Manufacturer Collaboration is Growing!

by Bob Zaruta, President/CEO, NWIRC

There is a flurry of activity that centers on collaboration in order to strengthen manufacturing in our region. Companies are working together to increase the awareness of career opportunities for youth and dislocated workers, to address various workforce challenges, share best practices, and do business with one another. NWIRC is excited to be involved with some of these initiatives; here are just a few.

Lean Together programs created by NWIRC promote collaboration by design. These ‘working groups for operational excellence’ bring together manufacturers to focus on making small, incremental improvements at their companies based on the Paul Akers book, 2 Second Lean. Companies share their ideas and successes, as well as tour facilities to see others’ improvements first-hand. New companies are joining the cohorts all the time. Many of the participants who started in Lean Together 1.0, have now moved on to Lean Together 2.0, Lean Together Advanced, and/or the Lean Together CEO Roundtable.

Next Generation Sector Partnerships for manufacturing are starting to make some traction in our region. NWIRC serves as a convener of the partnership for eight counties of northwestern PA, now with participation of leadership from approximately 50 companies. They recently held their third in-person meeting at Acucet Precision Aerospace in Meadville. On an on-going basis, three action teams collaborate during conference calls to move forward specific strategies within the themes of 1) promoting manufacturing careers, 2) branding the region with a #Return2NWPA campaign, and 3) business to business connections for regional sourcing and sharing best practices. Their ultimate goal is not to replicate activities already successful in the region, but to connect them or create new opportunities for a region-wide effort. I recently had the privilege of facilitating the re-launch of a Next Gen Partnership for manufacturers in 6 counties of North Central, PA, convened by Workforce Solutions. They have new energy and increasing participation, so it will be exciting to see their focus for the future.

Erie Regional Manufacturing Partnership (ERMP) leads efforts to address the skills gap by 1) participating in a grant program to reimburse companies who have a registered apprenticeship program, 2) creating an Adopt-a-School program for better connection to education, and 3) designing career pathways. Most recently, ERMP received a grant to develop a Work Advance Program to attract entry-level job-seekers with a training program, employment, and opportunities for advancement. NWIRC will contribute by providing critical thinking and problem-solving training modules, along with career coaching.

The future of manufacturing in NWPA will look even brighter as this collaboration continues.

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Toyota Kata: A Lean Strategy for Keeping Up with the Pace of Change

by Brian Lagas, Technical Manager, NIST MEP

“Why are our changeovers taking so long?” If you’ve asked this question on the shop floor, more than likely you were met with blank stares by your employees. Open-ended questions like this are overwhelming, so employees try to find quick answers that don’t really address the problem. They don’t have a starting point to form an answer.

But what if you asked a question with a specific, achievable goal? “What steps can we take to reduce changeover time by 15 minutes?” You’ve then provided your employees with a measurable goal in the form of a question. Your workers may feel empowered to answer with some hands-on suggestions for incremental changes, such as reducing setup steps or combining workstations.

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This in turn could not only reduce changeover time, but significantly eliminate wait times and inventories.

This approach is often described as Kaizen, or “continuous improvement,” which serves as the backbone for lean manufacturing. Kaizen uses the Plan, Do, Check, Act (PDCA) problem-solving cycle to encourage manufacturers to use small ideas to solve big problems, such as costly, time-intensive changeovers. These methodologies are the building blocks of Toyota Kata, an innovative, lean way of thinking described in the book by Mike Rother, Toyota Kata: Managing People for Improvement, Adaptiveness and Superior Results. In essence, Toyota Kata goes beyond problem-solving to teach management, engineers, and operators a new mindset to develop their creative and scientific-thinking skills to make them more effective, lean manufacturers. This approach looks at lean manufacturing as a culture, rather than a single process.

With the world of manufacturing evolving at a breathtaking pace thanks to developments such as Artificial Intelligence (AI), labor skill gaps, and the Industrial Internet of Things (IIoT), Toyota Kata gives smaller manufacturers a lean strategy to help them grow with these developments. It empowers employees with the skills they can use to continuously improve, adapt, and generate ideas for a strategic, competitive advantage.

While smaller manufacturers may not have the level of strategic resources like the behemoth Toyota, they can apply the same methodologies of Toyota Kata, including:

• Developing new habits and allowing people to think differently about problems and goals
• A way of working, and of working together
• Using scientific thinking as an ingredient to make teams and organizations more effective and successful
• Developing a culture of continuous learning and improvement at all levels through deliberate practice

Implementation of Toyota Kata begins with the aptly-named Starter Kata. Starter Kata focuses on small protocols and processes that, when practiced early and often, help manufacturing employees learn faster and teaches them to work more collaboratively. The two main elements of Starter Kata are Improvement Kata and Coaching Kata.

The Improvement and Coaching Kata help employees 1) understand the direction or challenge; 2) grasp the current condition; 3) establish the next target condition; and 4) experiment toward the target condition. By integrating Toyota Kata as part of your manufacturing best practices, your employees can successfully overcome obstacles and develop more confidence and scientific thinking to solve problems.

Brian Lagas manages NIST MEP’s Continuous Improvement, Toyota Kata, Sustainability, and Export initiatives. This article is an abbreviated version of the original that appeared on the Manufacturing Innovation Blog at www.nist.gov/mep.

Side Note: NWIRC will offer a Introduction to Improvement Kata session in Dubois on August 13 from 9:00-11:00am. There is no charge for the session and the facilitator is NWIRC’s Tom Weible, a TWI Certified Instructor. More details at www.nwirc.org/events.

Cybersecurity: An Ounce of Prevention is Worth a Pound of Cure

by Gerry Schneggenburger, NWIRC

Does your business have the following systems engineering tactics in place?

• 2-Factor authentication to enable remote users into your operational systems
• VPN service, plus an HR policy requirement to use it for 100% of all off-site systems usage
• A Secure FTP application when transferring sensitive eDocuments to customers and suppliers
• Periodic and ongoing eMail training to help your employees spot malware and scams
• An HR policy requiring notification when an employee departs, so system User-IDs can be disabled (including cloud applications)

If you answered ‘no’ to any of these, consider upgrading your business planning over the upcoming quarters to include Cyber Incident Prevention. Why?

• 61% of small businesses have experienced a cyber-attack in the past 12 months

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• 58% of cyber victims are identified as small businesses
• 34% of all documented attacks targeted are manufacturers
• $60K is the median cost of a data breach

By partnering with various information systems engineering experts, NWIRC has learned the above tactics will greatly improve your odds of thwarting cyber threats. Following this logic will not only lead your firm to safer digital operations, but can also commence formal cyber compliance. Cyber compliance is now a requirement within the military supply chain. Others, such as medical device manufacturing, automotive, aerospace, and pharmaceuticals, will modify and adopt their own cyber compliance standards.

You may be thinking, ‘What if my business can’t afford cyber-threat prevention now – what’s the cost of remediation later?’ It’s been the experience of some NWIRC defense-related clients, that proactive upgrades cost in the range of $10k to $30k. Whereas, once compromised and your customer is informed, the cost to identify vulnerabilities and remediate can easily be in the range of $50k to $100k, not including the potential loss of sales revenue if your customer can no longer conduct business with your firm.

For more information or guidance on connecting with an expert, consider reaching out to your NWIRC Strategic Business Advisor for assistance.

Gerry Schneggenburger has 30 years of executive business management experience with an IT foundation of systems development, programming, database administration, systems network engineering, and IT lean continuous improvement skillsets.

Leadership Challenge: How You Affect Your Company’s Culture

In the world of business, ‘profitability’ is king, but the most significant contribution a good leader makes isn’t really focused on the bottom line. It’s focused on people—on relationships—on developing employees. If your company wants to become an ‘employer of choice’, especially during a time of worker shortages, you need strong leadership and a culture that encourages teamwork. Good leaders are effective because they know what it takes to cultivate that culture. They understand employees will work hard if given the right tools, guidance, and reason. They also understand you earn the respect of those around you by making a significant difference in their lives.

NWIRC is partnering with Penn-Northwest Development Corporation and Clarion University SBDC to offer Leadership Challenge programs in Sharon (Sept 10) and Clarion (Sept 24). Based on the research of Kouzes and Posner’s best seller,  

Leadership Challenge, and leadership guru John Maxwell’s newest book, Leader Shift, you will discover 5 ways to rejuvenate and re-energize your organization’s culture. Topics include:

• Leadership is the ability to influence: model the way
• Inspire a shared vision to do more and be more
• Challenge the process to grow the team
• Build a ladder that will enable others to act
• Grow transformational leaders through engagement

When you leave this session, you will understand what it takes to become a great leader to influence and inspire those around you, and have the knowledge to develop a plan for moving forward.

Presenter for the program is NWIRC Strategic Business Advisor, Susan Hileman. She has been working with manufacturing business owners for over 17 years. A John Maxwell Group Certified speaker and trainer, she will share some of the essential skills for leaders to position their company for positive growth and a thriving culture. Cost for the program is $149. Additional details and registration can be found at www.nwirc.org/events.

Panel Discussion Features Regional Manufacturers

NWIRC and Steel Valley Authority will host a program on succession planning on July 31 from 1:00-4:30 pm at FICDA in Franklin, PA. The program will feature a panel discussion with regional manufacturers who will share their stories of succession planning and offer insights to companies that are just getting started or need to move their plan forward.

Companies planned for the panel include:

• Betts Industries in Warren, PA – Large multi-generational family business
• Precision Profiles in Titusville, PA – Small company purchased by owner outside the business
• C&J Industries – Meadville, PA – Large ESOP transition from family owned business
• Onex, Inc- Erie, PA- Small company, second generation owners

More information at www.nwirc.org/events.
YOUR STRATEGIC BUSINESS ADVISORS

If you have questions, or would like to speak with someone from NWIRC about services, please contact your Strategic Business Advisor (SBA):

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UPCOMING EVENTS

Succession Planning Programs
July 23; July 31
Location(s) : DuBois; Franklin
Check out the workshop on July 23rd to begin working on key areas of an initial transition and succession plan. The program on July 31st will feature a panel of regional manufacturers talking about their transition experiences. An expert will also provide insights about Employee Stock Ownership Plans (ESOPs).

Introduction to Improvement Kata
August 13
Location: DuBois
An opportunity for manufacturers in the region to learn and experience kata first-hand. During this NO COST 2-hour workshop, you’ll learn how kata is used in teams for continuous improvement.

ISO 9001:2015 Internal Auditor
August 20-22
Location: Erie
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.

IATF 16949:2016 Internal Auditor
Sept 17-19
Location: Erie
Training of the IATF 16949 automotive standard will provide understanding of quality management principles in context with ISO 9001:2015, along with techniques of process-based auditing with hands-on activities.

Contact us to join Lean Together 1.0 starting in August!

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