Jennifer Sereno

Assistant Deputy Secretary, WI Department of Workforce Development

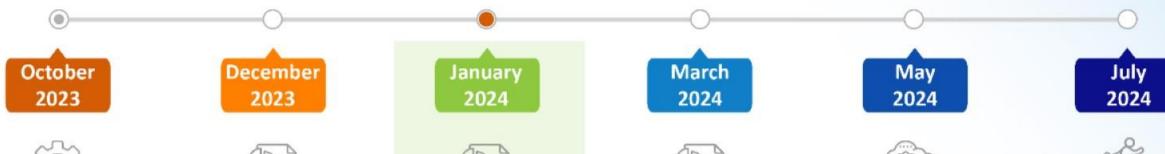
Housekeeping & Agenda

Definition: Artificial Intelligence refers to a collection of technologies that allow computers to automate tasks that have historically required human intelligence such as speech recognition, translation, computer vision, automated decision making, anomaly detection, forecasting and content generation. Generative AI tools can learn the patterns and structure of source training data, then generate new data that has similar characteristics.

Agenda

1:00 - 1:05 p.m.	Welcome and housekeeping – DWD Assistant Deputy Secretary Jenny Sereno	
	Agency Updates and Task Force Progress	
1:05 - 1:15 p.m.	DWD Secretary Amy Pechacek	
1,15 1,20 p.m.	DOA Secretary Kathy Blumenfeld	
	The Importance of a Human Centric Approach to AI and the Workforce	
1:15 - 1:30 p.m. 1:30 - 1:45 p.m.	Stephanie Wright, Chief Operating Officer, US Center for Advanced Manufacturing	
	World Perspectives on AI and the Workforce	
	• Stacey Weismiller, Initiative and Community Lead, Center for Advanced Manufacturing	
1:45 - 2:45 p.m.	and Supply Chains, USA, World Economic Forum	
	Subcommittee Reports	
	 Industries, Occupations, and Skills 	
	Equity and Economic Opportunity	
	Workforce Development and Educational Solutions	
2:45 - 2:50 p.m.	Break	
2:50 - 3:30 p.m.	Subcommittee Work	
3:30 p.m.	Next Steps, Upcoming Meetings – March 4, 2024, West Central	

Timeline





CONVENE

Identify priorities, working groups, processes, timelines, and expected outcomes/ deliverables.

FIRST REPORT

Report out from Industries, Occupations, and Skills, and Equity and Opportunity Subcommittees on priority opportunities and challenges related to workforce and Al.



SECOND REPORT

Report out from the Industries, Occupations and Skills; Equity and Opportunity; and Workforce Development and Educational Solutions Subcommittees on potential initiatives to advance workers, employers, job seekers, and a thriving economy.



TOPIC REPORT

Report out from the Workforce Development and Educational Solutions Subcommittee on proposed policy concepts, workforce and economic development initiatives, budget investments, and educational system recommendations. The proposals will incorporate the priorities and initial findings of the two other subcommittees as well as labor market data and other research findings.

INITIAL SUMMARY

Provide initial summary of findings and proposals as well as draft final report content.



ACTION PLAN

Provide final presentation and approve action plan.

33

6.9

Amy Pechacek

Secretary, Wisconsin Department of Workforce Development

WISCONSIN DWD 2023 A HISTORIC YEAR

New State Record High 16,384 Registered Apprentices enrolled in 2023

'As of November 2023

DWD 2023 Annual Report

New State Record High 8,357 Youth Apprentices enrolled during the 2022-23 school year

DWD 2023 Annual Report

DWD presents Exemplary Employer awards to

SECUDES

26 Wisconsin businesses

for Disability Employment Awareness Month

DWD 2023 Annual Report



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33

Kathy Blumenfeld

Secretary, Wisconsin Department of Administration



8

Missy Hughes

Secretary and CEO, Wisconsin Economic Development Corporation



US Center for Advanced Manufacturing

Stephanie Wright

Chief Operating Officer, US Center for Advanced Manufacturing



Workforce and AI A Human Centric Approach





Stephanie Wright, COO

US Center for Advanced Manufacturing

- 25 years in Purchasing & Supply Chain Leadership Roles including transformational change management in 60+ countries
- National Project Lead for Workforce
- Board Member
- International Certified Leadership Coach, CPCC & PQ
- Expert in Conflict Management, Negotiation and Positive Workforce Management
- DEI Advocate





- US Center for Advanced Manufacturing
- Commitment to IMPACT for the US Workforce
- A Human Centric Approach to AI & the Workforce

About the Center

The US center for Advanced Manufacturing engages key stakeholders in the American manufacturing ecosystem to help accelerate Industry 4.0 adoption and unlock productive innovation and sustainable inclusive growth.



Generating forward looking insights

The center anticipates global trends and supports U.S. manufacturers and policymakers that accelerate responsible industry transformation

Unlocking new collaborations

The center amplifies public-private collaboration to tackle key manufacturing challenges and leverage new opportunities

Building peer communities

The center creates and engages peer communities to facilitate knowledge exchange and best practice sharing

Current Projects

Key challenges the US Manufacturing and supply chain communities are currently facing:

The Center is focusing on a set of projects to address key industrial challenges:



Unlocking the full potential of technology and innovation across factories and value chains



Work force shortage and inadequate use of technology on shop floors



Global disruptions generating an unprecedented need for change



Accelerating Technology Adoption in the US



Reskilling and Upskilling the US Manufacturing Workforce



Disruptive Innovation and New Business Models in Manufacturing K-12

WORKFORCE : Five priorities areas of engagement driving opportunities across the US manufacturing landscape

Students exposed to manufacturing at a kindergarten - high school level

Alternative Pathways

Those who receive an education through non-traditional 4-year college degree programs

Traditional Pathways

Those in the workforce with 4-year college degree programs and up (such as master's and PhDs)

Under-represented

Minority groups, individuals with disabilities, veterans, re-entering citizens, women, 55+, low-income, and LGBTQ(+)

Current Culture

Current Workforce who are adapting to technological change and continuous learning

Engage



Gain insights on how organizations are attracting talent to their workforce by partaking in our year-long "How to" series



Take part in our community consultation on which priority area your organization is currently championing for attracting talent



Submit a best practice in one of our priority areas for our collection of leading examples on workforce development

"How to" Series - Next 12 months



17% structural labor market churn in US Assembly and Factory Workers in the next 5 years

6 in 10 workers in the US will require training before 2027



US manufacturing roles remain unfilled



Reskilling and Upskilling 31 programs will improve talent availability

Workers that will 6 in 10 require training before 2027

Preferred sources of funding for training from within organization

*All data from the World Economic Forum's 2023 Future of Jobs Report, US data

Human Centric Approach Workforce and AI



Mindset

- Address Worry & Fear
- Spark Curiosity
- Bring people into the solutions
- People Development Strategy
- Cross Sector Collaboration



AI Transformation

- What are you trying to achieve?
- Establish a strategy that knows the limitations
- Create transparency & metrics
- Use data to drive change in policies



- Look wide with a specific goal
- Collaborators & Influencers
- Commitment to Invest correctly
- Leverage investments to scale
- Active feedback look with all stakeholders identifying gaps

Now what?

What are we getting right:

- Workforce is part of the complex solution solving
- Financial Commitment = Workforce Loyalty

What do we need to pay more attention to:

- Identify the right strategy & skills
- Mapping the learning journey
- Creating and Communicating the necessary skills
- Leverage local academic and government

What do we need to do NOW:

- Bring the current workforce INTO the discussion
- Identify and develop collaboration to diminish barriers
- Advocate for change in Industry Hiring practices

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US Center for Advanced Manufacturing

THANK YOU



Stacey Weismiller

Initiatives & Community Lead, Center for Advanced Manufacturing & Supply Chains, World Economic Forum





Rebuilding Trust Outcomes from the Meeting

Davos-Klosters, Switzerland 15-19 January 2024



ABOUT THE ANNUAL MEETING 2024

About the Annual Meeting 2024

This year's meeting convened against the most complex geopolitical and geoeconomic backdrop in decades, making the need for purpose-driven, impactful action all the more important.

Leaders came together in Davos to rebuild trust and foster global cooperation on solutions to the most critical global priorities, including economic growth, climate and nature action, energy security, artificial intelligence and its governance, as well as jobs and skills.

66

Trust is a fundamental pillar of our social, economic and political life. It is vital for cooperation, social cohesion and effective functioning of institutions. To rebuild trust there is a fundamental need to embody trusteeship individually and collectively, which means to care for the greater good.

Klaus Schwab

Founder and Executive Chairman, World Economic Forum





Davos 207

AN NUAL MEETING 2024 OUTCOMES

AI, Frontier Technologies and their Governance

The World Economic Forum's <u>Centre for the Fourth Industrial Revolution Global Network</u> announced the opening of three new Centres in Germany, Qatar and Viet Nam – expanding the network to 19 centres.

The Forum and the governments of Ukraine, the UK and the Republic of Korea announced their mutual interest in establishing a Centre for the Fourth Industrial Revolution in their respective countries.

As of January 2024, initiatives by EDISON partners reached 784 million people through affordable and accessible digital solutions in education, financial services and healthcare.

The newly launched <u>Global Cybersecurity Outlook 2024</u> report highlights key solutions to tackle cyber inequity by providing both an in-depth analysis and recommendations to address this issue.

With 4.2 billion of the world's population going into elections in 2024, the session on 'Protecting Democracy against Bots and Plots' unlocked best practices from leaders on how to successfully defend elections against cyberthreats.

The <u>Al Governance Alliance</u> emphasized the importance of artificial intelligence (Al) access and inclusion in the ecosystem. Key areas of impact were identified, such as data access, connectivity, Al models, talent development and improving services in healthcare, finance and education.

In line with these efforts, Rwanda, through the Centre for the Fourth Industrial Revolution Rwanda in collaboration with the World Economic Forum, will host an AI Summit in Q3 of this year, further emphasizing its role in shaping the future of AI governance and accessibility.

The AI Governance Alliance called on governments to join and released a <u>briefing paper</u> <u>series</u> on tackling current AI governance challenges and shaping responsible and inclusive practices.

Annual Meeting Davos 2024

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Davos 201

AN NUAL MEETING 2024 OUTCOMES AI, Frontier Technologies and their Governance

Through the launch of new insights and multiple official and invite-only sessions, best practices were highlighted and discussed around the creation of skills-based labour markets, the <u>responsible adoption of Al in the workplace</u> and the <u>rise of digital global</u> <u>workforces</u>.

Together with the Cambridge Centre for Alternative Finance, the Forum launched the <u>Future</u> of <u>Global Fintech: Towards Resilient and Inclusive Growth</u> initiative, which aims to respond to current public and private sector needs for more robust data and empirical evidence on fintech that can inform market development and facilitate evidence-based regulation.

The growing cybersecurity talent shortage is an issue that needs community-wide efforts. Since its launch in 2019, the <u>Cybersecurity Learning Hub</u>, championed by Fortinet, the Global Cyber Alliance, Salesforce and the World Economic Forum, has trained over 1.3 million individuals.

The <u>Digital Healthcare Transformation Initiative</u>, which aims to achieve a digitally re-imagined health and healthcare ecosystem, was launched alongside a <u>landmark insight report</u>. Stakeholders across sectors and industries are committed to driving impact towards maximizing value for patients and communities by leveraging AI, health data and frontier digital tools.

The Forum and GovTech Campus Germany, with the support of the City of Berlin and the Government of Germany, launched the <u>Global Government Technology Centre Berlin</u> (GGTC Berlin) to systematically connect a national GovTech innovation ecosystem with a global network of experts and practitioners to inform and inspire GovTech agendas.

The <u>Global Lighthouse Network</u> – a community of 153 leading advanced manufacturing sites – shared that 50-60% of the more than 200 most recent use cases from the community relied on applied Al in some form, with 100% of the most recent 21 Lighthouses already having initiated generative Al pilots. To prevent an industrial digital divide from widening and to foster the sustainability and resilience of global production ecosystems, the community committed to scaling the Global Lighthouses use cases to enable a more sustainable and inclusive ecosystem.



16



People, Equity and Human Development

The <u>Reskilling Revolution</u> initiatives already in implementation are on track to reach over 600 million people as part of a wider effort to provide better education, skills and economic opportunities to 1 billion people by 2030.

The 2024 edition of the <u>Diversity</u>, <u>Equity and Inclusion Lighthouses</u> was launched to further advance a shared vision for more equitable and inclusive economies and societies

The Philippines, Viet Nam and Qatar have joined a growing <u>network of 20 Country Accelerators</u> focusing on education, skills and jobs.

The <u>Global Gender Parity Sprint 2030</u> – a global platform bringing together businesses, governments, international organizations and other stakeholders to accelerate the time to parity – was launched at the meeting.

The newly launched <u>Global Alliance for Women's Health</u>, co-chaired by the Bill & Melinda Gates Foundation and the health minister of Brazil, will help <u>close the women's health gap</u> and reshape the future of women's health. Closing the women's health gap will allow more women to live healthier, higher-quality lives and boost the global economy by \$1 trillion – every year.

The <u>Climate & Health initiative</u> solidified commitments from constituents across sectors and industries on how to address health outcomes exacerbated by climate change and drive impact in areas such as diagnosis and treatment, healthcare infrastructure, workforce and communities, outlined in the recently published <u>insight report</u>.

The <u>Regionalized Vaccine Manufacturing Collaborative</u> (RVMC), incubated at the World Economic Forum, is launched as a new global initiative dedicated to increasing vaccine equity via the establishment of sustainable regional vaccine manufacturing networks. Its secretariat will be hosted at <u>CEP</u>I, which has committed funding to the initiative to drive implementation of the <u>RVMC Framework</u> and save millions of lives globally.

The Government of India launched the Alliance for Global Good – Gender Equity and Equality, reinforcing the government's commitment to inclusive growth and building on the foundations of the G20 presidency. The Forum endorses and supports this alliance and looks forward to working with India on this critical and impactful endeavour.





20



Davos 20

MEDIA AND PUBLIC ENGAGEMENT HIGHLIGHTS



1.2B

Global audience reached through coverage in top media 1.8M

Audience reached on the Forum's public website

67%

Traffic concentrated on the meeting pages on the website

5.9K

Mentions across the most globally and regionally significant media

35M

Audience reached through own media social posts

17.1M

Views of social videos on social media

5.1M

Views of meeting streaming so far

450K

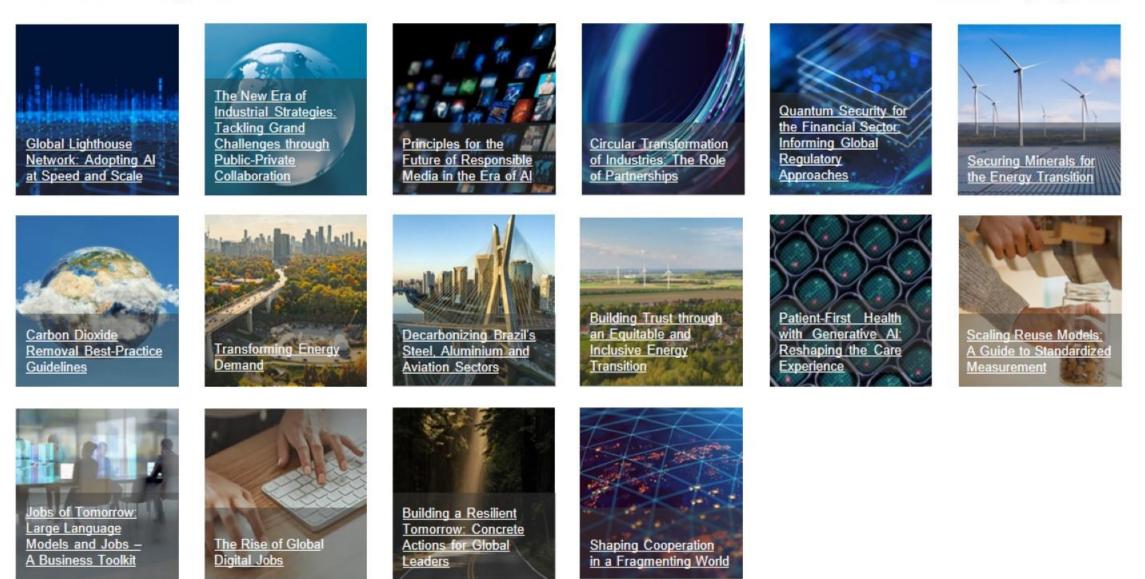
Newsletter subscribers



ABOUTTHE ANNUAL MEETING 2024

Forum Insights

White papers

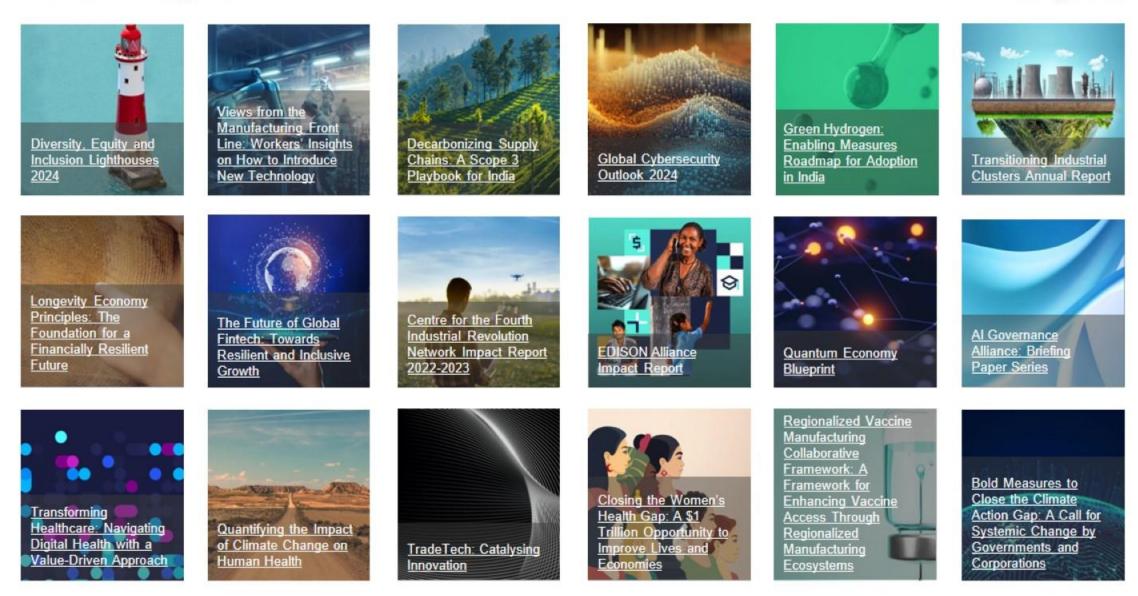




ABOUTTHE ANNUAL MEETING 2024

Forum Insights

Reports

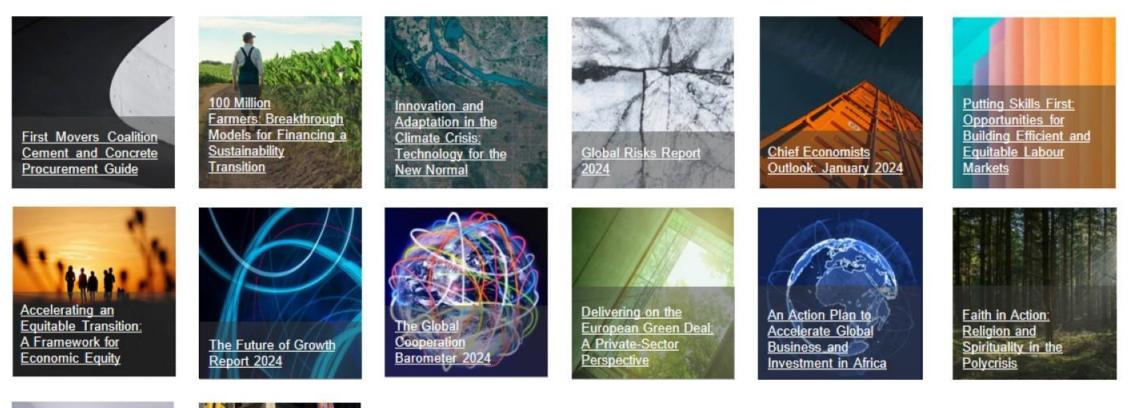




ABOUTTHE ANNUAL MEETING 2024

Forum Insights

Reports







WØRLD ECØNOMIC FØRUM

Annual Meeting Davos 2024

Industries, Occupations, and Skills Governor's Task Force on Workforce and Artificial Intelligence

Industries, Occupations & Skills

This subcommittee will delve into the industries, occupations, and functional skillsets most likely to benefit or experience disruption from AI. Both employee and employer needs will be addressed.



Question 1:

Given the data presented earlier, which Wisconsin industries, occupations, and skillsets may see the greatest opportunities with AI?



Q1: Greatest Opportunities

Industries

- 1. Healthcare
- 2. Government
- 3. Manufacturing

Q1: Greatest Opportunities

Occupations/Skills (most exposed)

- 1. Software engineering
- 2. Predictive analytics
- 3. Market research

Q1: Greatest Opportunities

- Opportunities across diverse industries and occupations. Early adopters can reap larger benefits; large companies who adopt first can help smaller businesses take advantage of them; leverage resources jointly, driving growth and building trust.
- 2. Identify processes that can be automated and anticipate changes in systems (how and when). These changes can lead to increased productivity, enhancing effectiveness and efficiency, and create opportunities.

Question 2:

Given this data, which industries, occupations and skillsets appear to be at potential risk as AI technologies expand?



Q2: Potential Risk

- 1. Risks in fundamental business building blocks: finance, communications, marketing (where we see repetition in business).
- 2. How to replicate early successes and avoid lagging behind, strive for leadership.



Q2: Potential Risk

- 3. How can we use AI to enhance productivity while retaining our employees.
- 4. Occupations impacted by the redesign of systems/processes with AI integration.



Q2: Potential Risk

- 5. Value of education diminishes/decreases
 - Entry-level jobs at risk, new grads facing limited opportunities
 - Colleges need to be agile
- 6. People gap (worker quantity challenge)
 - Attract and train more teachers

Question 3:

Considering the perspectives of workers, employers, and job seekers, how would you prioritize investments and training to sustain Wisconsin's thriving economy? Please consider the roles and responsibilities of government, education, and the private sector.



Q3: Priority Investments and Training

- 1. Introduce tax credits.
- 2. Implement incentives to draw workers into high-demand jobs, especially those influences by AI-driven transformations.



Q3: Priority Investments and Training

- Invest in the common interests of industry, workers, and society. Emphasize growth opportunities and leverage current competitive strengths.
- 4. Educate the workforce with critical thinking skills to navigate transition to AI integration.

Q3: Priority Investments and Training

5. Invest in innovation and creation of new jobs.

- As systems change and evolve, clear directions for education and training needs will emerge
- 6. Targeted communication to reach individuals unaware of available opportunities.
 - Access to comprehensive AI info shapes perspectives, distinguishing those embracing opportunities from those driven by fears



Industries, Occupations, and Skills: Education Ideas

- 1. Increase access to higher education, especially to community college for high-demand technology and business skills.
- Bolster curriculum support for the digital skills, entrepreneurship and critical thinking required to take advantage of new technologies.
- 3. Increase development of human-centered skills that will become more valuable as technical work becomes increasingly automated.



Industries, Occupations, and Skills: Public Awareness Ideas

- Increase AI literacy in the public in general and for employers in particular to empower people to constructively engage with new technologies.
- Increase awareness of the successful implementation of AI technologies within the state through the creation and circulation of white papers.



Industries, Occupations, and Skills: Public Awareness Ideas

 Invest in public projects that foster Data and AI readiness and develop AI job opportunities, such as investments in "Smart City" projects, AI-empowered public health, and digital access.



Industries, Occupations, and Skills: Business Investment Ideas

- Fund innovation hubs and industry incubators to help foster digital entrepreneurship and constructive inter-business partnerships.
- Increase incentives for businesses to productively adopt new technologies while maintaining high quality jobs.



Industries, Occupations, and Skills: Government Process Ideas

 Increase utilization and effective governance around data management and AI implementation at all levels of state government.



Questions?

Equity & Economic Opportunity

Equity & Economic Opportunity

The rise of generative AI offers the potential to advance equity and economic opportunity. This committee will explore existing programs designed to connect underutilized talent pools with in-demand skills, identify gaps, and propose solutions that lead to career advancement in these new fields.



Question 1:

To advance an economy that works for everyone, where do you see the greatest opportunities to connect underutilized talent pools with AI skills and jobs?



Q1: Key Opportunities

1. Connect to existing programs.

- Augment and invest in current programs
- Connect programs to educational systems and public organizations
- Scale programs up to increase awareness
- 2. Identify skills that are needed for good jobs.
 - Identify skills/areas/jobs that will be impacted by AI
 - Identify opportunities to apply these skills to various industries
 - Foundational education (Algebra, geometry, etc.)

Q1: Key Opportunities

- 3. Provide resources to industries to help identify skill sets that would bolster advancement within their industry.
- 4. Clearly identify expectations related to AI jobs.
 - Pay, benefits, roles, classifications, etc.
- 5. Connect displaced workers with good jobs.

Question 2:

Thinking about the worker quantity challenge and employers' need for talent, what do you envision in terms of roles and responsibilities for government, education, and the private sector in terms of connecting underutilized talent with AI skills and jobs?

Q2: Connecting Underutilized Talent

- 1. Government is responsible for removing barriers and ensuring funding toward equitable access.
- 2. Private sector should identify skills needed based on industry given AI impact.
- 3. Educational and training systems and program models need to develop curriculum to respond to skills needed.

Q2: Connecting Underutilized Talent

- Government, education, and private sector have a shared responsibility and need to work together.
- 5. Industries should work with technology developers and government to identify skills needed.
- 6. Technology developers should work with educational systems to develop curriculum.

Q2: Connecting Underutilized Talent

- 7. Improve labor market data so educational systems and government can adapt or pivot workforce development.
 - Identify immediate gaps/openings and workers with Visas looking for opportunities



Question 3:

Where do the greatest challenges lie in terms of connecting underutilized talent with AI skills and jobs? Please consider the perspectives of workers, employers, and job seekers. Also consider factors such as accessibility and existing employment barriers.

Q3: Priority Challenges

- 1. Lack of access to quality and affordable broadband.
- 2. Lack of digital literacy.
- 3. Clarity of educational pathways.
- Ensuring protections, support, and transitions are in place to support displaced workers and jobs.
- 5. Barriers to completion.
 - Complicated curriculum, childcare, transportation, etc.



Equity and Economic Opportunity: Great Ideas

- 1. Improving labor market data to inform equitable responses to Al's impact on the workforce.
- 2. Provide equitable access to AI training.
- 3. Provide equitable access to training for workers displaced or otherwise affected by AI in the workplace.
- 4. Provide equitable opportunities to invest in AI technology.

Equity and Economic Opportunity: Great Ideas

- 5. Provide equitable affordable access to broadband.
- 6. Provide voice, support, and transition assistance to workers affected by AI.
- 7. Provide training on equitable practices when implementing and using AI.



Equity and Economic Opportunity: Great Ideas that Need Specific Research

- 1. Funding, staffing, and infrastructure changes needed to implement recommendations.
- 2. Existing funding and training already available to provide digital literacy training for those who need it to access Al resources and training.



Equity and Economic Opportunity: Great Ideas that Need Specific Research

 Work with WEDC staff to identify existing Wisconsin Fast Forward and WEDC grants and determine if the existing grant structures will cover recommendations or if additional grant funds or changes in grant funding structure(s) are needed.



Questions?

Workforce Development & Educational Solutions Governor's Task Force on Workforce and Artificial Intelligence

Workforce Development & Educational Solutions

Based on the work of the previous two groups, this subcommittee will identify policy, educational, and budget solutions to prepare Wisconsin's workforce, drive economic development, and sustain thriving communities.



Workforce Development & Educational Solutions: Great Ideas Most Likely to Succeed

- Require computer science/data science courses for all college majors.
- 2. Establish micro credential AI programs in K-12 and higher education.
- 3. Invest in Al Innovation and Resource Centers.
- 4. K-12 mandates for digital literacy, cybersecurity, Al training.

Workforce Development & Educational Solutions: Great Ideas Most Likely to Succeed

- 5. Invest in Wisconsin's Technical Colleges.
- 6. Tax credits to incentivize industry Al investments.
- 7. Capacity building on AI for politicians, officials, and community leaders.
- 8. Government funding for private AI training of workforce, inclusive of marginalized communities.

Workforce Development & Educational Solutions: Great Ideas that Need Specific Research

- 1. Leverage Wisconsin's research institutions to create new AI tools.
- 2. Restructure most existing courses to incorporate relevant Al content.
- 3. Develop incentives to teach (K-12 or Higher Ed) Computer Science and relevant AI skills.

Workforce Development & Educational Solutions: Great Ideas that Need Specific Research

- Create a public information campaign to get the public to try it and get excited.
- 5. Develop courses (AI Application for all major students).
- 6. In higher education, require a 1 credit AI class for all majors.
- 7. In higher education, every major must take CS1, Al1, DS1.

Workforce Development & Educational Solutions: Ideas that Could be Great

- 1. Invest 25% of WI Fast Forward grants in Al/Industry 4.0.
- 2. In high schools, require a class in Al/cybersecurity.
- 3. Develop an Al summer camp for K-12 students.
- 4. Implement base training in middle schools.
- 5. Provide K-12 curriculum.
- 6. Micro-credential K-12.

Workforce Development & Educational Solutions: Research

- What jobs are keeping talent in Wisconsin? Top 20 jobs that high schoolers are entering throughout the state regardless of education level.
- 2. Can we identify four industries relevant to Wisconsin and create a catalog of processes within these industries and what skills are needed and can/will be impacted, replaced, or augmented by AI?

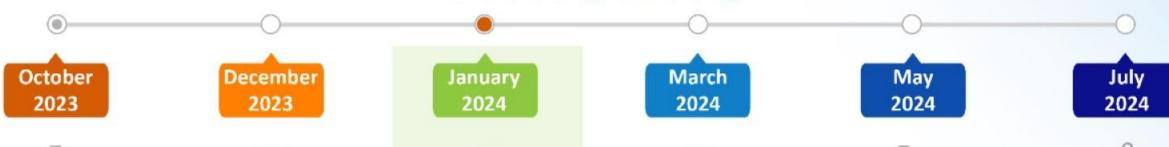
Workforce Development & Educational Solutions: Research

3. If your educational institution was charged with implementing AI curriculum, what would you need?



Questions?

Timeline





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Thank You