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Artificial Intelligence: Boundless Opportunities Require Innovative, Adaptive Public Policies

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HIGHLIGHT

From health care and energy to education and financial services, artificial intelligence (AI) holds promise for numerous areas of American life. The nation that wins the AI race will have a powerful role in shaping the future. To develop AI's potential, the United States must unleash AI's benefits while protecting Americans' safety and privacy and U.S. intellectual property from internal and foreign adversaries.

INTRODUCTION

The United States is in a competitive race against China and other nations to maintain its position as the leader in artificial intelligence (AI) innovation. In his January 23, 2025 executive order, President Donald Trump noted that the United States houses world-class AI research institutions, free markets, and a unique entrepreneurial spirit that will be vital to the development of AI. To maintain our global AI leadership, President Trump called for the development of AI systems free from ideological bias or engineered social agendas.

President Trump's executive order also revokes some previous AI policies and directives that created barriers to American AI innovation and encourages agency leaders throughout the government to work together to identify policy changes needed to remove obstacles in order to retain AI global leadership. Congressional leaders have indicated they share the White House's desires to design policies that enable the United States to keep its global AI advantage.

Concerns abound about AI, including its potential impact on labor markets, energy usage, and safety and privacy concerns. However, just as with the advent of past technologies—from electricity and steam engines to nuclear power, computers, and the internet—fear cannot drive our national AI decision-making, nor allow us to ignore this technological race.

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Sound technology policies will allow the United States to sustain and enhance America's global AI dominance to promote human flourishing, economic competitiveness, and national security.

ARTIFICIAL INTELLIGENCE BACKGROUND

In 2004, Stanford University Professor John McCarthy described AI as "the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable."

AI includes four developmental stages: 1) reactive machines (with no memory and task-specific, e.g. an input always with the same output), 2) limited memory (AI that can temporarily store data for making decisions), 3) theory of mind (AI that models and develops emotions, beliefs, feelings), and 4) self-awareness (a state sometimes called singularity, where some believe AI could evolve beyond human control, as in the movie "2001: A Space Odyssey").

Much AI technology exists in the limited memory stage today, with theory of mind currently in development and self-aware yet to be explored, though some observers believe AI could reach a tipping point where it outperforms human intelligence.

AI is broadly divided between traditional AI and generative AI. Traditional AI, called narrow or weak AI, is defined as performing specific tasks intelligently without creating anything new. These tasks are often carried out by voice assistants like Alexa or Google's search algorithm.

In contrast, generative AI, known as strong AI, is a derivative of AI that produces new things

or outcomes in an imaginative way. This type of AI produces images, music, or videos like social media deepfakes.

Traditional AI has reshaped the economy in many positive ways, including increasing the efficiency and productivity of businesses and homes. A 2023 report from Goldman Sachs claims AI could raise global gross domestic product (GDP) by 7 percent—and with it, standards of living for much of mankind—within 10 years.

Walker cautioned U.S. policymakers against "shooting ourselves in the foot with measures that would force the disclosure of American data and intellectual property to foreign actors or chill investment in cutting-edge AI technologies." Tech industry leaders previously urged the Biden administration not to add a new regulation that sought to limit artificial intelligence exports amid national security and competitiveness concerns. The tech industry was concerned that this new regulation was overbroad and could diminish the United States' global dominance in AI. The Biden rule was issued on January 13, 2025 and will take effect in 120 days, although the Trump administration has the ability to repeal the regulation.

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In a Fox News op-ed, Kent Walker, president of global affairs at Google and Alphabet, cited a McKinsey estimate showing that AI could add up to $22.1 trillion annually to the global economy—fast approaching the entire size of the nearly $29 trillion U.S. economy today.

Walker reported "that AI is largely being funded and developed by America's private sector, which invests hundreds of billions in research and development annually. Led by tech, the top 25 American companies invested more than $328 billion in America in 2023."

U.S. FEDERAL GOVERNMENT AND AI INNOVATION

Recently, two different federal approaches to the development of AI have emerged. The Biden administration generally sought to implement new regulations that could negatively impact AI's development. In contrast, the Trump administration aims to boost investment and U.S. leadership through deregulation.

In contrast, President Trump in his second administration is undoing Biden-era AI regulations and pursuing his own agenda. On his first day in office, President Trump also revoked Executive Order 14110 from 2023 ("Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence"). Biden's order, according to Reuters, "required developers of AI systems that pose risks to U.S. national security, the economy, public health or safety to share the results of safety tests with the U.S. government, in line with the Defense Production Act, before they were released to the public."

The 2024 Republican Party platform called for a repeal of this executive order, citing concerns over government interference with free market innovation and First Amendment problems, and urged policies allowing "AI development rooted in free speech and human flourishing."

President Trump then quickly announced up to $500 billion in private sector investment with three major U.S. firms to build AI infrastructure (including data centers) in the United States. The joint venture is called Stargate; and SoftBank CEO Masayoshi Son, Sam Altman of OpenAI, and Larry Ellison of Oracle joined President Trump for the Stargate announcement at the White House.

Shortly after the Stargate announcement, U.S. tech stocks cratered when Chinese AI firm DeepSeek announced it developed a free chatbot, the top-rated app in Apple's App Store, far more cheaply than America's top AI firms. Evidence that China has already developed such sophisticated AI capabilities, already challenging the U.S.'s leadership role, underscores the importance of the need for U.S. action to quickly retain its leadership in the AI realm.

AI AND LABOR CONCERNS

Some traditional employers and workers are fearful of generative AI (i.e. automation), which is still in its early stages, and how it could adversely impact their operations.

Freelancers, however, are learning how to coexist and even thrive with AI. Generative AI is already being implemented across traditional and freelance jobs through activities like coding, marketing, analyzing documents, and relying on chatbots for customer service, for instance. This happens with and without human input. Surveys indicate that many freelancers are harnessing AI to maximize their skills and focus on growing their businesses.

Max Tabarrok, an economics researcher at Dartmouth College, addressed these concerns,

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Within a Republican Congress, there is an opportunity to advance shared AI policy goals.

noting that "Fears about human labor getting replaced by machines go back hundreds if not thousands of years. These fears continue today in response to the rapid progress of AI in several previously secure human domains."

However, Tabarrok explains that automation increases productivity and output and raises the amount of capital available to each worker. Automation often improves capital productivity and creates new tasks that labor can perform. In this way, AI and human capital are complementary partners in new dimensions of productivity.

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For example, in December 2024, Google released a long list of 321 GenAI use cases that cover a broad range of industries, some of them in health care that can be life-saving. They include:

Freenome is creating diagnostic tests that will help detect life-threatening diseases like cancer in the earliest, most-treatable stages—combining the latest in science and AI with the ease of a standard blood draw.

Best Buy is using Gemini to launch a generative AI-powered virtual assistant this summer that can troubleshoot product issues, reschedule order deliveries, manage Geek Squad subscriptions, and more; in-store and digital customer-service associates are also gaining gen AI tools to better serve customers anywhere they need help.

The **New York State Department of Motor Vehicles** is transforming the driver service experience with AI to enable greater efficiency and accessibility within the DMV, directly benefiting the public it serves.

Etsy uses Vertex AI training to optimize its search recommendations and ads models, delivering better listing suggestions to buyers and helping sellers grow its businesses.

The **U.S. Dept. of Veterans Affairs** is using AI at the edge to improve cancer detection for service members and veterans. The Augmented Reality Microscope (ARM) is deployed at remote military treatment facilities around the world. The prototype device is helping pathologists find cancer faster and with better accuracy.

DaVita is developing dozens of AI models to transform kidney care, including analyzing medical records, uncovering critical patient insights, and reducing errors. AI enables physicians to focus on personalized care, resulting in significant improvements in healthcare delivery.

The efficiencies gained through technology like AI also allow increased leisure time, including time with loved ones.

CRYPTO AND AI FINANCIAL SERVICES REGULATION

Cryptocurrencies and AI are complementary and integrated technologies. AI cryptocurrencies are a growing industry that allows for decentralized financial services, or greater free market exchanges. According to news outlet CryptoSlate, "AI cryptos integrate artificial intelligence technologies into their operations, leveraging machine learning algorithms for enhanced decision-making."

Larry Fink, CEO of BlackRock, a more than $10 trillion asset management firm, told the 2025 World Economic Forum he predicts that the cryptocurrency Bitcoin will climb to $700,000 apiece as asset managers and sovereign wealth funds increase their ownership of cryptocurrency. Fink said he believes Bitcoin can protect against currency debasement.

Recognizing the need for the federal government to diversify its cryptocurrency and develop thoughtful policy for this emerging industry, President Trump signed an executive order in 2025 to create a strategic national digital asset stockpile and a new crypto task force.

Within Congress, Chairman of the U.S. House Financial Services Committee Patrick McHenry (R-NC) takes a favorable posture toward cryptocurrency and financial technology, or "fintech." In October 2024, McHenry issued a statement to "celebrate the 16th anniversary of the Bitcoin White Paper," saying "Innovators, entrepreneurs, and developers are building the financial infrastructure of the future."

McHenry was joined by all Committee Republicans in an October 2024 letter to Biden administration federal banking regulators at the Federal Reserve Board (Fed), Office of the Comptroller of Currency (OCC), and Federal Deposit Insurance Corporation (FDIC) responding to a July 31, 2024 request for information (RFI) on bank-fintech partnerships. The RFI focused on emerging trends in the fintech space.

McHenry's letter stated: "Innovation, including technological advances, in the financial system have and will continue to play an important role in the form of new products and services. Given fintech's evolving nature and promising potential to enhance our financial system, it is essential that these newer products and services are not treated with undue regulatory scrutiny, which will only lead to stifling innovation."

AI AND ENVIRONMENTAL CONCERNS

Critics have raised environmental concerns about the energy expenditure to run data centers and other components of AI development.

The race to develop AI is unstoppable and will rapidly accelerate globally. The question is whether the United States or China is leading the way. Environmentalists concerned about energy uses should note that the United States is far better than China at reducing its CO2 emissions and engaging in energy production, mining, and energy excavation practices that require humane labor and are less damaging to the environment.

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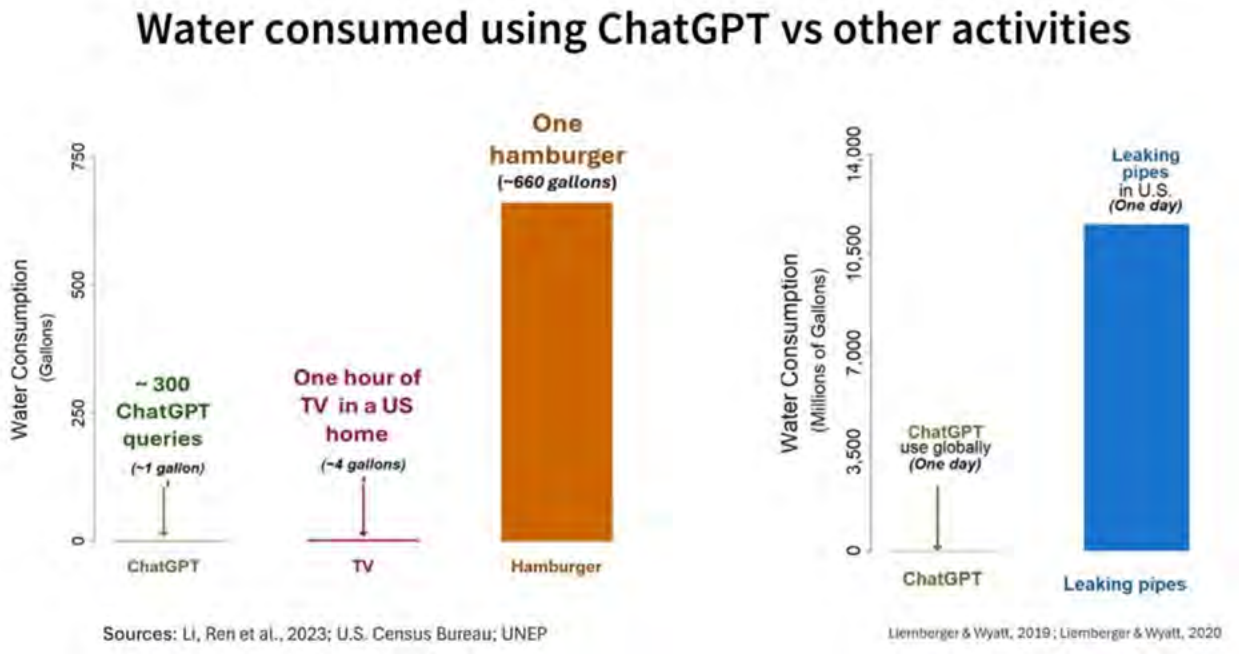
Yet the need to build the infrastructure to support data centers has been a bipartisan concern, to some extent. In one of his last acts in office, former President Biden issued an executive order providing federal support to address massive energy needs for fast-growing advanced AI data centers, calling for

leasing federal sites owned by the Defense and Energy departments. President Trump has not repealed that order to date.

Additionally, as Andrew Masley, director of Effective Altruism DC, notes, using ChatGPT, a generative AI chatbot developed by OpenAI



Regarding water use, Harvard Business Review ran an article with its authors concerned about "the evaporation of an astonishing amount of fresh water into the atmosphere for data center heat rejection, potentially exacerbating stress on our already limited freshwater resources."

However, Professor Yuan Yao at the Yale School of the Environment is part of a team with the National Science Foundation-led research initiative aimed at reducing the carbon footprint of computing. She reported that "AI can enhance energy efficiency and reduce energy usage, and it assists in environmental monitoring and management, such as tracking air emissions. Moreover, AI supports process and supply chain optimization to minimize environmental impacts."

and launched in 2022, requires minimal water usage, especially when compared to other water consumption uses, such as consuming a hamburger or addressing leaking pipes.

CONCLUSION

Artificial intelligence holds the potential to revolutionize numerous opportunities across a range of facets of American life. It will require nimble responses from policymakers to both protect consumers and employees and unleash these unique capacities.

WHAT YOU CAN DO

Get Informed

Learn more about artificial intelligence. Visit:

- Artificial Intelligence for Dummies
- Here's How Artificial Intelligence is Shaping the Future of Work
- Why AI can't and won't replace workers

Talk to Your Friends

Help your friends and family understand these important issues. Share this information, tell them about what's going on, and encourage them to join you in getting involved.

Become a Leader in the Community

Start an Independent Women's Network chapter group so you can get together with friends each month to talk about a political/policy issue (it will be fun!). Write a letter to the editor. Show up at local government meetings and make your opinions known. Go to rallies. Better yet, organize rallies! A few motivated people can change the world.

Remain Engaged Politically

Too many good citizens see election time as the only time they need to pay attention to politics. We need everyone to pay attention and hold elected officials accountable. Let your Representatives know your opinions. After all, they are supposed to work for you!

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Independent Women's Forum (IWF) is dedicated to building support for free markets, limited government, and individual responsibility. IWF, a non-partisan, 501(c)(3) research and educational institution, seeks to combat the too-common presumption that women want and benefit from big government, and build awareness of the ways that women are better served by greater economic freedom. By aggressively seeking earned media, providing easy-to-read, timely publications and commentary, and reaching out to the public, we seek to cultivate support for these important principles and encourage women to join us in working to return the country to limited, Constitutional government.