



THOUGHTS FROM THE EXECUTIVE BOARD

Business, in general, is on the rise and the future looks brighter than it has for some time. Companies need to plan for what is to come as we continue to grow in order to be prepared for the challenges ahead. As noted many times, the employees of our companies are a vital asset to the manufacturing community, as we need them to prosper and stay on the leading edge in our fields. We must train, provide a comfortable work environment, and influence a work ethic in our employees that produces profitable results.

This subject came to mind after I reviewed the health care cost we, as business owners, provide. The new health care laws are increasing our costs, due to services provided that are out of our control. It's very apparent that current laws, such as this, do not incentivize the workforce and business owners, who endure great risk in their field of work, to succeed in a very competitive market.

This being said, we need to find ways to improve our business strategies through our employees, organizations, and colleges. With these improvements, we can continue to educate and familiarize our employees with our business goals, and compete in a marketplace that constantly challenges those who take part.

**Greg Davis
RB Tool & Mfg. - EDM**

Business Matters...

Manufacturing with a Capital “M”

By Larry Lapide

Manufacturing has been the historical driver of progress in the United States. It’s high time to get that engine revved up again.

Several months ago I was asked to join the Manufacturing Executive (ME) Leadership Board, which is part of a community that is working on a new initiative to define “The Future of Leadership in the Global Manufacturing Industry.” I agreed to participate because I believe that supply chain managers in the United States have an obligation to do something to avoid losing much of the country’s manufacturing prowess, which is the direction we are heading if current trends continue. Such a loss would ultimately lead to our future generations experiencing a quality of life that is significantly inferior to what we were fortunate enough to experience throughout our lifetimes...so far that is.

One of the first things I did to support this initiative was to write a short blog on the ME web site titled “Manufacturing Needs to Rebrand” (see the blog section of <http://manufacturing-executive.com>). This column represents a longer version of the blog.

Long-Standing History of Manufacturing

I started my blog article by talking about a TV series called “the Story of Us,” which I had just viewed on the History Channel. After watching the series—which covered the history of the U.S. from colonial times to the present—I realized the importance of innovation and technology to the country’s unprecedented growth. The story told how major innovations and inventions have played a significant role in the country’s economic progress throughout our history. A simple invention of barbed wire, for example, allowed farmers and cattle ranchers to live in greater harmony while populating the West. Similarly, the laying down of rail tracks and telegraph wires enabled commerce to grow more seamlessly across the country during the 19th century.

The History Channel show pointed out that during the Civil War, President Lincoln was able to direct relatively sophisticated military activities and logistical movements because the North was more wired (via telegraph) and connected (by rail lines) than the South. Effectively, Lincoln leveraged an integrated military supply chain to win that war. This further demonstrates the premise that the U.S. was largely built on product innovation—and the ability

to take a product idea all the way from its design to its production on a large scale. Manufacturing, spelled with a capital “M”, played an enormous role in the nation’s progress and economic growth.

Another segment of the TV series covered the build-up of the U.S. manufacturing base during World War II that was largely responsible for the winning of that war. The so-called Greatest Generation had out-manufactured its enemies and developed a worldwide supply chain to do battle in every corner of the world. “Rosie the Riveter” and the “men who stayed behind” built the supply chain needed to support the troops. At the end of the war the country was left with a manufacturing base that represented on-half of the world’s manufacturing capacity.

This capacity was then leveraged to fuel the country’s unprecedented economic growth and affluence. In those days manufacturing was really king—spelled with a capital “M.”

The Decline in Manufacturing Prowess

Today, however, manufacturing lacks that same aura. Baby Boomers (like me) were advised by their parents to go to college so you wouldn’t have to work in a hot, dark, dirty, smelly plant.

In the 1980’s when manufacturing excellence had shifted to Japan, MIT started its “leaders for Manufacturing Program” to help bring back some of this capability to the United States. Indicative of the broader trend, though, last year MIT changed the name to the “Leaders for Global Operations Program”—shedding the “Manufacturing” label.

What happened to manufacturing? Affluence transformed the United States to a consuming nation enamored with the bigger-picture concept of supply chain management (SCM). This fostered a perception that manufacturing was just about plant operations—that is manufacturing spelled with a lowercase “m.” The Supply Chain Council’s Supply Chain Operations Reference (SCOR) model highlighted four process components: Source, Make, Deliver, and Plan. “Make” thus became just one of four components, dealing largely with plant operations. In the minds of most product companies, the “Plan” and “Deliver” processes took the center stage (to focus on quenching the nation’s thirst for goods from around the world), while “source” and “Make” were often outsourced and off-shored.

Many CEOs got on the outsourcing/off-shoring bandwagon primarily to benefit company

shareholders. They virtually forgot that a business also has responsibilities to its employees and to the communities in which it does business. Too many manufacturing-related jobs were shipped overseas without good justification. Sadly, manufacturing knowledge, expertise, and prowess went with them as well.

I cringed when I heard of an apparel company that had outsourced production to China and then wanted to move it to Mexico. The company had to rely on Chinese managers to execute the plan, having lost the employees who knew how to build and start up a plant. When oil prices started to rise in late 2004, the U.S. found itself short on petroleum engineers who know how to drill for oil. An article last year in the Wall Street Journal (Aug. 9, 2010) headlined "Some Firms Struggle to Hire Despite High Unemployment" stated that the gap in finding people to fill jobs "is most notable in manufacturing."

Over time, the projected long-term steady rise in oil prices will tend to drive "Source" and "Make" operations closer to the points of product consumption. In order to compete globally, U.S.

companies will need to be flexible and be able to efficiently move operations around as various markets grow, and possibly shrink. A prerequisite for this is that the U.S. regain the manufacturing prowess that it has lost over the years. A big part of this is capitalizing on future innovations. This will require a renewed view of the importance of manufacturing spelled with a capital "M," and meaning more than just plant operations.

As I stated at the start, I joined the ME Leadership Council to be part of a manufacturing revival. Maybe some readers will join us. At a minimum, however, please don't teach your children that manufacturing is spelled with a lowercase "m." It's a capital competency that is vital to their quality of life in the future.

Dr. Lapide is a lecturer at the University of Massachusetts' Boston Campus and is an MIT Research Affiliate. He welcomes comments on his columns at llapide@mit.edu

Reshoring—Bringing Manufacturing Back Home!

The Reshoring Initiative is a non-protectionist, efficient way to reduce our imports, increase our "net exports" and regain manufacturing jobs. Going local can reduce a company's TCO (Total Cost of Ownership) of purchased parts and tooling and offer a host of other benefits while bringing U.S. manufacturing jobs home.

The Initiative documents for large manufacturers the benefits of sourcing in the United States and helps suppliers convince their U.S. customers to source local. Archstone Consulting's 2009 survey showed that 60% of manufacturers use "rudimentary total cost models" and ignore 20% of the cost of offshoring. To help companies make better sourcing decisions the Reshoring Initiative, (www.reshorenw.org) provides:

- A free Total Cost of Ownership (TCO) software that helps them calculate the real offshoring impact on their P&L,
- Publicity to drive the reshoring trend,
- An online Library of 99 articles about successful reshoring, and
- Access to NTMA/PMA Contract Manufacturing Purchasing Fairs to help them find competitive U.S. sources.

Reshoring breaks out of the waiting-for-policy-decisions problem, the economic zero-sum-game and the increases in consumer prices and assures that the pie grows, to the advantage of all Americans. Reshoring also focuses on the manufacturing sector which has suffered so many job losses for decades and the SMEs which offer the best potential for job growth.

The Initiative is succeeding in changing OEMs' behavior. Companies have committed to reshore after reading Initiative articles. Fifty-seven representatives from large manufacturers and 113 custom U.S. manufacturers attended the May 12, 2010 NTMA/PMA Contract Manufacturing Purchasing Fair, where OEMs found competitive domestic suppliers to manufacture parts and tooling. Sixty-four percent of the OEMs brought at least some work that was currently offshored. An integrated, measurable, 6-step local reshoring effort is underway in Illinois and is also under discussion to revitalize other cities and states.

The Reshoring Initiative (www.reshorenw.org) is supported by:

The Association for Manufacturing Technology (AMT) www.amtonline.org

Sescoi, www.sescoi.com

GF AgieCharmilles, www.gfac.com/us

The Association for Manufacturing Excellence (AME) www.AME.org

The National Tooling and Machining Association (NTMA) www.ntma.org

The Swiss Machine Tool Society (SMTS) www.smts.org

Additional information on the NTMA/PMA Purchasing Fairs can be found at www.purchasingfair.com.

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Leadership: How Do You Face Life's Unpredictable Crossroads?

By Jay C. Rifenburg

We all reach periods in our life that challenge our very being and force us to take actions that are difficult and even frightening. It is the choice and leadership that take those daunting actions and turn them into successes. The unknown crossroads we all encounter bring forth life lessons that pave the way for our future, our happiness and fulfillment.

Although title, power, fame and wealth may indicate a person in a position of leadership, that alone does not give credence to being an effective leader. This is illustrated every day in the failures and incompetence of many of those in positions of power as they fail to understand that genuine leadership is more about the responsibilities to others rather than oneself. Any person who impacts another is a leader. Leadership relates to personal accountability, and taking ownership for what you want to be remembered for.

What are the principles that form your decision-making and interaction with others? What are the values that define what it is you stand for and believe in, and are those values projected in your actions? I have always known you cannot please everyone, but I have experienced a consistent number of character traits that universally translate to being an effective leader. Discipline, integrity, commitment, loyalty, perseverance, honor, respect and humility are just some that come to mind.

A common challenge of effective leading is an acceptance of mediocrity and lack of initiative among employees. Procrastination is known among all of us; it depletes individual creativity, innovation and a spirit of risk taking because of the lack of assertiveness being promulgated by the workforce. Initiative, or the power or opportunity to act or take charge before others do is a tell-tale way to see a leader from a follower. An assertive, confident and forceful personality can take you far. These things can squelch procrastination and lead an entire team of employees on the right path for productivity.

Also, taking ownership for the responsibilities one has created provide the strength needed to be assertive and take the initiative. Core values provide a foundation to execute actions and stand behind those actions. These core values within an individual can radiate through an organization, making the

entire company structured and defined in its core values and accountability.

Managing effectively and following through with the process to its completion is imperative to leadership. Not only does accountability mean evaluating the completed task to assess ways to improve in the future, but also the fun part: celebrating the achievement by appreciating your self and recognizing those who have helped in the achievement.

Change potentially creates discomfort, and discomfort creates personal challenges. We all know, and have felt, what leaving our "comfort zone" is like. It forces us to adapt or stand firm, be more creative and/or innovative in our approach toward a personal or professional task at hand. However, the onset of change transcends into the real challenge of revisiting the core values that strengthen your ability to make the decisions to effectively confront the change. Solidifying, updating and redefining the core values of the individual or the organization are the initial steps in building a staircase to overcome the stressors of change.

Consistency is comfortable, but it breeds mediocrity. An organization, as with an individual, who does not tackle the challenge of change will ultimately be defeated by the competition, or the life they face. Letting go of unwanted behaviors and destructive patterns of performance is also a wonderful benefit to dealing with change. It forces us to revisit how we do things to create a more efficient and productive work place.

From a leadership perspective, change also provides an opportunity to observe how those we lead deal with the stress of change, and who of those have the character to embrace the opportunity, or whine about the challenge. Change allows you to know your future performers and leaders. A final benefit of change presents an opportunity to develop new skills, hone old ones, and expand your horizon in regard to the greater potential of what you can be.

We all reach periods in our life that challenge our very being and force us to take actions that are difficult and even frightening. It is the choice and leadership that take those daunting actions and turn them into successes. The unknown crossroads we all encounter bring forth life lessons that pave the way for our future, our happiness and fulfillment. Those actions will also formulate the answer to the question, "What will you be remembered for?"

The behavioral attribute and resource to harness the strength to be decisive and eventually persevere through uncertainty is called individual resilience. It will triumph over self-doubt, failure and a lack of self-respect. It is resilience that fuels perseverance, accelerating the journey to success.

The rewards to being resilient include learning from the struggle, adding a new life experience, reflecting with a different perspective and gaining a greater appreciation for what you do have, rather than what you don't have. It is widely accepted that those around you shape who you are, and if you surround yourself with resilient individuals, they will foster a strong resiliency in you. What is most important to know at present is we all have the ability to be resilient by practicing the core values we believe in. It is bouncing back from failure and disappointment that puts the spring in our step because it provides the self-confidence to carry on.

There have been numerous times in my life, and yours, where life-changing decisions need to be made personally and professionally.

The core values that collectively form the personality of your character are the foundation for your confidence, and create a subconscious with the intuitive ability for you to make the correct choice when the challenge of making a decision arises. Our current economic and social stressors have only increased the need to be more conscientious and analytical in regard to how we live on a daily basis, but never neglect what your intuition may be telling you. Intuition should be thoughtful not spontaneous, and intuition collectively with diligent research will equal a successful decision made. Always take the time to weigh the pros and cons of a decision, and consider all the factors involved in coming to a right conclusion. It is this combination of being analytical and intuitively thoughtful that is extremely influential in making the right decision. It is difficult to regret that kind of choice.

Jay Rifenburg, a Saratoga Springs, NY resident, is president of the Rifenburg Training & Development, and author of the International Bestseller, "No Excuse!—Incorporating Core Values, Accountability and Balance into Your Life and Career," awarded "Book of the Year" by the North American Book Dealers Exchange.

Jay is a professional speaker, trainer and consultant and for the last 18 years has provided his expertise in the areas of personal development, leadership, and communication training to organizations, associations and schools across North America, Europe and Asia.

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Preceding articles copied from the NTMA Record—January 2011 Issue

AMERICAN TESTING SERVICES AWARDED - PHASE 1 - SMALL BUSINESS INNOVATION RESEARCH GRANT!!

American Testing was awarded a Phase 1 - Small Business Innovation Research grant (SBIR) from the United States Air Force (USAF) operating out of Tinker Air Force Base. The purpose of the grant is to develop a kit of parts capable of being used by the Air Force to perform proficiency tests on their technicians who perform non-destructive testing.

Currently aircraft structure and turbo engine parts undergo numerous repair cycles. During life cycle maintenance these parts undergo Non-Destructive Inspection (NDI) processes designed to identify critical flaws that could cause catastrophic failure of the aircraft or engine. NDI maintenance units and the USAF NDI Office perform quality assurance and proficiency assessments to calculate the probability of an NDI system detecting a flaw of a given size. The probability of detecting a flaw in a part is directly related to how frequently an inspection must be performed on a part.

To conduct a quality assurance and proficiency assessment a series of known flaws in appropriately representative parts is needed. This can be very difficult since there are very few known parts with defects. In addition when an in-service part is found to have a defect, it is typically replaced with a new part and the old part is sectioned and analyzed to determine the cause of failure. American Testing Services has teamed up with local companies for this SBIR grant to investigate ways to fabricate simulated cracks of specific sizes into aircraft grade materials which could later be used as test specimens. The award is for \$100K with an estimated completion date of September 2011.

Ohio Workers' Compensation Safety Compliance

Frank Gates University – Half Day Seminars

Join us for these half-day, morning educational sessions to stay informed about Ohio Bureau of Workers' Compensation (BWC) changes and total workers' compensation cost control recommendations from Frank Gates/Avizent. In addition to Frank Gates, Working Partners® and the Division of Safety & Hygiene will also be presenting.

May 10	Columbus (Powell), Bridgewater Banquet & Conference Center
May 11	Cincinnati (Loveland), Oasis Golf Club & Conference Center
May 12	Dayton, The Mandalay Banquet Center and Catering
May 17	Canton, Courtyard by Marriott
May 18	Cleveland (Strongsville), Holiday Inn Strongsville
May 19	Toledo, Holiday Inn French Quarter

Visit www.frankgates.com and click on "Events Calendar" under "News & Resources" to find additional information on each of these locations, including maps and directions.

GENERAL SAFETY RULES

A Company's General Health and Safety Rules are put in place to protect all workers and visitors. These workers may be contractors entering your facility or job site or they may be your own employees. The rules are to be reviewed and followed by everyone to ensure their safety.

General Safety Rules will ensure that all Company personnel understand and follow the basic safety guidelines. They will apply to associates as well as visitors, contractors, and vendors. The General Safety Rules are to be followed at all times. For the associates of the company, the rules are a condition of their employment. They are not an option but a requirement.

All safety signs must be obeyed. They may be used to designate areas as HEARING PROTECTION REQUIRED or HARD HAT REQUIRED. Safety signs will be used to convey important information to anyone entering an area. Notify management if safety signs are missing, damaged, or illegible so they may be replaced.

When working with equipment, it is always important to know the hazard. Know what it is that you are working with and the proper way to operate. Read the operator manual before using a new piece of equipment or get the proper training for its use.

Some general rules that must be followed while in a facility or on a jobsite are:

- Associates must learn and follow the specific safety rules for their department or area.
- All personnel working alone in an area must notify their supervisor or security so they may be checked on periodically.
- Horseplay is not permitted on jobsites or in facilities due to the possibility of resulting in accidents or injuries.
- Every associate must participate in good housekeeping

Visitors, vendors, and customers are an integral part of business. They may want to see the facility they are servicing or just see how your facility operates. In any case, they need to be kept safe from any hazards that may be encountered throughout the facility. An associate from your facility should always accompany these people and are responsible for informing and ensuring visitors follow all of the appropriate safety rules. In the event that there is an emergency or evacuation of any kind, the company policy will be followed and the visitors, vendors, and customers should be escorted to safety following the rules put in place.

All general safety rules are put into place to protect everyone entering a facility or work site. It is very important to know what these rules are and to follow them. If you are escorted by an associate, you should stay with that associate. They will ensure your experience is a safe and healthy one.

Don't Miss the April Monthly Meeting!

The TTMA is happy to present John Veatch, President and CEO of Lean Concepts, Inc. as the Keynote speaker for the April monthly meeting on Monday, April 18, 2011. His presentation will focus on "Waste in the Business Process".

Lean Concepts Inc. is a specialized consulting and training team that helps companies achieve manufacturing excellence by assisting them in implementing World Class Manufacturing techniques. Lean Concepts Inc. utilizes proven, rock-solid learning programs that teach employees the skills necessary to continuously improve the processes for making a variety of quality products, while maximizing the use of time, material, equipment, floor space, and effort.

It has been in business since 1998.

Register now!!

Registrations can be downloaded on the "Meetings" page of the TTMA website. Go to www.tristatetma.com

Join us!!

Monday, May 16, 2011
TTMA ANNUAL GOLF OUTING
Crooked Tree Golf Club
Check-In: 11:30 a.m. - 1:00 p.m.
Shotgun Start: 1:00 p.m.

And be a part of the Workforce Development efforts in the Tri-State area. The TTMA Golf Outing funds the TTMA Education Program that supports the Bots Competition and the new Student Reimbursement Program.

**Showcase your company in a 5 minute
Spotlight Presentation at a Monthly
Meeting!**

Contact Joy at ttma@fuse.net to schedule your Spotlight presentation

2011 TTMA Calendar of Scheduled Events

March 21, 2011	Monica Pfarr – American Weld Society
April 18, 2011	John Veatch – “Waste in the Business Process”
May 16, 2011	Annual TTMA Golf Outing – Crooked Tree Golf Club – Supports the Educational Fund
September 19, 2011	Grady Cope – Chairman, National Tooling & Machining Association (NTMA)
October 17, 2011	Federated Insurance – “Distracted Driving”
November 14, 2011	John Veatch – “Lean Manufacturing”
December 12, 2011	To Be Announced

Except where otherwise noted, meetings will be held in the Redwood Room at the Embassy Suites Hotel in Blue Ash:

4554 Lake Forest Drive
Cincinnati, OH
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Monthly Meetings are suspended from June through August and will resume in September, 2011

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The TTMA mission is to be the best metalworking and manufacturing trade association with comprehensive information resources for its members and interfacing with community partners.