

July 15, 2024

U.S. Department of Justice
950 Pennsylvania Avenue, NW
Washington, DC 20530

Re: Workshop on Promoting Competition in Artificial Intelligence

To the U.S. Department of Justice:

The Consumer Technology Association® (“CTA”) submits these comments to the U.S. Department of Justice (“DOJ”) in response to its recent workshop on promoting competition in artificial intelligence (“AI”), hosted by Stanford University.¹ CTA is North America’s largest technology trade association, representing more than 1300 companies in the U.S. technology industry. CTA’s members are the world’s leading innovators – from startups to global brands – helping support more than 18 million American jobs. CTA also owns and produces CES® – the most powerful tech event in the world. Eighty percent of CTA companies are small businesses and startups; others are among the world’s best-known brands. CTA members operate in a competitive marketplace to produce innovative products that provide enormous benefits to consumers and power the economy.

CTA has been engaged with AI in consumer technology and is a leading voice on policy approaches to AI and competition in the technology sector. On AI, CTA has released a proposed National AI Policy and Regulatory Framework,² consumer research on awareness and interest in AI and its applications,³ and industry-driven AI standards.⁴ On competition policy, in June 2024, CTA released a study that spotlights the shortcomings of the Federal Trade Commission’s

¹ *Workshop on Promoting Competition in Artificial Intelligence*, DOJ, <https://www.justice.gov/atr/event/workshop-promoting-competition-artificial-intelligence> (last updated May 30, 2024).

² National AI Policy and Regulatory Framework, CTA, <https://cdn.cta.tech/cta/media/media/pdfs/ai-policy.pdf> (last visited July 11, 2024).

³ See, e.g., *Decoding Consumer Sentiment and Outlook on Artificial Intelligence*, U.S. Edition, CTA (Sept. 2023), available at https://shop.cta.tech/products/2023-decoding-consumer-sentiment-and-outlook-on-artificial-intelligence-u-s-edition?_gl=1*t2ut7n*_ga*MjA1NzY5MDM4My4xNjc4ODkxMDk5*_ga_5P7N8TBME7*MTY5NDg5MTc1MS41NS4xLjE2OTQ0TE5ODYuNjAuMC4w&_ga=2.38117025.38966437.1694811339-2057690383.1678891099.

⁴ *Standards*, CTA, <https://shop.cta.tech/collections/standards/artificial-intelligence> (last visited July 11, 2024).

(“FTC”) 2023 Merger Guidelines.⁵

The AI marketplace is relatively new, rapidly developing, and vibrant, and CTA encourages DOJ and other agencies to take a measured approach that recognizes the real innovation and competition in the marketplace. As explained further below, (1) the AI marketplace is now dynamic and innovative, with robust competition at all levels; (2) the U.S. AI market will grow faster with a uniform regulatory approach at the national level for AI policy and competition policy; and (3) industry-driven AI standards are developing and should be encouraged.

I. The AI marketplace is now dynamic and innovative and involves robust competition at all levels.

Federal agencies, including DOJ and the FTC, should recognize that the AI market is still young, vibrant, and developing, and that competitive forces will continue to be fluid as new and creative AI applications are developed. Assistant Attorney General Jonathan Kanter stated at the workshop that new AI developments mark the “dawn of a new technological revolution.”⁶

AI as a category of technologies is not new, but generative AI systems and technologies, such as large language models (“LLMs”) that underlie generative AI systems, are emerging technologies that are evolving rapidly, as are the varied use cases and applications to which these technologies can be applied. An early demo of ChatGPT was released in 2022, and the AI landscape has changed dramatically since then as developers work to create additional commercial and open-source LLMs.⁷ Also, rapid changes in AI will create major shifts across all levels of the AI technology stack.

Robust competition already exists at every level of the AI stack. As demand for innovative AI solutions grows, many IT providers offer AI developers various ways to obtain the computing capacity they need. Amazon Web Services (“AWS”) offers services like AWS Lambda and AWS EC2 to provide scalable compute capacity for AI developers.⁸ Google Cloud and Microsoft Azure also provide similar services, such as Google Cloud AI Platform and Azure Machine

⁵ See Ed Frank, *Consumer Technology Association Study Criticizes DOJ and FTC’s 2023 Merger Guidelines, Offers Insights*, CTA (June 5, 2024), <https://www.cta.tech/Resources/Newsroom/Media-Releases/2024/June/CTA-Releases-Study-on-2023-Merger-Guidelines>.

⁶ Jonathan Kanter, Assistant Attorney General, DOJ, Remarks at the Promoting Competition in Artificial Intelligence Workshop (May 30, 2024), <https://www.justice.gov/opa/speech/assistant-attorney-general-jonathan-kanter-delivers-remarks-promoting-competition>.

⁷ See, e.g., *The LLM Index*, sapling.ai, <https://sapling.ai/llm/index> (last updated July 2, 2024).

⁸ *Amazon Web Services*, Amazon, <https://aws.amazon.com/> (last visited July 11, 2024).

Learning.⁹ At the model level, competition and innovation are being driven as much by startups as by more established companies, as developers enter and introduce new models. Startups, such as Hugging Face and Cohere, have been significant players in natural language processing (“NLP”), competing with established companies. Hugging Face’s model hub allows developers to share and access various NLP models,¹⁰ fostering innovation. The number and variety of AI-powered apps and services has exploded, with no signs of slowing down.¹¹ In 2023 alone, this sector generated \$1.8 billion and saw a surge in new applications across diverse industries, from healthcare and finance to entertainment and education. This rapid expansion is not just a fleeting trend but a robust evolution, with projections indicating continued acceleration as businesses and developers leverage AI to create innovative solutions and enhance user experiences.¹²

A vibrant financing and incubation infrastructure now funds and supports innovation in training new AI models and the development of new apps and other novel ideas that push the boundaries of AI. From 2013 to 2023, the U.S. private sector invested more than three times the amount in AI compared to any other country. During the same period, the U.S. established 5509 AI companies, nearly quadruple the 1446 companies created by China.¹³ Globally, in 2023 alone, investments in generative AI totaled \$21.3 billion, some three times more than the amount invested in 2022.¹⁴ Most of these investments took place in North America, followed

⁹ *AI Platform*, Google Cloud, <https://cloud.google.com/ai-platform> (last visited July 11, 2024); *Azure Machine Learning*, Microsoft Azure, <https://azure.microsoft.com/en-us/services/machine-learning/> (last visited July 11, 2024).

¹⁰ *Models*, Hugging Face, <https://huggingface.co/models> (last visited July 11, 2024).

¹¹ From April to June 2024, U.S. investment in AI startups totaled \$27.1 billion, accounting for nearly half of all U.S. startup funding. Erin Griffith, *Investors pour \$27.1 billion into AI startups, defying a downturn*, Business Standard (last updated July 3, 2024), <https://www.business-standard.com/world-news/investors-pour-27-1-billion-into-ai-startups-defying-a-downturn-124070301277-1.html>.

¹² Louise Wylie, *AI App Market Data*, Business of Apps (last updated July 2, 2024), <https://www.businessofapps.com/data/ai-app-market/>.

¹³ Nathan Borney, *Charted: U.S. is the private sector AI leader*, Axios AI+ (July 11, 2024), https://www.axios.com/newsletters/axios-ai-plus-d6877a80-3ef4-11ef-a68c-a580488dbfaa.html?chunk=3&utm_term=emshare#story3.

¹⁴ Press Release, EY, *Generative AI Venture Capital Investment Globally On Track To Reach \$12 billion in 2024, following breakout year in 2023* (May 16, 2024), https://www.ey.com/en_ie/news/2024/05/generative-ai-venture-capital-investment-globally-on-track-to-reach-12-billion-dollar-in-2024-following-breakout-year-in-2023. According to a Bloomberg Intelligence report, the generative AI market is poised to grow to \$1.3 trillion by 2032. See Press Release, Bloomberg, *Generative AI to Become a \$1.3 Trillion Market by 2032, Research Finds* (June 1, 2023), <https://www.bloomberg.com/company/press/generative-ai-to-become-a-1-3-trillion-market-by-2032-research-finds/>.

by Europe.¹⁵ This dynamic investment environment gives smaller companies – as well as more established AI companies – access to significant amounts of funding and technical and financing expertise, as evidenced by the increasing number of emerging successful companies that are releasing innovative AI products and services.¹⁶

The federal government recognizes how important ongoing funding and innovation in AI are for our country's future. In 2023, it updated the National Artificial Intelligence Research and Development Strategic Plan to state, "The United States has maintained its leadership in AI in large part because of continued and consistent investment in long-term, fundamental AI research."¹⁷ And, keeping with this declaration, the Administration has several initiatives on the horizon. For example, the National AI Research Resource ("NAIRR") pilot program was launched earlier this year, as directed by the Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence ("AI EO").¹⁸ The NAIRR allows entrepreneurs, students, and researchers from diverse backgrounds to access the resources to research and develop safe and trustworthy AI. The Administration has also focused on the ways that AI research and development ("R&D") is beneficial for multiple public sector contexts, such as education, healthcare, and meteorology, among others.¹⁹

As other countries continue to develop their own AI systems, U.S. leadership and competitiveness in AI is critical to mitigating national security threats from countries whose values and interests do not align with our own. AI investments are situated in the context of an AI race with China, and slowing U.S. AI efforts risks our economic and national security future. Agencies therefore should act cautiously when approaching new and dynamic markets in AI, as emerging technological advancements and market entrants can develop quickly and alter the

¹⁵ See Press Release, EY, Generative AI Venture Capital Investment Globally On Track To Reach \$12 billion in 2024, following breakout year in 2023 (May 16, 2024), https://www.ey.com/en_ie/news/2024/05/generative-ai-venture-capital-investment-globally-on-track-to-reach-12-billion-dollar-in-2024-following-breakout-year-in-2023.

¹⁶ See, e.g., Reece Rogers & Lauren Goode, *Muds Are Asleep. Quick, Everyone Release AI Products*, *Wired* (Nov. 22, 2023), <https://www.wired.com/story/new-artificial-intelligence-products-openai-anthropic-stability-ai/>.

¹⁷ National Artificial Intelligence Research and Development Strategic Plan 2023 Update, Select Committee on AI of the National Science and Technology Council, at 3 (May 2023), <https://www.whitehouse.gov/wp-content/uploads/2023/05/National-Artificial-Intelligence-Research-and-Development-Strategic-Plan-2023-Update.pdf>.

¹⁸ Exec. Order No. 14110, 88 Fed. Reg. 75191, § 5.2(a)(i) (Nov. 1, 2023); *National Artificial Intelligence Research Resource Pilot*, National Science Foundation, <https://new.nsf.gov/focus-areas/artificial-intelligence/nairr> (last visited July 12, 2024).

¹⁹ *AI Aspirations: R&D for Public Missions*, AI.gov, <https://ai.gov/aspirations/> (last visited July 12, 2024); *Readout: At AI Aspirations, Leaders Project a Vision for How We Can Use AI to Achieve America's Ambitions*, The White House (June 14, 2024), <https://www.whitehouse.gov/ostp/news-updates/2024/06/14/readout-at-ai-aspirations-leaders-project-a-vision-for-how-we-can-use-ai-to-achieve-americas-ambitions/>.

competitive environment. A measured approach that takes account of the competitive landscape in a rapidly changing industry can avoid stifling innovation, creating barriers to entry, and diverting resources from R&D.

II. The AI marketplace will benefit from a uniform regulatory approach at the national level in AI policy and competition policy.

CTA supports a uniform, national approach to AI rules and guidelines that provides certainty for business and fosters innovation, including in competition policy. In the area of antitrust, this means a consistent approach between DOJ and the FTC, as the agencies must ensure that the division of antitrust enforcement between them does not subject companies to uneven expectations and standards.

Notably, the present FTC leadership stated that Section 5 of the FTC Act provides the agency with authority broader than the Sherman and Clayton Acts, which are enforced by DOJ.²⁰ CTA disagrees on this point, and believes that departing from traditional antitrust principles, including its historical focus on consumer welfare will discourage procompetitive benefits for consumers while creating uncertainty in the marketplace.²¹ Additionally, the overlap of DOJ and FTC authorities risks creating uneven standards for market participants – including those whose competitors may be subject to different competition standards based on whether DOJ or FTC may have primary authority – which threatens innovation by creating substantial uncertainty. The agencies should collaborate on a uniform and predictable approach that follows established antitrust principles.

Additionally, DOJ should encourage states to defer to federal approaches on both AI and competition, and avoid creating a patchwork of laws and enforcement approaches that would create additional barriers to entry and further undermine innovation. Uniform national regulations can ensure consistency, reduce compliance costs, and create a predictable environment for investment, innovation, and competition. AI should not be subject to the same missteps that have plagued privacy regulation, where 19 states have adopted comprehensive privacy legislation, creating a patchwork of varying rules that drive up compliance costs.²² These costs are especially burdensome for smaller companies and startups

²⁰ See, e.g., Statement of the Commission: On the Withdrawal of the Statement of Enforcement Principles Regarding “Unfair Methods of Competition” Under Section 5 of the FTC Act, FTC (July 9, 2021), https://www.ftc.gov/system/files/documents/public_statements/1591706/p210100commnstmtwithdrawalsec5enforcement.pdf.

²¹ See Comments of CTA, Draft Merger Guidelines for Public Comment, Docket No. FTC-2023-0043-0001, Matter P859910 (filed Sept. 18, 2023), <https://www.regulations.gov/comment/FTC-2023-0043-1504>.

²² See *US State Privacy Legislation Tracker*, IAPP, <https://iapp.org/resources/article/us-state-privacy-legislation-tracker/> (last updated July 1, 2024).

that may lack the resources needed for state-by-state regulatory compliance. Already, states are beginning to pass or consider AI rules and legislation, and this could lead to a similarly complicated state-by-state regulatory patchwork for AI to the detriment of smaller companies in the AI ecosystem.²³ A vibrant and competitive AI marketplace would benefit from uniform federal rules rather than a state-by-state regulatory approach.

III. Industry-driven AI standards are developing and should be encouraged.

Industry participants continue to develop voluntary AI standards that will help drive AI innovation and competition. Notably, CTA has published several industry resources to assist companies in the development of a trustworthy and safe AI ecosystem, including best practices for identifying and managing bias in healthcare.²⁴ As another example, the ISO/IEC JTC 1 information technology committee has engaged in a broad scope of work, developing AI best practices addressing foundational concepts, trustworthiness aspects, data management, robustness, and cybersecurity.²⁵ Notably, these are industry-developed, voluntary consensus standards that exist independently of any specific AI regulatory framework.

Developing open, inclusive, and flexible standards can enhance interoperability, transparency, and fair access, fostering a competitive market. Voluntary, flexible standards allow AI developers and deployers to leverage all or part of the standard in a manner best suited for their organizational context and needs. Federal policy has long promoted the development and use of standards. For example, the National Technology Transfer and Advancement Act of 1995 requires agencies to use industry standards to carry out policy objectives.²⁶ The National Institute of Standards and Technology's ("NIST") landmark AI Risk Management Framework has

²³ See, e.g., Consumer Protections for Artificial Intelligence, S.B. 24-205, 2024 Gen. Assemb., Reg. Sess. (Colo. 2024), <https://leg.colorado.gov/bills/sb24-205>; Artificial Intelligence Policy Act, S.B. 149, 2024 Gen. Sess. (Utah 2024), <https://le.utah.gov/~2024/bills/static/SB0149.html>.

²⁴ Press Release, CTA, CTA Outlines Approach Governing AI Policy, Research and Standards (Sept. 13, 2023), <https://www.cta.tech/Resources/Newsroom/Media-Releases/2023/September/CTA-Outlines-Approach-Governing-AI-Policy,-Research>; Artificial Intelligence in Health Care: Practices for Identifying and Managing Bias (ANSI/CTA-2116), CTA (Nov. 2023), available at https://shop.cta.tech/collections/standards/products/artificial-intelligence-in-health-care-practices-for-identifying-and-managing-bias-cta-2116?_gl=1*1l8wyg3*_ga*MTM0MDY1MzI3Mi4xNjk1MTQyMTkx*_ga_5P7N8TBME7*MTY5ODE1NTg0NS45LjEuMTY5ODE1NTg1NS41MC4wLjA.&_ga=2.140954549.680840440.1698103059-1340653272.1695142191.

²⁵ See, e.g., ISO/IEC JTC 1/SC 42: Artificial Intelligence, ISO, <https://www.iso.org/committee/6794475.html> (last visited July 12, 2024); ISO/IEC JTC 1/SC 27: Information security, cybersecurity and privacy protection, ISO, <https://www.iso.org/committee/45306.html> (last visited July 12, 2024).

²⁶ National Technology Transfer and Advancement Act of 1995, Pub. L. No. 104-113, § 12(d)(1), 110 Stat. 775, 783 (1996), <https://www.govinfo.gov/content/pkg/PLAW-104publ113/pdf/PLAW-104publ113.pdf> (codified as amended at 15 U.S.C. § 272 note); OMB Circular No. A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, OMB, at 17 (Jan. 22, 2016), https://www.nist.gov/system/files/revised_circular_a-119_as_of_01-22-2016.pdf.

been successful due, in no small part, to the framework's voluntary and flexible nature, along with NIST's willingness to incorporate industry feedback.²⁷ The federal government accordingly should recognize and support industry and the private sector's efforts to develop consensus standards applicable to AI systems.

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CTA appreciates the opportunity to provide comments on the AI competition workshop. The AI marketplace is dynamic and developing quickly, and CTA encourages DOJ and other agencies to take a measured approach that recognizes the strong innovation and competition in the marketplace.

Respectfully submitted,

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²⁷ AI Risk Management Framework (AI RMF 1.0), NIST (Jan. 2023),
<https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf>.