U.S. Chamber of Commerce



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March 4, 2022

Office of Science and Technology Policy Attn: Faisal D'Souza, NCO 2415 Eisenhower Avenue Alexandria, VA 22314

Re: Update of the National Artificial Intelligence Research and Development Strategic Plan

To Whom It May Concern:

The U.S. Chamber of Commerce's Technology Engagement Center ("C_TEC") appreciates the opportunity to submit feedback to the Office of Science and Technology Policy ("OSTP") in response to its request for information on how to best update "the National Artificial Intelligence Research and Development Strategic Plan.¹" C_TEC appreciates OSTP's effort to determine "ways in which the strategic plan should be revised and improved.²"

Suggestions as to the addition, removal, or modifications of strategic aims.
 Address OSTP priorities of ensuring the United States leads the world in
 technologies that are critical to our economic prosperity and national security.
 Maintaining the core values behind America's scientific leadership, including
 openness, transparency, honesty, equity, fair competition, objectivity, and
 democratic values.

C_TEC strongly believes that Artificial Intelligence will significantly change our world for the better. It is paramount for the United States to lead the development of Artificial Intelligence for economic and security purposes. The United States' underlying democratic values provide us with a foundational set of rights such as liberty, free speech, freedom, due process of law, and freedom of assembly, all essential factors in facilitating the development of fair and ethical uses of Artificial Intelligence. These values are coupled with Americans'3belief that Artificial Intelligence can help society at large provide a significant advantage to the United States.

However, while these values are essential and can serve as a catalyst, the United States' values and optimism will not be enough for the U.S. to lead globally. Global

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¹ https://www.federalregister.gov/documents/2022/02/02/2022-02161/request-for-information-to-the-update-of-the-national-artificial-intelligence-research-and

² https://www.federalregister.gov/documents/2022/02/02/2022-02161/request-for-information-to-the-update-of-the-national-artificial-intelligence-research-and

https://americaninnovators.com/wp-content/uploads/2022/01/CTEC-US-Outlook-on-Al-Detailed-Analysis.pdf

leadership in Artificial Intelligence is heavily predicated on providing the correct regulatory climate that does not stifle innovation and provides the necessary investments into areas such as: education, hardware, and overall innovation. This is why C_TEC strongly supports the "National Artificial Intelligence Initiative Act⁴" (NAIIA). The NAIIA provides significant federal funding for the development of a "diverse workforce pipeline for the science and technology for Artificial Intelligence systems⁵" as well as grants for the development of "hardware for accelerating Artificial Intelligence systems⁶" and the development of the "National AI Research Resource Task Force."

Furthermore, the ANAIIA also requires the development of a voluntary risk management framework, which is currently being developed through the National Institutes of Standards and Technology ("NIST"). We strongly support the development of a Risk Management Framework around the development and life cycle of Artificial Intelligence systems and appreciate NIST's work to bring together "stakeholders to collaborate and address how to mitigate risks stemming from AI." We believe that the development of "trustworthy AI is a partnership8" and that "governments alone cannot promote trustworthy AI. The Chamber believes that governments must partner with the private sector, academia, and civil society when addressing issues of public concern associated with AI."

OSTP has a significant opportunity to be the driving force within the federal government in executing the National Artificial Intelligence Initiative. This effort will help ensure the U.S. government can meet the rising challenges through its continued support for increasing investments in research and development and supporting the development of Al-related voluntary consensus standards.

 Responses could include suggestions on AI R&D focus areas that could create solutions to address societal issues such as equity, climate change, healthcare, and job opportunities, especially in communities that have been traditionally underserved.

C_TEC strongly supports research and development on Artificial Intelligence that addresses societal issues. Continued research and development can provide significant

⁴ https://www.uschamber.com/technology/coalition-letter-the-national-artificial-intelligence-initiative-act-naiia-of-2020

⁵ https://science.house.gov/imo/media/doc/Al_initiative_SST.pdf

⁶ https://science.house.gov/imo/media/doc/Al initiative SST.pdf

⁷ https://www.uschamber.com/technology/coalition-letter-the-national-artificial-intelligence-initiative-act-naiia-of-2020

⁸ https://www.uschamber.com/technology/us-chamber-releases-artificial-intelligence-principles#:~:text=Fostering%20public%20trust%20and%20trustworthiness,explainability%2C%20fairness%2C%20and%20accountability.

⁹ <a href="https://www.uschamber.com/technology/us-chamber-releases-artificial-intelligence-principles#:~:text=Fostering%20public%20trust%20and%20trustworthiness.explainability%2C%20fairness%2C%20and%20accountability.

benefits to develop data-driven solutions in equity, climate change, healthcare, and employment, especially for those who have been traditionally underserved.

For example, the federal government is increasingly relying on AI R&D to help mitigate and "reduce the impacts of extreme weather events¹⁰" through efforts such as the development of the National Oceanic and Atmospheric Administration Center for Artificial Intelligence (NCAI) which looks to utilize Artificial Intelligence to "accelerate advances and serve as force multipliers to solve tough problems."¹¹ This is why Artificial Intelligence is increasingly being utilized in disaster risk management applications. From predicting the effect of an upcoming disaster to determining what resources and aid are needed post-disaster, AI is becoming an important tool to help Americans in times of need. For this reason, we encourage further investment into AI R&D for risk mitigation, which has great promise in helping to save lives and protect communities.

Artificial Intelligence has an excellent opportunity to assist in healthcare. From using AI and Machine learning to help diagnose cancer to using AI as a testbed for the development of future drugs, the future of our healthcare sector has never been brighter. Furthermore, AI can advance precision medicine and unearth insights that may not have been previously identified for the development of innovations for specific groups or individuals. However, we believe it is important to highlight that AI for healthcare is differentiated and can involve research that is predicated on looking for differences in these groups and should not be viewed as creating adverse bias. In terms of healthcare, AI can serve as a tremendous tool, and the different applications and contexts, as well as existing regulatory frameworks for healthcare, should be considered.

How AI R&D can help address harms due to disparate treatment of different demographic groups:

a. Research that informs the intersection of Al R&D and application with privacy and civil liberties.

C_TEC strongly supports the continued research and development to address harm to different groups. This includes the current guidance being developed at the National Institute of Science and Technology (NIST) on a "Proposal for Identifying and Managing Bias in Artificial Intelligence.¹²" We look forward to continuing to engage with NIST in their work to develop "advance methods to understand and reduce harmful forms of Al Bias.¹³" Furthermore, we support NIST's views and knowledge that "not all types of bias are negative.¹⁴" We encourage NIST in the future to facilitate larger conversations around data

¹⁰ https://sciencecouncil.noaa.gov/Portals/0/2020%20Cloud%20Strategy.pdf?ver=2020-09-17-150020-887

¹¹ https://www.noaa.gov/noaa-center-for-artificial-intelligence/about-ncai

¹² https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1270-draft.pdf

¹³ https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1270-draft.pdf

¹⁴ https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1270-draft.pdf

representation and accuracy while representing laws and regulations protecting consumer privacy and rights, as this is necessary to improve model and performance.

Finally, because of NIST's ongoing work and stakeholder engagement, we highly recommend that any other federal agencies' work align with NIST's developing guidance (SP 1270) on identifying and managing bias in AI.

b. Al R&D to help address the underrepresentation of certain demographic group groups in the Al workforce.

We strongly believe that a diverse workforce is critical. This is why we strongly support the National Artificial Intelligence Initiative, which put forth grants through the National Science Foundation for "Artificial Intelligence research, and postsecondary education program and activities, including workforce training and career and technical education program and activities, undergraduate, graduate, and postdoctoral education, and informal education opportunities.¹⁵" These grants are meant to support a "diverse workforce pipeline for science and technology with respect to Artificial Intelligence systems." Additionally, they are intended to "support efforts to achieve equitable access to K-12 Artificial Intelligence in diverse geographic areas and for populations historically underrepresented in science, engineering, and Artificial Intelligence fields.¹⁶" This is an important effort to ensure underrepresented communities are provided the necessary training and skillsets to enter into the AI workforce.

3.) Strategic directions related to international cooperation on AI R&D and on providing inclusive pathways for more Americans to participate in AI R&D.

C_TEC strongly supports establishing and strengthening regional hubs throughout the United States to advance workforce, training, representation, and overall digital equity. Regional innovation centers and involvement help develop and meet the needs of those regions. They can also help foster an environment that allows academic scientists and industry peers to regularly work together to drive sustained innovation and solution developments to those specific regions.

Conclusion:

We firmly believe that U.S. leadership in the development of Artificial Intelligence is pivotal for both the economy and security of the United States, and appreciate OSTP's work to update the National Artificial Intelligence Research and Development Strategic Plan. Thank you for considering these comments. We are happy to further discuss any of these topics.

¹⁵ https://www.congress.gov/congressional-report/116th-congress/house-report/617

¹⁶ https://www.congress.gov/congressional-report/116th-congress/house-report/617

Sincerely,

Michael Richords

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Policy Director
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