

Artificial intelligence, standardization and the risk of incorrect decision-making by machines

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SUMMARY

This paper analyzes the impact of the use of Artificial Intelligence (AI) on Brazilian law, focusing on judicial decisions and the regulations promoted by the National Council of Justice (CNJ) through Resolutions No. 332/2020 and No. 615/2025. The study seeks to understand the risks of algorithmic biases, the attribution of decision-making functions to machines, and cyber vulnerability within the Federal Supreme Court (STF), in light of the Federal Constitution, the General Data Protection Law (LGPD), and the Brazilian Civil Rights Framework for the Internet. The research demonstrates that, although AI is essential for modernization and procedural speed, its use requires mechanisms of governance, transparency, and human accountability. The analysis highlights that technology should serve as an auxiliary tool, never a substitute for the judicial function, in order to guarantee the principles of due process, impartiality, and legal certainty.

Keywords: Artificial Intelligence. Judiciary. STF. CNJ. Algorithmic Biases. Cybersecurity.

ABSTRACT

This paper analyzes the impact of the use of Artificial Intelligence (AI) on Brazilian law, focusing on judicial decisions and the regulations promoted by the National Council of Justice (CNJ) through Resolutions No. 332/2020 and No. 615/2025. The study seeks to understand the risks of algorithmic biases, the attribution of decision-making functions to machines, and cyber vulnerability within the Federal Supreme Court (STF), in light of the Federal Constitution, the General Data Protection Law (LGPD), and the Brazilian Civil Rights Framework for the Internet. The research demonstrates that, although AI is essential for modernization and procedural speed, its use requires mechanisms of governance, transparency, and human accountability. The analysis highlights that technology should serve as an auxiliary tool, never a substitute for the judicial function, in order to guarantee the principles of due process, impartiality, and legal certainty.

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1 INTRODUCTION

The incorporation of artificial intelligence (AI) into the Judiciary represents a milestone digital transformation, with a major impact on efficiency and procedural speed. In Brazil, experiences such as the Sapiens system, at the Attorney General's Office, and Victor and MARIA at the Supreme Federal Court, demonstrate how algorithms have been used for process screening and general impact analysis. Despite their benefits, the adoption of AI in the jurisdictional sphere raises constitutional questions relevant, especially regarding transparency, algorithmic biases and risks of cybersecurity.

The National Council of Justice, aware of such challenges, issued Resolution No. 332/2020, which established ethical and governance guidelines, and subsequently Resolution No. 615/2025, which expanded security, auditing and social participation mechanisms.

At the same time, the General Data Protection Law (Law No. 13,709/2018) and the Civil Framework for Internet (Law No. 12,965/2014) consolidate normative bases that limit the treatment automated processing of personal data, reinforcing the centrality of protecting privacy and due process of law.

In this context, this monograph investigates the contributions, risks and limits of use of AI in the Brazilian Judiciary, considering the need for balance between technological innovation and preservation of fundamental rights.

2 ARTIFICIAL INTELLIGENCE AND THE LAW

Artificial intelligence can be defined as the set of computational techniques that enable machines to perform tasks that previously depended exclusively on human cognition, such as classification, data analysis, decision making and prediction results. In Law, these tools have been applied to optimize routines, predictive analytics and automation of repetitive tasks. In the United States and Europe, Law firms and courts are already using AI to draft contracts, analyze jurisprudence and prediction of procedural outcomes. In Brazil, progress occurs in a gradual, with state and private initiatives that seek greater efficiency in the face of mass litigation.

3 STANDARDIZATION OF THE USE OF AI IN THE JUDICIARY

3.1 CNJ Resolution No. 332/2020

Resolution No. 332/2020 was a pioneer in establishing principles for the responsible use of AI in the Judiciary. Its pillars include transparency, non-discrimination, human responsibility and information security. These guidelines seek to ensure that the final decision remains under the control of the judge and that any biases are identified and corrected. Despite its innovative nature, the standard proved to be limited in the face of rapid technological evolution and the increase in cyber threats.

3.2 CNJ Resolution No. 615/2025

Resolution No. 615/2025 represented a significant advance, expanding the mechanisms of digital governance in the Judiciary. It determined the mandatory auditing independent, the adoption of reinforced cybersecurity protocols and explainability algorithmic, in addition to providing for the participation of civil society in monitoring the use of AI. Such measures reinforce democratic legitimacy and the need for accountability in practices of the Judiciary.

3.3 LGPD and the Internet Civil Rights Framework

The General Data Protection Law (Law No. 13,709/2018) establishes clear limits for the processing of personal data, determining that the use of sensitive information in algorithms respect the principles of transparency, purpose, and security. The Civil Rights Framework of the Internet (Law No. 12,965/2014) guarantees the protection of fundamental rights, such as privacy and freedom of expression, reinforcing that the use of technology cannot be override constitutional guarantees.

4 Algorithmic Biases and Cybersecurity

One of the main risks of using AI in the Judiciary is the reproduction of prejudices historical and structural. Algorithms trained on biased databases can

perpetuate inequalities of race, gender, and social class. Furthermore, decision-making opacity compromises the right to defense and the publicity of judicial acts, violating principles constitutional. Another critical point is the vulnerability of systems to cyberattacks, that can expose sensitive data and compromise judicial sovereignty. Therefore, the Resolution No. 615/2025 emphasizes the adoption of international security protocols and the creation of digital incident response committees.

5 REPERCUSSIONS FOR SOCIETY AND THE STF

The adoption of AI in the STF should not be understood merely as a measure administrative, but as a matter of democratic relevance. The jurisprudence of The Court and its summary understandings emphasize that jurisdictional activity is non-delegable and requires motivation and publicity of decision-making. Thus, AI must be understood as an auxiliary instrument, which can contribute to procedural efficiency, but never replace the judge in the exercise of cognition. Cases already brought to court regarding the use of technology highlight the conflict between innovation and fundamental guarantees, reinforcing the importance social control and transparency.

6 CONCLUSION

Analysis of Resolutions No. 332/2020 and No. 615/2025 of the CNJ, together with the LGPD, the Internet Civil Framework and the STF jurisprudence, demonstrates that the use of artificial intelligence in the Brazilian Judiciary is irreversible, but it must be guided by prudence and adequate regulation. Although technology brings efficiency gains and speed, cannot replace the jurisdictional function, under penalty of compromising rights fundamental principles such as due process, impartiality and legal certainty. Thus, it is reaffirmed that AI must remain as a support tool, subject to audits, social control and explainability, in order to ensure that technological innovation align with the strengthening of the Democratic Rule of Law.

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