an AI Regulatory

[61] In this sense, see Belli L. et al. (2021). Proteção de dados na América Latina: Covid19, Democracia, Inovação e Regulação. Arquipelago; and Belli L. and Doneda D. (2021). O que falta ao Brasil e à América Latina para uma proteção de dados efetiva? Jota. Available at: https://www.jota.info/opiniao-e-analise/artigos/o-que-falta-ao-brasil-e-a-america-latina-para-uma-protecao-de-dados-efetiva-02092021.

[62] On this topic, s. Noble, S. U. (2018). Algorithms of oppression. In Algorithms of Oppression. New York University Press, and: Benjamin, R. (2019). Race after technology: Abolitionist tools for the new jim code. Social forces.

[63] Several studies have pointed out the very low level of compliance with LGPD at the Brazilian level. As an instance, a recent study by the Regional Center for Studies on the Development of the Information Society (Cetic.br) stressed that despite the considerable digitalisation brought by the pandemic, less than half of health-service providers in Brazil complies with the LGPD. See Cetic.br TIC Saúde – 2021 Estabelecimentos. (November 2021), available at: https://cetic.br/pt/noticia/uso-de-tecnologias-digitais-avanca-nos-estabelecimentos-de-saude-brasileiros-mas-a-seguranca-da-informacao-segue-sendo-desafio-aponta-pesquisa-tic-saude-2021/.

Framework does not seem to help improve the situation. As we mentioned in the previous section, article 6 defines the standard of negligence, consisting in the "civil subjective responsibility", which would defer to the data subjects the burden to prove that specific AI systems have been conceived – intentionally or by fault – to process personal data to damage their interests.

Such a standard would require that data subjects understand an AI system is in place, that they have been victims of an illegal AI system – which by itself is an enormously challenging task – and subsequently to consider the effective participation of the system developer to evaluate the developer's compliance with existing norms, including LGPD, and identify a nexus between the action of the developer and the specific damages occurred.

As we have emphasised previously, given the complexity of the task for ordinary users of AI systems, this would amount to what Roman jurists would have defined as a *robation diabolica*, an impossible proof. Indeed, the Brazilian population i.e. the data subjects that would need to demonstrate malfunction of AI – and arguably data subjects in any country of the world – lack the fundamental computer science and data governance training and skills necessary to understand whether one has been a victim of a biased AI or, even more simply, whether the information provided by the controller may be deemed as "clear and adequate" to understand the criteria and parameters utilised by a given AI system to take decisions.

Moreover, the proposed AI Bill does not provide for the creation of a specific regulatory body with the necessary human, intellectual and budgetary resources required to regulate AI and defers to existing regulators the task of adopting sectorial regulation. Hence, one would assume that the only AI regulation concerning data protection would be elaborated and implemented entirely by ANPD.

At this point, it seems necessary to remind that the ANPD was established only in November 2020, publishing its first regulatory agenda only in January 2021, and such agenda already includes the regulation of a very dense list of extraordinarily urgent matters that are still undefined by the LGPD. Furthermore, the ANPD has a very limited budget and (at the moment of writing this article) had just expanded its initial meagre staff of only 36 members to a total staff of 72 individuals, who are mainly seconded agents with very recent experience in data protection matters. Indeed, very few worked on the subject before the creation of the ANPD, in late 2020, and the entire country counted remarkably few data protection trainings and specialists, before 2018.[64]

On top of these considerations, only 2 to 3[65] ANPD staff members have a technical background, which would be necessary not only to define appropriate AI-related guidance but also to implement it. Such context, together with the fact that ANPD has been established as an agency directly dependent on the Cabinet of the Brazilian President, and has only recently been awarded autonomy,[66] may lead the reader to wonder if the ANPD, in its current configuration, may be able to elaborate a sectorial regulation on the protection of personal data in the context of AI.

The elements mentioned above become concerning when wondering what an efficient and sustainable AI governance system could be. On paper, the proposed AI Bill would seem to aim at an AI governance system capable of stimulating innovation, of creating the most excellent possible protection for individuals – including regarding their personal data protection, operating in conjunction with LGPD – but also for society, collectively and inclusively, to be capable of adapting to technological evolution.

It also seems to explicitly aim to avoid a potential lack of trust in AI. However, the proposed normative and institutional framework, as well as the existing one, risks being very mild or even unfit to properly regulate AI in a way that avoids – or at least mitigates – potential risks of AI systems and steers their development and use towards the maximisation of their social benefits.

Clearly, the challenge of properly regulating AI systems and designing a strategy that allows the country to foster their sustainable development is enormous, and the proposed framework does not seem to tackle it appropriately. Looking at the recent data protection experience, one can argue that, even when a well-structured regulatory framework is imported, such as the case of the strong European inspiration of LGPD, and even when a dedicated regulatory agency is created, the regulation of a given area is only in its early phase. As regards AI, this early phase is still missing, and the initiatives undertaken so far do not seem to provide palatable answers to solve the Collindridge dilemma on the context of AI.

5. Conclusion

The analysis carried out throughout this work, encompassing the entirety of the Brazilian Framework for AI, allows us to argue that the AI policymaking efforts conducted until the first semester of 2022 lack a sufficient level of transparency, public debate, and horizontal and vertical accountability mechanisms.[67] As a consequence, it seems extraordinarily challenging to design appropriate AI regulatory frameworks in a context that does not allow for the understanding of the effects and risks of AI. At the same time, the increasing implementation of AI in the country will likely reduce the chances of adopting a framework able to regulate its use and evolution in meaningful ways.

Organising a more comprehensive number of public hearings, including diverse stakeholders, and establishing a mul-

[64] Further information on the ANPD staff, regulatory agenda, budget, and administrative organisation can be found on the ANPD website: https://www.gov.br/anpd/pt-br.

[65] This unofficial estimate was obtained during an informal conversation with ANPD staff members, in July 2022, at the Latin American edition of the Computers Privacy and Data Protection Conference (CPDP LatAm).

[66] See the non-official translation of Executive Order n. 1124/2022, which transforms the Brazilian Data Protection Authority into an independent administrative agency. In CyberBRICS.info (June 2022). https://cyberbrics.info/non-official-translation-of-executive-order-n-1124-2022/.

[67] On the distinction between horizontal and vertical accountability mechanisms, see O'Donnell, G. (1998). Accountability horizontal e novas poliarquias. Lua nova: revista de cultura e política, 27-54.

tistakeholder high-level expert group would be invaluable for improving the legislative efforts. A commendable effort in this regard has been the recent establishment of an expert commission to provide suggestions for the Federal Senate to improve the proposed AI framework. The Commission has done its best effort to organise a thorough consultation with a diverse set of panellists, probably as an attempt to respond to the ample criticism about the Commission's composition, including only lawyers and not even a single black member.[68]

Lastly, there is a need for harmonising the entire Brazilian Framework for AI: there needs to be coherence and integration between the AI Bill, the LGPD and the EBIA – especially regarding the principles and goals of the documents, as well as the metrics and concepts contained therein. On this note, looking at the described foreign experiences, Brazilian regulators and legislators could take note of the formats, objectives, and level of specificity of those frameworks, as well as the need to further specify budgetary elements and identify actors responsible for implementation, attributing appropriate resources to such actors.

General regulatory frameworks proposals, existing specific sectoral regulations, and regulations of specific uses of AI, as well as general risk-based approaches in a more general sense offer relevant teachings that should be integrated in the proposed Brazilian AI regulatory Framework.

To conclude, we can argue that it is undoubtedly positive that Brazil has started an AI regulatory effort, and the tropical giant has a remarkably relevant potential to become a regional leader in AI policymaking. However, the Brazilian experience, so far, seems unstructured, incomplete, and lacking the vision and resources that the regulation of such a relevant issue would indubitably require and an emerging leading economy as Brazil would clearly need.

Declaration of Competing Interest

The authors declare no conflicts of interest regarding the subject of this paper.

Data availability

Link to data tables is provided on footnotes.

[68] Marcos Urupá, Conheça os juristas que vão subsidiar a proposta de inteligência artificial no Brasil (Teletime February 2022), available at: https://teletime.com.br/17/02/2022/conheca-os-juristas-que-vao-subsidiar-a-proposta-de-inteligencia-artificial-no-brasil/.