Agenda

Smart Manufacturing: Leveraging the Democratization of Innovation

June 4, 2019

Hosted by: University of California Los Angeles
            Council on Competitiveness

Location: Carnesale Commons
          Palisades Room
          UCLA
          Los Angeles, CA

Time: 9:00am – 4:00pm

Attire: Business

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8:30 a.m. Registration and Light Breakfast

9:00 a.m. Welcome and Opening Remarks

9:15 a.m. The Council & and the Goals of Today's Dialogue
The United States is facing a promising frontier with Smart Manufacturing shaped by the opportunity of digitalization, the emergence of advanced operation and information technologies and the resulting generational re-emergence of advanced and highly productive manufacturing capacity on U.S. soil. This dialogue will focus on the democratization of Smart Manufacturing (SM) as a practical necessity for the future of U.S. manufacturing—the result of demand for higher precision, higher value products and the faster, cheaper, safer and far better use of materials and energy with less environmental impact. Realization of the considerable economic, investment and market growth opportunity created by supply chain productivity, process precision and manufacturing performance with radically expanded application of data, information and modeling will be a key driver of U.S. competitiveness.

9:30 a.m. Building the Talent and Workforce for the Future
There has been, and continues to be, considerable national discussion on talent, workforce training and education for advanced manufacturing technologies. Smart Manufacturing, and the process of manufacturing digitalization, requires much more than a workforce trained in data technologies. There is a growing need—and ability—to build and tap into a new culture of data consumers and data innovators and entrepreneurs. There is also a need to capitalize on an evolving culture of public and private partnerships to address complex, grand challenge level problems. Innovation, solutions and security can be spurred by an army of people with levels of expertise and proficiency in data partnerships and innovation and who know how to tap into and put into action an infinite array of possibilities created through access and exchange of data.

Key Questions:
- Is there a need to rethink workforce training and education as part of a cultural shift to a data, innovation and partnership-driven economy?
- How can industry and academia work together to build and tap into this new cohort of data consumers but also data innovators and entrepreneurs?

10:30 a.m. Networking Break

10:45 a.m. Challenges and Best Practices
There is much discussion that U.S. manufacturing needs to spur democratization of technology, knowledge, and innovation. This is particularly acute for Smart Manufacturing, where success depends on extensively scaled data exchange and interoperability agreements and partnerships. Democratization can occur through shared infrastructure that facilitates openness and interoperability in manufacturing and reduces the complexity of data and information use. What are today's Smart Manufacturing digitalization transformation challenges and best practices for U.S. manufacturing?
Key Questions:
• What is the Smart Manufacturing scorecard today? What is working and what the roadblocks standing in the way of transformation?
• What are some examples of replicable transformation best practices in manufacturing?

11:45 p.m. Lunch

12:30 p.m. CESMII – the Smart Manufacturing Institute
CESMII CEO, John Dyck, details how his team is leading the movement to revitalize US manufacturing through Smart Manufacturing - obliterating technological and non-technology barriers in the way of adoption and value capture to place the power of change and innovation is at the fingertips of everyone who touches manufacturing.

1:00 p.m. Aligning Interests and Opportunities
Openness, "open" platforms, interoperability, and shared infrastructure are not at all straightforward. For example, vendor, practitioner, integrator, university and government "business" interests can vary dramatically. Aligning interests and opportunities across multiple stakeholders is essential to the competitiveness of the manufacturing sector in the United States.

Key Questions:
• What do industry executives, federal and state governments, and university leaders need to know today about Smart Manufacturing?
• How can policymakers and users ensure that digitalization and democratization do not outpace security in the form of cyber threats from state and unaffiliated actors?
• How are the voices of small, medium and large practitioners, providers, integrators, universities, and government aligned to address risk and opportunity?

2:00 p.m. U.S. Private and Public Investment in Enabling Smart Manufacturing
The U.S. places a high reliance on market forces relative to government policy and investment compared to other countries for both initial change and sustainability. Are U.S. manufacturing industry, the Manufacturing USA Institutes, the national labs, agency research and development programs, state programs adequately prioritizing these to keep pace with consumer and global market demand and technology, investment, and innovation around the globe? Does U.S. have the right balance to achieve Smart Manufacturing at a good pace and sustain it?

Key Questions:
• Is the U.S. adequately prioritizing policy and investment to keep pace with consumer and global market demand that Smart Manufacturing and related advanced digital technology, investment, and innovation around the globe?
• What is the balance between market forces and investment for manufacturing cyber security?
• Is the U.S. manufacturing base on track to compete in the global marketplace when it comes to digital technology?
3:00 p.m.  **Smart Manufacturing the Larger Council Agenda**
In 2019, the Council launched a new initiative, the National Commission on Innovation and Competitiveness Frontiers (the Commission) to . The Exploring the Future of Production, Sustainable Consumption and Work Working Group of the Commission aims to map out the forces driving innovation and motivations shaping the future economy. The Smart Manufacturing discussion will inform the work of the Commission, and the Production, Consumption and Work working group, as it looks to prepare the United States for the coming, and constantly evolving, shifts in how Americans create, use and otherwise contribute to society.

4:00 p.m.  **Event Concludes**