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Chapter 39

Courting AI: How Brazilian Courts Are Using AI

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Abstract
In recent years, the Brazilian judiciary has announced over 100 initiatives using artificial intelligence (AI) systems to enhance its capabilities, while a mounting number of juridical decisions shape how AI can be used in the country. This paper aims at analysing how AI is concretely impacting the Brazilian judiciary and, vice versa, how the domestic courts are impacting the evolution of AI. In this perspective, the first part of this paper explores a selection of AI initiatives to expose the benefits and shortcomings in context of the Brazilian judicial system. These initiatives permeate all court levels with different complexities, ranging from identifying underlying legal claims in the Brazilian Federal Supreme Court and the Superior Court of Justice, to predicting the settleability of cases and the type of documents in trial courts. The second part will proceed to examine the extent to which national jurisprudence is already shaping the regulation of AI systems. Particularly, we will focus on decisions in the electoral context and resolutions of the Superior Electoral Court to illustrate how the current judicial approach produces frequently uncoherent decisions likely to foster legal uncertainty. Lastly, we put forward some concrete recommendations which

may help the national judiciary structure to use and regulate automated systems in more sustainable and coherent fashion.[1]

39.1 Introduction

In recent years, the Brazilian judiciary has announced over 100 initiatives using AI systems to enhance its capabilities, while a mounting number of juridical decisions shape how AI can be used in the country. This chapter analyses how AI impacts the Brazilian judiciary and, vice versa, how the domestic regulations in Brazil are impacting the evolution and use of AI.

After Section 39.2 introduces the Brazilian legal and judicial context, Section 39.3 explores a selection of AI initiatives used in the Brazilian judicial system. These initiatives permeate all court levels with different complexities, ranging from identifying underlying legal claims in the Brazilian Federal Supreme Court (STF) and the Superior Court of Justice (STJ), to predicting the settleability of cases and the type of documents in trial courts. Section 39.4 then examines the extent to which national jurisprudence is already shaping the regulation of AI systems.

39.2 The Brazilian Judicial System

As a civil law jurisdiction, Brazil's legal system is primarily based on codified statutes, with judicial decisions playing a secondary, though influential, role in legal interpretation and precedent formation. In recent years, however, this distinction has progressively diminished with the authority of judicial decisions being reinforced after the 2015 Civil Procedure Code reform, with measures establishing a series of decisions as binding precedents.

The judicial branch is characterised by its complex and multitiered structure, which often leads to inconsistent decision-making and an exceptionally high volume of litigation.[2] Its structure comprises the STF, the Superior Court of Justice (STJ),

[1] The authors would like to thank Richard Mckenzie-Gray Scott for his inputs on the initial version of this chapter, as well as Aneesa Williams for her help in revising it. Any mistakes left are our own.

[2] The numbers were obtained from the court open data dashboards. Supremo Tribunal Federal, 'Painel de Decisões' (2019), https://transparencia.stf.jus.br/extensions/decisoes/decisoes.html, accessed 20 February 2025. This phenomenon is partly the consequence of Brazil's constitutional framework, which grants direct access to the STF for a broad range of constitutional matters. In addition, the expansive system of appeals allows parties to prolong litigation, often

federal and state courts, specialised labour, electoral, and military courts, as well as small claims and alternative dispute resolution mechanisms, which operate to expedite lower-value disputes and reduce judicial congestion.

In this scenario, the National Council of Justice (CNJ, in its Portuguese acronym), presided by the Supreme Court's Chief Justice,[3] plays an important role in overseeing judicial administration, defining and implementing policies across the judicial bodies. Over the past two decades, the CNJ has actively promoted digital transformation in the judiciary, particularly through policy initiatives for promoting transparency, open data, and, more recently, AI usage in courts.[4] The CNJ provides an ample overview of AI tools developed, deployed, and shared across the Brazilian judiciary. In Section 39.3, we will focus on how STF has already deployed automated systems, and indications of its future usage.

Following the 1988 Federal Constitution, the Brazilian judiciary operates independently from the executive and legislative branches.[5] Judges enjoy tenure and the branch has financial autonomy, which characterise and reinforce judicial independence.[6] After the military period of dictatorship, the Brazilian Constitution also established broad capacities and jurisdiction for the STF. However, it took many years for these new powers to be exercised in practice, as at first the court often

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leading to judicial congestion. As an example, the STF alone receives more than 100,000 cases per year. Supremo Tribunal Federal, 'Brazilian Federal Supreme Court Activity Report' (2017), https://portal.stf.jus.br/internacional/content.asp?id=368859&idioma=en_us&ori=7, accessed 20 February 2025.

[3] In STF, the role of Chief Justice is traditionally rotated between its members without re-election for two year terms. Since its creation, the role has passed to the oldest member of the court who has not yet exercised the role. There were very few instances where this was not followed. See, for example, Felipe Recondo, *Tanques e togas: O STF e a ditadura militar* (Companhia das Letras 2018).

[4] This is available on the page: 'Modelos Disponíveis – Portal CNJ' *Portal CNJ* (13 August 2024), www.cnj.jus.br/sistemas/plataforma-sinapses/modelos-disponiveis/, accessed on 20 February 2025.

[5] The 1988 Federal Constitution marks the democratisation of the country, after two decades of a civil-military coup, reinstating fundamental rights, the separation of powers, and the independence of the judiciary.

[6] This autonomy is counterbalanced by the role of the legislative branch, primarily through the Federal Congress, in defining the judiciary's budget as part of the Annual Budget Law (Lei Orçamentária Anual). Judicial bodies submit their proposed budgets to the Executive Branch, which consolidates them into the overall budget proposal, which is then reviewed, modified if necessary, and approved by Congress, which holds the authority to allocate or reduce judicial funding. Consequently, the judiciary's financial planning is subject to broader fiscal policies and political negotiations.

refused to step into politically sensitive decisions.[7] With the arrival of a new generation of justices, the STF has stepped into an increasingly assertive and overreaching role as the highest court in the country.

Due to its large jurisdictional powers – the court can act as an original court for criminal proceedings for certain officials, appeals court for matters of constitutional interpretation, abstract constitutional review as well as a large set of other concrete cases[8] – the STF must deal with a very large docket of cases that far exceeds its international counterparts, representing a highly atypical workload for a supreme court. In 2024, the STF issued 115,563 opinions,[9] while the Supreme Court of the United States issued only 60. Confronting this scenario, the Court, supported by the CNJ, started to develop multiple mechanisms to cope with the challenging number of cases. Historically, this involved an increase in human resources, progressively augmenting the number of staff and clerks,[10] and the standardisation of decisions for repetitive legal issues. Recently, the courts also turned to automation and AI systems.

The effort to control the workload was not unilateral from the Court. Legal reforms approved by the legislative branch allowed the court to create binding precedents (*Súmula Vinculantes*) and establish so-called 'general repercussion themes'. These themes constitute a peculiar judicial process that the Court can utilise when they recognise that a given case has particular relevance for the Brazilian system, thus establishing a kind of *stare decisis* that must be followed by lower-level courts and administrative bodies. However, it is also repeatedly applied by the Court itself in its opinions, and it has been receiving a rising number of cases under violation

[7] Diego Werneck Arguelhes, 'Poder não é querer: preferências restritivas e redesenho institucional no Supremo Tribunal Federal pós-democratização', *Universitas Jus (encerrada)* 25 (1) (25 June 2014), doi.org/10.5102/unijus.v25i1.2885.

[8] For a more detailed description, including descriptive statistics, see Joaquim Falcão, Pablo de Camargo Cerdeira, and Diego Werneck Arguelhes, *I Relatório Supremo em Números – o Múltiplo Supremo* (Escola de Direito do Rio de Janeiro da Fundação Getulio Vargas 2012), http://bibliotecadigital.fgv.br/dspace/handle/10438/10312. Updated data also shown on: Thomaz Pereira, Diego Werneck Arguelhes, and Guilherme da Franca Couto Fernandes de Almeida, *VIII Relatório Supremo em Números: Quem decide no Supremo?: tipos de decisão colegiada no tribunal* (2020), https://hdl.handle.net/10438/29679.

[9] Information can be accessed on the dashboard made available by the court: Supremo Tribunal Federal, 'Painel de Decisões' (2019), https://transparencia.stf.jus.br/extensions/decisoes/decisoes.html, accessed 20 February 2025.

[10] Recondo, *Tanques e togas*, 255–279, chapter 9.

of such decisions.[11] This scenario made the STF look for ways to automate its workflow to increase its decision-making efficiency.

39.3 The AI Systems in the Brazilian Federal Supreme Court

In this section, we discuss AI systems employed by the courts in Brazil: Victor, VitorIA, RAFA, and MARIA. This chapter adopts the definition of an AI system as offered by Article 4 of the latest version of Bill 2338/2023, which is largely based on the definitions offered by the EU AI Act and the OECD, and is therefore highly unlikely to be altered. Importantly, as we will stress in Section 39.4, the definition proposed by the Bill differs from the one provided by the Brazilian CNJ. The definition proposed by the Bill reads as follows:

> 'artificial intelligence (AI) system: a machine-based system that, with different degrees of autonomy and for explicit or implicit purposes, infers, from a set of data or information it receives, how to generate results, in particular, prediction, content, recommendation or decision that can influence the virtual, physical or real environment'.[12]

As we will discuss, the Brazilian CNJ has adopted a narrower definition of an AI system, which is encompassed by the definition previously presented and will likely be substituted once the new AI regulatory framework is adopted. We conclude this section by highlighting some of the challenges of integrating automated decision-making in the context of the current position of the STF in Brazilian democracy.

39.3.1 Victor

The first system to be used by the STF was Victor, deployed in 2018.[13] Named in honour of Justice Victor Nunes Leal, this may be seen as a turning point in how the court has opted to face its large workload problems by embracing new technologies in a still very conservative legal field. Developed in partnership with UNB, this system

[11] For some data regarding this phenomenon in labour procedures, see José Luiz Nunes Leal and José Luiz Nunes, 'Precedentes vinculantes? Um retrato das reclamações no Supremo', JOTA Jornalismo (7 November 2023), https://tinyurl.com/58ttfe5u.

[12] Projeto de Lei No. 2.338, de 2023, Dispõe sobre o desenvolvimento, fomento, uso ético e responsável da inteligência artificial com base na centralidade da pessoa humana, (2023), www25.senado.leg.br/web/atividade/materias/-/materia/157233, accessed 20 February 2025.

[13] Supremo Tribunal Federal, 'Ministra Cármen Lúcia Anuncia Início de Funcionamento Do Projeto Victor, de Inteligência Artificial', Supremo Tribunal Federal (30 August 2018), https://portal.stf.jus.br/noticias/verNoticiaDetalhe.asp?idConteudo=388443&ori=1.

has attracted notable attention from the Brazilian and international academic community after having been described in multiple publications.[14]

Particularly, Victor played a pivotal role in opening new avenues for legal automation and data analysis in the Court. The system included a tool that allowed the extraction of cleaned text from documents that were stored as image, and a model to classify documents among a set of procedural manifestation from parties. Hence, the Court could not only integrate the system to the analysis of new cases, but also leverage decisions prior to digitalisation, as well as scanned documents from each lawsuit.

Its most notable feature is identifying cases dealing with common legal issues across those brought before the STF. Reportedly, at the time of deployment, Victor could identify potential matches for the twenty-seven most common themes of 'General Repercussion'.[15] The theme was then suggested to clerks. This task is a remarkable pressure point for the Court, as three procedural classes relevant to the Victor system correspond to about 79 per cent of the over 700,000 lawsuits brought to the court between 2014 and 2025. This automation was reported to reach an accuracy of 95 per cent, saving approximately 22,000 work hours a semester, thus freeing justices and their cabinets to dedicate their time to other issues.[16]

The STF then moved to create the Artificial Intelligence Advisership directly under the Court's presidency – a group of staff dedicated to the development of AI projects – recognising the initial project as successful. A potential consequence of developing the system inhouse is that less information has been made available about Victor's successor.

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[14] Pedro Inazawa et al., 'Projeto Victor', *Computação Brasil* 39 (1 April 2019): 19–24, doi.org/10.5753/compbr.2019.39.4522; Fabiano Hartmann Peixoto, 'Projeto Victor: relato do desenvolvimento da Inteligência Artificial na Repercussão Geral do Supremo Tribunal Federal', *Revista Brasileira de Inteligência Artificial e Direito – RBIAD* 1(1) (1 July 2020): 1–22; Nilton Silva et al., 'Document Type Classification for Brazil's Supreme Court Using a Convolutional Neural Network', in *Proceedings of the Tenth International Conference on Forensic Computer Science and Cyber Law* (HTCIA 2018), 7–11, doi.org/10.5769/C2018001.

[15] General Repercussion is a term utilised to identify themes that group multiple lawsuits whose judgement depend on the same underlying legal issue. Once STF decides on this issue, the ruling is applied as appropriate to all these lawsuits by lower courts. This was one of the mechanisms established by the 2005 Judiciary Reform.

[16] Supremo Tribunal Federal, 'Ministra Cármen Lúcia Anuncia Início de Funcionamento Do Projeto Victor, de Inteligência Artificial'.

39.3.2 VitorIA

Subsequently, the deployment of VitorIA was announced in 2023,[17] five years after the launch of Victor. The goal of the Court was to deploy another tool leveraging natural language processing to improve procedural efficiency.

VitorIA was designed to address a well-known machine-learning problem: clustering similar observations. The goal is to group lawsuits by their underlying legal issue, which may not always be clear. Its initial task was identifying large groups of similar cases to guarantee they receive a similar ruling, also improving the Court's workflow. This task was previously dealt with manually. The new system also has an interface with the General Repercussion mechanism. However, as it does not act as a classifier it opened a new possibility to help the Court establish new themes, which may have a large impact not only on its workload but also across the whole judiciary by settling frequent questions of law.

Both Victor and VitorIA are examples of leveraging automated decision-making while maintaining human decision-making. It is undeniable that the STF caseload represents a remarkably cumbersome burden, and its General Repercussion decision process already included the procedure of grouping similar cases, performed manually by its staff. However, the number of cases augmented by this procedure becomes increasingly complex, and possibly more error-prone. From this perspective, the systems assist decision-making by suggesting clustering through textual similarity, a decision that a human is well suited to evaluate the correction. We can expect that most of the time the decision is transformed from 'Which, if any, legal issue on the court stock does this appeal depend on?' to a much simpler 'Does each of these appeals depend on Legal Issue X?'

39.3.3 RAFA

RAFA 2030 (Neural Networks Focused on the 2030 Agenda in the Portuguese acronym) was deployed in 2022,[18] in order to integrate the Court docket into the 2030 Agenda for Sustainable Development Goals (SDGs) by the United Nations. Its role is simpler than the systems we analysed previously: identifying lawsuits relevant to each SDG put forward by the UN. Although not the state branch designated to create

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[17] Supremo Tribunal Federal, 'STF Amplia Emprego de Inteligência Artificial', Supremo Tribunal Federal (9 June 2023), https://portal.stf.jus.br/noticias/verNoticiaDetalhe.asp?idConteudo=508710&ori=, accessed 21 February 2025.

[18] RAFA's code is publicly available at: 'GitHub – Agenda2030rafa/Rafa_documentacao' *GitHub* (2022), https://github.com/agenda2030rafa/rafa_documentacao/tree/main, accessed 17 October 2024.

governmental policy, the Court may play a relevant role, and by April of 2023 it had already identified over 2,500 relevant lawsuits.

39.3.4 MARIA

At the end of 2024, a new AI system dubbed 'MARIA' (acronym for the Portuguese name of Module to Support Redaction with Artificial Intelligence) was released.[19] MARIA was developed by a private company, contracted through an open-bidding process, under which all rights connected to the system, as well as its source code, must be transferred to the Court. As previously stated by Justice Barroso,[20] this new system would leverage generative models to facilitate the writing of texts related to jurisdictional tasks, starting with the elaboration of:

> (1) Vote summaries – the court had previously established a format for summaries of justices' votes. The released system would be able to propose an initial and editable version following the established structure.
> (2) Summaries of facts in appeals lawsuits.
> (3) Initial answer and analysis of petitions from the Reclamação class – this class involves cases where the court already has an established precedent. The statement also informed that the Court would further improve MARIA, adding new capabilities to the system. One cited was the suggestion of relevant precedent citation of opinions issued in Reclamações.

Justice Barroso has aptly highlighted the importance of embracing technological development – something the legal field is not known for – and reasserted the need to steer such development through the rule of law and due process, while promoting an ethical approach. However, the new large-scale language model (LLM)-based system deserves further scrutiny and more reflection, due to its radically different approach. Indeed, as an LLM chatbot, MARIA's algorithmic structure is fundamentally distinct from those of the other tools the Court has employed thus far.

First, the use of LLMs can produce much more sophisticated results which also require a higher level of validation, so as to control accuracy and mitigate risks that

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[19] Supremo Tribunal Federal, 'STF Lança MARIA, Ferramenta de Inteligência Artificial Que Dará Mais Agilidade Aos Serviços Do Tribunal', *Supremo Tribunal Federal* (blog), https://tinyurl.com/64ztdpym, accessed 27 December 2024.

[20] Roberto Maltchik, 'Barroso: Brasil deve ter 'em futuro não muito distante' minuta de decisões por IA', JOTA Jornalismo (14 May 2024), https://tinyurl.com/nt5ky2e2; Sérgio Rodas, 'Judiciário Deve Usar IA Para Resumir Ações e Fazer Minutas de Decisões, Diz Barroso', Consultor Jurídico (14 May 2024), https://tinyurl.com/w74ty76u, accessed 20 October 2024.

can easily occur when automating tasks such as the generation of a summary of a whole lawsuit based on the previous analysis of multiple documents. Indeed, GenAI systems are inherently epistemologically unreliable regarding facts,[21] and prone to so-called 'hallucinations',[22] also described by some authors as 'bullshit',[23] which is done through a cognitive analogy.[24]

The task generative AI (GenAI) systems are developed to undertake is, put simply, predicting the next word given the previous context. With sufficient training data and computational capacity, these models can become very performing, mustering a human-like level of syntaxes, thus creating the illusion they have some sort of knowledge about the phenomena for which they are asked to produce text. However, this latter point is known to be untrue. There are methods to enhance their tracking of a knowledgebase,[25] but existing methods are incapable of solving the problem completely, thus requiring review by a human with proven skills in the given area to make sure the produced text is useful.

Moreover, the automatic generation of a summary can be problematic even without any actual mistake, since it would inevitably reduce and replace the subjective judgment of the judge, for the formation of which all facts are relevant, with the unreliable result of highly sophisticated matrixial multiplications, based on statistics rather than cognitive analysis. Even if this task is supervised, this level of automation can lead to problems, such as automation bias, overreliance,[26] and aggravation of existing problems through the sheer capability of algorithms being deployed on large amounts of cases and guiding future decisions.[27]

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[21]Emily M. Bender et al., 'On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?', in Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency, FAccT '21 (Association for Computing Machinery 2021), 610–623, doi.org/10.1145/3442188.3445922.

[22] Yue Zhang et al., 'Siren's Song in the AI Ocean: A Survey on Hallucination in Large Language Models', arXiv (24 September 2023), doi.org/10.48550/arXiv.2309.01219.

[23] Michael Townsen Hicks, James Humphries, and Joe Slater, 'ChatGPT Is Bullshit', *Ethics and Information Technology* 26(2) (June 2024): 38, doi.org/10.1007/s10676-024-09775-5.

[24]Luciano Floridi and Anna C. Nobre, 'Anthropomorphising Machines and Computerising Minds: The Crosswiring of Languages between Artificial Intelligence and Brain & Cognitive Sciences', Minds and Machines 34(1) (25 April 2024): 5, doi.org/10.1007/s11023-024-09670-4.

[25] Zhang et al., 'Siren's Song in the AI Ocean'.

[26] Danielle Keats Citron, 'Technological Due Process', *Washington University Law Review* 85(6) (1 January 2008): 1271–1272.

[27] Virginia Eubanks, Automating Inequality: *How High-Tech Tools Profile, Police, and Punish the Poor* (St. Martin's Press 2018); Cathy O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (Crown 2016).

What is the consequence of starting the decision process from an algorithmic output? Algorithms act like institutions by framing the behaviour of actors based on their output.[28] In this sense, they can heavily influence the result of the process. Delegating the outset of the judicial decision-making directly speaks to its underlying legitimacy. One could question whether the judge (or even one of its staff) was responsible for the selection of the relevant facts. Or whether the initial draft output may have produced a large influence on the final ruling by framing the whole process and its outcome.[29] Analogous to how a number suggestion anchors our decision-making,[30] there is evidence of extraneous factors in judicial decision-making.[31]

For the court's public and democratic role to be questioned, it may not matter that all decisions are made with justices-in/on-the-loop:[32] the mere questioning of the concrete role played by justices in the process may be enough to undermine the perception of its legitimacy. From this perspective, the delegation of tasks that are essential for key phases of the process to algorithmic tools is problematic as it largely frames human behaviour from that point forward and may create an illusory sense of factual understanding of relevant elements to drive the justice's perceptions and decisions.[33] The same issue appears with the automation of draft rulings, mentioned by Justice Barroso.

Finally, if we consider the current cost of developing these sophisticated models, including the vast amount of data they require to train,[34] and the existing

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[28] Ricardo Fabrino Mendonca, Virgilio Almeida, and Fernando Filgueiras, *Algorithmic Institutionalism: The Changing Rules of Social and Political Life* (Oxford University Press 2023), doi.org/10.1093/oso/9780192870070.001.0001.

[29] Elena Abrusci and Richard Mackenzie-Gray Scott, 'The Questionable Necessity of a New Human Right against Being Subject to Automated Decision-Making', *International Journal of Law and Information Technology* 31(2) (30 August 2023): 114–143, doi.org/10.1093/ijlit/eaad013.

[30] Amos Tversky and Daniel Kahneman, 'Judgment under Uncertainty: Heuristics and Biases: Biases in Judgments Reveal Some Heuristics of Thinking under Uncertainty', *Science* 185(4157) (27 September 1974): 1124–1131, doi.org/10.1126/science.185.4157.1124; George Lima, 'A âncora da justiça: o efeito de ancoragem nas decisões judiciais', Civilistica.com 10(3 (7 December 2021): 1–23, accessed 20 February 2025.

[31] Jeffrey J. Rachlinski and Andrew J. Wistrich, 'Judging the Judiciary by the Numbers: Empirical Research on Judges', Annual Review of Law and Social Science 13(1) (13 October 2017): 203–229, doi.org/10.1146/annurev-lawsocsci-110615-085032.

[32] Amitai Etzioni and Oren Etzioni, 'Pros and Cons of Autonomous Weapons Systems', *Military Review* (May–June 2017), https://tinyurl.com/pva7tjcu, accessed 20 February 2025.

[33] Lisa Messeri and M. J. Crockett, 'Artificial Intelligence and Illusions of Understanding in Scientific Research', Nature 627(8002) (7 March 2024): 49–58, doi.org/10.1038/s41586-024-07146-0.

[34] Yang Liu et al., 'Datasets for Large Language Models: A Comprehensive Survey', arXiv (28 February 2024), doi.org/10.48550/arXiv.2402.18041.

dependence on the remarkably limited number of foreign tech companies as regards computing capacity necessary to support AI development,[35] it seems unlikely that the Court could build such a system from scratch, thus entrenching Brazil's technological dependency and undermining its quest for AI sovereignty.[36]

This is likely to further jeopardise the legitimacy of the whole process because the LLM and algorithmic tools shaping the process are developed by unaccountable software developers and engineers, ultimately taking decisions that directly shape how the tool operates. Even if we could assume the absence of any potential interference or bias at the product-development level, could the court legitimately incorporate decisions substantially elaborated by private actors?[37] Indeed, judicial actors and notably supreme courts, should tread carefully before delegating to privately conceived AI systems the elaboration of core elements of the reasoning and justification of its decision, which represents an essential part of its legitimacy.

Considering the enthusiasm with which AI systems are being regulated by and introduced into the Brazilian judiciary, Section 39.4, which follows, explores some particularly salient points regarding how the Brazilian CNJ has approached the issue, recently establishing a set of precautions that should be implemented.

39.4 The Brazilian CNJ's AI Policy

In a pioneering move, on 21 August 2020, the CNJ approved Resolution 332 'On the Ethics, Transparency, and Governance in the Design and Use of AI in the Judiciary'.[38]

[35] See Luca Belli, 'Exploring the Key AI Sovereignty Enablers (KASE) of Brazil, towards an AI Sovereignty Stack', in Steven Feldstein (ed.), *New Digital Dilemmas: Resisting Autocrats, Navigating Geopolitics, Confronting Platforms* (Carnegie Endowment for International Peace 2023), doi.org/10.2139/ssrn.4465501; Luca Belli and Walter B. Gaspar (eds.), *The Quest for AI Sovereignty, Transparency and Accountability: Official Outcome of the UN IGF Data and Artificial Intelligence Governance Coalition* (Springer 2025), https://repositorio.fgv.br/items/a75a14bb-a245-4990-89ae-31aec3ea9289, accessed 20 February 2025.

[36] Notably the Brazilian AI Plan stresses the need to invest in the development of national algorithmic capabilities in order to strengthen AI Sovereignty. See G. P. Johansson Neto, V. C. Farias da Costa, and W. B. Gaspar, 'Brazil's Artificial Intelligence Plan (PBIA) of 2024: Enabler of AI Sovereignty?', *African Journal of Information and Communication* 34 (2024): 1–15, doi:10.23962/ajic.i34.20424.

[37] Jake Stone and Brent Mittelstadt, 'Legitimate Power, Illegitimate Automation: The Problem of Ignoring Legitimacy in Automated Decision Systems', arXiv (24 April 2024), doi.org/10.48550/arXiv.2404.15680.

[38] Conselho Nacional de Justiça, Resolução n. 332/2020, https://atos.cnj.jus.br/files/original191707202008255f4563b35f8e8.pdf, accessed on 30 October 2024.

The Resolution has been recently updated and was replaced by Resolution 615/2025,[39] which will be discussed further.

Although it is merely administrative in nature and encompasses only the judiciary, the Resolution can be considered as the first major regulatory framework for AI in Brazil, which emerged even before the Brazilian Congress discussed AI-related bills of greater scope and impact. The Resolution is based on the pillars of ethics and transparency and addresses important problems present in the Brazilian social reality, such as discrimination and bias, which ends up being reproduced by algorithms in various forms, such as gender, race, sexual orientation, and age. In addition, it considers the need to regulate the increasingly frequent use of AI systems by the Brazilian judiciary, given the risks associated with the unsupervised use of these tools, which have now become particularly widespread.[40]

The resolution, in its updated version (615/2025), provides important definitions in the items of its Article 4, such as 'artificial intelligence (AI) system', presented as a 'machine-based system that, with different levels of autonomy and for explicit or implicit purposes, processes a set of data or information provided and with the aim of generating probable and coherent decision, recommendation or content results that can influence the virtual, physical or real environment'. [41] Conspicuously, the Brazilian CNJ has decided to adopt a definition of AI that differs from the one proposed in Bill 2338/2023, being more restrictive.

Subsequently, Articles 5 to 8 impose the point that the implementation of these tools should respect fundamental rights and be based on the principles enlisted by Article 3, such as justice, fairness, inclusion, and the prevention of abusive or unlawful discrimination, transparency, efficiency, explainability, contestability, auditability, and reliability of systems that employ AI techniques, legal certainty and information security, due process of law, right to a full defence, prevention and precaution, among many others. However, one of the most important provisions of the entire Resolution lies in Article 8, which is intended to combat discrimination.

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[39] Conselho Nacional de Justiça, Resolução n. 615/2024, https://atos.cnj.jus.br/files/original1555302025031467d4517244566.pdf, accessed on 29 April 2025.

[40] Luis Felipe Salomão, *Artificial Intelligence: Technology Applied to Conflict Management within the Brazilian Judiciary* (Handle.net 2022), https://hdl.handle.net/10438/33954, accessed 20 February 2025.

[41] Conselho Nacional de Justiça, Resolução n. 615/2024.

In verbis:

02-Extract begin

> The products generated by artificial intelligence to support judicial decisions must preserve equality, abusive or unlawful non-discrimination and plurality, ensuring that AI systems assist in fair judgments and contribute to eliminating or minimising the marginalisation of human beings and errors in judgment resulting from prejudice.
>
> § 1 Preventive measures should be implemented to avoid the emergence of discriminatory biases, including the continuous validation of AI solutions and the auditing or monitoring of their decisions throughout the life cycle of the application, to ensure that AI solutions remain compliant with the principles of equality, plurality and non-discrimination, with periodic reports assessing the impact of the solutions on fair, impartial and efficient judgment.
>
> § 2 If discriminatory bias or incompatibility of the AI solution with the principles set out in this Resolution is verified, the necessary corrective measures must be adopted, including temporary suspension (immediate or scheduled), correction or, if necessary, definitive elimination of the solution or its bias.
>
> § 3 If it proves impossible to eliminate the discriminatory bias, the artificial intelligence solution must be discontinued, with the consequent cancellation of its project registration in Sinapses, and a report on the measures adopted and the reasons justifying the decision, which may be submitted to independent analysis for studies, if appropriate.[42]

02- Extract end

In addition to these absolutely necessary measures to fight discrimination and bias, which would already represent a great advance and were mostly present in its first version, the Resolution also brings more concrete and descriptive norms, such as the one provided in Article 35, which requires, as a general rule, that the teams that carry out the research, development, and implementation of AI tools must be driven by diversity and interdisciplinarity.

As provided in the Article:

02- Extract begin

> Art. 35: The composition of teams for research, development and implementation of computational solutions using artificial intelligence will be guided by the pursuit of diversity and representativeness, with an emphasis on including, whenever

[42] Conselho Nacional de Justiça, Resolução n. 615/2024.

possible, different gender and ethnic profiles and people with disabilities, as well as experience and training in different areas of knowledge.

§ 1 Representative participation should be ensured, as far as possible, in the planning, data collection and processing, construction, verification, validation and implementation stages of the models, in both the technical and business areas.

§ 2 The diversity of participation provided for in the heading of this article may be waived by means of a reasoned decision, among other reasons, due to the lack of professionals on the staff of the courts or the need to ensure effectiveness and speed in implementing solutions in the short term.

§ 3 The formation of the teams mentioned in the caput must be interdisciplinary, including professionals from Information Technology, Law and other relevant areas, whose scientific knowledge can contribute to the research, development or implementation of the intelligent system in the Court. [43]

02- Extract end

Despite having adopted the first version of the Resolution, the growth in the use of GenAI tools by the courts led the CNJ to establish, through Ordinance No. 338 of 11/30/2023, the Working Group on Artificial Intelligence in the Judiciary,[44] whose main objective was to review and update Resolution 332/2020 in light of the growing challenges imposed by these tools. A year after its appointment, the Group conducted several public hearings and produced studies on the impacts of the introduction of these new tools, seeking to solidify a proposal to update the Resolution.[45] The new version updates the main definitions of the previous regulation considering technological advances, as well as paves the way for the development of a matrix for categorising the risks of the tools implemented by the Courts. Similarly, several governance measures are suggested, which will help to increase the efficiency of supervision and implementation of these systems.

A disputed and highly controversial issue concerns the possibility that judges may use GenAI systems and LLMs developed by private companies, under private or personal subscriptions or accounts, when these have not been directly provided and supervised by the Court to which they are affiliated.[46] To regulate this issue, the updated version of the Bill states that:

[43] Conselho Nacional de Justiça, Resolução n. 615/2024.

[44] Portaria no. 338 de 30/11/2023, https://atos.cnj.jus.br/atos/detalhar/5368, accessed 30 October 2024.

[45] CNJ of Brazil, 'Public Hearing Addresses Risks, Mechanisms, and Costs Associated with the Use of AI in the Judiciary', https://tinyurl.com/yurnvjv2, accessed 7 November 2024.

[46] Available at: www.cnj.jus.br/wp-content/uploads/2025/02/draft-ai-resolution.pdf, accessed 17 February 2025. For more, see Tarcízio Silva, 'IA no Judiciário: cuidados e

> Article 19. Large-scale language models (LLMs), small-scale language models (SLMs), and other generative artificial intelligence (GenAI) systems available on the worldwide web may be used by judges and court staff in their respective activities as tools to assist in management or support decision-making, in compliance with information security standards and the provisions of this Resolution.[47]

The Bill emphasises that judges and court staff are encouraged to use these models through access enabled by the courts, although they may also contract private solutions if certain conditions are met. These conditions include undergoing training on best practices, limitations, and risks associated with LLMs and GenAI systems. Importantly, the use of these tools must be auxiliary and complementary, serving as decision-support mechanisms rather than autonomous instruments for judicial decision-making. Judges remain fully responsible for decisions made with the aid of these tools.[48]

The Resolution also prescribes that providers of LLM and GenAI services must adhere to data protection and intellectual property standards, ensuring that data provided by judiciary users is not processed or shared without express authorisation. The use of private or external LLMs and GenAI systems to process confidential documents is prohibited unless proper anonymisation or security measures are implemented.

To guide the correct use of these technologies, a best practices manual is to be prepared and updated periodically by the National Committee on Artificial Intelligence in the Judiciary. Continuous training and capacity-building programs are also mandated to ensure judges and court staff are updated on technological advancements and their implications for the justice system. When GenAI is used in drafting judicial acts, this may be noted in the decision, and an automatic record must be made for statistical and auditing purposes.

Despite the approval of an updated version of the Resolution, one of the greatest concerns regarding the use of these tools through the personal accounts of justices pertains to the data protection of the individuals subject to the court's jurisdiction. This is because there is a clear risk that documents uploaded by judges containing personal data of the parties could be used by these private agents to train

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transparência podem evoluir tecnologias para todos', JOTA (27 September 2023), https://tinyurl.com/49k9ptkh, accessed 30 October 2024.

[47] Conselho Nacional de Justiça, Resolução n. 615/2024.

[48] Ibid.

their models in total unawareness of the data subjects, thus directly interfering with their fundamental right to informational self-determination.[49]

However, one question remains regarding confidential data: as it is already part of public records (principle of the publicity of procedural acts),[50] to what degree should it be safeguarded? Is it justifiable to prohibit the judiciary members from using private tools if these are not provided by the Courts to which they are affiliated, with the relevant safeguards? One possible answer is that the risks related to the usage of the data by private companies would justify the ban, but, on the other hand, it is possible the same data is already accessible to these companies through regular means.

39.5 The Present and Future AI Policy Context in Brazil

Brazil is in the process of elaborating a general framework aimed at regulating AI systems, epitomised by Bill 2338/2023, which represents the most advanced regulatory proposal. Conspicuously, once adopted, the framework will also become the main regulatory instrument to define the use of AI in the judiciary.

Importantly, the country is also in the process of reviewing its existing Artificial Intelligence Strategy, known as EBIA in its Portuguese acronym (*Estratégia Brasileira de Inteligência Artificial*).[51] EBIA has been harshly criticised by most observers, including by the Brazilian Federal Audit Court (TCU), which emphasised that 'EBIA's objectives are not specific, measurable, realistic (attainable) or delimited

[49] Informational self-determination, a concept that has become an autonomous fundamental right at the Latin American level, since the CAJAR case, decided by the Inter-American Court of Human Rights in October 2023. Judgment of the Inter-American Court of Human Rights of October 18, 2023, Series C No. 506. The official text of the judgment is available at: https://jurisprudencia.corteidh.or.cr/vid/953775991. On the relevance of the case for the legal systems of the region, see L. Belli et al. *I Transferência internacional de dados pessoais na América Latina: rumo à harmonização de normas* (Lumen Juris 2024), https://hdl.handle.net/10438/36141.

[50] It is worth mentioning that in the Brazilian Constitution, the publicity of procedural acts is of fundamental right nature, as provided in Article 5, item LX: 'the law may only restrict the publicity of procedural acts when the protection of privacy or social interest so requires'. For more, see Filipe Medon, 'Quem precisa de vazamento de dados que já estão disponíveis no processo eletrônico?' JOTA (16 August 2023), https://tinyurl.com/35cp5569, accessed 30 October 2024.

[51] MCTI, 'Estratégia Brasileira de Inteligência Artificial – EBIA' (July 2021), https://tinyurl.com/3dt2wftt, accessed 20 March 2025.

in a time frame' and 'EBIA's monitoring and evaluation framework is not formally defined.[52]

In this context, EBIA should be seen as a missed opportunity for Brazil, considering that, as stressed in previous publications,[53] the combination of a strategic approach – which should be ideally defined by EBIA – with sound regulation framing AI shall be seen as instrumental to ensure the full enjoyment of citizens' fundamental rights while promoting Brazilian 'AI sovereignty'.[54] This latter concept refers to the capacity to understand, develop, and regulate AI systems, while nurturing national technological progress, socioeconomic development, and technological autonomy.[55]

Baking such considerations into the design and implementation of AI systems becomes even more relevant, when AI is utilised for the digitalisation and – partial – automation of critical state functions such as justice. We particularly need to stress that 'technological autonomy' – including regarding the AI tools utilised for public service digitalisation – is a constitutional objective for Brazil, enshrined in Article 219 of the Federal Constitution for over three decades, thus providing an especially solid basis to the pursuit of digital sovereignty in the country.[56]

We need to emphasise that AI regulation may have two different purposes. On the one hand, it can be aimed at addressing potential risks stemming from the use of AI systems, by imposing obligations and prescribing sanctions. In this sense, regulation is defined through 'classic' forms, which can be supplemented by technical

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[52] *Levantamento de auditoria, Inteligência Artificial* [2021] Sefti – TCU (TCU), 33 and 40.

[53] See Luca Belli, Filipe Medon, and Walter B. Gaspar, Towards AI Regulation in Brazil: Past Policies, Future Paths, and Present Uncertainties. Oxford Handbook on Algorithmic Governance and the Law (2025); Belli, 'Exploring the Key AI Sovereignty Enablers'; Belli and Gaspar (eds.), *The Quest for AI Sovereignty, Transparency and Accountability*.

[54] Luca Belli. 'To Get Its AI Foothold, Brazil Needs to Apply the Key AI Sovereignty Enablers', in Feldstein (ed.), *Digital Dilemmas*, dx.doi.org/10.2139/ssrn.4465501; M. Jiang and L. Belli (eds.), *Digital Sovereignty from the BRICS Countries: How the Global South and Emerging Power Alliances Are Reshaping Digital Governance* (Cambridge University Press 2024); Luca Belli, 'Building Good Digital Sovereignty through Digital Public Infrastructures and Digital Commons in India and Brazil', ThinkTwenty (T20) India 2023 – Official Engagement Group of G202023 (2023), https://is.gd/BDCXss, accessed 20 February 2025.

[55] Ibid.

[56] See Luca Belli and Larissa Galdino Magalhães, *Computer Law & Security Review | Digital Transformation in the BRICS Countries* (Sciencedirect.com 2024), www.sciencedirect.com/special-issue/10VRL9GGMQG, accessed 20 February 2025; L. Belli, Da soberania digital à soberania em IA. Entender, desenvolver e regular inteligência artificial rumo à autonomia tecnológica, https://tinyurl.com/33re4j6y, accessed 26 February 2025.

standardisation to facilitate compliance.[57] The previous sections of this chapter have offered some concrete examples of how this regulatory strategy is playing out at the Brazilian level with particular regard to the efforts led by the CNJ. However, this type of regulation still lacks a general framework able to harmonise efforts. Hopefully, this framework will emerge with the approval of Bill 2338/2023.

On the other hand, it is important to note that regulation can also have a facilitative nature, being aimed at directing strategic investments towards the promotion of research and development of AI systems able to embed and foster specific values. This type of regulation is remarkably understudied but is particularly relevant. As we discussed in the previous sections of this chapter, the Brazilian judiciary, spearheaded by the STF and STJ, has promoted specific projects aimed at adopting as well as developing AI systems, thus regulating its use in the judiciary by promoting the development of concrete tools, which in turn shape how decisions will be taken. However, we also need to acknowledge that this latter type of regulation lacks a solid framework able to provide harmonisation, which should ideally be defined by the new EBIA.

Hence, we may argue that although the Brazilian judiciary is leading the path in terms of AI regulation in the public sector, the lack of a general AI regulatory framework and of a revised AI strategy ultimately frustrate the efforts of the judiciary. In this perspective, the need to deliver AI regulation and strategy, incumbent upon the Brazilian Congress and Federal Government, become particularly urgent considering that, in their absence, the Brazilian AI ecosystem is developing in a fragmented and unharmonised fashion, thus making it even more challenging to develop and implement a nationwide vision for AI.

39.6 Conclusion

The integration of AI into the Brazilian judiciary represents a significant evolution in legal processes, reflecting both opportunities and challenges. This chapter has explored the multifaceted impact of AI initiatives within the judiciary, highlighting the benefits and shortcomings of current implementations, as well as the reciprocal influence of judicial decisions on AI regulation.

Various AI-related regulations and initiatives have already been adopted across different court levels. While these systems enhance efficiency – such as predicting

[57] This is the approach adopted by the EU AI Act, according to which technical standardisation is an essential ‘means for providers to demonstrate conformity with the requirements of this Regulation’ (recital 61), for example, defining what are ‘suitable risk management measures’ or ‘appropriate’ metrics to test high risk systems (Article 9).

case outcomes for alternative dispute resolution and automating document processing – they also raise concerns regarding consistency, transparency, and, ultimately, justice. Furthermore, the lack of a cohesive framework for these initiatives has resulted in a fragmented approach that may hinder their effectiveness.

Our analysis has also delved into how national jurisprudence is shaping AI regulation. The current regulatory landscape is characterised by a lack of coherence, potentially leading to legal uncertainties that could undermine public trust in AI systems, especially when such systems are utilised to automatise critical state functions such as providing justice.

As highlighted, while Brazil has made strides in establishing ethical guidelines for AI use within the judiciary, these efforts are often inconsistent and inadequately enforced.[58] The anticipated approval of Bill 2338/2023 may provide a more structured framework to address these issues, fostering greater alignment between AI applications and legal standards. The elaboration of a new AI strategy must also be considered as a necessary step as the definition of a solid regulatory framework, able to ensure transparency and accountability.

In conclusion, while the Brazilian judiciary stands at a pivotal juncture with its embrace of AI technologies, it must navigate the complexities of an emerging and not-yet-defined regulatory framework to harness their full potential. A balanced approach that prioritises both innovation and legal certainty will be essential for fostering a more effective and trustworthy judicial system in Brazil.

[58] Salomão, *Artificial Inteligence*.