

## 2015 FISCAL YEAR REPORT CARD FOR NATIONAL MEP SYSTEM



System success is evaluated by the impact MEP Centers have on their customers. This impact is determined through a third-party survey process, conducted quarterly. Following is a summary of results as reported for Fiscal Year 2015:

- **\$8 billion**      **Increased & retained sales**
- **\$1.2 billion**    **Cost savings**
- **\$3.2 million**    **Investments**
- **68,477**          **Jobs created/retained**
- **29,101**          **Manufacturers Assisted**
- **5,940**            **Manufacturers completed the survey**

AM&T is proud to be a part of the National MEP System and thanks the hundreds of companies in the Southern Tier who have allowed us to assist them to improve and sustain their performance, competitiveness and growth.

Our integrated, comprehensive approach, applied to the whole value chain, can make a difference. Call us, we can help.





Alliance for Manufacturing & Technology

## How We Help

- Business Assessments
- Strategic Planning
- Lean Enterprise
- Supervisory Training (TWI)
- Project Management
- ISO/AS Quality Systems
- Sales and Marketing
- New Opportunity Identification and Growth — Markets, Products, Services, Customers

AM&T is a not-for-profit economic development organization that receives significant financial support from the New York State Foundation for Science, Technology and Innovation (NYSTAR), and the National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP). AM&T is a NYSTAR® designated Regional Technology Development Center for the Southern Tier and is one of nearly 50 MEPs located across the country. AM&T works directly with regional companies to increase their competitiveness and profitability.

This publication is funded in whole or in part by NYSTAR. Any opinions, findings, conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of NYSTAR.



MEP • MANUFACTURING  
EXTENSION PARTNERSHIP



NEW YORK  
STATE OF  
OPPORTUNITY

Division of  
Science, Technology  
& Innovation

# Two Critical Things All Leaders Need to Do

Jan 15, 2016 Natalie Wolfson, Ph.D.

Help employees succeed in a perpetually changing world by encouraging resiliency and agility. Here's how.

A constantly changing workplace is guaranteed but there are very specific things leaders can do to help employees be prepared for this change. Learning how to treat employees as individuals is the first step.

Business owners and leaders can help their employees both to create positive change (what we call agility) and respond productively to change forced upon them (resiliency). Here are some tips to follow.

## 1. ENCOURAGE GREATER RESILIENCY AMONG EMPLOYEES

To do this, you need to:

**Be a Good Role Model.** A leader acts with resiliency him/herself, displays confidence, elicits respect and pride in his subordinates, and looks beyond his own interests. Basically, a leader models the behavior he/she wants to see.

People have what neuroscientists call "mirror neurons" – we activate the same neurocircuitry in our own brains when observing another as we would if we were the ones actually performing the behavior. Mirror neurons are critical for learning new skills by imitation. So, a great way to build employee resiliency is simply by modeling resilient behaviors yourself. Examples include remaining calm in the face of unexpected shifts in demands, setting ambitious but achievable goals for the company, and asking questions freely and openly.

**Stimulate Your People.** A leader provides intellectual and creative stimulation. He or she demonstrates effective problem-solving by challenging assumptions and seeking different perspectives. A leader also presents crises as challenges that can be overcome. In this way, you encourage thoughtful solutions to problems rather than hurried, stress-driven ones. Examples include asking questions in different ways, seeking unique perspectives, and framing crises as opportunities for development and challenges that can be overcome.

**Know Your People.** A leader considers each of his or her employees individually so they feel valued and respected according to his or her unique needs. Examples include asking employees questions about themselves, remembering unique details about each employee, and behaving with versatility across employees (i.e. changing your interpersonal approach based on the needs of the individual).

## 2. ENCOURAGE GREATER AGILITY & INNOVATION AMONG EMPLOYEES

To do this, practice the following:

**Beware of the "Negativity Bias."** Recognize that people demonstrate a negative bias toward creativity (versus practicality) when they experience uncertainty. This bias against creativity can interfere with someone's ability to recognize a creative idea. Once you recognize this bias, you can prepare for and counteract it.

**Make Innovation a Job Requirement.** Understand that innovation happens with diversity and conflict. You can encourage inno-

*(continued on page 5)*

## Some Recent AM&T Activities to Promote Innovation, Growth & Profitability of Manufacturers in the Southern Tier

- Conducted (2) one-hour Lean Thinking training sessions for DCMO BOCES, who hosted a successful mentor and career day at the SUNY Oneonta campus. Approximately 40 middle school male students attended “It’s a Guy Thing” to develop career goals and to connect with mentors.
  - Conducted a five-day “Planning and Scheduling” value stream mapping event with a Job Shop. A team of eight people create a process that when fully implemented, will improve product flow and ultimately improve on-time deliveries, and reduce wastes.
  - Completed a five-day 5S and Visual Workplace event. The team created a workplace where everything is visually clear and controlled. As a result, the workplace will produce fewer defects, less waste, fewer injuries, and fewer breakdowns. These improvements will translate into lower costs and improved quality.
  - Conducted a one-day Lean Policy Deployment session, which is a management process that aligns—both vertically and horizontally—an organization’s functions and activities with its strategic objectives. A specific plan was developed with precise goals, actions, timelines, responsibilities, and measures.
  - Conducted TWI Job Instruction workshop at a company located in Elmira, NY. Ten (10) employees were trained in employee relations to build their supervisory skills.
  - Conducted a one-day Introduction to Value Stream Mapping workshop at a company located in Elmira, NY. Ten (10) employees were trained in how to create value stream maps for a product or process family, identify the waste in the value stream, and implement plans to reduce or eliminate the waste.
  - Conducted a one-day Basic Project Management workshop at a company located in Elmira, NY. Twenty (20) employees were trained in basic project management methods.
  - Conducted an AS9100c Surveillance Assessment Readiness Review at a company located in Endicott, NY. A summary report was prepared and their Quality Management System was deemed compliant and ready for assessment.
  - Provided quality support to a company located in Ithaca, NY. Attended their annual Quality Management Review and provided feedback on their presentation and documentation.
  - Conducted an ISO 9001 Internal Audit at a company located in Groton, NY. No (0) non-conformances were noted. An opportunity for improvement was included in a summary report and their Quality Management System was deemed compliant and effective.
  - Conducted a Lean Review at a company located in Hornell, NY. Progress was assessed and they have achieved 50% reduction in lead-time for their High Voltage Transformer products.
  - Conducted an ISO 9001 Internal Audit at a company located in Stamford, NY. Only one (1) non-conformance was noted and a summary report was delivered.
- Their Quality Management System continues to be compliant and effective.
- Conducted an ISO 17025 Internal Audit at a company located in Ithaca, NY. Non-conformances were noted and a summary report was prepared.
  - Conducted ISO 17025 Witness Tests at a company located in Ithaca, NY. Six (6) laboratory test procedures were witnessed and there were no (0) non-conformances. A summary report was prepared and all witnessed tests were deemed compliant with current ASTM standards.
  - Conducted a TWI Job Method Improvement workshop at a company located in Elmira, NY. Ten (10) employees were trained in process improvement methods to build their supervisory skills.
  - Conducted an AS9100c Internal Audit at a company located in Elmira, NY. A summary report was prepared and their Quality Management System was deemed compliant and ready for registrar surveillance assessment in February 2016.
  - Completed Exemplar Global ISO 14001:2015 transition course & assessment exam. Received updated certificate.
  - Conducted a three-day Value Stream Mapping Workshop at a company located in Endicott, NY. Five (5) employees were trained on the VSM lean methods and mapped the value stream for a product family. Upon completion of the workshop, the team had a plan to achieve an estimated 18% reduction in lead-time for the product family.

# SOUND-BITES: IDEAS FOR LEADING EFFECTIVELY

- Success as a leader is built one encounter at a time. Make certain to make each one count.
- Before you start your day, prepare your attitude for success. Focus on what impact you want to have on others today and then live it.
- Leading others in periods of uncertainty requires an extra-level of care and handling. Your role is to create a safe zone. If you don't, fear stifles creativity and problem-solving.
- Just because someone gives you feedback doesn't mean it's valuable. Always consider the source and the intent.
- When assuming responsibility to lead a new team (a team that is new to you), resist the urge to tell. Instead, observe and ask. You'll have ample time to influence the team.
- What are you reading this week or month? What are you planning on reading? If you're not reading and learning, you're moving backwards at the speed of change.
- Treat the professional development of your team members like a series of video-game level up situations. New challenges, new opportunities to strive, fail, learn and ultimately succeed. Mix in ample real-time feedback and you're doing your part!
- It's Leader AND Manager. No one wants a leader who cannot manage or a manager who cannot lead. Learn to do both.

*Art Petty*

## Do's and Don'ts for a Lean Initiative Implementation

### Industry Week

The following list of do's and don'ts is aimed at keeping manufacturers focused on the right thing rather than indulging in the ultimate waste: wasting time.

#### DO'S

**1. Do** perform a root cause analysis to understand wasteful habits. This analysis requires the question "why" be asked at least five times to find the original root cause of waste in the facility.

**2. Do** create a process map to clarify steps that occur with team members from cross-functional departments. Having this visual recreation of the steps can eliminate wasted time caused by misunderstanding a verbal explanation.

**3. Do** develop a value stream map to differentiate the value added steps of a process from the non-value added steps, sum the time for each individual step and determine how much time is given to a process.

#### DON'TS

**1. Don't** move forward with a lean strategy without first ensuring the processes being evaluated and optimized are consistent and predictable. Standardized tasks and processes are the foundation for continuous improvement and employee empowerment.

**2. Don't** optimize a bad process. Ensure current and future processes are accounted for when implementing lean initiatives.

**3. Don't** react negatively to individuals for statements or ideas brought forth about lean processes. As long as ideas are presented in a respectful manner, they should be documented and considered.

### TOP KEYS TO LEAN

Here are a baker's dozen keys to successful lean implementations:

1. Base your management decisions on a long-term philosophy, even at the expense of short-term financial goals.
2. Create a continuous process flow to bring problems to the surface.
3. Use pull systems to avoid over-production.
4. Level out the workload (work like the tortoise, not the hare).
5. Build a culture of stopping to fix problems to get quality right the first time.
6. Standardized tasks and processes are the foundation for continuous improvement and employee empowerment.
7. Use visual controls so no problems are hidden.
8. Use only reliable, thoroughly tested technology that serves your people and processes.
9. Develop exceptional people and teams who follow your company's philosophy.
10. Respect your extended network of partners and suppliers by challenging them and helping them improve.
11. Go and see for yourself to thoroughly understand the situation.
12. Make decisions slowly by consensus, thoroughly considering all options; implement rapidly.
13. Become a learning organization through relentless reflection and continuous improvement.

# 5 Moves to Make Before Growth Returns

Jan 19, 2016 John Mills

The cyclical nature of the manufacturing business leaves no alternative, which makes how you address down markets all the more crucial.

Last year at this time, the North American manufacturing industry looked much different. Growth was still found in most factories then, leading to justifiable optimism. Not this year. Instead, we enter 2016 with a sense of foreboding. November marked the first decline in U.S. manufacturing activity in three years. Canadian firms have been hit even harder.

And yet it won't stay this way forever. If history proves anything it's that business cycles come and go, which here means that growth will return. Here are five things to do before it does:

**1. Assess staffing.** Downturns can be restorative if you use the time to review your team and find the weak spots. You need to be honest about this, because there will be some who aren't performing at the level you expect or need. Design a fair transition package for those you need to let go and don't be needlessly brutal. Hire a placement service to help those who need it and provide recommendations to those who ask for one. Then, spend time with the team members who remain. Remind them why you value their work and explain what opportunities you hope to provide over the long term.

**2. Assess incentives.** Your factory wasn't always suffering like this. And even in bad times some processes still work. Why? What can you do to replicate them? Take the time to diagnose your wins and then reverse-engineer incentives that encourage behavior that produces results. They don't have to cost much but they do have to be meaningful and directly tied to results.

**3. Prioritize your factory's workload.** Once you've audited both your employees and your work processes, it's time to focus effort. Start by making a list of your factory's highest priority projects. Next, arrange projects by value. (Sometimes the work that's due quickly isn't the most valuable.) Are there ways to combine effort and gain efficiency? Reorganize teams as needed and be aware that you may have to repeat this process as new customers come in and workloads shift.

**4. Cut everything extraneous.** While focus can help you to capture the highest-value opportunities, your floor may still be saddled with processes or equipment that get in the way of maximum productivity. Use downtime to cull everything that doesn't work or which creates unnecessary work. Whether that means selling or removing old equipment or reassigning workers whose skills are better deployed elsewhere, act quickly. A streamlined factory is always more

likely to cash in on new opportunities as they arise.

**5. Invest in new equipment.** Manufacturing is a cyclical business. If you've planned well, you may have the option to draw on reserves to order advanced equipment. And if you haven't? Now is as good a time as any to make a list of software, tools and related equipment that could improve the productivity of your floor. Task your finance team with creating a distinct fund that will receive a small portion of profits as growth returns. Set rules that prevent drawing on this cash for ongoing operational needs. When the next downturn comes, you'll have excess cash for making investments at recessionary rates.

No factory manager likes preparing for the worst. The cyclical nature of the manufacturing business leaves no alternative, which makes how you address down markets all the more crucial. Assess your staffing and incentives. Prioritize workloads and cut extraneous processes as you tune for maximum efficiency. And finally, always keep improving. Investments in new equipment and people are best made when no one else is buying.

*John Mills is executive vice president of Business Development at Rideau Recognition*

*(continued from page 2)*

vation by giving employees time to work on their own ideas and projects. You can also be a better leader in this area by hiring people who disagree with you, drawing attention to differences in opinion and encouraging active debates.

**Give Employees Freedom.** Employees of the future need autonomy over

the means, not necessarily the ends. In other words, they need some freedom to determine how they approach tasks -- the process, not the end goal. Managers tend to mismanage freedom by changing goals frequently or failing to define them clearly.

Whatever the future holds, one thing is certain, and that is a constantly changing workplace. By encourag-

ing a resilient and agile workplace, you are creating an environment that boosts individual productivity and organizational performance. Happy employees are productive employees, and great leadership is the only way to get there.



## Benefits of Becoming an AM&T Associate

- Four free hours of consulting services.
- Your company's profile will be featured in the "Associates' Corner" of our monthly newsletter, which is distributed throughout eight counties: Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tompkins, and Tioga. Also, the newsletter is featured on our website giving your company worldwide exposure.
- Discounted fees at AM&T sponsored seminars & workshops.
- A free Performance Benchmark and Transformation Planner (\$2,500 value).
- A link to your company's website from ours.
- Assistance with Technology Transfer, Funding Sources, Venture Capital Investment, Networking, Research & Development Programs, etc.
- Highlighted in the "Made in the Southern Tier" directory of manufacturers.

Call Jim Cunningham at 607-725-1225 to ask about becoming an associate.

More information at [www.amt-mep.org](http://www.amt-mep.org)

## NYSP21's Green Technology Accelerator Center

The Green Technology Accelerator Center (GTAC) program is administered by the New York State Pollution Prevention Institute (NYSP21), a partnership between the New York State Department of Environmental Conservation (NYSDEC), Rochester Institute of Technology and the university's Golisano Institute for Sustainability, Rensselaer Polytechnic Institute, the State University of New York at Buffalo and Clarkson University, with a statewide reach.

GTAC's mission is to support state companies to help accelerate the commercialization of new, environmentally friendly products or processes, resulting in increased economic growth and job creation. This is accomplished by leveraging highly specialized technical laboratory facilities and engineering expertise at NYSP21's four state university partners. Funded by the state DEC, the GTAC program provides significant support for qualified state companies to take advantage of the technical resources available through the NYSP21's four university partners.

NYSP21 and its GTAC program also work closely with the state's Regional Technology Development Centers (including AM&T) and the Business Incubator Association of New York State, Inc. to identify companies that can best utilize GTAC resources statewide. An acceptable program application, business plan and working prototype are requirements for acceptance into the program. The GTAC team subsequently provides a detailed, confidential engineering report and documented case study to all participating companies upon project completion. This report can be leveraged to promote the product's performance benefits to a company's target market or investment community.

Applications are accepted on a rolling basis. Please contact Dan Smith, GTAC program manager, to learn about program resources.

[Daniel.Smith@rit.edu](mailto:Daniel.Smith@rit.edu)

Website Links:

[www.NYSP21.rit.edu](http://www.NYSP21.rit.edu)

<http://www.rit.edu/affiliate/nysp21/green-technology-accelerator-center-gtac>

## U.S. Has Millions of Unfilled Jobs

(Strategy + Business—David Gross: 1-13-16)

In early January, the Bureau of Labor Statistics (BLS) reported what economists regard as the most important monthly figure: the payroll jobs report. The U.S. economy added 292,000 jobs in December—an unambiguously excellent performance. The following week, the BLS released another monthly indicator, one that is less widely followed but perhaps just as important: job openings. Why the country doesn't pay more attention to this figure is a question that always causes me to scratch my head. On the second Tuesday of every month, the BLS releases the Job Openings and Labor Turnover Survey (JOLTS). It's a measure of dynamism and confidence; people quitting jobs at a higher rate is a good

sign of confidence, and the number of openings provides a window into the mind-set of corporations. The news is superficially excellent. At the end of November 2015, there were 5.43 million jobs open in the U.S. That figure is up 11 %, or 545,000, from November 2014. It's an impressive gain of 3.29 million, or 152 %, from the low of July 2009, the month the recession ended... All things being equal, we should expect the number of job openings to fall over time—or to at least hold steady. But the data suggests that the labor market—it's a market, after all, where people are constantly bargaining for the right price—seems to have become less efficient since 2009.

## Associates' Corner



Hardinge is a global designer, manufacturer and distributor of machine tools, specializing in SUPER PRECISION(TM) and precision CNC lathes, high performance Machining Centers, high-end cylindrical and jig Grinding Machines, and technologically advanced Workholding & Rotary Products.

Hardinge's products are distributed to most of the industrialized markets

around the world with approximately 71% of the 2014 sales outside of North America. Hardinge has a very diverse international customer base and serves a wide variety of end-user markets. This customer base includes metalworking manufacturers which make parts for a variety of industries, as well as a wide range of end users in the aerospace, agricultural, transportation, basic consumer goods,

communications and electronics, construction, defense, energy, pharmaceutical and medical equipment, and recreation industries, among others.

Hardinge has manufacturing operations in the United States, Switzerland, Taiwan, and China.

Hardinge utilizes the Lean Principles in Manufacturing, Six Sigma and Total Quality Management for continuous improvement activities throughout its operations. Hardinge is ISO 9001 certified, a former Baldrige finalist and one of the Top 50 Companies in America.

For more information, visit: [www.hardinge.com](http://www.hardinge.com)

## Around the Southern Tier

Feb 10	AM&T ISO 2015 Briefing - Kathy Peacock- AM&T- 607-774-0022 x308 to register
Feb 11	Business After Business - Chemung County Chamber- 607-734-5137
Feb 11	SBC Network Lunch- The Greater Binghamton Chamber- 607-772-8860
Feb 17	SBIR Event- Incubator Works - Corning- Jim Cunningham- 607-725-1225
Feb 17	After Hours Mixer- The Watkins Glen Area Chamber- 607-535-4300
Feb 18	Economic Forecast Breakfast - Chenango County Chamber- 607-734-5137
Feb 24	NYS CFA Readiness Workshop - Tioga County Chamber- 607-687-2020
Feb 25	Public Relations Workshop - Tioga County Chamber- 607-687-2020
Mar 9	Business After Hours - The Tompkins County Chamber- 607-273-7080
Mar 15	Government Affairs: Current Issues - The Corning Area Chamber - 607-936-4686
Mar 16	After Hours Mixer- The Watkins Glen Area Chamber- 607-535-4300
Mar 17	Speed Networking For a Cause Followed by After Hours Networking - Greater Binghamton Chamber- 607-772-8860
Mar 24	Bright Ideas by Mortinec Business After Business - Chemung County Chamber- 607-734-5137
Mar 25	Cornell Center For Materials Research (CCMR)- 2016 Symposium- Cornell University
<b>Visit <a href="http://amt-mep.org/index.php/news-and-events/training-and-events/">http://amt-mep.org/index.php/news-and-events/training-and-events/</a> for additional events</b>	

Please add [mailbot@amt-mep.org](mailto:mailbot@amt-mep.org) to your address book or safe list to receive AM&T e-News. To subscribe to electronic or paper versions of our newsletter or to update your mailing address visit: [www.amt-mep.org](http://www.amt-mep.org) then select News and Events from the menu.

Return Service Requested

## AM&T DIRECTORY

www.amt-mep.org

Tel: 607-774-0022

Fax: 607-774-0026

### Jim Cunningham x311

Business Developer /  
Principal Consultant  
jcunningham@amt-mep.org  
mobile: 607-725-1225

### Ed Gaetano x304

Executive Director  
egaetano@amt-mep.org  
mobile: 607-760-3864

### Lloyd Johnson x312

Principal Consultant  
ljohnson@amt-mep.org  
mobile: 607-227-6229

### Bob Mann x305

Principal Consultant  
rmann@amt-mep.org  
mobile: 607-725-8226

### Carol Miller x316

Principal Consultant  
cmiller@amt-mep.org  
mobile: 607-237-8031

### Kathy M. Peacock x308

Finance Administrator /  
Notary Public  
kpeacock@amt-mep.org

## HELPING MANUFACTURERS PLAN, PERFORM, PROFIT & GROW

We are a team of experienced, skilled consultants and trainers dedicated to helping manufacturers in the Southern Tier of NY plan, perform, profit & grow. Our goal is to have manufacturers remain, grow and prosper in the Southern Tier.

AM&T uses a comprehensive, overall business approach to create significant and long-lasting business improvements. Our experience is that individual improvement methodologies will provide some measurable benefits on their own, but it is the combination of them across the whole value chain that will lead to dramatic gains.

### WE HELP BUSINESS LEADERS:

- Assess their current state
- Articulate and define their desired future state
- Train their workforce in improvement methodologies
- Implement process improvements across the whole value chain
- Identify new opportunities
- Achieve and sustain growth and breakaway results

### AM&T DELIVERS:

Third-party surveys for 2010-2015 reported impacts of:

- 2,839 jobs created or retained
- \$516 million in increased or retained sales
- \$15 million in cost savings
- \$35 million in investments
- \$749 million total impact
- 4.8 out of 5.0 Customer Satisfaction

### OUR SKILLS:

- Business Assessments
- Strategic Planning
- Lean Enterprise
- Supervisory Training (TWI)
- Project Management
- ISO/AS Quality Systems
- Sales and Marketing
- New Opportunity Identification and Growth — Markets, Products, Services, Customers

Our integrated, comprehensive approach, applied to the whole value chain, can make a difference. We are "hands-on", roll-up-your-sleeves people and we're passionate about manufacturing.

**Call Jim Cunningham at 607-725-1225 to ask how we can help.**