

Artificial Intelligence in Administrative Prosecutions: CADE's "Brain Project"

18.09.2023 4 min read

Authors

José Inacio Ferraz de
Almeida Prado Filho

Maria Eduarda Genova

Related areas

Competition Law

Topics

Artificial Intelligence Competition

Law CADE

I. Use of artificial intelligence by government

The use of artificial intelligence is widely debated in the business environment and there is no reason to exclude government's use of AI tools from the discussion. At the same time, initiatives for the use of algorithms and databases by government entities bring concerns arise over the precautions that public authorities should take when implementing AI systems.

Brazil's National Congress is already discussing legislation to deal with government use of AI. Bill 2.338/2023, presented by Senator Rodrigo Pacheco (PSD-MG), contains provisions that are relevant to prosecutorial activities, such as (i) allowing the use of cameras to identify persons in public spaces in accordance with specific legislation and with judicial authorization; (ii) establishing strict rules for systems used in activities typically performed by government, such as the administration of justice, criminal investigations, and public security, and (iii) specific rules to govern the contracting of AI systems by government authorities, including rules on transparency and non-discrimination¹.

Brazil's competition authority, CADE, is in the vanguard of government use of AI, deploying artificial intelligence technologies in antitrust prosecutions.

II. Artificial Intelligence in CADE – the Brain Project

In 2013, CADE's General Superintendent's Office developed a set of techniques to detect cartels based on data from competitive government contracting processes. Named the "Brain Project" (Projeto Cérebro), the tool uses data mining, statistical tests and algorithms to identify suspected coordinated action in public procurement².

The array of techniques serves to analyze measurable effects of collusive conduct that are improbable in competitive markets and would be unlikely to occur without prior communication between bidding companies. The tool detects patterns in companies' behavior from data in public procurement databases that could indicate collusive conduct in competitive procedures, such as bid suppression; similarities in bids, with standardized prices; cover bidding; and market sharing by participating companies³.

The main source of data is the database maintained by Comprasnet, the federal government's public procurement portal, but CADE also uses data provided by other government entities, as well as public databanks⁴.

Through the application of filters and algorithms, the Brain Project automates investigation analyses, sifting through data to identify patterns of potentially coordinated behavior. The tool thus helps flag markets that are more susceptible to competition offences, provides support for decisions to investigate suspicious conduct, and helps collect evidence and other information during investigations.

CADE used this set of AI tools in 2021 to open an investigation into a possible cartel in bidding on a contract for fire brigade services⁵. Based on Comprasnet data on procurement processes in which the bidding companies had participated, CADE performed an econometric study, which revealed a suspect pattern in the bids that had been presented. Data cross-checking detected the IP addresses of suspected companies in procurement processes organized by other government entities, including the Ministry of Social Security, the National Council of Justice, the Caixa Econômica Federal, and the Government of the State of Acre⁶. CADE's investigation is still ongoing.

III. Looking Forward

The use of economic filters to identify potentially coordinated conduct is viable only with the use of IT and statistical tools, since a large pool of data on competitive bidding procedures and information on companies' strategies must be analyzed to produce useful results⁷.

Initiatives to increase efficiency in government are highly desirable, and the use of AI can provide valuable assistance in prosecution activities. At the same time, use of AI in the public sector raises the same concerns that it does in the private sector, with the difference that unlike consumers, who can choose where they will take their business, citizens do not have the same choice with government.

NOTES

¹ BRASIL, Senado Federal. Uso de Inteligência Artificial Pelo Poder Público Será Sujeito a Regulamentação. Agência Senado, 2023. Available at <https://www12.senado.leg.br/noticias/materias/2023/05/12/uso-de-inteligencia-artificial-pelo-poder-publico-sera-sujeito-a-regulamentacao>.

² BRASIL. Conselho Administrativo de Defesa Econômica. Escola Nacional de Administração Pública, Prevenção e detecção de Cartéis em Licitações. Módulo 3. Repressão a Cartéis. 2019. Available at https://repositorio.enap.gov.br/jspui/bitstream/1/6495/1/Mod%201_Defesa%20da%20Concorr%c3%aancia.pdf.

³ BRASIL. Conselho Administrativo de Defesa Econômica. Escola Nacional de Administração Pública, Prevenção e detecção de Cartéis em Licitações. Módulo 3. Repressão a Cartéis. 2019. Available at https://repositorio.enap.gov.br/jspui/bitstream/1/6495/1/Mod%201_Defesa%20da%20Concorr%c3%aancia.pdf.

⁴ OECD, Fighting bid rigging in Brazil: A review of federal public procurement, 2021, p. 100. Available at <https://www.oecd.org/daf/competition/fighting-bid-rigging-in-brazil-a-review-of-federal-public-procurement.htm>. The report notes that in 2010, the federal Comptroller General – CGU gave CADE access to data from the Public Spending Observatory (Observatório da Despesa Pública), and that the Public Accounts Tribunal – TCU was in the process of making its data compatible with the Observatory's interface.

⁵ BRASIL. Conselho Administrativo de Defesa Econômica. Superintendência Geral. NOTA TÉCNICA Nº 7/2021/SG-TRIAGEM CONDUTAS/SGA2/SG/CADE. Administrative Proceeding no.08700.004914/2021-05. Available at https://sei.cade.gov.br/sei/modulos/pesquisa/md_pesq_documento_consulta_externa.php?J7F4wnIPj2Y8B7Bj80h1lskjh7ohC8yMfhLoDBLddY_LGcsxfX2HCQpNx7m0B1UF9RWscvGxs64vdOcfQxclLWkamZuuKFhT0ozapmEwrlBqmd4mq0X4xYuNG8X857Y.

⁶ BRASIL. Conselho Administrativo de Defesa Econômica. Superintendência Geral. NOTA TÉCNICA Nº 7/2021/SG-TRIAGEM CONDUTAS/SGA2/SG/CADE. Administrative Proceeding no. 08700.004914/2021-05. Available at https://sei.cade.gov.br/sei/modulos/pesquisa/md_pesq_documento_consulta_externa.php?HJ7F4wnIPj2Y8B7Bj80h1lskjh7ohC8yMfhLoDBLddY_LGcsxfX2HCQpNx7m0B1UF9RWscvGxs64vdOcfQxclLWkamZuuKFhT0ozapmEwrlBqmd4mq0X4xYuNG8X857Y.

⁷ BRASIL, PNUD. Cérebro: Inteligência No Combate à Formação de Cartéis. Medium, 2020. Available at https://medium.com/@pnud_brasil/c%C3%A9rebro-intelig%C3%Aancia-no-combate-%C3%A0-forma%C3%A7%C3%A3o-de-cart%C3%A9is-95db65d02eba.

› PROFESSIONALS

Professionals who combine legal insight and market perspective



José Inacio Ferraz de Almeida Prado Filho



Maria Eduarda Genova