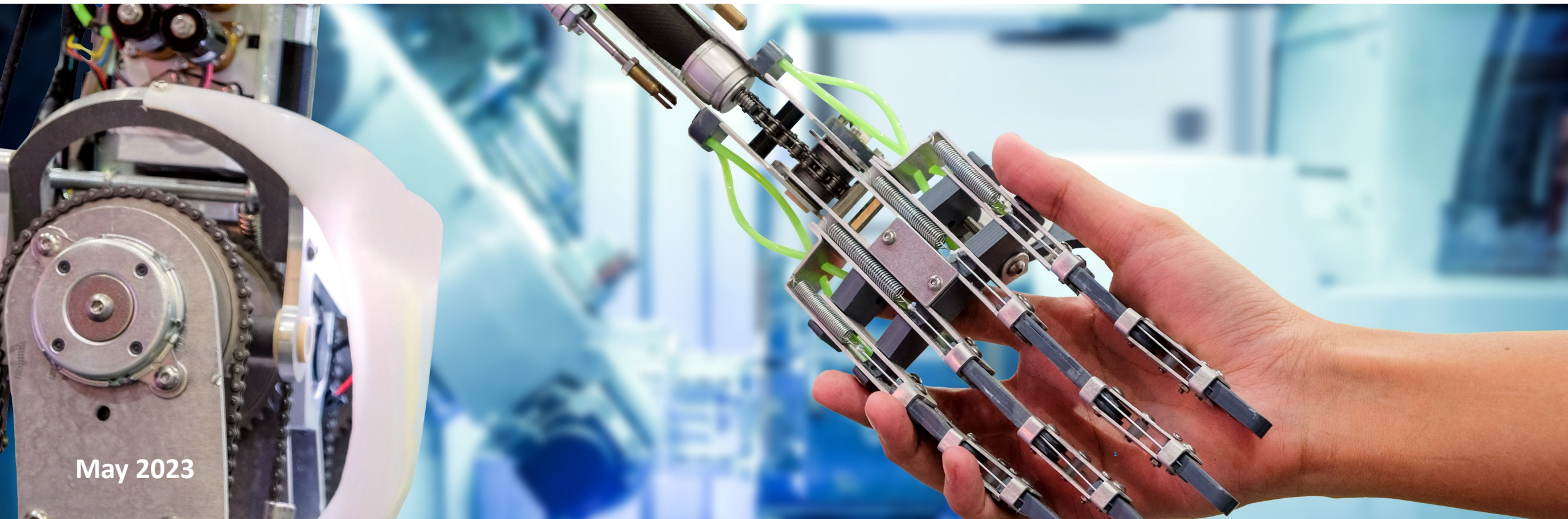


Impact of Collaboration on Re Skilling & Up Skilling the Workforce



May 2023

Key Takeaways



Incubating Partnerships

- Leaders must collaborate together to find alternative pathways to education and developing new set of skills for the workforce
- As technology will continue to shape how people are educated and work, partnerships will allow integration of technology and skill development early on in careers
- There is a shift in mindset on investing in the development and learning of the hourly and skill trade workforce which can be enhanced by cross functional support



Changing the Narrative

- Shared interest in showcasing early education programs to the community. The US Center will highlight in order to scale best practices in the community
- Shift in Skill-based education to support future requirements. Apple Developer Academy showcased how they select students based on emotional intelligence and curiosity
- Feedback from students on allowing people to decide how they learn in order to develop life long learning skills
- Creating the right branding for core jobs to ensure attraction of talent – Manufacturing is an innovative, creative space



Establish Frameworks

- Best in Class organizations focus on the way to disrupt systems and change the way people teach and learn. Practicing creative skills require encouragement of failures
- Organizations are changing their requirements for hiring to include and/or equivalent skill to remove barriers due to standard educational requirements. Skills First approach when hiring is critical
- Incorporating peer groups in the interview process allows for additional perspective and enhanced dialogue
- Establishing industry requirements for positions for staffing agencies will allow for additional workforce into the ecosystem

About the Center

The US Center for Advanced Manufacturing in partnership with the World Economic Forum engages key stakeholders in the American manufacturing ecosystem to help accelerate Industry 4.0 adoption and unlock productive innovation and sustainable inclusive growth.



Innovative

Unlock and deploy innovative products, technologies, and solutions to increase value for manufacturers and customers



Sustainable

Driven sustainable and profitable growth, achieve carbon neutrality, enable circularity, and commit to ESG reporting



Inclusive

Empower every manufacturing worker with new opportunities through partnerships with industry, government and academia

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:



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

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



Accelerating Technology Adoption in the US



Reskilling and Upskilling the US Manufacturing Workforce



Disruptive Innovation and New Business Models in Manufacturing

Accelerating Technology Adoption in the US



Context

- A select group of US manufacturers, including 9 sites from the Global Lighthouse Network, have deployed advanced manufacturing technologies at scale, generating new value within the factory and/or across value chains
- To build a more competitive US manufacturing sector, US manufacturers need to gain a deeper understanding of how they can apply these technologies and accelerate the pace of adoption



Objectives

- Sharing insights from the front runners in digital transformation including factories already identified in the Global Lighthouse Network
- Create a geographically diverse series of learning opportunities across the US to unlock new partnerships that drive technology adoption



Deliverables

- Build a multistakeholder community of representatives from private sector, public sector and academia committed to accelerate technology adoption across US manufacturing sector
- Develop a learning journey including workshops, webinars and events hosted throughout the US minimum quarterly with experts from industry, government, academia and civil society

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Reskilling and Upskilling the Workforce



Incubating Partnerships

- Collaboration of Private / Public organizations
- Facilitation of Academic and Corporate innovations
- Influence policy change to support progress

HOW:

Host a roundtable or events to foster action and change



Changing the Narrative

- Attraction to Manufacturing
- Alternative pathways to careers
- Focus on all levels
 - ✓ K-12
 - ✓ Under represented
 - ✓ Future Leaders
 - ✓ Leadership & Higher Education

HOW:

Participate in Interviews and Insights



Establish Frameworks

- Highlight innovation in approach to workforce challenges
- Scale best practices for speed of deployment to community for greater impact
- Identify Workforce Lighthouses showcasing Best In Class

HOW:

Submit Use Cases, Best Practice Repository

Workforce trends shaping the way organizations hire, develop and retain talent

55%

Roles in manufacturing remain unfilled in the US (2022)

49%

People working in job unrelated to their formal education

44%

Of workers skills that will be disrupted or changed in the next 5 years

Skills First Approach to Workforce

Top Skills 2027

1. Analytical Thinking
2. Creative Thinking
3. AI & Big Data
4. Leadership & Social Influence
5. Resilience, Flexibility & Agility

5-year Strategy

1. Upskilling in leadership
2. Focus on curiosity as a required skill
3. Lifelong learning development as key business practice

A field of white wind turbines under a clear blue sky. The turbines are arranged in rows, with some in the foreground and others receding into the distance. The sky is a uniform light blue.

20%

% of Management coming from
alternative education pathways –
fortune 500 tech company

Center Pipeline Projects

Emerging project concepts that will be developed in collaboration with the stakeholders of the center:

- Clean Energy
- Supply Chain Resiliency
- Cybersecurity





US
Center for
Advanced
Manufacturing