

## Eight-Step Problem Solving Workshop

Manufacturing today is under tremendous pressure to find new and innovative ways to improve performance and reduce costs. Recognizing the need for Continuous Process Improvement (CPI) is crucial. The effectiveness of any CPI effort is only as good as the problem solvers implementing and executing the plan, and the need is recognized for the majority of all personnel to be schooled in a disciplined, proven problem solving methodology.

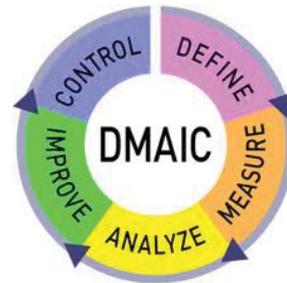
In this one-day session, AM&T will train participants in a modified 8-Step Problem Solving process, adopted from the Toyota Production System and tied directly to the Six Sigma DMAIC model -- Define, Measure, Analyze, Improve, Control.

### WHO SHOULD ATTEND?

Personnel charged with project management, process improvement, Lean initiatives, and anyone else interested in problem solving.

### KEY PARTICIPANT BENEFITS

- Learn how to utilize 8-step problem solving process
- Learn why objectivity, alignment, coherency, and distilling data down to the most salient points is important to successful problem solving
- Solve problems faster using a proven methodology
- Attain lasting results by using sustainment tools
- Gain in-depth knowledge to identify and resolve true root causes instead of symptoms
- Provide the organization with methods to share best practices
- Learn to understand the nature of a problem before jumping to solutions
- Learn to set clear objectives and metrics
- Understand the importance of cause and effect analysis in problem solving
- Create a culture of logical problem solving



### Meet your Instructors

Carol Miller has over 25 years of experience in the manufacturing and service sectors. She has a B.S. in Industrial Engineering from the State University of New York, College at Buffalo, and an M.S. in Management of Technology from Polytechnic University. She is a member of the Association for Manufacturing Excellence (AME) and the Project Management Institute (PMI), is a NIST-certified trainer and implementer of Lean Manufacturing techniques, and has received certification as a Lean/Six Sigma Black Belt from Villanova University. Carol leads AM&T's Lean effort.

Lloyd Johnson is a graduate of Syracuse University where he earned a B.S.E.E. and an MBA. Lloyd has over 30 years of experience in manufacturing, quality and program management. Lloyd is a Professional Business Advisor (PBA), a certified Project Management Professional certified by the Project Management Institute, and is certified to teach Training Within Industry (TWI).

To have this class delivered at your facility, call  
Jim Cunningham at 607-725-1225



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.

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MEP • MANUFACTURING EXTENSION PARTNERSHIP



Empire State Development  
Division of Science, Technology & Innovation

## SOME RECENT ACTIVITIES TO PROMOTE INNOVATION, GROWTH & PROFITABILITY OF MANUFACTURERS IN THE SOUTHERN TIER

- Participated in Pre-seed Workshop at Binghamton University. Two AM&T staff members were team coaches and one staff was a program facilitator/instructor.
- One AM&T staff was a facilitator/instructor at a Pre-Seed Workshop at Stony Brook.
- Conducted a Basic Project Management workshop at a company as part of the CFA/DOL contract. Twenty (20) engineers and managers attended and received training in Project Management methods and tools.
- Conducted 21 Lean Thinking workshops at one company as part of the CFA/DOL contract. A total of 378 employees from all shifts attended and received an overview of lean methods and tools.
- Conducted two (2) 8-Step Problem Solving workshops at one company. 40 employees attended and received training in root cause analysis methods and tools.
- Completed a 5-day "Set-up Reduction" event. The team challenged the current process and identified opportunities for improvement. The new set-up process was designed, documented and its performance validated. The reduced set-up will result in increased equipment capacity, increased productivity and reduced inventory.
- Conducted a 5-day "Engineered to Order information flow" value stream mapping event with a team of ten people. It is anticipated that when implemented, the plan will result in improved on-time deliveries and, reduced wastes (including process rework, over processing, expediting, rescheduling and changing priorities, etc.). As well as establish standard work processes that could be applied corporate wide.
- Conducted a 5-day "New Product Launch" process mapping event. It is anticipated that when implemented, the process will result in more effective product launches.
- Partnered with AME to conduct a one-day event session focused on Leader Standard Work. The event was attended by 23 people.
- Conducted (2) four-hour Lean Thinking training session focused on identifying and improving production and administrative wastes. The training was attended by 19 people.
- Conducted an 8-hour Lean for Manufacturing workshop, training participants in Lean Thinking and how to apply Lean tools & concepts. The training was attended by 13 people.
- Completed (2) multi-day 5S and Visual Workplace events. The teams 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.
- Completed ISO/AS Internal Audits, Briefings, Procedures Prep, Gap Analyses, & Management Reviews at 15 companies.

# 4 Things New Entrepreneurs Must Learn About Sales and Marketing

By Al Davidson

Entrepreneurs are a special breed – they are risk takers, innovators, and problem solvers. They are often enthusiastic, passionate and willing to stand up for their beliefs. But many entrepreneurs struggle with sales and marketing.

If you're one of these new entrepreneurs getting ready to launch your company, pay attention to these tips on how to get your sales and marketing done right.

## New Entrepreneurs Must Learn To...

### Choose Your Customers Wisely

Just like the old saying, "choose your friends wisely," many entrepreneurs need to be more selective about which customers they accept.

This advice might sound counter-intuitive. After all, aren't we supposed to take as many customers as we can get? Especially for new entrepreneurs, can we really afford to be picky? If you try to be choosy about which customers you accept, won't that drive customers away and ruin your business?

The truth is, your business is not going to be the right fit for every single customer, so you shouldn't try to please everyone. Instead of trying to be all things to all people, spend some time figuring out which customers are definitely not the right fit for you. If you can avoid the "wrong" types of customers, you can spend more time and energy pursuing the customers who need (and are happy to pay for) exactly the solution that you offer.

### Diversify Your Lead Generation Portfolio

The first rule of investing is "don't put all your eggs in one basket." But many entrepreneurs make this mistake by over-investing in certain types of lead generation and marketing activities. If you spend all of your time and energy making cold calls (and none of your time and energy building a decent website and social media presence), you're going to miss out on opportunities.

The reverse is also true – if you spend all of your time and money creating an elaborate Web presence, but don't spend any time researching and proactively reaching out to prospective customers, you're not going to make very many sales.

It's best to take a balanced approach in marketing. Divide your resources and time investments so that you have a good mix of outbound lead generation (email, sales calls, direct mail, advertising) and inbound lead generation (SEO, website content, social media).

### Don't Let Enthusiasm be the Enemy of Sales Success

Many new entrepreneurs are their own biggest fans – which is appropriate, since you need to believe in your company and be enthusiastic about what you're selling. The challenge comes when your enthusiasm causes you to lose sight of certain truths about your product, or causes you to lose touch with the needs of your customers.

If you're too eager to close a deal, you might drive away your

customers or put them on the defensive. If you're too excited about what your product can accomplish, you might lose sight of the situations where your product is not the right fit – and try to force a sale that isn't the right solution for the customer.

Enthusiasm is important, but make sure it's not blind enthusiasm.

### Be a Problem Solver

Sales and marketing is ultimately about solving problems. Entrepreneurs are natural problem solvers – they get into business because there's something they want to create or improve or develop to fill a need in the world. Often people get the idea that sales is about "talking people into buying something" or "overcoming objections."

The truth is, the most successful sales people are the ones who know how to build relationships, focus on their customers' needs, and find innovative ways to solve their customers' problems. If you can focus relentlessly on helping your customers get to a better place, you will have no shortage of sales opportunities for your business.

Entrepreneurship is a constant learning experience, and there's no better way to learn how to sell products and market a business than to become an entrepreneur. If you can avoid some of the "rookie mistakes" that go with being an entrepreneur and stay focused on improving your customers' situations, you'll be a successful entrepreneur.

## Attention Manufacturers

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The next cycle of the Consolidated Funding Application (CFA) process will be starting soon.

Funding for Manufacturers will be available for Capital and DOL Training Grants.

Call  
Jim Cunningham  
at 607-725-1225  
for more info.

## Extreme Makeover – Warehouse Edition

By Paul Myerson in The Lean Supply Chain RSS

Historically, the focus for Lean has been on manufacturing, as the warehouse is typically just a “box” on a Value Stream Map.

In many cases, product is pushed into warehouse and (hopefully) pulled by customers. As a result, the warehouse is the crossroads of conflicting requirements, creating lots of potential for waste.

So it's not hard to figure out why one of the best places to start a Lean Supply Chain program is by scheduling a 5S or Workplace Organization kaizen event in a warehouse.

The 5S's describe how to organize a work space for efficiency and effectiveness by identifying and storing the items used, maintaining the area and items, and sustaining the new order. They are:

**Sort** - Unneeded items are identified and removed. Only needed parts, tools, & instructions remain.

**Set in order** - Everything has a place; everything is in its place. Visual Scoreboard and other visual controls.

**Shine** - Do an initial spring cleaning. Maybe some painting, and Brillo pad scouring.

**Standardize** - Routine cleaning becomes a way of life. Preventative maintenance is routinely performed.

**Sustain** - 5S is a routine way of life. Root causes are routinely identified and dealt with.

A great example of 5S in action can be found on a video at this link: “Extreme Makeover Warehouse Edition” ([www.youtube.com/watch?v=28jq7\\_F36Rc](http://www.youtube.com/watch?v=28jq7_F36Rc)) demonstrating 5S and Value Stream Mapping in an actual warehouse. The benefits were impressive and included:

- A 40% time reduction in finding items.
- Crate building time reduced by 50%.
- Five facilities reduced to three.

The last “S” (Sustain) can be the hardest part of any 5S program. Sustain is the discipline to prevent backsliding. It makes sure that the practices of Sort, Set in Order, Shine and Standardize are maintained. It requires commitment, measurement and recognition. It is about promoting and creating the best environment to meet the challenge of sustaining 5S.

The event can be fun and rewarding for everyone (and a good team building exercise as well) which is a great starting point.

The real key to success is to “Sustain” that feeling and to keep the momentum going for the long term...in other words, developing a Lean culture, which requires a lot of support and effort on everyone's part.

# A SEAL's Perspective: 5 Ways to Be a Better Leader

By Jeff Boss

Entrepreneurs aren't average people. The average person doesn't hedge their bets against the odds and zig while the rest of the flock chooses to zag. But having the courage and audacity to enter into an unknown market, create a brand new product or meet with new partners is exactly what leads to entrepreneurial success for the simple fact that an entrepreneur's purpose defines them.

The desire to improve, learn and grow is intrinsic for the entrepreneur because they have found a purpose that suits their life's mission. But remaining competitive is a daily sport, and if you fail to live up to your purpose as a leader then you run the risk of failing to lead.

After spending 13 years in the SEAL Teams, there are five lessons I want to share that can make you a better business leader (after all, sharing knowledge is power, right?).

**Test yourself** -- daily. Leaders need challenges. They need to defy the unknown and achieve the unexpected. If this means waking up an hour earlier to work out, read the paper or just have personal time, do it. The sense of accomplishment yielded from your efforts will have a snowball effect on your self-efficacy. And remember, every day counts.

The BUD/S (Basic Underwater Demolition/SEAL training) motto of "The only easy day was yesterday" always held true because every day became harder



than the last. I remember thinking to myself after enduring a conditioning run, "That was the hardest run I ever did!" That is, until the next conditioning run, and then that run became the hardest one I ever did. The point is that every day affords an opportunity to become better than what and who you were yesterday. If you don't take advantage of the opportunity, your competitor will.

**Workout (i.e. sweat!).** Having the mental fortitude to push yourself does two things: it shapes your body and sharpens your mind. It's easy to brush off the mental component of exercise if you're not pushing yourself, especially if you just go to the gym to talk. But if you exert yourself, breathe heavily and sweat profusely (no grunts, please), then your mind feels the same effects and raises its pain threshold, which in turn allows the body to push itself further.

In his book, *Spark: The Revolutionary New Science of Exercise and the Brain*, Harvard clinical professor Dr. John Ratey cites multiple studies of students' high school fitness scores relative to their test scores, with results indicating that consistent activity positively impacts brain performance. Bottom line: The daily grind that entrepreneurs must face necessitates both a strong mind and a strong body. What the mind believes, the body achieves.

**Strive to become better, not the best.**

In BUD/S, we did a two-mile ocean swim every week with a swim buddy in the "toasty warm" Pacific waters (the Pacific is

anything but warm). In the rare chance that a swim pair were to encounter a shark, the plan was to stab your swim buddy and then swim like hell (no, really). The point is that a swimmer didn't have to be the fastest in the water -- just faster than the guy next to him. Apply this to your competition.

**Demonstrate your C<sup>2</sup>.** Character is who you are; competence is what you can do. The confluence of these, which I call C<sup>2</sup>, is the secret sauce that turns good leaders into unforgettable people that others aspire to be.

**Be humble.** Nobody likes hearing the same voice over and over again. In fact, incessant talkers are what I like to call social hand grenades -- throw them in a room full of people and watch the crowd disperse. Don't be that guy (or gal) who likes to talk just to show everyone how much you know. Remember this: Nobody cares how much you know, until they know how much you care.

Entrepreneurship is not for the faint of heart. It takes focus, determination, and discipline to push through the daily grind if you want to win. Separate yourself from the pack by practicing the fundamental leadership skills that cultivate better performance -- and better business.



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## 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

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)

## Associates' Corner



The Hilliard Corporation has evolved from a one-product business into a special-applications engineering company with a worldwide customer base. Founded in 1905, the company employs approximately 600 people at three manufacturing sites in Elmira.

The company's product lines include filtration systems, motion control devices, and engine starters. Hilliard works with customers to research and test products, thus the company has a large range of custom-engineered products that can be modified to meet new applications.

Hilliard's filtration components are sold under the Hilco and Star brand names. The Hilco Division products include filter housings, reclaimers, vent mist eliminators, fluid filtration systems, and filter cartridges. Applications for these products include emission control, ion exchange systems, power generation, metalworking, transformers, turbines, chemical plants, pipelines, food and beverage processing, compressors, and pumps.

Industries targeted by Star Filters include mining and metalworking, food and beverage processing, chemical and petrochemical processing, wastewater, cosmetics, pharmaceuticals, and biotech processing. The stainless steel plate and frame filters for liquid processing applications were first introduced in 1904, and the current product line includes

polypropylene a range of materials for both equipment and filter media.

The company's Motion Control Division makes clutches of various types including industrial overrunning, intermittent motion, centrifugal, drivetrain, and torque limiting. Applications for these clutches include machine tools, robotics, mining, mills, industrial vehicles, cranes, marine, lawn and garden, elevator and escalator, material handling, and many more.

A wide range of pneumatic, electric, and hydraulic starters for large-engine starting are produced by the Starter Division. Typical uses for these starters include turbines, diesel and gas engines, and engine test and overhaul shops. Applications include gas transmission, power generation, oil exploration and gas lift, marine propulsion, cogeneration, and stand-by generation.

Two years ago Hilliard management engaged AM&T to provide training in lean enterprise concepts for Hilliard employees, and to assist employee teams in identifying improvement targets and implementing changes. AM&T also assisted Hilliard with earning ISO 9001:2008 certification, and with training of their sales team.

"We are extremely satisfied with AM&T's services and expertise. I expect the investment we are making today will serve us very well not only in the near term but well into the future," said Hilliard President Gene Ebbrecht.

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

## Associates' Corner



Astrocom Electronics began in 1961 with three employees, and today has over 65,000 square feet of design and manufacturing space in its Oneonta facility.

The company produces communications equipment for a worldwide market that includes space programs, the military, municipal police departments, and private industry. Products include headsets, microphones, earphone and microphone elements, cables, connectors, and switches.

Astrocom management believes that one keystone to the company's success is its use of lean manufacturing techniques. One

result is the ability to quickly modify existing designs and/or drawings in response to customer needs.

Much of the company's testing equipment has been developed and adapted by Astrocom engineers. This equipment not only checks electronic parameters, but also simulates field environmental conditions, assessing product performance with regard to vibration, blast, shock susceptibility, light reflectivity, and packaging.

Sound chamber facilities allow testing of design theories and checking of attenuation, frequency response, articulation, and other parameters of prototypes and production units. An ozone chamber is used for accelerated aging of rubber assemblies and cord assemblies.

Computer routing design provides for circuit board masters.

Subassemblies such as PC boards, plastic components, and rubber molded items can all be done in plant. Metal stamping is also handled in-house.

All drawings become ink originals and circuit board master prints directly from the computer. With on-site facilities, Astrocom engineers are able to investigate theoretical as well as actual characteristics of any suggested design.

In 2008, Astrocom's management decided to pursue certification to the ISO 9001:2008 standard, and selected AM&T and DLS Quality Technology Associates, Inc. to assist in the process. In August 2009, Astrocom was successful in becoming certified to the ISO 9001:2008 standard.

For more information visit [www.astrocom-electronics.com](http://www.astrocom-electronics.com)

## Around the Southern Tier

Apr 16	Annual Business Expo & After Hours Mixer - Watkins Glen Area Chamber - 607-535-4300
Apr 17	Networking at Noon - Tompkins County Chamber - 607-273-7080
Apr 23	WBO Roundtable - SBDC at Binghamton University - 607-777-4024
Apr 24	Business After Business - Chemung County Chamber - 607-734-5137
Apr 24	Social Media Series - "Pay to Play" - Greater Binghamton Chamber - 607-772-8860
Apr 24	A Tax Guide for Small Business Owners - SBDC at Corning Community College - 607-937-6861
Apr 24	Innovation Day: Big Date - SUNY Binghamton - <a href="mailto:innovation@binghamton.edu">innovation@binghamton.edu</a>
May 03	Social Media: Strategies for Marketing Success - SUNY Broome - 607-778-5012
May 03	Blogging - SUNY Broome - 607-778-5012

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## 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 CAN HELP YOU:

- Assess your current state
- Articulate and define the desired future state
- Train your 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:

A third-party survey for 2008-2013 reported impacts of:

- 3,461 jobs created or retained
- \$622 million in increased or retained sales
- \$15.0 million in cost savings
- \$44 million in investments
- \$845 million total impact
- 4.6 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.**