



U.S. Chamber of Commerce
Technology
Engagement Center

Commission on Artificial Intelligence Competitiveness, Inclusion, and Innovation

Executive Summary

*This report is reflective of the Commission on Artificial Intelligence
Competitiveness, Inclusion, and Innovation only.*





Foreword

Artificial intelligence (AI) is increasingly used by all important actors in every aspect of our economy and society, both domestically and globally. Yet in many ways, in terms of technology, economic impact, and AI policy development, we are in the initial stages of a new age.

By the end of this decade, AI is projected to increase global economic growth by \$13 trillion. AI is already having a positive impact by helping hospitals address nursing shortages through patient monitoring, helping emergency management officials map wildfire paths for quicker and better responses, and broadening financial inclusion by expanding job applicant pools and new avenues of credit.

As with any innovative technology, important concerns have been raised as well. Many have asked what AI means for humanity; governments struggle to match policies with technologies that are developing at an exponential pace; and workers are concerned about what AI means for them. America's competitors, such as China, realize the importance of establishing dominance by developing emerging technologies, and others in the international community, such as the European Union, are attempting to write the first regulations governing AI.

All of these issues must be debated and addressed in a deliberative and sober manner to create appropriate policies that will provide the pathway for the development and deployment of AI in a responsible and ethical manner. At the core of the debate is this simple premise—for Americans to reap the benefits of AI, people must trust it.

The private sector must be a serious partner in this process.

Recognizing the critical role of the business community in this AI debate, in 2022, the U.S. Chamber of Commerce launched the Commission on AI Competitiveness, Inclusion, and Innovation (“Commission”). This bipartisan and multistakeholder Commission is comprised of the private sector, academia, and civil society. The Chamber charged the Commission with a mission to consider the complex issues and real-world impacts that AI will have economically, individually, and globally.

Over the past 12 months, the Commission has heard from a diverse array of experts in Austin, Texas; Cleveland, Ohio; Palo Alto, California; London, England; and Washington, D.C. because the private sector has a major stake in ensuring economic prosperity and growth for Americans in a digital age, raising an educated and skilled 21st-century workforce, and promoting individual rights and fairness.

The Commission’s work also builds on the past work of the Chamber’s Technology Engagement Center, which put forth industry census-driven privacy and AI principles.

I would like to thank former Congressmen John Delaney (D-MD) and Mike Ferguson (R-NJ) in particular for their extraordinarily effective leadership. Thank you, too, to all of the Commissioners who have devoted their time, energy, and ideas to this report.

It is time for action. We hope the Commission’s recommendations will spur additional dialogue and ideas. And we pledge to work to accelerate urgent efforts by business and government to enact AI policies that will help harness the benefits and address the important challenges.



David Hirschmann

*President & CEO
Chamber Technology
Engagement Center*

A Message from the Commission's Co-Chairs

By almost any measure, innovation and advances in technology have improved the condition of humanity. From advances in medicine and extension of life to improved living and working conditions and environmental sustainability, innovation has driven broad-based social progress.

Although progress has been steady and meaningful, it is not always positive for everyone because change is highly disruptive, sometimes destructive, and often comes without proper societal planning and protections. AI similarly presents enormous opportunity for social advancement, which is our ultimate goal. It will also present, however, significant hurdles and challenges. From national security implications to privacy concerns to ensuring that harmful biases are not hardwired into the next generation of technological systems, AI presents unique challenges. We must address these issues clearly so that we can shape appropriate responses and achieve our goal, which is to allow the innovation machine to continue to work its magic and improve society, while protecting the basic rights of our citizens.

If we look at history, we see the benefits of good collaboration between the public sector and the private sector in addressing similar situations. In fact, the best societal outcomes are often achieved when the government and private sectors work well together. Through a transparent and open discussion—with all parties at the table—we can work to develop policies that allow for better outcomes for all. That has been the Commission's spirit and approach.

It has been an honor to cochair the Commission with former Congressman Mike Ferguson, and I am grateful to all of our Commissioners. I believe our recommendations will provide policymakers with an important framework for more specific policy making.



The Honorable John Delaney

*Former Member of Congress (D-MD)
and Co-Chair, U.S. Chamber of
Commerce Commission on Artificial
Intelligence Competitiveness,
Inclusion, and Innovation*



It has been an honor to cochair the U.S. Chamber's Commission on AI Competitiveness, Inclusion, and Innovation. The Commission has brought together some of the top minds in academia, industry, and civil society to find consensus on an important and timely issue of how to position the United States to best to lead in the development and deployment of AI.

We have traveled the world together the past year, talking with leading experts, civil society, unions, government officials, and other important stakeholders. The Commission saw no shortage of ideas and thoughts about regulating AI, training our future workforce, and positioning the United States to compete globally. As I learned during my time in Congress, these discussions and opportunities to hear many different viewpoints and perspectives are important in one's ability to strike the correct balance and to provide the best recommendations to solve a specific problem. I believe the Commission's work has struck this balance and will provide government officials, private industry, and advocacy groups with a set of key principles to start a further discussion. I appreciate my fellow cochair Rep. John Delaney for his expertise and constant willingness to work through these issues.



The Honorable Mike Ferguson

Former Member of Congress (R-NJ), and Co-Chair, U.S. Chamber of Commerce Commission on Artificial Intelligence Competitiveness, Inclusion, and Innovation



AI Commission Members

Co-chairs:



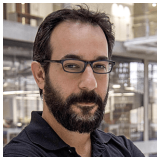
**Congressman
John Delaney (D-MD)**



**Congressman
Mike Ferguson (R-NJ)**



Commissioners:



Alexandros Dimakis
Professor, ECE Department, UT Austin; Co-director, National AI Institute on the Foundations of Machine Learning (IFML)



Christina Montgomery
Chief Privacy Officer and Vice President, IBM



Rachel Gillum
Head of Global Policy, Office of Ethical and Humane Use of Technology, Salesforce



Brent Orrell
Senior Fellow, American Enterprise Institute



Jerry Jones
Chief Ethics and Legal Officer, LiveRamp



Osonde Osoba
Senior AI Researcher, Fairness, LinkedIn



Shekar Katuri
AI Program, Strategy, and Governance Executive, Bank of America



Adam Thierer
Senior Fellow, R Street Institute



Chris Meserole
Director, AI Initiative, Brookings Institution



Conrad Tucker
Arthur Hamerschlag Career Development Professor of Mechanical Engineering, Carnegie Mellon University



Executive Summary

The use of artificial intelligence (AI) is expanding rapidly. These technological breakthroughs present both opportunity and potential peril.

AI technology offers great hope for increasing economic opportunity, boosting incomes, speeding life science research at reduced costs, and simplifying the lives of consumers. With so much potential for innovation, organizations investing in AI-oriented practices are already ramping up initiativesⁱ that boost productivity to remain competitive.

Like most disruptive technologies, these investments can both create and displace jobs. If appropriate and reasonable protections are not put in place, AI could adversely affect privacy and personal liberties or promote bias.

Policymakers must debate and resolve the questions emanating from these opportunities and concerns to ensure that AI is used responsibly and ethically.

This debate must answer several core questions: What is the government's role in promoting the kinds of innovation that allow for learning and adaptation while leveraging core strengths of the American economy in innovation and product development? How might policymakers balance competing interests associated with AI—those of economic, societal, and quality-of-life improvements—against privacy concerns, workforce disruption, and built-in-biases associated with algorithmic decision-making? And how can Washington establish a policy and regulatory environment that will help ensure continued U.S. global AI leadership while navigating its own course between increasing regulations from Europe and competition from China's broad-based adoption of AI?

The United States faces stiff competition from China in AI development. This competition is so fierce that it is unclear which nation will emerge as the global leader, raising significant security

concerns for the United States and its allies. Another critical factor that will affect the path forward in the development of AI policy making is how nations historically consider important values, such as personal liberty, free speech, and privacy.

To maintain its competitive advantage, the United States, and like-minded jurisdictions, such as the European Union, need to reach agreement to resolve key legal challenges that currently impede industry growth. At this time, it is unclear if these important allies will collaborate on establishing a common set of rules to address these legal issues or if a more competitive—and potentially damaging—legal environment will emerge internationally.

AI has the capacity to transform our economy, how individuals live and work, and how nations interact with each other. Managing the potential negative impacts of this transition should be at the center of public policy. There is a growing sense that we have a short window of opportunityⁱⁱ to address key risks while maximizing the enormous potential benefits of AI.

The time to address these issues is now.

In 2022, the U.S. Chamber of Commerce formed the Commission on AI Competitiveness, Inclusion, and Innovation (“Commission”) to answer the questions central to this debate. The Commission, cochaired by former representatives John Delaney (D-MD) and Mike Ferguson (R-NJ), was tasked with the mission to provide independent, bipartisan recommendations to aid policymakers. Commissioners met over the course of a year with over 87 expert witnesses during five separate field hearings across the country and overseas, while also receiving written feedback from stakeholders answering three separate requests for information posed by the Commission.

The Commission observed six major themes from its fact finding.

- i. J. McKendrick, *AI Adoption Skyrocketed Over the Last 18 Months*, Harvard Business Review: Innovation (Sept. 27, 2021), <https://hbr.org/2021/09/ai-adoption-skyrocketed-over-the-last-18-months>.
- ii. Y. Atsmon, K. Baroudy, P. Jain, S. Kishore, T. Saleh, B. McCarthy, and S. Nair, *Tipping the Scales in AI: How Leaders Capture Exponential Returns*, McKinsey & Company, Whitepaper Report (Apr. 23, 2021), <https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/tipping-the-scales-in-ai>.

Key Takeaways

1. The development of AI and the introduction of AI-based systems are growing exponentially. Over the next 10 to 20 years, virtually every business and government agency will use AI. This will have a profound impact on society, the economy, and national security.
2. Policy leaders must undertake initiatives to develop thoughtful laws and rules for the development of responsible AI and its ethical deployment.
3. A failure to regulate AI will harm the economy, potentially diminish individual rights, and constrain the development and introduction of beneficial technologies.
4. The United States, through its technological advantages, well-developed system of individual rights, advanced legal system, and interlocking alliances with democracies, is uniquely situated to lead this effort.
5. The United States needs to act to ensure future economic growth, provide for a competitive workforce, maintain a competitive position in a global economy, and provide for our future national security needs.
6. Policies to promote responsible AI must be a top priority for this and future administrations and Congresses.

Understanding the importance of these findings, the Commission also determined that the following five pillars should be at the core of AI regulatory policy making:

Five Pillars for AI Regulation

Efficiency.

Policymakers must evaluate the applicability of existing laws and regulations. Appropriate enforcement of existing laws and regulations provides regulatory certainty and guidance to stakeholders and would help inform policymakers in developing future laws and regulations. Moreover, lawmakers should focus on filling gaps in existing regulations to accommodate new challenges created by AI usage.

Neutrality.

Laws should be technology neutral and focus on applications and outcomes of AI, not the technologies themselves. Laws regarding AI should be created only as necessary to fill gaps in existing law, protect citizens' rights, and foster public trust. Rather than trying to develop a one-size-fits-all regulatory framework, this approach to AI regulation allows for the development of flexible, industry-specific guidance and best practices.

Proportionality.

When policymakers determine that existing laws have gaps, they should attempt to adopt a risk-based approach to AI regulation. This model ensures a balanced and proportionate approach to creating an overall regulatory framework for AI.

Collegiality.

Federal interagency collaboration is vital to developing cohesive regulation of AI across the government. AI use is cross-cutting, complex, and rapidly changing and will require a strategic and coordinated approach among agencies. Therefore, the government will need to draw on expertise from the different agencies, thus allowing sector and agency experts the ability to narrow in on the most important emerging issues in their respective areas.

Flexibility.

Laws and regulations should encourage private sector approaches to risk assessment and innovation. Policymakers should encourage soft law and best practice approaches developed collaboratively by the private sector, technical experts, civil society, and the government. Such nonbinding, self-regulatory approaches provide the flexibility of keeping up with rapidly changing technology as opposed to laws that risk becoming outdated quickly.

Recommendations

Having understood the urgency to develop policies to promote responsible AI and to ensure economic and workforce growth, the Commission used these pillars to develop policy recommendations to put these priorities into action. The Commission recommends areas that policymakers must address, including preparing the workforce through education, bolstering global competitiveness in the areas of intellectual property while shoring up partnerships, and protecting national security.



Preparing the Workforce

- **Use an Evidence-Based Approach:** Policymakers must take action to understand the potential impact of AI on the American workforce by leveraging new data sources and advanced analytics to understand the evolving impact of AI and machine learning on the American public.
- **Educate the Future Workforce:** The United States must increase education around AI in both the K-12 and higher education systems by encouraging policymakers to reform the standard curriculum to better prepare students for developing AI and machine learning systems.
- **Train and Reskill:** The public and private sectors must invest in training and reskilling the future workforce. These investments should be targeted toward programs that help ease worker transitions and improve incentives for businesses to invest in retraining. Policymakers should also leverage community colleges and vocational schools to train workers to perform jobs alongside AI-enabled systems.
- **Attract High-Skilled Talent:** In areas where a worker shortage cannot be addressed through education, training, and reskilling, Congress must act to increase the AI talent pool through targeted refinements to the H-1B visa process to encourage high-skilled immigration to the United States.

Bolstering Global Competitiveness

- **Shore Up Global Partnerships:** U.S. officials must collaborate with key partners and allies to develop more sensible global governance frameworks that advance our common democratic goals and values.
- **Advance Intellectual Property Protections:** Building on the foundation of the current system, policymakers must clarify intellectual property law requirements to ensure adequate protection of AI-enabled intellectual property. Before any change, policymakers must involve relevant stakeholders to consider potential unintended effects.
- **Provide Necessary Resources:** Policymakers should provide additional resources to the U.S. Patent and Trademark Office to support the acquisition of technical expertise, training, and other resources to speed the review of AI- and machine learning-related public patent applications.
- **Protect Ingenuity:** Policymakers should also explore opportunities to grant provisional approvals for submissions under review where appropriate to mitigate the effects of lengthy delays.

Protecting National Security

- **Human Rights:** The United States must drive the development and implementation of laws and codes of conduct focused on promoting human rights and innovation.
- **Establish International Rules of Conduct:** As the United States leads in the development of AI-enabled weapons, it should follow and encourage other countries to align with existing international norms and laws.
- **Systems Validation:** The U.S. should invest heavily in new ways of testing, evaluating, verifying, and validating (“TEVV”) military AI and machine learning systems to ensure that they are used safely.
- **Streamline Procurement:** To capitalize on American ingenuity, Congress and the Pentagon must look at streamlining acquisition processes and finding new ways of incorporating industry expertise and experience within the military enterprise.
- **Work with Allies:** The United States should look to open investment opportunities for AI-enabled systems to like-minded countries and allies and vice versa.

These findings and recommendations are not exhaustive, and we welcome the insights of others who may contribute to the AI policy debate. The Commission and individual Commissioners stand ready to collaborate with policymakers to address these issues that are of utmost importance to the United States and the economic well-being and safety of the global community.



U.S. Chamber of Commerce
Technology
Engagement Center

