

# Cynthia Hutchison

CEO, US Center for Advanced Manufacturing



# Advancing US Manufacturing to De- risk Supply Chains

# 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.



## 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

# Ecosystem Collaboration

- Importance of collaboration between academia, government, and industry
- Necessity of public investment in R&D with Industry follow-on capital
- USC4AM as a hub for fostering collaboration and innovation
- Fostering new and existing partnerships such as Purdue, International Trade Administration, and the World Economic Forum
- Amplifying impact through collective efforts and knowledge sharing

# Workforce Trends



---

**Dynamic Shifts in manufacturing jobs  
and skills development**

---

**Observations and trends in workforce  
transformation**

---

**Emphasizing on higher-skilled  
positions and advanced technologies**

---

**Projection of 12 million net increase in  
tech-augmented jobs**

# Technology Adoption

- Key technology trends
  - Automation, AI, material and digitalization in advanced manufacturing
- The importance of the Chips Act and semiconductor industry
  - What is the semiconductor industry of today? Batteries? Materials?
- Rapid growth of IoT devices
  - Expected to reach over 36 billion connected devices by 2025



# Government, Academia, and Industry Cohesion

The Center is striving for a stronger collaboration amongst policy makers, academia, and industry to fuel sustainable development and innovation

Harnessing the collective strength to address challenges and seize opportunities

The Center is unique in that it can shape the future of manufacturing not only domestically but globally

# Shared Trends Impacting US Center and Purdue

## Highlighting shared goals and collaborations between US and Purdue:

- Strategic alliances for long-term stability and innovation:
- Joint research and development initiatives in emerging technologies
- Exchange programs for workforce development and upskilling

## Examples of collaborative efforts:

- Joint projects in advanced manufacturing and supply chain resilience
- Coordinated efforts in promoting Industry 4.0 adoption and digital transformation

## Importance of aligning policies and strategies:

- Establishing common standards and regulations for interoperability
- Coordinating investment strategies to support mutual growth and competitiveness

## Vision for future collaboration:

- Other key players in the global manufacturing ecosystem building upon existing partnerships to tackle shared challenges
- Expanding networks to include cross-industry best-in-class companies



# Key Takeaways

## **Emphasis on collaboration, innovation, and technology adoption:**

- Key drivers for advancing US manufacturing and de-risking supply chains

## **Invitation to explore partnerships with USC4AM:**

- Opportunity to contribute to a global network of innovation
- Foster mutually beneficial relationships for shared success

## **Announcement of Innovation Summit in August 2024:**

- Platform for bringing together industry leaders and innovators
- Opportunity to exchange ideas and drive future advancements in manufacturing

## **Call to action for continued collaboration and optimism:**

- Encouragement to approach the future with optimism and determination
- Commitment to tackling challenges and fostering innovation in manufacturing together

**US**

Center for  
Advanced  
Manufacturing