

MANUFACTURING MATTERS

Are You Prepared for the Fourth Industrial Revolution? MACNY is Here to Help.



Randy Wolken, President & CEO

Are you ready for the Fourth Industrial Revolution or Industry 4.0? This is how historians and futurist are describing what is transpiring in manufacturing today. The Fourth Industrial Revolution is characterized by the fusion of technologies that merge the physical, digital, and biological spheres. And, the speed of technological and process breakthroughs has no historical precedent. Moreover, it is disrupting every industry globally to include entire systems of production, management, and governance.

We stand on the brink of an industrial revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, it could be unlike anything humankind has ever experienced before.

Just some of the important changes we are seeing – and will see increasingly more of - include:

- **Robot-Assisted Production:** The entire basis of industry will rely on smart devices equipped with cameras, sensors, and actuators interacting with the environment and workers.
- **Self-Driving Logistics Vehicles:** With the assistance of big data, self-driving vehicles will allow for unrestricted working hours and much higher utility.
- **Production Line Simulation:** Manufacturers will optimize production and save money through simulating production lines and rapidly changing their production.
- **Predictive Maintenance:** Smart devices will allow manufacturers to predict failures – and smart machines will independently maintain themselves.
- **Machines as a Service:** Manufacturers will sell a machine as a service. Instead of selling the entire machine to the client, the machine will be set-up and maintained by the manufacturer while the client takes advantage of the services it provides.

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Serving Manufacturers For Over 100 Years

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Now is the time to ask yourself, are you ready for the Fourth Industrial Revolution? Here at MACNY we are committed to helping your company both understand it –and excel within it. What are we doing here at MACNY?

ADVOCACY SOLUTIONS

- Our Statewide advocacy efforts continued this year with our growing Alliance partnerships throughout the entire state with the Manufacturers Alliance of New York State – now 2,500 companies strong! This year our advocacy efforts were critical in securing needed Workers' Compensation Changes. We encourage you to get involved in our long-term solutions effort through the Manufacturing Roundtable which launches this June.
- Our popular Manufacturing Lobby Day in Albany and our Central Upstate Manufacturing Breakfast in Syracuse allows manufacturing executives to meet with legislators and discuss policies that are important to our members.

ENERGY SOLUTIONS

- New York State is in the midst of rethinking its electricity network and the renewable energy generation policy. In the past year, MACNY has advocated on behalf of our members in these critical areas.
- MACNY continued its popular Electricity and Natural Gas Consortia for its 12th consecutive year, helping dozens of MACNY members pursue their preferred energy risk management strategies.
- We continue our longtime relationship with NYSERDA to assist manufacturers with their energy efficiency projects. This year, our NYSERDA partnership assisted hundreds of successful projects in the areas of facility and process efficiency.

HUMAN RESOURCE SOLUTIONS

- Our Human Resources Department continues to serve our membership. Our members constantly utilize our expertise to improve their internal operations, whether it is through HR surveys, HR related compliance questions, or consulting.
- This year, the HR Department provided service and support to over 650 HR professionals.
- HR also provided 350 HR professionals with learning events throughout the year on varied issues pertaining to their HR compliance and needs.

MIDDLE SKILLS GAP SOLUTIONS

- Because of our continued success in workforce development, MACNY is seen nationally and within the state as one of the New York's leading organizations addressing the mid-skills gap and building career pathways in manufacturing.
- This April we learned that MACNY had received a second year of funding in the State Budget to expand our efforts here and to bring registered apprenticeship training in manufacturing to new regions of New York State. We want to thank our many legislative and administration supporters for advocating for this solution. Apprenticeship training involves structured on-the-job training and related instruction. Over 40 companies are actively pursuing this opportunity already. Please contact our offices for more information on how your company can be involved.

TRAINING SOLUTIONS

- This year certainly proved to be yet another successful training year for MACNY where we trained over 800 individuals. This past year MACNY brought to its members our second annual Live2Lead broadcast, a John Maxwell Company national event. We also expanded our Executive Coaching program. Customizable programs were provided to numerous members to help them meet leadership development needs from the Emerging Leader to the Executive Suite.

PEB AND THE FUTURE WORKFORCE SOLUTIONS

- Through our partnership with PEB, our workforce efforts allowed for us to work on every facet of educating and recruiting the up and coming skilled workforce. Over the year, nearly 5,000 students and teachers, and over 100 local companies participated in PEB-sponsored events hosted throughout Central New York.

- MACNY and PEB continue as the business partner with the Auburn Enlarged City School District and Cayuga Community College in the Pathways in Technology Early College High School program (P-TECH) in Mechanical & Electrical Technology. Also, the Syracuse P-TECH with the Syracuse City School District and Onondaga Community College is now in its fourth year of operation - also in Mechanical & Electrical Technology.
- Manufacturing Careers Day was held this past year at Welch Allyn. Nearly 400 people were in attendance, including 300+ students and teachers from all over the region. Fulton Companies served as a second site hosting an additional 100 students.
- The first CNY STEM Job Shadow Day was another business-education success, with over 240 students and teachers taking part in the daylong event. Fourteen businesses hosted, highlighting careers in manufacturing and technology.
- The CNY STEM Scholarship program is in its 5th year. Over 100 students applied for scholarships/internships. The scholarships this year exceeded \$100,000.
- And finally, the Manufacturing Center at Enterprise America (WCNY). PEB and MACNY are leading the effort to sponsor the Manufacturing Center. By partnering with area companies, we give middle school students a real-life experience of advanced manufacturing/technology that can lead to an increase in students pursuing careers in these sectors.

These are just a few of the ways we serve you each year.

But more than just companies need to succeed in the Fourth Industrial Revolution. We must prepare as leaders and individuals. The speed and breadth of the latest revolution will require us to develop skills and capabilities that we have never or rarely used before. Usually, we have more predictable change over a longer period of time. This time it could literally happen overnight.

As a leader, it will be vitally important to ensure you and your organization have the employee skillsets necessary to thrive in the rapidly evolving environment. According to the World Economic Forum's Future of Jobs Report, there are at least 10 skills needed by our teams. They include: cognitive flexibility, negotiation, service orientation, judgement and decision making, emotional intelligence, coordinating with others, people management, creativity, critical thinking, and complex problem solving.

Each leader will need to grow in their capacity to lead rapid and unending change. Each leader – and team member – will need to develop a level of resiliency that allows them to sustain this level of performance. The Fourth Industrial Revolution will offer remarkable opportunities – and challenges. It's time to get ready for them so we can thrive as an individual within successful organizations. Are you ready? We will help you be ready! Here's how:

COUNCILS

- MACNY has 8 very active Professional Councils, annually hosting nearly 40 tours, learning events, and networking opportunities which engage over 700 individuals in our various council-related events.

INDIVIDUAL MEMBERSHIPS

- Two years ago, MACNY launched Individual Memberships. We have nearly 200 employees of MACNY member companies taking advantage of the program.
- Individual Memberships are available to employees of any MACNY member company. This unique offering allows individuals to take full advantage of the depth and breadth of MACNY's professional development opportunities. An Individual Member has access to ALL of MACNY's Councils and events, discounts on training, and access to MACNY's comprehensive e-learning platform. In all, hundreds of training and learning events and nearly unlimited online learning options.

MACNY is here to serve you, our membership. If any of the topics described above are of interest to you or if you would like to learn more about any of the offerings mentioned, please contact Marisa Norcross at mnorcross@macny.org.