



Written Statement for AI Insight Forum: Workforce

Allyson Knox, Senior Director of Education Policy

Microsoft Corporation

November 1, 2023

Introduction

Thank you for the opportunity to participate in the AI Insight Forum on Workforce. I am grateful to the leadership of Senate Majority Leader Schumer, Senators Rounds, Heinrich, and Young and the many other Members of Congress in working alongside the Administration and other stakeholders to chart a path forward for the safe, accessible, and effective integration of AI into our lives.

As Brad Smith, Vice Chair and President of Microsoft, recently wrote in [his testimony](#) before the Senate Judiciary Committee, Subcommittee on Privacy, Technology, and the Law, “Powerful new AI technologies should give all of us grounds for optimism, given their many potential benefits when they are developed and deployed responsibly. At the same time, we must not ignore their potential perils.” Microsoft is dedicated to helping to manage these risks by listening to and working with others in the tech sector, government officials, the academic community, employees and labor unions, educators and students, and civil society. To this end, our [Responsible AI Principles](#) center around equity, fairness, transparency, and inclusivity and apply to how AI is created, deployed to end users, and used.

Below, I will provide some examples of the ways in which AI is currently being used in the workplace, how it is impacting the job market, and how it is increasing accessibility for workers with disabilities and neurodiverse workers. I have also provided a suggested policy framework for AI and the workforce around investing in people, programs, and helping small businesses and some specific Federal policy recommendations to carry out this framework.

Current Applications and Trends of AI in the Workforce

AI in the Workplace

As AI technologies become increasingly integrated into our daily lives, a new baseline of necessary AI literacy is emerging, augmenting the need for traditional digital literacy. As a [recent report](#) by LinkedIn, a subsidiary of Microsoft, notes, AI literacy entails understanding the fundamentals of the technology but also encompasses recognizing the implications of privacy and algorithmic bias considerations, developing familiarity with AI tools in the workplace, and grasping the socio-economic implications of AI on society.

Microsoft’s [2023 Work Trend Index](#) report found that workers are already identifying many possible use cases for AI in increasing their productivity and efficiency at work. In a survey, Microsoft found that nearly 2 in 3 people say they struggle with having the time and energy to do their job. Some of the tasks workers said they would consider using AI for include: finding the right information (86 percent), summarizing their meetings and action items (80 percent), and planning their day (77 percent). Nearly three fourths (73 percent) of respondents suggested they would even use AI for creative tasks, like formulating ideas for a project or editing their work.

A [recent study](#) by Harvard Business School and Boston Consulting Group, *Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality*, studied how AI can be used in certain tasks to make workers more, or less efficient. The study found there are some tasks, like analytical thinking and writing proficiency, where using AI made participants significantly more efficient. Moreover, the study concluded that providing an overview of how to use AI technology before a participant was asked to use it to complete tasks yielded more positive results than if a participant was not given an overview, indicating that training on AI tools and technology is critical to maximizing their efficacy.

In March, Microsoft [announced](#) a new AI-enabled feature called [Microsoft 365 Copilot](#), which will revolutionize work as we know it today. In Word, Copilot will write, edit, summarize, and create alongside the user, while it will help to analyze and explore data in Excel. It will also help generate presentations and design slides in PowerPoint and clear an inbox in minutes—helping to prioritize and identify tasks—in Outlook. These features are designed to enable workers to spend more time on creative aspects of their work, rather than managing their [digital debt](#), “which is the notion that the inflow of data, emails, meetings, and notifications has outpaced humans’ ability to process it all.”

AI and the Job Market

In addition to enhancing the ways individuals work, AI is also poised to impact the labor market and workforce at large. Since the beginning of 2023, [LinkedIn found](#), on average, a 75 percent increase each month in members adding terms related to AI to their profile and that the share of global English-language job postings mentioning GPT or ChatGPT increased 21-fold since November 2022, when ChatGPT launched. In a survey to executives, the report also found that 44 percent of respondents plan to increase the use of AI at their organization in the next year, while only 4 percent of respondents plan to reassess roles and reduce headcount as an impact of AI in their workplace. Given this impact, we believe it is critical that more be done to ensure current and future workers have the skills necessary to take advantage of these opportunities. This will not be accomplished by any single player, but instead the private sector, government, education providers, nonprofits, and other stakeholders must work together to make these opportunities available.

For our part, LinkedIn and Microsoft are offering the first professional certificate in Generative AI in the online learning marketplace in order to ensure widespread access to the skills and knowledge necessary to seamlessly incorporate this technology into individuals’ personal and professional lives. Since June, over 220,000 people in the U.S. have engaged with the content in the professional certificate and over 7,000 U.S.-based learners have completed the entire pathway and passed the exam, which has been accessible at no charge and will continue to be so through 2025 to ensure that this knowledge is readily available and accessible to all. Additionally, LinkedIn and Microsoft have made several other commitments as part of their new AI Skills Initiative, which includes the Generative AI Skills Grant Challenge to explore how nonprofit, social enterprise, and research or academic institutions develop and implement programs to train and empower the workforce to use GenAI. Microsoft also recently hosted a series of virtual events to highlight the fundamentals of GenAI and explore how it can help people create, solve complex problems, and benefit their communities. As part of their ongoing commitment to train educators for the future, LinkedIn and Microsoft also launched a course about the potential of AI, specifically designed for educators to learn what AI is and how it works, as well as to understand how AI can be used in the classroom to improve learning outcomes, reduce educator workload, and increase learner engagement.

There are also a number of other [standalone courses available](#) through LinkedIn Learning today, including:

- How to Research and Write Using Generative AI Tools;
- What is Generative AI?;
- Generative AI for Business Leaders;
- Nano Tips for Using ChatGPT for Business;

- Machine Learning for Python: Foundations;
- Get Ready for Generative AI;
- Introduction to Prompt Engineering for Generative AI;
- Python Data Structures and Algorithms;
- Prompt Engineering: How to Talk to the AIs; and
- GPT-4: The New GPT Release and What You Need to Know.

LinkedIn has committed to ensuring that many of these courses are available at no cost to interested learners through the end of the year.

We know that teachers and trainers are at the forefront of AI aptitude, so we have created resources for them including:

- AI for Education Hub: [AI for education | Microsoft Learn](#)
- Bing Chat Enterprise for faculty: [Announcing Bing Chat Enterprise for faculty and Search Progress | Microsoft EDU](#)
- AI for Educators Course: [Empower educators to explore the potential of artificial intelligence - Training | Microsoft Learn](#)

These and other courses will be updated and produced as new information about AI becomes available. This flexibility will be critical to ensuring that skilling efforts are successful, as the technology is rapidly changing, and materials need to be updated with commensurate speed.

Accessibility

To fuel our economy, companies are often vying for talent and people with disabilities are an untapped talent pool. Globally, the unemployment rate for people with disabilities is more than double that of people without. Using AI in the labor market can help close these gaps. Microsoft is supporting the use of AI in the job market for individuals with disabilities through the following initiatives:

- [Mentra](#) addresses bias in hiring to create the world's most inclusive recruiting platform for the neurodiverse community. Mentra uses humanistic AI and community-driven design to create a matching algorithm that learns from an employer's hiring needs and neurodiverse candidates' strengths in order to create career success. Mentra's AI goes well beyond traditional job requirements by integrating a holistic understanding of the individual's personality, environmental preferences, skill levels, and ideal job.
- [Zammo.AI](#) is an industry leader and pioneer in Conversational AI, which enables easier browsing by enhancing interface options to include voice, filtering, and applying for employer job postings on websites or job boards like [LinkedIn](#). Disabled jobseekers can engage an intelligent chatbot hosted in a Microsoft Edge browser extension to provide a continuous interface across domains. The extension uses Azure OpenAI technology and allows a job seeker to continue their conversation with the chatbot throughout a job search journey across multiple unrelated job postings, job providers, or web domains.
- [Microsoft 365's Accessibility Assistant](#) is one example of an AI-enabled feature that enhances accessibility by creating better defaults to prevent issues before they occur, thus providing real-time and in-context remediation and clear, simple guidance. For workers with disabilities and neurodiverse workers, these changes will be transformative.

Microsoft's Commitment to Increasing Access to Technology

Beyond retraining current workers in how AI can and will be used in their jobs, it is imperative to ensure that the next generation of workers is learning about AI while they are still in school.

Microsoft has been a leading supporter of increasing access to computer science education and technology for students through several initiatives and partner organizations like:

- Technology Education and Learning Support ([TEALS](#)), which provides access to computer science education to over 14,000 students across eight countries, including in over 500 high schools in the U.S., by connecting technical volunteers with schools, educators, and students;
- [Code.org](#), which expands access to computer science education in K-12 schools, focusing on increasing access for underrepresented populations, and has recently launched an AI-specific [professional development program for educators](#); and
- [TeachAI](#), which provides policy recommendations for teaching with AI, builds a global framework for AI literacy that includes computer science, and fosters public engagement for global stakeholder participation.

These programs illustrate the power of public-private partnerships in increasing access to education and demonstrate the importance of making education about technology available to historically underrepresented groups. Models like these could be considered to ensure equitable access to knowledge about how AI works, and its potential benefits and challenges.

Microsoft has a long track record of working to ensure that advances in technology are accessible to all—AI will be no different. One example of this work is [Microsoft TechSpark](#). Founded in 2017, TechSpark fosters inclusive economic opportunity, job creation, and innovation in rural and remote communities and has secured more than \$125 million in community funding to help skill 55,000 people and create 3,300 jobs. Through promoting digital skills and employability, increasing access to broadband, and helping local organizations thrive, TechSpark is working to build an inclusive economic environment and make technology widely available and adopted. TechSpark may be able to serve as an example of public-private partnerships that can ensure AI is integrated into schools, communities, and lives across the nation.

Federal Policy Recommendations

While organizations such as Microsoft and LinkedIn are developing ways to ensure that current and future workers are able to integrate AI into their jobs, an effort which Microsoft believes must include having workers at the table, there is also a critical role for government to play. Microsoft suggests a public policy framework based on three pillars: (1) Investing in people by expanding access to the resources necessary to develop their AI and basic digital literacy skills, (2) Investing in workforce development programs, including through tech hubs, apprenticeships, sectoral partnerships, and technical education, and (3) Helping employers, particularly small and medium-sized businesses, by providing increased resources to train their employees.

In carrying out this framework, Microsoft supports the expansion of apprenticeships in non-traditional tech occupations and expanding the Federal Pell Grant program to support short-term programs which lead to certifications in areas related to AI and other high-demand fields. Microsoft will also support modernizing the Workforce Innovation and Opportunity Act (WIOA) and updates to the Perkins Career

and Technical Education (CTE) Program to reflect the AI moment through increased funding for individual training.

Conclusion

I hope that the information above begins to provide context and concrete examples for Congress to consider as examine AI's applications to the workforce. Thank you again for the opportunity to participate in the AI Insight Forum on Workforce. I look forward to continuing to work with Majority Leader Schumer and Senators Rounds, Heinrich, Young, and others in the Senate as we address these important issues.