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New America and GETTING-Plurality Research Network Comment on the White House OSTP National Priorities for Artificial Intelligence: Promoting Economic Growth and Good Jobs

New America is a new kind of think and action tank that is developing policies, platforms, products and new practices to advance equity and effect meaningful change in people's lives across technology and democracy; family economic security; people- and planet-centered politics; education from birth to workforce; and political reform and civic cohesion. New America's Open Technology Institute, Education Policy Program, and Center on Education & Labor contributed to this RFI. More information is available at: https://newamerica.org/

GETTING-Plurality is a multi-disciplinary research network at the Edmond & Lily Safra Center for Ethics at Harvard University led by Professor Danielle Allen and Professor Allison Stanger. The network pursues foundational analysis and theory, field-building, and policy development to foresee and mitigate potential harms to democracy and to strengthen the public benefit and democracy-supportive effects flowing from technology innovation. More information available at: https://gettingplurality.org/

What will the principal benefits of AI be for the people of the United States? How can the United States best capture the benefits of AI across the economy, in domains such as education, health, and transportation? How can AI be harnessed to improve consumer access to and reduce costs associated with products and services? How can AI be used to increase competition and lower barriers to entry across the economy?

Many of the benefits of AI have been greatly expounded upon by academics, scientists, entrepreneurs and leaders across civil society. Below we highlight a few cross-sectoral considerations and opportunities that would enable the US to capture the benefits of AI for economic growth and employment.

- **Workforce shortages:** Across education, health, and transportation, the US economy is experiencing workforce shortages that traditional labor-market approaches have been unable to address. We believe there is an **opportunity to prioritize the use of AI in areas where workforce**

shortages cannot be mitigated otherwise.

- In the education sector, the GAO has long tracked the U.S.' ongoing shortage of teachers—a problem that worsened during the COVID-19 pandemic. Teacher shortages are more prevalent in western states, rural and urban communities, high-poverty communities, and certain subject areas including foreign languages, physical science, and special education. These regions often experience similar workforce shortages in other sectors, for instance psychiatry and mental health providers.
- The American Trucking Association reported workforce shortages in 2021 approximating 80,000 and currently estimate that by 2030 the shortfall could reach 160,000. It is noted that there isn't a single cause for the massive shortage, and traditional labor-market incentives have failed to make significant gains – "pay and earnings have gone up significantly" and the shortage persists for employment that doesn't have educational requirements.
- **Augmenting existing jobs and worker productivity:** Productivity gains from replicating skills and increasing output are clearly outlined in industry and academic studies. One such early look at the labor market impact potential of LLMs "reveal[s] that around 80% of the U.S. workforce could have at least 10% of their work tasks affected by the introduction of LLMs, while approximately 19% of workers may see at least 50% of their tasks impacted." There is a presumption that one of the first and primary benefits to be captured from AI is in automating jobs and replacing existing labor-market skill sets. We believe there is also a great **opportunity to invest in the long-term use of AI for augmenting existing jobs and worker productivity, especially for novice and low-skilled workers.**
- AI powered technologies can automate repetitive tasks, enabling businesses and organizations to improve operational efficiency. This can lead to increased productivity and generate cost savings. But, the great value of streamlined processes in sectors like education, healthcare and transportation, is the potential to free up humans to take on soft-skills, managerial or people-facing roles for greater pay and with reduced risk to self.
- Recent studies on the productivity effects of Generative AI have shown that for ChatGPT specifically, output quality rises, inequality in output between workers' decrease and this can benefit low-ability workers. Right now, the use of these tools has emphasized the substitution of workers, but early experiments do suggest that tasks are restructured towards idea-generation, which can greatly benefit industry, and society at-large. The study also showed that worker satisfaction and self-efficacy increased, which can be critical in the age of the great-resignation and where industry shortage trends seem to be intractable.
- An augmentation focus could provide value to various skill-levels across the U.S. workforce. For low-skilled workers, the equalizing benefits of AI and productivity gains could reduce the amount of shift work required in off-hours, and minimize long-shifts. At the same time, the reduction in automated work could increase the value of human-facing and "care" jobs in currently lower-paid positions in public health, education, and transportation. Augmentation for skilled workers, like preK-12 teachers, could reduce administrative tasks, allowing them to focus on developing the mindsets, ethics and critical thinking skills that are needed for human flourishing. It would also enable teachers at all levels of the academic journey to recognize and focus on students who lack resources to navigate educational pathways successfully.

- **Leveraging AI for decision-making:** Our shared economic prosperity depends on the ability to support an educated, healthy and thriving workforce. The ability of AI to power and inform collective decision-making is critical to the U.S. economic growth. Efforts to increase the use of data in government decision-making are now reaching greater levels of maturity, but there is still great progress and investment to be made. And while it has been noted that to date many of these efforts powered by AI are based on biased training data and design, it is still **critical to invest in the use of data and AI and in the practices that would increase transparency and reduce bias in public interest use cases** and mitigate any over/under representation in training data that drives inequitable outcomes.
  - AI can extract valuable insights from large volumes of data, enabling better decision-making across various domains. This can lead to improved business strategies, enhanced customer experiences, and better protection against cyber threats.
  - In the public domain, AI could lead to improvements in the provision of government services and improving systems that have failed to function in the public interest, like the criminal justice system, education, housing, health and capital and finance systems for low-income Americans. In all of these use contexts, we should strive to decrease biased decisions and increase better-informed decisions. Achieving that goal will require a commitment to transparency, accountability, and clear standards of veracity in AI training data.
  - When incorporating principles of equity, AI can draw from expanded sets of data that go beyond the narrow slice on which decisions are currently made, and leverage a more inclusive talent base to improve decision-making and outcomes.

Recommendations:
1. Prioritize the use of AI in areas where workforce shortages cannot be mitigated otherwise.
2. Invest in the long-term use of AI for augmenting existing jobs and worker productivity, especially for novice and low-skilled workers.
3. Invest in the use of data and AI and in the practices that would increase transparency and reduce bias in public interest use cases.

How can the United States harness AI to improve the productivity and capabilities of American workers, while mitigating harmful impacts on workers?

In order to successfully deploy AI to the benefit of US economic growth and employment will require new levels of coordination across government, academic, industry and civil society, the deployment of new workforce development models and policies that help upskill and transition those sectors most impacted and increased capacity, especially in the public sector, to support the use of AI in ways that do not continue to exacerbate inequities.

- **Foster collaboration across all rungs of the economic development ladder:** In order to truly harness the benefits of AI on our economy, special attention must be paid to how Industry, the Labor-force and Government convene and collaborate to understand real-world outcomes of AI deployment and develop mitigation strategies. There needs to be strong investment in efforts to support collaboration between business networks such as the Business Roundtable, Small

Business Majority, Industry groups such as the National Association of Manufacturers, labor groups such as the AFL-CIO, and civil rights organizations such as UNIDOSUS https://unidosus.org/. **These tables can help ensure that we understand the complex and true impacts of AI on the economy, and cede recommendations and supporting regulation for private sector and industry to support workers that need to adapt to the use of AI.**

- Collaboration can also ensure that training and upskilling at-risk workers for next-gen jobs can be supported on-the-ground through policies like tax breaks for worker training accounts that are funded by the employer. Bringing sector-specific experts, employers and worker representatives around a common table, including companies large and small, would enable experimentation with the application of AI across a set of target sectors, especially as noted above those challenged by workforce shortages or where augmentation could drive productivity and economic markers like GDP. The focus of these collaborative structures should be on understanding how AI will impact the workplace, implications for skilled workers, and identification of pathways for upskilling or shifting workforce toward new and higher-value add jobs, especially low-income and low-skilled workers who will be most affected.
- A cross-sector partnership convening approach also enables better exploration of the guardrails needed by both private sector and labor groups to support AI deployment across our economy, such as adherence to core labor standards, promotion of diversity, inclusion, and equitable access to opportunities. It is duly noted in a recent report by Brookings that "issues surrounding work and worker flexibility, equity, and data governance and transparency pose substantial opportunities for policymaking," and having structures in place to address them could enable more expedient and effective responses.

- **Adopt more comprehensive workforce development programs, digital literacy education, and policies benefiting workers:** International models are emerging that would suggest that a holistic approach is critical to addressing the size of worker training and upskilling that is needed to ensure that the US improves productivity and worker capability. **We would recommend convening and funding national hubs of education and training that includes youth apprenticeship programs, community colleges, industry, labor unions and workforce development programs to connect learning needs with talents needs of industry, educate, train and transition workers, where needed, to new employment opportunities.**
  - The inclusion and successful deployment of AI from education to employment, finance to health, civic engagement to social connection— does require equitable access to digital literacy skills. The integration of AI in schools, workplace and everyday life will help more people expand their digital literacy skills, i.e. analyzing speech and search patterns and recommending online sources to improve their knowledge. Schools should include and update their digital literacy curriculums to include modules on AI literacy to help students better understand, use, and evaluate AI-driven tools. Industry should be incentivized to evaluate needs and continuously upskill their workers with updated digital literacy skills.
  - The government could incentivize through tax and other policies business investment in human capital for industry to incorporate AI across sectors in ways that increase productivity and worker contribution. US tax policy currently favors investment in capital assets over labor. Brookings published research indicates that a more optimal tax policy that treats

capital assets and labor with greater equilibrium would raise employment and the labor share and lead to industry adoption of automation in ways more optimal for society. Research from Oxford and Harvard Business Review analysis show that companies which invest in their workforce including with higher wages, benefits, and training or upskilling see stronger value creation and financial performance with increased productivity and a more engaged and enabled workforce. AI is taking over repetitive, low-skilled tasks and shifting worker value toward higher-skilled, human-facing, or ideating tasks at a time of increasing insecurity among lower-skilled workers.

- Recommendations from the Center for Security and Emerging Technology at Georgetown University, include state and federal governments providing additional financial support to create and elevate quality AI and AI-related programming. And additionally requiring incentives such as federal tax credits for community and technical colleges to partner with industry to design AI and AI-related programs where employers recognize the resulting credentials and use them to hire AI talent.
- There is an opportunity for the government to incentivize more modern business practices to enable greater worker financial security as an offset to AI's destabilizing effect on the US workforce. These practices could include tying retirement savings contribution plans and health benefits and paid family and sick leave to the worker rather than to the employer. Unemployment insurance and provision of flexible, partial benefits to workers who do not work full-time are important changes to current business practice that would shore up worker financial security and encourage worker flexibility to adapt to AI's impact on industry.

- **Capacity building in the public sector:** The U.S. could do more to acknowledge and broaden coordination with **programs aimed at increasing the talent pipeline of technologists into government.**
  - Programs like CodingItForward, which places young technologist into federal, state and local government, or TechCongress, which place mid-career technologists into Congressional offices, have proven to be successful and should be leveraged to more widely expand the number of technologists in government, which would greatly help these efforts. Diverse technologists would better set up agencies and institutions to govern AI, understand the impact and benefits on society, and address persistent issues like bias in the outcomes of AI-powered decision-making systems.
  - At the national level, federal agencies should also leverage the recent emergence of Chief Data Officers to develop capability, understanding the impact of the use of AI on its sector, facilitate data sharing and collaboration among stakeholders, as a crucial aspect of capturing the benefits of the development of AI applications. Federal agencies should also support the exploration, by public and private organizations, of mechanisms to share anonymized and aggregated data while maintaining privacy and security. Collaborative initiatives, such as public-private partnerships and data-sharing agreements, can enable the development of AI models and algorithms that deliver better outcomes across sectors.

Recommendations:

1. Invest in efforts to support collaboration between business networks and between cross-sector partners in order to ensure that we understand the complex and true impacts of AI on the economy.
2. Develop corporate tax policies to incentivize investment in workers.
3. Integrate AI into new and existing digital literacy programs in schools and workplaces.
4. Expand programs that bring technologists into government.

What specific measures – such as sector-specific policies, standards, and regulations – are needed to promote innovation, economic growth, competition, job creation, and a beneficial integration of advanced AI systems into everyday life for all Americans? Which specific entities should develop and implement these measures?

Building a robust digital infrastructure and ensuring widespread connectivity are essential for harnessing the benefits of AI. Investments in equitable broadband expansion, 5G networks, and cloud computing infrastructure support the scalability and accessibility of AI technologies – every American should have access to the technology and its benefits. This is what enables seamless data exchange, real-time processing, and deployment of AI solutions across different sectors and society.

Collaboration between government, industry, and civil society that is necessary to establish regulations that protect privacy, mitigate bias, and promote ethical practices in AI development and deployment.We recommend the following actions to support and promote innovation, more equitable economic growth, competition, job creation, and a beneficial integration of advanced AI systems into everyday life:

- **The Department of Commerce** – as the agency responsible for promoting job creation, economic growth, sustainable development and improved standards of living for all Americans should be directed to:
  - Convene a sub-committee of government, private sector and labor representatives that would develop sector-specific and cross-sector recommendations as part of the whole of government approach to integrating advanced AI systems into the US economy and society. This would elevate the US' AI response in the way it is structuring a response to Climate change with the National Climate Task Force; and
    - Commission the National Artificial Intelligence Initiative Office to provide administrative support;
    - Commission the National AI Research Resource Task Force to coordinate research support; and
    - Partner with the Select Committee on AI as a liaison on matters pertaining to the National AI Initiative and collaborate on design and implementation of domestic standards, regulations, investments,and improved trust and safety practices to prepare the present and future US workforce for integration of AI systems across all sectors of the economy

and society.
    - Integrate its approaches and learnings from this type of private sector, labor, industry, and civil society collaboration into international trade agreements in such a way as to assist other country governments' adaptation to AI and foster innovation by setting standards and connections to foundational research on impacts of AI on society;
  - Engage the Small Business Administration and specifically its Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs to support domestic small businesses to engage in federal research and R&D with potential for commercialization, stimulating AI innovation and commercialization in ways beneficial to SMEs.
- **The National Science Foundation** – as the independent federal agency charged with supporting science and engineering across the U.S., through grant-making, should be directed to:
  - Ensure that within its investments, especially those related to AI, that it prioritizes practices to design, deploy and govern technology in ways that advance the public interest. AI investments should be interdisciplinary by nature, and include the ability to assess and respond to the core ethical, legal, policy, social, economic and political implications. Opportunities to leverage existing networks like New America's Public Interest Technology University Network should be leveraged – as they center justice, dignity and autonomy for all, in particular for those most exposed to and impacted by technological harms.
  - Require and fund the Directorate for Technology, Innovation and Partnerships, or TIP, to include public and community engagement as part of all investments so that societal impact can be assessed as part of the R&D lifecycle of new technologies and the voice of communities most impacted by technology harms can be included and heard. Adherence to community engagement best practices, including working with trusted entities and ensuring that the community is reflected in the individuals doing outreach, research and development will be critical to the effectiveness of TIP.

Thank you for this opportunity to comment on this important topic. The GETTING-Plurality Research Network welcomes any further discussion and can be reached at contact@gettingplurality.org

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