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Tess DeBlanc-Knowles
National Science Foundation
Directorate for Technology,
Innovation and partnerships
2415 Eisenhower Avenue
Alexandria, Virginia 22314

RE: Comments of ACT | The App Association, *Request for Information on Key Technology Focus Areas for the National Science Foundation's Directorate for Technology, Innovation and Partnerships (90 FR 26330)*

ACT | The App Association (App Association) appreciates the opportunity to submit views to the National Science Foundation's Directorate for Technology, Innovation and Partnerships in response to its request for information in support of its annual review of the Key Technology Focus Areas..[1] The App Association is committed to accomplishing policy actions needed to sustain and enhance America's AI dominance, and to ensure that unnecessarily burdensome requirements do not hamper private sector AI innovation.

The App Association represents thousands of small business software application development companies and technology firms that create the technologies that drive internet of things (IoT) use cases across consumer and enterprise contexts. Today, the value of the ecosystem the App Association represents—which we call the app economy—is $1.8 trillion and is responsible for 6.1 million American jobs, while serving as a key driver of the $8 trillion IoT revolution.[2] Alongside the world's rapid embrace of mobile technology, our members create the innovative solutions that power IoT across modalities and segments of the economy. We support OMB's goal of ensuring federal agencies instill proper safeguards that prioritize economic and national security, privacy, civil liberties and more when utilizing AI and other advancements in technology and innovation.

AI-driven algorithmic decision tools and predictive analytics are having, and will continue to have, substantial direct and indirect effects on Americans. Some forms of AI are already

[1] NSF, *Request for Information on Key Technology Focus Areas for the National Science Foundation's Directorate for Technology, Innovation and Partnerships*, 90 FR 26330 (2025), available at: https://www.federalregister.gov/documents/2025/06/20/2025-11374/request-for-information-on-key-technology-focus-areas-for-the-national-science-foundations.

[2] ACT | The App Association, State of the App Economy (2022), https://actonline.org/wpcontent/uploads/APP-Economy-Report-FINAL.pdf.

in use to improve American consumers' lives today; for example, AI is used to detect financial and identity theft and to protect the communications networks upon which Americans rely against cybersecurity threats.

Moving forward, across use cases and sectors, AI has incredible potential to improve American consumers' lives through faster and better-informed decision making enabled by cutting-edge distributed cloud computing. As an example, healthcare treatments and patient outcomes stand poised to improve disease prevention and conditions, as well as efficiently and effectively treat diseases through automated analysis of X-rays and other medical imaging. AI will also play an essential role in self-driving vehicles and could drastically reduce roadway deaths and injuries. From a governance perspective, AI solutions will derive greater insights from infrastructure and support efficient budgeting decisions.

Today, Americans encounter AI in their lives incrementally through the improvements they have seen in computer-based services they use, typically in the form of streamlined processes, image analysis, and voice recognition (we urge consideration of these forms of AI as "narrow" AI). The App Association notes that this "narrow" AI already provides great societal benefit. For example, AI-driven software products and services revolutionized the ability of countless Americans with disabilities to achieve experiences in their lives far closer to the experiences of those without disabilities.

Nonetheless, AI also has the potential to raise a variety of unique considerations for policymakers. As NSF considers potential revisions to its Key Technology Focus Areas, and in particular the AI Focus Area, we urge you to incorporate the perspective of small business developers and align with the App Association's comprehensive AI policy principles:

1. **Harmonizing and Coordinating Approaches to AI**

   A wide range of federal, local, and state laws prohibit harmful conduct regardless of whether the use of AI is involved. For example, the Federal Trade Commission (FTC) Act prohibits unfair or deceptive acts or practices, and states also have versions of these prohibitions in their statute books. The use of AI does not shield companies from these prohibitions. However, federal and state agencies alike must approach the applicability of these laws in AI contexts thoughtfully and with great sensitivity to the novel or evolving risks AI systems present. Congress and other policymakers must first understand how existing frameworks apply to activities involving AI to avoid creating sweeping new authorities or agencies that awkwardly or inconsistently overlap with current policy frameworks.

2. **Quality Assurance and Oversight**

Policy frameworks should utilize risk-based approaches to ensure that the use of AI aligns with any relevant recognized standards of safety, and efficacy. Small software and device companies benefit from understanding the distribution of risk and liability in building, testing, and using AI tools. Policy frameworks addressing liability should ensure the appropriate distribution and mitigation of risk and liability. Specifically, those in the value chain with the ability to minimize risks based on their knowledge and ability to mitigate should have appropriate incentives to do so. Some recommended areas of focus include:

- Ensuring AI is safe, and efficacious.
- Encouraging AI developers to consistently utilize rigorous procedures and enabling them to document their methods and results.
- Encouraging those developing, offering, or testing AI systems intended for consumer use to provide truthful and easy-to-understand representations regarding intended use and risks that would be reasonably understood by those intended, as well as expected, to use the AI solution.

3. Thoughtful Design

Policy frameworks should encourage design of AI systems that are informed by real-world workflows, human-centered design and usability principles, and end-user needs. AI systems should facilitate a transition to changes in the delivery of goods and services that benefit consumers and businesses. The design, development, and success of AI should leverage collaboration and dialogue among users, AI technology developers, and other stakeholders to have all perspectives reflected in AI solutions.

4. Access, Infrastructure, and Affordability

Policy frameworks should enable products and services that involve AI systems to be accessible and affordable. Significant resources may be required to scale systems. Policymakers should also ensure that developers can build accessibility features into their AI-driven offerings and avoid policies that limit their accessibility options.

5. Data Bias

The errors in datasets used for AI innovation will remain one of the more pressing issues with AI systems that utilize machine learning techniques in particular. Regulatory agencies should examine data provenance and bias issues present in the development and uses of AI solutions to ensure that bias in datasets does not result in harm to users or consumers of products or services involving AI, including through unlawful discrimination.

6. Research and Transparency

Policy frameworks should support and facilitate research and development of AI by prioritizing and providing sufficient funding while also maximizing innovators' and researchers' ability to collect and process data from a wide range of sources. Research on the costs and benefits of transparency in AI should also be a priority and involve collaboration among all affected stakeholders to develop a better understanding of how and under which circumstances transparency mandates would help address risks arising from the use of AI systems.

7. Modernized Privacy and Security Frameworks

The many new AI-driven uses for data, including sensitive personal information, raise privacy questions. They also offer the potential for more powerful and granular privacy controls for consumers. Accordingly, any policy framework should address the topics of privacy, consent, and modern technological capabilities as a part of the policy development process. Policy frameworks plan must be scalable and assure that an individual's data is properly protected, while also allowing the flow of information and responsible evolution of AI. A balanced framework should avoid undue barriers to data processing and collection while imposing reasonable data minimization, consent, and consumer rights frameworks.

8. Education

Policy frameworks should support education for the advancement of AI, promote examples that demonstrate the success of AI, and encourage stakeholder engagements to keep frameworks responsive to emerging opportunities and challenges.

- Consumers should be educated as to the use of AI in the service(s) they are using.
- Academic education should include curriculum that will advance the understanding of and ability to use AI solutions.

9. Intellectual Property

The protection of intellectual property (IP) rights is critical to the evolution of AI. In developing approaches and frameworks for AI governance, policymakers should ensure that compliance measures and requirements do not undercut safeguards for IP or trade secrets.

While promoting transparency, we advise against disclosing proprietary information, such as training data. The mere fact that a model was trained on specific data does not guarantee its effectiveness for a given use case. Instead, the scientifically sound and industry-standard approach to assessing performance is

testing the model in its intended environment using data representative of the target population.

The App Association appreciates NSF's consideration of the above views.

Sincerely,

Brian Scarpelli
Senior Global Policy Counsel

Chapin Gregor
Policy Counsel

ACT | The App Association
1401 K St NW (Ste 501)
Washington, DC 20005
202-331-2130