Continuing to Drive Impact
by Bob Zaruta, President/CEO, NWIRC

Driving impact for manufacturers! That is the tagline for Northwest Industrial Resource Center, and that is how the work of NWIRC and the six other IRCs across the Commonwealth are evaluated. These Centers comprise the PA MEP, the official representative of the National Institute of Standards & Technology (NIST). Manufacturing Extension Partnership (MEP) in Pennsylvania. As a refresher, the NIST MEP program is a unique public-private partnership that delivers comprehensive, proven solutions to small and mid-sized manufacturers, thus fueling their growth and advancing the overall manufacturing economy. The Centers of the PA MEP are strategically located throughout the Commonwealth based on the specific needs of each region.

The PA MEP recently published a report highlighting impact for FY2018 summarizing data received from 557 companies that benefitted from services. The data was gathered during a survey process by an independent market research firm commissioned by the U.S. Department of Commerce. The purpose of the survey is to measure the return on investment to manufacturing clients served statewide. According to data reported by the 557 companies, PA MEP affiliate services directly contributed to the following achievements:

- Creation and retention of 6,113 manufacturing jobs;
- Realization of $186.2 million in new sales and $565.3 million in retained sales;
- Investment of $182.3 million in expansion, modernization, new technologies and workforce advancement;
- Recognition of $71.3 million in cost savings.

James Shillenn, PA MEP Center Director, noted that while the collective impact is impressive, the services provided by each of the Centers is essential to improving the competitiveness of Pennsylvania’s many smaller manufacturers.

The Allegheny Conference on Community Development recently published the PA Manufacturing Scorecard 2018 Annual Report and the data underscores the successful work of the MEP program. Pennsylvania experienced a 5.0% increase in its manufacturing GDP from 2016 to 2017, outpacing the U.S. (4.3%) and ranking the 8th largest increase in the country. PA employment in manufacturing increased by 0.6%.

The data is encouraging, but there are also challenges facing the economic performance of the state’s small to mid-sized manufacturers: making ongoing continuous improvements and identifying growth opportunities. These challenges are also linked directly to keeping up with technology, also known as Industry 4.0 or the 4th Industrial Revolution. Often these manufacturers lack the in-house expertise to pursue or deploy these principles and technologies. The IRC Network is at the forefront of the Industry 4.0 movement, offering its clients a full breadth of services to understand and implement the new technologies, including autonomous robotics, additive manufacturing and 3D printing, Internet of Things, Cloud computing, cybersecurity, big data and analytics, simulation, and horizontal/vertical software integration.

Lean Together 1.0 Graduation

Last month, a new group of companies graduated from NWIRC’s Lean Together 1.0 (working group for operational excellence). This cohort started last August with the group meeting monthly for classroom sessions, facility tours, and discussions focused on principles from the book, 2 Second Lean, by Paul Akers.

One of the highlights noted by all participants are the tours at manufacturing facilities in the region and the opportunity to see first-hand others’ successes with 2 second lean.

“At my first meeting for Lean Together, I was thinking- what did I get into and this won’t work for us,” said Mike Bleil, Production Supervisor at Onex, Inc.
“But, after you learn more about 2 Second Lean, it’s awesome! It’s a way of thinking to make improvements and work together as a team.”

The recent Lean Together 1.0 graduation was held at Industrial Sales & Manufacturing (ISM) who participated in the previous cohort, as well as participates in Lean Together 2.0 and the Lean Together CEO Roundtable. Companies in Lean Together are asked to complete a self-assessment with their team, at the beginning of the program and at the end, determing a 1-5 rating based on Lean Together’s 5 Ts (Transparency, Tearing Down Barriers, Trust, Teaching, and Tracking). All of the companies had a one point or greater improvement in each area, and most importantly, have started to transform their culture and have a plan for moving forward.

The recent graduates are from companies across the region, including: Advantage Precision Plastics, Electric Materials, Great Lakes Automation Services, Jones Hardwoods, McShane Welding, Onex, Peters’ Heat Treating, Specialty Fabricating and Powder Coating, Time Machine, and Wendell August Forge.

The next cohort for Lean Together 1.0 will begin in July and run monthly through April 2020 (with December off). Contact Molly Reichard for more information on how to get started at (814) 217-6067.

Optical Filters: TDMI Provides View of New Markets and New Opportunities

Optical Filters USA designs and manufactures display enhancement products for electronic displays and enclosures including EMI shielding, heaters, cover lenses and optical bonding for displays and touch screens. Special applications include military, marine, avionics, medical and in-flight entertainment. High-grade touch screens and displays are laminated to LCDs utilizing their proprietary Viz-Bond™ wet bonding system resulting in durable, sunlight-readable displays. Products manufactured via the Viz-Bond process represent about 30% of their current business. Optical Filters currently services a wide-range of industries, including aerospace, automotive, biomedical, computers, and many others.

The company approximates that they have experienced a loss of at least 5% in defense-related contract revenues. They noted that their Department of Defense (DoD) contract market opportunities had increased over the past two years, but were projecting that opportunities would decrease in the coming years. This decrease is primarily anticipated due to a primary contractor losing funding for a project that the company currently serves as subcontractor.

Working with NWIRC and other economic development partners, it was determined that to support the continued growth of the company, it was essential to identify and evaluate potential new industrial and geographic markets for best fit of their differentiating optical products to contribute to the top and bottom line. NWIRC assisted Optical Filters USA with the development of a Technology Driven Market Intelligence research and reporting project that 1) applied divergent thinking to uncover a range of potential markets for these new technologies; 2) identified and explored viable industries; 3) conducted a thorough vetting of the most promising markets identified, including engaging industry experts and potential clients, and 4) provided key market intelligence- all with a goal of identifying 5-10 potential leads within each of up to three target markets for Optical Filters to target with business development efforts.

The market research project was completed, with assistance from RTI, in accordance with the project objectives. NWIRC conducted high-level research on the strengths and weaknesses of six markets of interest to Optical Filters. Of the six markets researched, they selected two markets for deeper research to evaluate the potential for market fit for their capabilities and services. The conducted research and analysis suggest that Optical Filters pursue both selected markets for increasing sales revenues and diversifying market reach. “The project with the NWIRC provided much needed bandwidth to help us consider new markets
and opportunities that will contribute to the future growth of Optical Filters in NW Pennsylvania,” said Nicola Dent, CEO at Optical Filters. Estimated impact is $250K in increased sales, $250K in retained sales, 34 jobs retained and $50K in workforce practices.

Cobots and Machine Vision
Continuing the focus on technology

NWIRC continues a focus on technology education for manufacturers with upcoming programs in collaboration with NEFF and other partners in the region.

Cookies and Cobots is scheduled for May 15th from 11:30am-3:00pm at the Conewango Club in Warren, PA. This workshop will showcase how Universal Robots work collaboratively and safely alongside humans, have flexible deployment, easy programming, and fast set-up. Participants will also learn about other products that can help make automation seamless.

The Machine Vision workshop will be held at the Red Fern in Kersey, PA (near St Marys) on June 19th from 11:30am-3:00pm. Participants will learn the fundamentals of machine vision and see the latest in its solutions from Cognex for improving efficiency of the production line and quality of parts. You are encouraged to bring samples of your own parts for a chance to see them live under the camera.

There is no cost for either of the programs, but registration is required and lunch will be provided. Each program features a raffle drawing of an iRobot Roomba Vacuum for manufacturers who register early and attend the program.

See details at www.nwirc.org/events.

Succession Planning for Small Manufacturers

What does it mean to leave your business successfully? It means the company is well positioned for continued stability or growth, and the outgoing owners have enough to financially exit and live the life they desire. It also means the incoming leaders fully understand the strategic direction for the company, and successors have the knowledge, skills, and abilities needed to succeed. First and foremost, no one is caught off guard! Customers, employees and suppliers all feel secure about the future.

Succession is something that many family-owned businesses think will happen naturally—or don’t want to think about at all. But planning requires careful considerations and doesn’t happen overnight. A practical and interactive workshop is planned for anyone ready to begin developing the key areas of an initial transition and succession plan.

Susan Hileman, NWIRC Strategic Business Advisor, will lead the workshop next month for small manufacturers to get started on or move forward with a succession plan.

The workshop will focus on how to evaluate options for your company and when to choose them, key components of a good succession plan, how and when to transition out of your company, the importance of estate and financial planning for an exit strategy, family dynamics and the need for outside management or other options, as well as your company’s benchmark, value, and future stability. At the end of this session, participants will have a draft plan to discuss with the rest of their family, management team, or professional advisors; as well as practical tips for continuing to develop, finalize, and implement their plan.

There is no cost for the program and is scheduled for June 18, 2019 from 1:00-4:30pm at the Franklin Industrial & Commercial Development Authority (FICDA), 191 Howard Street, Franklin PA. Hileman has been working with manufacturing business owners for over 17 years. She is a Galliard trained Family Business Advisor, as well as a John Maxwell Group Certified speaker and trainer. Register at www.nwirc.org/events.

Lean Accounting for Fall

Lean Accounting classes will return this Fall, featuring lean expert and author Jean Cunningham. Mark your calendars now for October 16 and 17. Companies registering before September 13th will save $100 on tuition.

Registration is already open at www.nwirc.org/events.
If you have questions, or would like to speak with someone from NWIRC about services, please contact your Strategic Business Advisor (SBA):

**Tom Weible**
814.590.5202
Cameron, Clearfield, Elk, Jefferson, McKean & Potter Counties

**Susan Hileman**
814.572.2077
Forest, Mercer, Venango, Clarion Counties & Titusville

**Lisa Pustelak**
814.683.1034
Crawford, Warren Counties, Corry & Edinboro

**Andrew Idzik**
814.217.6068
Erie County & Bradford

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**UPCOMING EVENTS**

**Measurement System Analysis**
May 30
Location: St Marys
As another tool for quality management, participants will learn the concept for assessing, measuring, and improving the reliability of their measurement system. You will review different sources of measurement variation and techniques to identify, isolate, and reduce measurement variation.

**AS 9100D Internal Auditor**
June 4-6
Location: Erie
For manufacturers working within the aerospace industry, this course provides your internal auditors the understanding of AS9100 requirements; and how to prepare, conduct, report, and close-out an audit in accordance with AS9100 Revision D.

**ISO 9001:2015 Internal Auditor**
June 18-20
Location: St Marys
The 3-day course provides a detailed review of the ISO 9001:2015 quality standard. Participants will learn how to conduct an audit, write the audit report, take corrective actions and more.

**Lean Basics with Simulation**
June 25
Location: St Marys
The class combines lecture and simulation to provide a firm foundation of lean manufacturing techniques. Plant Layout, One-Piece Flow, TPM, Cellular Production, TAKT Time, Pull and Kanbans, and Quick Changeover...to name just a few. Each concept will build upon your ability to eliminate manufacturing waste.

For more information or to register for training, visit www.nwirc.org