



Protecting Americans' Privacy and the AI Accelerant

Testimony of

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Before the

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I. Introduction

Small app companies and connected device makers use, create, or adapt artificial intelligence (AI) tools every day. Their activities involve a variety of different kinds of AI, from machine learning and deep learning to generative AI tools such as foundation models (FMs), large, medium, and small language models (LMs), and image generators. In creating, tuning, and leveraging these tools, ACT | The App Association's (the App Association's) members are keenly aware of the risks these tools may present, including how their processing activities meet customers', clients', and users' privacy and security expectations. In turn, innovators in the app economy must be able to rely on business partners, distributors, and online marketplaces that enable the best privacy and security protections.

AI refers not to a single program or use case, but to a broad category of general-purpose technologies that companies and consumers are applying to new challenges every day. Because of this, policymakers must narrowly target government intervention to situations where a substantial risk of concrete harm exists, tailored to the harms at issue. Just as Congress declined to create a specific federal agency to regulate combustion engines in all their manifestations, it should also focus its AI efforts on how the technology is used and provide the flexibility to scale measures taken to address the risks presented by different scenarios. For example, the risks presented by AI used to improve the quality of pizza are fundamentally of a different nature than those presented by clinical decision support tools in healthcare. Consistent with our policy principles on AI (see Appendix),¹ Congress must first look to existing statutes, regulations, and best practices and understand how they apply to emerging technologies before leaping forward with legislation. We agree with several federal agencies that recently affirmed that their jurisdictional boundaries do not end where the use of AI begins. There is no "AI shaped hole" in the Federal Trade Commission (FTC) Act; unfair or deceptive acts or practices taking place with the help of AI or regarding AI services are just as prohibited as their unassisted analogues. Overall, the risks AI poses are not fundamentally new and overbroad intervention to control the development of the technology is unlikely to produce the results policymakers seek.

The scope of this hearing is appropriate, as the development and use of AI adds to the urgency for Congress to legislate on privacy in particular, while some other areas are not as ripe for substantive intervention. Our testimony makes three overarching points:

1. **The United States needs a federal privacy law.** On the one hand, the United States is several steps ahead of other countries in the development of AI sectors, in part because it has thus far declined to overregulate privacy. On the other hand, our innovation economy could fare even better on the global stage if Congress were to enact a strong, preemptive federal privacy framework that bolsters trust in cutting-edge AI tools while curbing mismanagement of personal data.

¹ ACT | THE APP ASSOCIATION, POLICY RECOMMENDATIONS FOR AI, available at <https://actonline.org/wp-content/uploads/Policy-Recommendations-for-AI.pdf>.

2. **Small companies are the leading edge on AI.** Nimble than their larger rivals, small businesses in the app economy have a comparative advantage in developing, deploying, and adapting AI tools for a variety of purposes. Their experience is a primary shaping force in the development of FM services and generative AI in all of its various forms and should play a major role in informing policymakers on how any new laws should apply to AI's development and use. They also benefit from a competitive landscape in markets for LM and FM services. They do not want policymakers to prematurely intervene on antitrust grounds, a development that could ironically stifle competition on the features small businesses care about most.
3. **Standards are going to play an important role in AI and other emerging technologies.** Small businesses leverage standards every day to compete with larger rivals and to interoperate with products and services that they can build on. The National Institute for Standards and Technology (NIST) plays an important role as a participant in voluntary, industry-led standards development efforts, as a clearinghouse of information on standards development, and as a coordinator of federal government participation in industry-led processes. However, Congress must encourage NIST's leadership in preserving small businesses' access to standardized technologies by holding standard-essential patent (SEP) holders to their commitments to license SEPs to any willing licensee on fair, reasonable, and non-discriminatory (FRAND) terms.

II. A Federal Privacy Framework

The proliferation of AI tools across industries and around the world is one of the most important reasons for Congress to establish a single, preemptive federal privacy framework. While a restrained approach to governance should guide Congress' thinking on AI as a group of technologies, Congress has a more developed understanding of the privacy questions at issue with their adoption. With 19 state-level comprehensive privacy frameworks in place, Europe's General Data Protection Regulation (GDPR), and a host of other regulatory regimes in various stages of consideration and implementation, privacy is a good fit for congressional action.

The privacy risks AI poses are outgrowths of existing privacy issues. Privacy is concerned first and foremost with the universe of purportedly *authorized* collection, processing, and transfer activities an entity may pursue. The impracticability of a single consumer understanding and authorizing all the foreseeable uses of data across all of the services they access—coupled with the elusiveness of defining privacy harms—have long presented formidable challenges for policymakers approaching the privacy problem. With AI, these same challenges emerge, but on a larger scale and with greater intensity on the foreseeability factor. For small businesses, the twin imperatives to provide regulatory clarity and to avoid taking away the tools they use now are heightened. With these considerations in mind, it may help to describe small businesses' priorities for federal

privacy legislation, with a special focus on AI and with the American Privacy Rights Act (APRA) as a reference.

Data minimization. AI is often useful precisely because it surfaces insights or ideas that people are unable or less inclined to find on their own. Therefore, the purpose the data serves, for both the entity processing it and the individual to which it pertains, often evolves after its initial collection. For small businesses, a data minimization provision that imposes a blanket ban on processing of personal data, except in specifically enumerated circumstances, is likely to cause problems. Both GDPR and APRA impose such a ban on processing, unless specific lawful bases exist. GDPR's formulation is more permissive, as it allows processing that is "necessary for the purpose of the legitimate interests pursued by the controller or by a third party" and where the "data subject has given consent to the processing" for "specific purposes."² In general, data minimization provisions should take the opposite approach, avoiding a blanket ban on all processing while describing prohibited processing activities that are likely to cause net concrete harm. Those concrete harms are not necessarily limited to financial or physical harms; then-Acting Chair of the FTC Maureen Ohlhausen's useful 2017 taxonomy of recognized harms outside those categories, including reputational injury and unwarranted intrusion, is still applicable.³ Consistent with these concepts, if Congress proceeds with proscriptions on processing activities, we recommend the use of relevant context and consumers' reasonable expectations as twin touchstones. The extent to which processing of personal data respects the reasonable expectations of consumers given the context in which data processing takes place is often the best predictor of possible risk of privacy harms occurring.

Explicit small business treatment. In legislatures across the country, proponents of privacy measures have indicated a desire to ensure small businesses are able to comply with and are not unduly burdened by any applicable requirements. However, we believe that APRA's specific method of achieving that goal—carving out small businesses from the definition of "covered entity"—could potentially deny them the benefits of preemption and inadvertently expose them to costly state-by-state compliance and unreasonably high litigation risks from differing liability regimes.

By excluding small businesses from the definition of covered entity, APRA would create uncertainties as to whether small businesses would be covered by the bill's preemption provision—or if, instead, they would remain regulated by existing and future state privacy laws. If small businesses are not covered entities under APRA's preemption provision, which preempts state laws "covered by" the federal law, they may have to contend with a burdensome patchwork of state privacy laws while their larger counterparts enjoy a single

² Gen. Data Protection Reg., Art. 6, available at <https://gdpr-info.eu/art-6-gdpr/>.

³ Hon. Maureen K. Ohlhausen, Acting Chair, Fed. Trade Comm., "Painting the Privacy Landscape: Informational Injury in FTC Privacy and Data Security Cases," speech before the Fed. Comm'cns Bar Assoc. (Sept. 19, 2017), available at https://www.ftc.gov/system/files/documents/public_statements/1255113/privacy_speech_mkohlhausen.pdf.

privacy standard. If the Committee is worried about further entrenching larger companies with big compliance budgets while disadvantaging smaller companies, we believe a pure carveout would have exactly this effect.

As we have previously indicated in testimony, App Association members are not asking to be carved out of federal data privacy legislation.⁴ Instead, requirements should be scalable depending on the size, nature, and complexity of an enterprise's processing activities, and small businesses should have access to compliance programs that provide a presumption of compliance with the law. We note that some of the world's largest companies have had to make prodigious compliance investments to meet GDPR requirements that are simply beyond the reach of App Association members. For example, Google's chief privacy officer testified before this Committee in 2018 that the company had to invest "hundreds of years of human time" to come into compliance with the framework.⁵ Offering small businesses a path to compliance is essential to ensuring the law holds them accountable, but that they have some protection from nuisance lawsuits and are afforded reasonable opportunities to rectify compliance issues in good faith. A compliance program would ensure that App Association members are rightfully viewed as—and held accountable for—complying with a federal framework, while alleviating excessive liability concerns and other burdens.

Preemption. Preemption must be strong and without vague exceptions. The great economic benefit of the internet is that it has allowed small businesses to reach customers in all 50 states. Small businesses do not, however, have the time or capacity to conduct constant legal analyses to determine whether relevant state law or federal law applies to their activities with each new scenario presented. Therefore, a preemption provision should expressly preempt state laws "related to" the federal law and should not have exceptions that call into question Congress' intent with respect to preemption.

Private right of action (PRA). A federal privacy framework must avoid inadvertently creating new sue-and-settle business models and inviting other abusive tactics based on claims with no merit. We acknowledge that the difficulty in bringing suit under current law lies in defining the harm that accrues to the aggrieved consumer. But, even under a new federal regime, in the majority of cases, enforcement agencies are equipped to obtain redress to the extent it is warranted. Therefore, we do not believe a PRA is a necessary element of a comprehensive federal privacy framework. However, if a bipartisan federal privacy bill

⁴ "Protecting America's Consumers: Bipartisan Legislation to Strengthen Data Privacy and Security," hearing before the House Committee on Energy and Commerce, Subcommittee on Consumer Protection and Commerce, (117th Cong., 2d Sess.), statement of Graham Dufault, senior dir. for public policy, ACT | The App Association, available at <https://docs.house.gov/meetings/IF/IF17/20220614/114880/HHRG-117-IF17-Wstate-DufaultG-20220614.pdf> ("The safe harbor would ensure that App Association members are rightfully viewed as—and held accountable for—complying with a federal framework . . .").

⁵ Ashley Rodriguez, "Google says it spent "hundreds of years of human time" complying with Europe's privacy rules," QUARTZ (Sept. 26, 2018), available at <https://qz.com/1403080/google-spent-hundreds-of-years-of-human-time-complying-with-gdpr#:~:text=Google's%20chief%20privacy%20officer%2C%20Keith,company%20into%20compliance%20with%20GDPR..>

includes a PRA, several safeguards are necessary: remedies must not include statutory per-person, per-violation monetary damages; any violation of the law should not constitute an injury-in-fact; businesses must be allowed an opportunity to cure the alleged problem before a suit is allowed to proceed; there must be penalties for baseless claims; and Congress should require notice to federal or state enforcement agencies, empowering them to veto baseless claims.

III. How Small App Companies and Connected Device Makers Use, Develop, and Adapt AI Tools

The reality of AI use in everyday marketplaces is both less shocking and more interesting than headlines and handwringers suggest. For example, focusing on the most egregious instances of facial recognition misuse by law enforcement agencies would provide an inadequate basis for understanding how AI works in the vast majority of commercial cases and the risks it truly presents. An overview of how App Association members use AI in diverse ways may provide a more helpful and representative sample of how AI benefits people and the kinds of risks at issue. For a lengthier report on our member companies' perspectives on and uses of AI, our white paper, *Small Businesses and Entrepreneurs: An Indispensable Force in the AI App Economy*, describes further examples from members in the United States and overseas.⁶

In a recent App Association member survey, 75 percent reported using generative AI.⁷ The figure for all kinds of AI is likely close to 100 percent, and since that survey was conducted late last year, the number using generative AI has likely increased. Many App Association members are also on the developer side of AI tools, and some even make the connective tissue for developers to customize LM resources for specific purposes. Among a range of enterprises, another survey recently revealed that among those that deploy large LMs, only 3 percent use just one, while 83 percent use three or more.⁸ Summarizing the reason for this variety, one of the respondents said, “[f]or about 50 percent of use cases, we use OpenAI, for 30 percent – 40 percent of use cases, we use our internal fine-tuned and pre-trained LLMs based on open-source LLMs like Llama 2 or Mistral, and for others we use Anthropic or Cohere.”⁹ Looking at the broader marketplace, the internal fine-tuned segment is especially common and an area where App Association members play a significant role, as they and their clients use AI to help them be more efficient at what they do not necessarily do that well so that they can focus on what they *do best*. As generative AI’s lifecycle transitions from hype to rubber meeting road, these smaller models are

⁶ ACT | THE APP ASSOCIATION, SMALL BUSINESSES AND ENTREPRENEURS: AN INDISPENSABLE FORCE IN THE APP ECONOMY (Fall 2023), available at <https://actonline.org/wp-content/uploads/small-businesses-and-entrepreneurs-an-indispensable-force-in-the-ai-app-economy.pdf>.

⁷ Priya Nair, “Survey Says: AI and IP are Essential to Innovation,” ACT | The App Association Blog (Feb. 27, 2024), available at <https://actonline.org/2024/02/27/survey-says-ai-and-ip-are-essential-to-innovation/>.

⁸ CBCINSIGHTS, STATUS: OPEN RELATIONSHIP, available at <https://tinyurl.com/58y7bezu>.

⁹ *Id.*

emerging as the more realistic immediate use case for enterprises around the world.¹⁰ For their part, small businesses say they are motivated to adopt AI tools primarily for cost savings and due to competitive pressure, and the most common uses by small businesses for AI tools are financial management, email marketing automation, and to enhance cybersecurity capabilities.¹¹

Decision support: healthcare. One of our member companies recently built a simple, AI-driven tool that both expands options for small healthcare practices and helps invigorate competition in a key market for practice management systems (PMS). These systems help healthcare practices manage their patient intake processes and are especially important for scheduling and managing contact and communications with patients. It can be especially difficult for small practices to find the right PMS that fits their specialty or patient population. Our member built the tool to rapidly scan and analyze broader range of PMS options on the market and rank them in terms of which would be the best fit for the client practice. It is an excellent example of AI made by small businesses for small businesses, helping solve a targeted problem and providing a custom solution in a manner that improves efficiency.

Caregivers have used clinical decision support (CDS) tools to help accurately diagnose conditions and build treatment plans that best fit their patients. App Association member Rimidi provides a remote physiologic monitoring and clinical decision support platform for patients and their providers to manage a variety of chronic conditions.¹² Rimidi helps ensure that providers can intervene when necessary when a patient's diabetes is at risk of reaching uncontrolled levels and helps chart a management plan that fits unique patients and their symptoms.

Generative AI. Real-world LM deployment is typically not a case of workers punching a prompt into ChatGPT and copying and pasting the results. For example, App Association members adapt LMs to draft marketing materials and write code. They start with either licensed or open-source models and fine tune them to produce results that better fit the results they want. Fine-tuning can also help an organization ensure a LM's outputs hew more closely to ethical and legal requirements, reducing the editing and review burden on the people in the loop.

In another example, App Association member Rotational Labs creates custom plug-ins for their clients to maximize their use of available LMs. They also help create "domain-specific" LMs using open-source models, allowing their clients to create their own models with their own data, either on a provided cloud infrastructure or the client's existing service. For one

¹⁰ Tom Dotan and Deepa Seetharaman, "For AI Giants, Smaller Is Sometimes Better," THE WALL STREET J. (Jul. 6, 2024), available at <https://www.wsj.com/tech/ai/for-ai-giants-smaller-is-sometimes-better-ef07eb98>.

¹¹ SBE COUNCIL, SMALL BUS. AI ADOPTION SURVEY, (Oct. 2023), available at <https://sbecouncil.org/wp-content/uploads/2023/10/SBE-Small-Business-AI-Survey-Oct-2023-FINAL.pdf>.

¹² RIMIDI, available at <https://rimidi.com>.

client, Rotational built a custom domain-specific model that successfully reduced manual review of tens of thousands of news articles by 90 percent.¹³

Decision support: financial services. Common in industries from fast food to healthcare, AI decision support tools have reached virtually every part of the economy. App Association members are redefining productivity by building and servicing decision support options driven by AI. For example, Florida (and Washington)-based Devscale built Clockwork.ai, a data visualization and decision support platform for financial professionals.¹⁴ The tool integrates with commonly used bookkeeping software to provide projections and “crunch numbers” while their clients can focus on relationships and expanding their business. Clockwork is, in turn, able to save its clients over 10 hours per month and help them grow their enterprises by 50 percent.¹⁵ This is an example of a deployment that does not draw on large LMs or FMs, but still uses machine learning to generate recommendations for users.

Decision support: pizza quality. Other kinds of decision support tools have been around for longer and are developed in-house. Domino’s Pizza began training their DOM Pizza Checker in 2019, inviting customers to take pictures of their pizza in exchange for redeemable points.¹⁶ Domino’s trained DOM with 5,000 images of pizza on an NVIDIA DGX platform and deployed it in 2021. The system captured pizzas as they left the oven, assessing each for pizza type, correct toppings, topping distribution, and aesthetic appeal. The system can flag a finished pizza that is likely to generate a consumer complaint, enabling store management to quickly identify and address quality issues as they arise. Domino’s says the quality of their pizza has improved 14 to 15 percent in the stores that have deployed DOM.

Decision support: smart agriculture. App Association members are also modernizing agriculture with software, smart devices, and AI. For example, Honolulu-based Smart Yields connects farmers and agricultural researchers to increase crop yield, revenue, and productivity. In a case study conducted with the Kohala Institute, Smart Yields embedded their sensors into the water system and soil around different crop fields, allowing for maximized water usage, better understanding of erosion and soil management, and an overall reduction in agricultural waste. Their use of retrofitted monitoring collars on local pig populations and a related algorithm that helps to monitor and predict herd movements has allowed farmers in the area to better protect their crop, especially macadamia nuts, while still preserving the land and safety of these native animals critical to the overall health of the local ecosystem. Smart Yields is helping Hawaii meet their commitment to doubling food production by 2030 and other communities achieve similar goals around the world.

¹³ ROTATIONAL LABS, CASE STUDY: BLUEVOYANT, available at <https://rotational.io/case-studies/blue-voyant/>.

¹⁴ DEVSCALE, CASE STUDY, CLOCKWORK, available at <https://devscale.com/casestudy/clockwork/>.

¹⁵ CLOCKWORK, available at <https://www.clockwork.ai/>.

¹⁶ Heili Palo, “The Secret Surveillance Sauce to Domino’s Pizza’s Success,” Assignment: Competing with Data, DIGITAL INNOVATION AND TRANSFORMATION, HARVARD BUS. SCHOOL (Mar. 28, 2022), available at <https://d3.harvard.edu/platform-digit/submission/the-secret-surveillance-sauce-to-dominos-success/>.

Competition in the markets for LM and FM services. Taking stock of how small businesses use AI in practice, they tend to select the options that fit their specific purposes. As a result, they often rely on a combination of services and customizations of the raw models. Conceptions of the marketplace as dominated by a handful of firms behaving anticompetitively do not comport with their reality. While some commenters have cast the burgeoning market for LM services as locked in by large companies, the truth is that the future of the market for LM services is far from clear. Moreover, the market for AI services generally is robust, with plenty of competitors entering and competing successfully in the market.¹⁷ These commenters' premises suggest Congress and other officials should do something to discourage or stop the participation of companies over a certain size in these markets. But small businesses stand to lose the most should artificial barriers to entry, such as imposing a licensing regime for FMs, be created in such policies. Small businesses also likely derive the most benefit from the creation of vertically integrated distribution and service offerings these companies are best positioned to provide. Ex ante regulations or enforcement actions designed to require strict interoperability or open access to LM services could also serve to eliminate the aspects of these services on which LM and cloud providers currently compete vigorously for App Association members' business, including privacy and security.¹⁸

Small businesses in the app economy are skeptical of government discouraging the investment of billions of dollars to create the infrastructure on which they plan to build their problem-solving innovations. Seemingly laying the groundwork for premature enforcement activity, the FTC's 6b study on generative AI markets¹⁹ is concerning evidence of an intent to interfere with or control the extent to which small businesses are able to do business with their largest partners and clients. Small companies have invested and will continue to invest in creating LMs, but limiting the size of the companies with which they can transact for services that require significant investment is not fair to the small businesses that need those offerings to be robust. Similarly, small businesses do not want policymakers to forbid them from partnering with their most lucrative clients and partners that happen to have the most powerful distribution channels. Thus, the government should not prevent or discourage larger companies with existing physical assets or know-how from moving vertically into FM and LM services.

Consider a parallel example. As the latest model cars take on more autonomous features, the industry is undergoing major shifts. New entrants are taking advantage of these disruptions to make credible inroads, while incumbent auto manufacturers are poised to

¹⁷ See Kendrick Kai, "AI50," FORBES (Apr. 11, 2024), available at <https://www.forbes.com/lists/ai50/>.

¹⁸ See Kedhar Sankararaman, "Unlocking the Future: How Smart Investments and Sensible Governance Can Propel the LLM Industry Forward," ACT | THE APP ASSOCIATION BLOG (Jun. 24, 2024), available at <https://actonline.org/2024/06/24/unlocking-the-future-how-smart-investments-and-sensible-governance-can-propel-the-llm-industry-forward/>.

¹⁹ Fed. Trade Comm'n, press release, "FTC Launches Inquiry into Generative AI Investments and Partnerships," (Jan. 25, 2024), available at <https://www.ftc.gov/news-events/news/press-releases/2024/01/ftc-launches-inquiry-generative-ai-investments-partnerships>.

leverage their existing vertical supply chains and manufacturing bases to make autonomous cars. Imagine if policymakers decided incumbent auto manufacturers should either be barred from making autonomous vehicles or regulated differently from market entrants just because they already have a vertically integrated advantage and compete successfully in the market for non-autonomous cars. Such a decision would deprive consumers of options from some of the strongest competitors and artificially box out years of experience in areas like safety.

Similarly, companies like Amazon, Microsoft, and Google have a sprawling network of existing assets in upstream industries such as cloud computing, which already serve as part of the vertical stack for LLMs and FMs. Just like building a car requires auto manufacturing capacity and a supply chain, LMs and FMs require significant computing power, and this is one of the main inputs for LM and FM services. In turn, cloud services are the main providers of this capacity. So, government intervention to prevent cloud companies from providing cloud capacity for their own FM efforts—or even to prevent them from providing compute capacity to other FM or LM projects—just because they are large incumbents in cloud computing appears to defeat the purpose of antitrust law.

IV. Standards are Critical for AI Technology Development

As technical standards are integrated into AI products and as AI standards form, a fair and balanced standards ecosystem will drive U.S. AI-based invention in critical sectors, including green technology and precision agriculture. We appreciate Congress' focus on this issue, as several members of this Committee have introduced measures aimed at enhancing American leadership in supporting the development and adoption of critical and emerging technology (CET) standards, which are—and will be—an important support of transformational AI-driven technologies around the world. Voluntary, open, private sector-led standards development has been a decisively winning approach for American technology interests. Any legislation to support this ecosystem must balance the interests of advancing American leadership with maintaining the openness of standards development organizations and the primacy of private sector leadership.

Among the measures introduced, we support the bipartisan *Promoting United States Leadership in Standards Act* (S. 3849), led by Senators Mark Warner and Marsha Blackburn.²⁰ We believe this legislation can better position standards development organizations and standards participants for success. A strong, yet nimble, approach to technical standards development is a foundational imperative for the App Association's members as they create tomorrow's innovations. Nurturing open and global participation in standardization activities, especially when hosted in the United States, can address shared technical challenges while advancing American technology leadership. If the Committee considers this legislation, we would like the authors to consider removing

²⁰ Promoting U.S. Leadership in Standards Act (S. 3849, 118th Cong.), available at <https://www.congress.gov/bill/118th-congress/senate-bill/3849?q=%7B%22search%22%3A%22s+3849%22%7D&s=1&r=1>.

“prestandardization” and “standards coordination” from the activities supported by the funds that would be allocated for the grant program. NIST already undertakes these activities, as do private sector-led standards development organizations (SDOs). Thus, although NIST should have more resources, funds set aside for hosting meetings in the United States should not also be set aside for activities NIST is already undertaking.

With respect to the array of additional proposals and oversight issues affecting NIST and its role in standards development, we offer a couple of guiding principles:

NIST should remain a supporter, rather than arbiter, of international standards development. Any legislation must avoid unintentionally recasting NIST’s long-standing role in standards development. Legislation should not task NIST with evaluating the merit of standards developed by SDOs or auditors checking on testing, evaluation, verification, or validation.

International collaboration. Legislation should avoid creating an appearance of convening a “voting bloc” that could cause the creation of competing blocs and lead to global fragmentation of standards development.

Standard-essential patent abuse. While the United States is the world leader in technology innovation, China is expanding its attacks, including through anticompetitive standard-essential patent (SEP) licensing abuses, which undermine the functioning of the open standards system. Originating in the telecommunications sector but now seen across key U.S. economic verticals, SEP abuse continues to be enabled by a lack of support and enforcement on the U.S. government’s part, which in turn continues to prompt bad faith SEP licensor practices. In one common example of SEP abuse, certain SEP licensors have been known to commit to making SEP licenses available to any licensee on FRAND terms and then breaking those commitments by systematically seeking injunctions against willing and reasonable licensees. In another example, certain SEP licensors refuse to license their SEPs to innovators at the most appropriate point in a supply chain, instead only making their licenses available to downstream manufacturers, unilaterally deciding for entire value chains where licenses can and cannot be taken. Conduct like this demonstrably increases costs for consumers, wastes vast amounts of capital on litigation instead of innovation, and pulls the rug out from under small businesses that rely on being able to take a license in order to interoperate with CET standards.

Federal policy must combat this abuse by holding bad actor SEP licensors to their commitments to license to any willing licensee—including small businesses—on FRAND terms. NIST was previously a signatory on a federal policy statement on SEP licensing that, unfortunately, mischaracterized federal law as allowing SEP injunctions against willing licensees. Having withdrawn the statement, the Biden Administration has not issued a new one, but we believe the executive branch should adopt a new policy that accurately describes the interplay of standards, patent licensing, and competition laws, and provide certainty and clarity to the ecosystem that:

- **The FRAND Commitment Means All Can License.** A holder of a FRAND-committed SEP must license that SEP to all companies, organizations, and individuals who use or wish to use the standard on FRAND terms.
- **Prohibitive Orders on FRAND-Committed SEPs Should Only Be Allowed in Rare Circumstances.** Prohibitive orders (federal district court injunctions and U.S. International Trade Commission exclusion orders) should not be sought by SEP holders or allowed for FRAND-committed SEPs except in rare circumstances where monetary remedies are not available.
- **FRAND Royalties.** A reasonable rate for a valid, infringed, and enforceable FRAND-committed SEP should be based on the value of the actual patented invention itself, which is separate from purported value due to its inclusion in the standard, hypothetical uses downstream from the smallest saleable patent practicing unit, or other factors unrelated to invention's value.
- **FRAND-committed SEPs Should Respect Patent Territoriality.** Patents are creatures of domestic law, and national courts should respect the jurisdiction of foreign patent laws to avoid overreach with respect to SEP remedies. Absent agreement by both parties, no court should impose global licensing terms on pain of a national injunction.
- **The FRAND Commitment Prohibits Harmful Tying Practices.** While some licensees may wish to get broader licenses, a SEP holder that has made a FRAND commitment cannot require licensees to take or grant licenses to other patents not essential to the standard, invalid, unenforceable, and/or not infringed.
- **The FRAND Commitment Follows the Transfer of a SEP.** As many jurisdictions have recognized, if a FRAND-committed SEP is transferred, the FRAND commitments follow the SEP in that and all subsequent transfers.

To advance the Congress' laudable goals of solidifying American leadership and elevating small businesses' freedom to innovate, strong enforcement against well-demonstrated SEP abuses is necessary. As foreign courts diverge on whether and to what extent to respect U.S. domestic law as it applies to SEP remedies, the federal government cannot afford to relinquish its long-standing leadership position on SEP issues. Our own national interests would be best served by taking a strong stand against SEP abuse, particularly around CET standards, and we believe the Administration's National Standards Strategy for Critical and Emerging Technologies (NSSCET) implementation offers prime opportunities to establish this leadership.

V. Conclusion

Small businesses are leading the way in defining AI's beneficial uses and developing ways of managing and avoiding the risks presented. With their comparative advantage in speed and agility, the experiences and perspectives of small app companies and connected device makers provide a realistic picture of how AI is used in everyday commerce. We deeply appreciate that this Committee considers these perspectives as part of its inquiry into the risks and benefits of AI and how federal privacy law may affect them. We look forward to working with the Committee to ensure that small businesses can continue to innovate on a strong foundation of privacy protection, standards access and development, and a free market with ample opportunities.

Appendix A

Majority Members

Maria Cantwell, Washington (Chair)

Headquartered in Seattle and founded in 2008, Digital World Biology creates digital educational tools to help students learn modern biology. Their app, Molecule World, is an easy-to-use visualization of 3D molecular structures ready for classroom use upon download. They also have a variety of textbook-like materials that help students learn quickly with visual aids and assist teachers with keeping students engaged with hands-on activities throughout the chapters.

Amy Klobuchar, Minnesota

Located in the Twin Cities and founded in 2013, Vēmos is a platform solution for bars, restaurants, and other venues as a one-stop-shop for the digital tools needed to manage and grow their businesses. Operating with only nine full-time employees, Vēmos found a way to harness and present a venue's data in a humanized way, which helps venues understand who their customers are and how to market to them effectively.

Brian Schatz, Hawaii

Founded in 2015 and headquartered in Honolulu, Smart Yields is an intelligent agriculture software that connects farmers and agricultural researchers to actionable real-time data, allowing them to increase crop yield, revenue, and productivity. With fewer than 10 employees, Smart Yields is committed to helping Hawaii meet its commitment to doubling food production by 2030 and other communities achieve similar goals around the world.

Ed Markey, Massachusetts

Established at the Massachusetts Institute of Technology (MIT) in 2011, Podimetrics is a medical technology services company that develops hardware-enabled, thermal-imaging solutions to predict and prevent diabetic foot ulcers. The Podimetrics SmartMat™ monitors the temperature of diabetes patients' feet to identify temperature asymmetries that signal the development of a foot ulcer. Coupled with a monitoring service, the Podimetrics Remote Temperature Monitoring System™ uses the wireless SmartMat™ to notify patients and clinicians of temperature asymmetry and inflammation, the first signs of foot ulcers, preventing amputations and other health complications.

Gary Peters, Michigan

With their U.S. operations based near Lansing, Michigan, Payeye has developed a unique eye-based payment method that combines hundreds of biometric data points within the iris and face to verify a customer's identity. They also offer express e-payments for e-commerce via QR codes and have developed a specific marketing and sales ecosystem centered around their technology.

Tammy Baldwin, Wisconsin

Based in Onalaska, Sergeant Laboratories is a software company that builds advanced IT security and regulatory compliance products for businesses. Their flagship product, AristotleInsight, measures and quantifies risk management data and provides detailed reports to compliance and security professionals to make informed decisions and stay a step ahead of cybercriminals.

Tammy Duckworth, Illinois

Aggieland Software is an IT consulting and custom software development company located in Springfield. The team at Aggieland Software helps their clients achieve sustainable growth and efficiency through services involving blockchain, artificial intelligence, and software development.

Jon Tester, Montana

Headquartered in Bozeman, Guidefitter is an online and mobile platform that connects people with guides, nature experts, and sportspersons for safe and guided natural expeditions and sports, including hunting, fishing, hiking, and camping. The platform also allows the experts to promote their business or experience and facilitates payment for merchandise as well as the guided tour or event.

Kyrsten Sinema, Arizona

Founded in 2019, LiteraSeed is a digital health startup creating a visual way for patients to share their symptoms with their doctors. The product, called a "visual symptom report," focuses on helping patients whose first language is not English and those with lower literacy levels to communicate with their doctors and better understand their medical records.

Jacky Rosen, Nevada

Pigeonly is an online and mobile platform that connects inmates with their loved ones. Their services provide a central place to send letters, pictures, cards, and more. Through the platform, families can also call their inmate at a lower cost and stay in

touch throughout their incarceration. The company's mission is to improve communication and community for those incarcerated and to encourage families to stay in touch with their inmates by simplifying and streamlining the process.

Ben Ray Luján, New Mexico

Snowball is an all-in-one fundraising platform that connects users with more than 15,000 nonprofits nationwide. The app has two parts. The first is for donors, giving them information about the nonprofits in Snowball's network, donation opportunities, and notice of emergency relief needs. It also provides a secure place to track donations and save credit card information. The second, for nonprofits, helps to keep track of donors, grow their donor base, and communicate fundraising opportunities.

John Hickenlooper, Colorado

Founded in 2007, Alchemy Security is a boutique cybersecurity firm based in the Central Rockies of Colorado. They serve as the cybersecurity expert for their clients, helping them make informed business decisions on how and where to invest valuable resources to minimize information security risks. Through a combination of risk analysis, security information and event management (SIEM), and other market-available technologies, Alchemy Security tailors their solutions to address the unique needs of their customers, regardless of industry or sector.

Raphael Warnock, Georgia

Based in Atlanta, Georgia, Rimidi creates mobile apps and software focused on supporting clinicians in the development of remote patient monitoring and chronic care management programs. Their clinical decision support tools, which work directly within existing electronic health records (EHR), combine patient-generated health data with clinical data allowing providers to make better-informed treatment and management decisions while also improving patient-engagement throughout care.

Peter Welch, Vermont

Apexis Health Solutions is a cloud-based software that helps patients with personalized services for Medication Therapy Management and includes more than 1,000 participating pharmacies and more than one million patients. Founded in 2009, Apexis works with health plans, pharmacy networks, corporate employers, and providers to deliver improved, patient-centric health outcomes.

Minority Members

Ted Cruz, Texas (Ranking Member)

Founded in 2018 by a trained speech pathologist, For All Abilities uses data to help employers amplify their employees' strengths while supporting their weaknesses through ADA/Disability 101 training and support throughout Equal Employment Opportunity Commission violation audits. Their main mission is to increase inclusion and equity for people with disabilities and help employers embrace the different abilities of employees.

John Thune, South Dakota

Infotech Solutions, LLC, is a concierge IT service helping businesses with everything from implementing a new software system or network to maintenance, general IT issues, security, and more. The company also offers an app across platforms that helps their clients troubleshoot IT issues and connect with their IT service team remotely.

Roger Wicker, Mississippi

Alpha Victoria Studios, founded in 2016, is based in Gulfport and boasts a team of three creative engineers. This IT contracting business provides their clients with web and mobile software development, digital marketing, and search engine optimization services.

Deb Fischer, Nebraska

LyncStream, founded in 2012 in western Omaha, helps businesses of every size and industry use technology to grow and automate their business. They provide a litany of services, including database technology, web and mobile software development, and product management throughout the software lifecycle.

Jerry Moran, Kansas

Founded in 2014, Foster Care Technologies is an evidence-based support tool that helps inform placement decisions in foster care. Through their work with the University of Kansas School of Social Welfare, it was determined their product leads to better long-term placement outcomes for children in foster care, as well as reduced costs for agencies working on placement.

Dan Sullivan, Alaska

StepAway is a mobile application to help those with addiction manage their day-to-day and make better decisions about their daily habits to help prevent relapses. The app is primarily centered around those who are unable to seek addiction treatment services but are looking to make a change in their drinking habits. The app helps track daily progress while also giving users insight into their triggers and provides valuable

information on how to make different and better decisions related to their alcohol use in a safe and private space.

Marsha Blackburn, Tennessee

Based in Nashville, Acklen Avenue provides clients with fully formed and outsourced software development teams. Founded in 2011, their services are tailored to each client's projects and staffing needs, making development a quick and efficient process whether the client is looking to develop a new aspect of an existing project launch or update.

Todd Young, Indiana

Located in Fishers, Arbogold is a software company helping landscaping businesses become more efficient and profitable since 1994. Their software encompasses job scheduling, resource management, profit margin estimations, and a series of mobile apps for employees to seek help regarding estimates, work orders, and other essential information.

Ted Budd, North Carolina

Founded in 1994 and headquartered in Chapel Hill with 26 employees, IPWorks provides clients with the tools they need to build internet-enabled web and desktop applications. Software developers at most Fortune 500 companies use their flagship product, IPWorks, to build their connected applications.

Eric Schmitt, Missouri

Founded in 2012 in Joplin, Midwestern Interactive provides their clients with embedded teams of experts. The team of nearly 100 assists clients with strategic planning around software, branding, and digital content. In addition, the team at Midwestern Interactive provides their clients with additional on-the-ground support as they implement their digital strategies.

J. D. Vance, Ohio

Located in Cincinnati since their founding in 2016, Canned Spinach is a custom software development company that helps companies of all sizes make a big impact. From some of the smallest startups to some of the largest Fortune 500 companies, Canned Spinach helps businesses bring their ideas into reality by launching new products and services. They provide clients with web and mobile software development, including design and next-generation technology, such as augmented reality experiences.

Shelley Moore Capito, West Virginia

TMC Technologies is an IT services company focused on helping their clients, both federal and local, with program and project management, scalable system and software engineering, IT infrastructure design and management, and network and telecom services. TMC Technologies has focused a lot of their IT work in their own backyard, providing IT services for West Virginia companies, especially small business owners looking to bring their company into the digital age.

Cynthia Lummis, Wyoming

BlackFog is a cyberthreat prevention company that uses a unique combination of behavioral analysis and data exfiltration technology to identify, stop, and prevent future data hacks, unauthorized data collection, and more across mobile and web endpoints. Their services protect their clients and their clients' most sensitive data and privacy while also strengthening their regulatory compliance.

Appendix B

General Views of the App Association on Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence

The App Association represents small business innovators and startups in the software development and high-tech space located across the globe.²¹ As the world embraces mobile technologies, our members create the innovative products and services that drive the global digital economy by improving workplace productivity, accelerating academic achievement, and helping people lead more efficient and healthier lives. Today, that digital economy is worth more than \$1.8 trillion annually and provides over 6.1 million American jobs.²² App Association members create innovative software and hardware technology solutions and are at the forefront of incorporating artificial intelligence (AI) into their products and processes.

AI is an evolving constellation of technologies that enable computers to simulate elements of human thinking – learning and reasoning among them. An encompassing term, AI entails a range of approaches and technologies, such as machine learning (ML) and deep learning, where an algorithm based on the way neurons and synapses in the brain change due to exposure to new inputs, allowing independent or assisted decision making.

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 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.

²¹ ACT | The App Association, *About*, available at <http://actonline.org/about>.

²² ACT | The App Association, *State of the U.S. App Economy: 2023*, <https://actonline.org/wp-content/uploads/APP-Economy-Report-FINAL-1.pdf>

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. The App Association appreciates the efforts to develop a policy approach to AI that will bring its benefits to all, balanced with necessary safeguards to protect consumers.

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 a wide range of 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, efficacy, and equity. 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, efficacious, and equitable.
- 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 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. Bias

The bias inherent in all data, as well as errors, 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 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. Ethics

The success of AI depends on ethical use. A policy framework must promote many of the existing and emerging ethical norms for broader adherence by AI technologists, innovators, computer scientists, and those who use such systems. Relevant ethical considerations include:

- Applying ethics to each phase of an AI system's life, from design to development to use.
- Maintaining consistency with international conventions on human rights.
- Prioritizing inclusivity such that AI solutions benefit consumers and are developed using data from across socioeconomic, age, gender, geographic origin, and other groupings.
- Reflect that AI tools may reveal extremely sensitive and private information about a user and ensure that laws require the protection of such information.

9. 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.

10. 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.